COMMITTEE FOR FINANCE AND PERSONNEL

Report on the Building Regulations (Amendment) Bill (NIA 11/07)

Together with the Minutes of Proceedings of the Committee relating to the Report, written submissions, memoranda and the Minutes of Evidence
Ordered by The Committee for Finance and Personnel to be printed 11 June 2008

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Committee for Finance and Personnel Membership and Powers

Powers

The Committee for Finance and Personnel is a Statutory Departmental Committee established in accordance with paragraphs 8 and 9 of the Belfast Agreement, Section 29 of the Northern Ireland Act 1998 and under Assembly Standing Order 46. The Committee has a scrutiny, policy development and consultation role with respect to the Department of Finance and Personnel and has a role in the initiation of legislation.

The Committee has the power to:

- consider and advise on Departmental budgets and annual plans in the context of the overall budget allocation;
- approve relevant secondary legislation and take the Committee Stage of primary legislation;
- call for persons and papers;
- initiate inquiries and make reports; and
- consider and advise on matters brought to the Committee by the Minister of Finance and Personnel.

Membership

The Committee has eleven members, including a Chairperson and Deputy Chairperson, with a quorum of five members.

The membership of the Committee since its establishment on 9 May 2007 has been as follows:

Mr Mitchel McLaughlin (Chairperson)
Mr Simon Hamilton* (Deputy Chairperson)*

Mr Roy Beggs Dr Stephen Farry Mr Fra McCann Ms Jennifer McCann Mr Adrian McQuillan Mr Declan O'Loan Ms Dawn Purvis Mr Mervyn Storey Mr Peter Weir

* Mr Simon Hamilton replaced Mr Mervyn Storey as Deputy Chairperson on 10 June 2008

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Department of Finance and Personnel

2 April 2008

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Climate Change Coalition Northern Ireland

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Building Control Northern Ireland

16 April 2008

Northern Ireland Building Regulations Advisory Committee

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List of Abbreviations and Acronyms used in the Report

ABE Association of Building Engineers

Bbl Barrel

BCNI Building Control Northern Ireland

BERR Business Enterprise and Regulatory

Reform

BRAB Building Regulations Advisory Body

BRAC Building Regulations Advisory

Committee

BRE Building Research Establishment

BREDEM Building Research Establishment

Domestic Energy Model

BSc Batchelor of Science

CADA Coalition of Aid and Development

Agencies

CBE Commander of the Order of the

British Empire

CBI Confederation of British Industry

CDM Construction, Design and

Management

CEF Construction Employers Federation

CEng Chartered Engineer

CEnv Chartered Environmentalist

CETI Committee for Enterprise, Trade and

Investment

CHP* Combined Heat and Power

CIBSE Chartered Institution of Building

Services Engineers

CM CentimetresCO2 Carbon Dioxide

CSH Code for Sustainable Homes

DALO Departmental Assembly Liaison

Officer

DART Dublin Area Rapid Transport

dB Decibels

DC District Council

DCLG Department for Communities and

Local Government

DEFRA Department for Environment, Food

and Rural Affairs

Department of the Environment,

DEHLG Heritage and Local Government,

(RoI)

DETI Department of Enterprise, Trade and

Investment

DFP Department of Finance and Personnel

DIY Do It Yourself

DMS Diploma in Management Studies
DoE Department of the Environment

DSD Department for Social Development

DSO Departmental Solicitors Office

E & W England and Wales

EEAC Energy Efficiency Advisory Centre

EEAP Energy Efficiency Action Plan

EEL Energy Efficiency Levy

EHS Environment and Heritage Service

EPBD Energy Performance of Buildings

Directive

EPC Energy Performance Certificate
EQIA Equality Impact Assessment

EREF Environment and Renewable Energy

Fund

EST Energy Saving Trust
EU European Union
EWP Energy White Paper

FBEng Fellow of the Building Engineers

Association

FCIOB Fellow of the Chartered Institute of

Building

FMB Federation of Master Builders

FOI Freedom of Information

GB Great Britain GJ Giga Joule

GSHP Ground Source Heat Pumps

GWh Giga Watt Hour

GWh pa Giga Watt Hour per annum HLF Heritage Lottery Fund

HMO Houses in Multiple Occupation

HSENI Health and Safety Executive Northern

Ireland

IAG Industry Advisory Group

K Thousand

KFC Kentucky Fried Chicken

kt Kilo Tonnes KW Kilo Watt KWH Kilo Watt Hour

KWP Kilo Watt Peak

LABC Local Authority Building Control

(England and Wales)

LCBP Low Carbon Buildings Programme

LNG Liquefied Natural Gas LPG Liquid Petroleum Gas

LPS Land and Property Services

Ltd Limited Company
LZC Low or Zero Carbon

M Metres

MBEng Member of the Association of Building

Engineers

MICE Member of the Institution of Civil

Engineers

MLA Member of the Legislative Assembly

mm Millimetre

MP Member of Parliament

MS Member States
MSc Master of Science
MSW Municipal Solid Waste
NDNM No Day Named Motion

NGO Non Governmental Organisation NHBC National House-Building Council

NI Northern Ireland

NIAER Northern Ireland Authority for Energy

Regulation

NIBRAC Northern Ireland Building Regulations

Advisory Committee

NIE Northern Ireland Electricity

NIFI Northern Ireland Environment Link NIHE Northern Ireland Housing Executive

NIO Northern Ireland Office

Northern Ireland Renewables NIRO

Obligation

Northern Ireland Renewables **NIROCs**

Obligation Certificates

Northern Ireland Sustainable NISDS

Development Strategy

Northern Ireland Statistics and **NISRA**

Research Agency

OBE Officer of the British Empire

°C **Degrees Celsius**

Office of the Commissioner of Public **OCPANI**

Appointments for Northern Ireland

ODPM Office of the Deputy Prime Minister

OFGEM Office of Gas and Electricity Markets

Office of the First Minister and deputy **OFMdFM**

First Minister

Office of Legislative Counsel OLC

Organisation of the Petroleum **OPEC**

Exporting Countries

OPSI Office of Public Sector Information

Pa Pascal

PA Per Annum

PD Post Dated

Post Graduate Certificate in Fire **PgCertFS**

Safety

PhD Doctor of Philosophy

PLC **Public Limited Company**

PPS Planning Policy Statement

PV Photovoltaic

Photovoltaic Major Demonstration PV MDP

Programme

Renewables Advisory Board RAB

RIA Regulatory Impact Assessment

Royal Institution of Chartered **RICS**

Surveyors

ROC Renewable Obligation Certificate

Rol Republic of Ireland

ROS Renewables Obligation (Scotland)

RPA Review of Public Administration

RSLs Registered Social Landlords

SAP Standard Assessment Procedure

SCHRI	Scottish Community and Householder
SUNKI	5 11 11111

Renewables Initiative

SD Sustainable Development

SDS Sustainable Development Strategy SEA Sustainable Energy Association

SEC Sustainable Energy Centre

SEDBUK Seasonal Efficiency of Domestic

Boilers in the UK

SEN Sustainable Energy Network

SI Statutory Instrument SL1 Subordinate Legislation 1

SoS Secretary of State

SPICE Scottish Parliament Information

Centre

SPP Scottish Planning Policy

SROCs Scottish Renewable Obligation

Certificates

tC Tonne of Carbon TD Teachta Da□□la

TER Target Emission Rate

TGD Technical Guidance Document
TGDs Target Guidance Documents
THI Townscape Heritage Initiative

TSN Targeting Social Need TSO The Stationary Office

UK United Kingdom

USA United States of America

VAT Value Added Tax

VLA Valuation and Lands Agency

Executive Summary

Building regulations currently play a vital role in securing the health, safety, welfare and convenience of persons in or around buildings, and in furthering the conservation of fuel and power in Northern Ireland. The scope and significance of the regulations will be increased by the Building Regulations (Amendment) Bill, which was introduced to the Northern Ireland Assembly by the Minister of Finance and Personnel on 25 February 2008.

The Bill, which comprises 17 clauses and 1 Schedule, is the first piece of primary legislation on building regulations in Northern Ireland in the last 18 years. It will make significant amendments to the principal legislation in existence, the Building Regulations (Northern Ireland) Order 1979. In broad terms, the Bill aims to refine the powers, duties and rights of the Department of Finance and Personnel (which has policy responsibility for the regulations), district councils (which enforce the regulations) and applicants. Moreover, it will extend the general principles of the existing primary legislation to include protection and enhancement of the environment and the promotion of sustainable development.

^{*(}CHP can also stand for Community Heating Plant)

Following Second Stage in the Assembly on 4 March 2008, the Bill was referred to the Committee for Finance and Personnel for Committee Stage. As part of its consideration of the Bill, the Committee took oral evidence from fourteen key stakeholders, including professional bodies, environmental groups and building control practitioners from Northern Ireland and from other jurisdictions. A substantial body of written evidence was received and is included in the appendices to this report.

As part of their evidence to the Committee, several witnesses proposed specific amendments to clauses of the Bill as well as further amendments to the 1979 Order. In addition, concerns were raised on policy issues, including the debate on mandatory microgeneration, that are important to the wider remit of building regulations but which did not engage the specific clauses of the Bill. The Committee's consideration of each of these areas is covered separately in the report.

As part of its scrutiny, the Committee sought responses from the Department to each of the concerns or proposals raised by witnesses and to additional queries which the Committee itself raised. The Department provided a series of written responses in addition to further oral briefing. This clarified a number of the issues to the satisfaction of the Committee. In addition, the Department indicated where some of the proposed amendments or concerns can be taken forward more appropriately through subordinate legislation or in the associated guidance issued by the Department.

This report represents the outcome of the Committee's consideration of the evidence presented at Committee Stage. It includes twenty-two key conclusions and recommendations, which are wide ranging and cover specific clauses of the Bill as well as related policy and enforcement matters and topical issues, such as energy conservation and the use of renewable energy technologies. The recommendations aim to support the reform and improve the effectiveness of the building regulations and to contribute to the wider principles, which are proposed in the Bill, of environmental protection and sustainable development.

Key Conclusions and Recommendations

Consideration of the Provisions in the Bill

- 1. The Committee broadly welcomes the provisions in the Bill and considers that its importance lies not only in that it will update and streamline existing regulatory and enforcement provisions but, more especially, that it will extend the general principles of the primary legislation on building regulations to reflect the increasing significance of energy conservation, sustainable development and environmental protection. (Paragraph 12)
- 2. The Committee particularly welcomes the provisions in clause 1 of the Bill, which will facilitate any future decision by the Department of Finance and Personnel (DFP) to introduce a requirement in building regulations for a percentage of energy used in new buildings to be derived from Low or Zero Carbon (LZC) systems. (Paragraph 14)
- 3. The Committee is content with the commitment which DFP has given to consider how buildings not covered by the definition of "protected buildings" in clause 2 might be addressed in guidance issued to district councils. The Committee looks forward to being apprised of the outcome of this exercise. (Paragraph 17)
- 4. The Committee welcomes the Department's acknowledgement of the calls for a strengthening of the statutory duty on district councils in respect of preserving the character of protected buildings and recommends to the Assembly that clause 2 be amended, as agreed with the Department, as follows:

In page 2, line 28, leave out "have regard to" and insert "take account of". (Paragraph 18)

- 5. The Committee notes the DFP advice that, given the applicability of building regulations beyond the domestic property sector, it would not always be appropriate to use the Code for Sustainable Homes as a template for the new guidance-based system. Nonetheless, in view of its formal application in GB, the Committee recommends that, where possible, the Code is used to inform the forthcoming guidance documents pertaining to domestic property. (Paragraph 22)
- 6. The Committee shares the concerns of stakeholders that difficulties could arise in the event of individual district councils not accepting the type approvals of building matters by other councils. DFP advised that it could not take on additional powers in this regard without affecting its role in determining appeals on council decisions on type approval, and the Committee accepts this position. Nonetheless, the Committee concludes that an appropriate form of legislative/legal intervention is likely to be required if the proposed voluntary arrangements fail to ensure consistency of approach by district councils in this area. (Paragraph 28)
- 7. The Committee agrees with the Department's proposed amendment to remove clause 10 and thereby retain the provision in Article 20 of the principal Order, regarding civil liability for breach of duty imposed by building regulations. The Committee is also content with the consequential amendments to clause 16 (Commencement) and to the Schedule of Repeals. (Paragraph 32)

Related Issues

Consideration of proposals for further amendments to the principal Order.

- 8. The Committee believes that there is a need for the Building Control appeals process to be transparent and prompt. Whilst accepting that this can be addressed without the need to amend Article 17 of the principal Order to introduce statutory duties on DFP, the Committee calls on the Department to establish formal protocols covering both the publication of the basis for appeal decisions and the turnaround time for such decisions. The Committee will wish to monitor the performance of the Department in this area. (Paragraph 39)
- 9. The Committee considers that, on the basis of the advice received, a system of determinations, as pertains in England and Wales, should not be introduced in NI at this time. Instead, the Committee recommends that the present appeals mechanism is reviewed at a later date to assess its effectiveness in the context of the change from "deem-to-satisfy" to guidance-based documents, having bedded down. (Paragraph 43)
- 10. The Committee shares the concerns raised by some witnesses on the gap in the building regulations regarding commencement of work following approval of plans, which would allow individual houses within multi-house applications to be built to outdated standards. Whilst the Committee understands that this has occurred only rarely it, nonetheless, considers that the current slow down in the property market could increase the risk in this regard and, therefore, calls on DFP to bring forward the necessary subordinate legislation to close this loophole at the earliest opportunity. (Paragraph 46)
- 11. The Committee notes that DFP has agreed to facilitate discussion with Building Control to examine how best to address the outdated legislation on dangerous buildings and places, including consideration of which Department would be best placed to take this forward. The Committee recommends that this review is given priority and looks forward to considering the findings. (Paragraph 49)

- 12. The Committee believes that a statutory duty on DFP to work with other jurisdictions in harmonising the building regulations may be impracticable. However, given that developers are increasingly working on a cross-border basis, the Committee would encourage DFP to examine the scope for establishing more formal north-south and east-west arrangements for coordinating policy and legislation on building regulations where appropriate. (Paragraph 57)
- 13. The Committee is mindful of the fact that the current building regulations apply to only a small percentage of the total building stock in NI and believes that continued focus should be placed on identifying and introducing additional measures aimed at reducing the carbon footprint of existing buildings. (Paragraph 59)
- 14. The Committee, in principle, welcomes the introduction of Energy Performance Certificates (EPCs) later this year. However, arising from its scrutiny of the related subordinate legislation the Energy Performance of Buildings (Certificates and Inspections) Regulations (NI) 2008 the Committee has sought assurance from the Department that all necessary preparations are being made ahead of the introduction of EPCs, in particular that appropriate steps are being taken to raise public awareness of the changes and to ensure the availability of trained and accredited assessors. (Paragraph 60)
- 15. The Committee looks forward to examining the outcome of the forthcoming consultation on 'green rebates', which should inform consideration of the potential of temporary rates reliefs /rebates as a tool for reducing household carbon emissions by encouraging the retro-fit of existing homes with energy saving materials. Such measures would have the added benefit of helping to address fuel poverty. (Paragraph 61)
- 16. The Committee calls on the Minister of Finance and Personnel to review the basis for the building regulations function falling within DFP and, in conjunction with the Minister of the Environment, to consider the case for transferring this function (and possibly also the related responsibilities for the government estate and sponsorship of the construction industry) to the Department of the Environment (DoE) with the aim of ensuring closer policy co-ordination between the building regulations and planning functions. (Paragraph 66)

Reducing Carbon Emissions from New Buildings

- 17. The Committee concludes that there is an important interrelationship between demand for LZC technologies, the capacity of the local renewables industry, and the further commercialisation and development of the technology. The Committee considers that market forces alone may not be able to sufficiently drive increased uptake of LZC systems and to support technological development. A firm and challenging timetable for the introduction of stricter regulations on carbon emissions from buildings will assist in this regard and, conversely, faster technological development will facilitate even higher standards. The Committee, therefore, recommends that the Department:
 - uses building regulations to further promote and encourage the use of LZC technology by establishing 2016 as a firm target date for all newbuilds in NI to be zero carbon, thereby keeping pace with developments in GB and RoI; and
 - follows the example of England and Wales in working jointly with the construction industry to achieve the 2016 target. (Paragraph 84)
- 18. The Committee acknowledges the strong arguments for and against the introduction of mandatory microgeneration. However, the Committee considers that the nub of the issue is one of timing as the use of LZC systems will increasingly become a necessity to help meet the carbon emission requirements in newbuilds. On the basis of the evidence provided, it is clear to the

Committee that energy efficiency measures alone will not be sufficient in the medium to long term if NI is to keep in step with GB and RoI in reducing the levels of carbon emissions from buildings. In addition, the current trend in rising fossil fuel prices is likely to result in decreasing payback periods for LZC technologies which, in the view of the Committee, will place the promotion of renewables in a new context. The Committee, therefore, calls on the Department:

- to regularly assess the cost-effectiveness of LZC systems in light of the ongoing increases in fossil fuel prices; and
- on the basis of the changing circumstances, keep under review the option of using building regulations to require that a proportion of the energy needs of newbuilds is provided from LZC systems. (Paragraph 85)
- 19. The Committee welcomes the fact that Planning Service is considering both permitted development rights for small-scale renewable energy systems and the potential for planning policy to take forward the concept of "macrogeneration" schemes for new housing developments. In this regard, the Committee has shared the information which it has received on similar legislative changes in the Republic with the Assembly's Committee for the Environment. (Paragraph 89)
- 20. Given the evidence on the importance of stimulating demand for renewables and supporting the early adopter market, the Committee understands the concerns raised recently, including by the Committee for Enterprise, Trade and Investment, at the ending of the 'Reconnect' grant scheme. The Committee considers that continued provision of an appropriate level of grant funding for household renewables is especially important in light of the decision by the Minister of Finance and Personnel not to proceed with introducing mandatory microgeneration into the building regulations. As such, the Committee calls on the Minister to work with his Executive colleagues to ensure that the necessary priority is given to funding the uptake and development of LZC technologies. (Paragraph 92)

Building Regulations and Sustainable Development

- 21. The Committee considers that using building regulations to promote and facilitate both energy efficiency and the use of renewable energy in buildings can play an important part in helping NI to achieve the targets which have been set at an EU, UK and regional level for reductions in carbon dioxide emissions and greenhouse gases and increases in renewable energy generation. (Paragraph 97)
- 22. The Committee understands that OFMdFM is leading a review of the Sustainable Development Strategy, with the aim of producing a strategy that is better aligned with the priorities of the Executive, as expressed by the Programme for Government. The Committee looks forward to considering the contribution which DFP will make to these forthcoming plans by the Executive to strategically address sustainable Development and, in particular, the role which will be identified for building regulations. (Paragraph 98)

Introduction

Background

1. The Building Regulations (Amendment) Bill 2008 was introduced to the Assembly by the Minister of Finance and Personnel on 25 February 2008 and received its Second Reading on 4 March 2008, when it was subsequently referred to the Committee for Finance and Personnel (the

Committee) for Committee Stage. The Bill has 17 clauses and 1 Schedule. The provisions in each clause are explained in the Explanatory and Financial Memorandum.[1]

2. The purpose of the Bill is to refine the powers, duties and rights of the Department of Finance and Personnel (DFP), district councils (which enforce the regulations) and applicants; and to extend the general principles of the existing primary legislation to include protection of the environment and the promotion of sustainable development.

The Committee's Approach

- 3. The Committee received briefing from DFP prior to the introduction of the Bill to the Assembly, including an oral briefing from the responsible departmental officials on 7 November 2007 and information on the outcome of the Department's previous policy consultations in 2004 and 2005. A public notice was placed in the main provincial newspapers on 5 March 2008, following commencement of Committee Stage, inviting written evidence on the provisions of the Bill. The Committee also contacted a number of key stakeholders who had responded to the Department's earlier consultations.
- 4. In response to its call for evidence, the Committee received written submissions from the following organisations:
 - Building Control Northern Ireland (BCNI);
 - Energy Saving Trust (EST);
 - Royal Institution of Chartered Surveyors NI (RICS(NI));
 - Sustainable Energy Association (SEA);
 - Northern Ireland Environment Link (NIEL); and
 - Association of Building Engineers (ABE).
- 5. The Committee also took oral evidence from the following key stakeholders:
 - BCNI;
 - Northern Ireland Building Regulations Advisory Committee (NIBRAC);
 - Climate Change Coalition NI;
 - SEA;
 - Chartered Institute of Architectural Technologists;
 - Chartered Institute of Building in Ireland;
 - RICS(NI);
 - ABE:
 - Institution of Structural Engineers NI Branch;
 - EST;
 - NIEL:
 - Local Authority Building Control, England and Wales (LABC);
 - Building Standards Section, Department of the Environment, Heritage and Local Government, Republic of Ireland (RoI); and
 - the responsible DFP officials.

- 6. A number of the above bodies also submitted additional written submissions proposing specific amendments to the clauses in the Bill and to articles in the Building Regulations (NI) Order 1979 ("the principal Order"). The evidence from the Building Control representatives from England and Wales and RoI was particularly helpful in providing the Committee with an insight into the experiences of other jurisdictions in implementing similar legislative reform to that proposed in the Bill. The Committee also commissioned three separate pieces of research from the Assembly Research and Library Services to inform its initial considerations.
- 7. Given the volume of evidence received and the range of issues and proposed amendments which were raised, the Committee required additional time to consult with the Department and to reach a considered position on the Bill. As such, on 28 April 2008, the Assembly agreed to extend the Committee Stage to 27 June 2008.
- 8. The Committee made a detailed analysis of the wide-ranging issues arising from the evidence and sought responses from DFP to each of the concerns or proposals raised by witnesses and to additional queries which the Committee itself raised. The Department provided a series of follow up written responses in addition to further oral briefing. This clarified a number of the issues to the satisfaction of the Committee. In addition, DFP indicated where amendments/changes proposed by witnesses can be taken forward more appropriately through subordinate legislation or in the associated guidance issued by the Department. In addition to the further amendments proposed to the principal Order, the Committee received evidence on policy issues, including the debate on mandatory microgeneration, that are important to the wider remit of building regulations but which did not engage the specific clauses of the Bill. The Committee's consideration of these issues is covered separately in the report.
- 9. The Committee carried out clause-by clause scrutiny of the Bill on 28 May 2008. At its meeting on 11 June 2008, the Committee agreed that its report on the Bill would be printed.
- 10. The Minutes of Proceedings relating to the Committee's deliberations on the Bill are included at Appendix 1. Copies of the Official Reports of the oral evidence sessions are at Appendix 2 and the written submissions which the Committee received initially are at Appendix 3. Follow up memoranda and papers, including the written responses from DFP to the queries and proposed amendments raised by witnesses and the Committee are at Appendix 4. Finally, Appendix 5 includes the research papers provided by the Assembly Research and Library Services to assist the Committee's deliberations.

Consideration of the Provisions in the Bill

- 11. During its clause-by-clause scrutiny of the Bill, the Committee agreed all the clauses without the need for amendment, save for clauses 2, 10 and 16 and the Schedule of Repeals. In terms of clause 2, arising from the issues raised during Committee Stage regarding the duty on district councils to preserve the character of protected buildings, the Department has agreed to table an amendment which will address the Committee's concerns, as detailed below. Clause 10 was not agreed to, as the Committee accepted the Department's proposed amendment to remove the clause and thereby retain the provision for civil liability for breach of duty imposed by building regulations contained in Article 20 of the principal Order. The decision not to repeal Article 20 will result in consequential amendments to clause 16 (Commencement) and the Schedule of Repeals, with which the Committee is content.
- 12. The Committee broadly welcomes the provisions in the Bill and considers that its importance lies not only in that it will update and streamline existing regulatory and enforcement provisions but, more especially, that it will extend the general principles of the primary legislation on building regulations to reflect the increasing significance of energy conservation, sustainable development and environmental protection.

13. The Committee's detailed analysis of the issues arising from the evidence on the provisions in the Bill, together with its formal clause-by-clause scrutiny, is detailed in the Official Reports at Appendix 2. However, the following section highlights the key issues upon which the Committee has raised concerns, drawn conclusions or made recommendations. The issues are identified below against the relevant clauses of the Bill, with consideration being limited only to those clauses which attracted substantive comment in the evidence.

Clause 1 – Building Regulations

- 14. In broad terms the Committee welcomes the provisions in clause 1. In particular, DFP has advised that the inclusion of the definition of "low or zero carbon systems" (LZC systems) has a broader scope than "microgeneration" and, combined with the amendments to Schedule 1 to the principal Order, will clarify and future-proof the primary legislation. The Department has also pointed out that, though the existing primary legislation (i.e. Article 3 of the principal Order) empowers DFP to mandate microgeneration through subordinate legislation, the current powers would not permit a requirement for a percentage of a building's energy to come from LZC systems. The Committee, therefore, particularly welcomes the provisions in clause 1 of the Bill, which will facilitate any future decision by the Department to introduce a requirement in building regulations for a percentage of energy used in new buildings to be derived from LZC systems.
- 15. The evidence on this clause included a call by NIEL for a definition of biomass to ensure that only sustainable energy forms are considered and a recommendation by SEA that target emission rates be reduced. In reply, DFP has explained that subordinate legislation and the supporting guidance would be the appropriate means for addressing both of these proposals. The Department also gave a commitment to consider the sustainability of fuel sources as part of future consultations.
- 16. In response to concerns from BCNI around definitions in Article 2 of the principal Order, the Department provided clarification on the application of the term "owner" and, on advice from the Office of Legislative Council (OLC), cautioned against amending the existing definition of "site" as this could inadvertently lead to tying the regulations to a tighter definition. The Committee was content with the explanations and undertakings which the Department provided in respect of this clause.

Clause 2 – Protected Buildings

- 17. In response to a call from BCNI and NIEL for the definition of "protected buildings" to be extended, DFP has explained that the term is linked to and harmonised with the definition used in Planning legislation and that attempts to list additional areas in the primary legislation could result in the scope of the powers being restricted. However, the Committee is content with the commitment which DFP has given to consider how buildings not covered by the definition of "protected buildings" in clause 2 might be addressed in guidance issued to district councils. The Committee looks forward to being apprised of the outcome of this exercise.
- 18. The Committee pursued with DFP a call from BCNI and ABE for the statutory duty on district councils in clause 2 to be strengthened. In response, DFP has offered to table an amendment at Consideration Stage to replace "have regard to" with "take account of". Having liaised with OLC on the issue, the Department advises that it would not be possible to introduce a more stringent duty on a district council without also including sanctions, such as fines, for failure to carry out the duty. The Committee welcomes the Department's acknowledgement of the calls for a strengthening of the statutory duty on district councils in respect of preserving the character of protected buildings and recommends to the Assembly that clause 2 be amended, as agreed with the Department, as follows:

In page 2, line 28, leave out "have regard to" and insert "take account of".

Clause 3 – Building Regulations Advisory Committee

19. In its evidence, ABE proposed that NIBRAC should be enabled to raise, with the Department, issues of concern to the building industry regarding building regulations. In responding, DFP explained that the Construction Industry Forum for NI, which is managed by DFP's Central Procurement Directorate, already provides an appropriate forum in this regard. The Committee was content with this explanation.

Clause 4 – Further provisions as to the making of building regulations, etc.

- 20. There has been a broad welcome from the stakeholders for the provisions in this clause, which replace the "deemed-to-satisfy" system with a guidance-based system. In response to calls for the new guidance to be freely available, DFP has stated its intention to make as much as possible freely available on its website. The Committee is content with this commitment.
- 21. As alluded to already, the Committee welcomes the provisions in the clause to extend the general principles of the existing primary legislation on building regulations to include protection of the environment and the promotion of sustainable development. NIEL had proposed a specific amendment to 4(c) where (b) would read "reduce the demand for, and further the conservation of, fuel and power". The Department has explained that this addition is unnecessary as reducing demand is integral to furthering the conservation of fuel and power. The Committee agrees with the DFP response on this point.
- 22. In its evidence on this clause, SEA suggested that the Code for Sustainable Homes could be used as a template for any replacement of the deemed-to-satisfy system. The Committee notes the DFP advice that, given the applicability of building regulations beyond the domestic property sector, it would not always be appropriate to use the Code for Sustainable Homes as a template for the new guidance-based system. Nonetheless, in view of its formal application in GB, the Committee recommends that, where possible, the Code is used to inform the forthcoming guidance documents pertaining to domestic property.

Clause 5 – Guidance documents

- 23. Several witnesses, including BCNI and RICS(NI), queried the extent to which authorative documents from other sources might be included in the guidance. The Committee welcomes the subsequent assurances from the Department that the guidance will include reference to other authorative third party guidance documents.
- 24. In response to a proposed amendment from NIEL as to how DFP should publicise and consult on its guidance, the Department advised that this would be a matter for policy rather than statute.

Clause 6 - Type approval

25. There was a broad welcome from the stakeholders for the provisions in this clause, which will empower district councils to "type approve" non-site specific building matters (e.g. house-type superstructures), as this will allow for greater flexibility. It was also acknowledged that provision will exist for applicants to appeal the decision of a district council to the Department. However, several organisations, including BCNI, SEA and ABE, anticipate potential problems

where one district council does not accept another council's type approval or where there is inconsistency in how councils approve applications. Arising from these concerns, it was proposed to include a duty in this clause requiring all councils to sign up to an agreed type approval.

- 26. For its part, NIBRAC explained the plans that are in place for a Type Approval Committee representing the 26 Councils, which will be established on a non-statutory/voluntary basis. NIBRAC has suggested that failure of the voluntary scheme may require legislative intervention by DoE.
- 27. In response to Committee queries as to whether a statutory mechanism could be found for DFP to ensure consistency of approach by councils (e.g. a power for DFP to issue directions to councils regarding type approval), the Department has explained that this could affect its role in determining appeals on council decisions on type approval. However, the Department has suggested that an appropriate provision may exist in Article 6(g) of the Local Government (Employment of Group Building Control Staff) Order (NI) 1994, which states that group officers have responsibility "to ensure consistency of interpretation, application and enforcement of regulations".
- 28. The Committee shares the concerns of stakeholders that difficulties could arise in the event of individual district councils not accepting the type approvals of building matters by other councils. DFP advised that it could not take on additional powers in this regard without affecting its role in determining appeals on council decisions on type approval, and the Committee accepts this position. Nonetheless, the Committee concludes that an appropriate form of legislative/legal intervention is likely to be required if the proposed voluntary arrangements fail to ensure consistency of approach by district councils in this area.
- 29. On a separate issue, NIEL proposed an amendment to Article 8(4) of the principal Order, to provide for type approval certificates dealing with "the energy performance of the building". In response, DFP explained that this would be provided for already under the principal Order and would be a matter for subordinate legislation.

Clause 8 – Contravention notices

30. In their evidence on the clause, BCNI and ABE suggested the need for a definition of "completion of works". In response, DFP pointed to OLC advice that it is often more restrictive to include a plethora of definitions in primary legislation. The Department also stated its intention to make it mandatory in subordinate legislation for the applicant to request a completion certificate, which will provide a date upon which the contravention notice process can operate. The Committee agreed the clause on the basis of this advice.

Clause 9 – Registers of information and documents to be kept by district councils

31. In response to concerns raised by several witnesses that the provisions in the clause could lead to the public being subject to unsolicited sales material, the Department has explained that councils could refuse to release certain information on applications under the Data Protection Act. Also, DFP has given an undertaking to consult widely in preparing the regulations to cover content and access issues. The Committee was therefore content with the clause.

Clause 10 – Civil liability

32. As explained above, the Committee agrees with the Department's proposed amendment to remove clause 10 and thereby retain the provision in Article 20 of the principal Order regarding

civil liability for breach of duty imposed by building regulations. The Committee is also content with the consequential amendments to clause 16 (Commencement) and to the Schedule of Repeals.

Clause 12 – Application of building regulations to the Crown

33. In its evidence RICS(NI) suggested that a definition of "Crown occupation" should be included to assist designers and district councils to decide whether the proposed building is exempt from building regulations. The Department referred the Committee to the definition of "Crown authority" in the principal Order and indicated that this would be used to determine the Crown status of, for example, a public company where this has not already been established by statute. The Committee agreed the clause in light of this clarification.

Related Issues

34. During the course of the Committee's evidence gathering, a number of witnesses raised issues relating to the wider remit of building regulations, including areas where additional amendments might be made to the principal Order, but which did not engage the specific clauses of the Bill. The Committee pursued these issues with the Department and the outcome of this is summarised below.

Consideration of proposals for further amendments to the principal Order

Plans deposited with a District Council (Article 13)

- 35. In its evidence, BCNI proposed that consideration be given to amending the provisions in Article 13 of the principal Order to require Building Control approval of plans before commencement of work, as a means of ensuring that serious and costly mistakes are not made during the construction process. It was further suggested that, to prevent delays for developers, an application could be "deemed approved" if it is not processed within a fixed time period.
- 36. In responding, DFP cautioned that a change of this nature would require detailed consideration and consultation, particularly to assess Building Control's capacity to resource the work involved and the potential for bottlenecks to occur in the approval process, which would not be welcomed by the construction industry. The Department also pointed out that the "deemed approved" approach may result in buildings being constructed that do not satisfy the requirements of the regulations. The Committee also noted that prior approval would not facilitate the "building notice" route open to house builders, which streamlines the approval process while allowing them to commence work at their own risk.

Appeals to the Department (Article 17)

- 37. Both BCNI and ABE called for the Department to publish the reasons why it reached appeal decisions and BCNI contended that there should be a time limit on such decisions. BCNI also proposed that, with the introduction of guidance-based documents, a system of determinations should be established, similar to that which exists in GB.
- 38. In response to the call for the publication of the basis for appeals decisions, the Department stated that it will shortly be placing the information on the DFP website. It also advised that, while there is no statutory period within which the Department must come to a decision, it

generally reaches appeal decisions within two weeks of receiving all the relevant papers from both the appellant and the relevant District Council.

- 39. The Committee believes that there is a need for the Building Control appeals process to be transparent and prompt. Whilst accepting that this can be addressed without the need to amend Article 17 of the principal Order to introduce statutory duties on DFP, the Committee calls on the Department to establish formal protocols covering both the publication of the basis for appeal decisions and the turnaround time for such decisions. The Committee will wish to monitor the performance of the Department in this area.
- 40. On the proposal for a system of determinations, the Committee notes that in England and Wales, where an applicant disagrees with Building Control's application of the regulations at any stage during its consideration of the plans, or where Building Control has rejected the plans, an applicant may seek a determination from the responsible Government department. A fee is payable for this service. In addition, where Building Control serves a contravention notice, the applicant's only remedy is the court, and the Committee understands that this can be a slow and expensive process. This system of determinations contrasts to the approach in NI, where an applicant may appeal, free of charge, to the Department only when the plans have been rejected.
- 41. The Committee agrees that, in theory, the determination of appeals system in England and Wales seems attractive. However, members noted the advice from the LABC representative, who previously held responsibility for running the system, that it has not worked well in practice, as the lengthy decision making process has meant that it is inefficient and consequently the procedure is rarely used. As a result, alternative approaches to dispute resolution are currently under consideration in England and Wales.
- 42. In its response to the proposal, DFP argued that there is more merit in retaining the existing powers requiring Building Control to exercise its professional judgement in deciding whether or not to approve plans or notices, with the Department offering a free appeals service should the applicant disagree with Building Control's decision. The Department has also pointed out that, in NI, where Building Control serves a contravention notice, the applicant may appeal to the Department, and resolution is relatively quick and at no cost.
- 43. The Committee considers that, on the basis of the advice received, a system of determinations, as pertains in England and Wales, should not be introduced in NI at this time. Instead, the Committee recommends that the present appeals mechanism is reviewed at a later date to assess its effectiveness in the context of the change from "deem-to-satisfy" to guidance-based documents, having bedded down.

Deposit of plans to be of no effect after certain interval (Article 19)

- 44. BCNI and ABE informed the Committee that presently, in the case of multi-house applications, so long as one house has commenced within three years, the plans cannot be declared null and void. This can result in individual houses continuing to be built to outdated regulations and standards. BCNI and ABE, therefore, proposed that Article 19 of the principal Order should be amended to provide for the power to declare approved plans null and void where individual buildings have not been commenced on multiple sites. In follow up to its oral evidence, ABE provided a specific form of words for the necessary amendment (Appendix 4), which the Committee forwarded to DFP for consideration.
- 45. In responding to this issue, the Department explained that, on the advice of OLC, it considers this proposed amendment to be unnecessary as the issue can be addressed through

subordinate legislation. The Department is considering making amending regulations which will result in each house in multi-house applications being treated as a separate application for the purposes of Article 19. This would have the effect of requiring work to commence on all houses within three years or the approval for the uncommenced works would become null and void.

46. The Committee shares the concerns raised by some witnesses on the gap in the building regulations regarding commencement of work following approval of plans, which would allow individual houses within multi-house applications to be built to outdated standards. Whilst the Committee understands that this has occurred only rarely it, nonetheless, considers that the current slow down in the property market could increase the risk in this regard and, therefore, calls on DFP to bring forward the necessary subordinate legislation to close this loophole at the earliest opportunity.

Dangerous buildings and places

- 47. BCNI pointed out to the Committee that, whilst district councils currently have powers to control dangerous buildings and places, these are contained in legislation written in the middle nineteenth and early twentieth centuries and which is now out of date and often ineffective. The BCNI position was supported by ABE and it was proposed that the Bill should include the powers to make regulations to control dangerous buildings and places.
- 48. The Committee raised this proposal with DFP and also took the opportunity of the oral evidence session with LABC, to explore the position in England and Wales. The advice from the LABC representative was that, in England and Wales, dangerous buildings and places is covered by legislation which is separate to building regulations and that this seems to work effectively.
- 49. For its part, DFP provided details of the various statutes under which district councils control dangerous buildings, though it was noted that Departmental ownership for this legislation has yet to be determined (Appendix 4). The Department explained that, at this stage, it has not yet been agreed that the building regulations legislation is the most suitable legislative framework in which to prescribe matters relating to dangerous buildings. It added that widening the provisions to include dangerous places would make the link with building regulations more tenuous. The Committee notes that DFP has agreed to facilitate discussion with Building Control to examine how best to address the outdated legislation on dangerous buildings and places, including consideration of which Department would be best placed to take this forward. The Committee recommends that this review is given priority and looks forward to considering the findings.

Control of demolitions

- 50. BCNI also proposed that the Bill should provide for the making of regulations to control demolitions. In explaining its proposal, BCNI stated that, whilst demolition of buildings falls within the requirements of the Construction (Design and Management) Regulations (NI) 2007, it is one of the most dangerous aspects of building operations and the current control system is reactive rather than proactive. Also supporting this proposal, ABE expressed the view that Building Control officers have the skills to oversee this work, which in future may relate to recycling or sustainability.
- 51. In responding to this proposal, DFP provided information on the various pieces of legislation governing demolitions and on which departments and agencies hold responsibilities in this regard (Appendix 4). The Committee accepts the Department's position that issues relating to enforcement of legislation governing demolitions are a matter for the relevant parent department or departments to address. The Committee would also echo the DFP advice that

Building Control should raise any proposals for improvements to the control of demolitions directly with the Health and Safety Executive NI.

Backland development

- 52. BCNI pointed out to the Committee that "backland developments" exist where emergency and service vehicles have been unable to gain access to the development. In the view of BCNI, no statutory agency appears to have powers to ensure proper access is available and, therefore, consideration should be given to whether this could be addressed in the Bill.
- 53. DFP responded to this issue by explaining that, although building regulations cover requirements for ensuring the health, safety, welfare and convenience of buildings, the scope in terms of access arrangements is confined to matters where the point of access forms part of the site. In the view of the Department, the access issues raised by BCNI would appear to be outside the scope of building regulations and, therefore, a matter for Planning Service.
- 54. The Committee noted from the evidence provided by LABC that building regulations in England and Wales include a specific provision requiring access for the Fire Service in all developments. When the Committee raised this with the Department, it was referred to provisions in Part E (Fire Safety) of the Building Regulations (NI) 2000, which appear to make equivalent provision in respect of the Fire and Rescue Service in NI. The Department also provided details of the relevant Planning policy and guidance which covers access for emergency vehicles (Appendix 4). The Committee is content with the clarification provided by DFP, though it sees this issue as another example of the potential for overlap between building regulations and planning, which highlights the need for closer co-ordination between the two functions.

Harmonisation of Building Regulations

- 55. A further proposal from BCNI was that the Bill should place a duty on the Department to take account of the requirements of other jurisdictions and work with others on a harmonisation agenda, both in terms of technical content and on coordinating the introduction of new regulations.
- 56. DFP, in it response on this proposal, outlined the voluntary arrangements which exist for ensuring that NI takes account of requirements in other jurisdictions and provides an input into cross-cutting policy development. This includes DFP representation at GB Building Regulations Advisory Committee meetings and regular attendance by colleagues from GB at NIBRAC meetings. In addition, at least once per year, one of the regions hosts a meeting of UK jurisdictions and RoI representatives to share information on issues of potential mutual interest. The Department highlighted its close collaboration with England and Wales on the content of proposed amendments as a means of minimising the resources needed to develop technical detail.
- 57. The Committee believes that a statutory duty on DFP to work with other jurisdictions in harmonising the building regulations may be impracticable. However, given that developers are increasingly working on a cross-border basis, the Committee would encourage DFP to examine the scope for establishing more formal north-south and east-west arrangements for coordinating policy and legislation on building regulations where appropriate.

Application to existing buildings

58. Several witnesses pointed out to the Committee that, at some time in the future, it may be necessary to consider applying building regulations to existing buildings, particularly in terms of

reducing their carbon footprint. Both BCNI and ABE raised the issue of whether the Bill should, therefore, provide for regulatory powers applicable to existing buildings. In responding to a subsequent query from the Committee as to whether a suitable enabling power could be included in the Bill, DFP advised that the potential human rights, financial and enforcement issues arising would require detailed consideration and public consultation and the proposal could not therefore be considered for inclusion in this Bill.

- 59. The Committee is mindful of the fact that the current building regulations apply to only a small percentage of the total building stock in NI and believes that continued focus should be placed on identifying and introducing additional measures aimed at reducing the carbon footprint of existing buildings. That said, the Committee acknowledges that there are some measures in place and some pending, which will help to improve the energy efficiency of at least a portion of the existing buildings. For example, the Department has explained that, where non-domestic buildings over 1000m2 are extended, have a new service fitted or the capacity of the existing service is increased, they must carry out consequential improvements, which are practicable and cost-effective, to the thermal fabric of the building.
- 60. As regards forthcoming measures, the Committee, in principle, welcomes the introduction of Energy Performance Certificates (EPCs) later this year. However, arising from its scrutiny of the related subordinate legislation the Energy Performance of Buildings (Certificates and Inspections) Regulations (NI) 2008 the Committee has sought assurance from the Department that all necessary preparations are being made ahead of the introduction of EPCs, in particular that appropriate steps are being taken to raise public awareness of the changes and to ensure the availability of trained and accredited assessors.
- 61. There is also the potential for new and novel measures to be introduced. In this regard, the Committee looks forward to examining the outcome of the forthcoming consultation on 'green rebates', which should inform consideration of the potential of temporary rates reliefs /rebates as a tool for reducing household carbon emissions by encouraging the retro-fit of existing homes with energy saving materials. Such measures would have the added benefit of helping to address fuel poverty.
- 62. Finally, in terms of the existing Government estate, for which DFP has lead responsibility, the Committee intends to monitor progress towards achieving the target, which is contained in the existing Sustainable Development Strategy, for the estate to be carbon neutral by 2015.

Departmental responsibility for Building Regulations

- 63. The Committee has noted that an important theme to emerge from the evidence is the close relationship and the scope for overlap between policy and legislation covering building regulations and that which covers planning. This has been evident in the consideration of issues such as renewable energy, protected buildings and access for emergency services.
- 64. The Committee also noted from the evidence provided by the Department of Environment, Heritage and Local Government (RoI) that the experience in the Republic is that there are advantages of having building regulations and planning within one Department, in terms of ensuring policy co-ordination and avoiding overlap. Similarly, in its evidence, NIEL called for greater integration of the building regulations and planning functions at both the departmental level, where policy is developed, and at district council level, where the responsibility for delivery and enforcement lies, in the case of Building Control, or is due to be transferred, in the case of Planning.

- 65. The Committee has queried the background to the building regulations function falling under the DFP remit. The Department has advised that, whilst responsibility for building regulations in NI was originally held by the Ministry of Finance, primarily because of that Ministry's responsibility for the Crown estate, in 1984 the responsibility for building regulations, the estate and sponsorship of the construction industry transferred to DoE. The present position was established in 1999, when there was a further transfer of these functions to DFP; however, the Committee notes that the reasons for this transfer have not been established.
- 66. Whilst recognising that the integration of building control and planning at district council level can be addressed as part of the transfer of functions under RPA, the Committee calls on the Minister of Finance and Personnel to review the basis for the building regulations function falling within DFP and, in conjunction with the Minister of the Environment, to consider the case for transferring this function (and possibly also the related responsibilities for the government estate and sponsorship of the construction industry) to DoE with the aim of ensuring closer policy coordination between the building regulations and planning functions.
- 67. In addition to the aforementioned issues, a number of proposals were raised relating to the policy and administrative aspects of building regulations or which were more relevant to subordinate legislation. These included a call from BCNI for a phased and published programme of proposed new regulations and recommendations from ABE in relation to district council databanks, the potential for district councils to promote Sustainable Communities, and the need to take account of future technologies when designing buildings. The details of these and other proposals from witnesses, together with the DFP responses on each issue, are included at appendices 3 and 4.

Reducing Carbon Emissions from New Buildings

68. Prior to and during the Committee Stage of the Bill, the Committee also received a sizeable body of evidence on a range of issues relating to the need to reduce carbon emissions from buildings. This included the debate over the use of on-site microgeneration systems for heating or providing electricity in homes and buildings, particularly in terms of whether this technology should be made mandatory. Evidence was also received, including from other jurisdictions, on current and forthcoming measures being taken in building regulations and in other policy areas to achieve a reduction in carbon emissions from new buildings.

Mandating Microgeneration/Low or Zero Carbon (LZC) Systems

- 69. The Committee was notified by the Minister in November 2007 (Appendix 4) of his decision not to proceed with subordinate legislation to amend the building regulations to introduce mandatory microgeneration in all new buildings from April 2008, as had been announced previously by the former Secretary of State, Peter Hain MP. Following the decision by the Minister, which was based on the advice of NIBRAC amongst others, the issue attracted attention in the media and the Committee received written and oral evidence from a range of stakeholders, including those in favour of the immediate mandating of renewables and those who consider that the circumstances and timing are not right for such a measure.
- 70. In opposing the introduction of mandatory microgeneration at this time, DFP has cited figures from the Department for Environment, Food and Rural Affairs (DEFRA) showing many of the LZC technologies having payback periods far in excess of their lifespans and therefore not being cost-effective. It was pointed out that this would leave the Department open to legal challenge under the 'Wednesbury Irrational' principle, which prevents government from introducing financial requirements on the public which are not cost-effective. The Department also expressed doubt over the ability of the technologies to deliver intended performance and

over the capacity of the local renewables industry to provide enough competent installers. Further, DFP highlighted that LZC technologies are not mandatory in building regulations in England, Wales or Scotland and that the 2006 Regulations, which will reduce carbon emissions by 40% in applicable buildings, are still bedding down in NI.

- 71. In explaining his decision not to mandate microgeneration, the DFP Minister has pointed out that compliance with the carbon emissions targets is now determined on a "whole building basis", involving standardised software which measures emissions based on the thermal efficiencies of the building's external fabric and the fixed energy consuming appliances. This approach, it is argued, offers more flexibility to achieve compliance with energy standards than prescriptive requirements. The DFP position was supported by the view of NIBRAC, which advised that reduced carbon emissions are better achieved through improvements to energy performance of building fabric, including higher insulation standards.
- 72. The Committee also noted that, in its evidence, LABC, whilst acknowledging that a case exists for promoting and encouraging microgeneration in the regulations, emphasised the risks associated with being prescriptive. Similarly, EST favoured setting a higher carbon standard at this time as this would leave it to the market to find the most cost-effective means for achieving the targets.
- 73. On the side of mandating renewables, SEA supplied figures to the Committee which, in SEA's view, disprove both the arguments regarding lack of cost-effectiveness or payback from LZC systems and the doubts around the capacity of the industry. SEA cited the experience of leading NI companies in exporting technology worldwide, including heat pumps, solar and wood pellets systems, as evidence that the technologies are proven. It was argued that the 2006 regulations still leave NI well behind other European countries and that there is no evidence that these regulations are driving an increase in the use of renewables in new builds. SEA also pointed out to the Committee that one third of all councils in GB already mandate renewables in new houses under planning policy, known as the "Merton Rule", and that a 10 20% carbon emissions reduction using on-site renewables is proposed for London. The lead being taken in RoI was also highlighted, where new building regulations will introduce a requirement for LZC systems to provide a specified contribution to the energy needs of any new dwelling submitted for approval after 1 July 2008. In addition, the Committee noted that a requirement exists in Scottish planning policy for on-site LZC equipment.[2]
- 74. The evidence from NIEL also supported the case for introducing a mandatory element to promote the use of renewables. NIEL explained that, whilst thermal efficiency is vital, promotion of renewable technologies is also vital to 'carbon neutrality' as there are energy uses, such as hot water and lighting, which always require input. It also pointed out that payback times for renewables are likely to decrease as fossil fuel and electricity prices continue to increase; a point which, the Committee notes, DFP itself has acknowledged.
- 75. NIEL advised that the experience of the 'Merton Rule' in England is that, due to the requirement of a percentage of on-site generation, developers found it in their interests to reduce the overall energy demand of their projects as they did not have to install as much capacity.
- 76. The evidence from NIEL also contended that it would be in NI's interests if government policy encourages development of the indigenous renewables sector and that the decision not to mandate in NI limits the development of renewable technologies. In this regard, it cites the findings from a recent report by the Renewables Advisory Board (RAB), an independent body which advises the UK Government on a range of renewable energy issues. [3] This report, inter alia:

- calls on Government to do more to stimulate demand for renewables and build capacity in the on-site renewables sector to avoid a supply gap in 2016 (the target date for zero carbon homes in England);
- proposes that this be achieved by either mandating a minimum renewables requirement or by the planning system requiring zero carbon standards in the largest developments before 2016; and
- estimates that the average cost of meeting zero carbon standards from onsite renewables will be £6k per dwelling, which would have a payback time of less than 10 years.
- 77. The report also forecasts a market for on-site renewables worth £2.3 billion a year from 2016 and NIEL sees this as further evidence that government support for the fledgling industry could support future economic development in NI.
- 78. In its evidence, EST stated that cost projections at the UK level indicate many microgeneration technologies will produce cost competitive energy by 2020, though biomass, ground source heat pumps and small commercial scale Combined Heat and Power (CHP) units are already cost effective. In its view, the rate at which cost-competitive technologies enter the market depends on: the capacity of the renewables industry; the early adopter market; and policy interventions to develop niche markets.
- 79. The Committee noted from the EST evidence that the current targets in England and Wales for reduced carbon emissions, including 2016 for zero carbon homes, will not only encourage but will require the installation of renewable technologies. In particular, microgeneration will become necessary in most apartments from 2010, when Level 3 of the Code for Sustainable Homes will apply, and for all levels above Level 4, which will be introduced in England and Wales in 2013. The Committee notes that DFP has commenced work on amending the building regulations in NI to follow England and Wales, by introducing a further 25% reduction in carbon emissions by 2010, increasing to 44% by 2013 and which will equate to levels 3 and 4 of the Code respectively. However, the Committee is concerned that NI has not yet followed England and RoI in establishing 2016 as a target for carbon free homes. [4]
- 80. Whilst EST stressed that the immediate priority should be on energy efficiency, it also recognised that mandatory microgeneration could build the renewables market and support technological development, but emphasised that any move in this direction should be on a phased basis, with sufficient notice to enable the market to gear up for the change. The Committee noted that a number of witnesses highlighted the importance of preparing the market and giving advance notice to the construction industry of changes to the regulations.
- 81. The LABC representative advised that a joint taskforce, involving Government and the Home Builders Federation, has been set up in England and Wales to develop policy on how zero carbon homes will be achieved by 2016. Whilst the LABC representative considered that achieving the 2016 target may depend on the electricity-supply industry moving from fossil fuels and towards renewables, he explained that, by setting demanding targets in England and Wales, Government has encouraged closer dialogue between builders and energy supply companies.
- 82. Related to the issue of the planning and management of change, the Committee also noted from the evidence provided by the Department of Environment, Heritage and Local Government (RoI) that, after the Irish Government set firm timelines and targets for the use of renewables, the building industry in the Republic came to terms with the changes.
- 83. The evidence from the Republic also reiterated the fact that the move towards zero carbon emissions will require the use of renewables and, thus, the need to build the capacity of the

renewables market. The representatives from the Department of Environment, Heritage and Local Government also referred the Committee to evidence from the European Energy Agency and the International Energy Agency which shows that if a product's market doubles, its cost decreases by approximately 20%.

- 84. From the range of evidence provided, the Committee concludes that there is an important interrelationship between demand for LZC technologies, the capacity of the local renewables industry, and the further commercialisation and development of the technology. The Committee considers that market forces alone may not be able to sufficiently drive increased uptake of LZC systems and to support technological development. A firm and challenging timetable for the introduction of stricter regulations on carbon emissions from buildings will assist in this regard and, conversely, faster technological development will facilitate even higher standards. The Committee, therefore, recommends that the Department:
 - uses building regulations to further promote and encourage the use of LZC technology by establishing 2016 as a firm target date for all newbuilds in NI to be zero carbon, thereby keeping pace with developments in GB and RoI; and
 - follows the example of England and Wales in working jointly with the construction industry to achieve the 2016 target.
- 85. The Committee acknowledges the strong arguments for and against the introduction of mandatory microgeneration. However, the Committee considers that the nub of the issue is one of timing as the use of LZC systems will increasingly become a necessity to help meet the carbon emission requirements in newbuilds. On the basis of the evidence provided, it is clear to the Committee that energy efficiency measures alone will not be sufficient in the medium to long term if NI is to keep in step with GB and RoI in reducing the levels of carbon emissions from buildings. In addition, the current trend in rising fossil fuel prices is likely to result in decreasing payback periods for LZC technologies which, in the view of the Committee, will place the promotion of renewables in a new context. The Committee, therefore, calls on the Department:
 - to regularly assess the cost-effectiveness of LZC systems in light of the ongoing increases in fossil fuel prices; and
 - on the basis of the changing circumstances, keep under review the option of using building regulations to require that a proportion of the energy needs of newbuilds is provided from LZC systems.

A Role for Planning Policy

- 86. The evidence presented to the Committee highlights the potential role of planning policy in promoting renewable energy, including microgeneration. EST explained how permitted development status for microgeneration systems would enable consumers to avoid cost and delays with seeking planning permission. The Committee has been advised that Scotland, England and Wales are presently reviewing policy in this regard and has received information from the Department of Environment, Heritage and Local Government (RoI) on how the Republic has already introduced planning exemptions in respect of certain micro-renewable technologies (Appendix 4).
- 87. Also, in its evidence, NIEL highlighted the scope for requiring "macrogeneration" for new groups of housing or commercial developments, through combined heat and power stations fuelled by waste products or renewable sources. NIEL pointed out that both new and existing houses could be heated from such systems. The Committee also noted that, in his evidence, the representative of LABC, indicated a preference for installing larger scale renewable units to cover multiple housing developments. In view of these proposals the Committee raised with DFP

whether there may be scope for introducing an element of mandatory 'macrogeneration' into building regulations ahead of any target date for zero carbon homes.

- 88. In its response to these issues, the Department has advised that, in NI, Planning Service has recently reviewed permitted development rights for small-scale renewable energy systems and that the outcome of this should encourage the use of LZC systems. DFP has also advised that, in GB, the planning framework is being used to take forward the concept of "macrogeneration" schemes, such as community heat networks and larger-scale wind generation for new housing developments. The Committee notes that such a proposal has been included in the recent consultation by Planning Service on "Planning Policy Statement 18 Renewable Energy".
- 89. The Committee welcomes the fact that Planning Service is considering both permitted development rights for small-scale renewable energy systems and the potential for planning policy to take forward the concept of "macrogeneration" schemes for new housing developments. In this regard, the Committee has shared the information which it has received on similar legislative changes in the Republic with the Assembly's Committee for the Environment.

Promoting LZC Technologies through Funding

- 90. From the evidence provided to the Committee it is clear that the availability of grant schemes is a key ingredient to encouraging the uptake and development of LZC technologies and that this pump-priming of the market is necessary to further develop the capacity of the renewables industry. EST advised that the current rate of installation of microgeneration technologies in NI is closely correlated with grant funding and that mass market introduction of these technologies is best stimulated by capital grants until the technologies become cost effective. As the majority of the technologies will not be cost effective by the time the present grant schemes cease, EST considers that there will be a need to provide continued capital support. The Committee has also heard how the provision of appropriate levels of grant funding has enabled RoI to move to a mandatory system.
- 91. In this regard, the Committee notes that 'Reconnect', the renewable energy household grant scheme for which the Department of Enterprise, Trade and Investment (DETI) has responsibility as part of its wider remit for energy policy closed to applications on 31 March 2008. The Committee understands that DETI intends to evaluate the performance of the scheme against its objectives, which included the creation of a self-sustaining market and job opportunities, coupled with increased competitiveness and a reduced demand for grid electricity. Whilst the Committee is aware that other sources of grant for renewable technologies are available, in particular the UK Low Carbon Building Programme, it understands that Reconnect was a more attractive scheme in terms of the conditions which applied and the level of funding available.
- 92. Given the evidence on the importance of stimulating demand for renewables and supporting the early adopter market, the Committee understands the concerns raised recently, including by the Committee for Enterprise, Trade and Investment, at the ending of the 'Reconnect' grant scheme. The Committee considers that continued provision of an appropriate level of grant funding for household renewables is especially important in light of the decision by the Minister of Finance and Personnel not to proceed with introducing mandatory microgeneration into the building regulations. As such, the Committee calls on the Minister to work with his Executive colleagues to ensure that the necessary priority is given to funding the uptake and development of LZC technologies.

Building Regulations and Sustainable Development

- 93. The Committee is acutely aware of the implications of NI's reliance on fossil fuels and the immediate and longer-term challenges which this presents for the Assembly and Executive, not only in terms of climate change and sustainable development but also in terms of fuel poverty. This was highlighted in recent comments by the NI Energy Regulator, Iain Osborne, when he stated that 'We have got three-quarters of households using the most carbon-rich fuels. We are much more exposed to carbon costs than anywhere else in the UK or Ireland'.[5]
- 94. In its evidence, NIEL pointed out that energy use in buildings represents 81% of non-transport energy consumption, with oil being the primary fuel for heat generation in NI. The importance of diversifying the sources of energy as well as reducing energy consumption, was also emphasised by NIEL, especially given the issues around increased oil prices and security of supply. In this regard, the Committee notes that only 4% of NI electricity comes from renewable sources and less than 1% from indigenous renewables.
- 95. The Committee sought clarification from DFP on the targets and timetables which exist, including at an EU level, for reducing carbon emissions and for increasing the uses of renewable energy. An assessment was also sought regarding the part which building regulations will play in meeting these targets. In response, the Department provided the following information on targets:
 - EU level 20% of energy to be generated from renewable sources and a 20% reduction in carbon dioxide emissions by 2020, possibly increasing to 30% with international agreement;
 - UK level 20% reduction in carbon dioxide emissions by 2010, increasing to around 30% reductions by 2020 and a 60% reduction by 2050, from 1990 levels. Also a target of 20% renewable energy generation by 2020; and
 - NI level 25% reduction in greenhouse gases by 2025, from 1990 levels (target included in existing Sustainable Development Strategy).
- 96. The Department also provided figures from the Carbon Trust NI Energy Study 2002, which estimated that the level of carbon emissions from domestic fuel could be reduced by 30% by 2012, as a result of energy efficiency improvements to existing buildings, including switching to natural gas and changes in electricity generation capacity as well as by building to higher standards. In terms of the impact from building regulations, DFP has also explained that approximately 5% of properties annually (i.e. 2% newbuilds and 3% refurbishments) will have enhanced thermal properties and consequent reduced carbon emissions. The Committee recognises that there will be an additional impact from the forthcoming introduction of Energy Performance Certificates, as alluded to earlier in the discussion on existing buildings.
- 97. The Committee considers that using building regulations to promote and facilitate both energy efficiency and the use of renewable energy in buildings can play an important part in helping NI to achieve the targets which have been set at an EU, UK and regional level for reductions in carbon dioxide emissions and greenhouse gases and increases in renewable energy generation.
- 98. The Committee recognises that building regulations form only one element of a much wider programme of measures to reduce carbon emissions and promote sustainable development. The NI Sustainable Development Strategy (SDS) and the associated implementation plan, published in 2006 during suspension of the devolved institutions, reflected the cross-cutting nature of the measures being taken across departments to address the sustainability challenge. DFP, for its part, has a number of key responsibilities in this regard, not least the functions which it fulfils in respect of building regulations and the promotion of energy efficiency in public sector bodies. The Committee understands that OFMdFM is leading a review of the SDS, with the aim of

producing a strategy that is better aligned with the priorities of the Executive, as expressed by the Programme for Government. The Committee looks forward to considering the contribution which DFP will make to these forthcoming plans by the Executive to strategically address sustainable development and, in particular, the role which will be identified for building regulations.

- [1] http://archive.niassembly.gov.uk/legislation/primary/2007/nia11_07.htm
- [2] A report published in 2007 by a panel appointed by Scottish Ministers, entitled A Low Carbon Buildings Standards Strategy for Scotland, has recommended that the requirement for on-site LZC equipment should be reviewed and probably removed from Scottish Planning Policy 6 (Renewable Energy) as the very low carbon standards are introduced in 2013.
- [3] The Role of Onsite Energy Generation in Delivering Zero Carbon Homes, Renewables Advisory Board, 2007.
- [4] The Committee was advised by EST that Wales has set 2011 as its target for newbuilds being zero carbon (which it defines as Level 5 of the Code) and Scotland is also moving towards establishing 2016 as its target.
- [5] Newsletter, 25 April 2008.

Appendix 1

Minutes of Proceedings Wednesday, 7 November 2007 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)
Mervyn Storey MLA (Deputy Chairperson)
Roy Beggs MLA
Dr Stephen Farry MLA
Simon Hamilton MLA
Fra McCann MLA
Adrian McQuillan MLA
Declan O'Loan MLA
Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Mary Thompson (Clerical Officer)

Apologies: Jennifer McCann MLA

Dawn Purvis MLA

The meeting commenced at 10.05 am in open session.

8. Evidence Session on Background to the Building Regulations (Amendment) Bill

Mr Beggs declared an interest as a member of the Building Control Group of Carrickfergus Borough Council.

The Committee received oral and written evidence from DFP officials: Philip Irwin, Head of Properties Division; Gerry McKibben, Building Regulations Branch and Bill White, Principal Technical Officer, Building Regulations Unit. The session was recorded by Hansard.

Mr O'Loan left the meeting at 12.12 pm.

Mr McQuillan left the meeting at 12.18 pm.

Dr Farry left the meeting at 12.20 pm.

Mr O'Loan joined the meeting at 12.27 pm.

Dr Farry joined the meeting at 12.39 pm.

Mr Hamilton left the meeting at 12.41 pm.

Wednesday, 5 March 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)
Mervyn Storey MLA (Deputy Chairperson)
Roy Beggs MLA
Dr Stephen Farry MLA
Simon Hamilton MLA
Jennifer McCann MLA
Declan O'Loan MLA
Dawn Purvis MLA
Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Mary Thompson (Clerical Officer)

The meeting commenced at 10.06 am in open session.

7. Building Regulations (Amendment) Bill – Assembly Research Briefing

Mr Beggs declared an interest as a member of Carrickfergus Borough Council, Building Control Group Committee.

The Committee received a briefing from Jodie Carson, Assembly Research on the Building Regulations (Amendment) Bill.

Agreed: that the Committee Secretariat will provide a list of key stakeholders to approach for written and oral evidence sessions for consideration by the Committee at next week's meeting.

The meeting continued in closed session at 12.05 pm.

Wednesday, 12 March 2008 Room 152, Parliament Buildings

Present: Mervyn Storey MLA (Deputy Chairperson)
Roy Beggs MLA
Simon Hamilton MLA
Fra McCann MLA
Jennifer McCann MLA
Adrian McQuillan MLA
Declan O'Loan MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Mary Thompson (Clerical Officer)

Apologies: Mitchel McLaughlin MLA (Chairperson)
Dr Stephen Farry MLA

Dawn Purvis MLA

Peter Weir MLA

The meeting commenced at 10.03 am in open session.

5. Evidence Session on Building Regulations (Amendment) Bill

The Committee was briefed by the following DFP officials: Seamus McCrystal, Head of Building Standards Branch; Hilda Hagan, Properties Division and Gerry McKibbin, Building Regulations Branch. The session was recorded by Hansard.

Members noted information from DFP on its proposed amendment to the Bill.

Agreed: that DFP will provide a written response to any further issues raised by the Committee.

Members considered which organisations should initially be invited to give oral evidence as part of the Committee Stage of the Bill.

Agreed: that all respondents to DFP's previous consultation on the provisions in the Bill will be contacted directly to inform them of the Committee's call for evidence in relation to the Bill.

Agreed: that representatives from Building Control Northern Ireland and from the Northern Ireland Building Regulations Advisory Committee will be invited to give oral evidence.

Agreed: that the six professional bodies which responded to DFP's consultation will be invited to give oral evidence and that the possibility of grouping these organisations to give evidence to the Committee will be explored.

Agreed: that representatives from building control bodies in other jurisdictions will be contacted regarding the possibility of giving oral evidence.

Agreed: that further oral evidence sessions may be scheduled after consideration of the written submissions received by the closing date of 16 April 2008.

Wednesday, 2 April 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)
Mervyn Storey MLA (Deputy Chairperson)
Roy Beggs MLA
Dr Stephen Farry MLA
Simon Hamilton MLA
Fra McCann MLA
Jennifer McCann MLA
Declan O'Loan MLA
Dawn Purvis MLA
Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Mary Thompson (Clerical Officer)

Apologies: Adrian McQuillan MLA

The meeting commenced at 10.06 am in open session.

4. Briefing from Climate Change Coalition Northern Ireland

Members were briefed by the following officials: Eithne McNulty, Regional Manager, Trocaire, NI; Dr Ian Humphreys, Operations Manager, Conservation Volunteers; Northern Ireland; Brian Scott, Chief Executive, Oxfam Ireland; and Declan Allison, Campaigner, Friends of the Earth. The session was recorded by Hansard.

Mr Weir left the meeting at 10.40 am.

Mr Storey left the meeting at 10.53 am.

Mr Weir returned to the meeting at 10.45 am.

Agreed: that the Climate Change Coalition Northern Ireland will provide a written submission in follow up to a number of the issues discussed with the Committee.

5. Briefing from Sustainable Energy Association on Mandatory Microgeneration

Members were briefed by the following representatives from the Sustainable Energy Association: John Hardy, Secretary; Patrick Flynn, Board Member; and Gabriel McArdle, Board Member. The session was recorded by Hansard.

Mr Hamilton joined the meeting at 11.22 am.

Mr Storey returned to the meeting at 11.30 am.

Dr Farry left the meeting at 11.32 am.

Agreed: that the Sustainable Energy Association will provide a written submission in follow up to a number of the issues discussed with the Committee.

Wednesday, 9 April 2008 Room 152, Parliament Buildings

Present: Mervyn Storey MLA (Deputy Chairperson)

Roy Beggs MLA
Dr Stephen Farry MLA
Simon Hamilton MLA
Jennifer McCann MLA
Adrian McQuillan MLA
Declan O'Loan MLA
Dawn Purvis MLA
Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Mary Thompson (Clerical Officer)

Apologies: Mitchel McLaughlin MLA (Chairperson)

Fra McCann MLA

The meeting commenced at 10.03 am in open session.

3. Matters Arising

Members noted the outstanding requests for information from DFP.

Agreed: that a copy of the submission to the Committee by the Sustainable Energy Association will be forwarded to the Department of Finance and Personnel (DFP).

Members noted that DFP had previously requested that the update on the review of small business rate relief be held in closed session, but has now advised that it should be open to the public.

4. Evidence Session on Building Regulations (Amendment) Bill – Building Control Northern Ireland

Mr Weir joined the meeting at 10.10 am.

Ms Purvis joined the meeting at 10.13 am.

Mr Beggs declared an interest as a representative of Carrickfergus Borough Council on the Northern Area Group Building Control Committee.

The Committee took evidence from the following officials: John Dumigan, Group Chief Building Control Officer, Southern Group Building Control; Donal Rogan, Building Control Manager, Belfast City Council; and Desmond Reid, Director of Building Control, Fermanagh District Council. The session was recorded by Hansard.

Agreed: that Building Control Northern Ireland's submission and the final transcript of its oral evidence will be forwarded to DFP for comment.

9. Committee Work Programme

Members considered the latest draft of the Committee work programme for the period up to summer recess. It was noted that the Royal Institution of Chartered Surveyors had requested a separate evidence session at next week's meeting and, to ensure that the agenda is manageable, evidence sessions on the Building Regulations (Amendment) Bill would be restricted to thirty minutes. It was also noted that a briefing from the Northern Ireland Law Commission had been provisionally scheduled for 23 April.

Agreed: that the programme will be published on the Assembly website.

Wednesday, 16 April 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)
Mervyn Storey MLA (Deputy Chairperson)
Roy Beggs MLA
Dr Stephen Farry MLA
Simon Hamilton MLA
Fra McCann MLA
Adrian McQuillan MLA
Declan O'Loan MLA
Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Mary Thompson (Clerical Officer)

Apologies: Dawn Purvis MLA Jennifer McCann MLA

The meeting commenced at 10.05 am in open session.

5. Evidence Session on Building Regulations (Amendment) Bill – Northern Ireland Building Regulations Advisory Committee

The Committee took evidence from Trevor Martin, Chairman of Northern Ireland Building Regulations Advisory Committee. The session was recorded by Hansard.

Mr Weir left the meeting at 10.57 am.

Mr O'Loan returned to the meeting at 10.57 am.

Mr Weir returned to the meeting at 11.04 am.

Mr Weir left the meeting at 11.14 am.

Mr Beggs left the meeting at 11.15 am.

Mr Beggs returned to the meeting at 11.21 am.

Mr McCann left the meeting at 11.22 am.

Mr McCann returned to the meeting at 11.25 am.

Mr Weir returned to the meeting at 11.26 am.

Agreed: that Northern Ireland Building Regulations Advisory Committee will provide a written submission in follow up to a number of the issues discussed with the Committee.

6. Evidence Session on Building Regulations (Amendment) Bill – Chartered Institute of Architectural Technologists and Chartered Institute of Building in Ireland

The Committee took evidence from the following officials: Eddie Weir, Continued Professional Development Officer, Chartered Institute of Architectural Technologists NI Region; David Traynor, National Councillor, Chartered Institute of Architectural Technologists NI Region; Noel McKee, Chairman, Northern Centre of the Chartered Institute of Building in Ireland; and Alan Mairs, Northern Centre of the Chartered Institute of Building in Ireland. The session was recorded by Hansard.

Mr Weir left the meeting at 11.57 am.

7. Evidence Session on Building Regulations (Amendment) Bill – Royal Institution of Chartered Surveyors Northern Ireland

The Committee took evidence from the following officials: Liam Dornan, Head of Building Control Faculty, Royal Institution of Chartered Surveyors Northern Ireland; and Ben Collins, Director, Royal Institution of Chartered Surveyors Northern Ireland. The session was recorded by Hansard.

Agreed: that the submission from the Royal Institution of Chartered Surveyors Northern Ireland will be forwarded to DFP for comment.

Mr McQuillan returned to the meeting at 11.50 am.

10. Building Regulations (Amendment) Bill - Timetable

The Committee considered the revised timetable for the Committee Stage of the Bill and a draft motion seeking Assembly agreement for an extension to 27 June 2008.

Agreed: Motion for extension to the Committee Stage of the Bill to be laid in the Business Office.

Members were advised that next week evidence will be taken from the Institute of Civil Engineers, the Association of Building Engineers and the Institution of Structural Engineers.

Members noted a response from the Energy Saving Trust on the Building Regulations (Amendment) Bill (NI) 2008.

Agreed: that the Energy Saving Trust will be invited to give oral evidence.

Members also considered inviting witnesses from other jurisdictions to explain their experience of implementing similar Building Regulations to those proposed in the Bill.

Agreed: that an evidence session will be arranged with representatives from the Republic of Ireland. It was also agreed that a written submission will be sought from a representative from the Local Authority Building Control for England and Wales.

Wednesday, 23 April 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)

Roy Beggs MLA
Dr Stephen Farry MLA
Simon Hamilton MLA
Jennifer McCann MLA
Adrian McQuillan MLA
Declan O'Loan MLA
Dawn Purvis MLA

In Attendance: Shane McAteer (Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Mary Thompson (Clerical Officer)

Apologies: Fra McCann MLA

Mervyn Storey MLA (Deputy Chairperson)

Peter Weir MLA

The meeting commenced at 10.05 am in open session.

8. Evidence Session on Building Regulations (Amendment) Bill – Association of Building Engineers and Institute of Structural Engineers

Mr Beggs declared an interest as a representative of Carrickfergus Borough Council on the Northern Area Group Building Control Committee.

The Committee took evidence from the following officials: Billy Gillespie, Council Member, Association of Building Engineers; Joseph Birt, Member, Association of Building Engineers and Joe McGlade, Institution of Structural Engineers, Northern Ireland Branch. The session was recorded by Hansard.

Mr Hamilton left the meeting at 12.29pm.

Agreed: that the Association of Building Engineers will provide the wording for its suggested amendments to the Bill.

Members noted submissions from the Sustainable Energy Association, from Northern Ireland Environment Link and DFP's response to the submission from Building Control NI.

Agreed: that the submissions from the Sustainable Energy Association; Northern Ireland Environment Link; the Association of Building Engineers and the Energy Saving Trust will be forwarded to DFP for comment, along with the official report of today's evidence.

Agreed: that the Northern Ireland Environment Link will be invited to give oral evidence.

9. Committee Work Programme

Members considered the latest draft of the Committee work programme for the period up to summer recess.

Agreed: that representatives from Local Authority Building Control in England will attend to give oral evidence on 30 April in respect of the Building Regulations (Amendment) Bill 2008.

Agreed: that Assembly Research will present a paper on the Reliability and Costs of Renewable Technology on 30 April.

Wednesday, 30 April 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)
Mervyn Storey MLA (Deputy Chairperson)
Roy Beggs MLA
Dr Stephen Farry MLA
Simon Hamilton MLA
Fra McCann MLA
Adrian McQuillan MLA
Declan O'Loan MLA
Dawn Purvis MLA
Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Mary Thompson (Clerical Officer) Meadhbh McCann (Assembly Research)

Apologies: Jennifer McCann MLA

The meeting commenced at 10.02 am in open session.

5. Building Regulations (Amendment) Bill – Evidence from Local Authority Building Control, England and Wales

Mr Beggs declared an interest as a representative of Carrickfergus Borough Council on the Northern Area Group Building Control Committee.

The Committee took evidence from Paul Everall, CBE, Chief Executive, Local Authority Building Control, England and Wales. The session was recorded by Hansard.

6. Building Regulations (Amendment) Bill – Evidence from Building Standards/Environment Assessment, Republic of Ireland

The Committee took evidence from Chris O'Grady, Head of Building Standards Section, Department of the Environment, Heritage and Local Government, Republic of Ireland and Sarah Neary, Senior Building Standards Advisor, Department of the Environment, Heritage and Local Government, Republic of Ireland. The session was recorded by Hansard.

Agreed: that the witnesses will provide a written response to issues raised during the evidence session.

Agreed: that future projections on the number of inhabitants living in existing housing stock and new builds in Northern Ireland will be requested from DFP.

7. Building Regulations (Amendment) Bill – Evidence from Energy Saving Trust, Northern Ireland

The Committee took evidence from Noel Williams, Head of Energy Saving Trust, Northern Ireland. The session was recorded by Hansard.

Agreed: that Mr Williams will provide a written response to issues raised during the evidence session.

Agreed: that Assembly Research will be asked to provide a synopsis of the Republic of Ireland Government's regulatory impact assessment of its decision on mandatory renewables and a brief update on similar developments in Scotland.

Members noted DFP's response to the submission from the Royal Institution of Chartered Surveyors.

Agreed: that the submissions from today's witnesses and the official report of the evidence sessions will be forwarded to DFP for comment.

Agreed: that the Department of the Environment, Heritage and Local Government's submission on the Republic of Ireland's planning exemptions for renewable technologies will be forwarded to the Committee for the Environment for information.

Wednesday, 7 May 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson) Roy Beggs MLA

Dr Stephen Farry MLA Simon Hamilton MLA Adrian McQuillan MLA Declan O'Loan MLA Dawn Purvis MLA Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Chris McCreery (Clerical Officer)

Apologies: Mervyn Storey MLA (Deputy Chairperson) Fra McCann MLA Jennifer McCann MLA

The meeting commenced at 10.06 am in open session.

5. Building Regulations (Amendment) Bill – Evidence from Northern Ireland Environment Link

Ms Purvis joined the meeting at 10.25am.

The Committee took evidence from Sue Christie, Director, Northern Ireland Environment Link and Robert Colvin, Building Control, Craigavon Borough Council. The session was recorded by Hansard.

Members noted written responses from DFP to submissions which the Committee had received from previous witnesses on the Building Regulations (Amendment) Bill 2008.

Agreed: that the Official Report of today's evidence from Northern Ireland Environment Link and proposed amendments received from the Association of Building Engineers will be forwarded to DFP for a written response.

8. Committee Work Programme

Members considered the latest draft of the Committee work programme for the period up to summer recess.

Agreed: that next week's consideration of the evidence taken on the Building Regulations (Amendment) Bill 2008 will be held in closed session as is normal practice.

Agreed: that the latest draft of the programme will be published on the Assembly website.

Wednesday, 14 May 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson) Mervyn Storey MLA (Deputy Chairperson) Roy Beggs MLA Dr Stephen Farry MLA Simon Hamilton MLA Fra McCann MLA Jennifer McCann MLA Adrian McQuillan MLA Declan O'Loan MLA Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Chris McCreery (Clerical Officer)

Apologies:

The meeting commenced at 10.04 am in open session.

The meeting continued in closed session at 11.59 am.

7. Building Regulations (Amendment) Bill - Committee Stage: Consideration of Evidence

Members considered a summary analysis of the evidence received to date.

Mr McCann left the meeting at 12.02 pm.

Mr McCann returned to the meeting at 12.20 pm.

The meeting continued in open session at 12.25 pm.

8. Building Regulations (Amendment) Bill - Committee Stage: Consideration of Issues, Evidence from DFP

The Committee took evidence from the following DFP officials: Seamus McCrystal, Head of Building Standards Branch, DFP; Hilda Hagan, Properties Division, DFP; and Gerry McKibbin, Building Regulations Branch, DFP. The session was recorded by Hansard.

Agreed: that DFP will provide a written response to a number of issues raised by the Committee.

Agreed: that the current timetable for the Bill will be revised to provide a further 'consideration of issues' session on 21 May and to start 'clause-by-clause' consideration on 28 May.

Mr O'Loan left the meeting at 12.57 pm.

Mr O'Loan returned to the meeting at 1.01 pm.

Wednesday, 21 May 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)
Roy Beggs MLA

Dr Stephen Farry MLA Simon Hamilton MLA Jennifer McCann MLA Adrian McQuillan MLA Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Chris McCreery (Clerical Officer)

Apologies: Mervyn Storey MLA (Deputy Chairperson) Fra McCann MLA Declan O'Loan MLA Dawn Purvis MLA

The meeting commenced at 10.06 am in open session.

4. Building Regulations (Amendment) Bill – Committee Stage: Consideration of Issues and Evidence from DFP

Mr Hamilton joined the meeting at 10.16 am.

The Committee took evidence from the following DFP officials: Seamus McCrystal, Head of Building Standards Branch; Hilda Hagan, Properties Division; and Gerry McKibbin, Building Regulations Branch. The session was recorded by Hansard.

Mr Beggs declared an interest as a member of Carrickfergus Borough Council and as a representative of Carrickfergus Borough Council on the North Eastern Area Group Building Control Committee.

Wednesday, 28 May 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)
Mervyn Storey MLA (Deputy Chairperson)
Roy Beggs MLA
Dr Stephen Farry MLA
Simon Hamilton MLA
Fra McCann MLA
Jennifer McCann MLA
Adrian McQuillan MLA
Declan O'Loan MLA
Dawn Purvis MLA
Peter Weir MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Chris McCreery (Clerical Officer)

Apologies: None.

The meeting commenced at 10.03 am in open session.

4. Building Regulations (Amendment) Bill – Committee Stage: clause-by-clause Scrutiny

Mr Beggs declared an interest as a member of Carrickfergus Borough Council and as a representative of Carrickfergus Borough Council on the North Eastern Area Group Building Control Committee.

The following DFP officials provided advice to the Committee during this session: Seamus McCrystal, Head of Building Standards Branch; Hilda Hagan, Properties Division; and Gerry McKibbin, Building Regulations Branch. The session was recorded by Hansard.

The Committee undertook its formal clause-by-clause scrutiny of the Building Regulations (Amendment) Bill as follows:

Ms Purvis joined the meeting at 10.15 am.

Clause 1 – Building regulations

The Committee noted that Dr Farry wished to reserve his position on whether the promotion of low or zero carbon systems can be taken forward more appropriately through subordinate legislation than on the face of the Bill.

Question: That the Committee is content with the clause, put and agreed to.

Clause 2 – Protected buildings

Mr Weir joined the meeting at 10.19 am.

Question: That the Committee recommends to the Assembly that the clause be amended, as agreed with the Department, as follows: 'have regard to' should be replaced by 'take account of', put and agreed to.

Clause 3 – Building Regulations Advisory Committee

Clause 4 – Further provisions as to the making of building regulations, etc.

Clause 5 – Guidance documents

Clause 6 – Type approval

Clause 7 – Power to require or carry out tests

Clause 8 – Contravention notices

Clause 9 – Registers of information and documents to be kept by district councils

Question: That the Committee is content with clauses 3 to 9, put and agreed to.

Clause 10 – Civil liability

The DFP officials explained that the Minister intends to table an amendment which would remove clause 10.

Question: That the Committee is content with the clause, put and negatived. clause 10, disagreed to.

Clause 11 – False or misleading statements

Clause 12 – Application of building regulations to the Crown

Clause 13 – Interpretation

Clause 14 - Minor amendment

Clause 15 - Repeals

Question: That the Committee is content with clauses 11 to 15, put and agreed to.

Clause 16 – Commencement

The DFP officials advised the Committee of the need for consequential amendments arising from the Department's proposal to remove clause 10.

Question: That the Committee is content with the clause subject to the Department's proposed amendments, put and agreed to.

Clause 17 – Short title

Question: That the Committee is content with the clause, put and agreed to.

Schedule - Repeals

The DFP officials advised the Committee of the need for consequential amendments arising from the Department's proposal to remove clause 10.

Question: That the Committee is content with the schedule, subject to the Department's proposed amendments, put and agreed to.

Agreed: that DFP will provide a written response on any issues which arise during the preparation of the Committee's draft report on the Building Regulations (Amendment) Bill.

The Chairperson brought forward from Agenda item 7 the consideration of The Energy Performance of Buildings (Certificates and Inspections) Regulations (Northern Ireland) 2008.

The Committee was briefed by DFP officials on each of the drafting defects in the regulations, which had been identified by the Examiner of Statutory Rules. Members were also advised that these issues will be addressed by the Department by way of amending regulations, which will be in place to meet the commencement provisions of the regulations now before the Committee. The Department fully accepted the comments raised by the Examiner and assured the Committee that there will be no delay in the regulations coming into operation.

Agreed: that the Committee will defer its formal consideration of The Energy Performance of Buildings (Certificates and Inspections) Regulations (Northern Ireland) 2008 until the amending regulations are before the Committee.

Wednesday, 11 June 2008 Room 152, Parliament Buildings

Present: Mitchel McLaughlin MLA (Chairperson)
Simon Hamilton MLA (Deputy Chairperson)
Roy Beggs MLA
Dr Stephen Farry MLA
Fra McCann MLA
Jennifer McCann MLA
Adrian McQuillan MLA
Declan O'Loan MLA

In Attendance: Shane McAteer (Assembly Clerk) Vivien Ireland (Assistant Assembly Clerk) Colin Jones (Assistant Assembly Clerk) Paula Sandford (Clerical Supervisor) Chris McCreery (Clerical Officer)

Apologies: Dawn Purvis MLA Mervyn Storey MLA Peter Weir MLA

The meeting commenced at 10.03 am in open session.

The meeting continued in closed session at 11.55 am.

7. Building Regulations (Amendment) Bill – Committee Stage: Consideration of Draft Report

Mr Beggs declared an interest as a member of Carrickfergus Borough Council and as a representative of Carrickfergus Borough Council on the North Eastern Area Group Building Control Committee.

Members considered the Committee's draft report on a paragraph-by-paragraph basis, as follows:

Paragraphs 1 – 13 were agreed.

Paragraphs 14 – 16 were agreed.

Paragraphs 17 – 18 were agreed.

Paragraph 19 was agreed.

Paragraphs 20 – 22 were agreed.

Paragraphs 23 – 24 were agreed.

Paragraphs 25 – 29 were agreed.

Paragraph 30 was agreed.

Paragraph 31 was agreed.

Paragraph 32 was agreed.

Paragraph 33 was agreed.

Paragraphs 34 – 53 were agreed.

Paragraph 54 was agreed subject to the last sentence being amended to read as follows:-

'The Committee is content with the clarification provided by DFP, though it sees this issue as another example of the potential for overlap between Building Regulations and Planning, which highlights the need for closer co-ordination between the two functions'.

Paragraphs 55 – 59 were agreed.

Paragraph 60 was agreed subject to the first sentence being amended to read as follows:-

'As regards forthcoming measures, the Committee, in principle, welcomes the introduction of Energy Performance Certificates (EPCs) later this year'.

Paragraphs 61 – 68 were agreed.

Paragraph 69 was agreed subject to deleting "Debate on" in the subtitle before paragraph 69.

Paragraphs 70 – 83 were agreed.

Paragraph 84 was agreed subject to the second sentence being amended to read as follows:-

'The Committee considers that market forces alone may not be able to sufficiently drive increased uptake of LZC systems and to support technological development'.

Paragraph 85 was agreed subject to the first bullet point being amended to read as follows:-

'regularly assess the cost-effectiveness of LZC systems in light of the ongoing increases in fossil fuel prices'.

Paragraphs 86 – 91 were agreed.

Paragraph 92 was agreed subject to the first sentence being amended to read as follows:-

'Given the evidence on the importance of stimulating demand for renewables and supporting the early adopter market, the Committee understands the concerns raised recently, including by the Committee for Enterprise, Trade and Investment, at the ending of the 'Reconnect' grant scheme'.

Paragraphs 93 – 98 were agreed.

Agreed: that the draft Executive Summary stands part of the report, subject to minor typographical amendments.

Agreed: that the appendices stand part of the Report.

Members noted that the conclusions and recommendations in bold within the main body of the report will be copied to the relevant section at the front of the report.

Agreed: that the relevant extract from the draft minutes of today's proceedings will be checked by the Chairperson and included in the Committee's Report as 'unapproved' minutes of proceedings.

Agreed: that the Report, as amended, be the Fourth Report of the Committee for Finance and Personnel to the Assembly for session 2007/08.

Agreed: that the Report be printed.

The meeting continued in open session at 12.34 pm.

Appendix 2

Minutes of Evidence

7 November 2007

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Mr Adrian McQuillan

Mr Declan O'Loan

Mr Peter Weir

Witnesses:

Mr Philip Irwin

Mr Gerry McKibbin Department of Finance and Personnel

Mr Bill White

- 1. The Chairperson (Mr McLaughlin): The Committee has agreed that the next agenda item, the Building Regulations (Amendment) Bill (Northern Ireland) 2007, will be held in closed session.
- 2. Mr Beggs: I declare an interest as Carrickfergus Borough Council's representative on the local area building control committee.
- 3. The Chairperson: The Committee is joined by Philip Irwin, head of properties division, Department of Finance and Personnel (DFP), Gerry Mc Kibbin, building regulations branch, DFP

and Bill White, principal technical officer, building regulations unit, DFP. Gentlemen, I welcome you to the meeting and invite you to share your thoughts with the Committee.

- 4. Mr Philip Irwin (Department of Finance and Personnel): We wish to brief the Committee on the Building Regulations (Amendment) Bill (Northern Ireland) 2007. The purpose of the proposed Bill is to amend the existing primary legislation governing building regulations the Building Regulations (Northern Ireland) Order (1979). We will do that by refining the powers, duties and rights of the Department, the district councils who enforce building regulations and those applying for building control approval.
- 5. As a general principle, the existing Order aims to secure the health, safety, welfare and convenience of persons in or around buildings, and to further the conservation of fuel and power. The most significant amendment that we have included in the proposed Bill is to extend those general principles to include the protection of the environment and the promotion of sustainable development.
- 6. There are then a number of more specific amendments to the Bill. Before going into detail on each of those, I will give the Committee some background on the consultative process that has been undertaken to arrive at where we are now. That process has been extensive. It commenced in early 2004, following ministerial approval to conduct a review of the Order that was granted in June 2003. Since then, there have been two public consultations. An initial consultation in the first half of 2004 invited comments on the existing scope of the building regulations framework in the broadest sense. A second public consultation followed in the second half of 2005, which invited comments on firmer departmental proposals that were tabled at that time.
- 7. In addition to the public consultations the Department also ran a number of stakeholder workshops for representatives of the building control function in the district councils and representatives of the construction industry. In early 2005, and again in autumn 2006, we presented a series of public seminars on the proposed technical amendments. Throughout the consultation process we have been working with the Northern Ireland Building Regulations Advisory Committee (NIBRAC) and keeping it involved in the process.
- 8. In late August and early September, officials met NIBRAC, the district council building control officers and industry representatives to discuss the most recent refinements to the proposed amendments. The consultation process has been extensive. In the initial scope we asked if we should look at revising the entire framework for building regulations. The general feedback said no but that changes should be made within the existing framework.
- 9. I will hand over, first, to Gerry McKibbin and then to Bill White, who will take you through the specifics of the changes that we are proposing.
- 10. Mr Gerry McKibbin (Department of Finance and Personnel): Philip mentioned the principles of the building regulations, which are set out in article 5(5) of the Building Regulations (Northern Ireland) Order 1979. They set out requirements for consideration of the health, safety, welfare and convenience of people in and around buildings, and the conservation of fuel and power. The proposals that we have put forward to amend those and to expand the scope of them to include the protection and enhancement of the environment and the promotion of sustainable development are similar to those that have already been implemented in England and Wales, Scotland and the Republic of Ireland. The raised profile of environmental issues has meant that people, in those countries, were keen to see that those issues were reflected in the building regulations.

- 11. In addition to changing those principles, we have amended schedule 1 of the Building Regulations (Northern Ireland) Order 1979. That schedule lists those matters for which building regulations may be made. In that schedule we have now included such things as: security of buildings; sustainable use and management of water; and the use, reuse and recycling of materials. We have also amended some of the existing provisions to include consideration of low- or zero-carbon systems. The Bill also includes a definition of low- or zero-carbon systems that reflects the definitions in the Energy Act 2004, which lists a number of technologies that we perceive to be equivalent to low- or zero-carbon systems, and any other system for the purpose of reducing greenhouse gas emissions. It also lists the number of greenhouse gases that are currently recognised.
- 12. One of the changes to the proposals is a very small reference to how NIBRAC is put together. Under the current legislation, the Department seeks representatives of NIBRAC from professional bodies. We are changing the word "bodies" to the word "persons". That may seem like a small change, but that will allow us to adhere to the Nolan principles that were set out for the appointment of public committees. It also meets the requirements that were set down in the guidance published by the Office of the Commissioner for Public Appointments in Northern Ireland. The legal definition of the word "persons" will still allow us to approach professional bodies. However, we will approach the bodies to ask them to invite their members to self-nominate rather than merely to provide us with two or three names.
- 13. Article 20 of the Building Regulations (Northern Ireland) Order 1979 relates to civil liability. That article was never commenced. Initially, we had proposed in the amended Bill that that article would be revoked. The Executive will discuss that matter tomorrow, and papers have been circulated. The Office of the First Minister and deputy First Minister (OFMDFM) came back with some questions about that and asked whether or not we should revoke that clause. It perceived that leaving the civil liability clause in would perhaps encourage people to construct in accordance with building regulations. We had proposed tabling an amendment during the Assembly Stages of the Bill that would remove the revocation. However, we want to have a full consultation process on the proposals rather than commencing that. The wording of the existing article is not appropriate to the way in which building regulations have developed since the introduction of the legislation in 1979. We want to ensure that the full consultative process takes place with the main stakeholders in particular, with building control.
- 14. The Bill also introduces a new criminal offence of deliberately, or negligently, producing false information in support of an application to purposely, or recklessly, mislead building control. The background to that came as a result of representations made by Belfast building control, about a case with which it had dealt. An application had been submitted for a new building. During consideration of that application, building control received a second application for an existing building with regard to disabled access. The requirements of building regulations are less onerous for existing buildings than they would be for new buildings. Once it became clear that there was a deliberate attempt to build a new building to less onerous requirements, building control had to step in and take action. There was nothing in the existing legislation that would have made the proposals in the second application an offence. Following building control's representation, we decided to examine the matter and, subsequently, introduced the new offence into the legislation.
- 15. Under Building Regulations (Northern Ireland) Order 1979, the Crown is not bound by the requirements of the building regulations. We will commence the binding of the Crown to the substantive requirements of the regulations in other words, the technical aspects of the regulations to which every Crown building will have to adhere. There is also a change of definition for "Crown building". At present a "Crown building" is defined as a building in which there is a Crown interest. That definition will be changed to mean a building that is occupied by the Crown.

- 16. That means that any building that has been built, regardless of whether the Crown is interested in occupying it at some stage, will still have to adhere to the full requirements of the regulations.
- 17. The legislation would impose two new duties on district councils. DFP will ask the councils to give consideration to the special characteristics of protected buildings when determining an application. Our definition of protected buildings is similar to that used by the Department of the Environment (DoE) in its planning legislation. In other words, that is a building that is listed by DoE and the Environment and Heritage Service keeps lists of such buildings or one that is inside a conservation area, as designated by DoE.
- 18. I will bring the Committee up to speed with developments on the Executive papers that have been issued. DoE asked whether the scope of the Bill could be expanded to include matters such as areas of townscape character, local vernacular buildings, and local landscape policies. DFP's feeling is that we should not expand it at the moment. As a matter of course, building control currently considers applications for all aspects of listed buildings or buildings that are protected under other policies. Widening the scope of the primary legislation would have negative connotations. We feel that increasing the number of buildings that could be protected would introduce a get-out clause. Buildings could be altered or amended as a way of getting around the need to apply the requirements of regulations that would have to be applied in existing circumstances. Therefore, we propose that the definition of protected buildings remains as it is under the DoE's strict guidelines and that as a matter of course, building control will apply the policies that are produced by the Planning Service and the Environment and Heritage Service to the buildings in those district council areas.
- 19. The second, and final, new duty that would be put on district councils would legislate for something that many councils do anyway. Under the new legislation, councils would be required to keep a register that records applications for building control approval. Through regulations, the Department would prescribe the information that should be held on that register. That would allow us to establish databases throughout the district council areas. For example, we could require that information on issue performance is kept, and we would have a source of information if we needed to produce reports for Europe, if that were necessary. Most district councils already do that as a matter of course, but we are trying to achieve a uniformity of approach across all district council areas in order that the regulations will allow us access to any information that is held. The legislation would set out the requirements for the method and medium with which the information can be held and for how long it can be held.
- 20. That is a brief look at the proposed changes to the procedural processes that are involved with building regulations. Bill White will now explain the technical changes that are to be introduced in the Building Regulations (Amendment) Bill (Northern Ireland) 2007.
- 21. Mr Bill White (Department of Finance and Personnel): There are around four main technical changes. First, article 5(1)(b) of the Building Regulations (Northern Ireland) Order 1979 requires the Department to give a deemed-to-satisfy solution for every regulation that it currently has. The regulations are written in a functional format. In other words, they set a performance standard that each part of the building should achieve. The deemed-to-satisfy provisions that the Department currently provides set the benchmark by which building control can judge whether those standards have been achieved. That process is becoming restrictive in the modern-day construction industry. It is becoming virtually impossible in some circumstances to give a deemed-to-satisfy solution that covers every eventuality, in every type of building in Northern Ireland.
- 22. The Department therefore proposes to follow the route that the rest of the British Isles has taken, which is to move towards a guidance-notes system. Technically, there is no difference

between the deemed-to-satisfy solution and the guidance information that is provided. However, the subtle difference is that the guidance document will provide the train of thought that the designers should follow when they design a building, especially particular aspects of that building. As well as providing guidance on the process that they should follow, the document will give the designers examples of solutions for typical types of buildings, for instance, simple buildings. For example, Part R of the Department's technical booklet, which provides deemed-to-satisfy guidance, refers to access and use of buildings. The foreword to that document, which is outside the deemed-to-satisfy text, shows how the various deemed-to-satisfy guidelines have been formalised.

- 23. We have found that people tend not to bother reading that foreword; they go straight to the body of the text, follow the deemed-to-satisfy system, and try to find, as quickly as possible, the solution for their building. It is becoming very difficult to provide one solution that fits all situations. Therefore, the guidance system would mean that the information that is in that foreword would be incorporated in the main body of the text, and the relevant paragraph would describe the rationale behind the Department's suggested solutions.
- 24. At present, if the deemed-to-satisfy route is followed, building regulation approval is guaranteed. The hands of building control officers are also tied in that they cannot ask the builder to do anything over and above what is stated in the deemed-to-satisfy solution. However, under the guidance system, in specific circumstances building control can ask the builder to go that bit further in the design of their building to satisfy the various requirements. As I have said, the rest of the British Isles, and including the Republic of Ireland, follows the guidance system. The technical information that they use is exactly the same as that which we incorporate in our documents.
- 25. The next technical amendment is to article 8 of the 1979 Order, and it grants an additional power to district councils to type approve superstructures. At the moment, article 8 permits the Department to approve particular types of buildings, thus complying with the regulations. However, that article has never been commenced. The intention is that the article will be amended in order to change that and to give district councils the power to give type approval to prescribed matters. Generally speaking, those prescribed matters involve the superstructure of the building: everything from ground level upwards can be given type approval. That is in recognition of the fact that certain designers in the country design houses or buildings that they intend to build throughout Northern Ireland it saves them having to reapply to each council area every time that they want to build there. The council in whose area the building is located will be required to consider matters that are specific to the site, that is: foundation, access, and drainage issues. That council will be responsible for checking those points.
- 26. The council that gives type approval to the superstructure will issue a certificate to that effect, giving details as to what is covered by the type approval. Under current legislation, one of the problems with article 8 of the 1979 Order is that one council cannot tell another what to do. The Bill will mean that that will not apply. Clause 6 of the Bill, which amends article 8 of the 1979 Order, has been drafted in such a way that means that that issue can be dealt with under RPA legislation, which will be debated by the Assembly in the future, rather than under building regulations.
- 27. Article 12 of the 1979 Order covers the types of test that district councils can require to be carried out to ensure conformity with building regulations. Again, that article has never been commenced. We intend to commence it, but we will also change the scope of it so that the tests for which a council can ask are prescribed in the building regulations. Those tests will be non-destructive. They will include: investigation to determine what sort of soil will be built on; airtightness tests, which are required under Part F of the Building Regulations (Northern Ireland)

2000; and the testing of air conditioning systems, etcetera, which are a requirement of the European Energy Performance Directive.

- 28. Last, but not least on the technical side, is article 18 of the 1979 Order, which relates to the serving of contravention notices. If a council discovers that something has been built that is contrary to building regulations, it will issue the builder a contravention notice. Having received a contravention notice, that builder is legally bound to take action to correct the defects in their building. Article 18 states that the district council must issue that notice within 18 months after the work in question has been completed.
- 29. That in itself is pretty straightforward. However, in the past, district councils have had difficulty with ascertaining when the work in question was complete. Therefore, there have been disputes about whether that date was outside the 18-month period of issue of the contravention notice. The Department has endeavoured to deal with that problem through the amendment to the article, and thereby tie district councils to issuing contravention notices to the date of completion of all the work. There will be a mandatory requirement on the builder to notify the district council of the date of completion. That starts the clock ticking: after that date, the district council can issue a contravention notice if it needs to. Those are the technical issues with the Bill.
- 30. The Chairperson: It seems that that area is problematic. How does one define completion? Sometimes, outstanding work needs to be completed on properties that have been handed over or that have come into use.
- 31. Mr White: That is the issue. Even simple matters can create problems; for example, when someone wants to build their dream house, it may take three years for them to build the house because they want to do it themselves in their spare time. Therefore, the construction period can drag on for a long period.
- 32. In its regime of site visits, building control does not carry out a clerk of works-type service. It is not on-site every week to check the progress of work. It visits sites to check on the major implications of the building structure. Obviously, key to that is the final inspection, when all the work is finished, to sign off the building and to confirm that the building in question complies with building regulations. It is at that stage that building control, sometimes, picks up defects. It will say that something is wrong and that it must issue a contravention notice. The developer will say that it cannot do so because that part of the work was completed two years ago or 18 months ago. Therefore, there is a dispute about when the work was finished. The Department is trying to avoid such disputes by tightening up that regulation.
- 33. The Chairperson: Will the regulations deal with problems, which I am certain that all elected representatives have come across, with regard to group housing or development schemes that have associated works such as access roads, foot pavements or lighting?
- 34. Mr White: It will deal only with matters that are related to the building regulations. Those that are linked to access roads, etc, are outside the scope of the building regulations. However, issues that concern access to a property from the boundary of the site, such as disabled access, are matters for building regulations and, therefore, they would deal those issues.
- 35. The Chairperson: Therefore, the regulations do not actually deal with the difficulties that some people have when the developer simply moves on and they are left with unresolved issues for a considerable period thereafter?
- 36. Mr White: Not necessarily.

- 37. Mr Weir: I want to ask about a couple of issues, particularly about how they affect local government. I see that a couple of additional duties have been proposed, and I appreciate that you have indicated that district councils are already practicing some of those functions. Having said that, has there been any assessment of what additional burden those duties will put on councils? For example, what will be the additional burden on their resources? It may be negligible, but if an assessment has been carried out, has any consideration been given to the provision of some form of additional resources for local government on that basis? It seems unfair that the cost of additional duties will have to be borne by ratepayers for the reason that central Government have simply thrown those duties at councils and told them to get on with it and pay for it themselves.
- 38. Mr McKibbin: As one might imagine, the Department has a close working relationship with the building control officers in the district councils. They have been aware of the proposals for some time, and they have actively participated in their development. They seem confident that all the proposals can be met by the resources of each building-control section. As has already been mentioned, the Bill generally legislates for the functions that are already being performed by district councils with regard to registers and protected buildings. It does not propose anything new per se; rather, it legislates for functions that all 26 councils already carry out as a matter of course.
- 39. With regard to registers, the Bill homogenises the approach that is taken by all 26 district councils and ensures that they all keep and have access to the same information.
- 40. The legislation will identify that protected buildings will be required to have particular characteristics and will therefore need particular consideration by district councils. However, all the district councils already do that, and they have supported those proposals during the consultation process.
- 41. Mr Weir: I assume that granting powers to district councils to type approve superstructures will sort out the problems that sometimes arise with building control regulations, such as trying to work out where the exact dividing line is between building control and planning. I presume that granting type approval powers to district councils could avoid their having to stray into getting involved in planning.
- 42. Mr McKibbin: It could.
- 43. Mr Weir: I appreciate what you have said, given that new councils could potentially be up and running by 2011. When RPA is fully rolled out, there may be ways of sorting out any difficulties with type approval.
- 44. However, I am concerned that this type approval if the legislation is passed would take effect fairly quickly.
- 45. Mr McKibbin: Commencement of type approval is one issue that we will be considering. We have been discussing with building control whether we need to see what new structures RPA establishes and what additional powers and duties it will confer on building control.
- 46. Mr Weir: I am concerned that, for example, Fermanagh District Council could grant type approval for a particular proposal, and the builder who is involved in that project could then show up in North Down Borough Council area stating that they have been given type approval by another district council and that there is nothing that can be done about it. That situation may not arise, but it would take any level of discretion —
- 47. The Chairperson: That is a theoretical possibility.

- 48. Mr Weir: Yes, it is a theoretical possibility. However, it could happen in practical situations. It seems that a builder could get type approval in one district council area, and any opposition that they face from another council would become null and void, given that the latter council's building control would have no powers to constrain that builder. I have some reservations about that
- 49. Mr White: During our discussions with building control on that type of issue, it proposed to establish a panel. The legislation will require councils to have discussions with prescribed people before granting type approval. For instance, if someone submitted an application for type approval for across three council areas, it would make sense for whatever council receives that application to discuss it with the other two councils. Therefore, consensus could be achieved.
- 50. I accept that that process will be voluntary. However, building control is talking about establishing a type-approval panel of building-control officials who will consider all applications. That group could then give panel approval for those applications.
- 51. That panel's opinion does not currently carry any legal clout; the panel simply makes a recommendation, and it is up to each district council whether they accept that recommendation.
- 52. Mr Weir: Could that be incorporated into the legislation?
- 53. Mr White: It could be incorporated into other legislation.
- 54. Mr Weir: I understand what you are saying regarding three councils getting together if an application is made that would affect the three areas. My concern is that a situation could arise in which an application is approved by one council and the builder goes subsequently into other council areas that have no input at all.
- 55. Mr White: That cannot happen. Any application for type approval will have to specify where one intends to build a particular structure. It would be onerous for someone to say that they are going to build a house anywhere in Northern Ireland, given that the structure of a house that is built on the north coast is totally different to the structure of one that is built elsewhere.
- 56. Mr Weir: From a practical point of view, for example, if I were a builder who had received approval to build a particular type of house that would be acceptable in north Down, Ards and Belfast, and I wanted to build houses in Lisburn, would I need to start the application process again?
- 57. Mr White: Yes. You would be issued with a certificate with the house type approval, which would say that that type of house had been approved for construction in the places that you had specified. It would also specify any particular issues that would be relevant to that structure.
- 58. Mr Beggs: I too seek further clarification on that issue. I am aware that in England, where building control operates outside local councils, there is downward pressure on costings and, probably, standards. People in the private sector seem to simply employ whoever will do the job most efficiently but not necessarily to the highest safety standards.
- 59. It is important that a mechanism exists to ensure that there is joined-up thinking as regards type approval of superstructures. You seemed to say that that would be done voluntarily. Has it not been built into the legislation that such approval must be agreed collectively through building control? For example, if someone makes a mistake, we would not want a precedent to be set and find that such an error becomes the norm, with builders continuing to build a structure that

had mistakenly been issued with type approval. How will you ensure that errors are not replicated?

- 60. Mr White: The legislation will say that, if a mistake is found after the council has issued a certificate, that council can amend the certificate. The council will be able to say that it granted type approval for the type of building that was required, but that it subsequently discovered a mistake. It will then amend the certificate for type approval.
- 61. Mr Beggs: Why should joint co-operation between councils not be formalised?
- 62. Mr White: The Department has been advised that it cannot do that. The building regulations that will support the amending Bill will say that the council, when considering type approvals, must consult with certain listed bodies. However, we cannot force all councils to accept cooperation.
- 63. Mr McKibbin: Part of the difficulty lies with where statutory responsibilities fall. For local government, they fall under DoE, but for building regulations, they fall under DFP. Therefore, anything that would need to be put in place to establish the statutory requirement to accept another council's decision would have to be done under DoE regulations.
- 64. We understand from consultation that building control is keen to have that power put in place, and it is keen to pursue DoE to ensure that the provisions that arise from RPA will give councils the statutory obligations to co-operate. Building control is also keen to establish the bodies that Bill White mentioned to ensure that consideration is given to type approval by a wide range of building control officers, particularly those who will be affected by the type approval in question.
- 65. Mr Beggs: In principle, the legislation is the correct way to proceed. It is a waste of resources to have several people checking the same issue many times. Ultimately, the customer will pay for that because the cost is passed on. However, there must be an appropriate means of ensuring proper scrutiny and joined-up thinking. That must include ensuring that a lower standard is not widely imposed.
- 66. Mr Storey: Following on from that, the numbers of people who inspect properties must be considered. You have set out the policy proposals that have and have not been developed. However, there seem to be more of the latter. If we examine the purpose of the amendments, has a great deal of work and consultation been done to achieve very little? Although the changes will be meaningful to the overall purpose of the legislation, are many proposals not being developed?
- 67. Would you like to see reference to the RPA, for example? Given that the RPA contains statutory regulations that are the responsibility of DoE, when will they be brought to the same level that the building regulations have attained? Do we now have a package that will add value to the overall control within building regulations?
- 68. Mr P Irwin: I think that we have. Many proposals relate to relatively minor issues, but major issues are also addressed, such as the introduction of the promotion of sustainable development and the ability to legislate in that area. The proposed change from a deemed-to-satisfy system to a guidance-based system is also a major issue and is one of the primary reasons for introducing the amending Bill. The Department discussed many other issues that were raised by different people, but we decided not to incorporate them into the Bill. However, the major issues are covered, and I see the areas that were not incorporated as minor issues.

- 69. Mr McKibbin: Some of those minor issues relate to the subordinate, not the primary, legislation, and those will be considered and consulted on when the Department carries out a full review of its subordinate package based on the changes that are being introduced. Any ideas will be drawn up as appropriate.
- 70. Mr F McCann: Similar to other members, I think that the proposals make sense. You spoke about the possibility of straying on to the road that is covered by clerks of works and others. Do the proposals allow building control officers to go into estates, for instance, that have been built recently to check that the work for which planning permission has been applied has been carried out? There are serious problems and difficulties with that, and you talked about the 18-month run-through period in which a district council may issue a contravention notice. There is also a problem with builders forfeiting retentions: they feel that the retention is so small that they can walk away from the job without returning to complete it, and some of the work that has been left has been atrocious.
- 71. Mr McKibbin: Under the Building Regulations (Northern Ireland) Order 1979 building control officers and district council officers are entitled to enter and inspect premises to satisfy themselves that the regulations have been adhered to and that there are no contraventions.
- 72. Mr White: The difference between the two pieces of legislations is that if a builder has contravened the building regulations and a contravention notice has been issued to him, they have a legal responsibility to correct those contraventions. Mr McCann mentioned retentions. If a client decides to keep back a 10% retention fee from a builder with whom he has a contract and states that the builder will not receive the money until the job is completed satisfactorily, the builder may decide that it will cost them more to go back and fix the few small things about which the client is pestering them and be content for the client to keep the 10% retention fee. That is not permitted under building regulations: the builder is legally required to complete the job, and, if they do not, the council will take them to court. A court judgement will be made on the contravention, and the builder will have to do something about it. Furthermore, the builder will be fined for not complying with the regulations.
- 73. Mr F McCann: Unfortunately, that does not always happen. In some cases, builders leave entire estates in shabby conditions.
- 74. Mr White: It depends on what the problems are. The building regulations exist for the health, safety and welfare of people, but they do not set a standard for the quality of work. You may disagree with how well a builder has finished a house, but they may have complied with building regulations in that the house is safe and does all the things that it is supposed to do. The building might not look the way that it should, but it might comply with the building regulations. Unfortunately that is one of those issues that cannot be resolved by legislation.
- 75. The Chairperson: You indicated in your presentation how you responded to some of the issues that arose in the various consultations. Were there issues that you did not agree to proceed on, or any underlying conflicts that we should be aware of at this stage?
- 76. Mr McKibbin: Building control raised a couple of issues at the most recent consultation back in August, to which we have given some consideration. Up until about three months ago there were clauses in the draft Bill containing provisions in relation to dangerous buildings. District councils currently operate under legislation that goes back to the 1850s in some cases, and building control approached the Department to see whether the Bill could be a home for legislation that would bring all that together. We drafted up various provisions to allow that to happen. However, building control came to the conclusion that you should be careful what you wish for. It considered the matter further and decided that there was more to be discussed and debated.

- 77. We agreed to take the provisions out of the legislation and to carry on the debate with building control on how best to bring that forward. The provisions that were put in did not sit naturally within building regulations anyway they would have been separate to the actual regulations and we have agreed to discuss that further.
- 78. Building control also raised an issue about demolitions and requested that provisions be put in place that would require any demolitions to be notified to it in advance. Its concern arose from the fact that there are currently various pieces of legislation relating to demolitions, but the enforcement, it felt, was inadequate and wanted some way to beef that up by making notification a requirement.
- 79. While the Department recognises that that is the case, there is a difficulty in preparing regulations or provisions within primary legislation, even to address issues that are seen as a shortfall of another Department's legislation. We suggested that RPA might address the issue if some of the Health and Safety Executive's duties and responsibilities were to go to district councils. The Department thought that it would be better to wait and see what happens with regard to RPA, and then building control could discuss with the parent Departments of the legislation how best to take that forward.
- 80. Building control brought up the issue of determinations. To give you a little background on that, in England and Wales a system of determinations and appeals operates. Those are two separate entities, but in Northern Ireland there is only a system of appeals. A determination in England and Wales happens when a district council or local authority and an applicant are at loggerheads over how a particular provision of the regulations should be applied. The applicant can approach the Department for Communities and Local Government for a determination on that. If a district council rejects an application, the applicant can approach the Department for a determination on the decision to reject. The Department charges a fee to the applicant for performing that function.
- 81. In Northern Ireland the Department provides an appeals mechanism for rejection of plans or application, and that provision is provided free of charge to the applicant. There is much more scope in allowing building control, as an organisation of professionals who have been doing the job for a long time and have the experience and expertise built up, to exercise its professional judgement on whether to go ahead with each application, rather than use the Department as a batting board to take the decision on. We already have a lot of consultations with building control on the technical aspects, background and intent of the regulations.
- 82. The Chairperson: Who conducts the appeal?
- 83. Mr McKibbin: Professionals from the building regulations unit in the Department conduct the appeal. There has been a suggestion that there should be a statutory time limit put on the Department within which it must conduct the appeal. At the moment there is none. Part of the difficulty is that the Department can only proceed when it is in receipt of all information relating to the application. As a matter of course when we receive an appeal for an application it is given top priority, and everything else is dropped until that appeal is heard.
- 84. The average time for conducting an appeal is two or three weeks at the most; however, there are some cases where information may not be forthcoming from the district council or from an applicant, which can extend that period. There could also be a particularly difficult technical matter brought in front of us that may best be resolved by setting up a tribunal between the two parties and the Department as the adjudicating body. That again could extend the time limit. We thought that, rather than putting provisions into the legislation to specify a time limit, the appeals should take top priority as a policy issue in-house.

- 85. The Chairperson: If you had to resort to a tribunal, would that be free to the applicant?
- 86. Mr McKibbin: Yes, it is in relation to an applicant.
- 87. A lot of the other policy proposals in the paper that were not taken forward were suggestions that were put forward by us or by building control. However, in discussion with the Office of the Legislative Counsel on the drafting, it was found that either the powers already existed in legislation but had not been applied in that way, or that the provisions were better suited to subordinate rather than primary legislation, and that is where they will be addressed. Those are the main issues that did not go forward. However, the most substantive issues appear in the Bill.
- 88. The Chairperson: The issues brought forward today have all helped to streamline and improve the draft Bill. Will it go out to consultation?
- 89. Mr McKibbin: At the time when the draft Bill would have gone out to consultation, we were approached to see whether we could streamline the process. Given the extent and the amount of consultation beforehand, we were asked to consider forgoing the consultation on the draft Bill and to put it through the Assembly process a lot quicker. We agreed to that, and the Executive also agreed that it should go before the Assembly without any further consultation. The major stakeholders are aware of the content of the draft Bill and have been kept up to speed during the process of developing and determining the policy. They have had a very active input into policy development.
- 90. The Chairperson: When will the Bill be tabled?
- 91. Mr McKibbin: The First Stage will be on 3 December 2007 and the Second Stage on 11 December 2007.
- 92. The Chairperson: That seems to be it. No doubt when the Assembly gets its teeth into the Bill there may be a need to follow up on some issues, and the Committee will continue to do that. Thank you all very much.

12 March 2008

Members present for all or part of the proceedings:

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Mr Simon Hamilton

Mr Fra McCann

Ms Jennifer McCann

Mr Adrian McQuillan

Mr Declan O'Loan

Mr Peter Weir

Witnesses:

Mrs Hilda Hagan Mr Seamus McCrystal Department of Finance and Personnel Mr Gerry McKibbin

- 93. The Deputy Chairperson (Mr Storey): I welcome Seamus McCrystal, head of building standards branch, Hilda Hagan of properties division, and Gerry McKibbin of building regulations branch to the Committee.
- 94. Mr Seamus McCrystal (Department of Finance and Personnel): I will keep the presentation brief because the purpose of the session is for members to ask us questions and clarify matters. The Bill proposes amendments to the Building Regulations (Northern Ireland) Order 1979, which has been amended once, in 1991. The 1979 Order is the primary legislation relating to building regulations in Northern Ireland, and the Bill aims to update the Order to take account of changes to industry practice and changes to the legislation in Great Britain and the Republic of Ireland.
- 95. The purpose of the Bill is to build on the existing legislative framework by refining the powers, duties and rights of the Department, the district councils that enforce the regulations, and applicants. The existing general principles of the Order are to secure the health, safety, welfare and convenience of persons in and around buildings and to further the conservation of fuel and power.
- 96. The Department has proposed several amendments to the Bill, the two most significant of which aim to extend those general principles to include the protection and enhancement of the environment and the promotion of sustainable development, matching similar amendments to building regulations in England, Wales, Scotland and the Republic of Ireland, and to facilitate a move from a deemed-to-satisfy-based system to a guidance-based system.
- 97. The Deputy Chairperson: Thank you, Seamus. What targets and timetables are there, including those on an EU level, to reduce carbon emissions and increase the use of renewable energy sources? How will the building regulations contribute to meeting those targets?
- 98. Mr McCrystal: At the moment, building regulations make a significant contribution, but they apply mainly to new buildings only or to buildings that are being substantially refurbished. The Department made an amendment in August 2006 which came into effect in November 2006 to that part of the building regulations relating to the conservation of fuel and power. The amendment aims to reduce carbon dioxide emissions from buildings by up to 40% compared with previous levels.
- 99. The Minister has asked building standards branch to make a further amendment to the building regulations to produce another 25% reduction in emissions by 2010, and a subsequent reduction in 2013, in order to achieve an overall reduction in carbon dioxide emissions of 44%.
- 100. The last amendment to the building regulations took into consideration a number of the requirements of the Energy Performance of Buildings Directive, which required the use of national calculation methodologies. Previously, compliance with building regulations relating to conservation of fuel and power involved assessing each element on its own thermal value. However, the methodologies combined those elements using nationally available software packages to produce a target emissions rate per building. An applicant must then demonstrate to building control that the actual building design either meets, or betters, those target emissions.
- 101. Mr Hamilton: When the concept of type approval first arose in briefings, it seemed like a good idea that should have been operating a long time ago. The Department's paper indicates that the principal Order allowed for type approval some time ago but that it was never commenced. Will you clarify for my benefit and the benefit of the Committee the range of properties you envisage will be covered by type approval? At the higher end of the scale, what types and scales of buildings will be allowed? Why was that part of the Order never commenced?

- 102. Do you envisage all type-approval decisions becoming the responsibility of district councils, or will any element be retained by the Department?
- 103. Mrs Hilda Hagan (Department of Finance and Personnel): We expect type-approval decisions to be confined largely to buildings in the private-dwelling sector, although, if, for example, someone wanted to build a particular design of storage warehouses in Belfast and Coleraine, type approval could extend to such industrial buildings. It could even apply to companies such as McDonalds.
- 104. Mr Hamilton: Could it apply to fast-food restaurants?
- 105. Mrs Hagan: Yes; type approval will facilitate a broad range of building types.
- 106. I do not know why that element of the Order was not commenced, except to say that no one approached, or lobbied, the Department in an effort to commence it until 2004-05, when the scope of the primary legislation was being considered and we decided to review the 1979 Order as amended. Having said that, although type approval has, to some extent, been operating informally, the matter has never been formally raised. However, the fact that the same types of social housing have been built in different district council areas is evidence that building control and the Department for Social Development have informally been type-approving. Therefore, although the commencement of type approval has not been formally requested, or used, it has been operating informally to some extent. I do not remember your third question.
- 107. Mr Hamilton: Will any type-approval powers be retained by the Department, or will such decisions lie totally with district councils?
- 108. Mrs Hagan: Type-approval powers relate only to non-site-specific matters. For example, if someone wishes to build a particular type of dwelling in three district council areas, the primary legislation requires the district council that receives the application to consult with the other two councils. Councils will set up administrative mechanisms to allow other councils to have a say in specific type-approval decisions. However, they will only be able to deal with non-site-specific matters; for example, overall type approval.
- 109. When it comes to building a house in one of the approved district-council areas, site-specific matters such as ground conditions, drainage, soil, or the proximity of a building to other structures that might constitute a fire hazard will be the responsibility of the local district council. Superstructure elements the above-ground bits and the house's design are non-site-specific elements that can be type approved by any district council.
- 110. Mr Hamilton: In practice, what financial impact will the Bill have on district councils? Type approval and other elements of the Bill have the potential to cause additional work for district councils. Will resources follow that work? Building control can be quite for the want of a better word profitable, and although district councils are not in the business of making profits, they can cover costs incurred. Therefore, in order to maintain the situation, are there any assurances that district councils will not be unduly burdened and that central-Government resources will follow the work.
- 111. Mr McCrystal: The Building (Prescribed Fees) Regulations (Northern Ireland) 1997 are due to be amended, and we have discussed the matter with building control. If type approval were to be introduced as a result of this Bill, it would be part of the overall fees regulations review, which would ensure that building control would be funded to carry out its work.
- 112. Mr Hamilton: That is good.

- 113. Mr McCrystal: Mrs Hagan said that, in the past, type approvals have been used successfully in social housing. The best example of that was the Housing Executive's remit to build general family housing. It had a range of standard house types that were approved and accepted by building control throughout Northern Ireland.
- 114. The Deputy Chairperson: If type-approval powers were to be given to each council, would there be a danger of different approaches being taken?
- 115. Mr McCrystal: That is a concern associated with function-based regulations, which require reasonable measures to be taken. District councils might interpret regulations differently.
- 116. The converse of that would be true in this case. If a type-approval system were introduced, and if building control had an administrative mechanism in place to deal with it, the approach would be more uniform and consistent, which would not just affect type approvals; it would have a knock-on effect for one-off applications. We discussed the matter with building control, which will consider the administrative provisions to be put in place.
- 117. Mr Weir: Mr Hamilton covered some of the ground that I intended to cover. Financial implications for councils was mentioned. Leaving that aside for the moment; as the detailed work will be carried out by building regulation officers at district-council level, what other implications would district councils face?
- 118. Mrs Hagan: Basically, a type-approval system would streamline the approach taken to approvals because councils could organise themselves to approve an application that falls across several council borders. It will bring consistency and uniformity to councils' approach.
- 119. The cost would have to be worked out through the fees regulations, and a balance will have to be struck between how the councils charge under the new system and the impact on the applicant or applicants. Details of that division will have to be worked out through the review of the fees regulations. The key positive impact will be the streamlining of the application process so that an individual applicant will not have to apply separately to three different district councils and pay three separate fees for building exactly the same type of house in three district council boundaries.
- 120. Mr Weir: Clause 3 deals with the building regulations advisory committee. Has any consideration been given to how its members will be appointed? Will the Minister make nominations? Will there be open competition, or will bodies be asked to make nominations? What is the thinking on that issue?
- 121. Mr Gerry McKibbin (Department of Finance and Personnel): The existing committee was set up in accordance with the Nolan principles. We approached the professional organisations and asked them to inform their members that self-nominations to the committee were being sought. The idea behind the committee is to ensure that there is representation from a good cross-section of the industry and that there is expertise from, and knowledge of, particular parts of that industry, rather than representation from a particular body.
- 122. There have been moves in one of the other Departments to introduce statutory requirements as regards the Nolan principles, so we have pre-empted that to some extent. We do not envisage the need for appointments by Ministers. Given that the Nolan principles allow for self-nomination, we believe that that is the best way forward, whether it involves approaching professional bodies or placing a public notice in the paper or whatever.
- 123. Mr Weir: That is a reasonable position. However, would you expect or allow for one or two nominations for places on the advisory committee to come from building control officers?

- 124. Mr McKibbin: Four building control officers sit on the committee at present. Two elected council representatives served on the previous committee, and a good cross-section of council opinion is represented on the Committee.
- 125. Mr Weir: I appreciate the remarks about the Nolan principles, but would there be merit in securing those places? I presume that thoughts are not finalised on the composition of the new advisory committee; so, would it make sense to ring-fence those places to at least ensure such representation continues? From the technical perspective, if the work is to be carried out at council level, it is vital to have council representation at both officer and elected member level on the committee. I appreciate that there is such representation at present, but it is not guaranteed. The committee would be in a position to say that although some proposals may be great from the professional perspective, they would not work at the practical, council level. That aspect needs to be considered.
- 126. Mr McKibbin: We have always had district council representation on the Northern Ireland Building Regulations Advisory Council (NIBRAC), whether at elected representative level or building control level.
- 127. We normally look at NIBRAC's planned work programme for a three-year period, or the subsequent three-year period, and consider what appropriate experience and expertise we need to bring to the committee to cover that work. It is inevitable that building control will always be represented because district council's voice is vital to formulation of the policy on building regulations.
- 128. Mr McCrystal: Much of the work in developing proposals for the regulations is carried out at subcommittee level. When we feel that there is a need for additional expertise at that level, we co-opt members. We have co-opted a couple of individuals, including building control officers, and we have found their contribution to be invaluable to our discussions.
- 129. Mr Weir: The same applies to those who are involved directly in the profession. It is vital that an advisory committee covers all the angles. There is no point in having something that will work out brilliantly at district council level, if it does not meet professional standards.
- 130. Mr McCrystal: In addition to that committee, we meet on a quarterly basis with a representative body from building control and discuss the issues that it is experiencing at ground level. Some of the issues that have been included in the Bill have come out of those meetings. We find the feedback from district councils invaluable.
- 131. The Deputy Chairperson: How are people appointed to the committee?
- 132. Mr McCrystal: We propose to catch up on what we did last time around, when there were vacancies on the committee. A number of years ago, we would have asked representative bodies, such as the professions and the district councils, to nominate individuals to sit on the committee. However, in order to follow the Commissioner for Public Appointments code of practice, we have asked those bodies to advise their members that we were seeking nominations from individuals. They encouraged individuals to apply, and they did apply. An appointments process was drawn up, overseen by an independent observer appointed by the Office of the Commissioner for Public Appointments. He scrutinised every stage, sat in on the interviews, and reported to the Commissioner afterwards.
- 133. Mr McQuillan: If the Committee is content to move on, may I ask about clause 4 of the Bill?
- 134. The Deputy Chairperson: That is OK. If members want to ask questions about individual clauses, we can return later to those that have not yet been mentioned.

- 135. Mr McQuillan: I want to know the difference between the terms "deemed-to-satisfy" and "guidance-based". What benefits will flow from the change from one to the other?
- 136. Mr McCrystal: Technically, there is no difference between the provisions. The deemed-to-satisfy provisions provide a benchmark which, if followed, will satisfy the requirements of a regulation, through the adoption of the solution that is in the technical booklet.
- 137. With functional-based regulations and solutions; when the regulations ask for reasonable provision to be made, and a solution is provided, and if an applicant then decides that they do not want to follow that solution, or cannot, because of individual circumstances, a gap arises in understanding the background to the regulation.
- 138. With a guidance-based system, we will be able to set out the objectives and design considerations of the requirement and provide a solution. It will be a more holistic approach. It is not as though, by moving from one system to the other, we will not be providing adequate solutions. The deemed-to-satisfy measures state that the solution "will meet the requirements" whereas the guidance measures will state that the solution "should meet the requirements". It will be for the building control officer to determine, in particular circumstances, whether something additional is required.
- 139. Mr McQuillan: Is there not a risk that the change will lead to greater disparities in the system?
- 140. Mr McCrystal: I do not think so: the regulations and the solutions will still exist. We will be providing the design considerations. It is really meant for the situation in which someone does not want to follow the "prescriptive" solution, and I hesitate to use that word because one does not have to follow any of the solutions.
- 141. If people decide not to follow the given solution, they must demonstrate to a building control officer how they will meet the requirements. If they can demonstrate that they followed the objectives of the requirement and took on board the design considerations, an alternative approach will be considered.
- 142. Mr McQuillan: It seems to be going in the same direction as the Planning Service, in that individual officers are going to be left to make up their own minds. It will be unregulated, and it will mean different things to different people.
- 143. Mr McCrystal: I do not think that that will be the case. However, the Committee will be taking evidence on that point. Building control officers, by and large, support the changes in the legislation. The deemed-to-satisfy provision is potentially restrictive in the modern-day construction industry, and in some instances makes it difficult for us to provide a solution in every circumstance we simply cannot do that. In such situations, if we can supply the design considerations, the designer will know what direction to follow in order to meet the requirement.
- 144. The Deputy Chairperson: Given that other jurisdictions have gone through the process and will have made the changes, has there been any information from them, or has the Department consulted them, on that? There is a concern that individual officers might interpret the regulations differently under the new system.
- 145. Mr McCrystal: With a functional-based requirement, there will always be room for interpretation regardless of whether we provide guidance-based or deemed-to-satisfy solutions.

- 146. With regard to other jurisdictions, the system has been in place in England and Wales since the mid-1980s. It was introduced in Scotland last year, and it has existed in the Republic of Ireland for several years. In a sense, we are playing catch-up.
- 147. In England and Wales, there is a review of building regulations, which was brought about as a result of criticism of an amendment that was made several years ago. It was decided to ask stakeholders for their views on the guidance. Some respondents stated that the guidance had become overly complicated. The Royal Institute of British Architects made the point that it welcomed the guidance when it was first introduced, and that although it stills sees benefit in the guidance-based system, successive amendments to the documents have made it somewhat complex. The review is trying to stop the drift and return the guidance to what the designers and building control require it to be.
- 148. The Deputy Chairperson: Mr Beggs; is your question about this clause?
- 149. Mr Beggs: No.
- 150. The Deputy Chairperson: Before we move away from clause 4, there is the use of the term "promote sustainable development". Is "sustainable development" defined in the legislation? Is it concerned with environmental, financial or economic sustainability? What is the definition of that phrase?
- 151. Mrs Hagan: Sustainable development is not defined in the Bill. In general, we refer to the definition of sustainable development that is included in the sustainable development strategy. Many minds have tried to define sustainable development, and one of many definitions could be inserted. One of the difficulties in drafting primary legislation is that one must be careful not to over-define certain terms, because that can restrict what one can do.
- 152. The types of things that we are thinking about are listed in the amendments to the schedule, and cover issues such as the sustainable use of water, limiting pollution and so on. I cannot remember everything that is listed in the Order.
- 153. Mr McCrystal: Clause 1 of the Bill deals with article 2 of the principal Order. Article 2 defines several terms and we propose to include definitions for low- or zero-carbon systems. Clause 1(2) of the Bill refers to schedule 1 of the Order, which lists the matters for which building regulations may be made. We have listed a number of proposed amendments to be included in the schedule, basically to widen the scope of building regulations to take into consideration, as Mrs Hagan said, aspects such as pollution, nuisance, matters affecting conservation of fuel and power, sustainable use of water and so on.
- 154. Mr Beggs: My understanding of clause 1 and the amendment to schedule 1 of the 1979 Order is that they will enable the introduction of subsequent regulations without going through the tortuous consultation process that has taken place to date. Will you confirm that clause 1 will mean the facilitation of mandatory microgeneration at some point without the requirement for significant new legislation, and that only the regulations would change?
- 155. Mr McCrystal: That would not require an amendment to the primary legislation but would require an amendment to building regulations. When amendments to building regulations are made, consultation always takes place. We would not simply make regulations and enforce them; they would be brought to the Committee, be issued for public consultation, and the responses would be brought back to the Committee.
- 156. We recognise that although microgeneration is not cost-effective at the moment, there could be a time when it will become so when the systems are more reliable and more readily

available than they are now. To use a crude analogy, microgeneration could be considered in the same way that computers were thought of in the 1980s — they were very expensive and had little capacity or power. In the past 20 years, many people have got computers that are much more cost-effective than they were. If microgeneration were to get to that point, and a regulatory impact assessment showed that there would be a decent payback, we would go that way. At the moment, we intend to concentrate on improving the thermal efficiency of buildings, because that is currently a much more cost-effective way of conserving power.

- 157. Mr Beggs: I appreciate that, but, in deciding not to take the route of mandatory microgeneration, did you consult other Departments? It is unfortunate that the Reconnect programme is ending at the same time as this promised programme, not now being considered, was to be introduced it means that the sector faces a double whammy.
- 158. Mr McCrystal: No, we did not consult other Departments on that matter.
- 159. Mr Beggs: Clause 2 is entitled "Protected buildings", and uses the phrase "have regard to" with respect to the protection of historic buildings. The character of historic buildings such as Carrickfergus Castle and some historic town halls would be altered if the regulations did not give them some protection. Are you satisfied that that wording will provide sufficient protection? What degree of flexibility will the wording, "have regard to", provide to building control officers when making their assessments?
- 160. Mrs Hagan: Informally, building control already has regard to the character of protected buildings. It has been doing that for some time. The legislation will formalise what building control has already been doing. The term "have regard to" has been included by the Office of the Legislative Counsel as a fairly standard way of drafting a provision such as this one, but it nevertheless has a legal standing and it will place a legal requirement on district councils to bear that in mind. I imagine that they will continue to do that, as they have done informally for the past few years. That will not make any difference to how building control considers applications that impact on protected buildings.
- 161. Mr Beggs: I am trying to get a better understanding of clause 10, which is entitled "Civil liability". The wording used in the briefing is that the Minister has announced that he will remove the proposed repeal of article 20. That means that it will stay in. Why was a proposal made to take it out and another made to keep it in? The briefing says that OFMDFM considered that its retention may encourage compliance with the regulations. In the light of that, why has it not been introduced before now and put to use?
- 162. Mr McKibbin: Article 20, as it stands, and if it were to be commenced, would allow someone who is taking action for personal injury or property damage to use non-compliance with building regulations in support of their case. Defendants could use also non-compliance to support their case. When the article was written and introduced into the 1979 Order, building regulations were largely prescriptive; they set out the exact requirements to be met.
- 163. The regulations subsequently became more functional, whereby one could show that one had made reasonable provision to satisfy certain parts of the requirements. We proposed to revoke the article because we never had a request to commence it, nor was it felt that there was a need to commence it at the time. However, when the Bill was passing through the Executive in November, OFMDFM asked whether commencing the article would not be a way of further encouraging compliance by having a legal stick, so to speak. In other words, it could be used in all claims involving non-compliance. Although that would still be the case, the way the article is currently written would no longer be appropriate because of the move to functional regulations.

- 164. Building control might find itself joined in many cases in which it has to show that the regulations were reasonable or considered to be reasonable. We have agreed with the Minister and the Minister said in the debate last week that we will see whether there is any way of amending the article to make it more appropriate for existing regulations. We will do that and, if necessary, bring a further amendment to replace article 20. The decision to remove the revocation was to allow the Bill to stand, so it would be amending rather than inserting a new piece of legislation.
- 165. Mr Beggs: When do you hope to have that amendment? Obviously, the sooner it is brought forward the better, so that it can tie in to the rest of the process that the Committee is dealing with.
- 166. Mr McKibbin: It is not likely to be during the lifespan of this Bill passing through the Assembly. I believe that it will come after that. There is considerable work involved with this and with other matters and we do not have the resources to take those forward at the moment. However, it is a matter to which we shall be returning.
- 167. Mr O'Loan: As regards clause 4, and the shift from the deemed-to-satisfy system to the guidance-based system, you said that "deemed-to-satisfy" is felt to be too restrictive and that people can get into jams in which everyone wants to move along but cannot do so because of the existing regulations. You indicated that building control officers would be happier moving to a guidance-based system, which would give them more discretion. Are developers in favour of that change?
- 168. Mr McCrystal: Developers are represented on NIBRAC. We have also met with builders and developers as part of stakeholder consultations. They welcome the change because it is more in line with regulatory procedures in the rest of the British Isles. Rather than having to take guidance documents from elsewhere and translate them into deemed-to-satisfy provisions, we could be more responsive to changes elsewhere and write guidance more quickly so that there would be a more unified standard in building regulations throughout the country. Builders are now much more mobile, so developers from here can be found working in Scotland or England. It becomes onerous for them if they find that they have three different standards to meet. On that basis, they welcome the change.
- 169. Mr O'Loan: Turning to clause 1 and energy performance: the thrust of the clause is to enable the Department to make regulations regarding the energy performance of buildings. The Department and the Minister have indicated that that should include energy emissions, focusing on insulation standards and the efficiency of heating systems.
- 170. Mr McCrystal: Absolutely.
- 171. Mr O'Loan: You said that microgeneration is not cost-effective, by which, I presume, you mean that payback times are lengthy given the technology available at the moment.
- 172. Will EU targets on energy emissions from buildings be achieved without some level of mandatory microgeneration for domestic buildings? Is there not an argument that technological improvements will be enhanced and accelerated by introducing a mandatory element?
- 173. Mr McCrystal: The difficulty with building regulations is that they are the minimum legal requirement they were never best practice, but a mop-up procedure. However, the standards in building regulations are by no means low.
- 174. The last amendment made to building regulations was on the conservation of fuel and power. Mr O'Loan mentioned efficiency of heating systems we require boilers to be 86%

efficient and good heating control systems. We also facilitate developers who want to use microgeneration systems rather than preventing those who want to. However, we do say that there is a carbon-dioxide emissions level that people must not go above, which is a high target to meet. Wood-pellet boilers are regarded as the most cost-effective microgeneration system, but they are not appropriate in every circumstance. If they work, that is grand.

175. Mrs Hagan: With respect to meeting EU emissions targets, it is worth bearing in mind that building regulations only apply, as Mr McCrystal mentioned, to new buildings, or to those buildings that are undergoing major refurbishment — less than 2% of the building stock in Northern Ireland. Building regulations cannot be applied retrospectively because of cost implications. Therefore, the opportunity for building regulations to reduce carbon emissions is quite limited because they only apply to 2% of the building stock.

176. Mr O'Loan: Do building regulations apply when there are refurbishments, extensions and other similar works to buildings?

177. Mrs Hagan: Yes.

178. Mr O'Loan: That would increase the percentage of the stock to which the building regulations would apply; would it not? I have heard high figures quoted from building control in my district council on the changeover in houses. In other words; that such activities could have a significant impact on the percentage of buildings that the building regulations apply to over a short period of time. Therefore, what you are saying is surprising. You are making a contrary argument.

179. Mr McCrystal: To expand the discussion away from the Bill, energy-performance certificates will have a significant effect and will bring house efficiency to the attention of householders. Not long ago, we brought an SL1 to the Committee, and we hope to be making regulations relatively soon. Each certificate will give a band rating for properties when they are constructed, sold or rented, which must be given to the purchaser or the tenant and will be similar to the markings on a fridge, or other white goods, in a shop.

180. There will be a list of cost-effective recommendations with the certificate. For example, if every bulb in a household is replaced with a low-energy light bulb, each would cost £3. However, the householder will save £7 a year per bulb and £60 over the lifetime of the bulb. If that saving were multiplied, the cost of the certificate will be recouped in about two years. Those fundamental recommendations will be given to the householder. Other examples include the benefits of upgrading the insulation in the roof space of a building or putting a lagging jacket on the hot-water storage tank. That is how the Department can affect those houses where structural alterations are not caught by building regulations — through another set of regulations.

181. Mr O'Loan: I am interested in the comment that building regulations are not thought of as the best practice, because I thought that they were. By some international standards, the insulation and energy-efficiency standards in our buildings are awful; I have been to Canada where, years ago, people would have had very high standards of insulation.

182. I certainly take the point that cost effectiveness must be a factor. However, I would have thought that the Assembly should be leaning heavily towards the best-practice argument as being the test for regulations.

183. The Deputy Chairperson;

- 184. Will certificates apply only to new and refurbished properties, or will they apply to every property?
- 185. Mr McCrystal: They will not apply to every property: they will apply to buildings upon construction and to those that are sold or rented. Therefore, if you intend to stay in your house, you will not need a certificate. However, if you intend to sell your house, one of the first things that the estate agent will ask you is whether you have an energy performance certificate. If you do not, you must acquire one because it has to be made available to the potential purchaser and be given to him or her on completion of the sale.
- 186. The Deputy Chairperson: Will that be carried out by the local council?
- 187. Mr McCrystal: Production of certificates is carried out by accredited energy assessors. That is a requirement of the EU Energy Performance of Buildings Directive.
- 188. The Deputy Chairperson: I want to return to clause 2 and the preservation of the character of protected buildings. There is currently a listing and grading of buildings. At what point in the spectrum are we operating? With respect to clause 2, what will initiate and define what is to be construed as a protected building? A range of buildings has been specified in the clause. Will it cover all of them?
- 189. Mrs Hagan: The Department has drawn on the specification that the Department of the Environment uses to define a protected building. The range of buildings included on the list of protected buildings is exactly the same as that to which building regulations will apply, and as the list is amended, so building regulations will extend or contract if certain buildings are added to or taken off the list. The Department of Finance and Personnel will stick closely with the Department of the Environment's definition in the Planning (Northern Ireland) Order 1991.
- 190. Mr McKibbin: There is nothing to prevent building control from considering buildings outside that definition, such as those that are examples of local vernacular architecture or are in an area of townscape character not caught by the Department of the Environment's definition. Building control might still consider those characteristics when it applies the regulations. However, it will be required under legislation only to apply the regulations to protected buildings.
- 191. The Deputy Speaker: Is that the definition or mechanism to which the terms used will have regard? Are there other factors that would be taken into consideration?
- 192. Mr McKibbin: There could be other factors. Indeed, with regard to the earlier discussion on guidance, the Department could, for example, produce guidance for district councils to use when they are having regard to such buildings. National Heritage has produced guidance in England and Wales, and the Environment and Heritage Service has produced a document that could be used, effectively, as a guidance document, and which would give district councils a line to follow.
- 193. Mr F McCann: In the past, buildings that have been listed have been bought, and builders have demolished them and said, "Oops, we did not realise that the building was listed." Who has the power to deal with those people when that happens?
- 194. Mr McKibbin: Demolition of listed buildings is covered by planning legislation, not by building control. It is up to Planning Service to deal with that situation.
- 195. The Deputy Chairperson: If I have followed the course of events today, we have considered clauses 1, 2, 3 and 4. Clause 5 deals with guidance documents. How will the new guidance differ from existing technical documents? Will it be more accessible and easier to understand?

- 196. Mr McCrystal: Because they are technical documents, they are meant to be read by a technical audience. However, as I said earlier, the Department will provide guidance on the thought process, design considerations and suchlike. It is hoped that when a designer works his or her way through the guidance and gets to a solution, he or she will understand how we have moved away from the functional requirement to reasonable provision. When he or she is considering an aspect of their building whether it be access, conservation of fuel and power, or whatever they will understand the objectives of the requirement for design considerations and follow it through to the solution. In fact, with a guidance-based system, the Department may provide more than one solution.
- 197. We may offer a solution ourselves, or we might refer to British standard, or other recognised technical documents.
- 198. The Deputy Chairperson: Will there be a legal basis for any of that?
- 199. Mr McCrystal: No. The current legal basis, "deemed to satisfy", is written into the regulations. However, it would be a foolish designer who would ignore the guidance. Clause 5(1) of the Bill provides for the introduction of article 5A(7), which will state that: "A failure on the part of a person to comply with guidance published under this Article does not of itself render that person liable to any civil or criminal proceedings; but the guidance is admissible in evidence".
- 200. If building control has to take legal action against someone, the guidance could be used in evidence to establish whether the designer had followed the correct route or ignored it completely.
- 201. The Deputy Chairperson: Is there a risk involved? I hope that I am interpreting it correctly. As that requirement is not based in a legal context, as the current structures are, could it be used as an opt-out if a matter were to go to court?
- 202. Mr McCrystal: I do not think that that would be the case. The designer may opt for a different solution to the one in the guidance document. Building control will assess that, and if it is decided that the solution offered does not satisfy its requirement for reasonable provision, the discussion between the two parties will follow the design considerations to see whether or not the designer has followed the guidance, and it will go through the objectives of the requirement and the design considerations. The onus is always on the applicant to demonstrate to building control that he or she has satisfied the requirement.
- 203. The Deputy Chairperson: Clause 7 of the Bill mentions article 12 of the principal Order, which covers the existing provision for tests. Has that been commenced?
- 204. Mr McKibbin: No. The change in clause 7 is quite a small one. As article 12 of the 1979 Order stands, it lists a number of tests that can be applied. We are changing that to allow us to provide in the regulations for those tests. It will allow us, to some extent, to control the number of tests that can be requested, rather than just give people carte blanche to ask for anything and save them from satisfying the requirements of the regulations.
- 205. For example, the amendment to technical booklet F that came about in 2006 could require an airtightness test to satisfy ventilation requirements regulations, which could be one of the tests that we could provide for in these regulations.
- 206. Article 12 was never commenced. We never had any call to commence it. However, bearing in mind that we are now moving towards prescribing tests in building regulations, we feel that

the article is now applicable and we will be starting the process to commence it when this Bill completes its legislative stages.

- 207. The Deputy Chairperson: If the Committee has other questions in relation to the other clauses, would you be happy if we forward them to you for reply?
- 208. Mr McCrystal: Yes.
- 209. The Deputy Chairperson: In conclusion, the consultation that was carried out raised issues to which no resolution was found. In addition to building control practitioners and the professional bodies, was there any feedback from the general public, or bodies representative of house buyers or self-build organisations?
- 210. Mr McKibbin: Most of the consultee responses that we received came from district councils or professional bodies. As the Minister said in the debate last week, it is quite a dry subject for the man in the street. Historically, we tend to get responses from the designers who are involved in building regulations on a daily basis, rather than interested members of the public.
- 211. The Deputy Chairperson: So, nothing was raised during the consultation that has not been resolved?
- 212. Mr McKibbin: Several issues were raised either about the proposals that we put out for consultation initially or about those that arose from the consultation and that were not, for various reasons, taken forward in the Bill. Often, that was because consultees were considering matters that were better addressed by subordinate legislation the building regulations than primary legislation.
- 213. Until a fairly late stage, we were proposing to insert clauses on the control of dangerous buildings. Building control approached the Department with that requirement. Building control currently uses extremely old pieces of legislation, some going back as far as 1854, to control dangerous buildings. They had asked whether we could consolidate those pieces of legislation into one, to which we agreed.
- 214. However, during subsequent consultations at a building control workshop, it became a question of "be careful what you ask for because you may just get it" and further discussions were requested. Therefore, we agreed to remove the clause from the Bill and to discuss with building control, and any other parties, the inclusion of clauses that would be more appropriate to their requirements.
- 215. Mr McCrystal: We had a meeting with building control on Friday at which we suggested that, because it operates at ground level and applies the current legislation, it should put together a working party to examine the matter in more detail and come back to us, at which point we will give the matter further consideration.
- 216. The Deputy Chairperson: As members have no further questions, I thank Seamus, Gerry and Hilda for coming today. It has been a useful and informative meeting. No doubt, we will see you again.
- 217. Do Members agree to forward to any outstanding issues from the Committee paper to the Department and request a written response?

Members indicated assent.

2 April 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Ms Jennifer McCann

Mr Declan O'Loan

Ms Dawn Purvis

Witnesses:

Mr John Hardy

Mr Patrick Flynn Sustainable Energy Association

Mr Gabriel McArdle

218. The Chairperson: Item five on the agenda is a briefing by the Sustainable Energy Association on mandatory micro-generation. Members should note that Hansard is recording the session and, therefore, telephones should be switched off. The Committee will be addressed by Sustainable Energy Association secretary John Hardy, and board members Patrick Flynn and Gabriel McArdle. Gentlemen, you are most welcome; perhaps you would like to make your presentation.

- 219. Mr John Hardy (Sustainable Energy Association): Good morning. Thank you for the invitation to speak to you today. I want to give the Committee some background information on the Sustainable Energy Association. We are a trade association that represents the renewable-energy industry on the island of Ireland. The association encompasses more than 1,000 companies, most of which are small to medium-sized businesses, and up to 4,000 employees. Many bigger companies particularly manufacturing companies are based in Northern Ireland, where the manufacturing base is located. I am accompanied by Mr Gabriel McArdle from Thermomax Ltd, which has recently been acquired by Kingspan Group plc. He is the company's senior executive and is in charge of the commercial-development department. Mr Patrick Flynn is the owner of Green Energy 4 U, which is a small, renewable-energy business based in County Down. It installs heating and energy appliances in homes.
- 220. Our submission presents evidence that demolishes the advice that informed Minister Robinson's decision not to implement the mandatory installation of 10% renewables in all new homes, which was due to be introduced in building regulations in April 2008. Civil servants put forward a four-fold argument: that the industry lacks the capacity to deliver; the lack of cost benefit in renewable-energy technologies; the unproven nature of the technologies; and the lack of precedents for that policy direction. We hope to show that those arguments and the evidence that supports them are inaccurate and unfounded and that the Minister was misled.
- 221. Precedents for such policies exist in the UK and Ireland; for example, the Lord Mayor of London introduced proposals under the London plan review. Developments must achieve carbon-emission reductions through mandatory on-site renewable energy of between 10% and 20%. Likewise, in the Republic of Ireland, building regulations to be introduced on 1 July 2008 will mandate that 10 kW hours per annum of thermal energy per sq m in each building, or four kW per annum of electrical power, must be introduced in all new builds. Overall energy consumption in new buildings will be reduced by 40% initially and eventually to 60%.

- 222. Mr Gabriel McArdle (Sustainable Energy Association): The Lord Major of London introduced the new policy on the back of the policy statement in 2004. The Merton rule also mandates the use of 10% renewables. To date, 150 councils almost a third of the 468 councils throughout Britain have adopted the policy.
- 223. It is also worth pointing out that it is more than likely that the company that I represent Thermomax Ltd, which is a recent acquisition by Kingspan Group plc will meet most of the Republic's new building regulations demands for 10 kW hours of solar energy from its manufacturing base in Bangor, which is pretty good.
- 224. Mr Hardy: Thank you very much, Gabe. That shows that the claim that there are no precedents is untrue.
- 225. The claim that the technologies are unproven is surprising, given that they are mainstream in mainland Europe. In fact, in Germany and Sweden houses cannot be built unless they incorporate some of those technologies. I will ask Gabe to elaborate on that.
- 226. Mr McArdle: I represent my own company, Kingspan Group plc, and also, as a member of the Sustainable Energy Association, companies such as Balcas in Enniskillen, which produces biomass products and brites wood pellets; and Glen Dimplex in Portadown, which produces heat-pump products.
- 227. The industry employs approximately 8,000 people. My business employs some 500 people in manufacturing in Northern Ireland, with factories in Bangor, Newry, Portadown and Banbridge working on renewables and the environmental sector of the business.
- 228. To date, Thermomax has produced and delivered 20 million solar tubes worldwide, although, unfortunately, not many to Northern Ireland. Recently thanks to the Housing Executive we have been supplying products to Northern Ireland. To put that into context, those tubes are equivalent to the output of Kilroot power station, which is a coal-firing power station, although it was recently adapted to be a coal- and oil-firing station. Ironically, it is the largest polluting power station in the UK. The solar energy generated by our Bangor product would take that power station off the map.
- 229. Balcas has evolved and is producing brites products locally for servicing the industry. Patrick is involved in biomass. Local manufacturing produces a small carbon footprint when the raw material is moved to the source of the product. We have supplied major European manufactures and, as a Northern Ireland-based company, we have also supplied the largest Far Eastern installation in Shanghai Airport, which produces 150,000 litres of hot water a day.
- 230. The technology is proven elsewhere in the world. Unfortunately, if the new legislation is not applied, we may not be given the opportunity to prove it locally.
- 231. Mr Hardy: Patrick works in installation and has first-hand knowledge of the technologies.
- 232. Mr Patrick Flynn (Sustainable Energy Association): The biomass heating in my home uses Viessmann tubes or Thermomax which are made in Bangor. From mid-March on, my home, and others with similar technology, will not require oil heating for hot water, which will be quite a saving. Some figures bandied about suggest that biomass does not pay. Oil heating does not have a payoff: oil is used. Biomass is both sustainable and financially beneficial to the client, with savings of up to 50% on their heating bills; that means that the average householder can expect a payoff in approximately three to five years.

- 233. We have an increasing demand for solar systems because the sun is available every day and it is free free for ever more. On the other hand, the price of oil and gas continues to rise. Investing in solar technology now will benefit us all financially, as we will be less dependent on fossil fuels.
- 234. Mr McArdle: I do not want to be selfish and talk about Thermomax in Bangor. Nevertheless, it has been making and exporting tubes for 27 years, which is a long time to prove technology, and it has been accepted worldwide. Viessmann is a huge German company. We brand the product and make it in Bangor, and Viessmann puts its name on it and sells it throughout Germany, which is the biggest solar market in Europe. It has been doing that for 15 years, so it is a proven technology.
- 235. Mr Hardy: We dealt briefly with cost benefit and the technologies; Gabe will tell us more
- 236. Mr McArdle: Patrick has already referred to costs. The reference to the payback and cost benefit comes from the Department for Environment, Food and Rural Affairs (DEFRA), but it has not taken into account any figures for oil or gas, although we are unsure of the reason for that. The cost benefit from the renewables point of view is available. We have installed renewables for many years, which proves that there is a payback on solar energy, and that, combined with a biomass system in a domestic situation on a properly sized, designed and controlled system, can show a payback in six to eight years.
- 237. Bewley's Hotel in Dublin airport is an example of a large-scale installation; at the moment it has more than 300 sq m of collector on its roof. The payback period for that installation is 10 years, because the capital was quite large due to the scale of the property. The hotel is saving €15,000 a year, as well as 15 tons of carbon; that is a quarter of the carbon emitted per year when the hotel was gas-fired. There are cost benefits and a payback to be gained from investing in renewable energy systems, which will last for 25 years. A gas- or oil-fired system does not offer payback in the long term.
- 238. Mr Flynn: I will back up that point, taking biomass systems as an example. Several years ago, an hotel in Newry that we looked at was burning 10,000 to12,000 litres of oil a week to sustain its heat and demand for hot water. A solar energy system would reduce the hotel's oil consumption considerably, but a biomass system would make a saving of 10% on oil expenditure. Taking today's heating oil prices at about 50p per litre, that 10% would represent a colossal saving, not only on money that can go back into the economy but also on carbon output, as there are about 55 times fewer carbon emissions from wood than from oil. That is significant, considering the Kyoto protocol agreements that must be met. There are substantial fines if those are not met; the money that would be needed to cover those fines would pay for many grant-aid schemes and incentives for businesses, and all of our homes, to change.
- 239. Mr Hardy: As outlined in our submission, the Sustainable Energy Association asked an accountant to examine the DEFRA payback calculations that were part of the consultation on the decision not to introduce mandatory microgeneration. The accountant made eight telling criticisms of those calculations, the most important of which, as Patrick mentioned is the fact that the figures seem to be based on an out-of-date pricing of oil at \$50 a barrel. The calculations also fail to consider the fact that there is no payback whatsoever on fossil fuels energy systems. The criticisms of the DEFRA calculations are detailed in our submission paper, so I will not go into detail at the moment, but I urge members to look at our paper.
- 240. Regarding the alleged lack of capacity in the industry to deliver, the progressive and joined-up policy that was advanced by Peter Hain was two-pronged. The Secretary of State decided that in order to bring about the adoption of more renewable energy systems into the mainstream, it was necessary to build capacity. Once that had been developed to a certain

degree with grant aid, the building regulations could be introduced to provide a sustainable market for the industry. In order to do that, the Secretary of State introduced the environment and renewable energy fund. It included £9.8 million for the Reconnect scheme, which enabled microgeneration systems to be installed in 4,000 private-sector and 600 social-sector dwellings.

- 241. In addition, Action Renewables established the Renewable Energy Installers Academy to ensure that there is a highly skilled indigenous workforce in Northern Ireland capable of maintaining capacity. The figures in our submission speak for themselves: there are 850 qualified installers. Capacity has been built up to the current level as planned, and the Reconnect grant is now being removed, as was planned.
- 242. Unfortunately, the mechanism that was supposed to be in place to maintain that capacity the introduction of building regulations is not happening. Therefore the industry no longer has grant aid or building regulations and is facing a crisis.
- 243. I think that we have demolished the arguments that were presented to the Minister, as we feel that Mr Robinson was misled by inaccurate evidence in making his decision.
- 244. Our chairperson, Ruth McGuigan, had discussions with Trevor Martin, who is the chairperson of the Northern Ireland Building Regulations Advisory Committee and the head of building control in Belfast City Council. He explained that he had opposed the mandatory introduction of regulations because he felt that it would be better if the Department supported the introduction of strong and vigorous codes for sustainable homes.
- 245. Although one of the Sustainable Energy Association's founding aims is to endorse the code for sustainable homes, unfortunately we have reached the stage at which capacity exists, grants are coming to an end, building regulations have not been put in place and the code for sustainable homes may not be introduced for several years. Therefore in order to facilitate the code for sustainable homes, the capacity that has been built up will disappear and will have to be reintroduced and redeveloped.
- 246. Mr McArdle: Furthermore, although it is great that 850 people who are trained to install renewable-energy systems have gone through the training academy and more are coming through and graduate schemes specialising in the emerging renewable-energy and building-services sectors are ongoing at Queen's University and the University of Ulster at Jordanstown, if those graduates are to find jobs, they will have to leave Northern Ireland.
- 247. I mentioned manufacturing, which is my side of the industry. Under various company brand names throughout the Province, Kingspan employs 500 people. In addition, there is Balcas and Glen Dimplex, and, of course, Harland and Wolff's dry dock is now being used for the manufacture of offshore wind turbines. The capacity exists here, and the situation is ripe for progress.
- 248. As with the Sustainable Energy Ireland grants in the Republic which are coming to an end the next phase must be support by means of legislative changes to part L of Building Regulations 2000. In Northern Ireland, unfortunately, that is not happening, and, as John said, we are heading into a cul-de-sac and our industry is heading for a tough time.
- 249. Mr Flynn: Based on personal experience in my own business, I can reiterate those comments. The building industry is experiencing a slight downturn, and I have been receiving phone calls from people who were previously employed in all sectors of the building trade but who are now seeking jobs. I have been telling them that we have plenty of work until Christmas, but they may have to look for work after that because there is no legislation and incentives to drive the industry forward.

- 250. Traditionally, those guys had to travel around the British Isles or further afield in search of work, and that will happen again. I spend much of my time training guys who have skills in all sectors to fit renewable-energy systems that could save people money, reduce our carbon footprint and help everyone. However, I fear that our business will become much smaller and, if we do not make progress, we will have to let many employees go.
- 251. Mr McArdle: We are not seeking subsidies, grants or handouts the Reconnect grant programme is coming to an end however, we require support in the form of legislation on building regulations.
- 252. Mr Hardy: We hope that we have provided evidence for our case, and we urge the Committee to ask Mr Robinson to reconsider his decision on mandatory microgeneration. Thank you for having us, and we welcome any questions.
- 253. The Chairperson: I repeat the question that I asked of the previous delegation: do you intend to make a submission to the Committee concerning the Building Regulations (Amendment) Bill 2008?
- 254. You have set out the effects of the Minister's decision in the here and now, but the key issue for you is strategic development. I believe that a submission from your association, among others, that addresses that issue will also have a strategic effect. I am aware that you want to address that, and I am sure that members will follow that line of questioning. However, we must also consider how the Assembly will address the key priority of sustainable development.
- 255. Mr McArdle: We are happy to do that. It is important to say that the industry body does exist. Perhaps we were not consulted because we are not public enough, but if there is still time to make a submission, we will.
- 256. The Chairperson: You have until 16 April.
- 257. Mr Hardy: We recently made a submission to the Planning Service on PPS 18, which deals with renewables technology, so we are not coming here to argue that you should have done this or that you should have done that. We realise that we have to have our say in the upcoming consultations to try to shape policy to our benefit. We are aware of the consultation period on the building regulations and we are drafting a submission.
- 258. Mr Beggs: Thank you for your presentation. I was particularly struck by your corrected calculations on simple payback years and annual cost savings on the different forms of microgeneration. The Committee is interested in that because the Minister wrote to us in November and included those figures, which were DEFRA-referenced. It is important that accurate figures be available that decisions can be based on. Can you provide the Committee with the back-up calculations to show where those figures come from so that we can submit them to the Department? Have you already done so? The payback period and the savings ought to be clarified because there are huge variations for example, a wood-burning stove goes from a 60-year payback to a payback period of less than one year.
- 259. Mr Hardy: Exactly.
- 260. Mr Beggs: Another example is that microgeneration goes from having a 6·5-year payback to less than a one-year payback. There ought not to be a debate about it; there ought to be evidence, and the sooner that is clarified the better.

- 261. Mr Flynn: The simplest way is to show it in practical terms. This is not a new industry to Northern Ireland. We have been in the business for four, almost five, years, and we have clients who were saving money on biomass, for example, when oil was \$50 a barrel. We can publish what those clients' savings were. Unfortunately, DEFRA's viewpoint is from the outside looking in, whereas we are on the inside looking out, saying that we have already proved that it works and have no problem restating that.
- 262. Mr Beggs: Can you provide the Committee with that information? We suggest that you make it part of your submission.
- 263. Mr Hardy: We had an accountant look at the savings, so providing the information to the Committee is no problem. The DEFRA figures were based on 2006 costs when the price of oil was lower. We do not know the size or proportion of the technologies that DEFRA is considering. The payback will be different depending on the size of the technologies that it is dealing with, but that is not a problem. If the Committee would like those figure, we will include them in our submission.
- 264. Ms Purvis: Appendix B includes another set of figures relating to payback where did they come from?
- 265. Mr Hardy: I believe that they are internal Department of Finance and Personnel figures. As to where they originated, I assume that they also came from DEFRA. They may have been updated, but they do not include the source.
- 266. Mr Beggs: They come from DFP. There are two issues. One is the introduction of mandatory microgeneration; the other is the Reconnect programme. You said that you have work until the end of this year. After that, if the situation remains as it is, the skills will dissipate and people will go elsewhere. How long would it take to build up contracts again? I am trying to find out how small the window is in which to solve the problem.
- 267. Mr Flynn: It has happened twice before in two grant schemes. The first was a taster to assess the position of the industry in Northern Ireland; it stopped, and there was talk of something else being introduced. From our conversations, we hear that Joe Public thinks that the Government will do something about climate change; therefore people sit back and allow the cost of the technology to rise. Energy and resources are getting more expensive all the time.
- 268. Previously, it took between nine months and a year to get the industry up and running again. That happened twice before. The grant scheme is great in that it gets many people interested and it promotes the industry. However, that is not what we want: we want a sustainable industry, but grants are not sustainable. We want an industry that moves forward. Incentives that benefit the economy as a whole are required, not handouts. Those might include incentives that benefit the householder through rates or incentives for businesses.
- 269. Mr Weir: Thank you for your evidence. I am aware of the good work and the major contribution that Thermomax, which is based in my constituency of North Down, makes to the economy. Many of us were delighted with the successful rescue of Thermomax; its difficulties were not the fault of the firm.
- 270. You said that you wanted to reverse the decision to end mandatory renewable energy targets. Have you sought a meeting with the Minister about that?
- 271. Mr Hardy: We have attempted to arrange a meeting, but without success it is difficult enough to secure an invitation to a Committee meeting. We tried to meet several Ministers: Margaret Ritchie, Nigel Dodds and Peter Robinson. We argue for joined-up thinking among the

Departments on energy and on sustainable development in particular. If we thought that it was worthwhile asking for another meeting, we would do so.

- 272. Mr Weir: Your document mentions developments in London and the Republic. Have there been any developments in the way in which the Scottish Parliament and the National Assembly for Wales treat renewable energy and microgeneration?
- 273. Mr Hardy: Recently, a press release from the Scottish Executive announced that they were tripling grant aid for renewable energy to encourage the industry. They wanted to ensure that more houses would install renewables to reduce the effect on the grid and on carbon emissions. The code for sustainable homes is being introduced in Wales and will be fast-tracked compared to the speed at which it was introduced in England. Even on a larger scale of renewables, Scotland is well above its UK requirements.
- 274. Northern Ireland's target for generating electricity or energy from renewables is 12%. For instance, a wood pellet-fired power station supplies most houses in Cardiff.
- 275. Scotland and Wales are following the same lines of legislation as England. Gabe mentioned the Merton rule. Members may not be aware that Merton Council in London introduced a mandatory requirement that all new houses must have a percentage of renewables. Of 468 councils, 150 have adopted that requirement, which represents one third of councils in the UK. That has set a precedent, and there is an impetus for the people of Northern Ireland to follow that lead. A fund was recently set up for local councils to adopt something similar; therefore, I see no reason why we cannot do so.
- 276. Mr Weir: As an aside, we could introduce wood-pellet fires in Northern Ireland, as we use them quite successfully in July already. Although some of the items that are burned might be slightly less environmentally friendly.
- 277. Mr Hardy: It could be the zero-carbon fortnight.
- 278. Mr Weir: Forgive me if this is slightly commercially sensitive, but you spoke about Thermomax's successful exporting side. What share of Thermomax's business might be described as domestic as opposed to international?
- 279. Mr McArdle: It is in single digits, and it is primarily associated with the Northern Ireland Housing Executive. Kingspan has had a good relationship with the Housing Executive over the years in supplying many different products. Last year, there were 1,200 installations. Things are a little unstable at the moment with the Housing Executive and funding has ceased, but we hope that that will free up during the summer, as it typically does.
- 280. The domestic figures are small in Northern Ireland, although they could increase up to 5%. In the overall scheme we are lucky that Thermomax has a world export market. However, the incremental increase that we deliver locally is phenomenal, and it is keeping jobs here.
- 281. Mr Weir: I understand that the domestic side has been beneficial, but principally your focus will remain on global export market. You seem concerned that the opposition to microgeneration or at least the opposition to changing building regulations comes from some civil servants. You also highlighted pressures in the pre-devolution phase and in the present devolution phase. There has been reference to concerns about additional costs being placed on industry. Have people in the industry lobbied against that because they feel that it will increase costs in the building trade or elsewhere?

- 282. Although some people in the Civil Service may be unsure about microgeneration, I would be surprised if that was the ultimate source of the opposition. If a head of steam has been built up to try to block that move and there has been pressure from some people in the industry, where do the major problems lie?
- 283. Mr Flynn: That is correct. It is not a matter of one body opposing the idea. Some people in the building industry want to build better, more sustainable homes.
- 284. Equally, those who are more business-oriented and concerned with making a profit view it as an extra and unnecessary cost. They are probably not sufficiently educated on why there is a need to move in that direction. However, there are many reasons: the Kyoto protocol; carbon emissions; the cost to the future population; and growing the economy for young people. Rather than seek funding, and so forth, which will be important as we move ahead, one of the association's biggest concerns is to promote the benefits of microgeneration.
- 285. Unfortunately, the days of cheap energy will soon end, and the other solution is nuclear energy, which brings its own problems. As Gabriel said, enough solar panels were installed in Germany last year to replace two power stations. It cost a population of 80 million €1 a month, or €12 each a year, to fund that scheme. It is not a massive amount, but it is tailored over a 20-year period, after which there will be no funding; however, by that stage most of Germany should be using sustainable energy.
- 286. Ms J McCann: To a degree, your answer to Peter covered the question that I was going to ask. There is much debate about renewable and sustainable energy. However, the previous presentation on climate change and yours on sustainable energy seem to suggest that microgeneration makes sense: environmentally because it cuts carbon emissions, but also socially and economically.
- 287. The Reconnect grants have been mentioned. Although they may not have much effect on businesses, they do on those who want to modify their homes. Many people who simply want to save money or who want to be more environmentally friendly cannot do so without the Reconnect grant.
- 288. I was interested in what you said about exporting. This is another case of a small local business not getting the same help as larger foreign direct investors. The argument that organisations such as Invest NI always throw up is that companies are not exporting enough. However you export, you employ people which is of economic benefit to the North of Ireland and you retain a skills base here.
- 289. I met some smaller organisations that deal in renewable energy, and they told me the same thing: they employ people who are skilled to a certain level, but those skilled people will leave. Therefore increased microgeneration makes sense. What is the main stumbling block? It is money. However, when we talk about money, we talk about value for money. Microgeneration makes sense because it offers value for money in the long term.
- 290. Mr McArdle: The Reconnect scheme benefits everyone. As the cost of property everywhere increases, fewer people are moving house; they are refurbishing, developing and making available added space for living rooms, and so forth. As you point out, there is now an ideal opportunity to consider different concepts of renewable energy, some of which are simple. From a selfish point of view although it applies to all renewable energy solar energy is extremely simple to retrofit.
- 291. We export a great deal. I talked about the availability of academically trained people in Northern Ireland through Queen's University and the University of Ulster, and we are now keen

to invest in Thermomax. We employ people with PhDs in technical subjects, and we are looking for more of the same calibre to service not only the local market but all our markets.

292. In addition to requiring people to perform the hands-on physical manufacturing and installation of our systems, we need more people with academic qualifications. For as long as we remain in Northern Ireland, we will take on people who have been academically trained. I am not suggesting that we will not remain in Northern Ireland, but that depends on where our future markets are. We will keep an eye on what is a fluid situation.

293. Ms J McCann: It is also important to note that if the scheme is not adopted or replaced by another scheme, sections of the workforce will lose their jobs. Although we want to employ people and build a strong economy, we are not putting effort into developing small local businesses; a mix of the two would be beneficial.

294. Mr McArdle: Grants will help, but legislation will undoubtedly drive the process. There are 5,300 houses to be built over the next three years, and it would be great to introduce legislation to support the installation of local renewable energy sources and to see those products manufactured, installed and supplied to those houses by local people. It would be ideal for Balcas in Enniskillen to supply a percentage of the houses with its wood-pellet fuel. However, without legislation, it becomes a commercial issue with builders or developers.

295. The Chairperson: The Committee will consider its options as a result of your interesting presentation — in particular the critique of the economic modelling that informed the Minister's decision. I assure you that the Committee will examine that matter and engage with the Department in a focused way. The Sustainable Energy Association's correspondence with the Department should inform the discussion.

296. The cost and strategic availability of fossil fuels in the long term brings the need for alternative technologies and renewables into sharp focus and compels us to adopt a business-like and policy-driven approach. We may need to discuss the issue with you again. You should act upon Peter's suggestion and renew your application to meet the Department to discuss the matter. In the meantime, the Committee will consider its next step. Thank you, gentlemen, for your interesting and informative presentation.

2 April 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Ms Jennifer McCann

Mr Declan O'Loan

Ms Dawn Purvis

Witnesses:

Mr Declan Allison (Friends of the Earth)

Dr Ian Humphreys (Conservation Volunteers NI)

Ms Eithne McNulty (Trócaire)

Mr Brian Scott (Oxfam Ireland)

- 297. The Chairperson (Mr McLaughlin): I welcome the representatives from the Climate Change Coalition to the meeting. If you make your presentation, members will ask follow-up guestions.
- 298. Ms Eithne McNulty (Trócaire): Thank you very much for receiving us; it is a pleasure to be here. We have a short presentation that will take no more than 10 minutes, and then we will have a discussion with you, which will probably be the richer part of the meeting.
- 299. The Climate Change Coalition for Northern Ireland comprises a wide range of environment and development groups who all wish to see Northern Ireland play its full role in combating global climate change. The coalition claims that, without urgent action, climate change is likely to devastate life on earth as we know it. That is a very powerful statement, but that is exactly how it is. Importantly, the world's poorest and most vulnerable are, and will continue to be, affected most. In fact, it is those who have offended least those in the developing world —who will be punished most.
- 300. Species and habitats are also at risk. Northern Ireland will not escape negative impacts, and we must think about that when planning for the future. High-emitting countries must reduce their emissions. Whether we like to admit it or not, we are among the high-emitting countries, and the onus is on us to reduce emissions. Additionally, there are strong moral, economic, social and environmental imperatives for Northern Ireland to bear its fair share of global energy cuts. We would welcome a discussion on the finer points.
- 301. We ask the Northern Ireland Assembly to support the international negotiations for global warming to peak at no more than 2° C above pre-industrial levels. We ask that the Assembly set an annual Northern Ireland carbon budget to enable an immediate and sustained decline in Northern Ireland's greenhouse gas emissions by an average of at least 3% per annum. The two figures of 2° and 3% are important for us. In particular, we ask that we assist the poorest countries to adapt to the unavoidable effects of climate change and that biodiversity options be considered.
- 302. Dr Ian Humphreys (Conservation Volunteers Northern Ireland): We would like a Northern Ireland climate Bill to set legally binding carbon dioxide reduction targets and a target of at least an 80% reduction on 1990 carbon dioxide levels by 2050. Scientists say that to remain below the 2°C threshold, global emissions of greenhouse gases will have to be reduced by at least 60% from 1990 levels by 2050. Our historic contributions impose a moral obligation on us to reduce our emissions further than that, because other countries will be unable to reduce their emissions by the same percentage. For those on the threshold of what can sustain life, cutting by even a little would be to fall below the level of survival. It is only appropriate that we take a slightly larger cut take our fair share.
- 303. We also want aviation and shipping emissions to be included in such a Bill, as they comprise a significant and growing component of our emissions and must be taken into account. To achieve the reductions that we have discussed, a reduction of 3% per annum is necessary. The action plan is for a five-year carbon budget so that we can measure progress towards the agreed targets.
- 304. Not only do we want the emissions reduction achieved in Northern Ireland to be measured, we also want to ensure that the reductions are made in Northern Ireland. We do not want to reduce our emissions by buying in through trading emissions schemes, such as the clean development mechanism. The moral argument would be that our emissions reduction should take place in Northern Ireland. There would be a financial incentive in that money invested in Northern Ireland to make reductions and to improve efficiencies and how people live will achieve a sustainable reduction; on the other hand if we buy in reductions by trading carbon budgets, the money leaves Northern Ireland and provides us with no benefits in the long run. The moral

argument has also been put forward by the Environment, Food and Rural Affairs Select Committee, which said that overseas credits should be purchased only as a last resort.

- 305. We want annual progress reports to be made to the Assembly from the Committee on Climate Change. The issue could be made public, which would enable the public and the environmental and development charity sector to express their views. It would also enable you, as elected representatives, to monitor progress in Northern Ireland.
- 306. A climate change Act would allow a judicial review if targets were not met. I hope that we would not have to go down that road, but it should be embedded in legislation.
- 307. The Executive should be obliged to respond to the reports of the Committee on Climate Change, which would enable the Assembly and a public scrutiny Committee to monitor performance. The public, elected politicians, the Committee on Climate Change and, ultimately, the courts all have roles and responsibilities in ensuring that targets in Northern Ireland are met.
- 308. Mr Brian Scott (Oxfam Ireland): My colleagues have laid out our shopping list. I will focus on the behaviour of our Government and in particular the Strategic Investment Board, which recently announced a £16 billion infrastructure-development programme. For the first three years, a mere £8·3 million of that £16 billion is devoted to measures relating to climate change, carbon reduction and energy efficiency. That is simply unacceptable. The Strategic Investment Board's documents and plans ignore the issue, which is a missed opportunity.
- 309. We are particularly concerned at the imbalance in the amount of money being spent on encouraging and stimulating private transport. Of course, our roads need to be improved, but minimal attention is being paid to public transport. There is a stark contrast between what Dublin and Belfast spend on public transport. For example, Dublin has the Luas, the Dublin Area Rapid Transport (DART) system, new plans for underground connections and so on; all Belfast seems to have is a few bus lanes and a bus-replacement programme. That is unacceptable.
- 310. We are also interested in Government procurement, particularly Fairtrade and ethical procurement, and we are pleased with the progress in that area. The Central Procurement Directorate issued a guidance note in March 2006; we want a report on the progress of those recommendations. Is Fairtrade procurement increasing throughout Government apparatus? Are statistics available? Is it being measured? If not, can we discuss with the Committee a procedure by which the above could be done? We are pleased with the exhortations and guidance notes, but what we require is action.
- 311. Mr Declan Allison (Friends of the Earth): I will talk a bit more about the roles of DFP and this Committee. An area in which the Department could have significant influence on carbon emissions is buildings, particularly building regulations. There is a zero-carbon homes scheme the eco-homes scheme, which Committee members are probably area of the aim of which is to have all new builds rated at zero carbon by 2016, with a phased-in increase in energy efficiency until that time.
- 312. The materials and techniques for achieving zero-carbon homes already exist; therefore it could be done now or in the near future. Northern Ireland could leapfrog ahead of the rest of the UK without waiting for the phased timetable. We should be building on our strong construction industry to position Northern Ireland as an exemplar in low-carbon development.
- 313. We were disappointed that the Minister of Finance and Personnel overturned Peter Hain's decision on the mandatory use of renewable energy in new builds, as it has left about 160 businesses and several hundred trained installers in limbo. In effect, the Minister has torn up

their business plans. It is a regressive step, and we want that requirement to be reintroduced into building regulations.

- 314. A 20-year programme to improve the energy efficiency of our housing stock by about 5% would create long-term quality jobs, improve the well-being of the people who live in those houses and make a significant contribution to reducing carbon emissions.
- 315. Grants from the environment and renewable energy fund should be reintroduced. Although the Reconnect programme is not directly the Department's responsibility, it would release the funds for it and in that sense it has a financial responsibility.
- 316. An innovative scheme could be introduced to examine the energy efficiency of homes and apply a banded rates system, based on eco-homes standards, whereby a much reduced rate would be applied to the most energy-efficient homes. However, there would probably also have to be some upfront grants, because installing insulation and bringing homes up to high levels of energy efficiency is expensive and an incentive to homeowners to carry out the required improvements would be necessary. Furthermore, it would be perverse if, having improved the energy efficiency and watched the value of their homes increase, homeowners would have to pay higher rates.
- 317. The coalition would like the achievement of zero carbon emissions by the 2015 target to be extended to the entire Government estate and not just to the Civil Service estate; that would include hospitals and Government agencies. A development plan should be drawn up with the aim of meeting the 2015 target; otherwise, the target will exist in limbo, and it will probably be filed away as a good intention that never came to fruition.
- 318. In summary, we want support for a Northern Ireland climate change Bill and, at this stage, we particularly want MLAs to sign the no-day-named motion calling for the Bill, which has just been tabled by the Business Office. That would deal not only with Northern Ireland's carbon emissions, although that would form a central part of it, but would also improve technology transfer and development aid. Leading by example would place a moral obligation on the rest of the world, particularly on developing countries.
- 319. There should be increased investment in renewable energy schemes to enable people to improve the energy efficiency of their homes. We also want to see a move towards sustainable procurement; improved building regulations to include renewable energy; increased support for renewable energy; a banded rates system to incentivise people to improve the energy efficiency of their homes; and an action plan for the Government estate to achieve zero carbon emissions. That is all I have to say for now, and we will answer any questions from members as best we can.
- 320. The Chairperson: Thank you for your wide-ranging presentation, although some of the points that it raised may fall outside the direct remit of the Committee; our function is to scrutinise the Department, so our focus will be on its role and its contribution to the broad agenda. Nevertheless, I thank you for drawing attention to the actions that the Department can take and how the Committee can get involved.
- 321. Dr Farry: Thank you for your presentation. I support the principle of a climate change Bill. However, in line with the Chairperson's direction, I will try to stick to questions about finance and economic policy. This is a huge subject, and I appreciate that our time is limited. I hope that this discussion will form part of an ongoing dialogue.
- 322. My questions merge into one another. You have given your view on the investment strategy, but perhaps you could give us your view on the impact of the Budget on climate

change, which would be more in line with the responsibilities of the Committee. I am interested in how we can shift public perceptions. The Budget focused on economic development, which was welcome; however, economic development and the protection of the environment are often seen as being competing objectives. The question is how to convince the public that both those objectives are complementary and that they should be merged. What is your reaction to the Stern Review? I understand that although it has been welcomed in some quarters, there are people on both sides of the debate who have questioned it.

- 323. There is a significant debate in Northern Ireland about how to produce energy in future, which parallels what is happening in Britain. There is a great deal of scepticism about the ability of renewable energy sources to deliver sufficient energy capacity. Much of that debate has focused on future projections using available technology. How can we introduce reliable estimates into that debate about how technology will improve over the coming years if investment is made in it? There have been huge changes in computing technology over the past 20 years.
- 324. The Committee has examined congestion charges. What are your views on congestion charges in our inner-city areas and the broader issue of road pricing? I am conscious of the point that you made about the public-private split in transport funding.
- 325. Those are very broad questions. It will probably take you two hours to answer them.
- 326. Mr Scott: We do not believe that the Budget has caused a clash of ideas. In fact, economic growth can provide the technological solutions that we require as well helping to reduce carbon emissions and construct sensible buildings that do not emit carbon and which are built and maintained in a way that does not consume so much carbon dioxide.
- 327. As one of my colleagues said, we need visionary leadership not just in setting an example to other parts of the UK and the rest of Europe and the world, but also to take economic advantage of the opportunities that are presented. I would like to make a prediction that by 2050, we in Northern Ireland and on the rest of this island and, presumably, the Scottish islands as well will be net exporters of electricity to land-locked Europe. We have enormous tidal power resources. Wind power is the flavour of the month only yesterday, the first commercial tidal turbine pilot was installed in Strangford Lough but the real opportunity lies in the North Channel between here and south-west Scotland, which has enormous potential.
- 328. From my experience of fish farming in that area, I know that there is a constantly running three-knot tide that could produce prodigious quantities of energy. Adequate research and development has not been put into that. Twenty-five years ago, Queen's University developed some of that technology, and it has been lying largely unused ever since. We have the engineering capacities and the energy resource, and we should use them.
- 329. There is no conflict between economic growth and reducing carbon dioxide emissions. The Budget could allow us to make significant strategic economic growth as well take advantage of renewable energy schemes and that does not simply mean windmills.
- 330. I am in favour of congestion charges in the short term; however, we ought to be working towards abolishing congestion. We ought to be planning our public transport systems to replace the systems that existed in our cities and countryside more than 100 years ago. That provides significant opportunities, as local companies are involved in public transportation. The Wright Group is one of the leading producers of buses in the UK. In addition, economic opportunities exist to develop our public transport.

- 331. Mr Allison: You mentioned a perceived conflict between economic development and the environment. The solution to that is sustainable development. One of the greatest failings of the Programme for Government and the Budget is that the phrase "sustainable development" only occurs with the word "economic" inserted between those two words. It does not occur in its own right, and there is no understanding of sustainable development and the opportunities that it offers.
- 332. We are moving towards a carbon-constrained future with very high fuel prices. Oil has already topped \$100 a barrel; it is predicted to top \$200 a barrel by the end of the year. We simply cannot continue with our oil-dependant lifestyles. We must invest in renewable energy and energy efficiency, which is where we can make the greatest gains. It is regrettable that the Budget does not tackle that issue.
- 333. Dr Humphreys: You asked how we could shift public perception. Many people do not see it as a question of the environment versus the economy; that may a perception of elected representatives rather than the public. People could be incentivised to make small shifts in how they run their houses; they may find that they have an extra £10 per month in their pockets to pay for the increased oil prices, for example. It would incentivise people if they saw the Government doing the same by investing in renewables or technologies that will not come online for a long time. People could trust that that would work in the way that the Government intend.
- 334. Ms McNulty: Education and awareness-raising can play a role in shifting public pereceptions. There is still a perception that there will be new fossil fuels finds and that the Arctic will provide the solution. However, even if gas and oil were found at the Arctic, worldwide resources would still diminish. Fossil fuels are not the future; a reliance on coal mining is not an option. Renewable energy —the wind energy that Brian mentioned is a message that the public needs access to.
- 335. Mr Beggs: Thank you very much for your presentation and useful discussion; it is a theme that the Assembly must develop.
- 336. You mentioned the need for mandatory measures and for providing incentives; however, I am unclear about where you think each is appropriate. Have you costed your proposals for improving the housing stock? Judgements must be made: should we build more social houses or fewer but of higher quality? Costings for building improved housing stock and for operating that which already exists would be useful if they are available.
- 337. I turn to renewable energy. I am surprised to learn that there has been no discussion between the Department of Finance and Personnel and the Department of Enterprise, Trade and Investment about the end of the Reconnect scheme and the changes to building regulations. Both will affect the sector at the same time; therefore I am sympathetic to continuing incentives to encourage the use of renewable energy.
- 338. You have criticised the Department for removing the mandatory nature of microgeneration. Do you not accept that it would be more environmentally friendly to have higher standards of insulation to avoid the need to generate energy in the first place? You seem to have missed that point. The Department said that there have been significant improvements in the new building regulations and that it plans to upgrade standards in 2011 and again a few years later. Do you not accept that it can be better for the environment to use high-quality insulation and reduce the need for the generation of any form of heat?
- 339. Mr Allison: You are absolutely right: the greatest gains can be made from energy efficiency. That produces the biggest bang for your bucks in reducing carbon emissions. However, it does not have to be either/or; we can improve energy efficiency and have high levels of renewable

energy as well. It need not be very complex renewable energy; it could be the provision of a water solar panel for every home. That would be simple to achieve and not particularly expensive.

- 340. The difficulty with removing mandatory renewable energy targets is that businesses were geared up to expect mandatory targets to be in place and had based their business plans on them. Now it has been scrapped and those businesses are in limbo.
- 341. That presents major difficulties. The Finance Minister has left all those businesses with no future.
- 342. Dr Humphreys: I have no figures on the percentage of houses that have insulation to the necessary level or which have fitted low-energy light bulbs or which have made other simple changes. However, I agree that those are the first steps: they are the quickest gains or the lowest-hanging fruit. As Declan says, people will still need to heat water and will still have to burn electricity for other things. For that we still need to look to renewables: insulating and other measures will not help with that.
- 343. Mr Beggs: Do you not accept that until you produce costs you cannot make a coherent argument?
- 344. Mr Allison: We can send you a report by the Renewables Advisory Board. It is estimated that £6,000 is needed on average to bring a home up to standard; that would produce an annual saving of £725 per home. The £6,000 would be paid off in less than 10 years.
- 345. The Chairperson: Does the coalition intend to make a submission on the proposed building regulations, which are out to public consultation as a part of the Committee Stage? The consultation ends on 16 April. The case has to be made by as many of the interested parties as possible.
- 346. Dr Humphreys: There will be a submission, delivered by first-class post.
- 347. Ms J McCann: Thank you for your interesting presentation. Most people agree that Governments have a social and moral obligation to the poorest and most vulnerable Third World countries.
- 348. I have spoken to locally based renewable energy organisations about the Reconnect grant scheme, which would encourage people to take energy-saving measures to make their homes more environmentally friendly. Many people in my constituency of West Belfast could not afford to take those measures unless such grants were available.
- 349. An additional benefit of the Reconnect grant scheme is that it would employ local people and local businesses. We are keen to have that scheme reintroduced.
- 350. The Reconnect grant and the building regulations are the two best ways of making a difference. They would constitute the action that you want, over and above a mere Government acknowledgment of their responsibility.
- 351. What can individual MLAs do for groups such as yours? How can we progress your objectives? Is the best way forward for the Reconnect grant scheme and emissions criteria included in building regulations to be put back on the agenda?

- 352. Dr Humphreys: Our main request is for a Northern Ireland climate bill; we want MLAs to support such a Bill if it comes before the Assembly.
- 353. If a climate Bill were enshrined in legislation, it would drive the other relevant issues, probably making your job easier. If there were legislation, plans to incentivise people such as bringing back the Reconnect scheme or furthering building regulations would fall into place. We all learn by example. Legislation would drive everything else, and help from MLAs would help that process.
- 354. I support the measures that you referred to; both are worthwhile, and investment on them would be recouped very quickly.
- 355. Ms McNulty: I thank Jennifer for mentioning the Developing World in relation to climate change.
- 356. We have taken particular care to address the Committee on the areas in which it has competence. However, if we think only within that restriction, our progress will be limited.
- 357. Northern Ireland is part of a globalised world, and the poor in the Developing World are already affected by climate change.
- 358. There are three reasons why the poor suffer most from climate change. First, they have experienced floods and droughts to a much greater extent than we have; secondly, those who are already poor are extremely vulnerable when faced with additional crises, such as climate change; thirdly, they rely heavily on rain-fed agriculture, and rain is either not coming at all, coming too late, coming out of season, or coming in deluge.
- 359. I appreciate that the Committee is restricted to approaching the subject within its own competencies; however, morally and ethically, we have a responsibility to think more broadly. A climate change Bill for Northern Ireland is imperative not only for our society but also for the Developing World.
- 360. Mr Scott: The reference to Fairtrade promotion may seem tangential to the issue of renewable energy, but it relates directly to what Eithne said. It is also directly within the Committee's remit how the Northern Ireland Government spend their billions of pounds a year. Will they spend their budget to aid poverty relief and assist people overseas to cope with the effects of climate change?
- 361. Climate change is already happening and is affecting the poor and vulnerable.
- 362. By going out of our way to buy Fairtrade and to procure goods ethically we can make an important contribution to the global picture. The Climate Change Coalition is made up largely of environmental organisations and bodies such as Oxfam Ireland and Trócaire. The Coalition of Aid and Development Agencies (CADA) in Northern Ireland comprises 20 organisations devoted to the eradication of global poverty. We care so much about what we are doing about climate change locally because we know from our work overseas the effect that climate change is already having on vulnerable populations in Bangladesh and in east, central and southern Africa. Buying Fairtrade products a simple, easy measure in the remit of the Committee can benefit people in the Developing World.
- 363. The Chairperson: The message could hardly be clearer; we hear it. The slogan about thinking globally and acting locally comes to mind. Declan, regarding the strategic investment strategy and the distinction between sustainable economic development and sustainable

development, it might be worthwhile supplying the Committee with a critique of the investment strategy to inform the discussion and help the Committee to examine it and to return to basic principles. The Committee would like to have as much information as possible so that we can make the most effective response within our limitations.

- 364. Mr Allison: I am sure that we can produce a detailed critique.
- 365. The Chairperson: That can be part of an ongoing relationship. You will find that people are ready to support the broad principles and can benefit from direct advice about how we can apply ourselves.
- 366. Mr O'Loan: Thank you for your presentation, most of which I strongly support. I have one question about housing stock. Progress was made recently on the building regulations for new houses and extensions; however, we have a major problem with the existing housing stock. Even in recently built houses the standards are very low. What would be the best way to tackle that problem? You referred to the Reconnect scheme. It is very easy to achieve great improvements in energy efficiency through the insulation and efficiency of heating systems and the paybacks are rapid, so there are many incentives for owners to act. How can we encourage people to do that cost-effectively? If the best way to proceed were pointed out to people, many would do it for themselves. If we were to put money into free surveys of houses with a set of recommendations for owners, as well as education and marketing about climate change, would that be a significant way forward?
- 367. Dr Humphreys: I doubt that a survey would affect many people, even if they were told that they could save on their bills. Some organisations Bryson House, for example already offer energy audits and tell people how to save on their bills. However, there is a certain inertia. People are reluctant to change, or their bills may be paid by direct debit, and so they do not improve their houses even though doing so could save them money.
- 368. Mr O'Loan: Is grant aid the only incentive to bring about change? There is a perfectly sound argument that grant aid is not needed because energy-efficient devices pay for themselves.
- 369. Dr Humphreys: A more community-based approach in which community champions could be trained to take on those issues and provide more on-the-spot support would be beneficial. Those people would be trained to know what measures would be most suitable for the types of houses in their areas, and they would also revisit the houses with energy metres to check what materials were being burned, for instance. They would provide support for householders. The position would be voluntary, and there would be a support infrastructure to train the position holders. Such an approach would have a strong effect, and it could be targeted at the areas in which improvements in housing are most needed.
- 370. Mr Allison: Householders who insulate their homes will recoup their money in six months or a year or two, but, as Jennifer McCann said, that is meaningless to people who cannot afford to insulate their homes in the first place. That is where grants are important. Saving people money through a banded rating system is also an important incentive.
- 371. Mr F McCann: Have you met representatives of the construction industry? What is its response to the design and build of new homes? Should there be one standard of build? It is argued that private dwellings are built to the minimum required standard and social homes are built to the maximum standard. There is, therefore, a large gap between the two, especially regarding energy efficiency.

- 372. Mr Allison: We have not met representatives of the building trade, but a private dwelling should not be more energy efficient than a social home merely because the householder has the money to build his or her own home.
- 373. Mr F McCann: Private homes are built to the minimum standard, so the issues that you referred to are irrelevant to their owners.
- 374. Mr Allison: I do not think that that is fair. All homes should be built to a high standard, and eco-homes standards are being phased in. However, we could leapfrog ahead now and go for the highest standards because we have the techniques, materials and know-how.
- 375. The Chairperson: Would you provide the Committee with further information on the application of the banded rating system and details of how it will be applied considering the move to a capital-based calculation system? That would help the Committee.
- 376. Following this evidence session, the Committee will receive evidence on mandatory microgeneration. We have had discussions on incentivisation, but a comprehensive approach must be taken at policy level. It is a common cause, and we have work to do on informing policy development on it.
- 377. How will low- or zero-carbon energy heating systems contribute to achieving t EU targets for renewable energy? Your expertise on that subject will benefit policy makers in their discussions. The Committee will have the opportunity to comment on that in the future, and your support would be helpful.
- 378. I thank you for your contributions; it was an interesting discussion. We have just opened the door on this work, so I anticipate that we will be in touch.

9 April 2008

Members present for all or part of the proceedings:

Mr Mervyn Storey (The Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Ms Jennifer McCann

Mr Adrian McQuillan

Mr Declan O'Loan

Ms Dawn Purvis

Mr Peter Weir

Witnesses:

Mr John Dumigan Mr Desmond Reid Building Control Northern Ireland Mr Donal Rogan

379. The Deputy Chairperson: Item 4 on the agenda is the evidence session on the Building Regulations (Amendment) Bill (Northern Ireland) with Building Control Northern Ireland. I welcome Mr John Dumigan, Mr Donal Rogan and Mr Desmond Reid to the Committee. As there is considerable information contained in your presentation, I suggest that we go through each paragraph, item by item. That would help you and members who may wish to ask questions on

certain articles and proposed amendments. Mr Dumigan, do you want to make an opening comment?

- 380. Mr Beggs: It is appropriate that I declare an interest as a member of the North Eastern Group Building Control committee, on which I represent Carrickfergus Borough Council.
- 381. Mr John Dumigan (Building Control Northern Ireland): Building Control Northern Ireland welcomes the opportunity to address the Committee. We hope that our presentation will be of benefit to your deliberations. We have a voluntary networking system, which is a central panel system, of which I am chairman. I hope that, between the three of us, we will be able to answer members' questions. I will leave it to you, Chairman, to decide how you want to make use of us. If you wish us to go through the presentation, we can do so; if you wish us simply to answer questions on the presentation, we are happy to do that as well.
- 382. The Deputy Chairperson: If members are content, I suggest that we start with paragraph 3.1 of the presentation and work our way through the issues. If any questions arise, we can ask Mr Dumigan and his colleagues to comment. Are members agreed?

Members indicated assent.

- 383. The Deputy Chairperson: Paragraph 3.1.1 recommends that the definition of "owner" should be changed to "responsible person". How would the responsible person be determined in cases in which, for example, there is a legal owner, an agent or a tenant? Is that approach taken in other legislation?
- 384. Mr Dumigan: It is difficult to determine who the owner is in some legislation. In many instances of enforcement, people refuse to declare their ownership of property. That makes it difficult to make a prosecution. In article 66 of the Pollution Control and Local Government (Northern Ireland) Order 1978, there is a requirement on people to declare their interest in a property. If they refuse to do so, a prosecution can arise. The Bill does not give us that power, although it would probably help us to determine the ownership of a property and, therefore, enable us to take action against the owner.
- 385. The Deputy Chairperson: Therefore you do not believe that it would be difficult to establish the person responsible for a property?
- 386. Mr Dumigan: At present, it is difficult. However, if the legislation required the owner to declare him or herself as such, that would certainly help the enforcement process. We would agree with that, Chairman. It is not an issue that we have raised, but it is a difficulty.
- 387. Mr Donal Rogan (Building Control Northern Ireland): The Committee may want to take advantage of the opportunity to harmonise definitions in the Building Regulations (Northern Ireland) Order 1979 and allied legislation. For four years, we have worked with Land and Property Services to produce information so that properties may be valued for local authority rating. There are overlaps in completion notices and completion of works as to how properties are measured in relation to the Land Registry (Fees) Order (Northern Ireland) 1976. It is not dealt with specifically in the Bill; however, if possible, there should be an opportunity to attain harmonisation across regulations.
- 388. The Deputy Chairperson: Let us discuss each article in turn. If it were helpful, John could give an explanation of each to help members. Shall we move on to paragraph 3.2?

- 389. Mr Beggs: I have a question on paragraph 3.1. You said that there may be difficulties in identifying the "responsible person" if work needs to be carried out.
- 390. Building Control recommends that "owner" should be changed to "responsible person". Is that a sufficient definition or does it present any problems? Might "responsible person" refer to the builder or the tenant? How have you come up with that term?
- 391. Mr Dumigan: We hoped that the term "responsible person" would be specified in the Bill, as, previously, the term "owner" was defined in article 2 of the 1979 Order; it is a more modern term. Under article 18 of the 1979 Order, Building Control can serve a contravention notice on the "owner"; we would like that term replaced by "responsible person", which embraces a variety of categories.
- 392. Dr Farry: It may be unusual, but occasionally the owner of a building or the person formally responsible will be outside the jurisdiction. How would you proceed in that event?
- 393. Mr Dumigan: Making the definition include any person, agent or trustee acting on behalf of that owner, including the occupant and the current definition includes occupants would deal with such a situation.
- 394. Mr Desmond Reid (Building Control Northern Ireland): It also includes the person carrying out the work, so it is a broad definition.
- 395. The Deputy Chairperson: If there are no other questions on that paragraph, we will move on to paragraph 3.2., "Article 3A Protected Buildings".
- 396. Mr Dumigan: Is the Committee happy with paragraph 3.1.2?
- 397. The Deputy Chairperson: Since are no questions from members, we will move on.
- 398. Mr Dumigan: Article 3A:
- "requires Building Control to have regard to the desirability of preserving the character of protected buildings".
- 399. When Building Control applies the regulations, it should not do so in a manner that would destroy the character of such buildings.
- 400. We consider that requirement to be weak. Building Control officials may look cursorily at a building, "have regard to it" but nevertheless destroy the character of the building. We recommend a statutory requirement on Building Control to consult with Government agencies that have responsibility for such buildings. We also suggest that the list of buildings for which such agencies should be consulted ought to be extended to include those of townscape character and others of historic or architectural value.
- 401. The Deputy Chairperson: Should that be in place of or in addition to the duty in the Bill, requiring Building Control to have regard to the desirability of preserving the character of protected buildings?
- 402. Mr Dumigan: It would place more of an onus on Building Control to recognise to a greater degree that we could destroy the character of buildings and that we should have more care in that area. It places a greater duty on us to act in a more responsible manner; we should not

- deal with the issue in a frivolous way. However, the proposed wording could allow some building control officers to do so if they were so inclined.
- 403. Mr Beggs: You mentioned townscape character and historic buildings; are conservation areas already included in technical booklet F?
- 404. Mr Dumigan: My understanding is that they are.
- 405. The Deputy Chairperson: If I do not get any indication that members have a specific question on each section of Building Control's submission, we will just move through it. Section 3.3 refers to article 5A, which deals with guidance for the purpose of building regulations.
- 406. Mr Dumigan: Building Control fully supports proposed new article 5A, as it is a much more flexible way to deal with building regulations. However, our concern is that the legislation states that only those documents that are published by the Department can be used as guidance. However, it is likely that many other organisations will produce documents that could be used as guidance, for example the Building Research Establishment. We are concerned that as such documents are not published by the Department, they could not be used as guidance.
- 407. The Deputy Chairperson: Do you envisage there being a list of accredited guidance publications that have been published by other bodies such as the one you referred to and are in the public domain? Is there not a risk that there could be contradictory guidance? Are we running the risk of having various sets of guidance that could be interpreted differently and lead to confusion?
- 408. Mr Dumigan: We envisage the Department's spelling out what the guidance would be. It would not be a free market in which publications could simply be picked off the shelf and classed as guidance. The guidance would perhaps be "issued by the Department", or "listed by the Department," rather than published by the Department.
- 409. Mr Reid: That already occurs in other aspects of the building regulations. When undertaking mechanical and electrical work, for example, we use guides published by the Chartered Institution of Building Services Engineers (CIBSE). We refer to other guides, but 5A seems to restrict our ability to do that.
- 410. Mr O'Loan: Provided that it can be made watertight, I see the point of your recommendation. I take the point that other guides are used in other fields.
- 411. Mr Dumigan: Paragraph 3.4 deals with type approval. We welcome that provision, as Building Control has had type approval for a considerable time; it benefits the industry by speeding up approvals. However, some councils do not wish to sign up to the scheme, and some disagree with parts of a type approval, because somebody feels strongly about some particular matter. After all, building regulations are open to interpretation. However, that undermines the scheme, and in my view undermines Building Control itself. We recommend that all councils be required to sign up to the agreed approval scheme so that a particular council cannot opt out of it. We need a robust system to ensure that whatever is type approved is in compliance with building regulations.
- 412. However, we are anxious to ensure that if a builder or developer goes to the trouble of getting a type approval from one council, another council does not tell him that it does not agree with that.

- 413. The Deputy Chairperson: Is there not an argument for keeping the power to type approve in the hands of DFP centrally rather than devolving it to councils?
- 414. Mr Dumigan: Yes, if DFP wants to retain that power.
- 415. Mr Rogan: A potential difficulty with that is that our customers value the right of appeal to a third party, which would be DFP. Therefore the councils should have the power to type approve. However, we recommend that action be taken to require all councils to comply with an agreed type approval scheme.
- 416. Mr Weir: How many councils resisted the scheme?
- 417. Mr Dumigan: Two or three.
- 418. Mr Weir: Do they object to certain aspects of the scheme or do they reject the scheme in its entirety?
- 419. Mr Dumigan: Two or three councils will not sign up to some parts of the scheme.
- 420. Mr Weir: Opposition is therefore relatively limited.
- 421. Dr Farry: Mr Dumigan, you stated that building regulations are open to interpretation and are not an exact science. How much variance is there in the approach to type approval taken by different building control professionals who work in similar settings but in different locations? How frequently are there are disagreements and what is the range of those disagreements?
- 422. Mr Dumigan: We have a close interface with the users of the service, and their message to us is that they want uniformity and consistency above all else. We tried to deliver that through the central panel system in which panels provide guidance on how to interpret and apply regulations. No matter how hard we work, there will never be 100% compliance or uniformity, but we are moving to get as close as possible to achieving that.
- 423. Each council is autonomous, and each council officer can make his or her own decision. We have a voluntary networking arrangement: it is not mandatory for an officer to accept any decision by a panel. That is the weakness in the system. However, we are much stronger than other building regulatory authorities, in that we work so closely together.
- 424. We work in a small Province with 26 councils. Our surveys and focus groups show that our customers are reasonably content and that we have not inflicted any major inconsistencies on them. We deliver a reasonably good and consistent service, but it is not 100% consistent there will always be differences.
- 425. Mr Rogan: The point about achieving consistency was well made. The central panel recently devised an audit to determine the effectiveness of the building control system. It is a voluntary audit, and no one else does it. We ask how effective the regulations are and whether they achieve what they are set out to do. Our objective is to achieve added value by achieving overall compliance.
- 426. Dr Farry: The review of public administration will reduce the number of councils from 26 to 11. How important will the power of type approval be in the new context? For example, developers who currently work in both the North Down Borough Council and Ards Borough Council areas may experience consistency issues, but when those two councils merge, there will be a central building control approach. However, I do not imagine that too many developers are

involved in similar schemes in North Down and, say, Fermanagh. When the number of councils changes from 26 to 11, will type approval become less significant?

- 427. Mr Dumigan: I do not believe so. Several multi-nationals requiring type approvals, such as McDonald's, are moving into Northern Ireland. The Department of Education requires type approvals for temporary classrooms and other pre-fabricated buildings. All sorts of buildings are being erected throughout Northern Ireland, and the people using those buildings would benefit.
- 428. Mr McQuillan: I have a question on the review of public administration. I thought that the move from 26 councils to 11 would make it easier for type approvals to be granted.
- 429. Mr Dumigan: Having read the Bill, I gather that the Department had in mind a type approval system similar to that which pertains in England and Wales, whereby one council assesses an application and all the other councils accept it. That was not the system that we had in mind for Northern Ireland, nor was it the way things were done in the past. Representatives from different parts of the Province would meet in a working panel to assess a type approval. They decided whether a project complied with building regulations, and their decision was adopted by the councils. That is different from how things are done in England and Wales. Problems have occurred in England and Wales when one council has made an approval that is not accepted by others. Our proposals are for a more robust system in which more people have an input into what the type approval is.
- 430. Mr Beggs: Do you agree that if there were no panel to make a decision, the multi-nationals would apply for approval to a council that required slightly lower standards, which in turn would lower the standard elsewhere in Northern Ireland. Therefore a panel system is a better method of protection.
- 431. Mr Rogan: We agree with that and see it as a way forward. The central panel, which we are here to represent today, has satellite panels that work to it, one of which is a standards panel, comprising a group of volunteers who come together to represent councils and take decisions on the interpretation of regulations. It is all about trying to achieve consistency. The model that we are presenting today, of a group of members who meet to interpret matters, is a stronger one. We do not want the regulations to be diluted by one council taking its own view. The evidence from England and Wales is that that has happened on occasions.
- 432. The Deputy Chairperson: We will now move to paragraph 3.5.
- 433. Mr Dumigan: Article 13 of the1979 Order deals with plans deposited with a district council. Although the Bill does not contain any amendment to article 17, Building Control would like to propose an amendment to it. I said earlier that councils are autonomous bodies, and we are here to put the view of the vast majority of councils. However, in their assessment of this article, several councils, but not all, expressed the view that plans should be approved before work is commenced, which would ensure that serious and costly mistakes are not made during the construction process. At present, developers can submit a plan to Building Control and start the project half an hour later. The result is that, in general, mistakes are made and remedial work has to be carried out, which is a waste of time and resources for developers and for us. It has created problems in some areas. I will ask Dessie to elaborate on that.
- 434. Mr Reid: As John said, not all councils hold the view that plans should be pre-approved; members may be aware that in Scotland developers must have approval before they start. The repercussions can be costly. No later than last week, I was presented with a situation in which a developer submitted plans with very little detail, got them out of his agent's office, and wanted to get started. The plans were for a multi-storey building with an underground car park. An initial look at the plan showed me that it was completely up the left; it may even require another lift.

- 435. That would have implications for the structure of the building. The underground car park requires extensive ventilation, which the plan did not cover that. We must discuss the matter further, and consider whether to allow building to proceed before approval. At the moment, some developers proceed without approval, but that can be a costly decision for the developer or applicant.
- 436. The Deputy Chairperson: Are there any bottlenecks in the approval process?
- 437. Mr Reid: Building Control has 56 days to consider plans, after which it is considered a deemed refusal. We suggest that that should be changed, and, after 56 days, should be considered a deemed approval. England and Wales do it that way; it puts the onus on Building Control to respond.
- 438. We encourage pre-application consultation whereby applicants discuss the plans with us before submission. However, that only happens occasionally because of the pressure to commence work on the site.
- 439. Mr O'Loan: You said that not all councils advocate the proposal; its intentions are clear but there are difficulties. Will bottlenecks or delays in the process hold up development? There are concerns about the planning system, and the Committee wants to ensure that legitimate development is not delayed. My understanding is that buildings are approved in stages and often can not proceed beyond the first stage foundations and so on because the proposal gets buried in the planning process. In a way, the system offers protection.
- 440. If that formed part of the legislation, how would it be enforced? The proposal is not ripe enough for the Committee to advocate an amendment to the Bill. Your evidence proves that it requires further examination.
- 441. Mr Rogan: Most councils approved the plan to introduce targets of 35 days for the commercial sector and 21 days for the domestic sector. However, 90% of Belfast's plans are turned round in 35 days. That does not mean that plans are approved, rather that a meaningful response is issued to the applicant. We approve only 38% of newly submitted plans, as most contain a contravention. Some clients or sometimes the agent or developer commence work before approval, but, as Dessie said, they do so at their own risk.
- 442. There are ways around it; we and our clients value greatly pre-submission consultation. On occasion, we use the stage approval system; sometimes clients prefer stage approval for a superstructure or a substructure. There are economic considerations in approving plans before commencing building work.
- 443. Mr O'Loan: If the proposal formed part of the legislation, how would it be enforced?
- 444. Mr Reid: I am not familiar with Scottish legislation, but it is illegal to start building before approval. We would have to introduce the measure slowly and perhaps take enforcement action against those who commence before approval. That would become a contravention, as it is in Scotland, where it is also a contravention to occupy before completion.
- 445. Mr O'Loan: I will leave it there.
- 446. The Deputy Chairperson: You say that you would like article 17 of the 1979 Order to be amended.

- 447. Mr Dumigan: Article 17 concerns appeals to the Department. When applicants are aggrieved by a decision taken by a council, they have a right to appeal to the Department. The Department publishes information on how it arrives at appeal decisions, which is a recent development. Hitherto, we have always had a problem in Building Control in trying to understand how the Department reached a decision. Although the Department now publishes such information, a new incumbent might decide not to publish. We are asking that the power be introduced to require the Department to publish information on the rationale that it uses to reach an appeal decision. We also suggest that, with the introduction of guidance-based documents, there be a system of determinations. The problem for developers and builders when working on-site is that if they have done something that Building Control feels to be wrong and requires them to fix, and they feel that it is not wrong and that they do not want to fix it, one cannot afford to wait a month or six weeks for an appeal to be heard. It would be of great benefit to the industry and to Building Control if there was a fast-track method for resolving such disputes.
- 448. The Deputy Chairperson: Is there a problem with delays at present?
- 449. Mr Dumigan: Usually, a developer will decide that he cannot afford the delay and will give up. I suppose that that could be considered a loss of rights. However, if there was a fast-track method to allow a decision to be reached in a matter of days, the issue would be over and done with and the builder could get on with his work.
- 450. Mr Beggs: How many appeals have there been?
- 451. Mr Dumigan: Most appeals happen as a result of planning applications. To the best of my knowledge, there are not many appeals about work on site. The Department has a better idea of the number.
- 452. Mr Beggs: Are you aware of any appeals in your own areas?
- 453. Mr Rogan: There were six appeals in Belfast last year, particularly on part R of the building regulations for disabled access and lifts. There were two in the past year about decisions on site.
- 454. The Deputy Chairperson: Article 18.
- 455. Mr Dumigan: Article 18 concerns serving contravention notices for work that contravenes building regulations. Under that article, councils have 18 months from completion of the works to serving notice. However, "completion of the works" is difficult to define and is open to legal interpretation and legal battles. Under paragraph 3.7.2, we are working to the enforcement concordat through a democratic process. Councils are not keen to take enforcement action. Such action is a last resort. Councils are anxious for us to try to resolve matters before they reach court. Building Control considers reaching court to be a failure in that we have been unable to prevent that from happening. Therefore, when the time that we are required to devote to that process is added up either through the democratic process or telling people what they are required to do according to the processes and the concordat as well as the time in which people have to appeal, and the general slowness of the legal system, we are often outside the 18 months. Therefore, the period within which we must serve a contravention notice has elapsed.
- 456. In addition, unauthorised work that is, work undertaken out of our sight often results in contraventions that are a danger to health and safety.

- 457. If that work has been completed for more than 12 months, we cannot serve a contravention notice. We can apply for an injunction for the removal or alteration of any contravening work.
- 458. However, the legal advice that we received states that that process is exceedingly expensive. In addition, courts expect requests for injunctions to be made in a timely manner. If the work was completed five or 10 years ago, an injunction is not timely; we will not win such cases. Our concern, therefore, is that there is an area of the Bill over which we have no control.
- 459. Paragraph 3.7.4 of the briefing note states that article 18A (1)(a) allows for a person upon whom a contravention notice has been served to submit a report to the council. That person has the right to appeal within a certain period. They also have the right to submit a report within a certain time; and after that submission, another appeal can be made. Indeed, a total period of 84 days is allowed for the report to be submitted. That period allows site work if it is ongoing to continue for a considerable time before a decision is made on whether to proceed or withdraw the notice.
- 460. The facility of submitting a report is seldom used. The whole process would be speeded up if that was facility removed. Article 18 is not effective for us it can prevent us from taking enforcement action. It gives the applicant certain appeal and legal rights; if we serve contravention notice, the applicant can appeal against that notice, submit a report, etc.
- 461. Article 21 provides the right for councils to go straight to court when provisions are contravened. Therefore although the process is convoluted and difficult for us, we could if we so wished circumvent it and go straight to court. That scenario is unfair on the developer and the applicant. If we implement the provisions of article 21, lawyers seem to grant the applicant certain rights and then take those rights away.
- 462. We need a more effective procedure for processing contravention notices and taking legal action.
- 463. The Deputy Chairperson: Do you have any suggestions about how completion of work could be defined? Admittedly, that is a minefield, but could it not be taken as the date of the completion certificate?
- 464. Mr Dumigan: I realise that the Department intends to let the clock run from the day that the completion notice is issued. However, we have had experiences in court when, although a completion notice had not been given under current legislation, the work was deemed to have been finished. We had argued that the work had never been completed and, therefore, that we had the right to serve the notice long after the 18-month period. The magistrate countered that although the appropriate documentation was absent, it was not reasonable to argue that the house had not been completed. I accept that it is difficult to define the time of a work's completion, but it is critical that we do it.
- 465. Mr Beggs: You said that councils have 18 months from the completion of the works to serve a contravention notice. We have discussed to whom notices are served and occasions when you have been unable to locate the owner. Is the system being abused, inhibiting your ability to serve the appropriate notice? Could the proposed legislation give rise to such a situation?
- 466. Mr Dumigan: I have taken legal action on several occasions against builders who have subsequently claimed in court that they are not the builder.
- 467. I told the magistrate that he was on site and that he was directing the work. The man said that he was the foreman, but not the builder. There are difficulties in the legal process, as I am

sure you all know. The t's must crossed and the i's must dotted, and one must go on site and identify the builder, find out his name, where he is from and record those details. However, there have been instances when that has been difficult.

- 468. Mr Beggs: In supporting your wider interpretation earlier, I do not want deadlines to be missed because of technical difficulties in getting the appropriate person with the notice, and what you say supports the definition of a responsible person. That may stop people circumventing the law.
- 469. Mr Dumigan: It is not infrequent to go to court and have the defendant say that he is the wrong person.
- 470. The Deputy Chairperson: Should councils not have access to the contract that was established between the builder the person who is carrying out the work and the company that is doing the work on their behalf? Anyone involved in building projects knows that if there is a legal framework an agent is used. That agent must have legal documents that stipulate clearly the builder's name for insurance purposes and for other reasons. It should not be that difficult to find out the name of the builder.
- 471. Mr Dumigan: On many occasions there are no written contracts especially with smaller works.
- 472. The Deputy Chairperson: You are referring mostly to smaller works; however, one would expect a contract with larger works.
- 473. Mr Dumigan: The situation is easier with larger works. However, the difficulty with larger works is knowing which member of the board of directors to serve notice on.
- 474. The Deputy Chairperson: Yes, or whether the work was subcontracted, and that can take you into another area.
- 475. Mr McQuillan: Surely that information can be found out through the planning process and the agent. Everything has to be advertised clearly.
- 476. Mr Dumigan: Not necessarily. Often applications are transferred from person to person. There have been difficulties in trying to identify the owner and the builder, and we do not have much power to demand that information.
- 477. Mr Rogan: Although we make that point, the provisions in the Bill are an improvement on the present situation. The reference to making false statements is also helpful, especially when filling out application forms. Traditionally, that has been misleading and frustrating for the local authority.
- 478. Dr Farry: My question is slightly tangential, but it relates to the issue. Does Building Control proceed, regardless of the payment of the fee? What is the legal link between payment of fees and the work? Are you honour-bound to inspect works, even though there is a default on the payment of fees?
- 479. Mr Reid: We are legally bound to carry out all our statutory inspections; it does not matter whether the fee is paid or not; we must carry out the full regime of enforcement. Fees relate to a separate piece of legislation, and we must pursue their payment separately. We cannot refuse to do our work or to issue completion notices.

- 480. Dr Farry: How big a problem is non payment or default on payment of fees?
- 481. Mr Reid: It is quite a big problem, and it is increasing with the drop in the industry and the number of commencements.
- 482. Dr Farry: Is that covered by the long title of the Bill or are you suggesting that it is a parallel piece of legislation?
- 483. Mr Reid: Prescribed fees is a separate piece of legislation.
- 484. Dr Farry: In the longer term, would it be advantageous to change the law to require payment of fees before certificates are issued?
- 485. Mr Reid: Yes. I have always advocated that.
- 486. Mr Rogan: I agree with Mr Reid. A link could be made between the issuing of the certificate and the fee, and that would strengthen our position. If a fee is not paid but work has commenced, that is an issue concerning different legal opinions. For example, in entertainment licensing legislation the local authority in Belfast has explained that the application is not legitimate if everything is not made up front, including the fee. Local authority building controls tend to be customer-focused. The industry tends to make last-minute decisions due to cash flow and other constraints.
- 487. When an application is lodged, it suits us to go through with the inspection process anyway, because undertaking the process that Mr Dumigan explained the issue of contraventions is much more difficult and is a burden on the rate payer. We would rather try to achieve compliance through negotiation and discussion as opposed to formal legal action because that could become a rate-born activity and could go beyond what the prescribed fees are intended for.
- 488. The Deputy Chairperson: Are Members content?

Members indicated assent.

- 489. The Deputy Chairperson: Can you elaborate on article 19?
- 490. Mr Dumigan: Article 19 covers the deposit of plans to be of no effect after a certain interval. At present, if plans are submitted for building works and are not commenced within three years of the date of that submission, councils can declare them to be null and void. However, what seems to happen is that developers will start to build a site of 100 houses, for example, and say that if one house has been started the whole site has been started. That site could then run for years, building to standards that could be long outdated. In fact, there have been recent instances of people building to 1973 standards.
- 491. Our concern and we have spoken to the Department about this is that building to lower standards should not happen in this day and age. There should be some mechanism whereby houses that have not been started on a site should have to comply with current building regulation standards.
- 492. I understand that the Department is of a mind that that can be addressed in secondary legislation, but our concern is that that will not deal with the thousands of sites that are in the pipeline. Thermal standards were raised at the end of 2006, and Building Control across Northern Ireland was swamped with applications for houses. The obvious intention of developers

was to get planning permission before the new standards were introduced. We are concerned that all that is still in the pipeline. It could go on for many years, and we are anxious to ensure that there is some mechanism to allow us to declare that those plans will be null and void.

- 493. Mr Beggs: I support that measure. Householders could purchase houses and could be unaware that they are inefficient. Why should the new standards not be adopted in order to provide more sustainable buildings and deal with energy requirements in the future?
- 494. The Deputy Chairperson: A situation could arise where houses could be built that do not comply with current standards, because somebody received approval several years ago. There are probably houses that have been built recently that only comply with standards that were in place in the 1970s or 1980s.
- 495. Mr Beggs: Would that cover issues such as disability access?
- 496. The Deputy Chairperson: Such cases would not have to comply with disability regulations.
- 497. Mr Beggs: That has strengthened my view on the issue.
- 498. Mr Reid: It is important that "commencement" be defined: on occasions, developers have started minor drainage work but claimed that a site has been started. The legislation needs to define "commencement".
- 499. The Deputy Chairperson: The definition of commencement is also relevant to planning applications. A site entrance may be opened, but the site might lie dormant for years, yet such sites are deemed as having commenced material works.
- 500. Mr Dumigan: Proposed new article 19A relates to the maintenance of registers by district councils. Councils keep registers, and we are concerned that suppliers and builders have access to those registers. I extended my house recently, so I know that people who are doing building work are inundated with junk mail from those people. The public should be protected from that sort of abuse, because that is not what the registers are there for. I am not sure how that abuse can be eradicated, because there is perhaps a requirement on us to provide that information under the Data Protection Act 1998.
- 501. If the Department specifies that we have to provide information, all of that information will be available. However, access to the registers is a difficulty.
- 502. The Deputy Chairperson: The minute that a planning application is advertised in a newspaper, the applicant will receive notification from a local builder because it is in the public domain; I am sure that we all have been subjected to that at some stage.
- 503. Ms Purvis: There is an edited version of the electoral register, on which people can request to be included. That may be one way of keeping information from manufacturers, suppliers and builders. Planning applications will be published in the press, but it will be up to the builders, for instance, to work harder to chase that up.
- 504. Mr Beggs: I am not sure how councils could restrict access to registers under the Freedom of Information Act 2000.
- 505. Mr Rogan: The Land and Property Service's chief executive and director of operations will be attending the Committee later today. The register that is kept by district councils could

perhaps be expanded to facilitate the rating legislation. That ties in with what was said earlier about harmonising definitions. We have to deal with linkage across the various legislations.

- 506. The Deputy Chairperson: We will move on to the additional issues.
- 507. Mr Dumigan: Building Control has powers to enforce dangerous buildings legislation and so protect the public. However, some of that legislation was drafted in 1847 the year of the famine; it needs to be brought up to date. We are not even certain whether it can be legally applied outside towns because the legislation was the Towns Improvements clauses Act 1847, and it related to towns only. We are not sure how much of it has been transferred. We have taken a great deal of legal opinion, but even the lawyers are uncertain of our legal standing.
- 508. We asked the Department to include that in the Bill, which it did. However, the definition was so broad that it appeared that we would apply dangerous buildings legislation to anybody who did something that was dangerous when involved in new build. That is not what we intended. It was intended that the legislation would apply to existing property, not to property under construction. The Department's action, therefore, was too broad.
- 509. In its wisdom, the Department realised that the legislation would need more consideration, so it removed the provision dealing with dangerous buildings. However, the Bill should include power to make legislation; if it does not, responsibility for the current legislation will lie in another Department. I am not certain whether another Department would be interested in undertaking that responsibility.
- 510. As we are dealing with buildings, the Bill should be more of a one-stop shop that deals with new buildings and dangerous buildings; then the public should know that it is all focused in one area.
- 511. We are anxious that the opportunity be taken now to provide for the power rather than for the regulations.
- 512. The Deputy Chairperson: Should DFP hold the power for dealing with dangerous buildings or should the councils hold it?
- 513. Mr Dumigan: The power should be held by the councils.
- 514. The Deputy Chairperson: DFP said that the issue of dangerous buildings must be further researched and evaluated before firm provisions are made. Do you agree?
- 515. Mr Dumigan: Yes, and we suggest that the power to make the regulations be taken now. The regulations would be made later.
- 516. Ms J McCann: Could the dangerous buildings legislation be broadened to include a provision that, when the site is under construction but work is not taking place, would make the site safer for people who live in the vicinity, particularly young children? When a building is completed, roads and footpaths that had been dug up as a result of the construction must be replaced. Could the legislation be extended to cover that?
- 517. Mr Reid: Most of those issues are covered by health and safety legislation and the construction, design and management (CDM) regulations when work is ongoing. The contractor has a responsibility to the general public to ensure that a site is safe. The existing legislation, to which the Roads Service is subject, covers the restoration of footpaths; the Water Service and other agencies are also subject to legislation. It would be difficult to apply the dangerous

buildings legislation to the type of situation that was mentioned. I appreciate such problems arise, but they are already covered by legislation.

- 518. Ms J McCann: It is not enforced enough.
- 519. Mr Reid: I did not say that it was.
- 520. The Deputy Chairperson: We will now discuss harmonisation of regulations.
- 521. Mr Dumigan: General press releases, trade magazines and television programmes say that new building regulations are being introduced; however, they are being introduced in England, not here. That causes confusion about what regulations are applicable. Moreover, the requirements in England and Wales are similar but slightly different from those here. The requirements in Scotland and the Republic of Ireland are also similar but slightly different from those here. The trade literature to advise architects and builders how to comply must be spelled out in four different jurisdictions.
- 522. It causes confusion, so we want the Bill to include an aspirational requirement for the Department to try to harmonise regulations, even if that only includes their introduction; if that were done, these islands would introduce the same measures at the same time. Most of the legislation comes from the European Union anyway. The harmonisation of regulations would benefit the industry and the profession.
- 523. The Deputy Chairperson: Is there an argument that Northern Ireland requires to do things differently?
- 524. Mr Dumigan: We acknowledge that that is your right; that is why there is an Assembly. I heard the same argument in the National Assembly for Wales. Scotland also has autonomy. Our suggestion is for each of the legislative bodies to get together to discuss the issue, as it would be beneficial if the regulations were given the same names. In Northern Ireland, fire safety is covered by part E of the regulations; part B of the Building Regulations 2000, which covers England and Wales, refers to fire safety; and in Scotland it is covered by another part of its regulations. That leads to total confusion.
- 525. The Deputy Chairperson: We will move onto the issue of backland development.
- 526. Mr Dumigan: I am sure that the Committee is aware that the issue of builders making use of backland development has been prevalent recently. On several occasions, access for the Fire Service and refuse lorries has been impossible. Those services cannot get access under arches to get to a development. We have spoken to colleagues in the Planning Service and to other colleagues, and it appears that there is no control over that difficulty. There are developments to which the Fire Service could not get access if there were a fire. That is a serious issue that must be addressed.
- 527. Mr Rogan: In the consultation on part J of the Building Regulations (Northern Ireland) 2000, we spoke to the Department, which emphasised that much of the backland development restricts access for refuse lorries and cleansing services. We ask that that be considered in the review of the regulations, particularly part J or, if required, in the Bill.
- 528. The Deputy Chairperson: It is serious if a development is under construction but cannot be accessed by the Fire Service.
- 529. Mr Rogan: There are examples, one of which is in Moira.

- 530. The Deputy Chairperson: In my constituency a couple of years ago, the Housing Executive had to demolish some of its properties because the Fire Service could not access them.
- 531. Mr Reid: In a village in Fermanagh, there are three houses in a backland development that cannot be accessed. To get access from behind the development, the developers are negotiating to use Housing Executive development land. However, the residents there do not want that to happen, so it is in a kind of no-man's land at the moment.
- 532. Mr Beggs: Is that because a Department has failed at the planning stage? If so, which one? Alternatively, has there been a failure in the planning legislation?
- 533. Mr Reid: There is no onus on the Planning Service to discuss its proposals with us. The Planning Service is given permission for the layout and design of a scheme; we cannot control that in our legislation.
- 534. Mr Beggs: I may take query elsewhere. If the Fire Service were consulted even at the planning stage, the situation would be improved.
- 535. Mr Rogan: Under the draft houses in multiple occupation (HMO) plan, councils are consulted on waste, fire safety and part R of the Building Regulations (Northern Ireland) on building issues. However, that is only under the draft HMO plan. Better consultation is required, and there should be a body that can ensure that proper access is a requirement.
- 536. Mr Beggs: Can Building Control refuse to approve plans if there is no fire access?
- 537. Mr Reid: No.
- 538. Mr Beggs: If Building Control had that power, it could assess buildings with drawings to determine whether there was fire access.
- 539. Mr Reid: That issue should be dealt with at the planning stage of a development before building permission is granted.
- 540. The Deputy Chairperson: That raises my concern about the planning process and the building control regulations in some cases, it seems that never the twain shall meet and that they live in separate silos. That is a huge issue. Surely it should be incumbent on the Planning Service to take cognisance of the basic important element of safety. There is a pre-consultation with planning in building regulations and planning applications, so there should be consultation between the Planning Service and Building Control. I assume that Building Control is not a statutory consultee in planning applications.
- 541. Mr Dumigan: That is correct.
- 542. The Deputy Chairperson: Do you regard being a statutory consultee as a valuable tool?
- 543. Mr Rogan: Building Control is a proposed statutory consultee under the draft HMO plan.
- 544. The Deputy Chairperson: However, not in normal circumstances.
- 545. Mr Rogan: No; the local authority is the statutory consultee, but it does not prescribe building regulations, which is difficult and tends to be on matters of pollution control and contaminated land.

- 546. In his review of social housing in England and Wales that the Government commissioned, John Calcutt links planning conditions, local authorities and warranty systems.
- 547. Mr Reid: Under RPA, all the planning powers will go back to councils I say that facetiously.
- 548. The Deputy Chairperson: It is a salient point.
- 549. Mr Reid: It is easier to organise and take on board.
- 550. The Deputy Chairperson: We are running over time, so I invite John to continue. If Members have any specific questions, feel free to raise them.
- 551. Mr Dumigan: The building industry is the most dangerous industry in the country, yet it seems to be self-regulated. There appears to be no robust inspection regime in place to ensure that things are done safely; it is mostly reactive as opposed to proactive.
- 552. We are particularly concerned about the demolition of buildings. Responsibility for that lies with the Health and Safety Executive, but we are of a mind that control of demolitions should lie with Building Control, because we would be reactive as we already inspect buildings. The Pointer database of addresses for the whole of Northern Ireland has been established; however, it lacks information on demolished properties, so the data are incomplete. No one holds such information, but if we were given that responsibility we could help to fill the gap. Our recommendation is that the Committee consider making regulations to control demolitions. In effect, Building Control could become a one-stop shop.
- 553. Mr Rogan: Most demolition is a precursor to reconstruction, which brings Building Control on site. We could ensure proactive measures to ensure that we control the whole demolition process.
- 554. The Deputy Chairperson: Who controls demolition at present?
- 555. Mr Dumigan: It is largely self-regulated, but it falls to the Health and Safety Executive. If something goes wrong, the executive will investigate.
- 556. Mr Rogan: Planning approval is required before the demolition of listed buildings and other proscribed buildings, but it is not necessary for other aspects of demolition.
- 557. Mr Dumigan: The Health and Safety Executive does not control a demolition. Representatives from the building industry have strongly suggested that we need a published programme of proposed new regulations so that people know what is in the pipeline. They have also suggested that when amendments to regulations are introduced, there should be a breathing space of three or four years to allow people to catch up with the new requirements. After that, further amendments could be introduced. However, there was a major upheaval when the last amendment was introduced in 2006. We have still not come to terms with that, and it is still disturbing Building Control and the industry. We merely suggest a system that is better planned.
- 558. The Deputy Chairperson: The amendments are driven by EU directives; therefore, in many regards, they are beyond our control.
- 559. Mr Dumigan: I accept that. However, we suggest that amendments be controlled and phased.

- 560. Mr Reid: England and Wales are reviewing the situation; they recommend a periodic review of building regulations every three years to allow the building industry to forward-plan rather than have continual changes, which happens at the moment.
- 561. The Deputy Chairperson: What about existing buildings?
- 562. Mr Dumigan: It might be appropriate to take on that power, because in future we may wish to apply regulations retrospectively. We might never wish to do that, but we will not get an opportunity like this for some time, so we should build in that power now.
- 563. The Deputy Chairperson: Would there be an enforcement issue? How would we police something like that?
- 564. Mr Dumigan: If someone wanted to upgrade buildings thermally, they would simply make an application in the normal way, saying that the buildings require that work. There is much talk of climate change and saving the planet, so we could take this opportunity to require buildings to be more energy-efficient. If the regulations could be applied to the existing building stock, it might help the situation. We are not saying that the regulations should be brought in; we are merely suggesting future-proofing and providing a power to carry out the work if necessary.
- 565. Energy-performance certificates, which Committee members will be aware of, are one method of doing what John suggests, but, in relation to schedule 1, we understand that there is provision to allow for application of building regulations to existing building stock.
- 566. Ms J McCann: Do you consider it important to have renewable-energy equipment installed in new buildings, in view of the debate about renewable energy?
- 567. Mr Rogan: I am aware of that debate. We have to try to achieve compliance with the building regulations. The building regulations are functional in the sense that they are not prescriptive; prescriptive regulations go against the ethos of our performance-based standards. Our argument is that the current regulations particularly the energy conservation regulations include provision for the regeneration of power. Therefore we are absolutely not against regeneration and micro-regeneration.
- 568. Our problem is that the economic payback is difficult. We will encounter resistance when we are interfacing with the applicants and trying to ensure compliance with a technology that is not financially beneficial, because, ultimately, the cost of the technology is always passed on to the end-user. Therefore we will encounter resistance to all the regulations. The current provisions give consideration to the micro-regeneration industry; however, the question of whether renewable-energy equipment should be installed in new buildings must be considered from the wider perspective of achieving the overall objective, which is to reduce carbon emissions.
- 569. Mr Dumigan: Building Control is unanimous on that. There are certain circumstances in which renewable energy does not work for example, if a house is not south-facing, a solar panel will not work as well as it would if the house were south-facing. Therefore it is not appropriate to put solar panels there; photovoltaics will never pay back. Similarly, if 500 houses burn wood pellets, a person will need breathing apparatus to be able to live on that estate. [Laughter]
- 570. The Deputy Chairperson: Yes, there are practical implications.

- 571. Mr Dumigan: It would be very difficult to make the installation of renewable energy equipment mandatory.
- 572. Ms J McCann: At last week's Committee meeting, we met people who gave a good presentation about why we should be changing to renewable energy sources in the long term. Using renewable energy sources could also have a social and economic benefit, for example, by insulating the homes of people living in disadvantaged areas. Any initiative should be cost-effective as well as being environmentally friendly, but both objectives could be achieved in the long term.
- 573. Mr Dumigan: I do not believe that small schemes will ever achieve what the Committee might want them to such schemes will not save the planet. The Committee must look at the large scale; for example, wind farms and tidal schemes, such as the one in Strangford Lough, which the Committee should visit. Large-scale projects will provide the answer to the problem of energy consumption rather than small-scale projects.
- 574. Mr Rogan: One of our difficulties is that we are always tasked with measuring our performance, and we therefore measure many outputs. One of the things that we must measure to be effective and it is a challenge for every Department is the outcome of what we are trying to achieve. What we are trying to achieve is compliance with the regulations, and what we are trying to achieve with that particular regulation is CO2 reduction.
- 575. Some lobbyists confuse the debate between energy diversification and CO2 emissions. We can meet the CO2 emission target in areas such as the power generation sector, which John mentioned. However, that outcome is covered by the provisions in part F.
- 576. We know that provisions are in place to further reduce CO2 emissions. Perhaps that will attract micro-regeneration or larger-scale regeneration, which would result in the economic benefits starting to kick in. However, making such provisions prescriptive goes against the concept of functional-based regulations.
- 577. Mr Dumigan: I want to put on record my acknowledgement of the excellent working relationship that we have with the Department of Finance and Personnel, which is a good example of joined-up Government. We communicate regularly with each other, we do not work in silos and there has been contact about the Bill.
- 578. We are making the Committee aware that during our debates with the Department, we got some, but not all, of what we wanted. We have listed for the Committee the issues that we feel were not addressed, and we were glad of the opportunity to do so.
- 579. Mr O'Loan: This has been a useful session. As we anticipated, the bodies that the witnesses represent have been closely involved with the Department on the issue. They have a high level of expertise, and they have made some important points.
- 580. The witnesses' submission makes 15 recommendations, one or two of which would probably require considerable work even to formulate the recommendations. However, most of the recommendations have merit.
- 581. Our task, in conjunction with making recommendations to the Department, is to turn those recommendations into workable amendments. Not to use the valuable information that we have received during this session would be a huge mistake.

- 582. The Deputy Chairperson: I thank the witnesses for their attendance today. This has been a useful session and has given us more detail and information that we can use as we move the process forward.
- 583. Do members agree that it would be useful to forward the witnesses' submission and the Hansard report of today's proceedings to DFP?

Members indicated assent.

16 April 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Mr Declan O'Loan

Mr Peter Weir

Witnesses:

Mr Trevor Martin Northern Ireland Building Regulations Advisory Committee

- 584. The Chairperson (Mr McLaughlin): Before we begin, I remind everyone that as electronic devices interfere with the recording equipment, they must be switched off completely; it is not sufficient to turn them to silent mode.
- 585. Members will find the briefing paper from the Northern Ireland Building Regulations Advisory Committee (NIBRAC) in their papers. I welcome Trevor Martin from NIBRAC, who I invite to make some introductory remarks.
- 586. Mr Trevor Martin (Northern Ireland Building Regulations Advisory Committee): Good morning. I do not want to go through the Building Regulations (Amendment) Bill, because NIBRAC of which I am chairman was behind the Bill and was involved in its drafting. Instead, I will spend 10 minutes telling the Committee a little bit about NIBRAC and our involvement in the consultation process. I will pick up on the key issues about which members have asked some of my colleagues and which have been highlighted in the Committee papers.
- 587. As I said, I am chairman of NIBRAC. For my sins, I am also head of building control at Belfast City Council. I have been in the industry for about 30 years, working in both the public and private sector, and, at one time, for the Government. I have been chairman of NIBRAC for the past four years and a member for five years. NIBRAC is an advisory committee that was set up by the Government to advise on the introduction of the building regulations.
- 588. NIBRAC comprises 16 members who were appointed as individuals, rather than on behalf of their professions or employers. They represent the industry and are appointed under Nolan Commission rules. They are therefore subject to rules on confidentiality, vested interests and so on. NIBRAC meets three or four times each year, but its subcommittees, particularly one that would meet to discuss the Bill, meets much more frequently. I am an ex-officio member of subcommittees.

- 589. The members of the subcommittee that considered the Bill have all since left NIBRAC; indeed, some have retired from the industry. However, Orla McCann of Disability Action chaired that subcommittee. She cannot attend today, but she has seen the papers that I have presented, and she is perfectly happy with their content.
- 590. The public consultations on the Bill were held in 2004 and 2005, and there was a good response rate to them. We worked with the Department on those responses, and we tried to address all the issues that were raised we did not shirk any of the matters that were mentioned. We also dealt with suggestions that members of NIBRAC made about the way in which to proceed with the proposals. To get the process to the Assembly, we had to draw a line under our deliberations at some point, because issues kept cropping up all the time. However, we drew that line under a point that included as many elements as possible at that time.
- 591. Under direct rule, an Order would be subject to review only every 25 to 30 years. That being the case, it was essential to include as much as possible in the Bill. Life is easier now that the Assembly has been restored. If amendments to regulations are needed, we can bring them to the Assembly, subject to the available parliamentary time. Therefore, we do not have to agonise over the process, but adjustments may be needed in future, and it is easier to do that under the current system.
- 592. Some aspects of the Bill caused debate. The move from technical booklets to approved documents is a great improvement of which the industry heartily approved. It means that we can introduce other types of guidance into the regulations, and it frees up certain matters.
- 593. District councils carrying out type approvals is to be welcomed that is an essential element of any regulatory jigsaw. It always seemed bizarre that 26 councils operated one set of regulations, yet people had to apply separately to each council for approval under what was, essentially, the same set of regulations. Therefore, the inclusion of this provision is fundamentally a major improvement and a good move that will save time and money. For architects, it provides conformity of interpretation across the Province, given that one big issue for them is that different councils ask for different things.
- 594. The main issue for Building Control is the establishment of a mechanism that will make such conformity happen. Type approvals exist in England and Wales, where the mechanism is voluntary. That works in some ways but not in others. In Northern Ireland, such a mechanism is necessary. One of the big challenges for Building Control and for me is to get such a mechanism in place. With the review of public administration (RPA), that will be easier, and Building Control officials are considering it.
- 595. The type of information that district councils keep on registers is not an issue. Most councils keep much more information than is required. In planning, all the information is in the public domain, and rightly so. However, Building Control information is always privileged between the applicant and the council. In the past, Building Control officials have been uncertain as to whether to release information. The Data Protection Act 1998 and the Freedom of Information Act 2000 mean that it is good for the industry that there is clarity about what information in registers the Department may make public.
- 596. One other issue is dangerous buildings and places, which the Committee has already discussed. That matter arose because councils sometimes use complex and archaic legislation to deal with that. Were that matter included in the Buildings Regulations (Amendment) Bill, it could make life easier by modernising how dangerous buildings and places are dealt with. The issue arose late in the consultation process. The problem with it was that when the Department tried to draft a form of words to address the problem, it sometimes ended up with a draft that was worse than the current regulations. As head of building control in Belfast City Council, I can say

that the Belfast Improvement Act 1878 was better than the regulations that we were drafting for 2008. The decision to remove that provision from the Bill and give it more thought was sound. I take most of my management theories from Winnie the Pooh: Winnie got stuck in honey pots and rabbit holes because he did not think over things carefully. It would therefore not be a bad idea to consider that matter more carefully.

- 597. Harmonisation of building regulations across Northern Ireland and the United Kingdom would be a good thing, but any devolved legislature should be able to move further than others in the rest of the United Kingdom on certain issues if it so wishes. Some issues are peculiar to Northern Ireland, and we may want to move on those, but they should not be subject to harmonisation.
- 598. When the Bill was being drafted, NIBRAC studied the Scottish building regulations and those in England and Wales. The committee's unanimous view was that the local authority building control system that we have in Northern Ireland was the best, and we were perfectly happy with it. Most committee members felt that local authority services were good, but that they may need to be tweaked and improved. Harmonisation would apply to regulations, not to the system. Sometimes we get things right in Northern Ireland, and it is not necessary to copy the systems that are employed in England and Wales or Scotland.
- 599. It is essential that NIBRAC agree a programme of work with the Department, but preprogrammed amendments are submitted all the time. Things must be subject to cyclical change. European directives also influence the programme of work, but vested-interest groups can now lobby the Assembly through the Committee for Finance and Personnel, which can then ask the Department to introduce new items on the programme or to move things up the agenda. Therefore, an opportunity exists to influence the programme.
- 600. I congratulate the Department of Finance and Personnel on the introduction of the regulations. The Department introduced part F of the building regulations, which related to thermal energy. That was a massive change in the regulations, and it was a model for other jurisdictions. The industry in England and Wales was given only 16 days before their introduction, whereas the Department here gave three months' notice, which was a lot of time. Therefore, what we did in Northern Ireland was a model for other jurisdictions.
- 601. Finally, I want to touch on building regulations and microgeneration, mainly because it has raised its head in the Committee and in the industry. I gave a couple of media interviews, and in one I was painted as being somewhere to the right of Attila the Hun and George W Bush. Microgeneration and building regulations are huge issues. If global warming is the biggest problem facing the world, we must tackle it. However, one can get into an emotional battle about such issues, and sometimes we can lose all reason and logic. Indeed, we started to stray when we reached that point in the debate.
- 602. The advisory committee discussed the issue at great length, and it is absolutely committed to the reduction of carbon emissions. However, we thought that Peter Hain's announcement was not the best route to follow. We welcomed Minister Robinson's announcement, and the committee's recommendation on that matter was unanimous.
- 603. The committee does not comprise housebuilders, and the only person who could possibly profess to having any interest in house building is one member from the National House-Building Council (NHBC). Two academics are on our committee Professor Chris Tweed and Dr Patrick Waterfield. They are experts in their field, and they agreed that there are better ways of cutting CO2 emissions. The committee therefore recommended that we can introduce microgeneration by other methods.

- 604. Building regulations are about outcomes. The Department or the Government should state the outcome that we need to achieve; it should be a matter for the industry to find out the best method of achieving it, and the solution should be imposed by Government.
- 605. That is all that I wish to say. I wanted to raise those issues, say a little about NIBRAC, and offer the Committee an opportunity to ask me any questions on what I have said or on any other parts of the industry.
- 606. Mr F McCann: Trevor has asked most of my questions and answered them at the same time.
- 607. Mr Martin: Like any good officer.
- 608. Mr F McCann: You should always be careful about mentioning Belfast to Committee members as some of them are liable to jump all over you. With regard to health and safety, how can Building Control staff help to protect people on building sites, especially in light of some of the recent injuries and deaths on building sites across the North?
- 609. Mr Martin: Northern Ireland is unique in that building control is the responsibility of the local authorities. That is not the case in England and Wales, because building control there has been privatised. Building control professionals in Northern Ireland can play a role in areas other than those that are related to building regulations. Anybody can consider building regulations: it consists of looking at a drawing; assessing it; stamping it; and checking the works on site.
- 610. Building control is a wider issue. There is a series of professionals in the 26 councils who could be used in a wider field, one of which is health and safety. There are approximately 300 building control professionals on site in Northern Ireland at any one time, and they could add greatly to the work of the Health and Safety Executive (HSE), because they would provide another set of eyes and ears on building sites. That has to happen, and the Assembly and councils must examine that opportunity and see what value the building control staff can add. A recent incident in Belfast, in which a floor collapsed, might well have been prevented had we taken a more proactive role. Building control professionals could, therefore, play a larger role.
- 611. It is crucial that the building control professionals have the basis for the building regulations, because that is what gives them their financial basis on which to add the extra value, and it provides the intelligence. The work on building regulations that is carried out by building control professionals can add greatly to the work of the industry.
- 612. Mr Beggs: You said that academics have determined that microgeneration is not the best method of obtaining renewable energy at this time and that increasing the insulation of a building is more effective. Nevertheless, microgeneration will become a more viable and relevant option in the future. Should a relevant provision be included in the Bill now so that it will be less difficult to introduce regulations on that matter in the future?
- 613. Mr Martin: The Bill amends the Building Regulations (Northern Ireland) Order 1979 by including microgeneration, and it mentions CO2 and greenhouse gases. The building regulations are not against microgeneration. Let me take off my NIBRAC hat and don another: if global warming is the biggest problem facing the world, we should address it holistically. However, we are not doing that. Rather, it is being addressed in a piecemeal fashion: the planners introduce PPS18; somebody else brings in microgeneration; and somebody else gives out grants. That means that three or four Departments are dealing with it.
- 614. Last year, I wrote an article for 'Agenda NI' in which I said that one Minister namely Minister should take responsibility for the issue. Everyone who has an involvement in

this area — the microgeneration experts, architects, builders, mortgage lenders, Land and Property Services, HM Revenue and Customs — should be brought into one room, and the Minister should tell them that she wants zero-carbon buildings by a particular year. It is up to the professionals to tell the Minister how that can be achieved, and no one should be allowed to leave the room until a solution is found. That way, nobody will be able to shirk a question or pass it on to someone else. In such an environment, the professionals will be able to tell the Minister whether such buildings can be designed and built. If it so happens that regulations or a lack of money are preventing the design and build of zero-carbon buildings, it can be determined whether regulations can be changed and whether green mortgages and tax exemptions can be obtained. By doing that, microgeneration will be brought into the heart of the debate, and a system will be established.

- 615. The great thing about Northern Ireland is its parochialism; everybody knows everybody else. Such a holistic approach could be taken only in Northern Ireland, because of its size it could not be taken in England, Wales or Scotland. Northern Ireland, more so than any other jurisdiction, could be the leader in bringing microgeneration and tackling CO2 emissions to a bigger platform.
- 616. Mr Beggs: The Committee has been advised that so long as building has commenced on one house on a site with multiple houses, the other houses can be built to some of the older regulations. We were also told that certain buildings were required to have Building Control approval even though the original parts of those buildings had been built to 1970's regulations and had poor insulation and disability access.
- 617. Will enforcement be easy, practical and consistent to ensure that all newbuilds will gain that approval in a shorter time frame? Can that be managed practically so that such systems will not be abused in the future?
- 618. Mr Martin: I believe that it can. Although abuse occurs, it is less likely in the current marketplace than previously, especially since the introduction of energy-performance certificates that rate houses. When you buy a house, just as when you buy a fridge, you know whether it is an A-rated house or a B-rated house. Although it is less likely that abuse will occur, a mechanism could be introduced to prevent it. As with any new regulation, someone will always try to find a way round it. Current market forces mean that people are now more aware that they should buy energy-efficient houses. That, in a sense, will reduce the problem. However, if abuse continues, some sort of provision, such as a cut-off period, should be included to prevent it.
- 619. Mr Beggs: Do any amendments need to be made to the Bill, or can that matter be dealt with in subsequent regulations?
- 620. Mr Martin: I would have to discuss that with the Department. Certainly, the matter could be brought up at the next NIBRAC meeting. However, it may be that amendments can be made to the Bill to try to close that particular loophole or to alleviate its effects.
- 621. The Chairperson: The final sentence of paragraph 3.2 of your brief, which deals with type approvals by district councils, mentions that the review of public administration should ensure:
- "that the scheme works easily and carries validity."
- 622. Do you know whether the Department of the Environment (DoE) is dealing with that particular concern? What changes do you believe are needed?

- 623. Mr Martin: I do not believe that DoE has examined that matter, but it may have to deal with it. A type approval system currently exists in England and Wales, and in that system, a particular council's approval of a type of building is then acceptable across other councils.
- 624. Competition is the driver for that system in England and Wales. The reason that councils do that is to keep out private inspectors. They have banded together to offer a valued product. If a local authority's building control approves a house in, say, Sevenoaks, that type of house will then be permitted in any other council area. Privatisation being the driver of building control does not exist here, because local authorities' building controls have a monopoly. At present, in order for NIBRAC to introduce type approvals voluntarily, all 26 heads of building control would need to buy in to the system. If two or three of them opted out and decided that they want to be kings in their own particular kingdoms, the system would start to fail and lose credibility. In that case, the Government and DoE must consider some sort of mandatory system that forces councils to accept the decisions of others.
- 625. Wearing my building-control hat, I want to point out that Northern Ireland Building Control and my colleagues are working hard before the Bill is enacted to agree on a system that we can all find workable. We are considering a panel system. At present, if a plan is not approved by building control in Belfast, for example, it will automatically go to Strabane's building control and be accepted. We are examining a more representative system in which a committee of the 26 local authority building controls will look at a plan, discuss it, agree and put a stamp on it. All 26 councils must absolutely agree that plan before it can be stamped. I hope that that system can be implemented and that the DoE will not have to introduce mandatory change. If we cannot get such a system, mandatory change must be introduced. That is the big challenge for Northern Ireland Building Control.
- 626. The Chairperson: Have you made a formal submission about that? Can you come back to the Committee with your written opinions about that matter? That would be helpful
- 627. Mr Martin: We could, Chairman.
- 628. The Chairperson: Your submission refers to proposed new article 19A and whether data that are held by Building Control are considered to be privileged information. Have you sought legal advice about that?
- 629. Mr Martin: We sought legal advice about that some time ago, and we were advised that the information was not in the public domain and was therefore privileged. However, that was prior to the Freedom of Information Act 2000 coming into force. Given that planning permission relates to building work that affects people's neighbours, it should be in the public domain. However, someone carrying out work to the inside of their house is not affecting their neighbour, so why should that neighbour, or anyone else, know about it? Building Control did not give that information to third parties; it was not in the public domain. The Freedom of Information Act 2000 has blown that situation open, because obviously any information can now be requested.
- 630. We believe that the registers will clarify the situation by acknowledging that the information that Building Control holds is in the public domain and should therefore be released if requested. That is a difficult area for us. For example, about two weeks ago I received an enquiry from someone who wanted to know what building work was going on in their neighbour's house. If I were to release that information, the person working on their house would query why their neighbour should be informed of it, arguing that what they do in their own house is their own business and is not public information. The registers will add some of clarity to that situation, and Building Control will welcome that.

- 631. The Chairperson: Are you confident that the Department is responding to that concern, or will that need to be tested at some stage?
- 632. Mr Martin: No, I do not think it that will need to be tested. The Department is aware of the issues that we face. The relationship between Building Control and the Department, through their liaison panels, and NIBRAC's relationship with the Department will ensure that that issue is addressed.
- 633. The Chairperson: Another issue that we face is the vexed question of microgeneration. Presentations about that have been made to the Committee previously. NIBRAC made a recommendation about it, and the Minister responded. Clearly, microgeneration has implications for the building industry. Have you considered the direction that is being taken in the South of Ireland, where a mandatory minimum renewable energy requirement in all new homes is being introduced?
- 634. Mr Martin: We have considered that. We also considered what is known as the Merton rule, which exists in England, where the councils have attempted something similar. That rule is beneficial for the microgeneration industry; however, it does not result in much reduction of carbon emissions. Therefore, it imposes additional expense on people without any real financial gain for them. There is much debate about the payback times for some forms of renewable technology. However, most people would agree that, if their options are to add insulation to a house or to put up a wind turbine, added insulation is the much better option. Insulation is better value, it results in a greater in fact, an immediate reduction of carbon emission, whereas it may take many years to recover the cost of a wind turbine.
- 635. Therefore, we must be sensible about what we are trying to achieve with the Bill. If the aim is to reduce carbon emissions, we should state what reduction we want. We should then continue to raise the standards, but allow the developers and individuals to choose the most effective and efficient way of meeting those standards. With standards being continually raised, a stage will be reached where microgeneration automatically becomes one of the better methods of reducing carbon emissions. However, all the other methods must be exhausted first.
- 636. The challenge for the microgeneration industry is to create a situation whereby building regulations do not force people to incorporate microgeneration technology into their building work; we must look at the problem from a holistic viewpoint, which will make those in that industry a bigger player than they are now. That involves offering grants and raising targets for the reduction of carbon emissions. Currently, the issue of microgeneration probably has more to do with fuel diversity than with the reduction of CO2 emissions.
- 637. Mr F McCann: Several weeks ago, I mentioned that some people in the building industry believe that the house building standards that have to be met by private developers fall far short of those to be met by, for example, people building social housing for housing associations. Should one standard not be applied right across the industry?
- 638. Mr Martin: One set of building regulations applies across the industry; however, the problem is that they set minimum standards. Therefore, a private developer may choose to build at a minimum standard. However, when a developer is building social housing, the Housing Executive will introduce voluntary standards that are over and above the minimum standards.
- 639. The standards will depend on the market that the developer is targeting: if they are targeting an expensive market, their work will obviously be of a higher quality. The regulations do not refer to the quality of the work; rather, they refer to whether a developer meets the minimum standard.

- 640. If what you are saying is that better houses are required, the best way to achieve that is to raise standards continually. I have often found that great intentions will not force developers to take certain measures. For example, ramps and toilets for disabled people started to appear in buildings only in the late 1980s. That was despite the fact that there have always been disabled people in Northern Ireland. Developers started installing those facilities only after legislation was introduced.
- 641. If the thinking is that the quality of building is poor across the industry, the best way to address that is to raise standards and ensure that everyone has to comply with the same set of regulations.
- 642. The code for sustainable homes has been introduced by the Department for Social Development (DSD). If that is deemed to be a good measure, perhaps an increase in the standards in the building regulations should also be encompassed by that code.
- 643. Mr O'Loan: I agree that the issue of dangerous buildings and places should be considered carefully. In last week's evidence session, Building Control Northern Ireland recommended that the Bill include powers to make regulations to control dangerous buildings and places. That was one recommendation of 15. However, you said that you would prefer the legislation to be amended at a later date. The same argument could be applied to several of the recommendations they all require careful consideration and cannot be rushed. I accept that.
- 644. The representatives of Building Control Northern Ireland also made the point that stabilisation is required, and they said that there should be a breathing space of three or four years after the Bill is enacted. Is it not possible to consider fully the issue of dangerous buildings and places and amend the Bill so that it deals with that matter?
- 645. Mr Martin: NIBRAC would have to discuss that with the Department. Building regulations have never covered the issue of dangerous buildings; that has always been covered by public health Acts, and, in Belfast, by the Belfast Improvement Act 1878.
- 646. The difficulty is that legislation can cover too wide an area. For example, a building could be defined as dangerous if it contained anything that could be hazardous, such as asbestos. Covering such a wide area could start to impinge upon other legislation under which other people operate. Alternatively, legislation can cover too narrow an area. Most councils have said and I know that mine has that what is proposed is better than the existing legislation. If that is a big issue for building control practitioners, there is a possibility that we, through the Committee, could raise it with the Department and ask for a bit more thought to be put into it.
- 647. Given the old legislation under which some councils operate, I know that they find it difficult to take action on dangerous buildings. Having worked in Belfast for many years, I am aware that not dealing with dangerous buildings quickly can lead to loss of life. Therefore, it is an important issue, and I will take it back to NIBRAC for consideration.
- 648. Mr O'Loan: That is fair enough. My second question concerns the harmonisation of regulations. I was surprised that you made no reference to the Republic of Ireland. Obviously, a lot of builders and developers from Northern Ireland work across the border. In some ways, harmonising our regulations with those in the Republic of Ireland is more important than doing so with those that apply across the water, although that is also relevant. Surely there is a good case for seeking all-island harmonisation.
- 649. Mr Martin: Absolutely. The regulations in the Republic of Ireland closely mirror those in England and Wales, as do ours. Therefore, harmonising the regulations between England, Wales,

Northern Ireland and the Republic is probably the easier option. Scotland tends to be slightly different and has always done its own thing.

- 650. Apart from Scotland, the existing regulations are not wildly different. The most pronounced difference is in how they operate. I know fairly well how the regulations operate in the Republic, because I go there every year, and I speak about regulations at a conference there every other year. The Republic's regulations are closely aligned with those in England and Wales. The main issue in the Republic is self-certification or, as some people argue, the lack of certification.
- 651. The harmonisation of the regulations on the major issues should not be too problematic. The main issue for jurisdictions is how to enforce, and ensure compliance with, the regulations. It is unlikely that agreement can be reached on that, because people have different views on how it should be done. However, to answer the question, we have close links with our colleagues in the Republic.
- 652. The Chairperson: Thank you, Trevor. No doubt debate on the matter will continue.

16 April 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Mr Declan O'Loan

Mr Peter Weir

Witnesses:

Noel McKee

Alan Mairs

Chartered Institute of Building in Ireland

Mr David Traynor

Mr Eddie Weir Chartered Institute of Architectural Technologists

- 653. The Chairperson: The Committee will now hear from the Chartered Institute of Architectural Technologists and the Chartered Institute of Building in Ireland. I advise members that due to work commitments, the witnesses were unable to provide a briefing paper to the Committee. However, I refer members to the copies of the paper that was produced by the secretariat.
- 654. The witnesses from the Northern Ireland region of the Chartered Institute of Architectural Technologists are Eddie Weir (CIAT), the continued professional development officer, and David Traynor, who is the organisation's national councillor. The witnesses from the Northern centre of the Chartered Institute of Building in Ireland (CIOB) are its chairman, Noel McKee, and Alan Mairs, who is a member.
- 655. Gentlemen, you are most welcome, and I invite you to address the Committee.
- 656. Mr Eddie Weir (Chartered Institute of Architectural Technologists): I thank the Committee for inviting us today. My colleague and I represent the Northern Ireland region of the Chartered Institute of Architectural Technologists, which is recognised internationally as the qualifying body

for chartered architectural technologists. Our discipline specialises in the technical side of architecture and the design of buildings.

- 657. As representatives of the construction industry, we are pleased to have been involved in the consultation for the proposed changes to the primary legislation. We do not need to go into detail about the proposed changes, because they are generally satisfactory. We appreciate that the Bill's major revisions are designed to expand the current regulations to include the protection and enhancement of the environment and the promotion of sustainable development in order to place the regulations here on a par with those already implemented in GB and the Republic of Ireland.
- 658. However, we are concerned that although the Bill will not initially place a financial burden on the public purse or the general public, future changes to building regulations, for which the Bill paves the way, will have a huge impact on the cost of construction, particularly if microgeneration is to be introduced into the design of new dwellings. That, combined with the impending reduction of U-values in the fabric of buildings, may lead to the rapid increase of house prices to compensate for those costly additions.
- 659. Given that we already struggle to build low-cost, affordable homes and that the use of microgeneration will eventually be mandatory here the first area in the UK to make it so the introduction of a grant programme must be considered to compensate for that financial burden.
- 660. Mr Noel McKee (Chartered Institute of Building in Ireland): I am chairman of the Northern centre of the Chartered Institute of Building. I too thank the Committee for inviting us to put our views. The CIOB represents the management sector of the construction industry. It has approximately 2,400 members in five regional centres throughout Ireland and approximately 42,000 members worldwide. The Northern centre, which I chair, represents 789 members from Counties Antrim, Down and Armagh. The north-western centre is based in Londonderry, and it represents members from Counties Derry, Tyrone, Fermanagh and Donegal.
- 661. Each centre is run by an organising committee of elected voluntary members of the Chartered Institute of Building in Ireland, they and deal with promoting the institute to the industry and to local schools. I have served two years as chairperson of the Northern committee, working alongside senior and junior vice-chairpersons.
- 662. Our work includes providing continuous professional development seminars and social events. A condition of membership of the organisation is that each member is required to continue their career development. We are also aware of the need to promote the industry and the institute to local schools and colleges. We must look to the future and provide young people with accurate and useful information as they consider their future careers.
- 663. The institute promotes good practice and professionalism in the construction industry and, therefore, we are pleased to be involved in discussions on the Bill. We are glad that the Assembly is developing and updating building regulations to take new technologies into account in the ever-changing face of construction and the building environment.
- 664. The Chairperson: Thank you very much. Do members have any questions to ask or any comments to make?
- 665. Other witnesses have addressed the issue of mandatory provision of renewable energy systems. Do you have any views or advice on that?

- 666. Mr Alan Mairs (Chartered Institute of Building in Ireland): I reiterate the views of other witnesses. The most important thing is to raise standards and to let the industry decide how best to provide renewable energy systems.
- 667. The enforcement of mandatory provision of specific systems, such as microgeneration, could stifle the innovation and development of new methods to meet standards. If the standards are s high, people will see a niche market and will develop other ways of improving the energy efficiency of buildings. However, if microgeneration becomes mandatory, the general attitude would be that there is no point in bothering devising long-term methods to improve energy efficiency.
- 668. The Chairperson: The effect on existing stock as opposed to guidance on new builds is another issue that has come before the Committee. Do you have any view on the retrospective application of the new guidelines?
- 669. Mr Mairs: There are difficulties with the retrospective application of the guidelines in that it puts quite a large burden on existing homeowners. Indeed, people who are renovating a property are already required to improve the building's energy efficiency.
- 670. If the standard is raised, energy efficiency will improve and CO2 emissions will be reduced throughout the country. However, that puts extra burden on current homeowners.
- 671. The Chairperson: Do you have any comments to make on that, Eddie?
- 672. Mr E Weir: Part F of Building Regulations (Northern Ireland) 2000 already has a mechanism to ensure that any building with a fabric that has undergone 25% of a material change to the roof, for example must comply with the regulations.
- 673. Mr Beggs: Do you feel that the Department gives sufficient training and guidance for the industry to fully understand, and adapt to, the practical outworking of the new regulations? Is three months sufficient for the introduction of the changes? Three months is better than the time that given in England and Wales. Due to the building control process and the subsequent planning process, architects need to design buildings well in advance of the implementation of the regulations.
- 674. Mr E Weir: As a rule, we are prepared for changes that will be made to the building regulations up to two years prior to their introduction. Therefore, by the time the three-month clock starts ticking on the introduction of the regulations, our members will be up to speed already.
- 675. We must hit the ground running on such matters. We are already preparing for future changes, such as the reduction of U-values, to create A-rated homes. Last week, we held a seminar for our members on bringing the U-values of wall constructions down to 0.2 w/m2, which would help to produce A-rated, low-carbon homes.
- 676. The new regulations will probably come into effect in the next year or two. We will liaise with Trevor Martin from NIBRAC and all the relevant Government bodies to ensure that we are well prepared for their implementation.
- 677. The Chairperson: That is all, gentlemen. Thank you very much.

16 April 2008

Members present for all or part of the proceedings:

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Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Mr Declan O'Loan

Mr Peter Weir

Witnesses:

Ben Collins Liam Dornan

Royal Institution of Chartered Surveyors

678. The Chairperson: I refer members to the written submission provided by the Royal Institution of Chartered Surveyors (RICS) and to the secretariat paper, which is still of use. I welcome Mr Liam Dornan, head of the institution's building control faculty and Mr Ben Collins, its director. I invite Liam to make a presentation to the Committee.

679. Mr Liam Dornan (Royal Institution of Chartered Surveyors): Mr Collins will make an opening statement, if that is OK.

680. Mr Ben Collins (Royal Institution of Chartered Surveyors): I thank the Committee for inviting us to give evidence on the Building Regulations (Amendment) Bill. My colleague Liam Dornan is head of the building control faculty of RICS Northern Ireland, and I am the organisation's director. Liam has worked for the building control service of Belfast City Council for 24 years. During that time, he has worked with a wide range of clients in both the public and private sectors.

681. RICS Northern Ireland is the principal body representing professionals employed in the land, property and construction sectors. We are here to represent our 3,000 members from across Northern Ireland. We asked for a separate session because of our extensive experience in the matters in hand. Our members practice in land, property and construction markets, and they are employed in private practice, in central, regional and local government, in public agencies, academic institutions, business organisations and non-governmental organisations (NGOs). We have a network of experts who work in those areas, and we can tap into that expertise when we are examining the detail and practicality of every proposed change to regulations.

682. In short, the Bill is of great interest to our members because we recognise the importance of building regulations. We all work, live and relax in buildings. Our 3,000 members, however, work with the built environment. They work with buildings from the cradle to the grave — from the original conception to the end of a building's life span. Furthermore, as part of our Royal Charter, the institution has a commitment to advise the Government of the day. In doing so, it has an obligation to bear in mind the public interest, as well as the development of the profession.

683. RICS Northern Ireland is therefore in a unique position to provide a balanced perspective on issues that are important to the land, property and construction sectors and on all related environmental matters. We welcome the opportunity to give evidence to the Committee, as we consider building regulations to be crucial to the built environment. We are happy to go through the clauses of the Bill, if the Committee would like us to do that.

- 684. The Chairperson: That would be helpful. If we examine the Bill clause by clause, members will have the opportunity to ask questions.
- 685. Mr Dornan: I will begin with clause 1. RICS believes that building regulations will be a key component of the Government's energy-saving aspirations. We believe that the Government should encourage a greater focus on sustainability through enhanced building fabric and efficient energy production in buildings, through the use of building regulations and financial incentives. However, although the Bill does not include a mandatory requirement to use renewable sources of energy, it gives people the opportunity to use them if they so wish. We believe that that is the way to go. Some further work on technology is required, and, possibly, on a commitment to extend financial incentives. When the technology is in place, the use of renewable energy sources will be promoted.
- 686. The Chairperson: If there are no questions about that, we will move on to clause 2.
- 687. Mr Dornan: Clause 2 could be more effective if a greater partnership existed between the Government agencies that deal with protected buildings. Such a partnership would be helpful to both building control staff and designers alike.
- 688. For example, I am currently dealing with some protected listed properties in Belfast. When the owners approached me, I was the third party with whom they discussed converting and altering their protected building. When I discussed energy conservation and fire safety, they said that the Planning Service and the Environment and Heritage Service told them that the walls could not be altered, the windows could not be removed, and the roof could neither be removed nor insulated. Matters such as those are governed by building regulations. I am probably repeating what other witnesses have said, but I believe that one agency should make decisions such as those. If that were the case, costs could be reduced.
- 689. The Chairperson: Do you have a specific amendment in mind that would address that anomaly? I can see that tension could emerge from that situation.
- 690. Mr Dornan: I would leave the introduction of such an amendment to the Department, but if my opinion is being sought on who should make such decisions, I think that the responsibility should fall to Building Control. The specifics for altering the building will come under the umbrella of Building Control, which is where I think that responsibility lies. Without such an agency, matters could become confusing for designers.
- 691. Mr Storey: That is a valid point. Does it not question the basis of the relationship between the Planning Service and Building Control?
- 692. Mr Dornan: Yes, and again there may be changes in that relationship in the future, and I would leave the responsibility for making those changes with the Government. Building Control will work with whatever the Department suggests. The details of the changes that will be made to buildings such as those I have mentioned can generally be found in the building regulations, and it is at that point where decisions should be made.
- 693. Mr Beggs: You have suggested that a greater partnership should exist. Proposed new article 3A states that:
- "a district council shall have regard to the desirability of preserving the character of protected buildings."

- 694. That means that Building Control must have regard for the sensitivity of a building. Are you really suggesting that planners and the Environment and Heritage Service should have regard for building control? I am trying to establish whether building control can be used or whether other regulations need to be changed.
- 695. Mr Dornan: My knowledge of planning is not as thorough as my knowledge of the building regulation system, but I believe that the Planning Service will give approval, in principle, for works to be carried out in a particular area while having regard to the visual impact that it will have on surrounding areas. Building regulations, however, will take care of the construction methods and of any physical changes to the building in question. If you are asking me whether Building Control can currently do the work of the Planning Service and Environment and Heritage Service, I would think not. However, resources will probably be made available and staff will have to be trained to carry out such work in any building control agency that may be established.
- 696. Mr Beggs: I take it that the answer is that changes need to be made elsewhere.
- 697. Mr O'Loan: The explanatory and financial memorandum on clause 1 states that the:
- "Order is amended to enable building regulations made by the Department to regulate energy performance of buildings, including the proportion of energy used which is to come from a particular source."
- 698. Does that mean that if people were of a mind to move to mandatory microgeneration in the future, it would not be necessary to introduce primary legislation? Could something be done about that under the regulations?
- 699. Mr Dornan: Yes; that is my understanding.
- 700. Clause 3 deals with the Northern Ireland Building Regulations Advisory Committee. We are happy with the proposed amendments to article 4(2) of the principal Order because we believe that people can be asked to represent the committee based on their merits without necessarily having to be part of a large organisation.
- 701. Clause 4 proposes amendments to article 5 of the principal Order. RICS Northern Ireland finds the changes acceptable; we have nothing to add.
- 702. Clause 5 deals with guidance documents. RICS Northern Ireland welcomes that inclusion. From our perspective, if we allow a move from technical booklets to approved documents, any credible guidance documents that are produced by proven accredited bodies, such as the British Research Establishment (BRE), the British Standards Institution (BSI) or European Normale, should be available for designers to use. That may help to demonstrate compliance with building regulation standards.
- 703. Mr O'Loan: Would somebody have to approve guidance documents?
- 704. Mr Dornan: Yes, they would have to be approved, and a mechanism would need to be put in place to do so. The body that approves the British Standard and European Normale Standard should be that which would approve guidance documents. Approved documents in England and Wales undergo scrutiny, and the same should happen in Northern Ireland.
- 705. Clause 6 deals with the power of district councils to approve types of building. RICS Northern Ireland welcomes that provision. There is great potential for cost cutting and efficiency

savings for those people who use the building control system. Designers and property developers alike will welcome the inclusion of the provision.

706. Type approval has been used by the Housing Executive and Building Control for around 20 years. Agreed details that were used in house building schemes were type approved, and once they were submitted to Building Control, there was no need for further assessment. That step has reduced the time that is needed to assess an application. In other countries, many large multinationals, such as Marks and Spencer and McDonald's, have type approvals that assist them in setting up in other parts of any given country without having to go through a lengthy assessment period. The IKEA building in Belfast, which my staff looked after, is almost a replica of that in Glasgow. Although there was no type approval system in place, the negotiations between the RICS, Glasgow building control and the developer reduced the amount of time that it took to get it up and running. That in turn helped the developer and building control. We have already rated the building, which means that £2·9 million will soon be in the public purse.

707. Clause 7 deals with the power to require or carry out tests for conformity with building regulations. The proposed amendments to article 12 of the Order are welcome. It could assist with innovation in the design and construction of buildings. For instance, Building Control may be presented with a design for a new type of concrete or type of concrete floor of which we have no knowledge. The design for that may not satisfy the guidance documents, and a test might be the only way to prove that it complies. We welcome that.

708. Clause 8 deals with contravention notices. Our organisation believes that it would be helpful if the period in which a contravention notice could be served were extended from six to 12 months. It might be of use to those members of our organisation who are supervising alterations to buildings if a 12-month period existed for the contravention notice to be served so that any latent defects could be discovered. Six months may not allow Building Control to be as reasonable as it is at the moment in following the enforcement concordat. Currently, people who are believed to be contravening standards are given a warning, followed by a period of time to comply, and then they are given several other warnings to prove that we are asking something reasonable. Twelve months appears to be a more reasonable time in which to deal with that process.

709. Mr O'Loan: I think that the explanatory and financial memorandum on clause 8 actually states 12 months.

710. Mr Dornan: Does the amended 1979 Order state that the period is 18 months?

711. Mr O'Loan: I do not want to start doing legal work, but I think that that refers to 12 and 18 months. I do not know the meaning of those references, but I do not see six months mentioned.

712. Mr Dornan: I think that the proposal was to reduce the notice period to six months; however, perhaps I am wrong. Anyway, the RICS would proffer a 12-month period within which a contravention notice could be served.

713. The Chairperson: We can revisit that issue. I suggest that we ask the Department for a response to the observations in your submission in order that we can satisfy ourselves about the details.

714. Mr Beggs: If that particular detail is to be checked, I ask clause 8(b), which amends article 18(6) of the amended 1979 Order, also be checked. Clause 8 states that the words:

""18 months from the completion of the work" substitute "the period mentioned in paragraph (5)""

be inserted into article 18(6).

- 715. I have been looking at article 18(5) of the amended Order to see what period of time is mentioned, and it is not obvious to me what that is. I would like that to be clarified.
- 716. Mr Dornan: Clause 9 deals with the registers that are to be kept by district councils. Most councils will keep comprehensive registers of their business anyway; I know that Belfast City Council building control does so. The Department may need to give further guidance on how such a register will be administered and it may determine whether there should be a statutory schedule of fees for giving designers or members of the public access to registers.
- 717. Registers may contain sensitive information; for example, there may be information on proposals submitted by two property developers who are vying for the same job. Although I am not a lawyer, the Department may have to examine the Data Protection Act 1998 and the Freedom of Information Act 2000 on that issue. In Belfast there may be 10 design houses all going for the same job schools, in particular, are open to competition and when they show me their proposals, they will expect me to keep them to myself, as they know that their competitors will come to me the next day. Therefore, the sensitive proposals and issues in that register must be examined.
- 718. The Chairperson: Your submission seems to indicate that your organisation is addressing the issue of a statutory schedule for fees, and, as other witnesses indicated, there is an obvious tension about the Freedom of Information Act 2000 and data protection legislation that will have to be addressed in some way.
- 719. Mr Dornan: Our organisation accepts clause 10, and we have no comment to make on it.
- 720. The Chairperson: There are no indications from members wishing to comment on that, so we shall just move along.
- 721. Mr Dornan: Clause 11 deals with false or misleading statements. It is important for people who act as experts in the field do so professionally. If structural engineers, architects or chartered surveyors submit reports or structural calculations to Building Control, knowing that those reports or calculations are not correct, the stakes can be high, particularly where fire safety or structural stability are concerned. Some self-regulation exists. For example, the RICS has a code of conduct, and its journal reports each month on what action is taken against those who fall short of the code. This provision is therefore an important inclusion.
- 722. However, the offence has to be matched by an appropriate sanction. I see that £5,000 has been mentioned; perhaps that is an appropriate sanction for particular offences, but I will leave it to the Department to decide the scale of financial sanctions.
- 723. Mr Beggs: Are you suggesting that £5,000 is too little?
- 724. Mr Dornan: I am not saying that it is too little; I am saying that the offence has to be matched by an appropriate sanction.
- 725. The Chairperson: I think that Mr Dornan is talking about proportionality.
- 726. Mr Dornan: Clause 12 deals with application of building regulations to the Crown. We welcome that clause. What normally happens is that speculative builders develop a building and then release it. As the Bill states, that building might be taken and occupied by the Crown. At that point, building regulations cease to apply. The shell building could be constructed in

accordance with building regulations. However, the fitting out of the building will not be subject to building regulations, given that the tenants are the Crown. Someone else will have to consider sustainability, for example, the heating system that is installed.

727. The Chairperson: I was thinking of asking Fra to define "Crown occupation". [Laughter.]

728. Mr F McCann: Do you have a couple of hours?

729. Mr Dornan: The changes that are proposed in clause 13 are acceptable to the RICS Northern Ireland. Turning to clause 14, the removal of the term "rack rent" is acceptable and will modernise the Order. However, it will then be important to examine the definition of "owner", which the Committee might have discussed with other witnesses. Building control services are enforcement bodies: we have to serve notices. Serving a notice is a last resort, but we need to serve it on the right person. Therefore, the definition of "owner" is an important issue that needs to be examined and possibly changed to mirror definitions in other legislation. In England and Wales, the Party Wall etc. Act 1996 has, I believe, a three-fold definition that makes is possible to pinpoint the responsible person who can be contacted contacting. The Department will probably want to examine that issue if it decides that a new definition of "owner" is needed.

730. Clause 15, which deals with repeals, is acceptable to RICS Northern Ireland, as are clauses 16 and 17.

- 731. RICS Northern Ireland welcomes the return of the Assembly and the opportunity to make this presentation, and I thank the Committee for its time.
- 732. We launched our manifesto in Parliament Buildings yesterday, and I was glad to see some Committee members present for that. The RICS is committed to sustainable development and to helping the Government meet their targets on the reduction of carbon emissions. We believe that that can be achieved by building on the success of the building regulation process, and many of the necessary structures are in place already.
- 733. As a professional institute, we have the luxury of having a multi-disciplined membership working in the private and public sectors, and that is one of our strengths. I hope that what we have proffered today has helped the Committee and that we can be of further use on policy issues on land, property, construction, and other environmental matters in the Province. Thank you very much.

734. The Chairperson: Liam and Ben, that was very helpful; thank you very much and good luck.

23 April 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Ms Jennifer McCann

Mr Adrian McQuillan

Mr Declan O'Loan

Mrs Dawn Purvis

Witnesses:

Mr Billy Gillespie Association of Building Engineers

Mr Joe McGlade Institution of Structural Engineers

- 735. The Chairperson (Mr McLaughlin): I welcome Mr Billy Gillespie, who is a council member of the Association of Building Engineers, Mr Joseph Birt, who is a member of the Association of Building Engineers, and Ms Kerry Greeves, who is a member of the Northern Ireland branch of the Institution of Structural Engineers.
- 736. Mr Joe McGlade (Institution of Structural Engineers): Mr Chairman, my colleague Ms Greeves is feeling unwell, so I am volunteering to speak on her behalf. I assume that that is acceptable?
- 737. The Chairperson: Absolutely. You are very brave, Kerry, to have come along at all.
- 738. Mr Beggs: I declare an interest as Carrickfergus Borough Council's representative on the north-eastern building control committee
- 739. The Chairperson: I suggest that each witness make a short opening presentation, because two separate organisations are present.
- 740. Mr Billy Gillespie (Association of Building Engineers): The Association of Building Engineers (ABE) does not have a large membership in Northern Ireland, but the majority of its members are in the public sector, mostly in building control departments. The association does not have a formal consultative mechanism, but the views contained in the submission reflect the opinions of all or most of its members on the Building Regulations (Amendment) Bill.
- 741. I will expand on my role and Mr Birt's. Mr Birt is a member of the Association of Building Engineers and advises on technical issues. He has been in building control for 12 years, and he works with Down District Council and the building control south-eastern group of councils. He is on the Building Control Northern Ireland standards panel, which addresses issues of interpretation and guidance; and he is also the chairman of the Building Control Northern Ireland fire safety panel, which works closely with the Northern Ireland Fire and Rescue Service. Mr Birt is also a member of the Northern Ireland Building Regulations Advisory Committee (NIBRAC).
- 742. I am a chartered civil engineer and a chartered environmentalist, as well as a fellow, council member and director of the Association of Building Engineers. Mr Birt and I have been in building control since 1996. I am the assistant group chief building control officer in the building control north-eastern group of councils. I am chairperson of the Building Control Northern Ireland training and communication panel and provide training for building control, architects, designers, builders and students. I am also a member of the Northern Ireland Building Regulations Advisory Committee.
- 743. We have a very good working relationship with all our professional colleagues and liaise closely with the Department of Finance and Personnel on the development and intended purpose of building regulations. The regulations are open to interpretation, and the Department maintains the role of arbiter in the event of an appeal against building control decisions.
- 744. The Association of Building Engineers is multidisciplinary, and its members have a wide range of building-related expertise. ABE members in building control are ideally positioned to take on additional functions as a consequence of the Bill or changes in local government regulations.

- 745. The association hopes its submission to the Committee is constructive and helpful. The ABE wants to encourage a building-control system that benefits the community and adds value to designers, builders and householders; the ABE hopes that the opportunity will be taken to ensure that, after enactment, the Bill will serve Northern Ireland as well in the future as the previous Orders have until now.
- 746. The Chairperson: Mr Gillespie and Mr Birt, do either of you want to draw attention to amendments or changes that have been recommended?
- 747. Mr Gillespie: Our submission refers to specific amendments. Would you like us to explain those amendments?
- 748. Mr Chairperson: Yes; please outline your proposed amendments briefly, and the Committee members may ask questions as each point is raised.
- 749. Mr Gillespie: The Bill must address the fact that the definition of "site", as interpreted in article 2 of the Building Regulations (Northern Ireland) Order 1979, has become outdated. The current definition of a site relates to the building's footprint. However, regulations have changed to include drainage, access from parking areas and access for the fire service. New consultation also considers issues such as retaining and garden walls and at how far refuse bins must be moved for collection.
- 750. The Association of Building Engineers feels that it is necessary for the term "site" to cover the entire area encompassed by the boundaries of where the building is being constructed rather than simply relating to the building itself. The Department should address that issue.
- 751. Mr O'Loan: The ABE's summary introduction states: "Initial consultations on the Order suggested that a complete re-write was planned and led to anticipation of far reaching changes. Many of these proposals would have been welcomed and it is hoped may be incorporated in the near future."
- 752. Is the Association of Building Engineers expressing a general sense of disappointment with this Bill?
- 753. Mr Gillespie: No, it is not, and I am sorry if it has come across that way. The initial consultation provided a panoply of options that could be included in the amended building regulations Order. Many people hoped that it would widen the horizons for the application of different regulations. Some of those have come to fruition, and others have not. Some people were disappointed that a few of those were not included. The ABE hopes that they will be included in the future or that the Order could be written in such a way that could enact other parts.
- 754. The Chairperson: I read that in the same way that Declan did. Do those references or amendments reflect the views of the Association of Building Engineers on the Bill?
- 755. Mr Joseph Birt (Association of Building Engineers): The ABE would have preferred to have seen other measures included in the Bill. Those are included in our submission and will be addressed as we work our way through it.
- 756. The Chairperson: I thought that we might address any reservations or issues as we discuss your submission.

- 757. Mr O'Loan: A similar issue arose when Building Control Northern Ireland submitted approximately 15 recommendations to the Committee. Its representatives said that their working relationship with the Department of Finance and Personnel was very good. I thought that the Bill, as currently presented, would have incorporated most of the measures that the sector viewed as being sensible.
- 758. Mr Birt: I am happy to go through our submission. That process should identify any constructive suggestions that the Association of Building Engineers has.
- 759. Mr Gillespie: Clause 2 of the Bill concerns protected buildings and the insertion of a new article 3A in the 1979 Order. The Association of Building Engineers felt that the way in which the clause is worded: "a district council should have regard to the desirability of preserving the character of protected buildings"

was not positive enough. There should be a requirement for councils to take a more proactive view; they should actively preserve protected or listed buildings. The ABE felt that the wording could be strengthened.

- 760. Mr Beggs: The current wording is "have regard to". Do you think that is weighted too much towards the new insulation efficiency measures, rather than protection?
- 761. Mr Gillespie: The current insulation regulations request consultations with the Environment and Heritage Service (EHS) about listed buildings. The phrase "have regard to" seems to suggest that one could consider it but would not have do anything more than that. If the point of the regulations outweighs historic considerations, the regulations have priority. If that is the case, the character of historic buildings will disappear. More emphasis should be put on preserving the historic character of buildings rather than conforming to new regulations.
- 762. The Chairperson: In those circumstances, would it be helpful to supply an alternative form of words?
- 763. Mr Gillespie: Yes, we would. The ABE could suggest a form of words.
- 764. The Chairperson: The Committee will welcome the ABE's guidance and technical expertise on that issue.
- 765. Mr Gillespie: Article 4 of the 1979 Order relates to the Building Regulations Advisory Committee. Mr Birt and I are members of that committee, which liaises with, and advises, the Department and forms useful links with the industry. At present, NIBRAC members do not have the opportunity to highlight issues of concern for the industry to the Department. We would propose amending the criteria to allow that to happen, but not necessarily in a forceful way.
- 766. Mr O'Loan: Do you mean raising concerns about issues other than building regulations? I thought that NIBRAC's function was to advise the Department on that.
- 767. Mr Birt: As I understand it, NIBRAC's function is to advise the Department on matters that the Department, for other reasons, may consider introducing through regulations and amendments.
- 768. However, there are circumstances in which specialist niches in the industry raise concerns; the ABE would propose that a suitable avenue should be provided for NIBRAC to highlight those concerns. NIBRAC is currently involved in the assessment of proposals that are put to it by Departments and Ministers; the relationship is reactive.

- 769. The ABE understands that Ministers give instructions to Departments on a range of different matters about what regulations should be introduced, which is entirely appropriate. However, the ABE is proposing another vehicle through which to make constructive suggestions about what should be included in legislation concerning the built environment.
- 770. Mr O'Loan: Should that be mentioned in the relevant article, or should the Committee simply be mindful of that?
- 771. Mr Birt: The way in which the article is currently worded suggests that NIBRAC's role is purely consultative. A slight rewording would be required to extend NIBRAC's remit to enable it to raise issues of interest.
- 772. The Chairperson: That sounds reasonable. Committee members are not technical experts, and they will need some support from your association in the wording of a proposed amendment to the article. In support of your argument, will you suggest an alternative wording, which the Committee will consider in light of its own feedback?
- 773. Mr Birt: Absolutely; the ABE will do that.
- 774. The Chairperson: As general rule of thumb, that is the best way to proceed. The ABE has a significant amount of background experience on the issue, which will be helpful to the Committee.
- 775. Mr Gillespie: Clause 5 of the Bill seeks to insert a new article 5A in the 1979 Order about guidance for purposes of building regulations. Under the current legislation, technical booklets provide a way of complying with the building regulations. If builders work in accordance with the technical booklets, they are deemed to satisfy the requirements of the regulations.
- 776. The Department is now suggesting that it will provide guidance documents, which should be considered to ally with building regulations. For builders and designers, there remains an option to rely on other documents, which may be produced by other technical groups in the United Kingdom, or if a better system were to be devised in Australia, that could become the standard used for design in that particular case. However, it is essential that the builder or designer ensures that building control is content with the codes or standards being used. We are happy that the change has been made from technical booklets to guidance documents.
- 777. Clause 6 of the Bill amends article 8 of the 1979 Order to deal with the power of district councils to approve types of buildings. The Association of Building Engineers welcomes the use of type approvals as more companies such as Lidl, KFC and McDonald's are building outlets in Northern Ireland. Those companies like their buildings in Northern Ireland to be the same as the ones that they build in England, Wales and Germany. Although the standards in Germany are somewhat different to ours, the approach is similar: the companies want to present a predesigned building in Belfast, Craigavon or Derry that is accepted by councils. That is a good idea that should be recommended.
- 778. In the past, Building Control Northern Ireland has done that through its standards panel a group of volunteers from group areas and districts representing the whole Province which examines particular designs. If the panel feels that those designs comply with building regulations, it recommends that they are accepted for use in all the councils of the Province. Due to the nature of the regulations, some difficulties have arisen because certain councils want to interpret the regulations slightly differently. Those councils may continue to do that, but their concerns should be on only site-specific issues, such as foundation conditions, ground conditions or contours on the ground, which may mean that different access is required. In principle, we

recommend type approval and suggest that the Department writes to the councils asking for their commitment to accept that form of type approval.

- 779. Article 17 of the 1979 Order deals with appeals to the Department. In England and Wales, the relevant Department publishes the appeals that it has received and the rulings that it has made. 'Building Engineer' publishes those rulings, which are the most widely read part of that journal because readers can learn from the experiences of others. The Department should publish the outcomes of the appeals that are made to it under article 17.
- 780. Mr Birt: The publishing of those rulings has proved to be particularly useful for designers and the wider industry, not only people in building control, because they clarify the intent.
- 781. The Chairperson: The benefit of sharing that information can readily be seen.
- 782. Mr O'Loan: What do you mean by "publishing"?
- 783. Mr Birt: The appeals and rulings can be published on the Department's website, as in England and Wales, or they can be published in other industry newsletters or journals. Publishing the appeals and their outcomes is a useful tool and would be more useful if they were widely available.
- 784. Mr Gillespie: Clause 8 of the Bill seeks to amend article 18 of the 1979 Order, which deals with contravention notices in respect of work contravening the building regulations. I apologise, because our submission suggests that the Bill would bring the time period down to six months—it should say 12 months. When I was writing the submission, I was looking at an earlier consultation document that suggested that the time period be six months.
- 785. Clause 8 would mean that there is 12 months from the time that the work is completed for building control to put on a contravention notice. Building control tries to persuade builders to build in compliance with building regulations. We often see that, if we have to take someone to court, it is a failure of ours to encourage people to build properly. In instances where we fail to get a builder to comply, we must issue a contravention notice.
- 786. Clause 8 amends the period in which a contravention notice could be served to 12 months of completion of a building will give us less time to do that. However, over 18 months, other construction work can go on, and that would mean that more remedial work would have to be done.
- 787. Taking people to court has a dramatic effect for building control. We try to comply with the enforcement concordat, and most council building control departments have signed up to that. The difficulty is that taking someone to court is a time-consuming and expensive operation. Council finance departments will often suggest that going to court is too expensive to contemplate. I have been involved with a number of other bodies that are involved in the regulatory forum, and they also come up against that. I encourage the Department to try to prevail on the Criminal Justice System Northern Ireland to streamline the court system to make it easier to take people to court to ensure their compliance.
- 788. Mr Birt: The proposed reduction in the period in which a contravention notice could be served from 18 months to 12 months is critical to our ability to achieve compliance with the regulations. For example, self-builders who are building their own homes might do so over a period of time. From experience, we find that, near the end of a project, funds run short and the house is built more slowly because it takes some time to build aspects such as external steps, the driveway and more expensive details inside the house. Building control may need to write to the property owner if it discovers an offending piece of work at the property. It may find that,

after a number of months, that is not resolved, despite receiving assurances from the property owner. For example, we are often told that the work will be done when the owner gets the VAT back. The change that the Bill proposes would bind building control to a shorter time frame and would necessitate enforcement action on people who genuinely intended to do the work.

789. Given the current market conditions, that could also occur on some development sites. If developers were left with buildings that were built but were not being sold, they would not finish the buildings for that reason, and work would cease. A longer time lag is needed, and clarity is needed on the issue of completions. Therefore, we suggest that the 18-month period be retained in the interests of fairness and proportionality.

790. Mr Beggs: Are there any negative aspects to allowing that extended period for remediation work?

791. Mr Birt: On some occasions, particularly on big projects, it is reasonable to suggest that a developer could carry out some contravening work and that building control would not take any action for 18 months. That can potentially happen under the current legislation, which allows contravention notices to be served only after 18 months. However, in reality, building control would make the developer aware of any contravening work as soon as that were identified. Negotiations would take place between building control and the developer, who would attempt to resolve the situation or would employ some experts to give advice. Therefore, the 18-month period is useful, and, to my knowledge, it has never been abused.

792. Mr Gillespie: Article 19 of the 1979 Order deals with the deposit of plans to be of no effect after certain intervals. Building Control Northern Ireland and the Association of Building Engineers are concerned that there will be a rush of applications before the new regulations are about to come into force. For example, in the week before regulations came into force — particularly energy regulations — in November 2006, the equivalent of six months of applications for houses were submitted to one particular council. Consequently, in some district councils, part of the regulations are only now being applied, 18 months after they came into force, because so many applications were made prior to that.

793. The problem is that, when an application is made for a development of 30 or 40 multiple houses, that constitutes a single application. As soon as work starts on that application, the developer can then take as long as he or she wants to complete the development. The regulations that apply to all the houses are the regulations that were in force at the time of the application. If an application is made to build 30 houses, and building control give building regulation approval, those houses could be built over 30 years, if undertaken by a small builder — and some developments do take a long time. They could be building to regulations that were in force 10 or more years earlier. There have been instances where builders are building to regulations that were in force in 1973. Fortunately, that is rare, but we would like a mechanism to try to remove that anomaly. The Department has suggested that the ability exists to prevent builders building to regulations that are out of date, but we feel that it is not straightforward and would be difficult to pursue.

794. Mr Birt: I concur with that; it is important to have a mechanism to deal with that issue. An example of the type of thing that can be missed through that loophole — which, effectively, is what it is — is that buildings that are built under current regulations would require escape windows, but which do not have those. There are new buildings on the market that should have heat detectors in kitchens and smoke detectors in living rooms, but they do not have them. The accessibility standards that are invoked today are not necessarily adhered to, and it is an area which is being exploited by developers, obviously to the detriment of prospective purchasers and the wider community.

- 795. The Chairperson: The Committee would appreciate some assistance with the wording of a proposed amendment to article 19.
- 796. Mr Gillespie: Clause 9 of the Bill seeks to insert a new article 19A into the 1979 Order to deal with registers to be kept by councils. The current councils were established in 1973, and many of them have records that go back to that date. In those days, everything was done on paper, and it became difficult for councils to store that paper, so many of them were looking for ways either to dispose of those records or to reduce the amount of space taken up by them. Some councils have digitally photographed their records and kept them on computers, but often that has resulted in loss of detail of some of the printing as well as some of the content.
- 797. Some councils have gone so far as to dispose entirely with records that go back beyond 10 years. That was partly due to initial fears about the Freedom of Information Act 2000 and the view that, if one does not have the information, one does not have to give it to people. Those initial fears have not actually been realised, and there have not been such demands.
- 798. We have heard about people who have been building, or have made an application, and have had unsolicited sales and marketing information sent to them. However, the ABE feels that it is important that councils should keep a register of information, and that that should be made available to, for example, future owners. The issue is dealt with more fully in the additional comments to our submission.
- 799. The first such comment relates to council databanks. The ABE feels that councils are in a unique position to hold all the information about the details of the construction of houses and other buildings. Increasingly, with the evolution of electronic data, we are able to store material electronically on computers. Council building control departments go out on site when a new building or renovation is under way, and they hold records of that. Most building control departments provide information on property searches to solicitors to assist them in the conveyancing process.
- 800. Building regulations have changed over the past few years. They have become more rigorous and have been extended to require testing and commissioning of flues, gas fires, unvented hot-water systems, boilers, heating controls, air-conditioning systems and airtightness. That information could be gathered and held by building control.
- 801. Building control provides information to Land and Property Services (LPS), which was formerly known as the Valuation and Lands Agency (VLA), on the commencement and completion of houses. Some councils are in negotiations with LPS over the possibility of getting details of house dimensions for valuation purposes. In the fullness of time, all that useful information could be used. Home information packs have been introduced in England and Wales, but not in Northern Ireland. Building control could hold all the information here.
- 802. A building logbook may be introduced here to provide information to new homeowners. The logbook would document certification processes, inspection records on houses, requirements for servicing and maintenance and, possibly, sustainability information on disassembly and reuse of appropriate materials.
- 803. The Department should consider provisions to require local authorities to gather and store that data safely for future use so that it could be passed to new owners or tenants.
- 804. Mr O'Loan: That is a major recommendation, but it is clear.
- 805. Mr Gillespie: In Northern Ireland, around 12,000 new dwellings are built each year. There are approximately 720,000 dwellings with which building control does not deal, unless an

extension or attic conversion is carried out. Those 700,000-odd houses may not be up to current standards and may be producing carbon dioxide emissions that we are trying to reduce in the new regulations. Therefore, they are not energy efficient.

- 806. The Department may wish to consider control being extended through building regulations to existing dwellings, particularly in light of the fact that energy performance certificates will become law, and they will be policed by local authorities, probably through building control. The energy performance certificates will draw attention to deficiencies in the energy efficiency of houses. It may be appropriate to set a standard whereby the energy efficiency of houses should not fall below a recommended figure. However, there is currently no responsibility on someone buying a new house to upgrade it. It may be worth considering suggesting that that work should be carried out when a house changes hands. Furthermore, there is no responsibility on councils to promote or advise on current standards. We do that by trying to improve submissions coming into building control. Part of the energy performance certificate requirements will be that building control departments should endeavour to promote certificates. There is no requirement for us to promote building standards and regulations, but it is something that we do to assist quality and consistency of standards.
- 807. Mr Birt: We are suggesting that the Bill amend the Order to provide for regulations to be made that will resolve the issue of carbon dioxide emissions in existing buildings. We are not suggesting that that happens now but that the Bill will include a provision enabling that to happen, should it be required in the future.
- 808. My colleague also suggested that building control could play a role in educating the industry about what the building regulations require. That would be an important role, given the recent changes in the industry, which were fairly significant. There is no obligation on building control or on councils to carry out that role, but the Committee may feel that it is important and should be built into the legislation.
- 809. The Chairperson: Of course, you are talking about existing stock. You are not talking about the industry so much as about general households.
- 810. Mr Gillespie: The matter of demolition was included in the original consultation. In England and Wales, local authorities control demolition and issue licences for it. Building control officers have the skills to oversee that work and when we have requirements for recycling and reuse of existing materials in future, it may be prudent to give responsibility for overseeing demolition to local authorities and building control. I suggest that legislation regarding party walls should also be included for enactment at a future time, and that building control could be involved in that.
- 811. The original consultation document also referred to dangerous structures. Building control currently enforces dangerous buildings legislation, some of which is over 150 years old. We have discussed that with departmental officials, who indicated that it has been difficult for them to frame legislation that would be beneficial to building control at present. We suggest that the Department should take the opportunity to include a reference to dangerous structures in the Order. By structures, I mean retaining walls and structures that may not be attached to buildings but which would be unsafe for members of the public. The Order should include that provision for enactment at a later date, when regulations appropriate to dangerous structures have been framed.
- 812. Mr Birt: We felt that those two previous issues were omitted from the draft Bill, and would prefer if they were included. If building control has information about how a building was constructed, it will be in a position to ensure that the materials being taken out of that building are reused effectively and not necessarily disposed of, something which is covered by other

legislation. That would be an appropriate way to deal with, for example, the steel structure, the timber members and even the masonry elements in the concrete.

- 813. We are not suggesting that time is available to redraft the Order to include a reference to dangerous buildings, but the enabling legislation must be in place to allow the necessary regulations to be developed in the near future. The Committee has a unique opportunity to implement those changes and introduce the enabling legislation at this stage.
- 814. Mr Gillespie: Our penultimate comment is about sustainable communities. Councils are well positioned to co-ordinate community sustainability strategies. For example, communities could be advised on renewable energy systems, such as grey-water recycling, rainwater harvesting, community heating plants to provide combined heat and power, arrays for solar panels and photovoltaic cells. If all those schemes were undertaken on a community-wide basis rather than in individual properties, they would be more efficient and would do more to reduce carbon dioxide emissions.
- 815. Councils might be requested to provide advice, information and training about sustainability and best practice. Similarly, via pre-submission consultations, councils might provide such advice to people intending to make planning applications. The Department should consider framing legislation in such a way that district council building control departments could be utilised for sustainability matters.
- 816. Mr Birt: Much information about such matters is available from manufacturers and other sources. The Association of Building Engineers values the independence of local authorities, which offer an existing voluntary pre-submission advice service for people who are contemplating work on their properties. That could be made mandatory specifically in relation to sustainability which would mean that members of the public would have access to independent, impartial advice about building proposals from their district councils.
- 817. That suggestion is linked to my earlier comment about training. There should be an obligation to inform the public about new regulations, which would greatly aid their implementation.
- 818. Mr Gillespie: The final element of our submission, which is a catch-all point, concerns future-proofing buildings. Material technology and construction methods are changing rapidly, and there is more emphasis on electronic data presentation and storage. It may be appropriate for the Department to include provisions in the Bill that would ensure that future buildings incorporate, and take advantage of, modern technologies and electronic communication systems.
- 819. Mr Birt: Before we conclude, on behalf of the Association of Building Engineers' members, I acknowledge the Department's openness and accessibility in giving advice. Although the Department remains impartial and will not discuss specific projects, the ABE and, indeed, Building Control Northern Ireland accept that we have a good relationship with the Department, and that greatly assists the understanding and interpretation of regulations, which must be commended. Furthermore, the Department's regulatory briefing sessions are part of a relatively new initiative that enhances the wider industry's understanding of regulatory requirements.
- 820. We also commend the Bill and welcome many of its improvements, including its clarification about low or zero carbon emissions. The provisions for the protection of historic buildings are useful. Type approval is an industry-wide demand to which it looks forward. Clause 1 of the Bill incorporates the use and recycling of materials, and that clause's adoption will contribute to meeting the Government's commitment to reuse materials. The proposed amendments will future-proof protected buildings, and the sustainable use of materials is also included. We welcome those proposals, and, if some of the other measures that we suggested were included,

the proposed amended Order would be excellent and — pardon the pun — would provide an exceptionally good foundation for the Northern Ireland built environment.

- 821. The Chairperson: Thank you. Some suggestions, particularly those concerning additional responsibilities and duties for the councils, would, for example, involve the Department of the Environment. The Committee will need to consult the Department of Finance and Personnel on that issue.
- 822. Joe, you have been very patient. We do not have the benefit of a written submission, so I invite you to focus specifically on issues in the regulations that you would like to see amended. Please feel free to flag up any concerns that you may have. Thank you for your patience.
- 823. Mr McGlade: Thank you for your invitation to give evidence. The reason that a written submission was not entered was that the Institution of Structural Engineers did not recognise any proposed amendments that would have a major impact on a structural engineer's role in the building process. Our position has been well covered by Billy, and I have only one comment regarding the new type approval. It has specifically excluded the structure where it has been implemented elsewhere, for such reasons as Billy has mentioned.
- 824. Much of our work is site-specific for example, a site could be very exposed and have wind problems or it could have foundation problems so I see type approval as excluding structural matters. Building control has always recognised the role of the structural engineer in the field of demolition and the assessment of dangerous buildings. I do not see that role changing.
- 825. Reuse of materials is fairly new to the institution; reuse of structural materials is an area in which we would have to become more involved. I can envisage that developing.
- 826. Generally, I have little to add to the excellent submission that has already been delivered by Billy and his colleague, and I thank you for the opportunity to attend.
- 827. The Chairperson: If you and your colleagues feel that there is something in particular that you would like to submit for example, a written amendment focusing on that issue to help the Committee we would be very open to that.
- 828. Thank you for the presentation. Will you be responding to the Committee's requests, Billy?
- 829. Mr Gillespie: We will suggest some amendments to the wording.
- 830. The Chairperson: I assure you that that would be very helpful to the Committee. Thank you.

30 April 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Mr Declan O'Loan

Mr Peter Weir

Witnesses:

Mr Noel Williams Energy Savings Trust

- 831. The Chairperson (Mr Mitchel McLaughlin): The Committee will now hear from the Energy Saving Trust (EST). The usual warning about switching off mobile phones applies because Hansard is recording the session. The Energy Saving Trust has provided the Committee with a briefing paper along with further statistical information. I welcome Noel Williams, who is the head of the Energy Saving Trust, and I invite him to make his presentation.
- 832. Mr Noel Williams (Energy Saving Trust): Thank you, Chairperson.
- 833. The Chairperson: Noel, if you are proposing changes to the Bill, it may be helpful if you stop at each proposed change in order to give members the opportunity to explore it rather than our having to trawl backwards and forwards over the same territory.
- 834. Before we move on to the trust's presentation, I want to refer to a point made by Dr Farry regarding the projected number of people who would be living in new houses over a time. I thought that that was an interesting perspective and is a matter that we should put to our own Department. Is the Committee in agreement that we should do that?

Members indicated assent.

- 835. The Chairperson: Mr Williams, would you like to make your presentation.
- 836. Mr Williams: Thank you for the invitation to talk to the Committee.
- 837. If I may, I will take a couple of minutes to brief the Committee on some of the points in the evidence on microgeneration, building regulations, the consultation on policy planning statement 18 I am aware that that relates to another Department, but it is worthy mentioning and the Building Regulations (Amendment) Bill itself. I have provided members with background information about the trust, so you will be pleased that I not will bore you with that today. I have brought two charts showing where the trust wants to be and the market transformation curve.
- 838. It may be useful if I comment on what the countries adjacent to our two islands are doing, although I am aware that you have had evidence from representatives from those areas. I will offer the trust's view on what Northern Ireland should be doing; and, finally, I will be pleased to answer members' questions.
- 839. The first paper is about microgeneration and building regulations. We have said for some time that it is vital that any amendments to building regulation should aim to ensure that the fabric of the building is robust and energy-efficient. Energy-efficient measures are likely to last for the lifetime of a property. For our statistical analysis, we work on the basis that energy-efficiency measures will last about 60 years because of segregation and suchlike in the building, but the house may last much longer. Therefore it is important not to treat the building of integrated renewables in isolation from the energy demand in a building; energy supply is logically linked to the energy demand in buildings.
- 840. The key to delivering sustainable energy solutions is to reduce the demand for energy. That can be done with energy-efficiency measures. Energy efficiency is more cost-effective than renewable technologies but, as the Chairperson said earlier, renewables could become a very valuable tool in future.

- 841. Our research suggests that regulating renewables has huge potential and this, in turn, will encourage microgeneration. However microgeneration must be part of the mix and not the panacea. It is important to lead by example, which I hope our Government will do. Although microgeneration cannot be a substitute for reducing heat loss in new homes, technologies will be required to deliver carbon savings as Northern Ireland moves towards zero carbon heating; a concept, you will not be surprised to hear, that I will be recommending today.
- 842. I have sent the Committee our response to the consultation of draft PPS 18. The response demonstrates our support for the Executive's desire to facilitate and encourage greater integration of renewable energy and for the technologies both in the design of new buildings and through the appropriate retro-fit for the technologies in existing properties.
- 843. Recent research that we have undertaken for the Renewables Advisory Board highlights the role of the planning system and the role it can play in facilitating the uptake of microgeneration technologies. The research shows that if the planning process makes the adoption of such technologies easier, people will not find it too difficult to jump through a particular hoop.
- 844. Draft PPS18 rightly encourages low-carbon renewable energy supply. Unfortunately, it does not mention the importance of reducing energy demand and considering this in tandem with energy supply. After all, it makes little sense to build and install a generating capacity if much of the output is wasted through the fabric of the building. There is also a financial issue: if capacity is lowered, it will cost less if the demand is low.
- 845. There is no mention of a building's geographic orientation in draft PPS 18. Indeed, the Committee might ask why would there be? However, it would be a positive step if all our buildings were orientated to facilitate renewables. I appreciate that it would be impossible for all new buildings to have a south-facing aspect, but if the properties are to be orientated from east to west, let us have a roof that can accommodate renewables. Let our housing stock be renewables-ready in the same way that our televisions are digital-ready as we move down the renewables stream.
- 846. I wish to comment on clauses 1, 4, 5, 7 and 12, particularly clauses 1 and 7.
- 847. We welcome the provision in clause 1 for building regulations to be able to regulate the energy performance of building, and we believe this concept to be important. Northern Ireland has not yet set a target date by which all new builds should be zero-carbon. That should be introduced and a target of 2016 established. Moreover, it is important that changes to building regulations are seen as an intermediate stage towards the creation of zero-carbon buildings.
- 848. Under the code for sustainable homes being adopted in England and Wales, microgeneration becomes necessary in all codes above code 4. England and Wales plan to bring this into building regulations in 2013.
- 849. Code level 3, for example, needs microgeneration in most flats and becomes part of building regulations in 2010. Developers should adopt energy-efficiency measures where possible so that there will be no need for universal microgeneration. There will not be such need in England and Wales until 2013. However, we encourage developers to aspire to codes 3 and 4 before the standards are introduced in building regulations.
- 850. Clause 7 is about the power to require or carry out testing. Testing in airtightness is important for energy saving. A survey commissioned by the Energy Efficiency Partnership for Homes showed that one third of new homes failed the indicative airtightness levels set out under the previous building regulations regime, part L (2002) for England and Wales, which is the

equivalent to part F in Northern Ireland. It is unclear to what extent those findings will be transferred to Northern Ireland.

- 851. It is sensible to have a robust compliance and enforcement regime that involves testing and that ensures that new-built homes meet specifications and contain the necessary design features to make them truly low-carbon.
- 852. I have distributed two charts to members. The first is entitled "Where We Want To Be" and it maps a horizontal timeline against a vertical measurement of carbon emissions. The Committee will see where the line starts to divide at 2010. If we do absolutely nothing from that year to 2050, we will run along the top line, which forecasts that emissions in the UK will rise to between 140 and 160 on the graph's carbon measurement scale. Under present forecasts we are doing a certain amount, but only enough to get us down to the second line, which dips under the measurement of 140 on the scale of emissions.
- 853. The important thing that I want to highlight is the depth shown up between the top line and that represented by the potential impact of the energy-efficiency sector. There is so much still to be done in energy efficiency, and that gap stays static after 2030.
- 854. Much more also needs to be done on renewables, which is illustrated by a further widening on the graph to potentially even lower carbon emission levels. Below that, there is a line representing the effect of CO2 sequestration, which means burying material in oil or gas fields. Then hydrogen, which has a line of its own, has to be considered; I hope that you will not ask me about that because I do not know anything about hydrogen. However, it is a technology that will find its feet in due course.
- 855. The Chairperson: We will try to resist the temptation.
- 856. Mr Williams: Thank you. [Laughter.]
- 857. The second graph shows "The Market Transformation Curve", which reflects what the Energy Saving Trust and the Carbon Trust are trying to achieve. The "R&D" on the lower left-hand side of the graph represents the Carbon Trust's input. We deal with the domestic side and we have roles in demonstration and early adopter grants through schemes such as the Reconnect programme. We conduct marketing, have energy advice centres, and inform the public. In Northern Ireland the Energy Savings Trust advice centre had contact with 67,000 households in 2007-08.
- 858. We hope that the market will move up the curve on the graph. We look to people such as those on the Committee to draw up regulations that sustain and enliven the industry. The graph peaks with the introduction of a regulation and we eventually get to that low-carbon concentration.
- 859. Dr Farry: Does the horizontal axis on "The Market Transformation Curve" represent the percentage of people who are involved in renewables?
- 860. Mr Williams: Yes. We think that that curve is reasonable. People will not act unless we demonstrate the technologies and hope that those who can afford to do so take it up. Our role is to educate, advise and encourage take-up through our marketing and advice network.
- 861. May I highlight what is being done in some of our neighbouring countries?

- 862. For example, as the Committee may already know, the code for sustainable homes was launched in England in December 2006. It sets a new standard for sustainable design, and, since April 2007, the developer of any new home in England can choose to be assessed against its criteria. The code measures the sustainability of a new home against certain criteria and has levels or stars that range from one to six. It sets minimum standards for energy and water use at every level, and it replaces the old eco-homes scheme.
- 863. The eco-homes scheme was an interesting wee standard, which was a bit wacky at times one could put six or seven bird's nests boxes in your house and trade that against energy, whereas now the sustainable standard is such that energy is set, which is much better. The code sets sustainable design performance criteria in nine areas: energy, carbon dioxide emissions, water, materials and surface water run-off. A code level is then awarded based on how the mandatory minimum has been achieved.
- 864. The building regulations were last updated in England and Wales in 2005, in Northern Ireland in 2006, and in Scotland in 2007. The Committee has just heard that in the Republic of Ireland the regulations were last updated in 2007 and that they come into effect in July this year. Code levels correspond to the percentage by which the standards have been exceeded. For example, code level 1 is awarded when a standard has been achieved that is 10% above the standard. Similarly, the percentage for level 2 is 18%; for level 3 it is 25%; for level 4 it is 44%; and for level 5 it is 100%. Code level 6 means that zero carbon has been achieved. All social housing must be built to code level 3.
- 865. Our position is that developers should aim for energy efficiency where they can, so there is no need for universal microgeneration until 2013. However, we encourage developers to aspire to code level 3 or 4 before the building regulations.
- 866. The National Assembly for Wales has signed up to the code for sustainable homes and has set a target that all newbuilds in Wales will be zero carbon by 2011. That is an ambitious target, but that is a matter for them, not for me. They define zero carbon as being code level 5, although with some commitment to extend it to code level 6. They say that there are certain issues with the higher rating, but I do not know what they are. To enable the National Assembly for Wales to make progress in that area, the proposal is that the building regulations be devolved to the Welsh Government in the same way as responsibility for our regulations has been devolved.
- 867. Unlike England and Wales, the Scottish Government have not as yet set a target date for achieving zero-carbon newbuild. However, recent policy documents from the Scottish Government suggest that they want to move towards zero-carbon newbuild. The Scottish Government convened an expert panel to advise on the development of low-carbon buildings for Scotland, and a report entitled 'A low carbon building standards strategy for Scotland' was published earlier this year.
- 868. The panel recommended that new buildings should be zero carbon as regards space and water heating, lighting and ventilation by 2016-17, if practical, and that there should be two intermediate stages as they move along the road to achieve zero-carbon buildings. One stage was the 2010 change in energy standards, which involves low-carbon buildings. Another stage would be the 2013 change in energy standards, which involves very low-carbon buildings, to use their terminology. Percentages are provided: low carbon means that energy standards should deliver carbon dioxide savings of 30% more than 2007 standards. Very low carbon means that energy standards should deliver carbon dioxide savings of 60% more than 2007 standards. The target is to achieve zero-carbon buildings in 2016, and total-life zero carbon buildings by 2030. The latter is an interesting standard, which means that there would be zero carbon from the construction, maintenance and demolition processes. Thus, very high standards have been set.

- 869. In addition, the Scottish Government have introduced their Scottish Planning Policy (SPP6) Renewable Energy, which sets out an expectation that all future applications proposing development with a total floor value of 500 sq m or more should incorporate on-site and low-carbon equipment that provides at least 15% of the energy. That percentage is similar to that of the Republic.
- 870. The report referenced comments that the requirement was to be reviewed after 2013 and will be removed from the regulations by then. This is because it will have been achieved by that date.
- 871. The Republic of Ireland will be fresh in your memory due to the preceding presentation. I made a couple of interesting observations as I looked through the material which was distributed. Ms Neary mentioned part L1 of the Building Control Act 1990, which states:
- "The amount of CO2 emissions associated with this energy use insofar as it is reasonably practicable"
- 872. That is a bit wishy-washy, and should be made more robust. The Act also states that:
- "primary energy consumption and related CO2 insofar as is reasonably practicable"
- 873. Ms Neary was talking about the 10 kW hours per square metre per annum statistic. That is a big, long technical term but leaving that aside, a reasonable portion of the energy consumed to meet the energy performance of a dwelling is provided by renewable energy sources. Scotland is setting a target and a percentage, which is interesting. Statements that include the phrase "where appropriate" should be tightened up. I have references to the 86% efficiency of boilers, but those statistics have already been discussed, so I shall move on.
- 874. I understand from my colleagues in Sustainable Energy Ireland that the code for sustainable homes is on the agenda of the Republic of Ireland, which has also been discussed.
- 875. I am nearing the end; I am moving onto the subject of Northern Ireland. Any consideration of changes to building regulations, including microgeneration in newbuild, should be in the intermediate stages on the way towards zero-carbon buildings. As such, the energy demand and efficiency need to be considered in tandem with supply and microgeneration. Energy efficiency is the best value for money, but that may change. Building regulations must also be used to ensure that existing homes are energy-efficient. When boilers are replaced for example, they should be replaced with the most efficient options.
- 876. There is no doubt that as the cost of microgeneration technologies approaches that of conventional technologies, it will fall, as, for example, the price of PCs has fallen. The least efficient models must be taken off the market.
- 877. Look at what has happened in white goods with the EU energy label scheme A-rated machines have become so popular that one can no longer buy washing machines that are crated or below. We have had to introduce A+ and A++ standards; that is the way forward. Our research shows that regulation on building regulations can encourage microgeneration. The help there by preparing dwellings and renewables.
- 878. Northern Ireland has not signed up to the code for sustainable homes, although it should or at least adopt an equivalent mechanism. There is no reason to follow the lead of other countries in any way, but any equivalent mechanism developed would have to be tight.

- 879. I am pleased to announce the extension of the low-carbon buildings programme to June 2010. Northern Ireland residents will be able to access £10 million to install micro- or renewable technologies. By doing that, they can play a vital role in tackling the global challenge of climate change and save money in the long run. The grants are not as lucrative as the Reconnect programme, but they are available and I have provided a table that you will see in due course.
- 880. Mr Beggs: Your evidence suggested that energy efficiency is more cost-effective than microgeneration and that changes to the fabric of a building will last for many years; they are not a short-term measure. If we want to help the environment, I assume that you would recommend that we should consider increasing insulation standards rather than making microgeneration mandatory. Is that a correct interpretation of what you said?
- 881. Mr Williams: Insulation standards were increased. If you were to ask members of the public whether they had loft insulation, they would probably say, "Yes". They might also guess that its thickness is about a hand's width, although it should be 11 in. The challenge is to encourage people to top-up their insulation to keep energy in the building. That is what we are trying to achieve, Mr Beggs.
- 882. Mr Beggs: I appreciate that insulation standards have increased significantly. However, given the changes to building regulations and the EU directives, further efficiency of buildings will be required in future. If we were to consider enhancing our standards before those requirements come into effect, should we examine insulation before we consider microgeneration?
- 883. Mr Williams: We must consider them in tandem. We must increase insulation and bring microgeneration in when it is required. It is not a matter of choosing one method or the other; we must join the two together.
- 884. Mr Beggs: I note that your submission says that your energy-efficiency work is funded not from the Northern Ireland block grant but from the Department for Environment, Food and Rural Affairs (DEFRA) and BERR. What is BERR?
- 885. Mr Williams: BERR is the Department for Business Enterprise and Regulatory Reform; it was previously the Department for Trade and Industry. It is the equivalent of the Department of Enterprise, Trade and Investment.
- 886. Mr Beggs: I was interested to note that routes to renewable energy grants are still open. However, I find it confusing that several bodies handle grants and that several different grants are available. Have any members of the public or organisations voiced concern about there being multiple routes and multiple schemes because that is not an efficient way of providing encouragement and assistance?
- 887. Mr Williams: On the contrary, the Energy Saving Trust has a one-stop shop now. Phoenix Natural Gas I became a customer of Phoenix only a few days before the price increase uses our number, as do Northern Ireland Electricity and the Housing Executive. The Northern Ireland consumers ring us, and we steer them through the grant process, so the confusion has gone away. Reconnect can be contacted via a different number, but the Department of Enterprise, Trade and Investment decided to do that. Normally, there is little confusion. As far as the public are concerned, if a grant exists and we can point them to it, they will gladly apply for it.
- 888. The Chairperson: Noel, the Renewables Advisory Board in England recently called upon the Government to stimulate demand for renewables in order to build capacity and avoid a supply gap by the due date for zero-carbon homes. It pointed to a mandatory renewable requirement as one approach for achieving that. What is your view?

- 889. Mr Williams: I hope that we introduce mandatory renewables in future. I agree with the decision of the Minister of Finance and Personnel not to make microgeneration mandatory from 1 April 2008. That was the right decision for the present. However, in future, we will have to make microgeneration mandatory. If we do not make microgeneration mandatory, some people will try to avoid it. One could argue that the market will get there eventually, and that may be so, but we can make it so.
- 890. The Chairperson: Earlier, you described an approach with intermediate stages. Do you anticipate guidance being issued in the foreseeable future?
- 891. Mr Williams: If the Government give enough notice of the requirement to the industry for example, if it was to be introduced in 2013 and we made everyone aware of it, there would be no excuse. We would gear up for the change and keep the market energised, if I may use that expression. When microgeneration becomes mandatory, people will be ready for it.
- 892. Dr Farry: What should we opt for in the Bill? Should we make microgeneration compulsory or should we simply facilitate the use of renewable sources of energy in a set target and specify microgeneration as one way of achieving it?
- 893. Mr Williams: If we are to get where we want to be by 2050, we will have to make microgeneration mandatory, and we will have to do that by 2020. Right now is not the time, but that time is not far off.
- 894. Dr Farry: Should microgeneration be mandatory for every household or is it a combination of individual and collective approaches, whether for an apartment building or an entire development, for example, when it comes to erecting a wind turbine?
- 895. Mr Williams: It is a combination of both. A fair proportion of houses are self-built, and if the regulations make solar or water power mandatory, the house builder must comply accordingly. There is an argument, with house prices being what they are, that such regulations add another £3,000 to the price of the building. However, the savings that can be made over the life of the house make that figure pale into insignificance.
- 896. Dr Farry: You made the comparison between information technology and the dramatic improvements in the performance of various technologies over the years. There is a need for massive investment in research, development and innovation in order to bring down the costs of renewable technologies. The IT market took care of itself because consumers demanded more efficient devices. That may not be the case with renewables; hence the need for more regulation.
- 897. It strikes me that we are approaching these issues home by home or country by country. Each of the four jurisdictions in the UK is doing its own thing, as is the Republic of Ireland. Those interventions are designed to pump-prime the market. However, the market for the supply of renewable technology devices and the related research and development does not take place on a self-contained basis in those five jurisdictions; it takes place on a European or global scale. How can each jurisdiction plug into the wider regulatory picture, and how does that relate to the need to pump-prime the market?
- 898. Mr Williams: The various areas of the United Kingdom ought to look at the situation in a different way; however, there are common measures that can be applied. For example, it would be a major step forward if we could get our wind capacity on to the grid instead of using micro wind turbines, for example. I do not have an opinion about micro wind turbines at the moment. We are engaged in a year-long study, which will conclude in June, of 100 urban micro-turbines. A wind turbine on top of a hill in rural Northern Ireland is a winner; I am not so sure whether it

would be equally successful attached to the side of my house. Those studies take in the whole country in order to make the regulation easier so that projects can be made cost-effective in future.

899. Mr Beggs: I wonder whether any house in Northern Ireland has a wind turbine attached to its gable. I have heard that B& Q did not sell too many of them in Northern Ireland because they did not make economic sense.

900. The Chairperson: I have never seen one.

901. Mr Williams: Some people in Northern Ireland have installed micro wind turbines, some of whom are involved in our study. We are taking that into consideration.

902. Mr Beggs: It would be useful to see the results of that study. In your submission you state that micro-generation at code level 4 will become a requirement of the regulations in England and Wales and that that requirement will be included in building regulations by 2013.

903. You also said that that will be the case in most flats from 2010. Does that refer to England and Wales too? Is Northern Ireland lagging behind in the regulations compared to what is happening in England and Wales? Perhaps we need more information about code levels.

904. Mr Williams: I can provide you with that information. I was referring to the code levels for England. The code for sustainable homes is something that we should sign up to because of that standard. Renewable energy is needed to reach code level 4 in the building regulations. The higher the code, the more renewables are needed: the aspect of the building must be right, for example, and there must be solar gain. The Committee, the Department and the Minister must decide whether the code is introduced in this way or by an appropriate mechanism. We suggest that the code can apply as well in Northern Ireland as it does in Wales.

905. Mr Beggs: You said that code level 4 will be in the building regulations by 2013. Has that been agreed in England, and has it been agreed that it will be implemented in Northern Ireland by that time?

906. Mr Williams: No; it has not been agreed that it will be implemented in Northern Ireland.

907. The Chairperson: Thanks very much, Noel. The Committee finds it necessary from time to time to follow up with written requests for clarification or elaboration from witnesses. I trust that we can do the same with you should the need arise.

908. Mr Williams: Yes, of course.

30 April 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Mr Declan O'Loan

Ms Dawn Purvis

Mr Peter Weir

Witnesses:

Mr Paul Everall Local Authority Building Control, England and Wales

- 909. The Chairperson (Mr Mitchel McLaughlin): The next item on the agenda is the Building Regulations (Amendment) Bill, and we will hear evidence from colleagues who have travelled from England. The session will be recorded by Hansard, so I remind Members that mobile phones must be turned off completely; otherwise they will interfere with the recording equipment.
- 910. I welcome Mr Paul Everall CBE, who is the chief executive of Local Authority Building Control (LABC) in England and Wales; we appreciate his making the effort to be with us today. Mr Everall, will you outline the role of your organisation and your experience of implementing building regulations in England and Wales that are similar to the regulations that are proposed in our Bill? Will you also detail your experience of the use of renewable energy sources in buildings in England and Wales? I invite you to share your wisdom and experience with the Committee.
- 911. Mr Paul Everall (Local Authority Building Control): Thank you very much, Chairperson. Good morning, everyone. It is a great pleasure for me to be in Belfast.
- 912. I have been the chief executive of LABC for some three years now. Before that, I was a senior civil servant in London, advising Ministers in Whitehall on matters involving buildings. I was head of the Buildings Division in what is now the Office of the Deputy Prime Minister the title changed several times in the years that I was there. I was appointed head of the Buildings Division in 1991, so I served some 14 years advising Ministers on the content of the building regulations and on the building control system in England and Wales.
- 913. At that time, I occasionally had the pleasure of visiting Belfast as I used to sit as an observer on the Northern Ireland Building Regulations Advisory Committee (NIBRAC). I believe that the Committee heard evidence from a friend of mine, Trevor Martin, who is chairperson of that committee. Since that time, I have been a member of the policy committee of the Consortium of European Building Control. I mention that because that role has given me the opportunity to study the different systems of building regulations across Europe, which I certainly found helpful to me in my Civil Service role.
- 914. I now turn to my current role. LABC is the representative body for local authority building control in England and Wales, and it represents some 276 local authorities that have building control responsibilities either district councils or unitary authorities. However, we are not just a representative body, which is important. It is difficult for the Government to talk to all 276 authorities, so if they want a collective view of what local authorities think about Government proposals, they come to us, and we try to develop that collective view on behalf of all local authorities.
- 915. As the Committee may be aware, unlike in Northern Ireland, building control in England and Wales is subject to competition from the private sector. Private-sector bodies called approved inspectors can be licensed to carry out building control work. Thus, for example, people who are having building work carried out on their house can choose to use either the local authority or an approved inspector.
- 916. Understandably, local authorities want to maintain a decent market share across all aspects of buildings work commercial educational, public and domestic. Therefore LABC is also a marketing body; it tries to sell the services of local authorities to architects, clients and

developers and tries to convince them that they would be wise to use local authorities rather than private-sector building control.

- 917. I have been in that role for three years, and it has been an interesting time. Last month, the Government published a consultation document on the future of building control. It suggests ways in which the system in England and Wales can be improved. We have held discussions with the Government about some aspects of that document, and I will be glad to answer any questions that the Committee may have.
- 918. There are two aspects of the Building Regulations (Amendment) Bill that interest me. The first is the move from "deemed to satisfy provisions" to approved guidance documents. As a result of my experience, primarily in England and Wales, but also elsewhere in Europe, I have become a strong supporter of the guidance document system. Before the system in England and Wales was changed 25 years ago, we had very prescriptive regulations that made it difficult for developers to do anything innovative or to keep up to date with developments in Europe and implement directives such as the European energy building performance directive.
- 919. The system was inflexible; under the system that we now have in England and Wales, the regulations which are themselves eight pages long set the objectives that we expect builders to achieve in their buildings. Meanwhile, the approved documents for England and Wales, which are published by the Government, give guidance on how to comply with the requirements of the regulations. Those documents are not mandatory, but if developers want to do something different, they must convince the building control bodies that their proposals are at least as good as those contained in the approved documents. Following the advice of the approved documents, however, demonstrates compliance with the regulations, and means that a developer would be unlikely to be prosecuted for any breach of the regulations.
- 920. One of the challenges for central Government is to continue to update the approved documents so that they reflect changes in technology and the continuing demands of society. The Government proposes to review or change energy efficiency regulations in England and Wales every three years in order to tighten up the requirements on climate change.
- 921. The other aspect of the Bill that interests me is type approvals. Those are very important in England and Wales, partly because of the complexity of the environment. Type approvals allow an architect to present his design to one local authority, have it checked and approved by that authority and have it accepted by all other local authorities in England and Wales. We had to develop that system because of competition, which was first introduced in the housing sector in England and Wales under pressure from the National House Building Council (NHBC). The NHBC offered a form of type approval, in the sense that once it approved a house type, it could be built anywhere in the country, as long as the NHBC was used as the approved inspectors. Had local authorities not decided to do the same thing, we would have lost a great deal of business to the NHBC because the process of getting plans checked was so much simpler.
- 922. The type approval system had to work very well; otherwise we would lose all our housing work to the NHBC. When I came to this job from the Civil Service, I was surprised to find that every local authority in England and Wales, without exception, had signed up to type approvals. The type approval system will work in Northern Ireland only if all local authorities agree to sign up to it or are required to do so. Type approvals are important in reducing the burden of the building control system on architects and developers.
- 923. Those two features were of particular interest to me when I studied the Bill, and I felt that I could share my views on them.

- 924. The third point concerned renewables. There is a great deal of interest from Ministers in Whitehall, just as there is here, in looking at the best way in which to combat climate change. As the Committee will have heard from other evidence, renewables may be the way forward. I have some concerns about how a policy might be applied. Personally, I believe that it is better to have goal-based regulations that set standards to be achieved rather than to prescribe that a certain proportion of energy must come from renewables. I would prefer that the use of renewables be encouraged through grant regimes or other forms of incentives rather than through regulatory change.
- 925. The Government in England and Wales have not yet proposed to require through the building control system that a proportion of the energy generated should come from renewables.
- 926. I am particularly concerned about microgeneration because last year some politicians were encouraging everybody to have wind generators on their properties. I have concerns about that from a building regulations perspective, because if generators are inadequately fixed or fixed to a chimney or to a gable wall, they can cause serious damage to the structure of the building, no matter how helpful they may be in reducing energy consumption. It may not be the case here, but building regulations in England and Wales contain requirements for electrical wiring and connections. It is important that wind generators on roofs are properly wired up and that the wiring complies with the requirements in the regulations.
- 927. I recognise the importance of increasing the amount of energy that is generated from renewable sources, but, personally speaking, I would not like to see it being made a mandatory requirement of building regulations in England and Wales. In a way, that would be against the philosophy of building regulations in England and Wales because we set objectives, for example, by setting the maximum amount of carbon that should be generated from a particular property, and we allow the developer to choose how to meet those requirements. If we were to start prescribing too much, we would go against that general principle of flexibility.
- 928. I am conscious that I have spoken for about 10 minutes. I am sure that members would rather ask questions than listen to me. I hope that I have given a helpful introduction to the topic.
- 929. The Chairperson: Yes, indeed.
- 930. Mr Weir: Thank you. It is good to have a witness who has such experience in these matters. To use a cliché, a wise person learns from his mistakes, but a wiser person learns from somebody else's mistakes. You mentioned initial problems with the system that was put in place in England and Wales, such as inflexibility. How might we combat potential implementation problems in the proposed reforms and in the Bill for Northern Ireland?
- 931. Mr Everall: When I read the Bill, I could not see anything in it that might cause difficulty. Please do not take this the wrong way, but it often used to be the case that we would introduce changes to the regulations in England and Wales, and, two or three years later, Departments in Northern Ireland would examine our experience including the guidance and the approved documents to see what mistakes we might have made, and they were able to learn from our mistakes when producing deemed-to-satisfy requirements. Now, perhaps, the situation is different because all parts of the UK have been subject to the energy performance of buildings directive, which had to be implemented in Northern Ireland on the same timescale as that in other regions.
- 932. To answer your question precisely, I cannot see anything in the Bill that I find to be unhelpful. I recommend that you use guidance documents and encourage type approvals.

- 933. Mr Weir: I understand that planning policy in England and Wales has been a key tool in ensuring the inclusion of renewables in newly built houses. Given your experience of that in England, do you believe that Northern Ireland should adopt that process?
- 934. Mr Everall: There are contrasting views on that. I am a purist, and I believe that regulatory systems should not overlap. Measures included in building regulations should not also form part of the planning system. In England and Wales some planning authorities have attempted to set higher standards through the planning system than are required under building regulations. That confuses developers and is therefore unhelpful. For example, the London borough of Merton tried to establish higher standards for the planning system than are required under building regulations; that is not a good idea.
- 935. The Government in England and Wales have developed a code for sustainable homes Northern Ireland may use a similar code that is not mandatory but encourages people to aim for higher standards of energy efficiency than present building regulations standards. It has a ratchet effect. Public-sector bodies will have experience of that, and bodies such as the Housing Corporation and English Partnerships advocate reaching the higher standards outlined in the code rather than compliance with building regulations.
- 936. Gaining experience in building homes at a higher level will make it easier to attain the required standards in 2010 when building regulation standards are next increased. Such a voluntary code is helpful, but to demand that the planning system provide that 20% or 40% of all new houses must have energy-efficiency standards that amount to a 20% higher standard than contained in building regulations is unhelpful.
- 937. Mr Beggs: I declare an interest as a member of Carrickfergus Borough Council on the north-eastern building control committee. You said that every local authority in England has signed up to type approval. How is that managed? How do we ensure that a lower standard is not applied in one authority area and imposed on other areas, resulting in lower overall standards?
- 938. Mr Everall: If an architect wants to have a house type-approved, he takes the plans to a local authority, which ensures that the plans comply with building regulations. If the plans are approved, they are referred to LABC, which issues a certificate to all local authorities and the developer to the effect that the design has been approved and, if brought to a local authority, must be accepted. Checks must still be carried out on site, but local authorities do not need to check the plan again. As far as I am aware, that works very well.
- 939. The receiving authority might, occasionally, raise an eyebrow about whether the authority conducting the original type approval was too lax but such cases are uncommon. LABC has a technical working group to examine such issues and to provide advice.
- 940. Mr Beggs: During evidence sessions the Committee heard that houses built in Northern Ireland can be built to out-of-date standards in cases where development had commenced a long time ago. Recent building control approval was given to developments designed originally in 1973. Therefore houses are built with poor energy-efficiency standards and poor disability access. An amendment to the Bill could provide for the power to declare null and void any individual buildings that have not been commenced on multiple sites after a specific time period.
- 941. Can you give us your views on such an amendment?
- 942. Mr Everall: I would have to think of what the implications are of such an amendment and if there were any compensation or fairness issues that need to be considered. I am not aware of the problem being widespread in England and Wales. However, the rules are basically the same: if you commence one house on a multiple site, that is regarded as commencing work. Therefore

the rest of the houses in the scheme should be built to the earlier standards; even if the building regulations are tightened up before the work is completed.

- 943. That has not been a problem in recent years in England and Wales, as the demand for housing has been such that it is not in the developer's interest to take a long time to develop a site. However, it may be that with the downturn in the economy that this would be a good thing to start thinking about. You could introduce provision to create a time limit on how long an approval is listed. There are time limits I think that it is three years in England and Wales where you must make at least a start on the site; otherwise the building permit becomes invalid. It may be prudent to consider how you might extend that to cover all the houses on a site and not just the first one.
- 944. Mr O'Loan: Such provisions may be strictly beyond the terms of the Bill and may be covered under previous criteria for type approval. However, we all agreed that the implementation of the Bill is desirable. However, how exactly do we implement it? You talked about two ways: by agreement or by making it mandatory. In case agreement does not work, why do we not just simply make it mandatory?
- 945. Mr Everall: That may be more of an issue in Northern Ireland. In England and Wales, the incentive for local authorities to sign up to a voluntary scheme, run by LABC, is that if they do not, they are likely to lose work to the private sector. If you do not have competition from the private sector and I am not aware that you are planning that at present t what is the incentive for every local authority to sign up?
- 946. Getting a local authority to agree to it would be the best option. However, if you have any fears that some authorities will not sign up to it voluntarily, you should seriously consider making it mandatory.
- 947. Mr O'Loan: We should consider why local authorities would not sign up to it.
- 948. The Chairperson: Imposing a different set of conditions or responsibilities on councils on housing provision may prove to be the tipping point in councils voluntarily signing up. We may need to consider a different approach.
- 949. Mr O'Loan: The issue of licensed inspectors does go beyond the proposals, but it is worth exploring. You seem to be saying that those inspectors have had a significant impact on the system.
- 950. Most of us who have some experience of the building control system in Northern Ireland would be pleased and impressed by the introduction of licensed inspectors. However, we should listen to experiences from elsewhere and whether the creation of an alternative has improved the system and made it more responsive. Is that your view?
- 951. Mr Everall: Yes. This is slightly difficult for me as my employers are a local authority. They are, of course, perfect in every way and we should never have introduced competition in England and Wales —
- 952. The Chairperson: The Hansard report has taken note of that. [Laughter.]
- 953. Mr Everall: However, in my previous days I did see the advantages of competition. Developers who have been around for a long time in England and Wales will say that the service that they receive from local authorities on building control has greatly improved over the past

- 25. There were stories told in the past of building control officers who found great joy in finding 101 reasons why a development did not comply with building control regulations.
- 954. The culture has completely changed, and building control recognises that unless it works with the developers to encourage and persuade them to comply, they can choose to go to an unapproved inspector. When the Labour Government came into power in 1997, Nick Raynsford, who was the Construction Minister, conducted a review of whether private-sector building control should continue. Ministers in England and Wales reached the conclusion that the benefits outweighed the disadvantages, and the Conservative and Labour parties have supported competition ever since.
- 955. The experience has been good, and developers often ask us why on earth politicians do not introduce competition into the planning system, as it might produce a more responsive and customer-friendly response from planners. However, you will understand why I will not comment on that. Competition improves the efficiency of building control.
- 956. The downside for us, and the reason that we need a marketing side, is that local authorities are there to provide a public service, but we are the building control body of last resort. People can choose to go elsewhere, but a local authority cannot turn work away and, therefore, we must provide an effective service. If all the lucrative work by which I mean the commercial building work that generates large fees for the building control body were to go to the commercial sector, it would leave local authorities to deal only with house extensions and similar work.
- 957. Although that is important work, building control would not be the interesting career that it is, and the service from local authorities would suffer. The biggest risk attached to introducing private-sector competition is that it would spoil the service that local authorities deliver. It is not only because I am chief executive of Local Authority Building Control that my recommendation is that it is not necessary to go down the private-sector route: there are other ways to maintain an efficient service.
- 958. Mr O'Loan: When talking about more efficient and lower-carbon homes, you said that your inclination is to set targets for the efficiency of households and to allow householders and developers to create methods to achieve them. You suggested that grant-aiding is preferable, particularly for encouraging microgeneration, to making it mandatory. My concern is that the point of a grant is to encourage people to do something that they might not otherwise do because the grant makes it more cost effective.
- 959. However, there are many cost-effective measures to improve the efficiency of homes, but lethargy and inertia prevent people from taking them. People could take sensible measures that would produce a quick payback, but they do not. I am sympathetic to the idea of encouragement rather than compulsion, but that is not producing results at the required rate, particularly among the existing housing stock.
- 960. Mr Everall: It would be difficult to see how regulation could address the existing housing stock. It would be a bold move for politicians to require people to carry out building work on their houses that they had not planned to do. However, without regulation that issue cannot be tackled through introducing legislation. Building control can get to grips with an issue only when someone states their intention to do some building work. Building control cannot touch people who are content to sit in their low-energy efficiency 1950s house and have no such intention. Therefore building regulations would not necessarily help to deal with the existing housing stock. If anything, it is even more important to provide incentives for people to improve the existing stock. Building regulations can set standard for new houses, but they cannot do anything about the existing stock.

- 961. Mr O'Loan: The question of how to encourage people to make improvements to the existing housing stock is left open.
- 962. Mr Everall: Yes, that leaves open the question of how we deal with the existing stock.
- 963. Dr Farry: Thank you, Paul, for coming over from England to brief the Committee this morning.
- 964. Returning to the issue of renewables, can it be argued that advances need to be made across a broad front in order to achieve carbon reductions? In the same way that building regulations cannot affect existing buildings that are not going to be modified, people who do nothing with their buildings will not come into contact with the planning system.
- 965. I am concerned that exacting carbon reduction targets have been set in the Climate Change Bill. There is often a tendency to delay the pain of meeting targets by seeing them as something to be dealt with in the future and believing that tough decisions will have to be taken by our successors rather than by us. I am not sure whether that is a credible approach.
- 966. I am conscious that there is a target in England and Wales for all new homes to be carbon neutral by 2016. I was interested in your comments regarding how that will be achieved by taking a joined-up approach that incorporates all the different targets that are being set and all the relevant programmes.
- 967. Should there be grants to encourage homeowners to use microgeneration as well as regulations for new homes introduced either through planning and/or through building regulations in order to shift to microgeneration as quickly as possible?
- 968. There are some parallels between this issue and that of recycling. Initially, people were encouraged to recycle voluntarily, but without a great deal of success. Councils particularly in Northern Ireland, and that is possibly one example of our being ahead of some councils in England and Wales then began alternating between collecting household rubbish and recycling every other week, which resulted in a sudden upsurge in recycling. Recycling may have reached a plateau and will need a new initiative. Do you agree that recycling is an example of the effective use of regulation and encouragement?
- 969. My final point may contradict what I have already said about microgeneration. To what extent is it appropriate to encourage either through planning or building regulations microgeneration per household or per building, when some form of shared generation, particularly in new housing developments for example, slightly larger wind turbines may be more appropriate? I appreciate that a similar approach is perhaps already being taken in other parts of Europe. Do you see any particular cultural problems here that may be holding us back from introducing that for example, a greater focus on owning one's property as opposed to the renting culture that exists in other parts of Europe? Is that a viable option, either different from individual microgeneration schemes or working in conjunction with them?
- 970. Mr Everall: Dealing with your last point first, in the case of using wind power, I would rather see a reasonably large wind pump generating power for 100 or 200 houses than 200 wind pumps on 200 houses. That is a way forward. The Committee may be aware that the Government have announced that there will be 15 new eco-towns in England and Wales, and it will be interesting to know what the proposed energy-generation scheme will be for those.
- 971. The 2016 target that all new homes will be zero-carbon is very demanding. I do not believe that zero-carbon homes can be achieved without the full co-operation of the energy-supply industries. I do not believe that zero-carbon homes can be achieved simply by installing more

insulation or more efficient boiler systems. That is partly because of all the electrical equipment, such as computers, that we now have in our homes.

- 972. In England and Wales a joint taskforce has been established involving the Home Builders Federation and the Government, which is developing a policy on how zero-carbon homes will be achieved by 2016. In my view, it will depend on the electricity-supply industry fully coming on board and moving towards using renewables rather than fossil fuels. I was interested in the session that the Committee had about that earlier this morning.
- 973. One of the challenges in England and Wales is that the Government have said that three million new homes are required by 2020 and that they want homes to be zero-carbon rated by 2016. It will be a challenge to meet both of those objectives at the same time. I am sceptical whether that can be done. Nevertheless, the fact that the Government have set such demanding targets has meant that there is much more dialogue between house builders and energy supply companies than in the past. There are moves afoot to extend that dialogue into the commercial sector.
- 974. In answer to Dr Farry's third point, there may be a role for promoting and encouraging microgeneration in the regulations, but I am nervous about being prescriptive. A couple of months ago, we might all have prescribed biomass as the right way forward. Now, of course, there is controversy about whether we are driving up world food prices because land that would otherwise be used for food crops is being diverted towards the production of biomass. I may be entirely wrong, but it would not surprise me if the use of biomass goes down the list of priorities significantly. When I was a young engineer, wave energy was to be the solution, and here we are 50 years later and it is not. The danger of being prescriptive is that we prescribe the wrong things.
- 975. Dr Farry: I appreciate the point that you make. I am sometimes tempted to make a comparison between the revolutions in renewable technology and information technology that have taken place over the past 20 or 30 years. Much concern is being expressed about whether current technologies are capable of providing significant reductions in energy use. There is a need for investment in research and development in order to improve efficiencies, which must be driven by the market.
- 976. Huge improvements in information technology were brought about by consumer demand over the past three decades for more efficient high-performance, high-capacity devices. I foresee a difficulty in the renewables market, in the sense that there is not the same drive from consumers for more efficient devices. It is a societal benefit. People do not recognise the benefits to the individual of renewable energy that they can, for example, from a more efficient personal computer. In economic terms, there is a much greater problem with the "free rider" tendency. Therefore in order to prevent market failure, is there not a stronger argument for some form of regulation that will drive the renewables market and improve technologies? Is there not a danger that those technologies might not improve through voluntary buy-in and grants alone? Is there a need to pump-prime the market?
- 977. Mr Everall: I fully understand your argument. There is a more pressing case for greater regulation of renewables than there is for information technology, where the market has done an excellent job. A great deal of careful thought is required before one becomes too prescriptive about the use of certain types of renewables. The market may not deliver. I attach some hope to the fact that people as a whole, and children in particular, seem much more concerned about the future of the planet than they were 10 years ago. Even if people do not want to save money by improving the energy efficiency of their homes, more and more are concerned about the state of the planet. Whether that is enough to make the changes that are required remains to be seen.

- 978. The Chairperson: In an earlier answer, you said that you were not convinced that we could achieve the carbon-neutral target by 2016. Does that not indicate that, without being prescriptive, we must be proactive in encouraging and developing capacity?
- 979. Mr Everall: Indeed, much more work must be done. As I said, some of that work is going on in England, at least. I am still not convinced that we will get there, but much more work is being done now than two years ago.
- 980. The Chairperson: What helpful and constructive work can we do on the Bill to help us to achieve the targets? How can we change the regulations to improve on what has been done in England and Wales?
- 981. Mr Everall: You can continue to raise targets in the regulations. You propose to issue guidance documents, so you can continue to develop the guidance to show people how to achieve targets. You can work with industry and with others to produce bigger, better guidance. The faster the industry can develop the technology, the faster you can tighten the regulations and raise the standards. Members may be familiar with the standard assessment procedure (SAP) ratings, which are energy-efficiency ratings on houses. For example, you can say that, instead of new houses having a rating of 80 on the SAP scale, you will want them to have a rating of 85 next year. However, you must be convinced that the technology exists to deliver that rate economically. That is a long-winded way of saying that the way in which you appear to be developing the regulatory system should provide the basis for achieving the results that you want.
- 982. Mr F McCann: It has been recommended to the Committee that further consideration be given to requiring approval of plans by local council building control before commencement of work. That approach has been taken in England and Wales, and there seems to be division between rural and city councils on how that is handled.
- 983. Mr Everall: I am not sure that I see that distinction. There are two ways in which one can carry out building work in England and Wales. One can either submit plans to the local authority, which is required to issue a decision on the plans within a certain time; I think that it is five weeks, but I do not have the regulations at my fingertips. If those plans are approved, the work can proceed. We also have what is called the building-notice system, which was intended for simple work, whereby one gives 48 hours' notice to the local authority that one intends to start work. One does not have to submit any plans. The local authority will inspect the work from time to time.
- 984. I mentioned earlier that a review of the building control system is ongoing in England and Wales. One of our arguments to Government is that the building-notice system has been misused. Works such as loft conversions or complicated extensions that can require a great deal of building-control officer time to ensure that they are done correctly are being carried out on building notices, without any plans having been submitted. I do not know how prevalent loft conversions are in Northern Ireland, but many people in London and other parts of England like to convert lofts into living accommodation. There are all sorts of issues to do with structural safety, means of escape and so on. If plans are not submitted for approval by the local authority, the local authority can find it difficult to ensure that problems are corrected as the building work progresses. That system has been misused by some developers.
- 985. Although that was not a very precise answer to your question, it may give the Committee a flavour of the problems that we face.

- 986. Mr F McCann: I am a member of Belfast City Council, which is inundated with requests for permission for loft conversions. Some of the building control officers would have difficulties if the system was changed, because their work would probably pile up.
- 987. Mr Everall: LABC is putting together evidence that English building regulations actually cost more than submitting plans, even though they are supposed to be more straightforward. You may be aware that in Scotland a warrant is required before starting work. However, in England and Wales one can start work without any prior approval. I am not sure that it is necessary to go quite as far as the Scottish model, but we are concerned about how the system works in England and Wales.
- 988. Mr McQuillan: It has been recommended that our Bill include powers to create regulations to control dangerous buildings and on the demolition of buildings. What is the position in England and Wales?
- 989. Mr Everall: Those areas are not controlled under building regulations. There are powers under the Buildings Act (1984) the principal statute under which building regulations are made in England and Wales but there are also separate provisions that go back to Victorian public health legislation. Local authorities have powers to take action if a building is considered to be dangerous; either by taking direct action themselves or requiring others to do so. It has never been necessary, and I have never heard it suggested, that in England and Wales those powers need to be contained in building regulations. They seem to work well as separate legislation.
- 990. Mr McQuillan: I am not sure whether we have separate legislation here or whether we would need to include that in the Bill. Do you know if that is the case?
- 991. Mr Everall: I do not know if you have separate legislation in Northern Ireland for dangerous structures or for demolition; if you do not, perhaps you should consider it.
- 992. The Chairperson: I think that we have separate legislation, but I am not sure of the details. The Committee can follow up on that separately, as it is any interesting point.
- 993. Mr Everall: We should not have to spend a long time filling out building regulation applications while deciding what to do with a dangerous structure. It is an emergency power and should be used as such. That is why it is separate from building regulation legislation.
- 994. Ms Purvis: There have been backland developments in Northern Ireland to which emergency and service vehicles have been unable to gain access. At present, no statutory agency appears to have the power to ensure that proper access is available. Has that been an issue in England and Wales and, if so, how have you dealt with it?
- 995. Mr Everall: The issue has arisen in England and Wales and part B of the regulations I appreciate that your letters are different; in England and Wales we use the same letters as in the Republic of Ireland deals with fire safety. That requires that there should to be access for the Fire Service in all developments, and that was specifically written into the regulations, I believe in 1991.
- 996. Ms Purvis: There was a recommendation that the Northern Ireland Bill should require the Department to work with counterparts in England, Wales and the Republic of Ireland to harmonise building regulations. That would apply to the technical content and to the time of introduction. Do you have any views on that?

- 997. Mr Everall: It would be desirable where it can be achieved. One of the reasons that I attended the Northern Ireland Building Regulations Advisory Committee and why colleagues from Northern Ireland attended our buildings regulation advisory committee in London was so that we could compare notes. Often, regulations are introduced in England and Wales and similar changes are made a few years later in Northern Ireland.
- 998. I strongly support the principle of harmonisation, particularly for developers who work in different parts of the United Kingdom. It would be good although we have never achieved it in Scotland if type approvals that have been agreed in England and Wales were also accepted in Scotland and Northern Ireland. However, its feasibility remains to be seen due to different methods of construction. Furthermore, there is perhaps a tendency to move away from harmonisation because of the effects of devolution.
- 999. The Scottish regulations differ from the English and Welsh ones, partly because Scottish politicians believe that they do not need to do the same as England and Wales. I am sure that there will also be issues in Northern Ireland. Northern Irish policies on radon are somewhat different from regulatory requirements in England and Wales, and that may be due to geological differences.
- 1000. I would like to see harmonisation achieved wherever possible, as that would help the construction industry, although there may be occasions where the different parts of the UK need different requirements.
- 1001. The Chairperson: Where an applicant deals with building controls application of the regulations at any stage of the planning consideration in England and Wales, they can ask for a determination from the Department. There is no provision here for an applicant to approach the Department until building control has concluded and rejected the plans.
- 1002. Other witnesses have recommended to the Committee that, with the introduction of a guidance-based documents approach, a system of determination should also be established similar that which exists in England and Wales. How has that process worked in practice, and has the fact that the applicant can appeal at any stage of the process been beneficial in your view?
- 1003. Mr Everall: The process has worked in principle. I used to be the senior civil servant responsible for running the determination of appeals system. The time that it took to get a decision meant that the system was inefficient, and consequently the procedure was rarely used. In theory, it was a very useful system to have, but it was not of much use.
- 1004. The Government's consultation paper on the future of building control consultation asks whether LABC, together with the equivalent private-sector organisation, could set up its own mediation system for disputes. LABC is looking into that possibility. If there were a dispute at any stage for example at the plan-checking stage if the developer thinks that the plans comply with the building regulations and the building control officer thinks that they do not perhaps the decision could be issued to an LABC-run technical panel that would have the right to make the final determination. The Government are consulting on that. I imagine that there would have to be some kind of statutory basis for that to work. It is recognised that the system of determination and appeals has not worked very well in England and Wales, and a better system needs to be found. The present system of dispute resolution has not worked well a solution needs to be found.
- 1005. The Chairperson: Recently, there has been a resurgence in development and pressure on the housing market, although that may be characteristic of here. The Committee has been given evidence of backland developments where there has been difficulty in getting access for

emergency vehicles. There appears to be no body with the statutory powers to address that issue. How have you dealt with that in England and Wales?

1006. Mr Everall: As I said to your colleague, there are requirements in our regulations which require there to be access for the Fire Service for example. If an estate is being developed, a road must be included that is big enough for a fire engine to drive down. It has been tackled to that extent in our building regulations.

1007. The Chairperson: Has there been any difficulty in enforcing that requirement?

1008. Mr Everall: No; that requirement has been accepted by developers. I used to say when I was responsible for making the regulations that people used to kick and scream about how the regulations were the end of the world as they knew it. I remember when we first introduced disability access requirements to the building regulations that householders said that they would never be able to build houses.

1009. The day after the regulations came into force, we did not hear another squeak. People just complied with the regulations; perhaps that is human nature. I have no evidence that the requirements on access to backlands or the Fire Service are not working. I do not know of any cases where that was not provided.

1010. The Chairperson: On behalf of the Committee, I thank you for your interesting presentation, although there are issues that Committee members will want to follow up through correspondence.

1011. Mr Everall: I apologise that I did not send any written evidence in advance, but I was not sure how best I could help the Committee. Please feel free to follow up any issues with me.

1012. The Chairperson: Thank you very much indeed.

30 April 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Mr Declan O'Loan

Mr Peter Weir

Witnesses:

Mr Chris O'Grady Department of the Environment, Heritage and Local Government, Ms Sarah Neary Republic of Ireland

1013. The Chairperson: We will move smartly on and continue this evidence session. I welcome Chris O'Grady, head of the building standards section, and Sarah Neary, senior building standards adviser from the Department of the Environment, Heritage and Local Government in the Republic. You are very welcome. I know that you listened to the previous witness, so you will be aware of what was said.

- 1014. The Committee is particularly interested in the role of your Department in relation to building regulations and the South's experience of implementing similar building regulations. We are also interested to hear about your experience of renewable energy sources in building regulations.
- 1015. I invite you to address the Committee.
- 1016. Mr Chris O'Grady (Department of the Environment, Heritage and Local Government): Thank you very much. With your permission, I would be grateful if both of us could address the Committee initially and then take questions together.
- 1017. Like Paul Everall, we are grateful for the invitation from the Committee. I say that on behalf of our Minister, who came into office last June. He is very strongly of the view that although we come here as his officials to assist the Committee's deliberations, we also come here to aid our learning process in order to sharpen our focus on the challenges that we face.
- 1018. None of us has the monopoly of knowledge on how to meet the challenges that face us all. We are very grateful to be here, and we found the last session with Paul Everall particularly helpful. Sarah will address some of the points that members raised in that session and give the Committee a flavour of where we stand in the Irish context.
- 1019. We submitted four written pieces of evidence to the Committee. One was a general note on the building regulations system in the South of Ireland. Essentially, under our Building Control Acts of 1990 and 2007, responsibility for complying with the regulations rests with the owner or the builder. Our enforcement regime consists of 37 building control authorities. By agreement with the city and county managers across the state, the target enforcement rate for buildings that are subject to commencement orders lodged with the building control authorities is 12% to 15%.
- 1020. That might sound quite modest in comparison to the more blanket imprint that the building control system here has, but it reflects the resources that are available to us. We have six-monthly reports from all building control authorities, and the indications are that there is 97% compliance across those 37 authorities to meet that 12% to15% target.
- 1021. In our written evidence, we also tried to give the Committee a brief flavour of each of the clauses of the Building Regulations (Amendment) Bill and how they correspond with our system. Due to the Committee's interest in the section of the Bill that details renewable energy technologies, we have also provided a short note on the new laws signed by our Minister on Christmas Eve 2007 as part of the Programme for Government.
- 1022. These new laws seek to secure an improvement of 40% in primary energy consumption and a reduction of 40% in CO2 emissions. Both targets must be achieved. The applicable date is 1 July 2008, and that allows for the small transition that the industry demanded.
- 1023. A member asked about a 1973 building design that could still be granted planning permission despite not complying with present energy efficiency standards.
- 1024. If builders in the South have planning permission before 1 July of this year, they can avoid the new target but only if the building is substantially complete by 30 June 2008. "Substantially complete" means that the four walls of the building must have been constructed. Other than that, our new targets and standards must be complied with subject to that transitional period.

1025. I know that the Assembly had a debate on whether renewables should be mandatory, but our Minister has taken the view that our building standards should contain a mandatory renewables element. We have had extensive engagement with house builders and other elements of the construction industry, and they have informed us that we must empower them with backup manuals, guidelines and access to the durable and reliable products that the building regulations require them to have. We are engaged in sustained dialogue with the construction industry to help it to meet the targets and obligations that are required by law.

1026. We have also given Committee members two notes on the link between the state's building control system and the planning system. There are a couple of reasons for the strong link between the two. First, our Minister is responsible for both systems. Secondly, the South has a joined-up approach to the problems and challenges that we face because of climate change and the need for a planning system that will, where possible, provide for exemptions for dwelling-based micro-renewables. Those exemptions, under the planning regime, should be extended to the industrial, commercial and agricultural sectors.

1027. Our first note informs the Committee of the law relating to micro-renewables that was introduced in February 2007; our second provides a flavour of the proposals that the Minister will introduce in Parliament in the South next month. A debate on renewables of greater capacity for use in the commercial, industrial and agricultural sectors will take place in June.

1028. Last month, an energy summit — the first of its kind to be held in Europe — was held in Dublin. The Taoiseach, the Minister for the Environment, Heritage and Local Government, the Minister for Transport, the Minister for Enterprise, Trade and Employment and the Minister for Agriculture, Fisheries and Food — due to her interest in biofuels and forestry — joined 300 captains of industry in Dublin to send out the message that there is a joined-up approach in the South and that building control is only one — albeit a significant — element of that.

1029. Although our Minister brought in 40% improvements for new dwellings on Christmas Eve, he announced, at the energy forum, that he would move to a 60% improvement for new dwellings in 2010 and that he would work with the state's Building Regulations Advisory Body — which was established under the Building Control Act 1990 — to deal with new targets for buildings other than dwellings. He said that the targets would be realisable and ambitious. They have not been articulated yet because he is anxious to consult the industry. He also talked about his desire to move towards zero-carbon emissions for all buildings by 2016, which ties in with what Paul Everall said. He did not give that date at the meeting, but he announced it at his party conference.

1030. He also said that he would use all the arms at his disposal. Considering his important imprint on housing policy across the state and his significant grant aid to local authorities, he will be asking them to come forward with demonstration projects in their housing programmes for the use of renewables and movement towards zero-carbon homes in local authorities. As he is responsible for social and voluntary housing, he will elaborate on the new strategies that have yet to emerge for the retro-fitting of those houses in the state, with a view to addressing the challenge of new buildings, other than dwellings, and the state's building stock over time.

- 1031. Sarah will pick up on some of the points that were raised in the previous discussion.
- 1032. Ms Sarah Neary (Department of the Environment, Heritage and Local Government): Thank-you for inviting us to the Committee meeting; it is a privilege to be here.
- 1033. Building regulations are not harmonised, but there are strong communication links between the various jurisdictions. Indeed, we hold islands meetings in various locations to discuss elements of the building regulations. I am member of the group that examines

structures. Representatives of the Scottish Building Standard Agency, the Department of Finance and Personnel, and communities and local government also attend the meetings. The meetings are a useful way of keeping up to date with what is happening in each jurisdiction and learning of any changes that may be imminent. All parties in the South appreciate that high level of communication.

1034. It will be worthwhile for us to provide an Irish perspective on some of the issues that have been raised.

1035. Mr Beggs asked how new houses built to 1973 building control standards should be dealt with. When we review any part of the building regulations, we implement transitional arrangements. Building work that commences after a certain date must comply with the new regulations; and building work that commences before that date must be "substantially complete" in order to avoid the regulations. As Chris O'Grady said, "substantially complete" means that the four walls of the house have been constructed.

1036. Our building control system is quite different from that in Northern Ireland, and England and Wales; we do not have an approval type system. Builders require a cert of compliance with the building regulation granted through the conveyance and legal system. The cert is a building professional's opinion — generally given after completion of a survey — that a new building complies with the relevant regulations. As Chris also explained, there is a requirement for 12% to 15% of all commencement notices to be inspected in each local authority.

1037. The provision of grants for renewable energy systems — and, indeed, mandatory introduction — has been discussed today. Under the Greener Homes scheme, we have had a grant system for the past five years; and there has been a huge take-up of those grants. The grants provide about one third of the cost of biomass boilers, wood pellet stoves, solar panels, heat pumps — any type of renewable energy.

1038. The Chairperson: Were grants provided for any type of renewable energy system? Was that left to the discretion of the owner or the installer?

1039. Ms Neary: To be eligible for the grant, an approved installer has to be used and the renewable energy system has to be on the list of products that meet the required standard.

1040. Part L "Conservation of Fuel and Energy" of the building regulations for new dwellings makes it mandatory for approximately 10% of the total energy used by a typical semi-detached house to be renewable. The exact figures are 10 kilowatt hours per metre squared per year for heat energy; and 4 kilowatt hours per metre squared per year for electrical energy. The mandatory requirement for electrical energy is smaller because producing electricity is more efficient — and has fewer distribution losses — than heat energy. Alternatively, combined heat and power (CHP) plants can be used. A CHP plant that provides energy for an apartment block or a district heating system complies with renewable energy regulations, even though it is not a renewable fuel source.

1041. We have moved from the grant scheme to the mandatory system, which is in line with our programme for improving energy efficiency and reducing carbon emissions. As Chris said, new houses have 40% lower heat energy demand than buildings in the 2005 regulations. We intend to achieve a 60% target by 2010 and eventually move towards very low or zero carbon housing. The system needed to be lubricated in order for renewable energy systems to become a larger component. All aspects in this round of provision relate to part L of the building regulations.

1042. One of the first questions was whether we have experienced any problems during the implementation of the building-control system. The Building Control Act 2007 made several

amendments to the Building Control Act 1990. The amendments indicate the four main areas where problems arose, which I will explain briefly.

- 1043. There was a general problem of compliance with part M, which deals with access for people with disabilities. The amendments provided for the introduction of disability-access certificates. At commencement-notice stage, developers must produce a set of drawings that show how part-M requirements have been incorporated and can be seen to be part of the overall design of the building rather than simply tagged on at the end.
- 1044. New regulations introduced the registration of architects. That was done because various people were calling themselves architects and offering services such as planning permission and building control. Now, however, the title is confined to people who are trained architects or who, under several other clauses, have had their professional capability assessed by a board.
- 1045. As we explained, under the building control system there is only one building control officer in most local authorities, and those officers are overworked. To ease the system, the method by which enforcements are carried out has been changed. Therefore rather than issue indictments, summary prosecutions are brought before the district court, which is an easier process. Fines and fees have been increased, so officers get help on both sides and they have more teeth.
- 1046. Amendments were also made for the regularisation of procedures that relate to fire certificates. When a building's form is changed during construction, its fire certificate needs to be revised and resubmitted. Previously, the procedure for that did not exist. Those are some of the issues that have been dealt with.
- 1047. The Chairperson: Your comments have been helpful.
- 1048. Mr Weir: Thank you for your presentation. One issue that the last witnessed raised was false information, whether mistaken or deliberate.
- 1049. Clause 11 contains powers of criminal prosecution for false information that are similar to those in the Republic. It seems to be a universal problem one of the downsides of human nature. Can you expand on the success of prosecutions for giving false information? Are there any changes that we should make?
- 1050. Ms Neary: I do not believe that there have been any prosecutions for giving false information; there may have been a few prosecutions for building control, although I would not swear to it. Generally, problems have been resolved on a case-by-case basis. Cases of misinformation have not been pursued through the courts.
- 1051. Mr Weir: Does the power act as a deterrent? Has it enabled building control officers, particularly on matters that are dealt with locally on a case-by-case basis, to tell people that they must play ball or go to court? Does that ensure compliance with the regulations?
- 1052. Ms Neary: The Act gives a building control officer certain leverage in implementing that power.
- 1053. Mr O'Grady: There has been modest enforcement. In a debate on building control in 2006, Members of Parliament complained about the lack of enforcement and the legislation's lack of teeth.

1054. The then Minister wrote to all city and county managers. He cited all potential breaches of the legislation and asked them to redouble their effort to increase enforcement to between 12% and 15% and to note the possibility of prosecution. He also informed them of his intention to increase the fines substantially, which he did in 2007. For example, the summary conviction fine will increase from £800 to €5,000, and the fine for conviction on indictment will increase from £10,000 to €50,000. In his letter the Minister stated that, for the first time, fines imposed by courts would provide an income stream for local authorities and that the expenses that they incurred in bringing prosecutions would be recoupable from the perpetrators.

1055. Mr Weir: That was the incentive for local authorities to be proactive.

1056. Mr O'Grady: Yes.

1057. Mr O'Loan: The new part L includes regulations that new dwellings must achieve at least a 40% reduction in primary energy consumption and a 40% reduction in related carbon dioxide emissions. I was particularly struck by the fact that the use of renewable energy sources will become mandatory. The Committee has debated at length whether that should be the case in the North too. However, the significant weight of evidence, in addition to the views of the Minister and professional sources, was against that option.

1058. I also note that you estimate the additional cost of adding efficient boilers and improving airtightness in a semi-detached dwelling at €10,000, which is approximately £8,000, but the resulting annual saving will be only €400. By dividing the cost by the annual saving —although that is not the proper calculation — the payback time is 25 years. I am surprised by how long that payback time is. Did those in the building sector, such as developers and estate agents, offer much resistance to part L?

1059. Ms Neary: We received several submissions from stakeholders in the industry requesting that we extend the time frame for the implementation of renewable energy sources. However, in general, part L has been well received by those in the industry, and they are embracing it.

1060. Mr O'Loan's simple calculation of payback time does not tell the full story. I accept that 25 years is a long time, but several factors must be taken into account, such as inflationary measures and whether the price of fuel will outstrip inflation.

1061. However, the total cost of €10,000 can be split between renewables and traditional methods. I do not have the exact figures but, using solar panels as an example, traditional methods account for about €4,000 and renewables for €6,000. The payback from the more traditional methods is much higher and is easily recouped. We are open about that.

1062. However, there is evidence that renewable products in general tend to come down in price as their use increases. The European Energy Agency says that if a product's market doubles, its cost decreases by approximately 20%, although I can provide the Committee with exact details. The Department wanted to ensure capacity building in the market because renewable energy sources are needed to achieve the target of new housing having a 60% lower heat energy demand than existing buildings standards by 2010. As we progress towards zero-carbon emissions, we will also need to use renewables.

1063. Mr O'Grady: We received 47 submissions when the Minister published his proposals last July. We held a series of meetings with industry stakeholders, and there was no doubt that they were very worried about the imposition of mandatory costs and how they might affect their margins. The Minister made his decision in the context of the Irish Government's obligations to meet EU climate-change targets. He decided that it was necessary to make one, sharp intervention to make people aware of the possibilities of his incremental approach in planning

law exemptions for dwelling place microrenewables such as wind turbines and solar panels, gradually moving to the commercial sector, thereby delivering, over time on our obligations to cut carbon emissions. That sea change was a political decision, while acknowledging in discussions with the industry that a 40% reduction could have been achieved by more traditional means.

1064. We were up-front in our discussions with the industry, telling them that insulation could be more airtight but that such was the challenge facing society — and not for just new dwellings, because we have a huge housing stock, much of it of such poor quality that it needs retro-fitting — that this was the time to signal that all our thought processes have to change.

1065. The Chairperson: Much more can be done with newbuilds to achieve dramatic improvements in zero-carbon footprints. The central issue is with existing stock and retro-fitting. The economic equation is now affected by the sharply rising costs of fossil fuel-based energy. That requires the Government to set targets to deal with the industry's concerns about margins, which is a huge consideration for developers. The economic equation is changing almost daily, and if fossil fuel prices continue to escalate, builders using renewables will soon have a marketing ploy for selling the property.

1066. Mr Beggs: I did not realise that renewables must be used in order to reach the new European directive standard of saving an extra 20% in energy use by 2010.

1067. Mr O'Grady: When he came into office, our Minister made a political decision to focus the mind on the sheer extent of the challenge facing society. Targets for this Government and for successive Governments include 30% of electricity to be renewable-sourced by 2020; 30% cofiring of biomass in peat stations by 2015; an energy-efficient action plan leading to a 20% improvement in energy efficiency across the economy by 2020; 5·7% biofuels penetration by 2010; 5% of domestic and commercial heat requirements from renewables by 2010; and up to 400 megawatts of electricity from combined heat and power by 2010.

1068. Those dates are quite close. Those targets were set at the discretion of the national Government and are not linked to EU directives. The Minister, although listening to the industry, felt that it needed a sea change of penetration of the mind, and he convinced the industry that this was the way to proceed. Since then, 400 members of the industry attended a sustainable housing conference at Dublin Castle in January; Homebond, which is the guarantor of new houses in the State, attracted between 400 and 500 people at eight meetings across the State; and an energy summit was held. None of the concerns that were articulated before the Minister introduced the regulations was repeated at those forums. In other words, the industry accepted that the changes were here to stay and that it had to get on with it.

1069. Mr Beggs: I appreciate what the Minister said. However, I want to return to the EU directive on improving energy-efficiency targets for new homes. Will the directive necessitate an increase in the use of renewable energy?

1070. Ms Neary: Are you referring to the Energy Performance of Buildings Directive?

1071. Mr Beggs: You mentioned 2010 and the aim of increasing energy efficiency in homes by 20%, with a requirement on using renewables to achieve that. Have I misunderstood?

1072. Ms Neary: That target relates to our national programme. We used the technical guidance in part L of the Building Regulations 2005 as a baseline for new homes. This year, energy efficiency in homes will increase to 40%; by 2010, we intend to increase that by 20% to 60%.

1073. Mr O'Grady: It is a national target not an EU directive.

1074. Mr Beggs: How did the Department ramp that up to allow the industry to adapt? Will a great deal of new developments suddenly appear as a result? How much warning has the industry been given about the new targets?

1075. Ms Neary: The new guidance in part L of the Building Regulations 2007 stipulates that the fabric of a building must reduce heat loss as much as possible.

1076. It details the required level and performance of insulation required to reduce heat loss. The guidance also incorporates methods of reducing thermal bridging. Gaps in insulation — allowing a cold surface on the outside to come into contact with a warm surface on the inside — can lead to heat loss, mould growth and condensation, none of which we want. There are accredited and acceptable guidelines on how to reduce thermal bridging, which we now promote. The guidance also provides information on how to reduce air permeability — caused by uncontrolled ventilation — through a building. Mandatory renewables are another step.

1077. On the building services side, it must be ensured that heating systems are properly controlled and that an efficient boiler is put in place. Is that what you are asking me about?

1078. Mr Beggs: The key question is how much warning was the industry given about the mandatory renewable-energy aspect?

1079. Ms Neary: We started the process about this time last year.

1080. Mr O'Grady: The process started last July. The industry asked for a 12-month transitional period, which would have lasted until the end of this year.

1081. However, the Minister decided that it should end on 1 July 2008. That still amounts to a 12-month transitional period. The Building Regulations 2007, Technical Guidance Document, Document Dwellings L, was signed on 24 December 2007. It stipulates that where a planning application is in place before 30 June 2008 and substantial construction has been completed by 30 June 2009, it is exempt from those new standards. That means that there is six-month and a 12-month transitional period. The system clicks in when the new standards become applicable. The real transitional period is six months, but from 1 July next year designers and architects will have to incorporate renewable technologies into their designs, whether up in the roof or with CHP.

1082. It is a tight system with a limited transition period. However, there seems to have been an acceptance that the law has changed and that people have to deal with it. I am not dismissing the concerns of the industry. However, the situation is similar to that which Paul Everall described earlier when he used the analogy that in England people were saying that Armageddon was on the way.

1083. Mr Neary: The industry was heavily involved in public consultations about the regulations last year.

1084. Mr O'Grady: The Minister said that he was keenly aware of what was happening and he told us to listen to the industry. He said that because we made the laws, we must help the industry to articulate them. Since 1 January this year we have been holding talks with the National Standards Authority of Ireland and the Irish Agrément Board in an effort to get renewable products certified. We have been engaged with Enterprise Ireland to get new competence centres linking third-level colleges with the construction sector.

1085. We have been talking to FÁS, the national training authority, and have discovered that, given the pace of change, we can no longer sit in a room and write regulations; we have to engage with stakeholders and with the various support structures in the economy to empower them to comply with the law.

1086. Mr O'Loan: What is in your policy framework for existing buildings?

1087. Mr O'Grady: To answer your question about the situation for existing buildings faithfully, I have to say that we hit the ground running with the appointment of a new Minister last year. Our plan in the Department of the Environment was to achieve 40% improvements in energy efficiency by Christmas Eve. We had no target whatsoever for existing buildings. At the energy forum the Minister announced that he would work with the statutory Building Regulations Advisory Body and that that body will produce realisable and ambitious targets in the short term — by September or December — that will be politically achievable by the Minister. The regulations would be mindful of what the industry has been saying about the initiative on renewables and its concerns that the initiative was overly penal and unnecessary because the 40% target could be achieved without introducing a mandatory level of renewables. We do not have targets, but the Minister is committed to introducing new standards by 2010 that have not been yet articulated. There will be a new 60 % standard for new houses and there will also be new standards for non housing stock — buildings other than dwellings.

1088. Ms Neary: For existing homes, the Department of Energy, Communications and Natural Resources has a fund and is working on a scheme to offer grants to certain areas.

1089. Mr O'Loan: Therefore grants are awarded to provide encouragement.

1090. Ms Neary: Yes, and several counties have been highlighted as target areas to start the process.

1091. Mr O'Loan: Will schemes for groups of houses be a better way forward than schemes for individual houses, and are there mechanisms to encourage that?

1092. Ms Neary: Combined heat and power as an alternative to microrenewables for either a small community or an apartment block was one of the areas in TGDL that we address, concerning a group of buildings rather than individual buildings. Sustainable Energy Ireland had a scheme called House of Tomorrow, through which small estates of between 20 and 100 houses could apply for a grant if they achieved what is now the standard, which is a 40% improvement on the 2005 regulations. That scheme has been operational in the industry for a while, and several estates have been implementing it and achieving the 40% improvement. There is talk that that scheme will continue and that the new standard will be 60%, which would pave the way for our change in regulations in 2010. That applies only to estates of houses or apartments.

1093. Dr Farry: I will start with a very difficult question. Has your Government produced any projections on the percentage of people who will be living in dwellings built after 2008 when the new regulations come in to deal with the distinction between a certain category of regulations for newbuilds and the legacy of people living in existing houses? Has your Government made any projections concerning what percentage of the population will be living in post-2008 buildings by, for example, 2020 or 2050?

1094. Ms Neary: Yes. We have statistics that apply up to 2020, I think, although I do not have them to hand. They show quite a high population increase.

1095. Dr Farry: On reflection, we should ask our own Administration to determine trends to see their effect on how we address the problem through newbuilds.

1096. Your documentation suggests that in the Republic of Ireland legislative building control and planning are controlled by the same Department. What are the advantages of that? In Northern Ireland the Department of Finance and Personnel controls building regulations, whereas the Department of the Environment controls planning. In the Republic of Ireland, how critical is the link between building regulations and planning? Paul Everall said that he considered planning to be potentially more effective than building regulations in devising regulations.

1097. Mr O'Grady: It is essential that the challenge be dealt with holistically; it cannot be tackled on an individual basis. The Minister issued two sets of guidelines on sustainable development and sustainable housing and commented specifically on that matter at the 2008 energy forum.

1098. The Minister is not solely concerned with building control or his plans to introduce new light bulbs by 1 January 2009; rather, he adopts a holistic overview of his ministerial responsibilities. He talks about the retro-fitting of social housing — because he has a budget for social housing — and local authorities' housing programmes and requests that they devise demonstration projects.

1099. Although it is not rocket science, it is critical to success that the Minister be responsible for both areas and that there is sustained dialogue between us and the planning section. In the Department of the Environment, Heritage and Local Government, building control forms part of the planning and heritage section, and we meet other senior managers monthly; that connectivity is essential.

1100. The Chairperson: Was that always the case?

1101. Mr O'Grady: I understand that it was.

1102. Ms Neary: As Paul Everall said, it is important not to confuse the two and implement building control through planning and vice versa. We constantly encounter a grey area between the two. However, being able to discuss and define that grey area is the advantage of being in the same Department. In another Department, it would be more difficult.

1103. Dr Farry: Do the regulations in the Bill allow developers or builders to determine which renewables to employ? That may not necessarily be achieved through microgeneration but through buying into different technologies individually or collectively. Does such flexibility exist?

1104. Ms Neary: The requirement is that 10 kilowatt hours per metre squared per annum of renewable energy sources must be used. The legislation states "a reasonable proportion" of energy must be derived from renewables, and the guidance defines that amount. There is flexibility as regards how they comply with that.

1105. Dr Farry: Although it might be outside the remit of the Department, there is debate about the efficiency of renewables technology, and there is much uncertainty about how that efficiency will improve over time with innovation and research and development. Is the market in the Republic of Ireland self-contained or is it part of a wider European market? How does the Government of the Republic interact with its colleagues in Europe to co-ordinate the pump-priming of the market? Can you encourage large technological developments on a stand-alone basis or must you work with European colleagues to drive that forward?

- 1106. Ms Neary: Ireland is a small, open economy, and therefore we import construction products from all over Europe.
- 1107. I am not sure whether your question relates particularly to renewables. However, many of the products that I have seen come from Austria, Germany and the Scandinavian countries; some products are also being developed in Ireland. There is a strong import into the market.
- 1108. We have funding for research in the construction industry. Chris might want to say more about that.
- 1109. Mr O'Grady: We would not overestimate the fact that we are major players in the game, and many of the products come from Germany and Austria, as Sarah said. However, there are two arms. First again at the famous energy summit the Minister for Enterprise, Trade and Employment, who has a massive budget for Science Foundation Ireland, announced a third pillar for the orientation on the Science Foundation Ireland. It has something like €1 billion over eight to 10 years, and the third pillar would be research into the energy sector with a view to seeking the elaboration of products that will have a commercial viability.
- 1110. Secondly, I met Enterprise Ireland last week in its offices in Glasnevin. It has a seven-year window of €3 million per annum and it is trying to get the construction industry to elaborate strategies with third-level sectors for competence centres. They are in 15 sectors of the Irish economy construction being one. We had a very good meeting. The people in the construction sector are very busy, but the opportunity could not be missed. However, products, strategies or methodologies would have to have transferability and a commercial value and also be export-orientated. The will and the resources are available, but I would not claim that there were major players.
- 1111. Mr Storey: Your paper referred to the additional cost of the new regulations to semi-detached dwellings, which is estimated at about €10,000. Does that figure include replacing oiland gas-fired boilers in existing dwellings? The regulations came into force on 1 April 2008.
- 1112. There has been a massive change. How have people reacted when they realised the financial implications of the regulations? Can the additional cost be offset against the benefits of insulation and the savings that can be made?
- 1113. Ms Neary: Ten thousand euros covered the cost of making a typical two-storey semi-detached house compliant with the new standards. As far as I can remember, it was based on a gas boiler with 86% efficiency. That is one example that showed how the regulations will apply and how much they will cost.
- 1114. The efficiency standard for replacement boilers is also 86%, which generally means that it is a condensing boiler. That was not taken into account, although we would have given an indicative estimate of the extra cost of a condensing boiler, which is marginal to replacing a boiler with one of a lower efficiency. That figure would not take into account existing situations, but the cost of moving from a traditional boiler to a condensing boiler is marginal.
- 1115. In general, people have accepted the regulations well. They are aware of the issues involved and want to move towards more efficient mechanisms. The condensing boiler has a very short payback period, and the expense is recovered in about five years.
- 1116. That is an easy sell. People in existing houses do not have to meet the same 40% improvement standard; that will be done voluntarily through a grant scheme: it will not be imposed. We have not had objections to the regulations on newbuild, which have generally been accepted by the public.

- 1117. Mr O'Grady: There is also a market response in the South at the moment. Houses are €30,000 to €40,000 cheaper than they were six months ago. That gives some wriggle-room for the developer to absorb the additional costs of changes that he or she must make by law but still have a product that is cheaper than it was several months ago. That is a significant factor in easing the pain of the measure; although the jury is out.
- 1118. The Chairperson mentioned regulatory impact assessments and the research that the Committee has had carried out. The full text of our regulatory impact assessment is on our website, www.environ.ie. The Committee's researchers may wish to use it. The precise elements of the new regulations are in the new Part L Building Regulations SI 854 of 2007, reflecting the fact that the Minister signed the regulations on 24 December 2007. I can supply that information in case you need the reference.
- 1119. The Chairperson: Thank you. In your briefing paper on building control and regulations you point out that the 37 building-control authorities do not have the power to type-approve. Please elaborate on how new or innovative systems or materials are approved. How would a developer who operates on a cross-border basis and who has type approval for an innovation or who uses new materials or systems in the North be dealt with?
- 1120. Ms Neary: We do not have a certification process, so we do not have a type-approval process. A developer must comply with the requirements of the regulations and a building control officer may request information or a demonstration to prove that. That is dealt with on a case-by-case basis around the country.
- 1121. With respect to innovative products, the Irish Agrément Board is the first port of call to have innovative products accepted by the market, by local authorities and, for funding purposes, by the Department of the Environment, Heritage and Local Government. We have several tax-relief schemes that are monitored by our inspectors, and they award certification. They require full certification for any innovative product or anything we are not familiar with generally through either an approval body in the European system or a European agrément body that can show equivalence. Such innovations must be suitable for use, safe and must comply with Irish building regulations. That is generally how innovative products are assessed.
- 1122. The Chairperson: What if a disagreement arose? Paul Everall spoke of a technical group that would be asked to resolve disputes on behalf of building control authorities. How are such disputes resolved in the South?
- 1123. Ms Neary: They are resolved on a case-by-case basis; there is no determination process. The Department's inspectors lead the way in that respect; they are involved hands-on in particular projects.
- 1124. Mr O'Grady: I will clarify that. That would not be the responsibility of the building control mechanism. Floor-area certificates, which are issued by our inspectors, enable a builder to claim stamp duty on a new dwelling. Our inspectors insist on 60 years' durability, which the industry claims is excessive. However, yesterday we discussed with the Irish Agrément Board and the National Standards Authority of Ireland how we can reconcile that level of durability with new solar panels from Taiwan, China and Germany. We need reliable information on how durable they are. The jury is still out on what precise structures we can use, but the debate is ongoing.
- 1125. The Chairperson: That seems to be all the questions. Thank you both for an interesting and helpful session. As always, it may be necessary for the Committee to correspond with you as we proceed with our work, and if that is the case I hope that you be able to elaborate further. On behalf of the Committee, I express our appreciation for your taking the trouble to visit us today.

7 May 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Roy Beggs

Mr Simon Hamilton

Mr Adrian McQuillan

Mr Declan O'Loan

Mr Peter Weir

Ms Dawn Purvis

Witnesses:

Professor Sue Christie

Northern Ireland
Environment Link

Mr Robert Colvin Craigavon Borough Council

1126. The Chairperson: I welcome Sue Christie, the director of Northern Ireland Environment Link and Robert Colvin from building control in Craigavon Borough Council.

1127. Professor Sue Christie (Northern Ireland Environment Link): Thank you for inviting us, Chairman. I am afraid that because of a sore throat I sound quite bad this morning, but I will attempt to say as much as I can. I will ask my colleague, who does not squeak, to make most of the comments. Northern Ireland Environment Link is the forum and networking body for environmental non-governmental organisations (NGOs). It represents 50 NGOs and they, in turn, represent approximately 100,000 citizens in Northern Ireland.

1128. Building regulations have an important role to play in combating climate change and promoting financial growth in Northern Ireland. Energy use in buildings — whether in homes, offices or industry — accounts for 81% of the non-transport energy consumption in the Province. Therefore building regulations will control a highly significant proportion of the total use.

1129. As promoted throughout the Assembly, action must be taken to achieve a 3% reduction in carbon dioxide emissions per annum. That target forms part of the UK's climate change Bill, which will be introduced into Northern Ireland later in the year. Data show that to reach the 80% reduction deemed necessary to avoid the worst consequences of climate change, a 3% year-on-year reduction must be achieved. Northern Ireland has a duty to play its part and should therefore set its own specific targets. Rather than being at odds with the economic development of the Province, such a reduction will provide a major stimulus to it, and it will be one step towards Northern Ireland's becoming a leading low-carbon economy.

1130. Building regulations have a major role to play, and although recent changes were positive, they did not go far enough. Even over the past year or so — and certainly since the regulations were developed — there have been significant changes in the price of oil and the security of supply. There is now, therefore, increased urgency to act on CO2 emissions. Insulation and the reduction of waste are fundamental to making Northern Ireland a lower-carbon economy.

1131. As the cost of energy increases, it will become even more crucial to invest in the early-stage development of technologies to reduce energy use in order to prevent people incurring high costs in the longer term that they will be unable to afford. Given the high level of fuel poverty in Northern Ireland, that is particularly important for the housing sector.

- 1132. It is inevitable that the cost of energy will continue to increase. As it does, it will become increasingly advantageous to the economy and the environment to incur the upfront cost of technology rather than the longer-term cost of the energy used in buildings. The financial drivers will continue to increase with the likely introduction of carbon pricing and carbon taxes. The security of supply is already an issue and, therefore, it is important to diversify the sources of energy as well as reduce the amount of energy used.
- 1133. Government must lead by example so that people in all sectors will follow suit. As a major contractor, with £1·8 billion of annual expenditure, they must also be drivers for change in Northern Ireland business. Northern Ireland must demonstrate that it has the highest possible standards to provide impetus for new products and businesses.
- 1134. Many opportunities for the generation of renewables exist in Northern Ireland: for example, microgeneration in buildings is estimated to cost from as little as £6,000 per dwelling. That can come from a variety of relevant sources, such as photovoltaics, wind, ground-source heat pumps or deep-heat sources.
- 1135. The type of renewable energy relevant to any particular building or dwelling must be related to the site of the building, the available energies, the intended use of the building, and possible alternative sources of energy such as chicken manure. There is also the possibility of macro-generation through local sources, either through combined heat and power stations that use waste products or other renewable resources, which can then be a requirement for new housing or commercial developments. That will ensure that new developments will benefit the local economy and not be a drain on it because of their energy requirements.
- 1136. Northern Ireland has many sources of renewable energy, including waste products. We need to look at the most appropriate technology for the needs of an area; we also need to include lifetime costings of carbon including the fuels used for a building as well as the incoming carbon pricing regimes. For any development, an environmental and social impact assessment is needed, as well as economic impact assessments, to ensure that the development is the right one for the future; not just the most economically viable development for a developer for today, but something that will benefit Northern Ireland's people for many years to come.
- 1137. Thermal treatment is often used as a euphemism for the incineration of municipal waste. There is nothing particularly wrong with the various types of thermal treatment, but it should only be used where it is the best available technology with the highest energy output. It should not be used as a catch-all or as an excuse to meet our waste regulations through burning everything to generate a little bit of energy. There must be a balance so that we get the best possible outputs from all our energy.
- 1138. The Committee commented on specific points that we raised, but we thought that today it would be more appropriate to discuss general issues. We welcome the new rating systems and hope that people will be able to understand them. However, there is much still to do. We would like to see more in the building regulations, for example, and requirements for recycled products and water-saving devices in new buildings. There is also a need to go beyond the consideration of new buildings only; they are significant, but most buildings are not new. We can retro-fit existing buildings without demolishing them and starting again. There should be considerable coordination between building regulations and planning to ensure that we end up with the best local solutions; not just the cheapest option at the moment, but the best longer-term solution.
- 1139. Mr Robert Colvin (Craigavon Borough Council): I agree with Sue. Building regulations have played an important role in advancing the environmental agenda from 1977 when provisions for the conservation of fuel and power were included in them. That was a response to the oil

shortage of the mid-seventies, and it expanded the existing regulations, which dealt primarily with health and safety. Conservation of fuel and power thus became included as an aspect of building regulations, and of course the Committee will be fully aware that that is still valid, considering the attitude of the European Union towards sourcing energy from external countries. The provisions in the Bill are timely and welcome because they address recycling, sustainable development and the environment.

- 1140. One of the advantages of the building regulations is that they create a level playing field for everybody. Everybody knows exactly what the rules and regulations are and they know how to price their product, so everybody starts off at the same point. Building regulations have an important role to play, but we should not forget the important role of planning.
- 1141. Planning plays an important part in building regulations. A group from Sweden gave a presentation last week about the use of combined heat and power or district heating. Their argument was that when a new development of, say, 50 to 100 houses is being built, owners should be able to avail themselves of some form of combined heating and power system. That would provide homeowners with a choice and local authorities with a vehicle to recycle waste, which, I am sure you are well aware, will be a major issue in future. If people do not recycle, the European Union could impose draconian penalties on Northern Ireland. If Craigavon Borough Council does not recycle more, it could face penalties of millions of pounds.
- 1142. Combined heat and power enables waste to be used, and it should be considered in conjunction with planning. I hope that members will be able to explore some of those issues in their questions.
- 1143. The Chairperson: Thank you. We would like you to consider the Committee's response to the building regulations and return your comments on it to help us to complete our report for the Consideration Stage of the Bill. We would appreciate it if you could do so by the start of business on Monday, although I realise that that is a tight timetable.
- 1144. Professor Christie: We received the response when we arrived here today. We saw nothing objectionable in it, but we will look at it again.
- 1145. The Chairperson: I am sorry to give your throat more trouble; I am sure that Peter will be very gentle on you.
- 1146. Mr Weir: First, you talked about the need for convergence to ensure that planning and building control worked together. Will that convergence be achieved when planning and control are governed by one body, namely the appropriate local council?
- 1147. At local level, there can be frustration when the two do not match. You offered a strategic view that covered broader issues about the way forward, but what improvements would you like to see made to the Bill?
- 1148. Mr Colvin: The Bill is timely and appropriate, as it enables the Department to generate regulations that it feels will be necessary in future, which to an extent makes it future-proof.
- 1149. Combined heat and power systems are recognised sources of energy and technology. Therefore it is appropriate that the Department can take that forward through regulations by incorporating the consideration of combined heat and power systems into the planning process. That is critical if we are to address the issue of waste and to build zero-carbon homes.

- 1150. At present, the building regulations address recycling, but there is no stipulation as to how much people should recycle. Guidance could be provided on the percentage that should be used. Many people already use recycled materials such as bricks and old chimney pots for aesthetic reasons when building their homes, but more could be done. We are fortunate in Northern Ireland, as we have many quarries that provide aggregate for building, and there is no reason why we could not develop those.
- 1151. Northern Ireland probably has enough water to meet its needs; however, the misuse of water is an important issue. We should not wash our cars or flush our toilets with drinking water.
- 1152. Water is a valuable resource that appears to be plentiful in Northern Ireland, but it should not be taken for granted. The more efficient use of water is a worldwide issue that should encourage more widespread methods of re-use in Northern Ireland, including water harvesting and the use of grey water.
- 1153. Mr Weir: What is grey water?
- 1154. Mr Colvin: It is the stuff that comes off the roof and runs into a water butt. Many people use it for watering gardens, but it can also be used to wash cars and for other purposes. A useful stipulation would be that grey water should be stored rather than allowed to run off into a watercourse or soakaway, which happens commonly in Northern Ireland.
- 1155. Professor Christie: Grey water poses a potential flooding problem by increasing the volume of water in our sewerage system. By separating the collection systems for grey water and rainwater from the sewage flow we can create a win-win situation for water treatment and usage.
- 1156. I do not know how many members of the Committee are seriously into gardening, but we have had little rainfall for several weeks now and the water level in my pond is way down. Water shortages are and will remain a problem in Northern Ireland, and they will significantly influence the type of crops that we grow. Hosepipe bans and the rationing of drinking water will no longer be things that happen elsewhere in the world; they are and will remain a reality in Northern Ireland. The old adage that Northern Ireland has so much water that people should not have to pay for it no longer holds.
- 1157. The Chairperson: Do you hear that, Robbie?
- 1158. Mr Colvin: I hear that, Chairman. Sue is right: we have always assumed that we have plenty of rain in Northern Ireland, but things are changing.
- 1159. On a separate point, I welcome proposals for the protection and enhancement of the environment and the promotion of sustainable development. However, should the Bill not emphasise the benefits of recycling, which will have such a critical role in future? Will the Department include a recycling element in its proposals or will that come from somewhere else? Either approach is fine.
- 1160. Mr Hamilton: Why do you seek to change the terminology in clause 2 from "protected buildings" to "historic buildings"? The term "protected buildings" in the Bill is quite narrow; does your approach make it even narrower?
- 1161. Professor Christie: No; based on advice from our colleagues in the Ulster Architectural Heritage Society, we believe that the term "protected" widens the definition.

- 1162. The problem is that "protected buildings" could refer specifically to listed buildings. We would like to broaden the scope to include all buildings in conservation areas and historic buildings that may not be listed for a specific reason but which contribute to the landscape and the historic environment.
- 1163. The Chairperson: Is there not a danger that an "historic" building could be narrowly interpreted to exclude a whole range of buildings that you might otherwise wish to protect?
- 1164. Mr Hamilton: That is my concern. "Historic" implies a very particular aspect of a building.
- 1165. There is more to the built environment that we may wish to protect than simply buildings of a particular age; there may be buildings of recent vintage that are important and should be valued. Proposed article 3A(2)(b) to the 1979 Order states that the meaning of "protected buildings" includes "buildings situated in conservation areas". My concern is that the term "historic buildings" may be too narrow. I think that we have similar aims, but our interpretation may be somewhat different.
- 1166. Professor Christie: My empty-desk colleague might say something specific about that. I am concerned to ensure that we do not narrow the definition just to particularly finely built buildings that have been given protection. What sort of non-historic buildings would you like to see protected?
- 1167. Mr Hamilton: Perhaps terminology such as "protected" and "historic" is insufficient. There are recent buildings that one might wish to protect.
- 1168. Professor Christie: Perhaps you would prefer the word "heritage"? We may require a different term.
- 1169. The Chairperson: The Department of Finance and Personnel refers to protected buildings as prescribed by legislation; however, I am unsure of that definition. Perhaps you could address that point in your response. It might be a good idea for today's Hansard report to be passed to DFP so that we can get its opinion.
- 1170. Mr Hamilton: It is an interesting subject. Despite our choice of different words, I think that we share the same concerns.
- 1171. The Chairperson: One would not wish to narrow the scope inadvertently.
- 1172. Mr Hamilton: That is right.
- 1173. The Chairperson: Was there a positive response in England to the Renewables Advisory Board's report?
- 1174. Professor Christie: Yes. Northern Ireland is heading towards legislation that might prove useful and which will run parallel to English legislation that requires microgeneration in new buildings. Although there may be concerns about that in relation to CHP, and macro-scale requirements might be preferable to individual micro-scale requirements, the requirement for some sort of renewable energy in every new development seems to be a good way forward.
- 1175. We must ensure first that we use and waste as little carbon as possible. Renewable energy generation is good for three reasons: it diversifies energy supply; it decreases the demand for CO2 production; and it is a public-relations exercise people can see that the technology works and they are therefore keen to have it. In Northern Ireland, people still believe

that photovoltaics do not work because we do not have much sun — which is not true — and that wind turbines are still not good enough for microgeneration on buildings — which is true.

- 1176. A requirement for renewable energy generation on all new buildings would be a big driver for indigenous industry which is always good to continue installing such systems, as the number of installations may decrease as we approach the end of EREF money.
- 1177. Although the Building Regulations (Amendment) Bill is different from the legislation in England for including such a stipulation, building regulations could ensure that a proportion of materials used is recyclable and that some proportion of energy requirements is met from renewable sources.
- 1178. Mr Colvin: Members are perhaps aware of a report that was recently produced by the Confederation of British Industry entitled 'Climate Change: Everyone's Business'. I became aware of that report because I was invited to an interesting sustainable development masterclass that the Office of the First Minister and the deputy First Minister (OFMDFM) recently ran in the Culloden Hotel. If members are already aware of the report, please forgive me for repeating what you already know.
- 1179. The report said that most taxes and regulations that were designed for the old economy must undergo a fundamental redesign, including fiscal policy and building regulations, in light of the new information. With the right focus, research and development, the report suggests that we and when it says "we", it means the UK, although Northern Ireland has a great deal of expertise in that area can be at the forefront of new, low-carbon technologies that could power the world economy.
- 1180. I am aware that the economy is at the centre of the Assembly's attention, but the Assembly has also recognised the role of sustainable development, not only in addressing climate change but in creating sustainable jobs. We are all aware of what has been happening to old technology industry jobs. As Sue said, we could create many new technology jobs.
- 1181. There must be a role for renewable technologies in the future. They will inevitably be required, because an oil boiler could not be used in a zero-carbon house. Although such a house would not need a great deal of heating, another method of heating would be required, most probably by some form of renewable technology.
- 1182. Some people are concerned that renewable technologies are not as efficient as they should be. Some are not, but how will they develop unless they are given a stimulus? Government could support a fledgling industry that could be very good for economic development, create many jobs, and address the issues that we are discussing today.
- 1183. Despite debate about some of the issues, we can all agree that conserving fuel and energy is very important in ensuring that we become less dependent on external sources of fuel. I also recognise that some of those sources that we rely on are depleting and are therefore increasingly expensive.
- 1184. Research and development is tied in very closely with renewable technologies, and the report, which was compiled by hard-nosed business people, shows that there is a role for it. That was borne out by the Stern Review, which showed that economic opportunities exist to do something about those matters now rather than wait until it is too late.
- 1185. Despite concerns about them, renewable technologies must be given serious consideration. The Committee should consider giving some direction in the regulations about how renewable technologies should be used in the construction of new houses.

- 1186. The Chairperson: We discussed that issue last week. The escalating cost of fossil fuels has made renewable technologies a much more sustainable future option.
- 1187. In your paper you say that biomass is not necessarily the panacea. At the risk of doing more damage to your throat, Sue, could you pick up on that and give us some further thoughts?
- 1188. Professor Christie: There are two issues with biologically derived fuels. The first is biomass, which is energy from plants such as willows, forest brash or other crops. That provides a huge opportunity. There is also a huge opportunity for Northern Ireland through waste products. We produce a great deal of waste, and it is a terrible shame to see it being treated as a problem by burying or burning it. Waste should be used because of the nutrients in it; there is potential in anaerobic digestion and in aerobic digestion.
- 1189. The controversy arises through biofuels, which produce oil products from food or land that would otherwise be used to produce food. That is where the problem arises, locally and globally. Locally, it may be advantageous, at the moment, to produce wheat and convert it into oil for burning in cars. You can put it down to economics and say "That is life". However, on a global scale, we are facing starvation there is no other word for it. This year, because of increased demand for rice and the change in crop production in America, primarily —from corn and soybeans for human consumption to crops for biofuels production, we have seen a huge rise in global food prices. Big ethical questions arise about whether Americans have the right to grow crops to produce fuel for their cars, when they could grow crops that would save lives in other parts of the world. We probably do not want to get into that debate here.
- 1190. There is almost certainly a market in Northern Ireland for rapeseed oil to produce biofuels. There is less controversy about biomass and secondary biofuels, which are derived from waste products such as straw instead of from wheat grain. In that way, the wheat may be harvested and used for human food, while the straw can be used to produce biofuel. There are definitely ways forward.
- 1191. International arguments come down largely to economics. Large swathes of tropical countries that are under virgin rainforest or which are used for other purposes are being converted to soybeans or palm oil, which are used directly for biofuels. That diverts land from virgin rainforest and produces huge amounts of CO2. The life-cycle balance of biofuels is nothing like as positive as it appears in simple, one-line calculations. The destruction of carbon-reducing virgin rainforest is a huge issue.
- 1192. Mr Beggs: I am interested in your comments on the planning processes for large-scale developments that use combined heat and power. Could 50 to 100 houses count as a unit to which microgeneration could be applied or is the viable unit bigger than that? The technologies are proven and are widely used elsewhere.
- 1193. Mr Colvin: Sue may have a view on this. Combined heat and power is recognised in other parts of Europe as the way forward. Those who have industrial waste bring it to a plant and pay to get rid of it. Not only can a plant sell energy cheaply, but it is paid to dispose of waste.
- 1194. The figure that I have presented will have to be researched by the Department to find out what would produce best value. However, I can offer an example: it is not uncommon, in places such Craigavon, to get an application for perhaps 180 houses, each of which is to be independently heated with its own oil boiler. To look at this from a different perspective, it seems a shame that there is no facility to heat that number of houses. Not only new houses could be heated, but existing ones as well. In Sweden, pipes for combined heat and power are laid along with those for other purposes, such as gas.

- 1195. Such a decision, however, will have to be taken at the highest level; that is why I bring it to the Committee.
- 1196. Mr Beggs: Your submission refers to the Minister's decision not to proceed with mandatory microgeneration. Other evidence shows that increasing insulation is better for the long-term use of a building. Since a building will last 100 years or more, it is better to invest in insulation and make it more efficient from the beginning.
- 1197. I accept that microgeneration is likely to become a necessity in every home in future. However, do you agree that particularly given the standard of building regulations increasing insulation levels is the most efficient and environmentally friendly method of reducing energy consumption?
- 1198. Professor Christie: It is not a question of either/or. We must increase insulation levels; avoiding waste is a primary concern. However, increasing insulation is not an alternative to providing renewable-energy in buildings that can produce the required residual heat and power. Buildings can be perfectly insulated, and can employ passive solar technology using light tubes and windows facing in the right direction. However, people living in such buildings will want to take the odd bath or run the computer; there will always be a need for additional electricity and hot water. It is not an either/or matter; renewable-energy is an additional requirement. Insulation decreases the amount of energy lost and the amount of energy needed for heating. However, microgeneration is required for hot water the most obvious example because insulation cannot provide that. Photoelectric hot-water heating is the best technology available and, in addition to insulation, it is useful. We must address all the power needs of a house.
- 1199. Mr Beggs: Surely, it would be better to promote efficient forms of renewable energy, such as solar water-heating systems, rather than expensive forms such as photovoltaics. Photovoltaics do not make economic sense and their promotion could put people off renewable energies. Do you agree that it would be much better to promote sustainable, energy-efficient systems that make financial sense in order to encourage people to use renewable sources?
- 1200. Professor Christie: I agree, within reason. Hot-water heating is the best system. However, to drive technology and research and development we must assess the viability of photovoltaic installations. Hot-water heaters and photovoltaics are not directly substitutable. Hot-water heaters provide only hot water, but photovoltaics create electricity that can be used to power computers and lights. As renewable energy technology becomes increasingly important and demanded throughout the world, the techniques and materials used will improve. Although some of the materials used in the generation of photovoltaics are not overly abundant, new technologies are being developed throughout the world and Northern Ireland should be at the forefront of that.
- 1201. We should promote existing and proven forms of renewable energy. I would not advise anyone to get a small-scale wind turbine because although big ones work they are simply not proven to work. However, we must push the boundaries and create demand rather than lag behind and use other people's technology. You are probably aware that a firm in Bangor was at the forefront of developing the current generation of water heating.
- 1202. Why can we not continue that in other areas?
- 1203. Mr Colvin: It is important to look ahead to 2016, which the Department has defined as the time for the zero-carbon house. I do not think that that can be achieved without some form of suitable renewable technology to assist in the way that Sue has just outlined.

1204. The Chairperson has already referred to the horrendous cost of energy. A guy who lives near me has a 7,000 sq ft house, and he complains that it costs him £25 a day in oil alone to heat it, which is a massive bill. Such expense is driving people who would not normally complain about the price of fuel to start squealing a little bit. He has voluntarily asked an environmental consultant for advice on how he can reduce his fuel bill, and he is now looking at the solutions that Sue has suggested. The market has changed rapidly

1205. The Chairperson: Four hundred per cent in seven years, and we are looking at targets for seven years' time — who knows what will happen? It is time that the economic factor became the determinant. There is an assumption that fossil fuels are the answer. Perhaps your man does not need such a big house.

1206. Mr Colvin: That is true.

1207. The Chairperson: Is it an hotel?

1208. Mr Colvin: An architect was given a brief to design a house in a certain part of the country. His client showed him a house and said that the one he wanted must be bigger than that.

1209. The Chairperson: Thank you very much; your presentation was most helpful. It would be useful to send the Hansard transcript to DFP for a quick response. We are approaching the deadlines by which we must respond. Professor Christie, I hope that your throat recovers in time.

1210. Professor Christie: Thank you very much. I apologise again.

14 May 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Ms Jennifer McCann

Mr Adrian McQuillan

Mr Declan O'Loan

Mr Peter Weir

Witnesses:

Mrs Hilda Hagan Mr Seamus McCrystal Department of Finance and Personnel Mr Gerry McKibbin

1211. Mr Seamus McCrystal (Department of Finance and Personnel): We have not provided the Committee with an additional submission because we feel that this session is more of an opportunity for the Committee to question us on the evidence that it has heard. Having listened to the evidence that was presented to the Committee, and having read the written submissions, we are pleased that there was a broad acceptance of the content of the Bill — although perhaps

not total unanimity. We have had a lot of engagement with stakeholders, so that is as we would have expected it to be.

- 1212. In particular, we had extensive discussions with Building Control, and we were somewhat surprised to learn that a number of the matters that we had discussed and agreed with Building Control would not be included in the Bill. Those issues featured prominently in its evidence, and some of the matters that it presented had not been discussed with us at all. The Committee may wish to address those issues with us.
- 1213. Microgeneration is an issue that prompted considerable discussion in both oral and written submissions, and the Committee may wish to raise that matter with us today. I want to put on record that the Department disagrees with the Sustainable Energy Association's views on how civil servants briefed the Minister on microgeneration and the building regulations, and on the information that we provided to the Minister before he made the decision not to make mandatory a requirement on renewables.
- 1214. That is all I want to say for now. If there are matters that we are unable to clarify today, we can forward written submissions to the Committee.
- 1215. The Chairperson: To make the discussion manageable, we will go through our analysis of the evidence page by page and I appreciate that you have just received it. You can respond as we go through, or Members can raise issues. We have noted your comments on microgeneration, and we will deal with it separately.
- 1216. Mr O'Loan: What about the issue of a clear definition of "biomass"?
- 1217. Mr McCrystal: This issue arises from the Northern Ireland Environment Link paper. We propose that the Bill provide the all-encompassing powers and that any specific requirement be written into the building regulations.
- 1218. Mr O'Loan: So the issue will be addressed through regulations?
- 1219. Mr McCrystal: If we had to make specific recommendations to require low- or zero-carbon technologies in the building regulations, and we had to deal specifically with fuel for biomass, those matters would be dealt with in the regulations rather than through the Bill's overarching powers.
- 1220. The Chairperson: Does that indicate a commitment that there will be a definition, either in regulations or elsewhere?
- 1221. Mr McCrystal: We will obviously have to look at that matter in more detail. The definition of "low or zero carbon system" in the Bill is similar to that in comparable legislation in the South of Ireland and in England and Wales. We will examine the issue. However, I am not sure that beside the word "biomass" in the Bill there should be brackets to expand or clarify what is meant by it. Clarification would be needed only if we were making specific regulations or providing guidance.
- 1222. Mr Beggs: Has the Department any view on the strength of wording that should be associated with the flexibility for building control departments to ensure that a building's character can be protected?
- 1223. Mrs Hilda Hagan (Department of Finance and Personnel): At the moment it says that councils must "have regard to" protected buildings. The Office of the Legislative Counsel has

advised that, where a sanction is not really available, the wording cannot be strengthened to say that councils "must" do anything. If they failed to do it, a penalty would have to be available. The Office of the Legislative Counsel has advised that it might be slightly stronger or tighter to say "take account of". We can consider whether to put forward an amendment to the Bill that changes "have regard to" to "take account of". "Have regard to" seems to suggest that one can also disregard it if one so wishes.

1224. The Chairperson: So you are saying not that you will substitute the words "take account of", but that you will consider doing so?

1225. Mrs Hagan: Yes.

1226. The Chairperson: Will you advise the Committee of your conclusion? We may want to reflect a view in our report.

1227. Mrs Hagan: Yes.

1228. Mr F McCann: Many historic buildings have been demolished without regard or fear of punishment. The Bill must reflect that. It would be interesting to find out how many people have ever been prosecuted for simply going ahead and demolishing a building.

1229. Mr Gerry McKibbin (Department of Finance and Personnel): Demolition of listed buildings is an offence under planning legislation, not building regulations, and is, therefore, a matter for the Department of the Environment.

1230. Mr McCrystal: Building regulations would apply to the destruction of a feature inside a building, rather than an entire building. Technical booklet F supports part F of the regulations, which deals with conservation of fuel and power. There are a couple of paragraphs in there which indicate that special consideration applies when buildings in which work is to be carried out have historic or architectural value. We refer to a document produced by Environment and Heritage Service (EHS), 'Historic Buildings and Energy Efficiency', which is a guide to part F. I have a copy, which I will leave with the Committee Clerk. It was prepared by Environment and Heritage Service in conjunction with Building Control. It gives guidance to building control officers on matters that they should consider when work is carried out on historic buildings. Obviously, that could also apply to buildings in areas of special interest.

- 1231. The Chairperson: The Committee has received some evidence. Without anticipating our discussion or our report, I believe that the Committee has an interest in that issue. Perhaps the amended wording would go some way towards addressing our concern.
- 1232. Mr Storey: The definition of "protected buildings" is given as: "(a) listed buildings within the meaning of the Planning Order (Northern Ireland) 1991; and
- (b) buildings situated in conservation areas within the meaning of that Order."
- 1233. The Association of Building Engineers suggested that a third meaning should be added:

"buildings of local architectural or historical interest".

1234. Mrs Hagan: Such buildings are already included in the guidance that EHS works to when determining whether to list a building. A listed building could already be a building that has local architectural or historical interest. I believe that we have brought details of all of the listed buildings in County Antrim.

- 1235. The Chairperson: Is that because I am the elected representative for South Antrim? [Laughter.]
- 1236. Mr McCrystal: There are 18 pages of listed buildings in County Antrim alone. We brought that along as an example. That indicates the broad range of buildings that EHS considers. I will leave that with the Committee.
- 1237. The Chairperson: My constituency office is on there. [Laughter.]
- 1238. Mr O'Loan: I know that, sometimes, our discussion goes a bit beyond the direct scope of the legislation and I will do so here. If anyone thinks that the listed-building system gives full and adequate protection to our built heritage, they need to think again.
- 1239. The Chairperson: They should take a look at the experience of tree preservation orders.
- 1240. Mr O'Loan: There is a major issue here. We need to protect our heritage.
- 1241. Mr Beggs: One of the suggestions that have been made to us is that the Building Regulations Advisory Committee should have a wider remit for raising issues of concern in the building industry. How are issues outside of building control raised formally with the Department? Is it down to individuals to approach the Department with an issue, or is there a structured way of dealing with the industry's concerns?
- 1242. Mr McCrystal: Because building regulations are written by central Government and enforced by building control officers at the district council level, most issues related to building regulations are raised with building control officers. We meet on a quarterly basis with senior building control representatives. Any issues that have come to their attention are discussed and considered at those meetings.
- 1243. Mrs Hagan: In our paper of 8 May, we dealt with that issue. There already is a formal interface between the construction industry and the Department, namely the Construction Industry Forum. I am not sure that that is mentioned in your analysis.
- 1244. Mr O'Loan: It is.
- 1245. Mrs Hagan: That is the forum that is used. Informally, building control officers can bring issues to us which we then raise with the Building Regulations Advisory Committee. Therefore, it works both ways.
- 1246. Mr McCrystal: To give an example, we will meet building control officers on Friday afternoon to discuss specific issues in relation to enforcement of regulations on central-heating boilers. There are ad hoc meetings at which we deal with such matters. We have met the Council for Registered Gas Installers and the Oil Firing Technical Association.
- 1247. Dr Farry: Is the code for sustainable homes going to be scheduled for one of the guidance documents?
- 1248. Mr McCrystal: No. In England and Wales the Department for Communities and Local Government produced the code, and that specifies six levels or grades. The minimum level is deliberately set above the building regulations. The code states that building regulations are the minimum acceptable legal standard, and code level 1 is set above that.

- 1249. When the code was produced, it was to indicate the future direction of building control: for example, code level 3 will be the next level that part F conservation of fuel and power moves to. That has already been signalled for 2010. As the building regulations requirements become more stringent, the code standards will also change, and they will continue to rise so that they will always be above the requirements of building regula tions.
- 1250. Dr Farry: Those represent ground zero, then.
- 1251. Mr McCrystal: Yes.
- 1252. Mr Beggs: If it is not appropriate to introduce the code for sustainable homes under building control legislation, which part of Government should give the signal as to what direction we should take? Is it the responsibility of the Office of the First Minister and deputy First Minister to look after sustainable development? Ultimately, there is a need to adopt a long-term strategy.
- 1253. Mr McCrystal: In Northern Ireland, policy for housing rests with the Department for Social Development. Minister Ritchie has already signalled that the code for sustainable homes will be adopted for all public-sector housing in Northern Ireland. That will probably move on to the situation that is now proposed for England and Wales, where all new homes will be assessed against the code. If an application is not made for assessment, it is given a zero-rating against the code.
- 1254. Mr Hamilton: In various evidence sessions there has been much discussion of type approval. One of the elements that emerged was the lack of a more formal, statutory basis on which to ensure consistency in assessment. Is there a way in which a statutory mechanism could be written into the Bill, or the Bill extended, to allow a consistent approach to type approvals? There is a provision in the draft Bill giving the Department the final say to ensure consistency. Do you envisage an extension or broadening out of that? Is there a way in which that could be done?
- 1255. Mr McCrystal: I do not think that we can do that in the Bill. However, article 6(g) of the Local Government (Employment of Group Building Control Staff) Order (Northern Ireland) 1994 states that group officers have responsibility "to ensure consistency of interpretation, application and enforcement of regulations". In discussions with building control officers, our view has been that that is a matter for building control staff and the Department of the Environment.
- 1256. Uniformity and consistency of approach will probably be a more significant issue for district councils. For example, if district councils are given responsibility for planning control, the mechanism will have to be consistent across a wider range of functions.
- 1257. Mr Beggs: Does this issue need to be built into the review of public administration (RPA) process in the reform of local government?
- 1258. Mr McCrystal: Yes. We have made a submission to the consultations on RPA making clear that that is our view, and it mirrors the view put forward by building control officers to RPA at the time.
- 1259. Mr Beggs: It is important that this issue not be dropped or passed over, and that no individual council or officer be able to put a block on the process.
- 1260. Mr McCrystal: We agree. With increasing numbers of functions being devolved to district councils, it is even more important that that approach be built in.

- 1261. Mr O'Loan: How will you ensure that there is adequate protection to prevent unsolicited mail being sent to people whose contact details have been divulged because they are building?
- 1262. Mr McCrystal: We will have to deal with that issue through regulations, on which there will be consultation. England, Wales and Scotland are slightly ahead of Northern Ireland in this regard; they are wrestling with the issues of data protection and freedom of information. They will do the research and we will piggyback on their findings.
- 1263. Planning permissions and building regulations approvals are already listed in newspapers. Therefore, the addresses of properties are available, if not individuals' names. There are companies that gather and collate that information, before selling it to others. That is where the unsolicited mail comes from. As a result, if anyone applies for planning permission or building regulations approval, before that comes through the letterbox, they will get unsolicited mail.
- 1264. The information on the register will be more detailed; it will include building plans and specifications, which could be a freedom of information or data protection issue. We will wrestle with that in due course. It is a proposal that we are putting in the Bill we would like to do it, but we will consult on the detail of the register and return to the Committee with proposals.
- 1265. Mr Hamilton: With regard to use of the term "occupied by the Crown" in clause 12 —
- 1266. The Chairperson: Fra was to do a bit of research on that. [Laughter.]
- 1267. Mr Hamilton: I am still not sure whether it was the word "Crown" or the word "occupied" that was causing him some difficulty. The Department has said that the term "occupied by the Crown" is self-evident, and in most cases it is clear whether a building is occupied by the Crown. However, there might be an increasing blurring of the meaning. If Northern Ireland Water, for example, occupies a building of its own, is that Crown occupation?
- 1268. Mr McKibbin: The legislation that established Northern Ireland Water specified that it would not become a Crown authority.
- 1269. Mr Hamilton: That is a specific example, but there may be other bodies that veer towards being privately run organisations, which would be more at arm's length. Some legislation defines public buildings as buildings:
- "wholly or mainly occupied by members of the Northern Ireland Civil Service."
- 1270. Would such a simple definition assist in defining "Crown occupation"? I am talking off the top of my head, but, perhaps, the Flags (Northern Ireland) Order 2000 is an example.
- 1271. Mr Beggs: Have you been talking to Fra about that?
- 1272. Mr Hamilton: I understand the resistance to being too expansive in saying what it is, but that could be a short and snappy explanation that defines it in terms of who is in the building.
- 1273. Mr McCrystal: The current wording in the Building Regulations (Northern Ireland) Order 1979 allows for a Crown Department to express an interest in a building as soon as a developer lays before the Department a set of plans. If the Government Department says that it will occupy the building when it is completed, it becomes a Crown building from the time that that first interest is shown. We are trying to say that the building should not become a Crown building until it is occupied. That will mean that the private developer will have to put his plans through building control.

- 1274. Mr Beggs: You say that a private developer will have to go through building control even if the Crown is going to occupy the building. Therefore, what is the distinction? Everything will have to go through building control. What is the point in talking about the two issues?
- 1275. Mr McCrystal: If the Crown undertakes any work to a building, they will have to demonstrate compliance with the regulations. That may be an internal checking mechanism.
- 1276. Mr Beggs: Are you saying that internal works may not require building control involvement?
- 1277. Mr McCrystal: That is possible. Building control officers under their legislation can offer services to Government Departments, and may provide that service for them.
- 1278. The Chairperson: There is an issue relating to article 13 of the principal Order, which deals with plans deposited with a district council. The building control representatives thought that a change would be beneficial. Could the necessary enabling powers be taken in the Bill, with commencement of the provision and any related subordinate legislation coming along at a later date? The issue is whether approval of plans is required before the commencement of work. The building control professionals raised that as an issue, so it must be of some substance.
- 1279. Mr McCrystal: I will have to look at the Hansard report of that meeting, but I think that the representatives from building control said that only some councils thought that plans should be approved before work commenced. It was not a unanimous decision among councils.
- 1280. At present, work can commence and notification can be given to the building control department. There is a question about whether approval should be given or whether developers should be allowed to work at risk. If they do work at risk and they get something wrong, they will have to change it at their own cost.
- 1281. Mr F McCann: If my memory serves me, there was a division between big town and city councils and rural councils. The people from Belfast City Council said that it would be desirable, and it would allow them to avoid any backlogs.
- 1282. Mr McCrystal: Do you mean to simply allow the status quo to continue?
- 1283. Mr F McCann: Yes.
- 1284. Mr McCrystal: There is no unanimous agreement among building control officers about that issue. The concern that was expressed was about developers being able to start work, and that errors could be made that would then have to be rectified, which would be at a cost to the developer. The other side of the argument is about backlogs. There could be a situation in which building regulations could face the same problems and criticisms as the planning regulations.
- 1285. Mr F McCann: Problems have been caused because backlogs exist and it is difficult to move the process on. For example, city councils receive thousands of applications, and that can cause problems. Those applications cannot simply be written off.
- 1286. Mr McCrystal: The large councils do not appear to have a problem with the current system.
- 1287. Mr O'Loan: We should not be pushing for change in that area.

- 1288. Mr McCrystal: Another issue that was raised was whether applications should be deemed approved if the building control department fails to make a decision on them within a specified period of time. Currently, such applications are deemed to have been rejected. The applicant can then appeal to the Department.
- 1289. The danger in changing the system is that, in the event of a backlog, a developer's application could be deemed approved, and a development could be built in contravention. The building control department would then have to foot the bill to rectify the situation.
- 1290. Ms J McCann: My experience with planning is that boxes can simply be ticked and everything approved. I have reservations about work commencing without building control approval. A lot of apartment developments have been allowed to go ahead. Residents have the right to raise objections. Building work commencing without even the planners' approval would cause considerable concern. I see both sides of the argument, but people's interests have to be protected.
- 1291. Mr McCrystal: It is important to distinguish between the functions of the Planning Service and the functions of building regulations. Planning law determines whether one gets permission to build. Building regulations are about whether the proposed building complies with structural and environmental standards. Therefore, it is not a question of building control officers not granting permission for a building; it is more about the requirements that must be met while building it.
- 1292. Applications may be approved, or they may be rejected for specific issues. If a developer alters the plans, which are then approved, as far as building regulations are concerned, the development can proceed. Planning is a question of whether a developer is allowed to build or not.
- 1293. The Chairperson: It is a broader issue. There are genuine concerns about the rights of residents being gazumped as builders may be able to proceed with developments.
- 1294. Mr McCrystal: That is more of a planning than a regulation issue.
- 1295. The Chairperson: I take that point.
- 1296. On appeals to the Department, are decisions published within a specified time frame? If so, does that work in practice?
- 1297. Mr McCrystal: They are not published within a specified period of time. We have an internal target of making a decision within two weeks of an appeal been received. We provide background information to building control departments on any such decisions.
- 1298. In the past, we did not receive many appeals we would have received three to five a year. In the past year, though, we received 25 appeals about access to, and use of, buildings. That is because of amendments that we made to our requirements a couple of years ago. There are now more onerous requirements, which are usually about the provision of lifts in buildings to provide vertical circulation.
- 1299. The Chairperson: I appreciate that some appeals are more complicated than others, but what is your general experience? Do you meet your internal benchmarks? Is there a benefit in setting specific and public benchmarks?

- 1300. Mr McCrystal: The benchmarks are built into our business plans; it is a question of whether we also incorporate them in legislation. If so, we would also have to include a provision whereby, when an appeal is made, we would write to the building control department and the appellant to request that they submit any further evidence that they wished to be considered. We would have to set a period of time for them to do that and, subsequently, a period within which we would have to respond. I am not sure that that is a matter for primary legislation.
- 1301. The Chairperson: No; I am not sure either, but neither am I convinced that it should be a matter of custom and practice. How is the process managed?
- 1302. Mrs Hagan: Senior management monitors our business plans quarterly, and we are taken to task for any specific targets that are not met. Therefore, without being a legal requirement, monitoring is a fairly effective way of ensuring that we meet those targets. We have to explain any failure to our senior management.
- 1303. All the material relating to a decision is published on our website, so that others who are in a similar situation can learn from how the Department dealt with a previous appeal. They will know whether their appeal is likely to succeed, the grounds used for appeals in the past, and so forth. Therefore, a significant amount of information on appeals is already being published. That is the custom and practice, and we see no need to go any further.
- 1304. The Chairperson: Does that have as much strength as a written policy requirement even internally? Is it literally a matter of custom and practice?
- 1305. Mr McCrystal: No; it is an internal target for the Department.
- 1306. The Chairperson: OK; I think that that answers my question.
- 1307. Mr McCrystal: When we make a decision on an appeal, as well as informing the appellant, we inform the district building control manager and the group chief building control officer who is responsible for the overall area.
- 1308. The Chairperson: Article 19 of the 1979 Order concerns the deposit of plans being of no effect after a certain interval. Building control officers and the Association of Building Engineers raised some concerns about that.
- 1309. Mr McCrystal: They did raise that with us. We had several discussions with building control officers. We included that issue in the original consultation on the Bill because we felt, at that stage, that it was a primary-legislation matter. However, the Office of the Legislative Counsel advised us that we can deal with the matter through building regulations. It is, therefore, a matter for subordinate legislation, and we will address it during the next change to those regulations. We do not disagree with the sentiment. It concerned us too, and that is why we proposed the amendment to primary legislation.
- 1310. Mr Beggs: I feel strongly about this. During evidence sessions, we were told that assessments are still being made according to 1973 standards. Given the new considerations of disability access, energy efficiency, and so forth, that is ridiculous. What time frame do you have in mind? Why can you not deal with it now under primary legislation?
- 1311. Mr McCrystal: We would have to reflect any change to primary legislation when we amend the building regulations. As soon as this process is complete, the Department will amend the regulations to take account of guidance. We will change part A of the regulations, which deals with interpretation.

- 1312. Mr Beggs: What is your time frame for that?
- 1313. Mr McCrystal: It should take approximately two years to put together that package. You mentioned 1973 we were made aware of only one such example. That was the case of a house that had been passed before the building regulations were made. We checked the building by-laws and, although the decision was correct, we suggested that it was a foolish thing to do.
- 1314. Mr Beggs: I do not know how building by-laws differ from building regulations.
- 1315. Mr McCrystal: Building was controlled by by-laws before the building regulations came into operation in 1972. Sorry; I did not make that clear.
- 1316. Mr Beggs: So it was was prior to 1972?
- 1317. Mr McCrystal: Yes; it was prior to 1972.
- 1318. Mr Beggs: That seems to strengthen my case.
- 1319. Mr McCrystal: There was only one case, and it seemed an extremely foolish thing to do. It was put to us that that person said that they were entitled to do it, and when we looked at the requirements we found that that was the case. However, I would not like to try to heat that property.
- 1320. Mrs Hagan: The point that we are trying to stress is that the evidence may be based on that one example; I do not get the impression that there are dozens of examples. If one thinks of the number of applications for building control approval that are made annually, there are not dozens of examples of that having happened.
- 1321. Mr Beggs: Nevertheless, with significant changes already made regarding thermal efficiency, and more planned, there is a great potential for substandard houses to be built under old regulations in the future, unless the issue is addressed.
- 1322. Mrs Hagan: When the energy performance certification requirements are introduced, it will be obvious that they are substandard houses.
- 1323. Mr Beggs: Perhaps the public may not be as knowledgeable as they should be. Through time they will become knowledgeable, but, at the minute, people in the early stages of buying a house do not ask about the energy efficiency of the house straight away.
- 1324. Mr McCrystal: They will be aware of the energy performance certificates very shortly. The last time that amendments were made to the building regulations, when consulting on the proposals, we organised seminars with the building industry, architects and surveyors. We told them, not only that the regulations were changing, but that the energy performance certificates would be introduced in the future. Those certificates will include a benchmark, so that the thermal performance of that building is benchmarked against current building regulation standards. There will be a clear mark in those certificates.
- 1325. Mr Beggs: There is also the issue of ensuring that there is good disability access to all buildings in the future. That is an issue that the energy efficiency certificate does not address.
- 1326. Mr McCrystal: No, I accept that it does not.

1327. The Chairperson: I must apologise. We have another commitment in this room which is due to commence shortly. There are a number of other questions based on the analysis paper, and we would like to write to you, but we would need you to respond by the end of the week, if possible, as we are about to start the clause-by-clause drafting process. I thank you again for your assistance, and apologise for having to curtail our meeting.

21 May 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Ms Jennifer McCann

Mr Adrian McQuillan

Mr Peter Weir

Witnesses:

Mrs Hilda Hagan Mr Seamus McCrystal Department of Finance and Personnel Mr Gerry McKibbin

1328. The Chairperson (Mr McLaughlin): I welcome Mrs Hilda Hagan, Mr Seamus McCrystal and Mr Gerry McKibbin from the Department of Finance and Personnel. Can you please make your opening remarks and then take the Committee through the responses to the Committee's questions. To help Hansard make the record of proceedings more complete, can you read the text of the question before your answer.

1329. Mr Seamus McCrystal (Department of Finance and Personnel): We have provided responses to the questions that the Committee submitted after last week's evidence session. I draw your attention to the Department's response on publishing the outcome of appeals. Last week, we erroneously said that the summary of appeals was on the Department's website. That has not yet happened but is being addressed as a matter of urgency. A summary of the reasoning behind the appeals and how we reached our decisions is sent out to the appellant if an appeal is not upheld. The decision is also given to the district building control manager and to the group chief building control officer. John Dumigan stated that he was given that information.

1330. I shall start with the first set of questions, which deal with evidence received by the Committee.

1331. Question 1:

"Can the Department please address the call for a clear definition of biomass or the concern that renewable and non-renewable technologies should be clearly differentiated (page 1)?"

1332. Any definition of biomass would be covered by the supporting guidance if we were to make regulations that would specifically require biomass. The issue is whether biomass fuels are classified as renewable or non-renewable.

1333. Question 2:

"Could a statutory mechanism be found which would ensure consistency of approach by councils (pages 9 and 10)? (For example determination role for DFP when consensus is not reached voluntarily or power for DFP to issue directions to councils in respect of type approval)"

- 1334. The evidence that we provided was supported by the response that was given to the Committee by Trevor Martin, who is the chairman of the Northern Ireland Building Regulations Advisory Committee and head of building control for Belfast City Council. Our view is that implementation of the arrangements for type approval applications would be a matter for the Department of the Environment at local government level. We also referred to the duty of group chief building control officers to ensure uniformity and consistency of approach. We have done some more research, and we have discovered some legislative provision that might address that issue.
- 1335. Mr Gerry McKibbin (Department of Finance and Personnel): Section 104(1) of the Local Government Act (Northern Ireland) 1972 states: "A council may make arrangements with any other council or any public body or government department for the exercise of any functions—
- (a) by the council on behalf of the other council or, as the case may be, the public body or department, or
- (b) by the other council or, as the case may be, the public body or department on behalf of the council,

on such terms as may be provided for by the arrangements."

- 1336. It strikes us that that is a mechanism whereby councils cannot simply have a gentleman's agreement to carry out type approvals in council areas. It may also provide us with some statutory clout. We will discuss that matter further at our next meeting with building control.
- 1337. Mr Weir: It sounds as if the 1972 Act gives statutory permission. However, you seem to be talking about a statutory duty, which is different. I see that you have made reference to the forthcoming review of public administration (RPA) legislation. I know that, as part of the RPA discussions, there is an intention to have a local government modernisation Bill, which is due this autumn. Have you received any notification from the Department of the Environment that the statutory duty could be included in the modernisation Bill or that that Department has made a commitment in relation to it?
- 1338. Mr McKibbin: No, we have not. We have made representations to the Department of the Environment, as part of the RPA consultations, that there should be some form of statutory requirement on district councils to consult one another and more widely. We have not made any more representations since then.
- 1339. Mr McCrystal: The Local Government (Employment of Group Building Control Staff) Order (Northern Ireland) 1994, to which we referred to last week, would presumably have to be redrafted as part of any new RPA arrangements. At the moment, those regulations clearly set out the group areas in relation to 25 councils. If the number of councils is reduced, that legislation will have to be rewritten. Again, we indicated that the expanding number of functions that would go to councils would be part of the overall effort to ensure consistency across those councils.
- 1340. Mr Beggs: I wish to register an interest as Carrickfergus Borough Council's representative on the north-eastern building control committee. You read out some information regarding the ability of councils to enter into agreements with other councils. Equally, however, that enables a council not to do so. If a council does not wish to enter into such an agreement, it will not

happen. There are circumstances in which that may not happen. It might come down to the individual view of a building control officer in one area who may be able to sway the views of the local councillors. Is there not a need for those agreements to be put down in black and white and be done and dusted? Why should it be left flexible?

- 1341. Mrs Hilda Hagan (Department of Finance and Personnel): The legal advice that we have is that a requirement cannot be put into this Bill that says that one council must accept another council's decision. They are autonomous bodies, with the ability to make their own decisions. They cannot have the decisions of other councils foisted on them; it has to be done through some other mechanism. It would be up to the councils. I assume that district councillors could have an input into that decision-making process, that it would not just be left to a building control officer and that that would happen on a much broader range of issues than simply building control. Councils must have to agree matters across the board, on issues that are, dare I say it, slightly more significant, even, than building regulations. I would not say that we could build a mechanism into the Bill that would require one council to accept another council's decision
- 1342. Mr Beggs: However, that does not require another council's decision but a group decision of a Northern Ireland-wide body that would carry out those type assessments. It does not set out to impose the wishes of one neighbouring council on another but to ensure that a collective group decision is accepted in every district council area.
- 1343. Mr McCrystal: The Local Government (Employment of Group Building Control Staff) Order (Northern Ireland) 1994 puts the onus on the group chief building control officer to ensure consistency of interpretation of applications and enforcement of those regulations. Group chief building control officers would be the first to tell us that that legislation gives them responsibility but does not give them the authority to enforce it in the group areas. If an individual district building control manager decides to ignore the view of the group, that can happen. Apparently, those regulations were changed in 1994 and took some of the previous powers away from the group chief officers.
- 1344. Mr Beggs: Will you clarify that, at present, an individual building control officer can ignore the views of the group? How do you see type approval working in the future if it is operating under similar guidance?
- 1345. Mr McCrystal: An individual can ignore the views of the group; however, recently there has been much more discussion across all district councils on building control issues. If there are councils that might or would consider moving away from accepting the decision of another council, they are in the minority.
- 1346. Trevor Martin stated to the Committee that, after discussions with his colleagues, he would be hopeful that a system would be in place to agree type approvals.
- 1347. The Chairperson: There will always exceptions.
- 1348. Mr Beggs: I would prefer to hear that the system was solid rather than hopeful.
- 1349. Mrs Hagan: The evidence that the Committee heard from Paul Everall, the chief executive of Local Authority Building Control for England and Wales, indicated that a system had operated there successfully for some time without there being a legal agreement between the district councils.
- 1350. Mr Beggs: In England and Wales, there is pressure from the private sector that does not exist here. There is a possibility of an individual officer holding out.

1351. Mr McCrystal: There are powers in the existing Order that give the functions of the district council, in relation to building control, to others. Although we could write regulations to have approved inspectors operating in Northern Ireland, there is no appetite for that in building control or the National House-Building Council (NHBC). The NHBC is one of the largest approved warranty and insurance providers in England and Wales, and it has indicated that it is not interested in acting as an approved inspector in Northern Ireland.

1352. Mr Beggs: Are you saying that, if difficulties arise and individual building control officers are non-co-operative, that is an option that could be pursued to encourage them?

1353. Mr McCrystal: It could be used as a sanction.

1354. Mr McCrystal: Question 3: "In clause 6(2), which amends Article 17 of principal order, will give DFP power to type approve where a council fails to do so within prescribed period and the applicant brings an appeal. Could this provision be broadened to address the consistency issue (pages 9 and 10)?"

1355. Any appeal that was brought to us in relation to type approval would be binding on all district councils. If the Department were to be asked to take an additional role, it may remove from the applicant the opportunity to appeal to the Department. In other words, if the Department were, or were not, to issue the type approval in the first instance, that power would come in. The Department feels that it would not want to go there.

1356. Question 4:

"In relation to the term 'Crown occupation' being self evident how would this term apply to a body which is part funded by government or a public company like SIB of NI Water (page 13)?"

1357. The 1979 Order's definition of "Crown authority" can be found in our submission.

1358. In practice, that means that bodies such as hospitals, schools or council buildings would not be considered Crown buildings. That definition would be used to determine the Crown status of a public company where that has not already been established by statute — for example, the legislation that created Northern Ireland Water clearly states that it does not have Crown status.

1359. Last week, reference was made to a definition in the Flags (Northern Ireland) Order 2000, which states that a Government building is one that is:

"wholly or mainly occupied by members of the Northern Ireland Civil Service."

That definition excludes buildings occupied by staff of Departments such as HM Revenue and Customs, the Lord Chancellor's office, the Northern Ireland Office, the Ministry of Defence — basically, the Home Civil Service.

1360. Question 5:

"In relation to 'Article 19 of the principal order – Deposit of plans to be of no effect after certain interval' issues were raised that provision should be made for the power to declare individual buildings which have not been commenced on multiple sites to be declared null and void. What changes will the Department make to address the issue (page 16)? Also, how will commencement be defined — e.g. construction of 4 walls as is the approach in Rol?"

- 1361. It was originally the intention of the Department to amend the primary legislation to address that issue and, indeed, the question about how best to address the matter formed part of public consultations on the Bill and our instructions to the Office of the Legislative Counsel (OLC). However, on further consideration of the matter, the OLC advised that the current wording of article 19 of the principal Order would allow the matter to be addressed through subordinate legislation and that that would be the most appropriate mechanism by which to address the issue. Therefore, the Department will address the issue when it amends the subordinate regulations.
- 1362. We had considered preparing a definition of "commencement", but we were advised by solicitors that any definition might raise human rights issues. We will give that further consideration when we examine the subordinate legislation.
- 1363. Mr Beggs: Is there a timescale for amending the subordinate legislation?
- 1364. Mr McCrystal: It usually takes two years to amend subordinate legislation. It takes that time to make all the preparations, carry out the public consultation and notify Europe.
- 1365. The Chairperson: What exactly are the implications of defining "commencement"? What are the human rights implications?
- 1366. Mr McCrystal: We have not gone into that on the advice of the OLC. We were told that the matter should not be addressed in the Bill because it could be dealt with through regulations. We have not pursued that yet, but we will do when we examine the regulations.

1367. Question 6:

- "In relation to Dangerous Buildings and Places how much urgency is this being given to this issue, especially as it has not been possible to determine ownership for some of the existing legislation (pages 17 and 18)?"
- 1368. The proposals in relation to dangerous buildings were not written to fill a statutory void but rather at the request of building control in order to harmonise existing provisions. The removal of the proposal from the Bill has not weakened the existing legislation in any way. Indeed, revoking the existing legislation as originally planned would have restricted district councils' powers to address the full scope of matters covered by the existing legislation.
- 1369. We emphasise that the Department has not yet determined whether dangerous buildings fall within its legislative remit. In his evidence, Paul Everall said that that aspect should not be addressed through building regulations.
- 1370. The Chairperson: How and when will the issue be addressed and the legislation updated?
- 1371. Mr McCrystal: There is a lot of legislation on this matter, but it is old. In the preparation of early drafts of the Bill and consultation on them, we found that no Department would claim ownership of that legislation. However, the legislation exists, and it can be used.
- 1372. At present, building control and district councils use the legislation to control dangerous buildings. After detailed discussions with representatives from building control, we learned that material that we had inserted in the Bill was starting to restrict their work.
- 1373. The Chairperson: Do you mean that the existing legislation was restricting its work?

- 1374. Mr McCrystal: The existing legislation covers not only dangerous buildings but places. That was the starting point.
- 1375. The Chairperson: The new legislation will address that. However, how will you solve the issue about which Department is responsible for the legislation?
- 1376. Mr McCrystal: Building control agreed to address that, because of its close involvement with the process and its knowledge of the existing legislation. We requested that it produce a paper that would enable us to assess whether it was a matter that we could deal with in a further amendment to the Bill or whether we could redirect the matter to another Department.
- 1377. The Chairperson: Will that happen within the time frame of the process?
- 1378. Mr McCrystal: Obviously, that will happen outside the timescale of the Bill. In the past, the difficulty was in securing time to introduce primary legislation at Westminster. Presumably, the process of introducing amendments to Northern Ireland legislation will be much easier now that the Assembly is up and running.
- 1379. The Chairperson: I suppose it is a case of "if it ain't broke, don't fix it". The legislation is workable, but it needs to be tidied up.
- 1380. Mr McCrystal: Building control recognised the danger that we could break something that was workable. The legislation needs to be updated through amendments. However, as you said, Chairman, there was a danger that we could have broken it.

1381. Question 7:

- "In relation to 'Backland Development' could access for ambulance and fire service not fall under the health and safety aspects of building regulations (pages 18 and 19)? Also, is DFP liaising with DoE on this?"
- 1382. Backland development is addressed in Building Regulations (Northern Ireland) 2000 under Part E, which deals with fire safety. It applies where points of access form part of a site for which building regulations approval is sought. It refers to access for the Fire Brigade up to the boundary of the building. I will leave copy of that document with the Committee Clerk.
- 1383. I have also submitted Planning Policy Statement 3 (PPS 3), 'Access, Movement and Parking', which contains a reference to access for emergency services; it is a material consideration for the Planning Service when it considers applications. We have also included an extract from a joint guidance document from Roads Service and the Planning Service called 'Creating Spaces'. One of its main objectives is to ensure that the Fire Brigade and other emergency services can gain access.
- 1384. The document also indicates the minimum vertical clearance of arches. In relation to fire safety, building control is responsible for restrictions on a site for which building regulations approval is sought. However, the Planning Service is responsible for restrictions outside the site. The example of backland development in Moira was cited during evidence submitted by building control. In that instance, we would consider that a matter for the Planning Service.
- 1385. The Chairperson: In practice, even though there is a divided responsibility, do you think that those issues are adequately covered between the two organisations and that it is a matter that could be resolved between the Department and the Planning Service?

1386. Mr McCrystal: I think that it could. PPS 3 was revised in February 2005, more than likely because of difficulties that arose with a particular development.

1387. The Chairperson: Are there any blind spots that emerge in practice?

1388. Mr McCrystal: We would hope not. There are certainly no blind spots with regard to building regulations.

1389. Mr Beggs: There may be a need to remind district councils that issues relating to access must be assessed at the planning stage. As a member of Carrickfergus Borough Council, I have not come across an issue on which building control provided input at the planning stage. I am aware of environmental services providing input at the planning stage, but the Department may need to remind district councils of that area of responsibility.

1390. Mr McCrystal: It is possibly an internal issue, because district councils are statutory consultees of the Planning Service.

1391. Question 8:

"In relation to 'Control of Demolitions' has there been any discussion with the Health and Safety Executive etc regarding a potential role for Building Control (page 19)?"

1392. As that lies outside the remit of building regulations, the Department has not entered into any discussions with the Health and Safety Executive about a potential role for building control in the control of demolitions. However, we have discussed the matter with representatives from building control on a number of occasions and advised them to pursue it directly with the Health and Safety Executive. It is not a question of whether there are adequate powers in place to deal with demolitions; the concern is about enforcement, which is why building control was directed to the Health and Safety Executive. If it is already adequately covered by legislation, the Department does not feel that there is any need for it to be covered again in the Bill.

1393. Question 9:

"In relation to 'Existing Buildings' could the enabling powers not be taken now and the impacts assessed if/when it is proposed to exercise the power by making regulations (page 20)?"

1394. When alterations to existing buildings are being undertaken, some of the requirements of the building regulations are likely to be triggered; for example, Part F, which deals with conservation of fuel and power, requires cost-effective consequential improvements to be carried out to the existing building fabric when major refurbishment of certain buildings is being undertaken. It is not normal practice to introduce a new primary power unless there is a specific intention to use it at a later stage. The proposal of the Association of Building Engineers was that such a power should be built into the Bill in case it might be needed. It is our understanding that that is not normally done, and there may be some resistance from the Office of the Legislative Counsel if that is proposed.

1395. The Chairperson: Therefore, that power will not be added to the Bill at this stage.

1396. Mr McCrystal: It will not be added at this stage. The regulations on work to existing buildings are the same as elsewhere on these islands. Now that we have a local Assembly, if there were any proposal to change that, and it required primary powers, it would be much easier for those to be brought in. Rather than the Department introducing such a change, it is more

likely that the Assembly would do so and that the Minister would give us an instruction in that regard.

1397. Question 10:

"In relation to 'Council Databanks' are there any plans for Home Information Packs to be introduced in NI? Is there a case for all the information relating to a building being brought together (pages 20 and 21)?"

1398. The introduction of home information packs would be a matter for the Department for Social Development. However, the Department of Finance and Personnel understands that there are no current proposals to introduce such a requirement in Northern Ireland. The detail and format of the register of information that we are asking district councils to keep would be established by subordinate legislation and would be subject to full consultation.

1399. At that stage, the Department will consider any proposals that are put forward as the type of information that should be included. That prescribed register may form part of a larger database held by district councils. We accept the logic of having uniformity in the data stored across district councils. However, the retention of data outside the scope of the building regulations register will be a matter for the councils to agree on.

1400. District councils, because of their disparate functions, hold a lot of information. It would not be unreasonable for district councils to hold one large database, and one element of that would be the building regulations information. Access rights would be built into that, so that various officers could see only part of the data. However, with regard to the review of public administration, and so on, the creation of a common database across all councils in the same format would be beneficial. If that did not happen, we would consult on the information that we would ask district councils to keep solely in relation to building regulations matters.

1401. The Chairperson: Therefore, you are not making a recommendation at this stage as to either the control or the dissemination of that information.

1402. Mr McCrystal: No, we are not; we are asking for the power to ask district councils to maintain the register, and we would prescribe that power in building regulations. At that stage, we would come back with an SL1, and we would consult widely on that.

1403. Question 11:

"In relation to 'Sustainable Communities' is there an argument for placing a duty on councils, in enforcing building regulations, to promote sustainable development (page 22)?"

1404. Section 25(1) of the Northern Ireland (Miscellaneous Provisions) Act 2006 states:

"A public authority must, in exercising its functions, act in the way it considers best calculated to contribute to the achievement of sustainable development in Northern Ireland, except to the extent that it considers that any such action is not reasonably practicable in all the circumstances of the case".

1405. In addition, section 109 of the Local Government Act (Northern Ireland) 1972 allows councils to inform their constituents by a number of means of any matter relating to their functions. At a previous Committee meeting, we submitted information about section 109.

1406. The Chairperson: We shall now move on to the second set of questions, which deal with the microgeneration debate.

1407. Mr McCrystal: Question 1:

"Is the Code for Sustainable Homes formally applied/promoted generally in NI, as in England and Wales (page 4)?"

1408. The Department for Social Development has responsibility for housing matters in Northern Ireland. Minister Ritchie has announced that, from April 2008, the Code for Sustainable Homes will apply to all new social housing in Northern Ireland, aiming initially at achieving level 3 of the Department for Communities and Local Government's Code for Sustainable Homes. There has been no further adoption of the code within Northern Ireland; however, the code was intended to be a road map for the future development of building regulations, and the proposed 2010 and 2013 amendments to the regulations will raise the standard to levels 3 and 4 respectively of the code.

1409. In my evidence last week, I said that the standards in the Code for Sustainable Homes were deliberately set above building regulations standards, and, as the building regulations requirements rise, so the minimum requirements of the code will always rise above that.

1410. Question 2:

"In relation to work commenced to amend Building Regulations to follow England and Wales regarding further reductions of 25% and 44% in carbon emissions by 2010 and 2013 respectively has 2016 been formally established as a target for carbon free homes in NI, as in England, Wales and RoI (page 4)?"

- 1411. There has not yet been a declaration by any Minister that the 2016 target for zero-carbon homes will be adopted in Northern Ireland. As it is departmental policy to harmonise with England and Wales in the making of building regulations, it is likely that we will continue to review Part F of the Building Regulations (Northern Ireland) 2000, which deals with conservation of fuel and power, to bring it to a comparable standard to that in England and Wales, as has been stated for the 2010 and 2013 standards.
- 1412. It is simply that the Minister has made the declaration that we will amend our Part F regulations in 2010 and 2013. However, as the building regulations policy has been to harmonise Northern Ireland's regulations with those in England and Wales, the Minister will more than likely make a statement on that subject at some point. I do not want to pre-empt anything that the Minister might say, but the policy has been that we move in harmony with England and Wales. Indeed, in its evidence, building control said that it wanted harmony to be maintained with the other legislative bodies.
- 1413. Dr Farry: Is there an assumption that a Minister would make such a declaration, because your phraseology suggests that the declaration could be made by one of a number of Ministers?
- 1414. Mr McCrystal: The answer was worded in that way because of the Code for Sustainable Homes. Minister Robinson has responsibility for building regulations, and Minister Ritchie has responsibility for the code. Neither Minister has made a statement on the matter. However, the Minister of Finance and Personnel would make a declaration with regard to building regulations.
- 1415. Dr Farry: You emphasise the importance of Northern Ireland moving in harmony with England and Wales with regard to developments in building regulations. In practice, although

working within a different legal framework, there is a greater tendency here to work as a single market on an all-island basis with regard to construction than there is between England and Wales. Is there not an argument to be made for harmonising building regulations, as far as is possible, with what is happening in the rest of the island?

1416. Mr McCrystal: That does happen. There are slightly different timescales, but the standards in the South of Ireland are very similar to our own — and to those in England and Wales. I am not suggesting that the South of Ireland copies the regulations in England and Wales, but they are similar. A Minister in a local Administration might, however, want a particular emphasis on a regulation or require a higher standard. One example in Northern Ireland, although it is not related to the conservation of fuel and power, is fire safety: we have a higher standard than England and Wales for smoke alarms in homes, and that has been the case since 1994. Therefore, although we are in harmony, there are slight differences in the requirements.

1417. Dr Farry: Is the Department ruling out opting for the mandatory renewable target that has been adopted by the Republic? Does the Department want to leave that to change through regulations over time, or is there an argument for having an overarching policy framework in the legislation as opposed to regulations — which would be a major shift in policy?

1418. Mr McCrystal: That is the Department's view in the papers that it has submitted and in its advice to the Minister. It was also brought forward in evidence to the Committee by Paul Everall. The building regulations make clear the role of "functional requirements". For Part F, we are concentrating on reducing carbon dioxide emissions. In the cold building approach, a building's carbon dioxide emissions are calculated by using the insulation values in the floors, walls, roof and windows, and by examining the controls in the heating system and boiler efficiency. It is a holistic approach, and we intend to tighten those targets in 2010 and 2013. That gives designers the flexibility to install microgeneration, which would be taken into account in their calculations. However, this is not the right time to introduce a mandatory requirement.

1419. A report was produced in Scotland for Scottish Ministers, entitled 'A Low Carbon Building Standards Strategy for Scotland'. An expert panel, appointed by Stewart Stevenson, the Minister for Transport, Infrastructure and Climate Change, was asked:

"to advise on a low carbon building standards strategy"

1420. in order to increase energy efficiency and to reduce carbon emissions in Scotland.

1421. The report states:

"having considered evidence from research and from recent experience, we do not consider that the industry is yet sufficiently well developed to justify mandatory requirements in building regulations for low carbon equipment or to require all buildings to become generators of electricity ... The cost of energy generation when viewed at the level of individual buildings could be such that it will tend to discourage development."

1422. The report goes on to discuss:

"affordable housing, where the investment could be significant and the returns are of relatively limited benefit. Some low carbon equipment in housing can make services systems substantially more complex, more difficult for occupants to understand and more expensive to maintain."

1423. The report also states:

- "several building-integrated technologies are well established. However, others are relatively immature and are not ready for mainstream use. Indeed, certain of the technologies available are failing to achieve their intended performance when integrated into buildings."
- 1424. I will leave an extract of that report with the Committee.
- 1425. The Chairperson: A sliding scale of targets has been set in England and Wales to work towards targets for carbon-free homes by 2016. Why is there a reluctance to take that approach here? At last week's meeting, we heard that the Republic had set a definitive target, and you responded to that point. You talked about harmonising building regulations between here and, generally speaking, England and Wales. In order to meet the 2016 targets, England and Wales is working to specific targets to reduce carbon emissions by 25% by 2010 and 44% by 2013.
- 1426. Mr McCrystal: The targets that the Republic of Ireland has set will achieve the same as we are proposing to achieve for 2010 and 2013.
- 1427. The Chairperson: I am unclear why we are not being definitive in setting targets so that we can raise public consciousness of what we expect the outcome to be and why we are not acting in a proactive way.
- 1428. Mr McCrystal: We have set targets. We said that carbon emissions will be reduced by 25% by 2010 and up to 44% by 2013. That will give the same results as those that were given from the evidence that you received about the South of Ireland.
- 1429. The Chairperson: Do you argue that that will have exactly the same effect as defining the target?
- 1430. Mr McCrystal: It will have the same effect on carbon emissions, although, in the South of Ireland, it has been decided that a percentage of that will be achieved by microgeneration.
- 1431. The Chairperson: What can be done if that is not achieved?
- 1432. Mr McCrystal: The South of Ireland has only one building control officer for each local authority area to enforce its building regulations. That building control manager is tasked with inspecting between 12% and 15% of the buildings. There is no deposit of plans with the local authorities in the South. Up here, in contrast, every set of plans is deposited with the council, every building is checked and the calculations are checked. That gives the certainty of more compliance with building regulations than in the South, where only between 12% and 15% of buildings are checked.
- 1433. The Chairperson: I do not dispute which system is the more effective, I simply want reassurance that our system is effective and that the regulations that we will adopt will have the desired outcome.
- 1434. Mr McCrystal: The 2010 and 2013 targets have been set across the United Kingdom, and they will be harmonised. The percentages that were given by the Republic of Ireland are slightly different because it has a different starting point. The UK amended its regulations last year; the South of Ireland amended its regulations a couple of years before that. The output of what will be achieved with carbon dioxide emissions will be the same.
- 1435. The Chairperson: Have you considered the benefits or otherwise of publicly setting the targeted outcomes as a means of encouraging the industry and raising public consciousness?

- 1436. Mr McCrystal: Yes, we have flagged up those targets to the industry.
- 1437. Mrs Hagan: The Minister announced the 2010 and 2013 targets when the last amendments to the legislation were made. The only part of our jigsaw that is missing is the 2016 carbon neutral target. That has not been announced publicly, but traditionally we have always harmonised with GB. Therefore, it is likely that we will set the same target as GB, but that has not been publicly announced. Due to the divided responsibility between the Department for Social Development and the Department of Finance and Personnel here, the question is which Minister will announce which targets.
- 1438. Ms J McCann: To continue that argument, when various organisations were giving evidence to the Committee, a direct rule Minister had decided to include that target in the mandatory regulations. The organisations considered that doing so would raise awareness and ensure that renewables were at the forefront of people's minds. Why, therefore, has there been a change? Surely not including the target in the building regulations will limit the long-term development of renewables.
- 1439. Mrs Hagan: To be fair, there was a balance in the evidence to the Committee; some organisations strongly supported the previous Secretary of State's announcement. At that stage, prior to the Secretary of State's announcement, it remained the Department's view that it would be better to tighten the targets. However, although the Department and its officials' views have not changed, the previous Secretary of State made his announcement.
- 1440. Other evidence to the Committee suggested that not everyone supports mandatory microgeneration. The Energy Saving Trust and others suggested that the same outcome —
- 1441. The Chairperson: Outcomes should be the focus.
- 1442. Mrs Hagan: Yes; that is our focus, and, given that the aim is to reduce carbon emissions, it is best left to developers to decide how they can reach the targeted emissions rate in the most cost-effective way, and in a way that suits them. As long as they construct a building that meets that targeted emissions rate, there should be no prescriptive requirement placed on them to do so in a particular way.
- 1443. As of now, not all renewable technologies are sufficiently mature or cost-effective, and the Committee heard evidence from the Northern Ireland Environment Link and the Climate Change Coalition Northern Ireland that the average cost would be £6,000 per home. For some, that is not a lot of money, but for many others, it is for example, for first-time buyers who are trying to get onto the property ladder only to be told that they must spend a further £6,000 on their home. The human rights, as well as the financial, implications, would have to be rigorously tested before the Assembly could make microgeneration mandatory for all.
- 1444. Ms J McCann: Do you think that not including a target would limit the future use of renewables?
- 1445. Mr McCrystal: No. Our point is that now is not the right time to make microgeneration mandatory. The outputs and performance must be considered. The Energy Saving Trust's evidence to the Committee suggested that the fact that the Department proposes to make an amendment in 2010 will start to make renewables more commonplace. The trust mentioned that renewables would have to be introduced into flats and apartment buildings first and, by the 2013 target, many more buildings will have to install renewable sources of energy.
- 1446. As Paul Everall pointed out, flagging up future changes to the building regulations gives the industry time to adapt and ready itself to meet those requirements. Therefore, by sticking

with setting performance targets, it becomes a matter of how those targets will be met. The renewables industry has the opportunity to become more efficient and improve the consistency of its products. As mentioned in the Scottish report, some technologies are extremely good at the moment, but those that are not include photovoltaic panels, which are currently a maximum of 15% efficient, whereas the Department demands that oil boilers are at least 86% efficient.

- 1447. Therefore, some technologies have some way to go in their development and in reducing their costs, because £6,000 is a lot of money, and many of the technologies cannot be used day in, day out. At the moment, a central heating boiler is fired by oil or gas and can run constantly, but many of the technologies merely supplement that main energy source.
- 1448. The Chairperson: The regulations in England and Wales are focused on achieving targeted outputs; therefore, the logic is that many buildings will require microgeneration to achieve those targets.
- 1449. Mr McCrystal: Many buildings will require microgeneration, so the industry must be given time to adapt.
- 1450. Mr Beggs: You mentioned the proposed amendments to the regulations in 2010. Would those amendments come into effect in 2010? Would you make a firm commitment to making those amendments well in advance? Could the amendments be put into legislation in 2009, with their start date somewhere further down the line, so that the industry is given a definite signal? In the past, when changes occurred, statements were made, but there was no real legislative follow-up. It would be much better if there were a firm commitment in advance and a good leadin period for the industry to adapt. Therefore, the amendments could take effect in 2010, but they could be put into legislation before that date.
- 1451. Mr McCrystal: The amendments to the regulations in England and Wales may be made in April 2010, but our amendments will probably be made some months after that. When the previous amendment was made to the building regulations, we introduced the requirement here less than six months after it was introduced in England and Wales. That is also our aim for these amendments. There will be public consultation on any changes to the regulations in 2009, and the industry will be made aware of those changes. Consultation documents are usually tightly written, with the intention that the proposed wording will be used in the amendments to the regulations, unless we receive adverse comment.
- 1452. Mr Beggs: Do you want to ride on the back of development elsewhere and then carry out the consultation exercise here? It is important to get that consultation exercise to the industry, especially the microgeneration element of it, as most apartments will have a requirement for microgeneration.
- 1453. Mr McCrystal: We will consult on the performance standards in 2009 and make amendments to the regulations in 2010. There is normally a 12-week period between the regulations being made and their coming into operation. That is intended to give the industry as much time as possible to become aware of the requirements.
- 1454. Mr Beggs: Can a longer period be given, especially for architects who are designing buildings? Sometimes plans are drawn up six months to a year before they actually take effect.
- 1455. Mr McCrystal: The consultation exercise starts about 12 months before the regulations are actually made, so we are flagging up what we intend to do. If we were to give a longer period of time between making the regulations and their coming into operation, we would be criticised for delaying their implementation. That is why the normal time frame is 12 weeks. In the past,

England and Wales gave six months' notification between making their regulations and their coming into effect.

- 1456. The industry will be aware that we have consulted on the same standards, because all the construction magazines and professional bodies provide information to their members telling them what is happening in England and Wales. Therefore, the industry will know that the regulations are coming into operation.
- 1457. Dr Farry: Northern Ireland is hoping to mirror the targets that were set in England and Wales, but are we starting from a different baseline?
- 1458. Mr McCrystal: No, we are starting from the same baseline. England and Wales made their last amendment in April or May 2006, and we made our amendment in August 2006.
- 1459. Dr Farry: Our approach to the energy efficiency of new homes is on a par with that in England and Wales. I appreciate that there are fuel efficiency problems right across Northern Ireland, and we heard reports from organisations such as the Energy Saving Trust that Northern Ireland has some of the biggest carbon footprints in the UK. A great deal of the damage is caused by buildings, but I appreciate that we are talking about new buildings here. The baseline is exactly the same as that of England and Wales.
- 1460. Mr McCrystal: That is correct.
- 1461. Dr Farry: There is debate about whether to aim for the targets that are set out in the report or some form of mandatory microgeneration. Is there a middle ground? Will it be possible for the requirement to contain some flexibility as to whether the option chosen can be microgeneration or a more community-based macrogeneration, for instance? Are there two poles with different options in between?
- 1462. Mr McCrystal: The Planning Service concluded a consultation on draft Planning Policy Statement 18 (PPS 18), 'Renewable Energy', recently, and it is considering macrogeneration.
- 1463. Dr Farry: That begs the question: how do building regulations plug into what is happening in planning? Where does one start and the other end?
- 1464. Mr McCrystal: If new regulations relating to planning and renewable energy are introduced and the Planning Service requires some method of macrogeneration to be implemented the calculations that are submitted to building control will show up the carbon footprint of the development.
- 1465. Dr Farry: If the Department of the Environment decides to introduce new planning guidance that requires some degree of renewables microgeneration or community-based macrogeneration there will be an automatic follow-through to building regulations. Is that correct?
- 1466. Mr McCrystal: Yes, that is correct.
- 1467. Dr Farry: That brings me back to the Chairperson's question about how to raise public consciousness on the issue, because it will require a big buy-in from people. It is a mixed-up situation, but that is not your fault. The Department for Social Development has responsibility for the Code for Sustainable Homes; the Department of Finance and Personnel has responsibility for building regulations; and the Department of the Environment has responsibility for planning regulations. It is a confused picture. It will be difficult to find ways to encourage people or

inform them of any changes that will be required in their behaviour. It seems as if there is no one is in charge of pushing that agenda. Everyone has their own little slice of the action.

1468. Mr McCrystal: The way in which Departments are carved up is not a matter for us, but I take your point. We have referred to England and Wales a lot. The Department for Communities and Local Government is huge, and it has responsibility for building regulations, sustainable communities, planning and the Code for Sustainable Homes. Each of those services falls under one Department. Although matters are carved up differently in Northern Ireland, other Departments will be working on a similar basis to the Department of Finance and Personnel in that it is trying to harmonise, as closely as possible, with what is happening elsewhere.

1469. The Chairperson: Your response paper to the Committee states:

"The Department for Social Development has responsibility for housing matters",

1470. but it has responsibility for public housing matters. Does the Department of Finance and Personnel regulate for private-sector buildings? How will the code that is being introduced by the Department for Social Development read across to whoever has responsibility for the private sector?

1471. Mr McCrystal: I thought that the Department for Social Development had responsibility for housing policy. In her statement on the Code for Sustainable Homes, the Minister for Social Development said that the code standard would apply, in the first instance, to social housing — for which the Department for Social Development is responsible.

1472. The Chairperson: Is there a grey area on which we might need to reflect? There is a confusing division of responsibility, and there is confusion on why the Department of Finance and Personnel is dealing with building regulations and why a single Minister is not dealing with the entire sector. So is there a grey area that needs reflection? I am not sure; I am merely asking the question.

1473. Mr McCrystal: I do not think that there is a grey area in respect of the Code for Sustainable Homes. The Ministers in England and Wales did exactly the same as our Minister is doing. On introducing the code, they said that it would apply to all Government-funded housing — the housing corporation and social housing. The Minister for Social Development has done the same here. England and Wales have moved on, and they are now talking about the assessment of private dwellings against the code. The Minister has done the same here. England and Wales have moved towards assessing private dwellings against the code.

1474. The Chairperson: Will we take a similar approach?

1475. Mr McCrystal: I am not sure. That is the remit of the Minister for Social Development.

1476. The Chairperson: The Committee might have to address the issue, because the public may assume that the code applies to all homes and that the private sector is not exempted.

1477. Mr McCrystal: In the first instance, Minister Ritchie said that it would apply to social, publicly funded housing. That was also the first statement that was made on the issue in England and Wales. However, I am sure that the Department for Social Development is aware that England and Wales have moved towards the introduction of mandatory assessment against the code's standard.

1478. The Chairperson: I am sorry for delaying the proceedings. I know that we are straying away from our agenda. Thank you for your patience, Seamus, and please continue.

1479. Mr McCrystal: Question 3:

"At what point in time will it become necessary for new houses in NI to include microgeneration, in addition to energy efficiency technologies, in order to meet these targets (page 4)?"

There will come a time when new houses in Northern Ireland must include microgeneration. We have talked about the impact on flats in 2010, what will happen in 2013, and, as we move to zero-carbon homes, microgeneration will become absolutely necessary.

1480. Question 4:

"Will NI also introduce Level 4 of the Code for Sustainable Homes in 2013 (page 5)?"

1481. Without repeating our answers, as we move forward in 2010 and 2013, level 4 of the current Code for Sustainable Homes will become the fuel and power conservation standard applied in Northern Ireland.

1482. Question 5:

"Has DFP or the wider Executive made any forecasts of what will be the likely requirements from the local renewables industry (e.g. technological performance, production and installation capacity etc) in order for NI to meet the targets going forward (pages 5 and 6)?"

1483. The Energy Saving Trust and the Carbon Trust have carried out research into the cost-effectiveness of renewable technology. The EU has produced a renewables energy policy that requires the UK to generate 15% of its energy from renewable sources by 2020, which means from all renewable sources. Buildings will probably have to produce 40% of that target.

1484. The national action plan for achieving the target is being developed through the Department for Business, Enterprise and Regulatory Reform. Locally, the Department of Enterprise, Trade and Investment is responsible. Paul Everall previously told the Committee that, given sufficient notice, the industry will gear itself up to meet those new standards. The Department feels that the industry should be prepared to act, because the Minister has already projected what will happen in 2010 and 2013.

1485. Question 6:

"What is the background to and logic for having Building Regulations in DFP whilst Planning is in DoE? Might a transfer of the Building Regulation function to DoE provide for better policy coordination, especially given that responsibility for delivery of both functions will soon rest with councils (page 6)?"

1486. We defer consideration of that matter to you.

1487. The Chairperson: Thank you very much. [Laughter.] It is a very strange scenario, and the Committee will give the issue some consideration.

1488. Mr McCrystal: The Department dealing with building regulations has moved from what was the Ministry of Finance, between 1972 and 1984, to the Department of the Environment, where

it remained until the first restoration of Government in Northern Ireland. It then moved to the Department of Finance and Personnel.

1489. The change may have been linked with the sponsorship of the construction industry. Responsibility for construction-related issues — such as procurement — still rests with the Department of Finance and Personnel. Another Bill is being brought to you on those issues. That is all I can say on that matter.

1490. The Chairperson: We appreciate that.

1491. Mr McCrystal: Question 7: "Might there be scope for introducing and element of mandatory 'macro-generation' ahead of any target date for zero carbon homes (page 6)?"

1492. We have already referred to the Planning Service's recently concluded consultation on PPS 18 on renewable energy. Much of that consultation dealt with the macro element of renewables.

1493. That concludes our answers to the Committee's questions.

1494. The Chairperson: Committee members will see the reference to protected buildings in their notes. Are members content to accept the proposed amendment to clause 2?

Members indicated assent.

1495. The Chairperson: Seamus, thank you for your evidence and your co-operation with regard to the Hansard recording of your evidence.

28 May 2008

Members present for all or part of the proceedings:

Mr Mitchel McLaughlin (Chairperson)

Mr Mervyn Storey (Deputy Chairperson)

Mr Roy Beggs

Dr Stephen Farry

Mr Simon Hamilton

Mr Fra McCann

Ms Jennifer McCann

Mr Adrian McQuillan

Mr Declan O'Loan

Ms Dawn Purvis

Mr Peter Weir

Witnesses:

Mrs Hilda Hagan Mr Seamus McCrystal Department of Finance and Personnel Mr Gerry McKibbin

1496. The Chairperson (Mr McLaughlin): This session will be recorded by our colleagues from Hansard, and so I ask members to ensure that mobile telephones are switched off.

1497. Mr Beggs: It is appropriate that I declare an interest as Carrickfergus Borough Council's representative on the north-eastern building control committee.

- 1498. The Chairperson: I welcome Seamus McCrystal, Hilda Hagan and Gerry McKibbin from the Department of Finance and Personnel. With members' agreement, I suggest that we go through the Bill clause by clause.
- 1499. The Committee Clerk: A short briefing paper has been provided to assist the Committee's consideration of the clause-by-clause scrutiny. As members are aware, the Building Regulations (Amendment) Bill will amend the Building Regulations (Northern Ireland) Order 1979, which is known as the principal Order. The clauses of the Bill are explained in the explanatory and financial memorandum.
- 1500. The Committee has taken a detailed analysis of the many issues that arose during the evidence-gathering process. The Department has clarified some of the issues to the satisfaction of the Committee, and has indicated where proposed amendments can be effected more appropriately through subordinate legislation or in the associated guidance issued by the Department.
- 1501. The Committee may wish to make recommendations on some of those issues, and that can be covered by the Committee's report on the Bill, which will be drafted after today's meeting. The Committee will consider the first draft on 11 June.
- 1502. This session is about the clauses of the Bill it does not include consideration of the many policy or other issues that have arisen during the evidence-gathering process.
- 1503. The Chairperson: Seamus, perhaps you and your colleagues will take us through the clause-by-clause scrutiny, and members will ask questions on issues that concern them.
- 1504. Mr Seamus McCrystal (Department of Finance and Personnel): The Committee Clerk referred to the 1979 Order, and it may be useful to the Committee to refer to a copy of it that we have included in our submission with the proposed amendments highlighted in red ink. The inclusion of a new clause appears relatively straightforward, but where a few changes are recommended it can be difficult to read.

Clause 1 (Building regulations)

- 1505. Mr McCrystal: Clause 1 amends article 2 of the principal Order by introducing proposed new paragraph (4), which refers to "low or zero carbon system" and which gives an interpretation of such a system.
- 1506. Paragraph 4 refers to "a source of energy or a technology", and an interpretation of such a source is given in paragraph 5. Paragraph 6 defines the "other greenhouse gases" mentioned in paragraph 5(j).
- 1507. Clause 1(2) relates to schedule 1 of the principal Order, which lists the matters that may be included in building regulations. We propose several inclusions to schedule 1 to extend those matters to cover the broader area of sustainability. Should I go through those inclusions in detail, Chairman?
- 1508. The Chairperson: I do not think that that will be necessary unless members feel that those inclusions are an issue. If the Committee is satisfied with clause 1, we will move on to clause 2. Do members have any comments on clause 1?
- 1509. Dr Farry: I am not sure whether this is the right point at which to raise the wider discussion about microgeneration and whether there should be an overall target for renewables.

Should that be left to regulations or to wider environmental policy, to Building Control Northern Ireland or to the Planning Service?

- 1510. If the Committee was minded to suggest microgeneration or to set targets for the use of renewables, would this be the relevant clause to have that considered? If the Bill is a read-across with the 1979 Order, that is a relevant question.
- 1511. Mr McCrystal: In clause 1(2) proposed new paragraph 17(D) to the principal Order states that:
- "Measures affecting the use of fuel or power (including the amount of fuel or power to be derived from a particular source or sources)."
- 1512. That would give us the primary power to require that a specific amount of energy used in a building be derived from a particular source, such as the low or zero-carbon systems in proposed new paragraph 4. Proposed new paragraph 17D gives us the power to regulate in future.
- 1513. Ms Hilda Hagan (Department of Finance and Personnel): We would detail that in subordinate legislation.
- 1514. Dr Farry: The Chairman made the point last week that that issue presents a big challenge for the Committee, the public and the construction industry. Whether those powers should be determined by regulations which are not as transparent as primary legislation sparks debate, which in turn heightens awareness of what is going on.
- 1515. Should targets be contained in the primary rather than in the subordinate legislation? We should be trying to do more up-front through primary legislation rather than leaving it to regulations. I am not sure whether other members agree with me, but it is something that the Committee should consider.
- 1516. Mr Beggs: I will be interested to hear the views of the departmental officials, but as targets vary over time they should be dealt with through secondary legislation or regulations.
- 1517. Ms Hagan: The Office of the Legislative Counsel (OLC) supports that approach. Primary legislation provides a broad power to enable issues to be dealt with more specifically in subordinate legislation. Subordinate legislation can be changed quickly and is made using a more streamlined process.
- 1518. With regard to the issue of transparency, it may comfort the Committee to know that we consult on the policy options that we submit; we must also carry out a regulatory impact assessment on the stages in creating subordinate legislation. There is transparency before a regulation is made. That is why we generally stick with broad powers in primary legislation and subsequently specify those powers in subordinate legislation.
- 1519. Mr McCrystal: When we consulted on making amendments to the primary legislation, we received very few responses, and those that we did receive showed a clear misunderstanding of what primary legislation entailed. Indeed, we received only specific comments on the technical points of the regulations.
- 1520. Therefore we believe that the technical regulations are better known and understood. By and large, the construction industry dips into primary legislation only when it has to generally in relation to the appeals mechanism. There is not a wide understanding of the primary powers.

1521. The Chairperson: The Committee can say that instead of saying "can do", the regulations must stipulate "must do". That should reassure members of the importance that the Committee attaches to the matter. Not only is using the combination of primary legislation and regulations — which can be amended in the light of experience — a tried and trusted approach, it also allows for a future tightening of the regulations if the industry does not respond in the way that the Committee expects.

1522. Do members have the secretariat paper? It has been prepared by the staff and reflects the key policy issues picked up in the evidence sessions; it will help us to work through this very technical document.

Question, That the Committee is content with the clause, put and agreed to.

Clause 1 agreed to.

1523. Dr Farry: I wish to record that I would like to reserve my position on that point and reflect on it further.

1524. The Chairperson: That has been noted. Please bear in mind the point about recommendations.

Clause 2 (Protected buildings)

1525. Mr McCrystal: Clause 2 will insert a proposed new article into the principal Order to ensure that district councils give due regard to the desirability of preserving the character of protected buildings when interpreting the regulations.

1526. The words "have regard to" are included in proposed new paragraph 3A. We have agreed with the Committee to replace that phrase with the stronger "take account of", as that would strengthen the requirement and the duty on district councils.

1527. Mr O'Loan: What difference would that make to a building control officer in taking a decision?

1528. Ms Hagan: You could argue that it would not make a great deal of difference. Some people could interpret "have regard to" quite tightly as meaning that they must do x, y and z. However, when I spoke to the Office of the Legislative Counsel about amending the phrase, its advice was that "take account of" had been used in earlier legislation as it was interpreted as being stronger than "have regard to".

1529. One must demonstrate that one has "taken account of" something, whereas being asked to "have regard to" something means that one can choose to regard it or disregard it.

1530. One could argue semantics about whether there is a great deal of difference between the two terms. However, the advice of the Office of the Legislative Counsel was that "take account of" was slightly stronger and that the district councils would have something more to prove.

1531. Mr O'Loan: I welcome that improvement. If the lawyers say that those words have more force, we should take it seriously.

Question proposed:

1532. That the Committee recommend to the Assembly that the clause be amended as follows: In page 2, line 28, leave out "have regard to" and insert "take account of". — [The Minister of Finance and Personnel (Mr Peter Robinson).]

Question put and agreed to.

Question, That the Committee is content with the clause, subject to the Department's proposed amendment, put and agreed to.

Clause 2, subject to the Department's proposed amendment, agreed to.

Clause 3 (Building Regulations Advisory Committee)

1533. Mr McCrystal: This clause makes one change: it substitutes the word "persons" for the word "bodies" in article 4 of the principal Order. That reflects the requirements of the Office of the Commissioner for Public Appointments. Appointments to committees such as the Building Regulations Advisory Committee should be based upon the individual's knowledge and should not be seen as a nomination of someone from a body. In that circumstance, we notify all the professional bodies and interests concerned and ask them to bring any vacancies that we have on the committee to the notice of all their members. Members then submit applications to us individually.

Question, That the Committee is content with the clause, put and agreed to.

Clause 3 agreed to.

Clause 4 (Further provisions as to the making of building regulations, etc.)

1534. Mr McCrystal: The "deemed to satisfy" provision is removed and replaced by a guidance-based system. The scope of building regulations is extended to include protection and enhancement of the environment and the promotion of sustainable development.

Question, That the Committee is content with the clause, put and agreed to.

Clause 4 agreed to.

Clause 5 (Guidance documents)

1535. Mr McCrystal: Where we make regulations that are supported by "deemed to satisfy" provisions, we set out the procedures under which guidance will be prepared and published.

Question, That the Committee is content with the clause, put and agreed to.

Clause 5 agreed to.

Clause 6 (Type approval)

1536. Mr McCrystal: This clause gives district councils the power to type-approve non-site-specific building matters — for example, types of superstructure — in consultation with prescribed bodies, and that will allow greater flexibility. Applicants may appeal against the decision of a district council to the Department, and building regulations will detail the matters for which type approval may be sought.

1537. The Chairperson: Are members content?

1538. Mr O'Loan: I am content, although type approval is a significant issue. There is a great need for voluntary co-operation on that at present, which is fine if all works well. However, we can envisage situations in which developers will encounter hold-ups if district councils withhold approval. Apart from the proposals in the legislation, we need assurance that that is being addressed properly.

1539. Mr McCrystal: If a developer submitted plans to a district council, the council would have to determine whether they met the requirements of building regulations, and if they did, it would have no option but to approve the plans.

1540. The member may be concerned that a district council might not give type approval to allow a developer to use a house type in another district council area. In that case, there is provision for the developer to appeal to the Department against a decision to withhold type approval. We will make a decision on that. I hope that that reassures the member.

1541. Mr O'Loan: How long would such an appeal take?

1542. Mr McCrystal: It depends on the complexity of the case. As soon as we have all the information that we require for an appeal, we usually turn it round in a couple of weeks, unless there is a backlog.

1543. Mr O'Loan: We are all concerned about the planning system, but we have been largely unaware of the problems involved in building control.

1544. We are conscious of the frustration that occurs when proper economic development is delayed, and we do not want anything built into the system that creates unnecessary bureaucratic delay.

1545. Mr McCrystal: A developer could start more than one development in different district council areas at exactly the same time. If a developer appealed to us after being refused type approval, we would hope to have made a decision before he started a development in another district council area.

Question, That the Committee is content with the clause, put and agreed to.

Clause 6 agreed to.

Clause 7 (Power to require or carry out tests)

1546. Mr McCrystal: Clause 7 gives the Department the power to prescribe in building regulations the type of tests that a district council may carry out or require to be carried out to ensure that building regulations are not contravened.

Question, That the Committee is content with the clause, put and agreed to.

Clause 7 agreed to.

Clause 8 (Contravention notices)

1547. Mr McCrystal: District councils will not be allowed to issue contravention notices after a time. We will specify in regulations that that time will not exceed 12 months after the date on

which the entire works are completed. That will be prescribed in building regulations. Regulations will be made by the Department to make it mandatory to inform a district council of the date when those works were completed.

Question, That the Committee is content with the clause, put and agreed to.

Clause 8 agreed to.

Clause 9 (Registers of information and documents to be kept by district councils)

1548. Mr McCrystal: The Department proposes a new requirement for district councils to keep registers of information for public inspection. That would formalise current practice and allow the Department to prescribe the format and content of such registers.

1549. Ms Purvis: Proposed new paragraph 19A(4)(c) states that a district council:

"shall, in prescribed circumstances, provide to members of the public, on request, copies of information and documents".

1550. The Committee has concerns about unsolicited sales material. Does the proposed new article allow for the prevention of such unsolicited material?

1551. Mr McCrystal: No. The Department discussed that issue at a previous evidence session. Unsolicited advertising material goes to anyone who applies for or who receives planning approval or building regulations approval. That is simply because approvals are listed and put into the newspapers. The addresses are in the public domain, and organisations collate that information on behalf of companies and bombard successful applicants with it.

1552. Ms Purvis: Therefore it is not through this register.

1553. Mr McCrystal: No. This relates to getting specific information from district councils. However, we will prescribe and consult on the information that we expect district councils to keep and how they handle that information. We are concerned that there are data protection and freedom of information issues, and the matter will have to be looked at in much more detail.

1554. The Chairperson: There are so many sources of information.

Question, That the Committee is content with the clause, put and agreed to.

Clause 9 agreed to.

Clause 10 (Civil liability)

1555. Mr McCrystal: Article 20 was to be omitted as it had never been activated and the Department had not received representation asking it to do so. However, the Minister will oppose clause 10's being part of the Bill.

Question, That the Committee is content with the clause, put and negatived.

Clause 10 disagreed to.

Clause 11 (False or misleading statements)

1556. Mr McCrystal: Clause 11 inserts proposed new paragraph (1A) creating a new criminal offence for knowingly or recklessly submitting false information to a district council.

Question, That the Committee is content with the clause, put and agreed to.

Clause 11 agreed to.

Clause 12 (Application of building regulations to the Crown)

1557. Mr McCrystal: Article 22 in the principal Order had never been commenced, but, to reflect modern procurement practice in the Crown Estate, we propose to commence that article and to include a redefinition of a Crown building as one occupied by the Crown and to require Crown buildings — except where prescribed — to be compliant with the substantive requirements of building regulations.

Question, That the Committee is content with the clause, put and agreed to.

Clause 12 agreed to.

Clauses 13 to 15 agreed to.

Clause 16 (Commencement)

1558. Ms Hagan: Small amendments are proposed to clause 16(1) and (3) to take account of the fact that the civil liability provisions of article 20 will no longer be repealed.

Question proposed:

1559. That the Committee recommend to the Assembly that the clause be amended as follows: In page 7, line 17, leave out "repeal of paragraphs (8), (9) and (13) of" and insert "repeals relating to"— [The Minister of Finance and Personnel (Mr Peter Robinson).]

Question put and agreed to.

Question, That the Committee is content with the clause, subject to the Department's proposed amendment, put and agreed to.

Question proposed:

1560. That the Committee recommend to the Assembly that the clause be amended as follows: In page 7, line 22, leave out from "repeal" to "Article" in line 23 and insert "repeals relating to article 22 of the principal Order" — [The Minister of Finance and Personnel (Mr Peter Robinson).]

Question put and agreed to.

Question, That the Committee is content with the clause, subject to the Department's proposed amendment, put and agreed to.

Clause 16, subject to the Department's proposed amendments, agreed to.

Clause 17 agreed to.

Schedule

1561. Ms Hagan: The repeals will remain as they are listed in the schedule, except that "Article 20" will be removed and paragraph 4 of article 22 will not be repealed.

Question proposed:

1562. That the Committee recommend to the Assembly that the schedule be amended as follows: In page 8, line 14, leave out "Article 20". — [The Minister of Finance and Personnel (Mr Peter Robinson).]

Question put and agreed to.

Question, That the Committee is content with the schedule, subject to the Department's proposed amendment, put and agreed to.

Question proposed:

1563. That the Committee recommend to the Assembly that the schedule be amended as follows: In page 8, line 15, leave out "paragraphs (3) and (4)" and insert "paragraph (3)". — [The Minister of Finance and Personnel (Mr Peter Robinson).]

Question put and agreed to.

Question, That the Committee is content with the schedule, subject to the Department's proposed amendment, put and agreed to.

Schedule, subject to the Department's proposed amendments, agreed to.

1564. The Chairperson: Thank you. The Committee's draft report is due by 11 June 2008. Seamus, issues may arise that require a response from the Department, and I ask you to bear in mind our tight time schedule. The Committee Clerk will work with you on that. Thank you again for your time and expertise.

Appendix 3

Written Submissions

Building Control Northern Ireland

Finance and Personnel Committee

Briefing Note

The Building Regulations (Amendment) Bill (Northern Ireland) 2008

1.0 Introduction

- 1.1 The purpose of the briefing note is to set out the views of Building Control in Northern Ireland on the proposed Building Regulations (Amendment) Bill 2008.
- 1.2 Building Regulations are administered by the 26 District Councils in Northern Ireland. For the purposes of ensuring uniformity of interpretation, application and enforcement of Building Regulations, Councils are grouped together. There are five group areas and Belfast City Council. Group Chief Officers and District Building Control Managers have established a voluntary networking structure known as the panel system. This structure is designed to help co-ordinate Building Control services across Northern Ireland. The Executive Panel has nominated Desmond Reid, Director of Building Control in Fermanagh District Council and John Dumigan, Group Chief Officer of the South Eastern Group of Councils to present the views of Building Control on the proposed Building Regulations (Amendment) Bill 2008.

2.0 Background

- 2.1 Building Control very much welcomes the opportunity to present its views to the Committee on the Amendment Bill.
- 2.2 We have been working closely on this issue with our colleagues in the Building Regulations Unit in the Department of Finance and acknowledge that a significant number of our concerns and views have already been addressed and are incorporated in the proposed Amendment. We believe that this joined-up approach has resulted in a document that will deliver better regulations, better control and also future proofs regulatory needs.

However, not everything Building Control thought should be in the Amendment was included. The presentation, to the Committee, therefore, focuses only on those issues that Building Control feels should be strengthened or included. Articles in the Bill not mentioned in the presentation are therefore generally in line with Building Control views.

2.3 It is our view that the original Building Regulations Order, written sometime in the early 1970's was a far sighted document and served Building Control well over the years.

What is needed now, is some modernising and future proofing.

3.0 COMMENTS ON ARTICLES ON THE PROPOSED AMENDMENT BILL

- 3.1 Article 2 Interpretation
- 3.1.1 The definition of "Rack Rent" has been omitted, however "owner" (the person upon whom a contravention notice may be served) includes a reference to the Rack Rent.

We recommend that the definition of "owner" should be changed to "the responsible person". The new definition could include legal owners, occupiers, tenants and agents who represent an owner or estate.

3.1.2 The definition of "site" refers to the footprint of a house or building. It should be extended to include the area within the boundary of the land belonging to the building, or buildings. Current Building Regulations applied to works such as, Fire Rescue Service access, access for disabled people, retaining walls, drainage etc. If powers are confined to work within the footprint of the building then some requirements may be unenforceable.

We recommend that the definition of site be extended.

3.2 Article 3A – Protected Buildings

The article requires Building Control to have regard to the desirability of preserving the character of protected buildings i.e. listed buildings and those in conservation areas. Building Control feels that the power should be made to require Building Control to consult formally with the agencies responsible for listed buildings etc where the character or structure of such buildings are to be changed or affected as a result of regulatory requirements. We also feel that this should be extended to Townscape character buildings and buildings of historic or architectural value (as already listed in Technical Booklet F).

We recommend that Building Control is required to consult the relevant statutory agencies where sensitive buildings will be affected by regulatory requirements. The consultations should include buildings listed in TBF.

3.3 Article 5A – Guidance for purposes of Building Regulations

In Article 5A (3) it would appear that only guidance published by the Department will be guidance for the purposes of Building Regulations. This may exclude third party documents published by other authoritive bodies.

We recommend that the Department provides for the use of other authorative documents as guidance.

3.4 Article 8 – Type Approvals by District Councils

Building Control welcomes this provision and believes it will be of benefit to developers and the professions by speeding up approvals. We are, however, anxious to ensure that Councils are required to accept type approvals and cannot opt out or seek additional requirements.

We recommend that the power is taken to require all Councils to sign up to an agreed type approval scheme.

3.5 Article 13 – Plans deposited with a District Council

A number of Councils expressed the view that plans should be approved before work is commenced.

This could ensure that serious and costly mistakes are not made during the construction process. To prevent delays for developers, an application could be deemed approved if not processed by a Council within a prescribed time period.

We recommend that further consideration is given to requiring approval prior to commencement.

3.6 Article 17 – Appeals to the Department

Where the Department considers an appeal against a Councils decision it would be helpful and informative to have the rationale behind the decision published. It would also be of benefit if a time limit could be specified for the period the Department has to reach a decision (similar to the time limits imposed on Councils).

We recommend that Article 17 requires the Department to publish the reasons why they reached appeal decisions and that there should be a time limit on such decision. It is also recommended

that with the introduction of guidance based documents a system of determinations is established (similar to Great Britain).

- 3.7 Article 18 Contravention Notices in Respect of Work Contravening Building Regulations
- 3.7.1 Under this article, Councils have 18 months, from the completion of the works, to serve a contravention notice. Completion is often a contentious issue and it would be useful to have a definition of "completion of the works".
- 3.7.2 The Enforcement Concordat, the democratic process of seeking Council approval to prosecute, the provisions allowing the applicant to appear before the Council, the appeal system and the general slowness of the legal process can often make it difficult to meet the 18 month deadline.
- 3.7.3 Unauthorised work often results in contraventions that are a danger to health and safety. If this work has been completed for more than 12 months Councils are unable to serve a contravention notice. Articles 18 (a) allows Councils to apply for an injunction for the removal or alteration of any contravening work completed for more than 12 months. However, the injunction process is exceedingly expensive. In addition, courts expect requests for injunctions to be "timely" and taking cases related to work which has, perhaps, been completed many years ago, has little chance of success. Councils may only consider injunctions related to the most serious safety concerns and most contraventions therefore will never be remedied. No Council in Northern Ireland has used the injunction process to date.
- 3.7.4 Article 18A (1) (a) provides for a person upon whom a contravention notice has been served to submit a report to the Council. The Article provides for a total period of 84 days for the report to be submitted. If site work is ongoing, this period allows work to continue for a considerable time before a decision is made on whether to proceed or withdraw the notice.

The facility of submitting a report is seldom, if ever, used and this process could be speeded up if it was removed.

We recommend that the procedure for processing contravention notices is reviewed and made more effective.

3.7.5 Article 19 – Deposit of Plans to be of no effect after certain interval

Currently, plans for work which has not been commenced within 3 years from the date of submission, can be declared null and void. In the case of multi-house applications, as long as one house has been started, the plans cannot be declared null and void. This means that for many years houses can continue to be built to outdated regulations and standards.

Building Control is unconvinced that this issue has been addressed in the proposed amendment.

We recommend that the amendment provides for the power to declare individual buildings which have not been commenced on multiple sites to be declared null and void.

3.7.6 Article 19 A – Registers to be kept by District Councils

Councils have expressed a concern that manufacturers / suppliers / builders etc will be able to obtain information on the names and addresses of members of the public who intend to build, or extend, their house. This could mean that those people will be subject to substantial quantities of unsolicited sales and marketing material.

We recommend that consideration be given to this issue.

4.0 ADDITIONAL ISSUES

4.1 Dangerous Buildings and Places

Councils currently have powers to control dangerous buildings and places. The powers are contained in legislation written in 1847, 1854 and 1907. It is outdated and often ineffective. Building Control holds the view that it would be appropriate to have included in the Amendment Bill the power to make regulations to control dangerous buildings and places.

We acknowledge that the Department, during the consultation stages, did include provisions for the control of dangerous buildings and that Building Control felt that, as written, those were too broad. We also acknowledge that this issue may delay the Amendment if it is to be included at this time. Nevertheless, we believe that this is an opportune time to deal with a long standing problem.

We recommend that the Amendment Bill should include powers to make regulations to control dangerous buildings and places.

4.2 Harmonisation of Regulations

It would be advantageous to industry if Building Regulations within the British Isles and the Republic of Ireland could be better harmonised both in terms of technical content and time of introduction.

We recommend that the Amendment Bill includes a requirement that the Department takes account of the requirements of other jurisdictions and works with others on a harmonisation agenda.

4.3 Backland Development

There have been backland developments where emergency and service vehicles have been unable to gain access to the development. No statutory agency appears to have powers to ensure proper access is available.

We recommend that the Department is asked to consider if these powers could be included in the Amendment Bill.

4.4 Control of Demolitions

Building Control is aware that demolition of buildings falls within the requirements of the Construction and Design Regulations. However, demolition is one of the most dangerous aspects of building operations and the current control system is reactive as opposed to pro-active. Building Control currently deals with the construction phase and developers may benefit from a one stop shop approach if the responsibility for demolition also lay with us. Building Control will be reactive as they are already on the ground inspecting buildings.

The Pointer system suffers from a lack of data on demolished property and Building Control could provide this, as they provide information on new developments.

We recommend that the Amendment Bill, provides for the making of regulations to control demolitions.

4.5 Programme of Work

It would be helpful to the industry and Building Control if a phased and published programme of proposed new regulations was produced. The last amendment to Building Regulations in 2006 is still causing major upheaval and this year two further amendments are proposed. Builders and Architects are advising that a breathing space of 3 years should be introduced between changes.

4.6 Existing Buildings

Building Control feels that at some time in the future it may be necessary to consider applying Building Regulations to existing buildings e.g. to reduce their carbon footprint. It may be an opportune time to take the power to enable such regulations to be made in the future.

We recommend that the Amendment Bill provides for regulations applicable to existing buildings.

End of Briefing Note

Mr John Dumigan Mr Desmond Reid 4 April 2008

Energy Saving Trust



Energy Saving Trust Enterprise House 55-59 Adelaido Street Belfast BT2 8FE

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Mitchel McLaughlin MLA Chair of DFP Committee Room 336, Parliament Buildings Belfast BT4 3XX

7 April 2008

Deat chair,

REVIEW OF BUILDING REGULATIONS

I write to you in your capacity as Chair of DFP Committee with an understanding that your Committee is currently reviewing Building Regulations.

Please see the attached briefing which I submit as formal evidence, for your consideration.

Yours faithfully,

NOEL WILLIAMS Head of Energy Saving Trust Northern Ireland COMMITTEE FOR -8 APR 2008

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The Energy Saving Trust Limited, Registered Office: 21 Dartmouth Street, London SW1H 9BP Registered in England and Wales No. 2622374

Energy Saving Trust

Microgeneration in Building Regulations



The Energy Saving Trust (EST) is one of the leading organisations set up to mitigate the damaging effects of climate change. It aims to cut carbon dioxide emissions - the main greenhouse gas causing climate change - by promoting the sustainable and efficient use of energy.

EST is an independent not- for-profit organisation and acts as a bridge between government, consumers, trade, businesses, local authorities and the energy market. It provides free, impartial and independent advice and information on energy efficiency, transport and renewables.

EST's position on building regulations

EST believes that it is vital for the fabric of buildings to be robust and energy efficient, before innovative technologies are added. The energy efficient measures are likely to last for the lifetime of the building, perhaps over 100 years, while microgeneration technologies may be replaced within a few years. Moreover, energy efficiency is currently more cost effective than microgeneration.

EST fully supports the phased integration of renewables into building regulations, but believes that setting a higher carbon standard might be a better instrument since this would leave it to the market (developers) to find the most cost effective means of reducing the carbon footprints of new build. EST would encourage all developers to adopt the EST Best Practice standards, which seeks to raise carbon footprint targets by 25% above current building regulations standards.

EST's response to the PPS 18 Renewable Energy Consultation

This highlights the importance of installing energy efficiency technologies before microgeneration technologies. However, EST's microgeneration modelling work (the results of which are outlined in EST's recent report 'Generating the Future: An analysis of policy interventions to achieve widespread microgeneration penetration') highlights the role that mandating microgeneration in new build (as part of a wider mix of policies) could have in building the market for microgeneration.

We need to ensure that policies are introduced now to ensure significant numbers of microgeneration technologies are in place by 2050.

Scottish Example

In Scotland, SPP6 set out an expectation that 'all future applications proposing development with a total cumulative floor space of 500 sq metres or more should incorporate on-site zero and low carbon equipment contributing at least an extra 15% reduction in CO2 emissions beyond the 2007 building regulations CO2 emissions standards'.

However, the recent report of an expert panel appointed by Scottish Ministers entitled 'A low carbon building standards strategy for Scotland' recommends that this requirement be 'reviewed and probably removed from SPP6 as the very low carbon standards are introduced in 2013'.

This is very much in line with what EST is saying for NI - that any consideration of changes to building regulations (including requiring microgeneration) are seen as intermediate stages on the way to zero carbon buildings and as such energy demand issues (energy efficiency) need to be considered in tandem with energy supply issues (microgeneration).

EST is also carrying out a study into Urban Micro Wind Turbines from Jun 07 – Jun 08. The results are due out in September

Mandatory Microrenewables in NI Building Regs – Key Points

- The building fabric should be robust and energy efficient, before innovative technologies are added.
- The fabric is likely to last for the lifetime of the building, while microgeneration technologies may be replaced within a few years.
- Energy efficiency is also more cost effective than microgeneration.
- A greater available evidence base to support the emissions reductions potential of energy efficiency measures than for microgeneration measures.
- Setting a higher carbon standard might be better instrument since this would leave it to the market (developers) to find the most cost effective means of reducing the carbon footprints of new build.
- Planning policy can play a role in promoting microgeneration technologies in new build.
- Progress is being made in other places e.g. Scotland where the Scottish Executive has proposed to

'require planning authorities to ensure that certain new developments include on-site renewable energy equipment which will reduce predicted annual CO2 emissions by a given percentage'.

- In England and Wales ministerial announcements have been made which outline the Governments expectation that local authorities will require that certain developments reduce their predicted CO2 emissions by a given percentage.
- Key to long term energy performance of a home is the fabric build right, build tight.
- Build to Best Practice standards 25% greater.

For further information contact Noel Williams, Head of the Energy Saving Trust in Northern Ireland, Tel: 07739 191958(M) 028 9072 6006(B) / noel.williams@est.org.uk

A Microgeneration Strategy for Northern Ireland



Input from the Energy Saving Trust

This paper provides the Energy Saving Trust's initial thoughts on the support that will be required for microgeneration in Northern Ireland (NI). Please note that these views should not be taken as representing the views of individual Energy Saving Trust members. Please contact Noel Williams, Head of Energy Saving Trust NI, with any questions or for further information, at noel.williams@est.org.uk or 028 9072 6006.

1. The Energy Saving Trust

The Energy Saving Trust was established as part of the Government's action plan in response to the 1992 Earth Summit in Rio de Janeiro, which addressed worldwide concerns on sustainable development issues. We are the UK's leading organisation working through partnerships towards the sustainable and efficient use of energy by households, small communities and the road

transport sector. We have had a dedicated office in NI since 1996. We operate a number of programmes in NI including a Sustainable Energy Centre (SEC) – the NI EST Advice Centre - providing advice on energy efficiency, transport and mass-market renewables to consumers. Further details of our activities related to microgeneration can be found in Appendix 1.

2. Current status of microgeneration in NI

In August 2005, the Energy Saving Trust in conjunction with Element Energy Limited, Cambridge University Faculty of Economics and E-Connect undertook a study analysing the potential of microgeneration technologies up to the period 2050[1]. The work was undertaken at a UK level and included the detailed modelling of the impacts of specific policies to promote microgeneration. The recommendations provided in this paper are largely based on this UK-wide modelling.

It is worthwhile noting here that we believe it would be useful to run the model against NI specific data as opposed to UK-wide data – we are currently modelling Scottish specific data for the Scottish Executive. This would produce information tailored for NI data on factors such as housing stock, wind-speed, biomass availability, proportion of dwellings off the gas grid etc. Outputs from the model are about the degree and timescales of adoption of various technologies in different scenarios. We would welcome the opportunity to discuss this possibility in greater detail with DETI.

Projections of cost at a UK level suggest that many microgeneration technologies will produce cost competitive energy by 2020. However, biomass heating and ground source heat pumps can already be cost effective when compared with electric heating systems, whilst small commercial scale (sub 50kW) CHP units are borderline cost effective at present without the need for further technology breakthrough. The rate at which cost competitive technologies enter the market will depend on a number of key factors:

- the speed at which industry can scale up production and installation capacity and skills;
- awareness in, and the size of, the early adopter market;
- the extent, type, and effectiveness of policy interventions to develop early niche markets.

Other microgeneration technologies have the potential to become part of a commercial, mass market decentralised energy system for the UK, supplying a large proportion of UK electricity and heating requirements at a cost competitive with today's supply. In the process substantial quantities of CO2 emissions would be avoided. Current projections indicate that there is a wide spread in projected dates when cost competitive energy can be produced by microgeneration technologies: Stirling engines are earliest (2010-2015), with small wind and fuel cell CHP following circa 2015-2020. Domestic photovoltaics are unlikely to produce equivalent cost energy before 2030.

There are currently less than 100,000 microgeneration installations in the UK (of which most are solar water heaters installed pre-2000). Historically, the annual number of installations is closely correlated with the level of available grant funding with the sectors seeing the most yearly installations being PV and solar water heating, in response to generous grant schemes. The yearly installations of ground source heat pumps and small wind turbines are also increasing rapidly, although from a low starting point, stimulated by grant programmes and rapid cost reductions. MicroCHP is only just beginning to enter the market, but there is a very large technical effort on both Stirling engine and fuel cell technologies.

3. Current support for microgeneration technologies in NI

3.1 Grant programmes

Historically the main support mechanisms for microgeneration technologies in NI have been the UK wide PV Major Demonstration programme (PV MDP), and the Clear Skies programme. Alongside these programmes NI Electricity (NIE) ran a 'PV top up' programme and a 'Clear skies +' programme alongside the PV MDP and the Clear Skies programme. The programme provided funds of between 10 and 20% on top of the existing grants available under these programmes. This top up funding played an important role in kick starting the market for microgeneration technologies in NI. Indeed, before the top up was implemented there had been no applications from NI. More recently support has been provided under the UK-wide Low Carbon Buildings Programme (LCBP). While this programme will continue to be available in NI, the Environment and Renewable Energy Fund (EREF) is now the main support mechanism for microgeneration in NI.

The current rate of installation of microgeneration technologies in NI is closely correlated with grant funding. The Household Programme of the EREF is due to run until 2008, and the first phase of the LCBP will run until 2009 although existing funding for household microgeneration is likely to run out before then. As such these programmes will continue to be the main support mechanisms for microgeneration technologies in the household sector until 2008/9.

The second phase of the LCBP began in November 2006 and aims to drive down the price of microgeneration technologies. It will apply across the whole of the UK. The programme will be focused on delivering measures to the public sector, including charitable bodies such as social housing, but private householders will not be eligible for grant funding. However, the benefits of this programme should also be visible to householders through the resulting reductions in the price of relevant technologies.

3.2 The Energy Efficiency Levy

A very small proportion of the current Energy Efficiency Levy (EEL) is directed at solar technologies. This has little impact on the market for such technologies and we do not envisage that the level of activity this programme directs at such technology will change over the short term.

4. Perceived barriers to the introduction of Microgeneration

The most commonly perceived barriers to the introduction of microgeneration are:

- high cost;
- legislation/planning and;
- the level of consumer awareness.

4.1 High cost

High cost of technology is an important barrier: most suggestions for overcoming this relate to the provision of appropriate grant schemes.

Indeed our model shows that the mass market introduction of microgeneration technologies would be best stimulated by capital grants until technologies become cost effective.

Our model also shows that the majority of microgeneration technologies will not be cost effective by the time existing grant schemes cease, and as such there will be a continuing need to provide significant capital support for these technologies.

The potential for microgeneration in the householder sector is considerably greater than that for other sectors and as such it is important that post EREF and LCBP1 there is continued capital support for non cost effective technologies in this sector as well as in communities. Such support should be reduced over time as the technologies become more cost effective. We are currently undertaking additional work on our microgeneration model to provide a better idea of the required levels of capital support required for each technology in the future.

4.2 Legislation

The 'legislation' barrier refers primarily to problems with planning permission, the cost of required metering combined with the low value of exported electricity and the lack of targets and incentives for renewable heat.

In this context we recommend that greater consideration is given in NI to the role planning can play in promoting microgeneration technologies. Considerable progress is being made in the rest of the UK on this area most notably in Scotland where the Scottish Executive has proposed to 'require planning authorities to ensure that certain new developments include on-site renewable energy equipment which will reduce predicted annual CO2 emissions by a given percentage'. In both England and Wales ministerial announcements have been made which outline the Governments expectation that local authorities will require that certain developments reduce their predicted CO2 emissions by a given percentage. We would urge similar action here in NI.

In our opinion setting the target as a reduction in CO2 emissions is preferable to setting a target as a proportion of energy to be generated from renewables as this maximizes the resulting carbon savings and means that developers do not just focus on installing technologies with the lowest upfront capital costs.

Granting permitted development status for all microgeneration technologies would mean that consumers could avoid the cost and the delays associated with seeking planning permission, and as such has a key role to play in the promotion of microgeneration. Again, progress on this issue is being made in the rest of the UK, with both England and Scotland currently reviewing the permitted development status of microgeneration technologies. We look forward to responding to the proposed NI consultation on this issue later this year.

As an ongoing support mechanism, a system of feed-in tariffs, as used elsewhere in Europe to provide a guaranteed price for exports would be helpful or alternatively an obligation on suppliers.

There is also considerable scope for the NI Renewables Obligation (NIRO) to support microgeneration. This is acknowledged within the current DETI consultation. We are currently developing our thoughts on the most appropriate means of providing this support through the NIRO.

4.3 Consumer awareness

Raising public awareness and knowledge of microgeneration technologies is essential to boosting demand – at this stage it is particularly important to raise awareness in the early adopter market.

Disseminating information about microgeneration products will be vital, and this will be most effective if targeted at those consumers most likely to be interested in microgeneration. The Energy Saving Trust has built a segmentation model using an industry standard system called MOSAIC. The model divides the UK population into groups according to the degree that they emit CO2 from their homes and cars and their concern for the environment. Within this we have identified the proportion (30%) of households in NI most likely to be interested in microgeneration. We can provide further details of these segments to the DETI if this would be useful.

The continuation of existing advice/information services in NI will play a key role in raising public awareness and knowledge. In April 2005 we began a pilot of the use of a Sustainable Energy Network (SEN) to progress activity on small-scale sustainable energy issues in three areas of the UK (NI, North East, and Anglia). We are evaluating the current pilot to assess the carbon savings and other benefits arising from the SEN quarterly. Results from the first six months are extremely promising and show overall cost effectiveness of £9.7/tC against a target of £10/tC. We expect to see this improve in later rounds of the evaluation as renewables and transport activity increases. The evidence confirms that SEN advice is making a difference at individual consumer level. Results for the first full year of operation will be available in December 2006. In this context it is worthwhile noting that a recent survey of consumers with solar hot water systems conducted at the Social Policy Research Unit at the University of Sussex showed that the advice and support of a local energy agency was the single most important factor in their decisions[2]. In addition, recent market research undertaken on behalf of the Energy Saving Trust highlights strong demand and consumer interest for further information about microgeneration.

In Scotland the Scottish Household and Community Renewables Initiative (SCHRI) funds development officers who are located in the Scottish Energy Efficiency Advice Centres. The development officers assist the development of Community Renewable projects providing expertise and developing networks to drive projects forward. Development officers signpost communities to UK, and specifically Scottish funding sources and advise on relevant legislative, planning and technology issues to ensure maximum project success. We see a continued role for the development officers and believe that they will play an increasingly important role in supporting the take-up of microgeneration technologies over time, and suggest that consideration is given to funding an NI equivalent operating within the NI EST Advice Centre.

5. Technology specific recommendations

Please note that the figures quoted below relating to expected CO2 emissions reductions and to the contribution that such technologies could make to domestic heat and electricity requirements relate to the whole of the UK. As noted above figures specific to NI could be generated by running our model against NI data as opposed to UK-wide data.

5.1 Stirling engine CHP

Currently, the technology is not far from being cost effective. This is strongly dependent on achieving lifetime and maintenance costs close to those of the incumbent oil/gas boilers. Following likely commercial introduction circa 2010, this sector is predicted to grow quickly as costs reduce further. After cost effectiveness is achieved, it could take another 10-15 years before a significant proportion of domestic energy is generated by this technology. This technology is likely to be successful in larger dwellings and older dwellings with higher than average heat loads. Over 8 million UK homes could be reached by 2050, supplying 40% of domestic heating requirements and 6% of UK electricity supplies.

Mass market uptake could be accelerated through obligations upon energy suppliers followed by a requirement for use within the NI Building Regulations when appropriate. This could take the form of a requirement to include microgeneration technologies to reduce predicted annual CO2 emissions by a given percentage where the percentage could increase over time. We recommend that the microgeneration strategy makes it clear that once technologies are cost effective, they will be included within Building Regulations.

5.2 Fuel cell CHP

This technology is more suited to smaller dwellings with lower than average heating loads, particularly new build. Any future reductions in domestic heating loads (through higher standards for building fabric) would increase the market for this technology. Commercialisation is strongly dependent on achieving lifetime and maintenance costs close to those of the incumbent oil/gas boilers. Cost effective introduction is likely circa 2015. Thereafter costs are predicted to continue to reduce significantly. In 2050, with appropriate support, small fuel cells could supply 9% of UK electricity requirements and reduce domestic sector CO2 by 3%.

As with Stirling engines, mass market uptake could be accelerated through obligations upon energy suppliers and then by a requirement for use within the NI Building Regulations. This technology could produce 1.6% of UK annual electricity demand, or up to 18% if a more equitable value for exported electricity is achieved and units are sized according to heat demand rather than electricity load.

5.3 Wind

Small wind systems are generally not cost effective at present. However, a number of new products have recently come to market with potential for significant volume related cost reductions. As a result, mass-commercialisation could occur circa 2015. The potential for small wind is significant – there are a number of UK developers, a suitable UK market of significant size and near term potential for considerable cost reductions. With appropriate support, small wind could supply 4% of UK electricity requirement and reduce domestic CO2 emissions by 6%.

In the short term, this technology will need to be supported through the period of time until commercialisation is achieved. Projections suggest a capital grant of circa 25-50% could be sufficient to support uptake levels until this time. However, commercial viability is highly dependent on acquiring a more equitable price for exported electricity. This would be the single most important market change for small wind. Poorly informed planning decisions could increase costs and reduce the market quite significantly. An objective assessment of the environmental impact of domestic small wind systems is required to provide clarity on this issue, followed by quidance to planners on the key issues including permitted development status.

Note that the current market for wind turbines is not based on cost-effective purchasing decisions and is likely to slow down once more information about performance is widely known.

5.4 Photovoltaics

Photovoltaics (PV) are not generally cost effective at present and significant incentives are required to maintain the market for small grid connected systems. There are small markets where PV is already cost effective, including for remote power and in prestige facades, but generally cost effectiveness is not predicted to occur until 2030. However, a technology breakthrough could reduce capital costs and bring this forward towards 2020. Lack of planning issues means the market potential for PV is amongst the largest of those studied. If cost issues were overcome, this technology could supply almost 4% of UK electricity demands, and reduce domestic sector CO2 emissions by up to 3%.

Significant incentives will be required to maintain the market until commercialisation is reached in circa 2030. However, there is some anecdotal evidence to suggest that current levels of grant are propping up high prices with lower prices seen in other countries despite similar costs.

A more equitable value on exported energy will be required to ensure commercial viability.

5.5 Biomass heating and heat pumps

Both biomass heating and GSHP technologies can be commercial when compared against electric or Liquid Petroleum Gas (LPG) heating, but in general the technologies are not competitive with natural gas or oil fired heating. Although only a small proportion of the housing market uses electric heating, and only a fraction of these will be suited to biomass or GSHP, the CO2 savings are disproportionately large (due to the high CO2 emissions of electric/LPG heating). With appropriate support, these technologies could reduce domestic sector CO2 emissions by 3% by 2050. These applications would also be likely to contribute disproportionately to alleviation of fuel poverty in low income households living in hard-to-treat homes off the gas grid.

These microgeneration technologies both rely on wet-heating systems to be installed instead of electric. This could be a significant barrier due to the perceived simplicity of electric heating systems in particular. Regulation could therefore be used to improve uptake in preference to electric or LPG in NI. For example, incentivisation in the Building Regulations or in local/national planning guidelines. For low income households it may be appropriate to use direct grant support through the Warm Homes scheme. In this context it is worthwhile noting that we are running a pilot project on behalf of the Scottish Executive to test the suitability of renewable energy technologies in tackling fuel poverty in properties without the option of gas connection. We would be happy to provide DETI with further details about this pilot if it would be helpful.

5.6 Solar water heating

Currently the largest microgeneration industry, installing 2000 units annually. However, generally, solar water heating is not cost effective at present. The technology is most effective if replacing electric heating systems. However, while capital costs are projected to reduce, the learning rate appears low as the market is already mature, and it is not likely that solar water heating will provide cost effective water heating without substantial grant support.

Significant grant funding (on the order of 50% of capital costs) would need to be maintained long term to support the market. Lower levels of grant funding would assist but installation levels would be significantly lower than potential. Planning policies requiring a percentage of renewable installation will undoubtedly help as the technology has one of the lowest capital costs. However, because this does not encourage developers to install technologies that lead to the largest carbon savings it may be more appropriate to encourage planning policies to contain carbon reduction targets rather than percentage of renewables targets.

In this context we are very pleased that the EREF fund will, via the NI Housing Executive (NIHE), be funding the installation of solar hot water heaters in 600 fuel poor homes. However, we believe that consideration should also be given to the inclusion of biomass and GSHP as options under NI fuel poverty programmes for off-gas grid properties

6. Recommendations for Northern Ireland's Microgeneration Strategy

To inform the NI microgeneration strategy we believe it would be useful to analyse the potential of microgeneration technologies in NI up to the period to 2050.

- Grant support is required in the short term. Early adopters who are willing to pay over the odds for technologies should be encouraged in order to develop the market in the early stages. Grant support for the household sector will be required post EREF and LCBP.
- Ensure a better price for sale of exported electricity from microgeneration and/or specific obligations on suppliers
- Increase consumer information and awareness of technologies and appropriate use via NI EST Advice Centre, and consider the funding and NI equivalent to Scotland's SCHRI Development/Community Officer network to assist in the development of community renewable projects.
- Encourage planning policies and ensure that they include carbon reduction targets rather than 'percentage of renewable' targets.
- Implementation of general 'permitted development' for appropriate technologies.
- The provision of clear direction to industry on the future inclusion of cost-effective technologies into Building Regulations.
- Inclusion of Biomass and GSHP as options under NI fuel poverty programmes for off-gas grid properties
- There is also considerable scope for the NIRO to support microgeneration. This is acknowledged within the current DETI consultation. We are currently developing our thoughts on the most appropriate means of providing this support through the NIRO.

Energy Saving Trust (NI)

15th November 2006

Appendix 1 -

The Energy Saving Trust's Microgeneration Activities

- The Low Carbon Buildings Programme. The Energy Saving Trust manages this programme on behalf of the Department for Trade and Industry (DTI)[3]. The programme provides grants for microgeneration technologies for householders, community organisations, schools, the public sector and businesses.
- The Scottish Community and Householder Renewables Initiative (SCHRI). The Energy Saving Trust jointly manages this programme with Highlands and Islands Enterprise on behalf of the Scottish Executive. The programme provides grants, advice and project support to assist the development of new community and household renewable schemes in Scotland.
- Fuel poverty and microgeneration. On behalf of the Scottish Executive the Energy Saving Trust is running a pilot study to explore the potential of renewable energy technology options for heating in a variety of domestic settings across Scotland with a view to considering including these technologies in the main central heating programme at a later date.

Potential for Microgeneration, study and analysis. In August 2005, the Energy Saving Trust in conjunction with Element Energy Limited, Cambridge University Faculty of Economics and E-Connect undertook a study analysing the potential of microgeneration technologies up to the period 2050. The study was commissioned by the DTI to inform the Low Carbon Buildings Programme and the recently published microgeneration strategy. The report – Potential for

Microgeneration, study and analysis was published on 12 December 2005, and can be found at: http://www.dti.gov.uk/energy/consultations/pdfs/microgeneration-est-report.pdf[4]

The study included an UK-wide industry consultation exercise to assess the current status of technologies and the barriers preventing wider uptake. Detailed economic modelling was undertaken to assess the potential costs and benefits of microgeneration under various scenarios for the period 2005-2050, and to indicate when each of these technologies could become more cost effective.

The technologies covered in the study included:

- Solar photovoltaics (PV).
- Wind turbines.
- Small hydro.
- Active solar water heating.
- Ground source heat pumps (GSHP).
- Bio-energy.
- Small CHP (renewable and non-renewable).
- Hydrogen energy and fuel cells.

The headline findings of the report are:

- By 2050 microgeneration could potentially provide 30-40% of the UK's total electricity needs.
- By 2050 microgeneration could help to reduce CO2 emissions by 15% per year.

Sustainable Energy Network (SEN) of Sustainable Energy Centres (SEC)

The Energy Saving Trust is building upon its unique national network of 52 Energy Efficiency Advisory Centres (EEACs) across the UK, which has successfully delivered 6.2 MtC lifetime savings since 1993-4. In 2005 we began a pilot of the use of a SEN to progress activity on small-scale sustainable energy issues through 3 SECs in the UK (NI, North East and Anglia).

Under the SEN model the provision of the advice service will be part of an integrated approach to changing consumer behaviour on a much larger scale, where each SEC will:

- Deliver defined regional carbon saving targets in their territory. Such a role will involve supporting and co-coordinating the range of existing delivery agencies and filling any gaps.
- Provide an impartial and free advice service that also covers the use of renewable energy in homes and energy in road transport. This will operate as a high profile service that can link consumers to delivery mechanisms for consumer sustainable energy, thereby making it easy and convenient for them to take action.
- Instigate local awareness raising activity that links with national marketing and is integrated with local delivery mechanisms, to provide a compelling message.

Government response to the Biomass Task Force

In October 2005 a Task Force led by Sir Ben Gill submitted a report to Government proposing a set of recommendations to optimise the contribution of biomass energy to renewable targets and sustainable farming and forestry and rural objectives[5].

In April 2006 the Government published its response to the Biomass Task Force[6], undertaken by a cross-departmental team, including a secondee from the Energy Saving Trust.

- [1] The report Potential for Microgeneration, study and analysis was published on 12 December 2005, and can be found at: http://www.dti.gov.uk/energy/consultations/pdfs/microgeneration-est-report.pdf
- [2] Schulz, 2006 unpublished MSc thesis on 'micro-generation technology: factors influencing the purchase decision for solar thermal systems' quoted in 'Unlocking the Power House: Policy and System Change for Domestic Microgeneration in the UK', SPRU 2006. See: http://www.sustainabletechnologies.ac.uk/PDF/project%20reports/109%20Unlocking%20Report.pdf
- [3] www.lowcarbonbuildings.org.uk
- [4] For the executive summary see:

http://www.dti.gov.uk/energy/consultations/pdfs/microgeneration-est-summary.pdf For the DTI press release see:

http://www.gnn.gov.uk/environment/detail.asp? Release ID=181382 & News Area ID=2 & Navigated From Department=False

- [5] http://www.defra.gov.uk/farm/acu/energy/biomass-taskforce/btf-finalreport.pdf
- [6] http://www.defra.gov.uk/farm/acu/energy/biomass-taskforce/btfreport-govresponse.pdf

RICS Response to the Building Regulations



RICS Northern Ireland

RICS Northern Ireland response to Building Regulations (Amendment) Bill for NI Assembly Finance & Personnel Committee 11 April 2008

Royal Institution of Chartered Surveyors (RICS) Northern Ireland, is the principal body representing professionals employed in the land, property and construction sectors and represents some 3,000 members across Northern Ireland.

Our members practise in land, property and construction markets and are employed in private practice, in central, regional and local government, in public agencies, in academic institutions, in business organisations and in non-governmental organisations.

As part of our Royal Charter, the Institution has a commitment to provide advice to the government of the day and, in doing so, has an obligation to bear in mind the public interest as well as the development of the profession. RICS Northern Ireland is therefore in a unique position to provide a balanced, applitical perspective on issues of importance to the land, property and construction sectors and on all related environmental matters.

We welcome the opportunity to give evidence to the committee as we consider building regulations to be of crucial importance to the built environment. Buildings and the energy we use in them counts for 40 % of carbon emissions. Ensuring they are energy efficient is a key means of addressing climate change. We believe that a greater focus on sustainability can be obtained through building regulations.

Outlined below are our comments on the individual clauses of the Bill.

Clause 1 - Building regulations

This change is acceptable.

Clause 2 - Protected building

This provision could be more effective if there was more of a partnership between all government agencies dealing with the built environment. It would of use to both Building Control staff and designers alike.

Clause 3 - Building Regulations Advisory Committee

This change is acceptable.

Clause 4 - Further provisions as to the making of building regulations, etc.

This change is acceptable

Clause 5 - Guidance documents

The inclusion of this is welcomed. It should be understood that any credible guidance document should be acceptable to a district council.

Clause 6 - Type approval

There is great potential here for cost cutting and efficiency.

RICS Northern Ireland



Clause 7 - Power to require or carry out tests

The amendments to this Article are welcome.

Clause 8 - Contravention Notices

The Department should extend the period of six months from the date of completion of works to twelve months. It might also be of use to supervising designers in allowing them to deal with latent defects which are brought to their attention in this period. It would therefore be of use to both Building Control staff and designers alike.

Clause 9 – Registers of information and documents to be kept by district councils.

Clear guidance as to how such a register will be administered will need to be issued to cover what the registers should contain, for example clarifying if there will be a statutory schedule of fees associated with accessing this register and other administrative issues.

Clause 10 - Civil liability

This change is acceptable.

Clause 11 - False or misleading statements

This change is acceptable.

Clause 12 - Application of building regulations to the Crown

The Department should include a definition within Article 2 of this Bill of "crown occupation". This will help designers and district councils to decide whether the proposed building is exempt from building regulations or not.

Clause 13 - Interpretation

This change is acceptable.

Clause 14 - Minor amendment

This change is acceptable.

Clause 15 - Repeals

This change is acceptable.

Clause 16 - Commencement

This change is acceptable.

Clause 17 - Short title

This change is acceptable.

Sustainable Energy Association

SUSTAINABLE ENERGY ASSOCIATION

SUBMISSION TO
THE DEPARTMENT OF FINANCE AND PERSONNEL
ON THE
BUILDING REGULATIONS (AMENDMENTS) BILL
(NORTHERN IRELAND)

APRIL 16TH 2008

The Sustainable Energy Association wish to make a submission to the Department of Finance and Personnel on the Building Regulations (Amendment) Bill (Northern Ireland).

Our primary argument is that the mandatory renewables requirement needs to be restored, as the arguments used to remove it where wholly invalid to the point of mischievousness. These arguments were;

- Lack of cost-effectiveness or payback disproved by our figures in appendix 1
 Lack of capacity to deliver in NI disproved by our figures in appendix 2
- 3. Unproven nature of the Technology disproved by appendix 2 again, NI leads the world in key technologies like solar, wood pellets and Heat Pumps and our leading companies have been exporting proven technology world-wide for up to 30 years.
- Lack or precedence for the policy see section A.2 below again disproven.

The Association will comment on the Regulations under the following three headings:

- A. The likely effects of not including mandatory renewables in the 2008 building regulations
- B. The background to the decision by the Minister for Finance and Personnel not to introduce mandatory micro-generation within the Building Regulations, namely, the inaccuracy of the information used in advising the Minister to make this decision.
- C. General comments the clauses within the Bill.

EFFECTS OF NOT INCLUDING MANDATORY RENEWABLES IN THE 2008 BUILDING REGULATIONS

1) Sub-standard regulations

The 2006 building regulations were the first update since 1990 in Northern Ireland- thus the 2006 40% increase in energy efficiency in new houses leaves Northern Ireland well behind the norm in other European countries.

If the 2008 mandatory renewables requirement is removed, the 2008 regulations will be the same as 2006- leaving Northern Ireland with only one modest increase in energy efficiency in a twenty year period.

- 2) Putting Northern Ireland out of step with the rest of the UK and Ireland.
 - One third of all councils in Great Britain already mandate renewables in new houses under the 'Merton Rule'
 - London: The Mayor of London has introduced proposals that developments must achieve carbon emission reductions through mandatory onsite renewable energy of 10-20%
 - Dublin: In the Republic of Ireland on the 1st of July 2008 new building regulations will mandate 10kwh per annum of thermal energy per metre squared of building or 4kw per annum of electrical power, whilst reducing overall energy consumption by 40% initially and 60% progressively.

EFFECT OF 2006 REGULATIONS – LEVEL OF PLANNING APPLICATIONS WITH RENEWABLES FOR NEW BUILDINGS

WE ARE IN THE PROCESS OF ANALYSING A F61 REQUEST TO ALL 26 COUNCILS IN N.I. TO SEE HOW MANY PLANNING APPLICATIONS WERE RECEIVED UNDER THE 2006 REGULATIONS THAT INCLUDED RENEWABLES.

BASED ON THE 8 COUNCILS SO FAR ANALYSED - THE ANSWER APPEARS TO BE "NIL" OR AS CLOSE TO NIL AS MAKES NO DIFFERENCE.

IT IS THEREFORE CLEAR THAT NIBRAC'S ASUMPTION THAT THE DECISION TO INSTALL RENEWABLES IS BEST LEFT TO THE MARKET AND TO DESIGNERS IN WHOLLY INVALID BASED ON THE LAST 2.25 YEARS OF DATA SINCE THE REGULATIONS WENT IN.

B) BACKGROUND TO THE DECISION NOT TO INTRODUCE MICROGENERATION

What was the original plan?

The documents obtained under the FoI Act by the S.E.A. from DFP show the progressive, "joined-up thinking" of the Secretary Of State, Peter Hain, towards facilitating small scale renewables in Northern Ireland. As states in Jenny Pyper's briefing paper of 20th Sept 2005;

"The Secretary of State has noted the prospect for change in GB in relation to how planning policy and building regulations will encourage renewable energy generation and has requested a meeting to determine how NI might take the lead in this area –particularly by making the use of solar/PV mandatory on new buildings and all public sector new build and renovations and by ensuring that small scale renewables attract permitted development status within planning guidelines."

In order to build the capacity of the renewables industry to precede the introduction of mandatory microgeneration in building regulations, the Secretary of State introduced a two year programme to build-up capacity and skills, which would then be sustained with the introduction of new Building Regulations in April 2008.

As the briefing paper by Bernie Stuart, dated 5 June 2006, states;

"The SoS decided that furthering capacity, stimulating demand and reducing costs could be met through incentives that, in part, led to the creation of the Environment and Renewable Energy Fund. For example, in the domestic sector £9.8 million has been set aside to have micro-generation systems installed in 4000 private sector and 600 social sector dwellings. For this to take place, Action Renewables has established an Installers' Academy and other industry trainers are delivering specific training to prospective installers."

What happened to stop Hain's plan?

The DFP documents also record resistance by prominent civil servants throughout based on inaccurate cost and payback calculations. These inaccurate calculations show that renewable systems are not cost effective and were the basis of inaccurate legal advice as a result- i.e. the 'Wednesbury Irrational' concept does not apply as was suggested to both Minister Hain and Minister Robinson.*

However, the cost of renewables upon which the arguments were based were seriously inaccurate. They would appear to be based on the assumption that the retail cost of home heating oil was 37 p per litre but it actually 55 per litre. We also attach DEFRA predictions of a worst case scenario for the cost of a barrel of crude oil in the year 2020 of \$45 per barrel – it is currently \$112 and we are only in the year 2008.

Furthermore, the cost of these technologies and their installation has since decreased given the increase in demand and the increase in capacity of the industry.

Crucially, the figures used do not include wood pellet boilers which—compared to oil-fired central heating- offer a much greater value of money with a pay-back of about 4 years (note that DEFRA and the personnel advising both Ministers failed to mention that there is NO payback for fossil fuel systems).

It is not difficult, therefore, to understand Mr Hain's dissatisfaction at the "deliberate attempts to delay and frustrate his wishes" as stated in an email from his special adviser, Philip Taylor, 5 June 2006.

We would therefore suggest that the decision not to include mandatory micro-generation in the Bill was erroneous and so this decision should be reversed and the necessary amendments made.

One of the arguments made in support of not introducing mandatory micro-generation was the lack of cost-effectiveness in the technologies. When the S.E.A made an oral brief on this subject to the Finance and Personnel Committee, this included an appraisal of the DEFRA payback figures used by the Department in coming to their conclusion. This appraisal, by a qualified accountant for the S.E.A. showed these figures to be inaccurate.

Following the presentation of these figures, the Committee requested that the Association provide them with detailed calculations for these figures. These are included for the purpose of illustrating the misleading basis of the argument not to introduce mandatory micro-generation. SEE APPENDIX 1.

C) GENERAL COMMENTS ON THE CLAUSES WITHIN THE BILL

COMMENTARY ON CLAUSES

Clause 1 Building Regulations: Schedule 1 to the 1979 Order is amended to enable building regulations made by the Department to regulate energy performance of buildings, including the proportion of energy used which is to come from a particular source.

The energy performance of Buildings needs to be increased and the TER needs to be reduced. This Clause needs to be used to ensure new build houses have water meters installed along with smart meters for electricity consumption. The Association welcomes the inclusion of Low and Zero Carbon sources in this clause.

NOTE THAT THE SAP TOOL NEEDS TO BE AMENDED TO PROPERLY REFLECT RENEWABLES AND ENERGY EFFICENT DEVICES LIKE GROUND SOURCE HEAT PUMPS, OR DESIGNERS WILL CHOOSE NOT TO USE THEM TO AVOID A POOR SAP RATING

Clause 2 Protected Buildings; this amendment requires district councils to have regard to the preservation of the character of protected buildings when carrying out their functions under building regulations.

This is essential so as to preserve the character of our local built environment so as to ensure the destruction of Victorian promenade houses does not happen again like in Portrush, however consideration needs to be built into the cost of this on Local Councils and the owner of the building to enable them to preserve this built heritage.

Clause 3 Building Regulations Advisory Committee: the process for appointing members is amended to reflect the Office of the Commissioner of Public Appointments for Northern Ireland's Code of Practice, which recommends that nominations to public bodies should come from suitable individuals who meet the application criteria.

NIBRAC needs to be expanded so as to include stakeholders such as the Sustainable Energy Association, Action Renewables etc.

Clause 4 Further provisions as to the making of building regulations: the deemed-to-satisfy provision is removed and replaced by a guidance-based system. The scope of building regulations is extended to include the protection and enhancement of the environment and the promotion of sustainable development. Deemed-to-Satisfy is an easy way for builders to know how to comply with the Building Regulations. If this is to be removed to a Guidance Based system the Guidance needs to be freely available booklets including such booklets like the Dept of Communities and Local Governermit Low-Zero Carbon Design. These booklets should then be sent to all registered construction firms through the CEF, HSENI, Safe T Cert, NHBC, FMB etc. Guidance has always been available through the Building Control Surveyor and this guidance remain even if we do not adopt the English based guidance system. The Code for Sustainable Homes should be used as a template for any replacement of the deemed-to-satisfy system.

Clause 5 Guidance documents: procedures are set out under which guidance will be prepared and published.

Again, how will the documents be published

Clause 6 Type-approvals: district councils are to be given the power to 'type-approve' nonsite specific building matters (e.g. house type superstructures) in consultation with prescribed bodies, allowing for greater flexibility. Applicants may appeal the decision of a district council to the Department. Building Regulations will detail the matters for which 'type-approval' may be sought.

This is good as it will remove some anomalies where one council passes a house and another refuses it. However there appears to be a lack of clarity from the Department over responsibility for grading a house. For instance, some councils have much stricter application of the regulations and within each Building Control group there are different interpretations of the regulations. One wonders who will have the overall say on this, and what appeal does a council have if presented with an application that is 'type-approved' by another council but they disagree

Clause 7 Power to require or carry out tests: The Department is given the power to prescribe in building regulations, the type of tests which a district council may carry out or require to be carried out to ensure that building regulations are not being contravened.

Georg

Clause 8 Contravention notices: district councils will not be allowed to issue contravention notices after a time (not exceeding 12 months after works are completed) to be prescribed by building regulations. Regulations will be made by the Department to make it mandatory to inform a district council of the date when those works are completed.

Clause 9 Registers of information: a new requirement for district councils to keep registers of information for public inspection formalises current practice and allows the Department to prescribe the format and content of registers.

We would expect to see extra money set aside for Councils to store the information in a freely searchable database and develop a more modern based environmentally friendly computerised system of application, storage and retrieval

Clause 10 Civil liability: Article 20 is omitted as it has never been activated and the Department has not received representation asking it to do so.

Clause 11 False or misleading statements: this creates a new criminal offence of knowingly or recklessly submitting false information.

Too difficult to implement

Clause 12 Application of building regulations to the Crown: Article 22 has not been commenced. To reflect modern procurement practice within the Crown estate, we now intend to do so and include a redefinition of "Crown building" as a building occupied by the Crown and to require Crown buildings (except where prescribed) to be compliant with the substantive requirements of building regulations.

The local Council should inspect any Crown occupied building given that within the lifetime of the building, under modern procurement methods and government leasing of buildings it is likely that the building will be in the hands of a private owner at some stage and therefore should conform to all regulations to the satisfaction of the local council rather than a paid departmental staff member.

Clause 16 Commencement: provisions of this Order will be brought into operation on such day or days as the Department may appoint, by Order.

No common

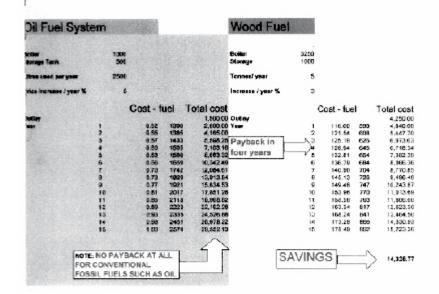
APPENDIX 1

Costings provided by members of the renewable energy industry:

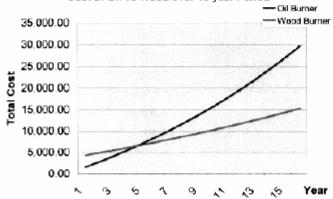
- A. Costings used in training installers for every technology
- B. Actual cost comparison for current oil price by the S.E.A.
- C. Richard Smith, Balcas, producers of Brites wood pellets.
- D. Peter Kernohan, Wood Energy Limitd, the UK's largest manufacturers of wood pellet boilers.
- E. Connaire McGreevy, Rozell Renewables, suppliers and installers of wood pellet boilers. (not available at time of going to print – will follow)
- F. Patrick Flynn, GreenEnergy 4u, installers of renewable energy systems. (not available at time of going to print – will follow)
- G. Dimplex, a Portadown based manufacturer of ground and air source heat pumps. (not available at time of going to print – will follow)

A. Costings used in training installers for every technology

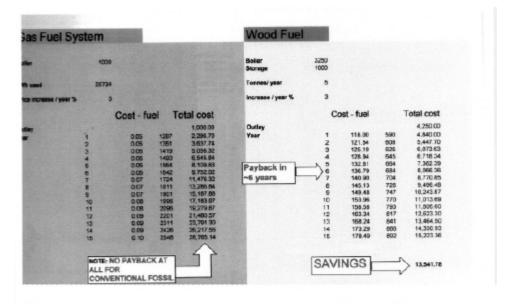
Seven typical detailed costings are inserted here from a training course



Cost of Oil vs Wood over 15 year Period

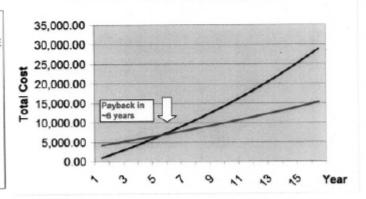


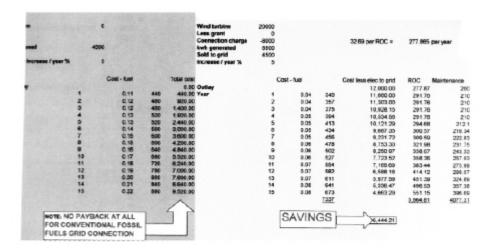
NOTE THE ABOVE FIGURES DO NOT INCLUDE THE COST OF CARBON - WERE THIS TO BE INCLUDED THE PAYBACK WOULD BE LESS THAN 2 YEARS

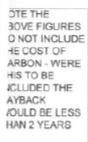


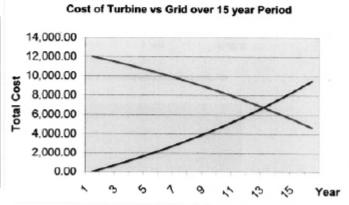
Gas Central Heating vs Wood - 15 year Period

IOTE THE
IBOVE FIGURES
O NOT INCLUDE
THE COST OF
ARBON - WERE
THIS TO BE
NCLUDED THE
AYBACK
VOULD BE LESS
THAN 2 YEARS









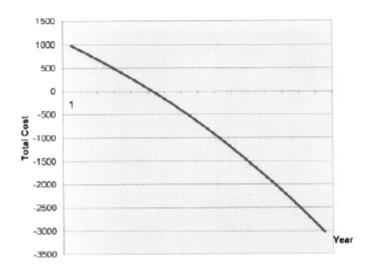
Solar Hot Water new build v's immersion heater

System cost	2499	Annual energy output	1000
Grant	-1125	Boiler efficiency	70
less costs due to ner	-400		
Paid	974	Fuel cost per kWh	0.13
		Annual saving	185.71

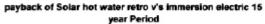
Increase / year %

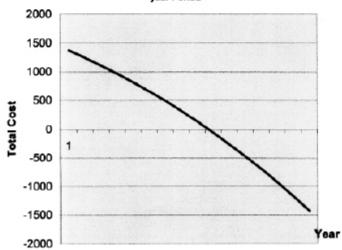
	Ar	nnual saving	Pa	ayback point
Outlay				974.00
Year	1	185.71	186	788.29
	2	195.00	195	593.29
	3	204.75	205	388.54
	4	214.99	215	173.55
Payback in -	N5	225.74	226	-52.19
,)	237.02	237	-289.21
5 years	7	248.87	249	-538.09
	8	261.32	261	-799.41
	9	274.38	274	-1,073.79
	10	288.10	288	-1,351.89
	11	302.51	303	-1,684.40
	12	317.63	318	-1,982.04
	13	333.52	334	-2,315.55
	14	350.19	350	-2,865.75
	15	367.70	368	-3,033.45
	16	386.09	386	-3,419.53
	17	405.39	405	-3,824.93
	18	425.66	426	-4,250.59
	19	448.94	447	-4,697.53
	20	489.29	469	-5,166.82

Solar Hot Water New Build v Immersion heater new build



Solar twin v's electric immersion Retrofit Annual energy output Boiler efficiency Fuel cost per kWh Annual saving System cost Grant Paid 2499 -1125 1374 1000 100 0.13 130 5 Payback point Annual saving 1,374.00 1,244.00 1,107.50 964.18 813.68 656.87 316.54 132.62 -59.45 261.13 -472.88 695.23 -928.69 -1,173.82 -1,431.21 -1,431.21 -1,431.21 -1,431.21 -2,283.21 -2,283.21 -2,283.21 130.00 136.50 143.33 150.49 158.02 165.92 174.21 182.92 130 137 143 150 168 166 174 183 192 202 212 222 233 245 257 270 284 298 313 329 1 2 3 4 5 6 7 8 9 0 11 12 13 14 15 6 17 18 19 20 Payback in 182.92 192.07 201.67 211.76 222.34 233.46 245.13 257.39 ~9 years 257.39 270.26 283.77 297.96 312.86 328.50 -2,924.57



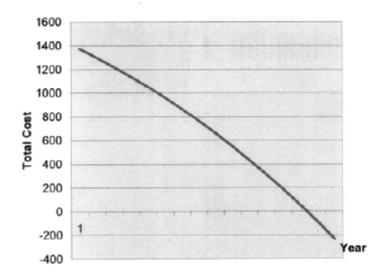


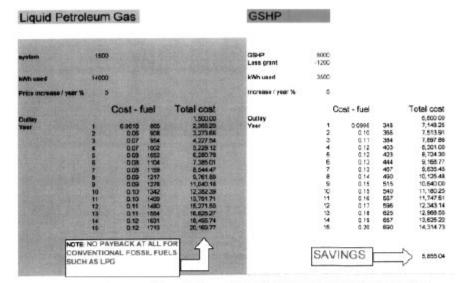
Solar v's oil retrofit 1000 70 0.0523 **74.71428571** Annual energy output Boiler efficiency 2499 System cost Grant Paid -1125 Fuel cost per kWh 1374 Annual saving Increase / year % Payback point 1,374,00 1,299,29 1,220,84 1,136,48 1,051,97 961,16 665,80 765,98 Annual saving 74.71 78.45 82.37 86.49 90.82 95.36 100.12 76 78 82 86 91 95 100 105 110 116 122 128 134 141 148 155 163 171 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 765.58 660.55 105.13 550.16 434.25 312.55 110.39 115.91 121.70 127.79 184.76 50.59 -90.30 -238.23 134.18 140.88 Payback in 147.93 ~14 years 155.33 -393.55 183.09 171.25 -556.64 -727.89 180 189 -907.70 -1,096.50 19 179.81

Solar Hot Water v's Oil over 15 year Period

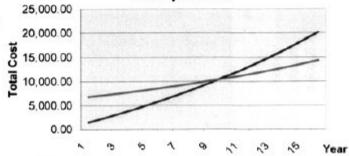
188.80

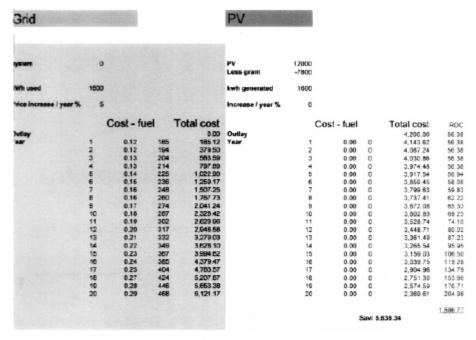
20

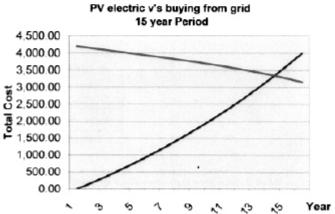




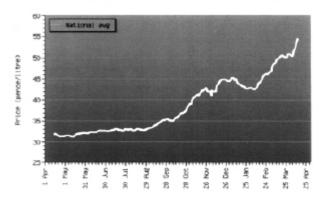
Ground Source Heat Pump vs Liquid Petroleum Gas over 15 year Period







B Increase in price per litre of heating oil from April 2007 to April 2008



Source: www.boilerjuice.com/priceHistory.php

This chart shows the strong rise in the price per litre of heating oil over the last year, from 32pence per litre in April 2007 to the current price of 55 pence, which is expected to rise even further. This price rise was not taken into account by the Department when they were advising the Minister..

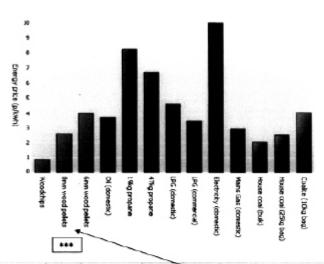
FUEL COMPARISONS

Source: Balcas/Brites

FUEL	FUEL
	PRICE/kWh OF
	HEAT
Pellets	2.58
Oil	5.23
Gas	3.48
LPG	6.18
Electricity	11.67
Coal	3.18

These figures, provided by Brites, the largest producers of wood pellets in the UK and Ireland, and based in Enniskillen, Co.Fermanagh, compare the fuel price per kilowatt-hour for various fuel types and show clearly the advantages of biomass over fossil fuels.

Source: Wood Energy Ltd



Part	Energy	Retail Unit La	oft price (exc.YAT)	Holsture Content (%wb)	Energy price (p/kWh)
Wood Chip	Woodchips	Termo	€35.00	25.00	0.99
	Smm wood peliets	Terme	£118.0	8.00	2.39
Acod Pellet	6mm wood pellets	15kg Bag	£3.00	8.00	4.04
testing Oil	CH (domesoc)	utre	£0.52		4.78
	194g properic	19kg betile	£19.86		6.26
	47kg propune	47kg bettle	640.21		6.76
PG	LPG (domestic)	Libre	€0.32		4.68
	LPG (commercial)	Litre	£0.24		3.51
Sectricity (Electricity (domestic)	kWh	£0.11		11.00
Maine Cas N	Hains Gas (domestic)	EATH-	60.06		5.00
	House coal (bulk)	bulk (tonne)	£171.4		2.11
oet n	louse coal (25kg bag)	25kg bag	£5.24		2.57
	Coolite (10kg bag)	10kg bog	£3.33		4.69

late that no account is taken of boiler efficiency.

ies and Electricity

werage prices taken from a selection of energy consumers above and below LGWhpa Domestic - tariffs include VAT at 5% Commercial / arge user - tariffs include CCL at 0.43p/kWh for electric and 0.15p/kWh for gas. (Commercial) <1 GWh pa. (Large User) >1 GWh pa. (ball

secured VAT rate of 5% applies to all domestic coal supplies and commercial coal supplies of 1 tonne or less per delivery feating oil

teduced VAT rate of 5% applies to all domestic heating oil supplies and commercial oil supplies of 2,300L or less per delivery. **Nellets** 6mm bag price is based on orders of over 1 tonne otherwise price increased by 10%.

APPENDIX 2

CAPACITY

THE ECONOMIC IMPACT OF THE INDUSTRY IN TERMS OF JOBS, SKILLS, EXPORT POTENTIAL, ETC.

Section A: Name, location and employment of major renewable systems manufacturers in Northern Ireland.

Section B: Names of qualified installers in Northern Ireland.

SECTION A

Balcas

Balcas is a privately-owned company with extensive family investment.

White the company has its main timber processing plant and HQ in Co Fermanagh, it also has investment interests in Estonia and the Republic.

In the past decade annual turnover has increased by 50% in cash terms, mainly since 2000. In 2005 it opened an £8m biomass fuel plant at its Fermanagh site which produces wooden pellets made from compressed sawdust and wood chip-pings -- called brites -- which can be used to fuel industrial and domestic heating plants.

It makes the sawmill electricity self-sufficient, saving more than £1m a year, and surplus energy is sold to the NIE grid.

Profile

Managing director: Emest Kidney

Employment: 637 Turnover: £58.2m Profit: £300,000

Laragh, Enniskillen, Co Fermanagh BT94 2FQ Tel: 028 6632 3003 Fax: 028 6632 4082

Glen Electric (NI)

Glen Electric is a Northern Ireland registered company but has only a small part of its manufacturing and distribution business located in the province — in Newry. Founded in Newry in 1973, it grew into the Glen Dimplex Group, and is the largest manufacturer of electric heaters in the world with nearly 30 firms globally employing more than 5,600 people.

The group has expanded through the acquisition of a number of businesses in related activities. Brand names within the group include Dimplex, Morphy Richards and Belling. Net spending on acquisitions exceeded £30m in the last three years, and annual sales exceed £1bm.

The company is owned by Martin Naughton and Lochlann Quinn.

Profile

Group chairman: Martin Naughton

NI employment: 850 Turnover: n/a Profit: n/a

Dunicer, Co Louth Tel: 00353 4168 51700 Fax: 00353 4168 51807

Thermomax Ltd 7 Balloo Crescent Balloo Industrial Estate Bangor Co. Down BT19 7UP Northern Iteland

Thermomax Ltd. is a leading manufacturer of premium quality equipment for efficient and economical conversion of solar radiation into thermal energy.

Based in two locations in the United Kingdom, and one in Italy, Thermomax occupies over 10,000m2 of purpose built factories on 10 acres of land.

The Thermomax product is currently sold to over 40 countries with Western Europe, The Far East and the United States as its main markets. The number of Thermomax collector tubes in service throughout the world is now in millions with satisfied users achieving considerable savings in their fuel cost as well as a reduction in CO2 emissions. The company employs 135 staff.

KINGSPAN ENVIRONMENTAL AND RENEWABLES

Kingspan Environmental and Renewables is a division of the Kingspan Group headquartered in Co. Cavan, Ireland. Kingspan has manufacturing and distribution operations throughout the world. It was founded in 1972 as a small family business by Eugene and Brendan Murtagh, both members of the Board of Directors.

Since 2000, the Kingspan group has continued to grow through select acquisitions.

KINGSPAN said that 40 new full-time manufacturing jobs have been created as a result of a f6m investment by the group's Kingspan Environmental & Renewables subsidiary in a new production facility for its Eurotrocare and Klargester product brands. It beings the number of people employed to 75 in Newcy, Co Down.

A Lascelles Plumbing & Heating	Antrim
A.R.E.S (Renewable Energy Systems	Antrim
ABS Ltd	Tyrone
Advantage Home Energy	Armagh
AF Moore Plumbing & Heating	Antrim
Aidan Kelly	Tyrone
AK Services	Antrim
Alan Turner Plumbing & Heating	Down
Alan Turner Plumbing & Heating	Down
Alternative Heat Ltd	Down
Anderson Mechanical Services	Armagh
AS Philpott	Antrim
Ashfield NI Ltd	Down
B Tremlett Plumbing & Heating Contr	
Bawn Plumbing & Heating Services	Armagh
Bayview Contracts Ltd	Down
Beggs & Partners	Antrim
Benny Malfon	Londonderry
Bioheating	Londonderry
Blue Sky Renewables	Antrim
B-Mac Plumbing & Heating	Antrim
Boiler & Heating Solutions	
Brady Electrical	Antrim
Brendan McElholm Plumbing & Heati	Antrim
Brian McGibbon Plumbing & Heating	Tyrone
Brocke Plumbing & Heating	
	Fermanagh
Brownlow Heat Transfer	Armagh
C Smyth Electrical	Down
C Toman Plumbing & Heating	Antrim
C&H Plumbing & Heating	Down
Cairn Biofuel Ltd	Down
Cassidy Bros	Londonderry
Castle Electrics	Antrim
Cathal Moane Plumbing & Heating	Tyrone
Ciaran Murphy	Londonderry
CK Electrical	Antrim
CK Plumbing	Tyrone
CMK Plumbing & Heating	Tyrone
Colin Baxter	Tyrone
Colin Robinson Plumbing & Heating	Antrim
Combined Facilities Management	Londonderry
CPW Gas Services	Londonderry
D Leonard	Tyrone
Darren Irwin	Antrim
Darwin Armstrong	Antrim
DCG Plumbing & Heating	Tyrone
DCI Energy Control	

DCI Services	Antrim
Decca Plumbing & Heating	Down
Denco	Antrim
DL Plumbing & Heating Ltd	Armagh
DN Plumbing & Heating	Down
DT Mechanical Engineering Services	Lordondon
E O'Rourke & Son	
EAGA Partnership Ltd	Down
EAGA Partnership Ltd	Louth
	Tyrone
Eco Solar Systems	Down
Eco-Energy (NI) Ltd	Antrim
EICC Environmental Services	Down
Elite Plumbing & Heating	Down
Envirotech-Europe	Tyrone
Erne Power	Fermanagh
Evergreen Energy	Londonderry
F G Plumbing	Londonderry
Felim Quiqq Plumbing & Heating	Londonderry
Fergus Fitzsimons	Down
FLF Heating & Plumbing Services	Fermanagh
FM Services	Antrim
Frank McNicholl Plumbing & Heating	Londonderry
Frontier Energy Limited	Tyrone
Fusion Heating Ltd	Down
Gary Fleming	Armagh
Gary McGill Plumbing & Heating	Londonderry
General Plumbing	Tyrone
Genersys Ireland Ltd	Down
George Nelson Plumbing & Heating I	
Gerard McCloy	Londonderry
Gerkros Heating Technology	Tyrone
Gilmore.co.uk	Londonderry
Gilroy Heating	Down
Glass Oasis	Down
Glens Gas	Antrim
Go Go Gas Ltd	
Graham Kirk Heating & Plumbing	Armagh Antrim
Green Energy Solutions Ltd	
greenenergy4u	Armagh
Greengen Solutions Ltd	Down
GRM Plumbing & Heating	Antrim
	Antrim
H & A Mechanical	Londonderry
Handley Heating	Down
Heat Ltd	Antrim
Heating Controls & Devices	Tyrone
leatwaves	Down
Heatwell Henry Heating	Londonderry
	Antrim

HGS Building & Mechanical Services	Londonderry
HJ Campbell Plumbing, Heating & Re	Down
Homewarm Homewrap Ltd	Armagh
Horizon Renewables	Antrim
HS Heating	Down
HTC Mechanical Services	Tyrone
Hutton M&E Services Ltd	Antrim
lain Watters	Down
Ian Short Plumbing & Heating	Tyrone
IDM Heating & Plumbing	Antrim
I-FIX Plumbing & Heating	Antrim
Island Mechanical	Down
Island Plumbing & Heating	Down
Islandcore Green Energy	Antrim
J & B Hamilton Plumbing & Heating	Londonderry
J A Graham	Antrim
J A Wilson	Down
J J Loughran	Tyrone
J T Rourke Heating & Plumbing	Down
Jeffers Heating & Plumbing	Tyrone
JM Plumbing & Heating Services	Down
Joe Porteous	Londonderry
John Bradley	Londonderry
John Hagan Plumbing & Heating	Tyrone
John Magee Plumbing & Heating	Londonderry
John Pickering	Londonderry
John Quinn Plumbing & Heating	Down
Jonathan Irwin	Tyrone
JP Beatty Plumbing & Heating	Armagh
JPC Renewables	Fermanagh
JR Waddell Ltd	Down
Kane Heating Ltd	Down
KD Plumbing & Heating	Tyrone
Kevin Brown	Londonderry
KJ Porter Plumbing & Heating	Tyrone
KKG Heating Systems	Antrim
KPF Plumbing & Heating	Antrim
L G Electrics	Antrim
Leslie Mulholland Plumbing	Armagh
Letters Plumbing & Heating	Antrim
M & E Services	Antrim
M Large Tree Services	Antrim
M Percy & Son	Armagh
Magma Heat Ltd	Tyrone
Mark Rocks Heating & Plumbing	Down
Martin Byrne	Down
Martin Lennon	Down
Martin Mechanical & Electrical Ltd	Antrim

Martin Phillips Plumbing & Heating	Armagh
Marx Heating & Plumbing	Londonderry
Maurice Ruddock	Antrim
Maurice Stevenson Ltd	Armagh
	Tyrone
McAleer & McGarrity Ltd	Tyrone
McCleave Solar	Down
MCG Contracts Ltd	Londonderry
McGurk & Moore	Londonderry
McGurk & Moore	Londonderry
McIntyre Electrics Portrush	Antrim
McNutt Plumbing & Heating	Fermanagh
Melvin Rankin	londonderry
Mid Ulster Plumbing	Londonderry
Milton Plumbing & Heating	Antrim
MM Mechanical	Londonderry
MN Plumbing & Heating Supplies	Down
Moira Plumbing & Gas Services	Armagh
Morris Renewable Heating	Tyrone
MTA Components	Antrim
NA Bloomer	Armagh
Natural Home Energy	Down
Neeson Plumbing & Heating	Antrim
Next Energies	Tyrone
NI Gas Plumbing & Heating Ltd	Antrim
Niall McAleer	Tyrone
Niall McCourt	Down
Niall P McEvoy	Londonderry
NIHE	Antrim
Norman Brown	Antrim
North Star Communications Ltd	Down
Nuaire Home Ventilation Ireland Ltd	Antrim
NuTech Renewables Ltd	Down
Nuthern NI	londonderry
O'Kane Plumbing & Heating Supplies	Tyrone
OSM (IRL) Ltd	Down
Patrick Furphy Plumbing & Heating	Armagh
Patrick McGrenaghan	Down
Patterson Plumbers Ltd	Tyrone
Paul Darby Plumbing & Heating	Antrim
Paul Harley	Antrim
Paul Holland Plumbing & Heating	Antrim
PCM Plumbing & Heating	Armagh
PD Plumbing & Heating	Tyrone
Peninsula Plumbing	Down
Peter McLaughlin	Londonderry
Phoenix Energy Services	Antrim
Pipeline Services	Antrim
	15000

Pipemac Plumbing & Heating	Antrim
PJ Hughes Plumbing & Heating	Down
PJ Mullan & Sons Ltd	Londonderry
PM Plumbing & Heating Services Ltd	
Powertech Ireland	Tyrone
Prestige Plumbing & Electrical	Londonderry
R Gormley Contracts	Fermanagh
Radiant Heat	Londonderry
Raymond Furphy	Armagh
Renewable Construction Solutions	Londonderry
Renewable Energies Ltd	Down
Renewable Energy Systems Ireland	Down
Renewable Heating	Tyrone
Renewables Ireland Ltd	Antrim
Richhill Plumbing Services	Armagh
Robert Bunting Heating & Plumbing	Down
Robert Newberry Bangor Ltd	Down
RP Mechanical Heating	Antrim
Rural Generation	Londonderry
S M McCoy & Co Ltd	Londonderry
Scoffield Specialist Services	Antrim
Seamus Moley Contracts	Down
Select Energy Engineering Ltd	Antrim
Serviceheat	
Sharpe Mechanical Services	Down
Sheridan & Hood Ltd	Antrim
Si Energy Ltd	Antrim
Sioan Plumbing & Heating	Tyrone
SMP Solutions	Down
	Down
Solair Energy Ltd	Armagh
Solar Energy Connect	Antrim
Solar Heating NI Solar Solutions NI	Antrim
	Down
Solariec	Antrim
Sun Renewables	Down
Sydney Brown & Son	Tyrone
T & P Solutions	Londonderry
T McCartney Plumbing & Heating	Antrim
Terry McCallion Renewable Energy S	
The Copper Doc	Armagh
The Green House Ltd	Antrim
Thermacad Energy	Antrim
Thomas Hanna & Co Ltd	Fermanagh
Thomas Magill	Down
Thomas McCloskey Ltd	Londonderry
TJ McConnell & Sons	Londonderry
TM Plumbing & Heating Tony Collins Plumbing & Heating	Tyrone
LDDV COURS PILIMBING & HESTING	Londonderry

Total Floor Heating Ltd	Down
Vincent O'Hare	Down
W A McDowell	Antrim
W E Moore Gas Installer	Londonderry
Warmfloor Heating Ireland Ltd	Tyrone
Warren Dunlop	Antrim
West Medium	Tyrone
White Underfloor Heating	Down
Willis Plumbing & Heating	Antrim
Winters Engineering	Tyrone

APPENDIX 3

Freedom of Information request from DEFRA showing the figures used in making the decision not to introduce mandatory microgeneration in the building regulations.

Department for Environment, Food and Rural Affairs



Telephone 08459 33 55 77 Website www.defra.gov.uk

The fuel cost assumptions that were used were as follows:

Fuel type	Fuel price p/kWh
Gas	2.32
Electricity (average)	9.09
Electricity on peak	9.95
Electricity off peak	3.77
Electric storage space heating	5.01
Electric storage water heating	4.70
heat pump	6.45
Oil	3.17
Coal	2.65
Logs	2.61
wood chips	1.90
pellets (bags)	5.94
pellets (bulk)	3.57

Source: Domestic sector quarterly fuel prices, BERR September 2007.

To translate the oil figure into cost per barrel, 1 US barrel is 158.984 litres, and the energy content of 1 litre of fuel oil is 11.89 kWh.² So, 3.17p/kWh means 37.06p/litre, or around £58.92/US barrel. Note that this is the cost to the domestic consumer, not the bulk cost. Since this work was carried out, costs of heating oil have risen.

Finally, Defra was in contact with the Renewable Energy Association concerning the costs of technologies, including biomass boilers. Their main focus was on community biomass boilers, but they did also comment on costs for biomass boilers for individual homes.

 $^{^2\} http://www.carborstrust.co.uk/resource/energy_units/default.htm$







limet	(Marie)	(Aceta) bakpack	Average capital cost £	Marginal cort, where applicable it	Arruni cost costs 6	Correcte	Paul and healing system displaced
<u></u>	0 07	1105		0.059	- 600	central heating.	
Air equice heet pumps	15	29.91	43,500	Not applicable	193.00	S kW facul pump	Electric storage heating
Salay FV	25	31.20 (new bulki outete)	9,375 or 6,000 on a new build totals	Not applicable	192.30	Cold given for 2.5 YOV corporaty installed	Electricity
Soler thermal replacing gas- central heating	25	68.81 (new build extend)	3,600 tr 2,600 to a	Mol applicable	35.50	4n2 installed.	Gen central horang
Solar tharmal replacing of central heating	25	62.62 (new build estate)	mow build outsite		47.86		Oil control healing
Suiter Processi replacing electric storage hooding	25	40.28 (rune build octate)			62.10		Electric storage hasting
Wood burning stone replacing gas non-opining heating	20	Heat emplicable		1,000	-6.90	Henra one room celly	Gus rom-central healing
Wood burning stove replacing solicitual non-central heating	20	67.11		1,000	14.90	Heels one room only	Solid fuel non-central heating
Wheel burning stove replacing electric representati heating	26	\$3.20	3	1,000	30.00	Heels one room only	Sectio non central heating

UPDATED FOSSIL FUEL PRICE ASSUMPTIONS SOURCE OTT

Real 2004 proms	Crude Oil	Natural Gas		ARA Ceal
	3/06/	Beach Price p/horm	\$100	\$/Tonne (26.1Quitoning
2004	38.2	22.3	3.04	79.34
2005	55,0	37,1	2,50	55,35
2005	52.0	35.0	2.10	54.86
2007	49.0	31.6	1.90	93.52
2008	46.0	28.3	1.80	45,59
2009	43.0	26.2	1.73	45,24
2010	40,0	25,6	1,70	44,37
2011	40.5	25.9	1.70	44,37
2012	41.0	25.2	1,70	44,37
2013	41.5	26.5	1.75	44,37
2014	42.0	26.8	1.70	4.37
2019	42.5	27.0	1.70	44.37
2019	43.0	27.3	1,70	44,37
2017	43.5	27.6	1.70	44.37
2018	64.0	27.9	1,70	44,37
2019	44,5	28.2	1.70	44,37
3000		***	1 70	44.17

Real 2004 prices	Drude Oil	Natural Gas		ARA Coal
	3/561	beach Price p/horm	7 01	\$/Tone (26,1GJ/tones
2004	38.2	22.3	3.04	79.34
2005	48.0	33.8	2.42	63.27
2006	44.4	30.3	1.96	51.21
2007	40.8	26.8	1.73	45.18
2008	37.2	245	1.62	42.15
2009	33.6	22.2	1,54	40.15
2010	30,0	19,9	1.50	39,15
2011	30.5	202	1.49	38.76
2012	31.0	20.5	1.47	38.37
2013	31.5	20.8	1.46	37.98
2014	32.0	21.1	1.44	37.58
2015	32.5	214	1.43	37.19
2016	32.0	216	1.41	36.80
2017	33.5	21.9	1.40	38.41
2018	34.0	22.2	1.35	39.02
2019	34.5	22.5	1.37	35.63
2020	35.0	22.8	1.35	35.24

Real 2034 prices	Crude Oil	Natural Gea		ARA Ceel
	3/00	Beach Price phorm	\$PGJ	S/Fanne (26,1G/Manne
2004	382	22.3	364	70.34
2005	40.0	30,0	2.34	61,18
2006	36.0	25.0	1.82	47.55
2007	32.0	20,0	1.56	40.74
2008	28.0	17.5	1.43	37.34
2000	24.0	15,0	1,34	35.07
2010	20.0	15,0	1,26	33,63
2011	20.5	15.3	1.27	33.16
2012	21.0	.15.5	1.24	32.36
2013	21.5	15.0	1.21	21.50
2014	22.0	16.0	1.18	30.80
2015	22.5	15,3	1,15	30.02
2016	23.0	16.5	1.12	29.23
2017	23.5	16.8	1.09	28.45
2018	240	17.0	1.06	27.67
2019	24.5	17.3	1.00	26.88
2020	25.0	17.5	1.00	25.10

All prices in 2004 real currency Exchange rate for \$76 used in gas price projections = 1,83 (Average for 2004)

HIGH-LEVEL DESCRIPTIONS OF FOSSIL FUEL PRICE SCENARIOS

The purpose of the following fable is to paint a picture of the fond of circuminances under which the different medium - and long-term tosall faul price accessful provided might metartalise. For simplicity, this has been presented in terms of broad bands, railier than convinenting on the possible year-by-year or mear term price developments.

ÿ	High	Control	Law
C	Gickent economic growth, supecially in direction process, storag Demand sheaffely for on remains low and growth remains robust OPEC maintain control of swing production capacity OPEC's prior larget remains high (so a result of growing needs of draft scomposity)	Prices reduce to 2010 as new production capacity is built; however, prices remain higher than historically due to more aggressive prices by OPEC a Post 2010, prices increase as OPEC's dominates broatelet and all is increasingly produced from more expensive sources.	Non-OPEC protectes invest in and station algorithm and sparing production capacity Damaral above down, we autoritized a patay index of abrit to take place and/or global connection growth stown down Enterty policy measures in lary consuming oduration encourage fuel affoliancy enalthresis independence.
Clea	 UK supplytemand betwee remains light for the next ten or three years, teacing to higher shangs prices, which is turn increase when spot prices Classic-pass competition develops only to a limited degree despite EU the reliastice Prices set by other LNG (LG arbitrage) or Everyween plant gas, and as workelly remain linked to thight of a rices 	 Assumes gas prices in Europe and US remain of Bristol (to leaves of oil prices projected in the Consent acceptable, and the UK gas prices are set, oil the margin, by LNG (UB entitings) or European physitise gas. 	 Gas 4s-gas competition develops reptify in Europe due to Bosellesdon and styr-floom's global UNG legal The LHO and physics gas markets become highly competitive globally, with prices often doesn to large an marginal costs of production and Intelleptris βon
CAL	Demand for onal results robust, especially in developing countries Competitiveness of onal se funi for green generation handled by one buchnologies	Recent high prices oper further investment in production capacity that leads to a shallow in prices to excursi long-run mangeral coats Shallorly, very high recent prices in the length worket sees due to increased augustes and, potentially, comewhal codening demand if global economic growth above down	Demand for onal dealines further dust to competitiveness of alternative, dealine; fush (a.g. gas) World economic growth and imate growth slow down, depressing finish prices Cost production becomes highly competitive globally, with prices driven down to marginal costs Technological improvements further lower production costs of cost placets.

Table 6, attached to draft RIA on Amending Building Regulations in Northern Ireland

Measure	(years)	Simple Payback (years)	Average Cost £	Annual cost saving £
Micro-CHP	15	6.50	£1,496	£230
Biomass Boiler	20 9.76		£4,000	£410
Micro-wind	15	10.04	£2,250	£224
Ground source heat pump	20	12.23	£9,375	£368
Photovoltaic	25	44.22	£2,500	£212
Solar Hot Water	25	52.08	£2,500	£48
Wood 20 burning stove		60.00	£1,500	£25

The capital costs in the table attaché to the draft RIA on amending building regulations in Northern Ireland, above, have been compiled from information taken from the consultation version of the illustrative mix for the Carbon Emissions Reduction Target. However, the annual financial savings do not quite correspond to the values given in this document, although they are close for all measures except micro-wind.

Defra's most up to date figures were calculated for the final version of the Carbon Emissions Reduction Target, which was approved by the Westminster Parliament in Januaryv 2008 and is available on the OPSI website¹. Note that this policy applies in England, Scotland and Wales, but not Northern Ireland.

The revised table, below, shows some significant differences when compared to the figures quoted above. In particular, the annual savings from heating measures are strongly dependent on the fuel displaced. These annual savings were calculated by the Building Research Establishment using the BREDEM model. The savings are those that would be expected for a three bedroomed semi detached home.

For heating systems, the marginal costs depend on the heating system displaced. The following assumptions have been made:

New gas condensing boiler, including installation: £2,500 New oil condensing boiler, including installation: £3,350 New solid fuel boiler, including installation: £2,400

Author: Penny Dunbabin, Defra

http://www.opsi.gov.uk/si/si2008/em/uksiem_20080188_en.pdf

In all cases, it has been assumed that the central heating system and radiators do not need to be replaced.

Finally, the figures for heating systems do not take into account relative maintenance costs. For example, the maintenance costs for ground source heat pumps are lower than those for gas or oil centrally heated systems, where an annual safety check is necessary. This has not been taken into account.

Medicare	(years)	Sirryda payback (yeers)	Average copied costé	Marginal cost, where applicable £	Asnuel cost saving £	Comments	Foot and heating system displaced
М сто-СНР	18	6.13	£5,100	2800	67.50	Marginal cost as compared to a new boller. Assume that a gas control heating system is being replaced.	Gas central heating
Mico-wird	10	40.15	8,200	Nex applicable	79.70	Roof mounted, 10% food factor. Provious cost was a loss-leader and untillely to be sustainable. 1.5 KW installed capacity	Secricity
Mini-vind	22.5	26.01	21,000	Not applicable	807.50	Pole-mounted, 20% load factor, 5 kW installed capeuity	Electricity .
Blomese baller replacing gas central heating	20	Not applicable	£10,000	£7,500	-305.20	20 kW blomase boller	Gas central heating
Biomace boiler replecing all central hosting	20	Not spolicable	210,000	£6,650	-135.40	20 WW blompes boiler	Oil carrive I feating
Blomase boiler replacing stacking starting	20	77.16	210,000	E10,000	129.50	20 kW blomase boiler	Electric storage hosting
	40	Not applicable	213,200	E10,700	-1.60	12 KeV heat pump. Lifetime changed to 40 years. This is the Better of the	Que central frétting
Ground source heat pumps reglacing of central heating	46	59.53	213,200	29,650	158.30	pround beend coll, rather than the pump, which will need to be	(Mi central healthing
Ground source heet pumps replacing alsolids storage heating	40	30.85	E13,200	£13,200	430.50	replaced). Note, however, that the sentings figures do not take account of the sevings in annual maintenance. This will shorten psyhoot times for gotto replacing oil	Electric atomics heading

Author: Penny Dunbabin "

Meaure	Lifespan (years)	(James) belyecty Symbia	Arrichge capital cant E	Marginal cost, where applicable £	Annual cost swing it	Comments	Fuel and heating ayutum displaced
	en establi	9 9		ē.	\$ 100	otetinal heating.	7. 300
Air source heat pumps	15	29.91	£5,900	Met applicable	163.60	a kW helk pump	Electric storage heating
Sater PV	25	31.20 (new build exists)	8,375 pr 8,900 pn a new build spirts	applicable	102.30	Cost given for 2.5 toW expectly instalted	Electricity
Solar Harmal replacing gas cannot hearing	26	66.31 (rere build mean)	3,600 cr 2,500 on a	Hot applicable	26.60	4m2 installed.	Geo central heating
Solar thermal replacing oil central hearing	26	52.52 (new bulld setata)	new build volute	· ·			Of carried heading
Bolar thermal replacing electric storage heating	25	40.26 (new bulki estate)	6587		62.10		Electric alonge heating
Wood burning stove replacing gen non-central heating	20	Hot applicable	18.00	1,000	-5.90	Heats one man only	Gae acm-central heating
Wood burning stove replacing solid fuel non-central treating	20	67.11	W00000	1,000	14.90	Heats one room only	Solid Ami non-contral hettino
Wood burning slove replacing electric non-central heating	20	39,39		1,000	30.00	Heate one room only	Electric pero central hasting

Author: Penny Dunbebin, Defre

Building Regulations (Amendment) Bill: Committee Stage Consultation Comments by Northern Ireland Environment Link 16 April 2008

Northern Ireland Environment Link is the networking and forum body for non-statutory organisations concerned with the environment of Northern Ireland. Its 50 Full Members represent over 90,000 individuals, 255 subsidiary groups, have an annual turnover of £44 million and manage over 230,000 acres of land. Members are involved in environmental issues of all types and at all levels from the local community to the global environment.

These comments are agreed by Members, but some members may be providing independent comments as well. If you would like to discuss these comments we would be delighted to do so.

Prof Sue Christie, Director Northern Ireland Environment Link 89 Loopland Drive Belfast, BT6 9DW P: 028 9045 5770 E: Sue@nienvironmentlink.org W: www.nienvironmentlink.org

Northern Ireland Environment Link is a Company limited by guarantee No NI034988 and a Charity registered with Inland Revenue No XR19598

Introduction

Northern Ireland Environment Link (NIEL) welcomes the progression of the Building Regulations (Amendment) Bill to the formal Committee Stage. We welcome the efforts of the Finance and Personnel Committee to involve wider stakeholders in their consideration of the Bill.

Enhanced Building Regulations will play a vital part in reducing Northern Ireland's carbon footprint and in ensuring wider environmental, social and economic sustainability for Northern Ireland. In considering potential amendments to the Building Regulations (NI) Order 1979 it is important to recognise that the regulations' role in 'furthering the conservation of fuel and energy' will only become more significant.

A policy framework to address and mitigate climate change is now beginning to develop in Northern Ireland. The Assembly's support for the UK Climate Change Bill is welcome but a Northern Ireland Climate Bill should act as the driving force towards becoming a low carbon society. Building regulations should ensure the built environment can deliver and adapt to the future through the provision of low, and eventually zero, carbon buildings.

It is estimated that 81% of energy consumed in Northern Ireland, excluding transport, is used for space heating and hot water in buildings and in commercial and industrial uses. Oil is by far the most utilised fuel for heat generation in Northern Ireland, with CHP and small scale renewable heat technologies providing a tiny contribution to the total fuel mix. Therefore, the encouragement of renewable heat sources, such as geothermal or biomass, and development of CHP as a significant source of energy for either business or domestic use, should be an important element of the Building Regulations.

Our demand for electricity is growing: DETI estimates that, on average over the last 15 years, electricity consumption has increased by 1.8% per annum. The NISDS includes a target to (from 2007) "reduce consumption of electricity by 1% annually until 2012." By reducing demand for energy we also make achieving the renewable energy target easier as developers faced with the 'Merton Rule' will testify: developers having to embed a percentage of on-site generation as a condition of planning permission found that it was in their interests to reduce the overall energy demand of the project as they did not have to install as much capacity. There is still a great deal to do in NI with regard to energy efficiency. Recent improvements to Part F of the Building Regulations are welcome but must now be improved further.

Northern Ireland currently generates only 4% of its electricity from renewable sources. Of Northern Ireland's energy usage (for electricity, heat and transport), indigenous renewables account for less than 1% of the total. The rest of our energy comes from fossil fuels, highlighting the massive challenges we face in achieving the targets noted above.

Large scale renewable projects and microgeneration should both be utilised. The development of microgeneration capacity and local energy networks (for heat and electricity) has many benefits over the traditional electricity grid. Large scale plants waste much of the energy in their fuel source by not utilising 'waste' heat and through the electricity lost in transmission and distribution systems. Decentralised systems can be much more efficient, especially when there are local markets for heat and electricity. Smaller generating units with more diverse fuel

supplies could improve Northern Ireland's energy security and provide a vital income for a number of people. Peter Robinson's decision not to pursue mandatory microgeneration limits the development of renewable technologies and perhaps energy efficiency in Northern Ireland, therefore, should be reversed.

A recent report from the Renewables Advisory Board (RAB), which advises the UK Government on renewable energy issues, provided the first in depth analysis of the role of onsite energy generation in the delivery of the Government's policy of ensuring that all new homes are zero carbon from 2016 (a measure that NI should also adopt). Amongst its conclusions is that the policy could drive a market for onsite renewables worth £2.3 billion a year from 2016; this is a significant market for Northern Ireland companies (RAB Report)[1]. However, the report also warns that the capacity of the microgeneration industry must be developed now and that it will require support to drive innovation and competitiveness.

The RAB report also states that the average cost of meeting zero carbon standards from on site renewables is expected to be £6,000 per dwelling. This price can be passed on to the customer without significantly affecting the final house price as the buyer will benefit from stamp duty relief. The occupant will also benefit from the annual fuel bill savings (this is particularly relevant as over 300,000 people in Northern Ireland are in fuel poverty due to increasing fuel costs and poor housing quality) and from rates relief. Microgeneration would also be made more attractive if generous feed-in-tariffs for energy sold to the grid were introduced in Northern Ireland.

Between 8,000 and 10,000 new houses are built every year in Northern Ireland. These houses will now be built to sub-optimal standards and will be heated and powered by ever more expensive fuels. The rest of the UK and the Republic of Ireland are intent on improving their building standards and we should not lag further and further behind. We hope the Minister reconsiders his decision regarding mandatory microgeneration. This is the time to raise housing standards, reduce fuel costs in the new build sector and encourage the next wave of successful Northern Ireland companies.

Specific Comments

Amendment Number 1: Building Regulations

The energy sources to be listed in Article 2, paragraph (5) of the principal require further consideration and description - perhaps in guidance notes. A clear definition of biomass should be included to ensure that only sustainable forms of biomass are considered. The impact of biomass production must be considered and acceptable levels of social and environmental performance in the production of bioenergy among supply chain actors, from growers to end users, should all be factored in. Specifically, creating a demand for imported biofuels that may not have been produced sustainably could have significant, long term detrimental consequences for people and nature throughout the world. NIEL believes that energy recovery from biodegradable MSW should only be considered as an appropriate waste management option after all the materials that have the potential to be reused and recycled, and non-combustible and harmful materials, have been removed from the waste stream and that the energy recovered from the process should only be considered a low or zero carbon system if a high thermal efficiency is achieved. We are concerned that there is no distinction made between other forms of thermal treatment and incineration/combustion. While all should be fully regulated, we believe that failure to distinguish between these technologies could limit the adoption of Advanced Conversion Technology (gasification, pyrolysis or anaerobic digestion), which we believe to be a more sustainable option than mass burning technologies.

Including "(j) other sources of energy and technologies for the generation of electricity or the production of heat, the use of which would, in the opinion of the Department, cut emissions of

carbon dioxide and other greenhouse gases" alongside genuinely renewable sources should be carefully considered. The Building Regulations should clearly differentiate between renewable and non-renewable technologies. While lower carbon technologies, such as the replacement of oil heating systems with gas systems, are welcome initial steps, the Regulations should facilitate moves towards 'zero carbon' buildings; while natural gas emits a third of the carbon dioxide compared to coal it is still a finite, greenhouse gas emitting fuel.

Amendment 1 (2) (a) should be supported by further guidance to explain the how the 'life cycle of materials and components' will be considered, with particular reference given to the assessment of life cycle carbon emissions and how low carbon products should be favoured.

Amendment 1 (2) (c), point 17A should read "Standards of natural and artificial lighting...etc."

Amendment Number 2

- "Historic buildings" should replace the term "protected buildings" in the title and in paragraph 3A (1). Paragraph 3A (2) should read:
- (2) In this Article "historic buildings" means—
- (a) listed buildings within the meaning of the Planning (Northern Ireland) Order 1991; and
- (b) buildings situated in conservation areas within the meaning of that Order.
- (c) buildings situated in areas of townscape or village character.
- (d) buildings of a vernacular or traditional character.".

Amendment Number 4

Amendment 4 (c) should insert paragraph (5) (c) as "reduce the demand for, and further the conservation of, fuel and power."

Amendment Number 5: Guidance documents

Paragraph 5A (2) (a) should read "shall conduct a full consultation, including: placing notice of the consultation on the Central Consultation Register and Department website and sending a copy of the draft to such persons as it thinks are representative of those having an interest in building regulations."

Paragraph 5A (3) should read "(3) After the Department has proceeded under paragraph (2) it shall publish the guidance on the Department website and further appropriate locations and provide training for district councils and other stakeholders."

Amendment Number 5: Type approval

To amendment 6 (1) (d) add to paragraph (4) "(d) the energy performance of the building"

Amendment Number 8: Contravention notices

In order to support the reduction in the period when contravention notices can be issued further funding should be allocated to enforcement teams.

Association of Building Engineers





Evidence from The Association of Building Engineers To The Northern Ireland Assembly Committee for Finance & Personnel

23rd April 2008

Presented by Mr Billy Gillespie BSc DMS CEng CEnv MICE FBEng Member of Council of the Association of Building Engineers, Regional Representative for ABE & Fellow of ABE Assistant Group Chief Building Control Officer for the N E Group of Councils

Supported by Mr Joseph Birt BSc,PgCertFS,MBEng Member of the Association of Building Engineers Member of the ABE local Technical Advisory Group and Interview Panel Specialist Support Officer with Down District Council

The Association of Building Engineers welcomes this opportunity to present its views to the Committee on The Building Regulations (Amendment) Bill 2008

Introduction

The Association of Building Engineers was founded in England about 80 years ago. It provides a professional qualification for those practicing the art and science of building and confers the title Building Engineer on its corporate members.

It is a multi-disciplinary organisation incorporating practitioners with specialisms in construction, civil engineering, architecture, structural engineering, fire safety, building services engineering, quantity surveying, valuation and project management at both the design and on-site stages. It is for this reason that Membership of the Association of Building Engineers is one of the professional qualifications recognised by Building Control Departments both in England and Wales and in Northern Ireland.

Members of the Association are subject to the Codes of Professional Conduct and are obliged to maintain their skills and knowledge by undertaking Continuing Professional Development throughout their working lives. Building Engineers undertake activities to create and maintain buildings and the built environment throughout Great Britain and Ireland. These activities include site investigations, building inspections and surveys, consultation, project design, plan preparation and operations management. Building Engineers need to be familiar with new materials and technologies and must have a knowledge of current British Standards, Codes of Practice and Building Regulations.

In Ireland there are some 200 members of the Association of Building Engineers with the majority of them residing in Northern Ireland. Many of those members are employed in the public sector,

The Building Regulations (Northern Ireland) Order

The Building Regulations (Northern Ireland) Order was initially written some 30 years ago and has undergone a number of stages of modification since that time. The original document was written with great foresight, and included sections which were not enacted initially, to allow for changes and developments within the Building Industry and local Authorities in Northern Ireland.

Initial consultations on the Order suggested that a complete re-write was planned and led to anticipation of far reaching changes. Many of these proposals would have been welcomed and it is hoped may be incorporated in the near future.

Considering the proposed Building Regulations (Amendment) Bill

Article 2 – Interpretation

In the existing Order the definition of "site" has become outdated being restricted to the area of the building footprint. Parts of the regulations relating to drainage, access from parking areas, access for Fire Service and currently waste collection, retaining and garden walls necessitate control extends beyond the building itself.

It is felt the opportunity should be taken to amend the definition of "site".

Paragraphs (4) (5) (6) – the incorporation of reference to low or zero carbon systems and the wide range of energy producing systems and technologies is to be welcomed.

Article 3A – Protected buildings

It may be appropriate to impose a duty on Councils to preserve protected or listed buildings. Where dealing with refurbishment under Part F (energy conservation) Councils have a duty to consult with the Environment & Heritage Service and often have a conflict between saving the character and heritage or saving energy.

It may be appropriate to introduce a more positive approach.

Article 4 – The Building Regulations Advisory Committee

The ABE appreciate that it is difficult to get volunteers to deal with the details of Building Regulations. It is hoped that ABE as a body has made a contribution to the composition of NIBRAC in the past. Each member of NIBRAC, with their skills and knowledge developed from their professional body, is appointed in their own right, by the Minister, and from experience we feel the Committee forms a useful link with the industry.

It may be appropriate to consider enabling NIBRAC to raise, with the Department, issues which are of concern to the industry .

Article 5A – Guidance for purposes of building regulations

In England and Wales Approved Documents are regarded as guidance – one way of building something – but not the only way. It is accepted that builders can vary their construction to meet the particular circumstances. This takes away the reliance on the Technical Booklets which had to be contrived to meet all circumstances.

We welcome the introduction of Guidance Documents produced by the Department.

Article 8 – Power of district councils to approve types of buildings

ABE would welcome the use of Type Approvals as more National and International companies are building stores in Northern Ireland.

It would be hoped that Councils would not revoke and only in special cases vary a Certificate already approved by other Councils.

The Department may wish to develop some form of commitment from Councils.

Article 17 – Appeals to the Department

In England and Wales the results of Appeals against contraventions are published as "determinations" and are widely read in our journal, Building Engineer. These articles are informative to new and experienced members – it prevents people making the same mistake, if the reason is explained.

We feel the Department should publish the outcomes of such Appeals made under Article 17.

Article 18 – Contravention notices in respect of work contravening the building regulations

Building work is often a slow laborious process ant the point of "completion of the works" is often difficult to determine. We see little advantage in bringing the time period down to 6 months.

When areas of non-compliance are identified Building Control will, in line with the Enforcement Concordat, persuade, assist and encourage the offending builder to make- good the defective work and legal action is a last resort. Building Control see a prosecution as a failure. Some other Council Departments count prosecutions as a measure of success. Some Councils have never taken anyone to Court. The reason being that it is costly both financially and in terms of manpower resources.

We would encourage the Department to prevail on the Criminal Justice Department to streamline the Court system to make it less expensive and less time consuming.

Article 19 – Deposit of plans to be of no effect after certain interval

There remains a concern within Building Control over the multiplicity of applications that are made just before amended regulations come into force. This results in instances where a small builder undertaking a development of 30 houses could be constructing the final house to regulations which had been superseded some 10 years earlier. In the case of a single house if it is not started within 3 years from the date of application the plans are deemed to be of no effect and a new application is required.

We feel that the opportunity should be taken to remove this anomaly which is being exploited by some builders.

Article 19A – Registers to be kept by Councils

Many Councils have retained original documents from Applications going back to, and beyond, 1973 when the present Councils were formed. This had formed an invaluable archive and source of historic information and data. Storage is a problem and some Councils have disposed of records, only retaining those going back for 10 years. Other Councils have had documents photographed digitally for storage. Much of the historic records have been lost. A number of people are concerned about this loss and there has been a suggestion that the Freedom of Information Act may have brought about the disposal.

The ABE feel that it is essential that Councils keep Registers and maintain Records of all important information, both paper and electronic format in a secure, safe location which can be used for data gathering and as an archive.

Concern has been expressed that data should not be made available to anyone particularly if they aim to use it for an address database for unsolicited sales or marketing.

Additional Comments

Council Databanks

Councils are in a unique position in local communities to be the repository of all community-based information. We are seeing with e.business the need for Local Authorities to accept and store electronic plans and applications. Councils through their Building Control Departments already know where new building and renovation is going on and hold these records. Councils currently provide information for assisting the conveyancing process through a Property Search.

Regulations have been extended to require testing and commissioning of flues, gas fires, unvented hot water systems, boilers, heating controls and air conditioning systems as well as airtightness.

Information on digital maps giving dimensions of buildings which may be gathered for LPS and site dimensions could also be retained.

Home Information Packs are being introduced in England and Wales and while they may not be introduced in Northern Ireland, the time is approaching where a Building Log Book may be required documenting the materials which went into the building, the inspections which were carried out, the commissioning processes, the Certification processes and requirements and records for servicing and maintenance and possibly ultimately the information for disassembly and re-use of appropriate elements.

The Department should incorporate provisions to require the Local Authority to gather, store and retain this data in a safe and secure fashion, to be used for statistical purposes and enable it to be passed to each new owner or tenant.

Existing Buildings

Current regulations create safe, energy efficient new homes, There are very many more existing buildings which may not be safe and are not energy efficient.

The Department may wish to consider the application of some of the Building Regulations to existing buildings, particularly in light of the fact that the Energy Performance Certificate will draw attention to deficiencies with respect to Part F.

Demolition

In England and Wales the Local Authorities control demolition. Building Control Officers have the skills to oversee this work, which in future may relate to re-cycling or sustainability. Original consultation suggested it may be included.

The Department may wish to consider including this and legislation on Party Walls for enactment at a later time.

Dangerous Structures

The original consultation made reference to dangerous buildings, which the Local Authorities currently deal with under numerous pieces of legislation, some dating back over 150 years.

It may be possible for the Department to take this opportunity to include dangerous structures in the Order, for enactment at a later date when consolidated appropriate regulations have been formulated to ensure safety.

Sustainable Communities

Councils have the ability to advise and co-ordinate Community Sustainability Strategy for community based renewable energy systems, grey water re-cycling, rainwater harvesting, community heating (CHP) plant, arrays of solar panels and photo-voltaic cells. All of these could be installed and run more efficiently on a co-ordinated community basis than by individuals.

The Department should consider framing the legislation to allow the skills of the District Council Building Control Departments to be utilised to greater advantage in the future.

Future-proofed Buildings

Technology of materials and construction methods and communication requirements with the availability of electronic data presentation and storage may present developments which were not envisaged a few years ago.

The Department should ensure that provisions are made to incorporate into the design of buildings future technologies.

END

Billy Gillespie

Joseph Birt 17th April 2008

Memoranda and Papers from Department of Finance and Personnel

Detailed background to policy proposals included in the Building Regulations Bill

Background

The above Bill proposes amendments to the Building Regulations (NI) Order 1979 (the 1979 Order) (as amended). The 1979 Order is the primary legislation relating to building regulations within Northern Ireland. Ministerial approval to conduct a review of the 1979 Order was granted in June 2003, the aim being to update it to take account of changes in industry practices and changes in legislation in the rest of GB and the Republic of Ireland.

Purpose of the proposed Bill

The purpose of the proposed Bill is to build on the existing legislative framework by refining the powers, duties and rights of the Department, district councils (which enforce the regulations) and applicants. The existing general principles of the 1979 Order are to secure the health, safety, welfare and convenience of persons in or around buildings, and to further the conservation of fuel and power.

One of the more significant amendments in the proposed Bill is to extend these general principles to include the protection and enhancement of the environment and the promotion of sustainable development, matching similar amendments to the Building Acts in England & Wales, Scotland and the Republic of Ireland.

A summary of proposed amendments and new duties is outlined below, with further detail on each appended to this paper.

Amendments proposed

The following amendments are proposed:-

- 1) The expansion of the general principles of Building Regulations to include protection and enhancement of the environment and the promotion of sustainable development;
- 2) The inclusion of security of buildings, sustainable use and management of water, waste management, durability of materials and the use of low or zero carbon systems as matters for which Building Regulations may be made;
- 3) A move away from "deemed-to-satisfy" provisions towards a guidance-based system;
- 4) Nominations to the Northern Ireland Building Regulations Advisory Committee (NIBRAC) (a statutory body which advises the Department on amendments to building regulations) now to come from persons (including representative bodies), to comply with the Nolan principles for public appointment;

- 5) The granting of an additional power to enable district councils to type-approve superstructures;
- 6) Types of tests for conformity with building regulations to be commenced on amendment. The types of tests will be prescribed rather than detailed in the Order;
- 7) The period for serving a contravention notice;
- 8) The removal of civil liability provisions;
- 9) Creating a new criminal offence of making false or misleading statements; and
- 10) The removal of Crown exemption, except where doing so would jeopardise the safety and security of the building or people in or around the building.

New duties proposed

Two additional duties are proposed:-

- 1) A requirement on district councils to consider the special characteristics of listed buildings or buildings within conservation areas when considering applications for building control approval for such buildings; and
- 2) A requirement on district councils to retain a register of all applications for building control approval.

Some existing definitions will be revised and new definitions added in support of the proposed amendments and new duties.

Options Considered

Initially, three options were open to the Department:

- Do nothing this was not seen as feasible, as increasing EU requirements, particularly in relation to energy performance and the environment, were already testing existing provisions;
- Radically overhaul the entire Building Regulations framework in addition to the greater impact this option would have had on building control practitioners, the construction industry and the general public, there was insufficient evidence to suggest that such a move was necessary, because a significant degree of contentment was expressed by consultees; and
- Amend the existing Order and introduce new duties as appropriate this was seen as the preferred option, as it would facilitate harmonisation with the legislative provisions in England & Wales, Scotland and the Republic of Ireland, with minimal resource implications.

It was clear from the responses to consultation that there was general contentment with the main thrust of the provisions of the 1979 Order. Opinion suggested that rather than make any significant changes to the building regulations' processes, the need to extend the matters for which regulations may be made was widely recognised. The proposed Bill will now do so, by including new powers to regulate to protect and enhance the environment and to promote

sustainable development. These new powers should also accommodate emerging national and European requirements. The proposed Bill also provides district councils with a number of new powers and duties.

Financial Implications

The proposed Bill does not place any increased financial burden on the devolved administration, on staffing levels, nor on the general public. However some of the proposed regulatory powers, such as those which deal with low or zero carbon systems, would have financial implications when implemented in subordinate legislation. These would be explored in relevant Regulatory Impact Assessments.

Human Rights / Targeting Social Need (TSN) - Impact Assessments

There is nothing in the proposed Bill that would have an adverse effect on human rights.

As building regulations apply to everyone in Northern Ireland, regardless of where they live or whether or not they fall into any of the Section 75 groups, building regulations policy has been screened out of the EQIA programme.

The proposed Bill does not impose any costs to businesses, charities or the voluntary sector; nor does it impact on TSN or on any other area identified under the Integrated Impact Assessment tool, and therefore no impact assessments were needed.

North/South or East/West Implications

Certain proposals in the Bill, such as the move to a guidance-based system and away from the existing "deemed-to-satisfy" system, will mirror existing practice within England & Wales, Scotland and the Republic of Ireland.

EU Issues

The Department is working towards full implementation of the EU Directive on the Energy Performance of Buildings. It is generally considered that this Directive is the first in a number of energy-related EU Directives. The proposed amendment to the general principles of building regulations, together with the enhanced list of matters for which building regulations may be made, will assist the Department in implementing this and future Directives in this area.

Review of Public Administration

The changes proposed in the recent Review of Public Administration will not affect building control's enforcement of the Buildings Regulations, as this will continue to be provided by district councils, whatever their final number may be.

Potential for controversy

The proposals have already received considerable support from stakeholders, as reflected in both the response to public consultations and in the stakeholder workshops. The Department, therefore, does not anticipate any controversy arising from the proposals.

Departmental Solicitor clearance and Secretary of State consent

As required by Section 9 of the Northern Ireland Act 1998, the Departmental Solicitors' Office has cleared the Bill as being within the Assembly's competence. The Secretary of State's consent in accordance with section 8 of the Northern Ireland Act 1998 is required as the Bill proposes the creation of two offences. Draft provisions have already been cleared by NIO officials.

Appendix

Amendments Proposed: - Further Detail

1) The expansion of the general principles of Building Regulations to include protection and enhancement of the environment and the promotion of sustainable development.

Article 5(5) of the Order allows the Department to include in Building Regulations standards that can reasonably be expected to be attained in buildings, having regard to the need for securing the health, safety, welfare and convenience of persons in or about buildings. They also take account of the conservation of fuel and power. These, in essence, are the general principles of Building Regulations. In recent years there has been a marked increase in awareness of environmental issues and this has been reflected in amendments to legislation in England & Wales placing greater emphasis on matters such as sustainability, security and the environment. Indications are that further EU Directives on these themes will emerge. Therefore the Department wishes to extend the general principles of Building Regulations to also include:

- the promotion of sustainable development; and
- the enhancement and protection of the environment.
- 2) Extension of matters for which Building Regulations may be made.

There is a need to extend and clarify the (Schedule 1) list of matters on which Building Regulations may be made, to include:-

- security of buildings;
- sustainable use and management of water;
- use, reuse and recycling of materials;
- durability of materials and materials' life cycles;
- pollution (emissions) and nuisance;
- low or zero carbon systems (in the list of other fuel or power); and
- performance standards for heating, mechanical ventilation and air conditioning.
- 3) A move away from "deemed-to-satisfy" provisions towards a guidance-based system.

The Building Regulations express the majority of technical requirements for work in a functional format, i.e. they identify a reasonable standard that must be attained and refer to 'deemed-to-satisfy' provisions in publications that set the benchmark for compliance with those requirements. Article 5 (1) (b) of the Order currently provides the Department with the power to provide 'deemed-to-satisfy' solutions, which it does through a series of Technical Booklets and reference to other publications. Following the deemed-to-satisfy provisions therefore guarantees compliance with the requirements of the regulations. However it is possible to satisfy the requirements of the regulations using methods outside those set in the deemed-to-satisfy publications.

The other legislative authorities in the British Isles use a system of providing practical guidance (as opposed to 'deemed-to-satisfy') which is taken into consideration when determining whether the requirements of the regulations have been met; but, like our deemed-to-satisfy provisions, there is no obligation to follow this guidance. The merits in moving from deemed-to-satisfy to a guidance-based system are: to facilitate more rapid reaction to new guidance, standards or EU Directives; to encourage more creativity and flexibility in design and materials; to facilitate closer technical harmonisation with other legislative authorities; and to relax some of the more onerous legislative requirements associated with providing deemed-to-satisfy provisions.

We therefore propose to repeal Article 5(1) (b), to rely on Article 5 (1) (c) as the power to provide guidance instead and to introduce provisions relating to the preparation and review of guidance documents, including consultation thereon.

4) Nominations to the Northern Ireland Building Regulations Advisory Committee (NIBRAC) to comply with the Nolan principles for public appointment.

Currently Article 4 of the Order requires the Department to consult with "bodies", rather than individuals, when making appointments to NIBRAC. However the Nolan Principles require the Department to adhere to the guidance contained in the Office of the Commissioner of Public Appointments for Northern Ireland's (OCPANI's) Code of Practice. OCPANI guidance recommends that nominations (to public bodies such as NIBRAC) must come from suitable "persons" who meet the application criteria (including representative bodies or associations). We are therefore proposing an amendment to align with the OCPANI guidance.

5) The granting of powers to district councils to type-approve superstructures (to be commenced as amended).

Article 8 of the Order permits the Department to approve any particular type of building matter as complying with requirements of the regulations, but this Article has not been commenced. The Department intends to commence this Article in recognition of the growing practice of building the same type of house in various district council areas. However we are proposing to amend it to allow district councils, in consultation with prescribed persons, limited powers of type-approval so that, for example, a house builder may submit plans for a particular type of house for type-approval to one district council, and use the type-approved plans to build the same house in another council area. The district council would be required to issue a certificate detailing the nature of the type approval and the conditions associated with the approval. The matters for which type approval may be sought would be prescribed within the regulations.

The district council in whose area the building is to be erected would have the responsibility to ensure that the building is erected in accordance with the type-approved drawings. In addition it would approve those elements of the design that are unique to that particular site, for example with respect to local soil and weather conditions, to ensure that the completed building is built in accordance with the current Building Regulations. The apportionment of fees etc. connected with these functions will be prescribed in amendments to the Fees regulations. Applicants will have the right to appeal to the Department.

6) Types of tests for conformity with building regulations to be commenced on amendment. The types of tests will be prescribed rather than detailed in the Order.

Article 12 grants district councils the power to require reasonable tests to be carried out to confirm that there is no contravention of the regulations. The councils also have the power to conduct tests themselves. Tests are limited to tests on the soil and subsoil, material or components used, and services, fittings or equipment provided. However this Article has not been commenced. We intend to commence it, amended so that the types of tests may be

prescribed in regulations instead. This will facilitate any subsequent amendment should the need for an additional test arise in the future.

7) The period for serving a contravention notice

Under Article 18 of the Order, where work has been carried out that is in contravention of the Building Regulations a district council may, within 18 months of the work in question being completed, issue a notice stating that there has been a contravention of the regulations and requiring that the contravention is put right. Such a notice may require either removal of the work in question, or its alteration to comply with the regulations.

We propose to amend the period within which a district council may issue a contravention notice and set a long stop of 12 months from the date the district council declares itself satisfied that the works meet the requirements of the regulations (this period is in line with the defects liability period in normal building contracts).

To do so we will make it mandatory, in the regulations, for an applicant to notify district councils when the works have been completed and for the district council to issue a completion certificate once they are satisfied that the works meet the requirements of the regulations.

Article 18 will be amended to permit a prescribed period to be set in regulations.

8) The removal of civil liability (not commenced) powers.

Article 20 allows for breaches of duty imposed by the Building Regulations to be actionable where the breach causes damage. As this power has never been commenced, and the Department has had no representations for it to do so, we are proposing that it is repealed.

9) Creating an offence to make false or misleading statements in support of an application for Building Control approval.

Article 21 deals with penalties. We are proposing an amendment to make it an offence to knowingly or recklessly submit false information for the purposes of obtaining building control approval. At present district councils have to rely on common law principles to remedy such matters.

10) The removal of Crown exemption, except where doing so would jeopardise the safety and security of the building or people in or around the building (to be commenced as amended).

Article 22 (not commenced) would bind the Crown to the substantive requirements of building regulations ("substantive requirements" are the requirements of building regulations with respect to the design and construction of buildings and the provision of services and fittings, as distinct from the procedural requirements). We propose to commence this Article to bind the Crown, amended to redefine "Crown building" as a building or part thereof occupied by the Crown, to remove the definition of "Crown interest, and to prescribe exempted buildings or bodies in regulations.

New Duties Proposed: - Further Detail

1) A requirement to consider the special characteristics of listed buildings or buildings within conservation areas (protected buildings) when considering applications for building control approval for such buildings.

Although applications for building control approval submitted to district councils for listed buildings or buildings within conservation areas have long been given special regard due to their nature, there is no formal requirement within the existing legislation that requires district councils to do so. The Department is therefore proposing a provision which will require district councils to have regard to the special characteristics of listed buildings, or buildings within a conservation area, and to ensure that when applying the requirements of the Building Regulations, they take care to ensure that, as far as practicable, the special characteristics of such buildings are not compromised.

2) A requirement on district councils to retain a register of all applications for building control approval.

Under current provisions, district councils are not required to keep any record of plans or other documents submitted in relation to applications for building control approval (although it is generally the case that such records are kept as a matter of course). Such a requirement is now included in legislation for England & Wales, Scotland and the Republic of Ireland. We have therefore requested the introduction of provisions which will require district councils to keep a register of information relating to all applications for building control approval including details of progress and outcomes of such applications. District councils will also have to make the register available for public inspection. The actual format of the register would be prescribed in the regulations.

Summary consultation and policy proposals taken forward & not taken forward in the Building Regulations Bill

Consultations

- 2 full public consultations (Jan-Mar 2004 and Jul-Oct 2005). Approx. 450 consultees invited to respond each time, with information placed in the press and online. Around 10% response rate to each consultation.
- Establishment of Northern Ireland Building Regulations Advisory Committee (NIBRAC) sub-committee to take forward policy scoping exercise. Consultation with NIBRAC at each meeting (3 meetings per year);
- Consultation with Building Control Liaison Group (formal interface between the Department and district councils' Building Control Officials) at each quarterly meeting;
- Establishment of 2 stakeholder groups with construction industry representatives and building control officers. Workshops held in February 2005 to discuss policy proposals prior to 2nd consultation and again in August 2007 to discuss bill content;
- Input at building regulations seminars in January 2005 and September 2006 to inform full range of stakeholders of progress with review;
- Building regulations website kept updated throughout review process.

Annex A

Policy proposals taken forward in final bill

Issue	Proposed by	Outcome
Amendment of "principles" of building regulations to strengthen environmental remit	DFP	Proposal taken forward in final bill
Extension of Schedule 1 matters (matters for which building regulations may be made)	DFP	Consultation proposals extended further to include apportionment of energy from certain sources and to include new definition of "low or zero carbon systems" following SoS statement on microgeneration.
Move from "deemed-to- satisfy" to guidance based system	DFP	New provisions introduced in bill to allow adoption of guidance based system
Change to NIBRAC appointment process to comply with Nolan principles of public appointment	DFP	Department now to consult with "persons" rather than "bodies"
District councils given powers to type approval	DFP	Provisions amended to reflect input and advice from stakeholder workshops
Provisions relating to tests amended to allow Department to prescribe those tests considered appropriate	DFP	Proposal taken forward in final bill
New trigger established for commencement of period during which a contravention notice could be served	Building Control/ Construction industry	Period extended to 12 months at the request of stakeholder groups
Removal of civil liability provisions	DFP	Article repealed by bill
Creation of new offence relating to provision of false or misleading information	Building Control	New offence created by bill
Removal of Crown exemption	DFP	Change to definition of "Crown building" and commencement of Article 22 to bind Crown
District Councils to consider special characteristics of listed buildings etc.	DFP	Provisions introduced to require councils to have consideration of particular characteristics of listed buildings and buildings within conservation areas when applying regulations
District councils to retain register	DFP	Provisions introduced into bill. Content of registers to be prescribed in regulations.

Policy proposals not taken forward

Issue	Proposed by	Outcome
Change to definition of "site" and "building" to widen scope Inclusion of boundary walls and earth-retaining walls in definitions	DFP, Building Control	Legal advice from Departmental Solicitors Office (DSO) (later confirmed by Office of Legislative Counsel (OLC)) suggested that change not necessary as existing definition sufficed
Redrafting of powers relating to continuing requirements	DFP	OLC advised that redraft was not necessary
Type approvals to be legally binding on all district councils	Building Control	OLC advised that this was not possible – building control to establish internal mechanism to manage type approvals and to seek strengthening of powers through RPA legislation
Retrospective application of environmental building regulations	Building Control	It was considered that widening the scope of the regulations in this way would place too great a burden on the owner/occupier and also on the construction industry
Self-certification/approved inspectors	Construction industry	Powers to introduce this have been retained in 1979 Order, however there are no plans to introduce such schemes at this time.
Provisions relating to fees should be amended	Building Control	This is a matter that will be addressed by the forthcoming review of the Fees Regulations
Determinations should be introduced	Building Control	Determinations considered but not felt appropriate for Northern Ireland as existing appeals system duplicates part of process
Current provisions relating to activation of approval by commencing work are allowing building against out-of-date regulations	Building Control	Department will address this matter by amendments to subordinate legislation.
Councils should be allowed to work outside council area	DFP	Proposal dropped on advice of OLC
Off-site inspections for pre- fabricated building components	DFP	OLC advised that existing powers would permit such inspections.
Powers to address dangerous buildings should be brought into the bill	Building Control	Powers drafted for inclusion but withdrawn on advice of OLC following discussions with Building Control. Matter to be revisited at a later date.

Issue	Proposed by	Outcome
Department should consider legislation to give more weight to the Building Control panel system	Building Control	This is a matter for DoE, which has legislative and policy responsibility for local government.
Work should not start before approval is given	Building Control	It was felt that this would disadvantage the construction industry by potentially creating bottlenecks in the application process.
A definition of "completed works" should be included	RICS	The works will be completed when the builder/owner notifies building control of their completion as required by the regulations.
Department needs to outline clear guidance in relation to protected buildings.	RICS	Department will refer to existing guidance in this area
Building Control should be tasked with enforcement of demolitions. Possibility that Health & Safety Executive functions will transfer to Building Control under RPA, so bill should try to be as futureproof as possible.	Building Control.	Demolitions are covered by other regulations. It would not be appropriate to use building regulations to enforce other legislation. District council functions post-RPA can be addressed once those functions have been agreed. Not appropriate to second-guess RPA.
Department should prescribe in the bill the period in which it must conclude an appeal	Building Control.	Department's policy is currently that appeals take precedent. A prescribed period would serve no purpose and is therefore seen as unnecessary.
Schedule 1 should be amended to include protection from radiation from cables, wireless equipment etc.	Building Control.	The safety of equipment to be installed is not a matter for building regulations, but rather is covered by separate legislation.

Mandatory Microgeneration in New Buildings



Craigantlet Buildings Stoney Road Belfast BT4 35X Telephone 028 9052 9140 Faccimile 028 9052 3600

Mr Mitchel McLaughlin MLA Chairman Committee for Finance and Personnel Committee Office Parliament Buildings Stormont

Our Ref: Sub/505/07

November 2007

MANDATORY MICROGENERATION IN NEW BUILDINGS

In July 2006, the former Secretary of State Peter Hain MP announced that the Government was proposing to amend the Northern Ireland Building Regulations to make micro generation mandatory in all new buildings from April 2008.

I will be answering an Oral Assembly Question "To ask the Minister of Finance and Personnel if he will make a statement on mandatory micro generation" on Tuesday 27 November 2007 and wish to advise you that, in response, I will be stating that I will not be proceeding with this amendment.

Existing Requirements

The former Secretary of State's announcement was made at a time when the last amendment to the Building Regulations Part F 'Conservation of fuel and power' was already under review. That review concluded with new regulations which came into operation on 30 November 2006. The regulations set standards that will reduce carbon emissions by around 40% (over previous standards) in buildings to which these new regulations apply. The changes introduced constituted the most wide-ranging and radical revision ever made to the Building Regulations and the construction industry is still coming to terms with these new provisions.

Compliance with these regulations is now determined on a 'whole building basis' where the carbon emissions for the building are measured using standardised software and assessed against a target emissions rate. Measurement takes into consideration the thermal efficiencies of all elements of a building's external fabric (roof, walls floor, windows, doors etc.) and the fixed energy consuming appliances (boiler, lighting, etc.). The regulations set long-stop values for many of these elements solely to prevent construction problems arising, but apart from these constraints designers have the

freedom to select the methods of construction best suited to their proposed building provided the emissions rate for the building does not exceed the target. In this way, the integration of renewable technologies is encouraged as reductions in emissions enabled by these technologies will contribute to meeting the required emissions target.

This 'whole building approach' and the standard calculation methodologies used to apply it were developed to comply with the requirements of the EU Directive on the Energy Performance of Buildings.

Amending the Building Regulations

A draft regulatory impact assessment (RIA), prepared whilst developing the policy, raised serious concerns about the cost-effectiveness of many of the micro generation technologies, indicating payback periods far in excess of their lifespans (see DEFRA figures below).

Extract from Table 6 in the Regulatory Impact

Measure	Lifespan (years)	Simple Payback (years)	Average Cost (£)	Annual Cost saving (£)
Micro CHP	15	6.50	£1,496	£230
Biomass Boiler	20	9.76	£4,000	£410
Micro Wind	15	10.04	£2,250	£224
Ground Source Heat Pump	20	12.23	£4,500	£368
Photovoltaic	25	44.22	£9,375	£212
Solar Hot Water	25	52.08	£2,500	£48
Wood Burning Stove	20	60.00	£1,500	£25
Source: Defra		•	•	

The Northern Ireland Building Regulations Advisory Committee (NIBRAC), a statutory body which the Department must consult when proposing any amendment to the Building Regulations, is in favour of reducing carbon emissions, but is of the opinion that the introduction of a mandatory requirement for micro-generation is not the appropriate mechanism to achieve such reductions as it would neither be cost-effective nor deliverable by the construction industry. The Committee's opinion was that reductions in carbon emissions would be better achieved by focussing on the more cost-effective approach of further improving the energy performance of the fabric of the building through higher insulation standards, better air tightness and improved building services.

Legislative Harmony
Introduction of a mandatory micro-generation policy would set Northern Ireland apart from the rest of the UK as there are no plans to amend building regulations in England, Wales or Scotland in a similar manner. E&W are commencing work on an amendment which will come into force in 2010 to further reduce carbon emissions by up to 25%. In its new Programme for Government, the Scottish Government has stated that it will publish a strategy for low-carbon buildings and will increase energy efficiency through building regulations.

Other considerations

Advice from the Departmental Solicitor's Office suggests that to introduce a mandatory micro-generation requirement may leave the Department open to legal challenge under the "Wednesbury Irrational" principle. This prevents public bodies from setting requirements that are seen as not cost-effective and therefore place a financial burden on the public.

Many micro generation technologies are considered to be either innovative or are at least relatively new to the Northern Ireland construction market. There is uncertainty that the industry could, at this point, provide an adequate number of competent installers should micro generation be required in all new build.

The uncertainty extends to the ability of the technologies to robustly deliver the intended performance. The National House Building Council exclude these systems from their 10-year house builders warranty scheme and the Council of Mortgage Lenders exclude the installation cost of such systems when determining the level of mortgage being advanced to a borrower.

Summary

The EU Directive on the Energy Performance of Buildings has fundamentally changed the way in which assessment against Building Regulations standards is measured. Compliance now involves a holistic assessment of the energy performance of the entire building and assessment of its total carbon dioxide emissions.

Designers and developers are free to meet the requirements in a manner that suits the specific circumstances of the building and is most cost effective for their clients. They may, if they consider it appropriate, incorporate micro generation technologies. These technologies are already facilitated by the current building regulations.

I do not consider that the flexibility already provided to designers and developers in allowing them to determine how to comply with the Building Regulations energy standards should be compromised by introducing prescriptive requirements that may not be either cost effective or suitable to the building being designed.

For these reasons and the fact that there are unresolved issues around the maturity of a number of types of micro generation energy systems, the manufacturing and installation capacity and skills base, I have decided not to proceed with the policy set out by the former Secretary of State that all new buildings should incorporate micro-generation.

The Assembly recently debated climate change and sustainable development and although there were variations in the approach to tackling these issues, Members were in agreement that urgent action is required. It is important that we progress matters in a way that is sustainable and that will ensure a healthy and sound environment for future generations. Building Regulations will play its part in meeting that objective.

Although last year's amendment to the building regulations set a requirement for a high level of energy performance in buildings, we cannot become complacent. I have, therefore, asked my officials to assess the viability of using the Building Regulations to require further reductions of 25% and 44% in carbon emissions by 2010 and 2013 respectively.

RT HON PETER D ROBINSON MP MLA MINISTER FOR FINANCE AND PERSONNEL

Building Regulations (Amendment) Bill Proposed Amendment to the Bill

Background

1. In his opening remarks to the Assembly during the Second Stage debate on the above Bill on 4th March 2008, the Minister for Finance and Personnel advised that he would be introducing an amendment to the Bill at a later stage to remove the proposed repeal of Article 20 of the Building Regulations (NI) Order 1979.

- 2. Article 20, which was never commenced, allows for breaches of a requirement or duty imposed by the Building Regulations to be actionable where the breach causes damage. As this power has never been commenced, and the Department has had no representations for it to do so, it was agreed with the Office of Legislative Counsel that the Article be repealed.
- 3. When Article 20 was written, building regulations were largely prescriptive in nature, setting down exact requirements for compliance. However this is no longer the case and the regulations are now almost exclusively functional in their application, requiring only that "reasonable provision" be made to satisfy compliance.
- 4. On consideration of the policy memorandum by the Executive prior to their meeting on 8 November 2007, OFMDFM expressed the opinion that the retention and commencement of this Article was preferable as it may encourage compliance with the regulations. It was agreed that the proposed repeal be removed from the Bill and that officials would review the need for the Article. Given the change in approach from prescriptive to functional regulations, the Article as written is no longer appropriate.

Proposed amendment

5. The amendment that the Minister intends to introduce at a later stage would remove clause 10 of the Building Regulations (Amendment) Bill and amend the List of Repeals in the Schedule to the Bill to remove the reference to Article 20.

DFP response to Sustainable Energy Association



Assembly Section Craigantlet Buildings Stormont BT4 3SX

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Shane McAteer Clerk Committee for Finance and Personnel Room 428 Parliament Buildings Stormont 29 February 2008

Dear Shane

Sustainable Energy Association

In response to your letter of 14 February, please find attached the Department's comments on the Association's letter of 8 February to the Committee.

Yours sincerely,

Norman Irwin

Building Regulations and Microgeneration

Background

In July 2006, the former Secretary of State, Peter Hain MP, announced that the Government was proposing to amend the Northern Ireland Building Regulations to make Microgeneration mandatory in all new buildings from April 2008.

In November 2007, the Minister of Finance and Personnel responded to an Oral Assembly Question by stating that he would not be proceeding with this amendment.

The DFP Committee noted the Minister's decision.

The Committee may wish to be made aware that since the Minister made his decision, the Department has received two FOI requests about this issue. One came from a local daily newspaper and the other from an individual associated with the Sustainable Energy Association.

Building Regulations

NOTE: The term "microgeneration" is not used in the building regulations. We more correctly refer to it as "low or zero carbon energy sources (LZC)". LZC is the term used for building regulations purposes throughout the UK and Ireland.

New building regulations for Part F (Conservation of fuel and power) came into effect on 30th November 2006. These requirements represent around a 40% improvement on previous thermal standards with a corresponding reduction in carbon emissions and are still "bedding down".

The methodology is based on Article 3 of EU Directive 2002/91/EC that required Member States (MS) to move away from an element by element approach. Article 3 required MS to adopt a methodology of calculation of the energy performance of buildings based on an integrated "Whole Building Approach".

Our building regulations requirements for the conservation of fuel and power are fully in line with those current in England, Wales and Scotland.

LZC is not mandatory in the building regulations in England, Wales or Scotland. However, the use of LZC energy sources in all buildings is fully facilitated, and indeed encouraged by the current building regulations.

The Republic of Ireland have introduced a requirement for LZC to provide a reasonable contribution to the energy needs of any new dwelling submitted for approval after 1st July this year. The reasonable contribution is defined in their technical guidance.

The Department has a statutory duty to consult with the Northern Ireland Building Regulations Advisory Committee (NIBRAC) when proposing to amend the building regulations. NIBRAC specifically asked for the Minister to be advised that it did not consider mandatory microgeneration to be appropriate at the present time.

The Minister has signalled a review of Part F (Conservation of fuel and power in 2010 and 2013 to further improve the requirements by 25% and 44% respectively over existing standards. This is in line with proposals elsewhere in the UK.

Other considerations

The Departmental Solicitor's Office has advised that mandatory microgeneration could leave the Department open to legal challenge under the "Wednesbury Irrational" principle. This states that any requirement of a public authority that is not seen as cost-effective and therefore places a financial burden on the public may be addressed in the courts.

Many commonly installed microgeneration technologies are not

cost-effective and there are concerns about how much benefit they can actually deliver in use. This matter is the subject of current scientific research funded by Government.

Owing to concerns about reliability and the uncertainty about the ability of the microgeneration technologies to robustly deliver their intended performance, the National House Building Council exclude these systems from their

10-year house builders warranty scheme and advances from mortgage lenders do not reflect the full cost of such installations.

DFPNI comments on the Sustainable Energy Association (SEA) submission to the Committee

The SEA submission states the benefits of a biomass boiler compared to an oil boiler, with the biomass boiler having a payback of 9.76 years. It is acknowledged that biomass boilers are probably the most successful of the LZC energy sources and their use to demonstrate compliance with the building regulations has increased substantially since the introduction of the new energy regulations in November 2006. However, the SEA figures for oil boilers are incorrect. The Office of Climate Change bar chart shows that A/B rated heating boilers on which the building regulations standards are based have a payback within 7 years.

NOTE: The attached bar chart from the Office of Climate Change clearly shows that the measures giving a payback within 7 years are all energy efficiency measures, whereas the measures that do not pay back within their lifetime are mainly microgeneration measures.

The SEA submission raised the following questions.

Q1. What level of consultation was there on the Minister's decision?

A. The Minister's decision was made on the basis of a submission from his Department. The DFP Assembly Committee was fully appraised of that decision and noted it.

Q2. What lobby interests were involved?

- A. Neither the Minister nor his officials were lobbied by interest groups. However, officials invited and met collectively with representatives of a number of bodies on one occasion to consider the technical feasibility of making microgeneration mandatory. The bodies that attended were Action Renewables, Carbon Trust, Construction Employer's Federation, DoE Planning Service, Energy Saving Trust, Northern Ireland Electricity, Northern Ireland Energy Agency, Northern Ireland Housing Executive, University of Ulster at Jordanstown, Willis Heating and Horizon Solar Ltd.
- Q3. What other plans are there in place or to be announced to help us meet our draft programme commitments?
- A. This question should be directed to DETI who have responsibility for energy policy in Northern Ireland.
- Q4. Can this decision be revisited with a view to make recommendations that it is reversed?
- A. The Minister is content with his decision.
- Q5. How is Northern Ireland going to play its role in achieving the 15% target by 2020?
- A. This question should be directed to DETI who have responsibility for energy policy in Northern Ireland.

The SEA submission states that the Minister's decision was made to "protect the flexibility of designers and developers". This is incorrect. The Minister's reply said -

"I have re-examined the former Secretary of State's proposals and have concluded that the flexibility which the methodology in the current regulations affords to designers and developers should not be compromised by the introduction of such a prescriptive requirement.

I have therefore decided not to proceed with the policy set out by the former Secretary of State that all new buildings should incorporate microgeneration.

I consider that this decision better serves the interests not only of the construction industry, but also the wider general public and, in particular, the needs of first-time buyers".

In relation to improved standards, the Minister has already signalled reviews of Part F (Conservation of fuel and power) in 2010 and 2013 to further improve the requirements by 25% and 44% respectively over existing standards.

It is acknowledged that carbon emissions from existing buildings must be substantially reduced to meet Government targets. Building Regulations only impact on around 2% of buildings, that is, when they are newly constructed or being altered or extended.

The introduction of Energy Performance Certificates later this year will bring heightened awareness of energy performance and of the cost-effective improvements that can be carried out. This will for the first time highlight the carbon impact of the 98% of existing buildings which are not subject to the building regulations.

DETI comments on the Sustainable Energy Association (SEA) submission to the Committee

Proposal for an EU Directive on Renewable Energy

DETI has overall responsibility for energy policy, including renewable energy policy, in Northern Ireland. In carrying out this role, DETI officials actively work with other Departments on a range of policy and operational issues to promote and develop renewable energy.

The recently published proposal for an EU Directive on the promotion of the use of energy from renewable sources restates the March 2007 EU Council decision to implement a 20% renewable energy target for 2020; this covers all forms of energy: electricity, heat and transport. As regards the latter, a separate 10% biofuel target has been set. The target for the UK is 15% overall, incorporating 10% transport bio-fuel target.

At a UK level, the Department for Business Enterprise and Regulatory Reform will be formulating the UK response through the development this year of a UK Renewable Energy Strategy. DETI is currently considering what part NI can play (as part of the UK's wider response as the Member State) in responding to the challenge of the recently published proposal for an EU Directive on Renewable Energy: this consideration will be informed by the recently published Grid Study.

Northern Ireland is doing better than the whole-of-UK figure on renewable energy given in the letter from SEA: levels of renewable energy here are currently running at around 5%, and DETI officials believe that Northern Ireland is on course to meet its target of 12% by 2012, primarily through on-shore wind generation.

Reconnect

Reconnect, formerly known as the household programme, is part of the previous administration's £59.2m Environment and Renewable Energy Fund which was launched on 24 July 2006.

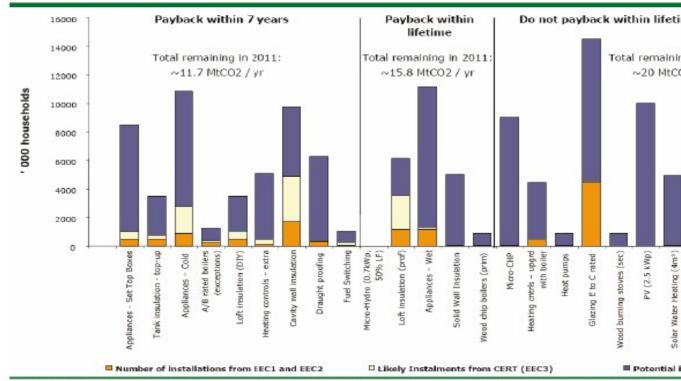
The programme provides homeowners in Northern Ireland with grant assistance of up to 50% to install renewable energy technologies in their home. The aim is to encourage up to 4000 households to install renewable energy technologies.

Whilst almost the full allocation of £8m for Reconnect has been committed to householders wishing to install household renewable energy systems, on many occasions this is not followed through to installation, resulting in grant offers not being taken up and funding being lost. We have seen a conversion rate of around 70% from letters of offer to completed installations.

DETI is currently evaluating the findings of a review of the Sustainable Energy market, which has examined, in part, the level of up take. Before making any decisions in respect of further phases of Reconnect a full evaluation of the scheme will also be required. Any additional support going forward will need to take into account changing market conditions, value for money and the effect on competitiveness.

After accounting for existing policy, those paying back within 7 years have potential to save a further ~ 11.7 MtCO2 per year in $2011^{1,2,3}$





(1) Carbon savings for each measure are not strictly additive when multiple measures in a household are installed; CFLs payback within 7 years and could save up to 2.35 MtCO2 in 2011; (2) Supply side constraints may hinder our ability to get at all these savings instantly; (3) Much of this is expected to be exploited by the proposed Supplier Obligation

DFP response to follow up questions on Building Regulations (Amendment) Bill



Assembly Section Craigantlet Buildings Stormont BT4 3SX

Tel No: 02890 529147 Fax No: 02890 529148

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Shane McAteer Clerk Committee for Finance and Personnel Room 428 Parliament Buildings Stormont 1 April 2008

Dear Shane

Response to Committee follow up questions on Building Regulations (Amendment) Bill 2008

Your letter of 13 March 2008 sought information on issues arising from the evidence session on the Building Regulations Bill.

Attached at annex A are responses to the questions raised.

Annex B contains additional information that may be of interest to Members.

Yours sincerely,

Norman Irwin

Annex A

General Issues

1. What targets and timetables exist, including at an EU level, for increasing the use of renewable energy sources? What part will building regulations play in contributing to meeting these targets?

EU targets are 20% of energy to be generated from renewable sources and a 20% reduction in carbon dioxide emissions by 2020, possibly increasing to 30% with international agreement.

UK targets are a 20% reduction in carbon dioxide emissions by 2010, increasing to around 30% reduction by 2020 and a 60% reduction by 2050, from 1990 levels. The target for renewable energy generation is 20% by 2020.

The NI Sustainable Development Strategy sets a specific target of a 25% reduction in greenhouse gases by 2025 (from 1990 levels).

It is difficult to estimate the potential contribution which building regulations may make. The amendment made in November 2006 should reduce emissions from buildings to which the regulations apply by 40% below previous levels. Further amendments planned should reduce emissions by a further 25% by 2010, rising to 44% by 2013. These reduced emissions may be achieved through improvements to the thermal fabric of buildings, although as the target emissions rate reduces the use of renewable energy sources will become more common. With increased uptake the reliability and efficiency of renewable technologies should improve and costs should reduce.

It is estimated that just under 2% (or around 10,000) new dwellings are built annually. Further, based on statistics supplied by Belfast City Council and fee income comparisons across District Councils, it is estimated that a further annual 3% of dwellings undertake refurbishments attracting Part F (conservation of fuel and power) of the Building Regulations. So in total some 5% of properties annually will have enhanced thermal properties and consequent reduced emissions.

The Carbon Trust Northern Ireland Energy Study 2002, published October 2003, available on www.carbontrust.co.uk/publications, estimated that in 2002 domestic fuel use was responsible for 6,569.6 kt of carbon dioxide (CO2) emissions, and that these emissions could reduce to 4,663kt CO2 by 2012 (a decrease of just under 30%), achieved by energy efficiency improvements to existing buildings, switching to natural gas and changes in electricity generation capacity as well as by building to higher standards.

Building Regulations set the minimum standards for new buildings. To encourage building beyond these minimum standards the Code for Sustainable Homes has been developed. The Code provides a standard to guide industry in the design and construction of sustainable homes, considering not just energy but also water, waste, materials and ecology. Developers will be able to obtain a 'star rating' for new homes which demonstrate environmental performance to one of the six Code standards. This standard will be adopted for social housing in NI from April 2008 (in NI housing policy responsibility, and thus the Code, rests with DSD). In England & Wales (E&W) it has been decided that by 2016 all new homes should be carbon-neutral, and this will be reflected in the Building Regulations. NI is likely to adopt this approach and timeframe for amending the Building Regulations accordingly. Work has already commenced on an amendment to the Building Regulations (NI) 2000 to a similar timescale and target setting to that in E&W that will result in a further 25% reduction in carbon emissions by 2010, increasing to 44% by 2013. This equates to Levels 3&4 of the Code.

Last year Planning Service reviewed permitted development rights for small-scale renewable energy development, and has also recently concluded a consultation on PPS 18 – Renewable Energy. The outcomes of these exercises should facilitate and encourage the use of renewable energy sources.

2. What has the Department learned from the experiences from other legislative authorities in GB and RoI in relation to the changes to the legislation and how these have been implemented in practice?

Guidance replaced deemed-to-satisfy in England during the 1980s, in ROI and Scotland more recently. Over the years while this has encouraged innovation it does not appear to have lead to diversity in enforcement. However the guidance has been criticised as having become overly complex and the Department for Communities & Local Government (DCLG) is reviewing it with a view to simplifying it, proposing periodic cyclical reviews and more adequate lead-in times from making changes to their coming into operation. In NI the Department has traditionally undertaken cyclical reviews of the Regulations, and leaves 3 months between making and coming into operation of changes to the Regulations.

In relation to provision on registers, DCLG is currently consulting on the scope of the powers contained in their 1984 Building Act, and we will bear the outcome of this in mind in exercising the proposed provisions in NI.

In relation to sustainability, similar provisions were obtained in England & Wales in 2004 through the Sustainable & Secure Buildings Act. DCLG has commenced work on exercising the powers to regulate the use of water. Again we will review the outcome of this exercise in taking forward similar proposals in NI.

Type approvals have operated in England & Wales following the granting of relevant powers in 1984. Approval there is facilitated by informal cross-Council consideration of applications, and a system of lead Councils has been established in relation to applications from national clients (such as Marks & Spencer). District Councils locally have been encouraged to consider similar approaches.

Clause 3 – Northern Ireland Building Regulations Advisory Committee (NIBRAC)

3. Will the new appointment process be based on merit and will the positions be advertised?

The Nolan principles, as enshrined in the Code of Practice of the Office of Commissioner of Public Appointments in Northern Ireland, were followed when the current Committee was appointed (in 2006). This included appointment on merit. The process was overseen by an independent monitor who reported back to OCPANI.

Positions are advised directly to known key professional bodies and stakeholders who are requested to drawn them to the attention of individual members for self-nomination. Positions are also advertised in the Press.

This same process will be followed when further appointments become due in 2009.

Clause 4 - Further provisions as to the making of building regulations

4. If the guidance-based system involves less detailed specification of requirements, could this result in uncertainty amongst builders/developers and needless cost? Also, will there be a need for greater involvement by building control officers to advise on the specifics of meeting the requirements?

The Department's view is that the guidance system should clarify requirements rather than create uncertainty, as the background rationale as well as at least one solution will be provided in the documents. At the moment the deemed-to-satisfy Technical Booklets do not provide background information.

Building Control Officers already provide advice on potential applications and solutions and, with the benefit of having the rationale behind the requirement explained, they and developers will have a clearer understanding of the requirement. This should remove uncertainty rather than increase it.

5. What will the new duty to 'have regard to' the need to further the protection and enhancement of the environment and to promote sustainable development mean in practice?

This means that the Department will be empowered to make regulations designed to protect and enhance the environment and to promote sustainable development, such as in the areas covered by the matters extended under Schedule 1 amendments, as well as for the existing purposes of securing the health, safety, welfare and convenience of people in or about building and conserving fuel and power. This could at an appropriate time permit, for example, the setting of requirements on water usage or energy generation from renewable technologies.

Clause 5 – Guidance documents

6. How will the Department ensure that the guidance will be reviewed and monitored regularly for compliance with the requirements of the building regulations?

The Department would intend using the same system and resources that it currently deploys when updating the deemed-to-satisfy solutions in Technical Booklets. This involves adapting as appropriate the amendments which are researched and developed in England & Wales, and includes consulting with NIBRAC, the Assembly Committee and the public. Building Control is well represented on NIBRAC and its sub-Committees.

Monitoring of compliance with the Building Regulations is a matter for Building Control and communication on relevant issues with the Department is facilitated through well established liaison meetings with Building Control, which take place formally on a quarterly basis, and on an ad hoc basis as required.

7. Will all the necessary guidance be made widely available well in advance of the change being introduced?

The Department will continue to ensure that the guidance is made widely available well in advance, including, as is current practice, free to download from our website (www.buildingregulationsni.gov.uk). Amendments to the regulations are usually made at least 3 months before they come into operation and contain transition arrangements to allow for applications for Building Control approval which have been submitted for approval before the coming-into-operation date of the amendment. Where significant amendments are made the Department has, and will continue to in the future, held information seminars for interested parties, including the industry and Building Control. In the past attendance has been between 500 and 600 people.

Clause 7 – Power to require or carry out tests

8. When will the Department introduce the regulations prescribing the tests which are to be carried out to ensure that building regulations are not contravened?

Following the enactment of this Bill, the Department will review and update the sub-ordinate regulations to take account of all the changes required by the new powers and provisions contained in the amended 1979 Order, and the changes as a result of the requirement to prescribe tests will be a part of that review. It is envisaged that the new regulations will be made in 2010.

Clause 8 - Contravention notices

9. The Explanatory Memorandum mentions that regulations will be made by the Department to make it mandatory to inform a district council of the date when works are completed. Are district council building control offices not already responsible for issuing completion certificates? Will this arrangement change?

Building Control is, and will remain, responsible for issuing completion certificates. At present however it is not mandatory for an applicant to ask for a completion certificate, so Building Control can only issue them when requested. We are proposing to make it mandatory in the regulations for applicants to seek a completion certificate, so that Building Control will have a specific date from which it has 12 months to issue a contravention notice or a completion certificate if it satisfied that the completed work meets the required standards.

Clause 9 – Registers of Information

10. What are the present arrangements for district councils keeping registers and how will these change as a result of the provision in clause 9?

The present arrangements for keeping registers are not prescribed, and so a variety of arrangements exist across the District Councils. All 26 Councils use computer-based systems (some simple databases, others more complicated) to collate and track information for managing the processing of plans and associated inspections for current applications. However the information held varies.

This amendment would formalise and streamline District Council record keeping, so that consistent information is kept in a uniform manner by all District Councils.

The Department will consult fully with all District Councils and other interested parties when developing the detail on what is to be held in the register, how it is to be held, in prescribing the circumstances in which copies of information or documents will be provided to the public and in determining appropriate fees.

Clause 11 – False or misleading statements

11. The new criminal offence of knowingly or recklessly submitting false information will, on summary conviction, attract a fine not exceeding level 5 on the standard scale. How much does a level 5 fine amount to at present and how does this compare to the level of fine for comparable offences elsewhere?

A level 5 fine is £5,000 and is the maximum on the standard scale of fines for summary convictions. Under both the Planning Order (NI) 1991 and the Health & Safety at Work (NI) Order 1978, level 5 fines apply where false or misleading statements are made.

Clause 12 – Application of building regulations to the Crown

12. The Explanatory Memorandum states that Crown buildings will be required, 'except where prescribed', to be compliant with the substantive requirements of building regulations. In what circumstances might Crown buildings be provided with an exemption from the substantive requirements?

Buildings are most likely to be exempted on grounds of national security, to ensure for example that the security of floor plans is not compromised.

Financial Effects of the Bill

- 13. The Explanatory Memorandum indicates that the Bill will not place any additional financial burdens on the public purse or general public.
 - Will the change to a guidance-based system result in any additional costs for DFP in respect of the preparation and publication of the guidance?

Initially there will be an additional workload to amend regulations and to prepare guidance documentation. In the medium (3 years) to long term we envisage that removing the need to make sub-ordinate legislation each time an updated deemed-to-satisfy solution has been provided will free up some administrative resource which can be redirected to other priority areas.

Will there be any financial burdens arising from the new duties on district councils, including having regard to protected buildings?

There may be some small additional expenditure involved in moving to the prescribed register, but it is unlikely that this will be significant as most District Councils already keep the information in some way. There should be no additional costs arising from new duties on protected buildings as this again is formalising current practice.

The Prescribed Fees Regulations (made by the Department) set fee levels to cover District Council costs in checking plans and ensuring compliance with the regulations. These will be reviewed in the near future to ensure that fee income will reflect additional duties introduced by amended regulations.

• Are businesses/builders likely to incur additional costs from having to seek type-approval for house plans from separate district councils?

This matter will be addressed in the review of the Fees Regulations. The Department's preliminary view is that overall costs should not increase in seeking type-approvals, as the developer will only have to submit to one Council for a cross-Council approval on non-site specific matters. He will however have to apply separately to each District Council in whose area the structure is to be built for approval on site-specific matters, but this will not increase his costs over current levels. Unless there is benefit to the developer in terms of time and cost it is unlikely that type-approval applications will be made.

14. In terms of openness and transparency, is there a need for the Department to inform the public (within the explanatory and financial memorandum) that the proposed new regulatory powers, such as those which deal with low or zero carbon systems, will have financial implications when implemented in subordinate legislation?

The Explanatory & Financial Memorandum already states, at paragraph 11, that 'subsequent regulations may have financial implications and will be supported by Regulatory Impact Assessments as appropriate'

Annex B

Additional information on matters excluded from the Bill.

1. Dangerous Buildings provisions

Why have provisions not been included on dangerous buildings?

Building Regulations deal with construction-related matters, so there was always some concern about including provisions dealing with dangerous buildings, since such provisions would relate more to repair or demolition.

However the Department considered representations from District Councils to include modern provisions relating to dangerous buildings in the primary legislation, but concluded that the whole area should be researched and evaluated much more fully before firm provisions could be made. During the course of considering this matter it became apparent that without additional research there was a strong possibility that the existing wide-ranging powers exercised by District Councils could inadvertently be curtailed by the provisions proposed for this Bill. The further research would include determining the most suitable legislative home for such provisions.

District councils have acknowledged this position and a deferral. DFP has agreed to facilitate the further research and discussion.

Meantime District Councils will continue to operate under the current legislative provisions which, although somewhat archaic, appear to serve the purpose reasonably well.

2. Demolitions

Why have provisions not been included to allow District Councils to control demolitions?

The existing legislation controlling demolitions is not DFP's responsibility.

Issues relating to enforcement of legislation governing demolitions are a matter for the relevant parent department or departments to address.

3. Building against out of date Regulations

Why have provisions not been included to prevent building taking place against out-of-date regulations?

This issue was raised during consultation. Under the 1979 Order, once approval has been granted by Building Control an applicant has three years from the date he deposited plans to commence work. If work is not commenced within this time, the plans are considered to be of no effect, that is, as if they had not been deposited. However a single application may include plans for multiple units and where work starts (eg foundations are laid) on one unit the approval is activated and remains valid. This has resulted occasionally in houses being built some time after approval was granted, which results in newly-constructed buildings being built against out-of-date regulations.

The legislative position was considered by the Office of Legislative Counsel (OLC) on receipt of the instructions. This highlighted that the 1979 Order does not require an additional power to permit the Department to regulate for building against out-of-date regulations, but that the sub-ordinate legislation can address this. The Department will therefore include provisions to remedy this in amending the supporting regulations.

4. Determinations v appeals

Why does Northern Ireland not adopt the England & Wales approach of determinations rather than appeals?

It may be helpful to clarify the differences between the two approaches. In England & Wales where he disagrees with Building Control's application of the regulations at any stage during its consideration of his plans, or where Building Control has rejected his plans, an applicant may approach the Secretary of State (though the function is carried out on his behalf by DCLG, the Department responsible for building regulations) for a determination on whether or not Building Control was correct in its interpretation of the regulations. A fee is charged to the applicant for this service. Also, in E& W where Building Control serves a contravention notice the applicant's only remedy is the court, and this can be a slow and expensive process.

In Northern Ireland, an applicant may appeal to the Department when his plans have been rejected by building control. There are no provisions to allow an applicant to approach the Department until such time as Building Control has decided to reject his plans. The Department believes that there is more merit in retaining the existing powers requiring Building Control to exercise its professional judgement in deciding whether or not to approve plans or notices, with the Department offering a free appeals service should the applicant disagree with Building

Control's decision. Also, in NI where Building Control serves a contravention notice the applicant may appeal to the Department, and resolution is relatively quick and at no cost.

5. New Order v amending the 1979 Order

Why did the Department not replace the 1979 Order in its entirety?

When the Department first instructed OLC it was on the basis that the 1979 Order should be replaced entirely. However OLC's view was that there were insufficient changes to warrant a complete replacement of the 1979 Order, and advised the Department to amend the Order instead. The Department accepted this advice.

DFP response to Building Control Northern Ireland



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Shane McAteer Clerk Committee for Finance and Personnel Room 428 Parliament Buildings Stormont

17 April 2008

Dear Shane

Building Regulations (Amendment) Bill

DFP Response to Building Control Evidence Given 9 April 2008

Further to your letter of 9 April enclosing the paper dated 4 April 2008 submitted by Building Control in support of their evidence on the above Bill, I attach the response from DFP officials. The response follows the paragraph numbering in the Building Control paper.

Please note that the paper contains a paragraph on microgeneration which is included to clarify current and future powers in relation to making microgeneration (referred to in the Bill as low or zero carbon systems) mandatory.

Yours Sincerely

Nome.

Norman Irwin

Building Regulations (Amendment) Bill

DFP Response to Building Control Paper Dated 4 April 2008

3.1 Article 2 – Interpretation

The removal of the definition of 'rack rent' means that where this term is mentioned elsewhere in the 1979 Order then the common law definition applies.

Building Control's concerns relate to identifying the owner for the purpose of service contravention notices. The term 'owner' is defined in the 1979 Order as 'the person receiving the rack rent...' However for the purposes of Article 18 (Contravention Notices) such notices may also be served on the occupier, the person executing work, the person causing work to be executed or any other person appearing to the Council to have control of the work. The Department considers this to be a sufficiently broad spectrum to enable District Councils to serve contravention notices without a need to amend the definition of owner.

The definition of 'site' already contained within the 1979 Order is fairly broad, and indeed has been used to support a broad definition within regulations amending Parts R and C of the regulations. Possible revisions to the existing definition were discussed with the Office of Legislative Counsel (OLC) during the drafting process, but the conclusion was that amending the existing definition may in fact lead to tying the regulations to a tighter definition, so on balance it would be best to leave the definition as it is.

3.2 Article 3A – Protected Buildings

The term 'have regard to' would cover Building Control consultation with agencies responsible for listed buildings etc in the circumstances to which Building Control refer. It is the Department's understanding that this is in line with current Building Control practice. The use of this terminology is in line with drafting practice where no formal sanction exists should, for example, Building Control fail to consult.

The Bill links the definition of Protected Building to the definition used in the Planning (NI) Order 1991, so harmonising the meaning across these legislative areas. As such the definition would only change should Planning Service elect to do so following consultation.

Technical Booklet F is the deemed-to-satisfy document relating to Part F (Conservation of Fuel & Power) of the Building Regulations. As such it does not have a mandatory status, so the references therein to buildings of townscape character is really only to highlight to applicants the type of matters that may be considered when applying Part F to such buildings

3.3 Article 5A – Guidance for purposes of Building Regulations

While the guidance must be published by the Department we would intend that this would include referencing the other third party guidance documents referred to by Building Control within the text of the published document. This would be in line with such guidance in England & Wales, and Ireland. This has already been discussed with Building Control.

3.4 Article 8 – Type Approvals by District Councils

The Department cannot require one District Council to accept another's Council's type approval, as each Council is autonomous and entitled to make its own decisions. It is for this reason that we have discussed with Building Control representatives the various mechanisms for achieving cross-Council acceptance, such as lead Councils in specific cases and cross-Council panels to consider applications. However it will be for District Councils themselves, in consultation with Local Government Division in DoE, to come up with either formal or informal mechanisms to facilitate cross-Council co-operation. This matter will also have to be addressed when planning control is devolved to district councils to ensure consistency of application.

3.5 Article 13 – Plans deposited with a District Council

The Department's view is that any proposal to require Building Control approval to be received prior to commencing work requires detailed consideration and consultation before an amendment could be introduced, particularly to assess Building Control's capacity to resource the work involved and the potential for bottlenecks to occur in the approval process. The Department would be concerned about such a proposal as prior approval has a tendency to create bottlenecks in the determination of applications, which would not be welcomed by the construction industry. Furthermore, were the Department to go down the route of "deemed approval" after a prescribed period rather than the existing "deemed rejection" as suggested, this may result in buildings being constructed that do not satisfy the requirements of the regulations.

In addition, prior approval would not facilitate the "building notice" route open to house builders that streamlines the approval process while allowing them to commence work at their own risk. However should such a proposal receive sufficient support from all stakeholders, we would not see a difficulty in bringing forward further legislation in the future, particularly as devolution has shortened the primary legislation process somewhat.

3.6 Article 17 – Appeals to the Department

The Department already publishes appeals material and does not see the need to make this a legal requirement.

While there is no statutory period within which the Department must come to a decision, it is our policy to give all appeals top priority, and a decision is generally reached within two weeks of receiving all the relevant papers from both the appellant and the relevant District Council.

The Department has already provided the Committee with reasons why determinations are not considered appropriate in NI.

3.7 Article 18 – Contravention Notices in respect of work contravening Building Regulations

The Department discussed a number of related issues with OLC during the drafting process. The conclusion was that it is often more restrictive to include a plethora of definitions with the primary legislation, and the application of a common law and common sense interpretation can often be more helpful. Additionally, as has already been indicated, the Department proposes to

make it mandatory in the subordinate legislation for the applicant to request a completion certificate so that Building Control will have a clear 12 month period from the date of completion of the works specified in that request during which it may inspect and, if appropriate, serve a contravention notice.

The Department's view therefore is that the amendments already proposed will make the contravention notice process more effective.

The Department feels the retention of an appellant's right to produce a report is necessary to ensure that the appellant is given adequate opportunity to present supporting evidence.

3.7.5 Article 19 – Deposit of plans to be of no effect after a certain interval

We discussed this matter with OLC which advised that the regulation-making powers in Article 5(3) of the 1979 Order already permit the Department to provide for the deposit of plans, and that would include providing for the lapse of plans. The Department will therefore make appropriate provision in the regulations when they are being reviewed and amended subsequent to acquisition of the other powers contained in this Bill.

3.7.6 Article 19A – Registers to be kept by District Councils

Councils will be able to resist requests to release certain information relating to applications which would be protected by the Data Protection Act. In preparing regulations to determine the content of registers and rights of access to them, the Department will consult widely with all interested parties.

4.1 Dangerous buildings and places

The Department has already provided the Committee with information on this matter. We would restate that at this stage it has not yet been agreed that the Building Regulations legislation is the most suitable legislative framework in which to prescribe matters relating to dangerous buildings (and widening the provisions to include dangerous places makes the link more tenuous). The Department has agreed to

facilitate discussion with Building Control to consider how best to approach legislating for dangerous buildings and places, and that includes which Department would be best placed to do so

4.2 Harmonisation of Regulations

The Department already takes account of building regulations requirements in other jurisdictions and works closely with colleagues in England & Wales on the content of proposed amendments. This helps to ensure that we minimise the resources needed to develop technical detail particular to local building (including fuel mix) circumstances. The Department sends representatives to the GB Building Regulations Advisory Committee meetings to ensure that our views / circumstances are factored into policy development, and colleagues from BRAC and the Scottish equivalent regularly attend NIBRAC meetings. Additionally at least once annually one of the regions hosts a meeting of UK jurisdictions and ROI representatives to share information on policy developments, proposals and potential cross-cutting issues.

4.3 Backland Development

Building Regulations deal with requirements to ensure the health, safety, welfare, convenience and energy efficiency of buildings. The access issues raised by Building Control would appear to be a matter for Planning Service. District Councils are already statutory consultees for Planning Service.

4.4 Control of demolitions

The Department has already provided the Committee with information on this matter.

4.5 Programme of work

Following the 2 amendments proposed for later this year (to Parts D and J) the Department is not proposing to make any further amendments until 2010, when new regulations will be made to reflect the new powers acquired by the proposals in this Bill. DCLG is consulting currently on phased changes for the future and we await the outcome of that. There may also be an opportunity to harmonise the Part references.

4.6 Existing Buildings

Building Control has not discussed retrospective application of the regulations with the Department. There has been no consultation on this matter. The Department considers that the potential human rights, financial and enforcement issues arising would require detailed consideration and public consultation and could not therefore consider the matter for inclusion in the Bill at this stage. However this issue could be considered as part of future amendments to the primary legislation. Where non-domestic buildings over 1000m2 are extended, have a new service fitted or the capacity of the existing service is increased, they must carry out consequential improvements to the thermal fabric of the building. These improvements must be practicable and cost-effective.

Microgeneration

Under Article 3 of the 1979 Order (the primary legislation), the Department has the power to require that microgeneration become mandatory in all new buildings. Such a requirement could be introduced through an amendment to the sub-ordinate regulations. However the current primary powers would not permit us to require that a percentage of the building's energy use comes from low or zero carbon systems. The proposed amendments contained within the Bill would allow the Department to apportion a percentage of a building's energy use from a particular source. The term "low or zero carbon systems" has a broader scope than "microgeneration", and is commonly used in this context, so this is defined in the Bill, along with greenhouse gases. These amendments therefore serve to clarify and future-proof the primary legislation.

DFP response to the Royal Institution of Chartered Surveyors Northern Ireland



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Mr Shane McAteer Clerk Committee for Finance and Personnel Room 419 Parliament Buildings Stormont

25 April 2008

Dear Shane

Building Regulations (Amendment) Bill

DFP Response to Royal Institute of Chartered Surveyors Evidence Given 16 April 2008

Further to your letter of 16 April enclosing the paper dated 11 April 2008 submitted by RICS in support of their evidence on the above Bill, I attach the response from DFP officials.

Officials have limited their response to those clauses on which RICS have made comment.

Yours Sincerely

Norman Irwin

Clause 2 – Protected buildings

This is beyond the scope of the Bill. Final say in what constitutes an appropriate amendment to a protected building ultimately lies with Planning Service following consultation with Environment & Heritage Service. If Building Control agrees a relaxation to the regulations, this must still be approved by Planning Service/EHS as being appropriate to the nature of the building. There is nothing in the current or proposed legislation that would prevent Building Control from consulting with Planning/EHS during consideration of the proposal.

Clause 5 – Guidance documents

The Department intends to publish a list of guidance documents that will include appropriate British or European Standards or other documents that are considered to be appropriate guidance. The Bill places a duty on the Department to consult with interested bodies when drafting guidance and every opportunity will be afforded to stakeholders to comment during the preparation of the guidance.

Clause 8 - Contravention notices

When the Department consulted with stakeholders in August 2007, the Bill at that time proposed a 6-month contravention period. However, having considered the comments and concerns from stakeholders (including Building Control and RICS), the period was extended to its current proposed length of 12 months from the date of notification of completion.

Clause 9 – Registers of information and documents to be kept by district councils

The bill allows the Department to prescribe in regulations the information and documents that shall be kept in the register. These regulations will also prescribe the administrative functions associated with the register, the level of fees that may be charged for certain information, and the circumstances in which such fees may be charged. The proposals for the regulations will be subject to full public consultation and the Department will work closely with all major stakeholders and solicitors to ensure that the regulations operate within the parameters of the Freedom of Information Act and the Data Protection Act.

Clause 12 – Application of building regulations to the Crown

The Department does not consider it appropriate to include a definition of "Crown occupation" as it believes it to be self-evident. Furthermore, defining a term in primary legislation may restrict its scope for future application.

DFP response to NI Environment Link

From: Norman Irwin, DFP

Date: 2 May 2008

Summary

Business Area: Properties Division, Building Regulations Unit

Issue: Building Regulations (Amendment) Bill - Response to Northern Ireland Environment Link

(Niel) Paper Dated 16 April 2008

Restrictions: None

Action Required: To note

Background

NIEL submitted written evidence on 16 April regarding the provisions in the above Bill and other related matters.

Kev Issues

DFP's response is as follows:-

1. Introductory comments

The "Merton Rule" refers to the implementation of England & Wales' Planning Policy Statement 22 rather than anything to do with building regulations and is so-called because the London Borough of Merton became the first local authority in the UK to require through its planning process a percentage of on-site energy generation in major* new developments, where viable.

* 10 or more dwellings; other uses where floor area >1000m2

Further reductions in carbon emissions through building regulations are planned through additional amendments to Part F (Conservation of fuel and power) that will reduce emissions by a further 25% by 2010, rising to 44% by 2013.

2. Amendment No. 1 – Building regulations

The Department welcomes NIEL's comments in relation to fuel sources and will consult fully when formulating policy in this area. Building regulations will be reviewed regularly to help facilitate the introduction of zero carbon buildings (see 1. above).

Schedule 1 to the Building Regulations (Northern Ireland) Order 1979 already allows for regulations to be made to address the natural lighting of buildings.

3. Amendment No. 2 – Protected buildings

"Protected buildings" is a term defined by existing legislation. There is nothing to prevent a district council from considering the characteristics of buildings within the areas listed by NIEL, however by attempting to include a comprehensive list in primary legislation, the scope of the powers may instead be restricted.

4. Amendment No. 4 (inserting a new Article 5(5)(c) re reducing energy demand)

It is the Department's view that this amendment is unnecessary as reducing demand is an integral part of furthering the conservation of fuel and power.

5. Amendment No. 5 – guidance documents

It is a matter of policy how the Department publicises and conducts consultations, and does not therefore require to be written into statute.

6. Amendment No. 6 - Type approval

From September 2008 an Energy Performance Certificate will be required for all new buildings under the Energy Performance of Buildings (Certificates and Inspections) Regulations (NI) 2008.

Article 8 of the Building Regulations (Northern Ireland) Order 1979 allows type approvals for any prescribed matter connected with building regulations. This could include the energy performance of buildings, and would be a function of sub-ordinate legislation. Before prescribing such matters, the Department will conduct a full public consultation, and would welcome comments from NIEL on any proposals to amend the Building Regulations.

7. Amendment No. 8 – Contravention notices

The change in the trigger for the commencement of a 12 month contravention period is not necessarily a reduction on existing provisions. The period lasts from the commencement of the works until 12 months after notification of completion is made. (Notification of completion will

become the prescribed trigger for this period under a future amendment to the sub-ordinate legislation.) Under current provisions, the enforcement period is 18 months from the completion of the specific item that caused the contravention, which in the case of lengthier construction projects, the enforcement period may elapse before the building has been completed.

Norman Irwin DFP DALO

DFP response to Energy Saving Trust

From: Norman Irwin, DFP

Date: 2 May 2008

Summary

Business Area: Properties Division, Building Regulations Unit

Issue: Building Regulations (Amendment) Bill - Response to

Energy Savings Trust (Est) Paper

Restrictions: None

Action Required: To note

Background

EST submitted written evidence and gave oral evidence to the Committee on 30th April regarding the provisions in the above Bill and other related matters.

Key Issues

DFP's response is as follows:-

1. EST's position on building regulations

The Department agrees with EST that better and more cost-effective thermal efficiencies can be gained from improving the fabric of the building before introducing renewable technologies. The building regulations set minimum standards for construction which, while minimum, deliver thermally efficient buildings. There is nothing to prevent a builder from building to a higher standard should he choose to do so. The proposed future amendments to Part F (Conservation of fuel and power) of the Building Regulations will result in a reduction in carbon emissions of 25% by 2010, rising to 44% by 2013.

2. EST's response to the PPS 18 Renewable Energy Consultation

While the development and implementation of PPS 18 is a matter for Planning Service, the Department notes that the creation of planning policy to require the inclusion of microgeneration in new developments mirrors the approach taken elsewhere in the UK. It would be appropriate that Planning Service facilitates and encourages developers who make applications for development consent which contain proposals for renewable technologies.



Building Regulations (Northern Ireland) 2000

Amendment of Part F

Conservation of Fuel and Power Final Regulatory Impact Assessment

August 2006

Scope

1. This Regulatory Impact Assessment (RIA) relates to the amendment to Part F: Conservation of fuel and power of the Building Regulations (Northern Ireland) 2000 (Part F). Two new Technical Booklets are provided to support the amended regulations. This amendment plays a major role by implementing Articles 3 to 6 of the EU Energy Performance of Buildings Directive (EPBD) and commitments to improved energy efficiency standards made in the Government's Energy White Paper (EWP).

Note:

Although the Energy White Paper related solely to England and Wales, an Energy Strategy for Northern Ireland produced by the Department for Enterprise, Trade and Investment stated that the conclusions of the EWP would be adopted for NI.

Objective

- 2. The objective of the amendment is to reduce carbon emissions from new buildings and buildings that are being altered or extended.
- 3. The purpose of this amendment is to improve the energy efficiency of buildings in response to the declared aims of the EWP and those set out in Article 1 of the EPBD. The proposals will apply to all buildings controlled by the Building Regulations, covering all new buildings as well as the alteration and extension to existing ones.

Background

Previous amendments of the building regulations

- 4. The last amendment to Part F, Conservation of fuel and power came into effect on 1 April 1999. Since then England and Wales (E&W) introduced an amendment to their regulations on 1 April 2002 which raised their standards for the thermal efficiency of buildings above those current in Northern Ireland. The RIA that accompanied the 2002 changes in E&W, estimated that the amendment would improve the energy performance of new dwellings by about 25% at the expense of adding 1% to 3% to construction costs. Similar performance improvements were introduced for buildings other than dwellings.
- 5. E&W further amended their requirements for the conservation of fuel and power on 6 April this year. The Department of Finance and Personnel (DFP) in Northern Ireland (NI) received Ministerial approval to work in parallel with E&W to prepare an amendment to our Part F that would, where practicable, bring the NI Regulations broadly into technical harmony with those for E&W as soon as possible. This means that NI is leapfrogging the E&W 2002 standards and moving directly to the more demanding standards for 2006. This will undoubtedly be a major step forward for the construction industry in the NI as it represents an improvement of around 40% on current standards.

Energy White Paper

- 6. The reduction of CO2 emissions is a key element in the Government's sustainability agenda. The EWP set out the Government's thinking on how to achieve the substantial reductions in CO2 emissions that are needed in the coming decades if we are to have any prospect of stabilizing the environment. Two key elements of that strategy are set out below and are reflected in the attached amendment.
- a. Encouragement to improve the energy efficiency of buildings; and
- b. Encouragement to select energy sources and generating technologies that produce much less, or no, carbon.
- 7. As the EWP states, the cheapest, cleanest and safest way of addressing our energy policy objectives is to use less energy. This approach reduces CO2 emissions, relieves pressure on the energy supply infrastructure and cuts energy bills for householders and businesses. The majority of the proposals contained in this amendment are therefore geared to improving the energy efficiency of buildings.
- 8. As the EWP also states: 'if we are to achieve a 60% reduction in carbon emissions by 2050, we are likely to need renewables by then to be contributing 30% to 40% of our electricity generation and possibly more'. We have therefore included in the proposals measures that will encourage greater uptake of low or zero carbon (LZC) energy generation systems. This is also in line with Article 5 of the EPBD.
- 9. Buildings account for approximately half of the UK carbon emissions, and so it is clear that improved standards for new construction and the upgrading of the existing stock present important opportunities to make a significant contribution to achieving the reductions aimed for in the EWP. Building Regulations are perhaps the most important instrument in achieving a widespread improvement to the energy performance of buildings.

Energy Efficiency: The Government's Action Plan

10. The Government published this plan in April 2004 – one year on from the EWP – with the aim of saving a further 12 million tonnes per year of carbon emissions by 2010 by building on previous commitments. The plan notes that the EWP sets energy efficiency at the heart of the

energy policy, building on the Climate Change Programme, and identifies energy efficiency as the most cost-effective way to meet all the energy policy goals. It sets the scene for the coming decade but anticipates more work to identify what further savings will be needed in the period 2010 to 2020. That work will take into account the results of the review of the Climate Change Programme.

- 11. The Energy Efficiency Action Plan (EEAP) sets out a package of measures designed to overcome barriers to achieving the EWP commitments. The main barriers are seen as behavioural and organisational resistance amongst building owners to what are known to be cost-effective measures. Key elements of the plan are given as;
- a. Measures aimed at householders such as the Energy Efficiency Commitment, the Decent Homes Programme, and fiscal incentives to landlords and others,
- a. Revision of the Building Regulations,
- b. Launching of the EU Emissions Trading Scheme which came into effect in 2005, and
- d. Strong leadership in the public sector, with cuts in carbon emissions in existing buildings and procuring high efficiency new ones.

The EU Energy Performance of Buildings Directive

- 12. This was published on 04 January 2003 and requires Member States to transpose its requirements into national law by 04 January 2006. It also requires most of the Articles to be implemented by that date, but allows for extensions of time for building certification and boiler and air conditioning inspections. The only grounds for extension that the Directive allows are time accepted by the EU Commission as necessary for a Member State to muster sufficient numbers of acceptably qualified surveyors and inspectors.
- 13. Owing to the complexities of implementing the Directive, no Member State did so by the implementation date. E&W brought new building regulations into effect on 6 April 2006 to implement Articles 3 to 6 of the Directive but has deferred the implementation of Articles 7 to 10, as allowed for by the Directive, due to a lack of suitably qualified assessors.
- 14. This amendment to Part F of the Building Regulations (Northern Ireland) 2000 implements Articles 3 to 6 of the Directive in Northern Ireland. Separate regulations will be made to implement the remaining Articles 7 to 10 of the Directive (Articles 7 10).

Risk Assessment

15. This amendment to the Building Regulations is primarily aimed at addressing climate change as part of the Government's overall programme. The risks associated with climate change are discussed in the Climate Change Programme itself, in the EWP, in the EEAP and in the Second EU Climate Change Programme Progress Report, so the detail is not repeated here. However, a summary of the main risks is included below. There are a number of technical and administrative risks, and in particular, there are the legal risks associated with a delay in implementation of the EPBD.

Technical and administrative risks

- 16. Failure to proceed with this amendment to the Building Regulations and failure to properly enforce it will undermine the estimated savings given in the Energy Efficiency Action Plan and hence jeopardise the Climate Change Programme.
- 17. The improvements in the standards in the Building Regulations and widening of the scope of application take into account such risks as:
- a. Adversely impacting on other aspects of building performance such as ventilation for health and combustion appliance safety, acoustic insulation, etc.
- b. Demanding construction details or techniques that are too challenging so the risk of serious defects becomes unacceptable. Defective insulation and airtightness construction details can lead to acute problems of rain penetration, condensation problems (which can lead to ill-health caused by mould), and latent problems leading to poor service life.
- c. Creating disproportionate burdens on particular sectors of industry. There are many forms of construction requiring different materials and design and construction techniques, and each of these has a place. Raising standards too far and too frequently would place severe technical and commercial burdens on builders and their materials and component suppliers, and slow the building programme. It might also provide an unwarranted market edge to overseas competitors.
- d. Making the regulations and associated supporting provisions too complex to understand and enforce. Informal consultations in E&W with the construction industry, local authority building control inspectors, and approved private inspectors has revealed widespread concern at the growing complexity of the energy efficiency requirements. The previous provisions in E&W came into effect in April 2002 and after two years there were still outstanding concerns about the understanding of what is required, the amount of effort needed to supervise and inspect, and the extent of evasion. The EWP gave the Government's intention to work with Local Authorities to see how enforcement and the correlation between design intent and As Built performance can be improved. A workshop on the enforcement of energy requirements, jointly sponsored by the Department for Communities and Local Government (DCLG) [formerly the ODPM] and the Foundation for the Built Environment, was held in March 2004 and a report of the proceedings is on the DCLG web site. In light of the difficulties identified in E&W, we will work with Industry to ensure that Building Control, designers, developers etc understand what is required and what is necessary to demonstrate compliance with the new provisions.

Legal risks associated with implementing the Directive

- 18. Failure to implement exactly, or to implement in time, could have led to the UK being exposed to the risk of infraction proceedings initiated by the Commission.
- 19. There are also risks attached to the proposed way in which the Directive is to be implemented. Rather than adopting the "copy-out" approach, the Directive's requirements for Articles 3 6 are to be embedded in the existing national legal frameworks that bear on construction. Copy-out avoids the risk of challenge by the Commission or private complainants in the UK or elsewhere of failing to comply fully or over implementation. In isolation however copy-out would leave industry and commerce with no guidance on how to implement. Official guidance published to fill the vacuum could have risked the Government being as exposed as if adopting elaboration.

Options

Option 1 - Do Nothing

- 20. The Government has already decided that "business as usual" is not a viable strategy. It has accepted the weight of scientific opinion that we need to achieve substantial cuts in greenhouse gas emissions. It has also accepted that the process of achieving these reductions needs to start as soon as possible. This is reflected in the aims established in the EWP and taken forward in the EEAP.
- 21. A second important reason that prevents the "do nothing" approach is that EU Member States were required to transpose the EPBD into law by 04 January 2006. Many of the requirements of the EPBD are most appropriately brought into effect through the Building Regulations.

Option 2 – Information and Education

- 22. Setting aside for the moment the imperative of legislation to implement the EPBD, information and education would be an alternative option. Information and education will have a vital role to play in dissemination of the goals and how they can best be achieved. Experience has shown however that, in isolation, such an approach is only effective in helping the committed and the enthusiastic to improve, i.e. it is a driver of good and best practice.
- 23. This is why improvements in the standards in the Building Regulations are one of the key elements of the EEAP. We consider that to persuade the majority of the construction sector to pursue higher standards, something other than exhortation is required. The technical information that supports the energy efficiency requirements in Building Regulations defines reasonable energy efficiency practice that provides a minimum standard. By improving the minimum legal standards, there will be a "regulatory push" to complement the "pull" provided by information and education schemes and any supporting incentive schemes that may be put forward by the Government.
- 24. Information and education will also help deliver the objective in the EWP of improving the degree of correlation between design standards and As-Built performance. To achieve the objective, there will need to be an improvement in;
- a. The general awareness of the need for building energy efficiency;
- b. Construction workforce skills, and
- c. Building Control surveyors' skills and hence their abilities to enforce the regulations. Simplifying the provisions in the Technical Booklets will further support this.

Option 3 – Amending Part F of the Building Regulations

- 25. The Government gave the aim in the EWP of introducing the next major revision of the energy efficiency standards in the Building Regulations by 2005. It also gave the aim of using the regulations to raise the standard required for new and replacement boilers to the level of the most efficient boiler types SEDBUK A and B rated condensing boilers. At the Better Building Summit it gave an implementation date for raising the boiler standards as 01 April 2005. The original intention was to arrange for two stages of amendments:
- a. By April 2005, to bring into force revised regulations so that in most cases new and replacement domestic boilers would be condensing types rated SEDBUK A or B, except in specific cases where a reasonable alternative provision shall be made. This has been done; and

b. By 31 December 2005 bring into force the proposed changes to the Building Regulations that would improve the energy efficiency of buildings and assist in the transposition of the EPBD. This date was to meet the deadline of 04 January 2006 given in Article 15 of the EPBD for the implementation of its requirements. The deadline was not met in E&W but new requirements were brought into effect on 6 April 2006. The current amendment introduces similar requirements for Northern Ireland.

Due to a possible infraction of an existing EU Directive on central heating boilers we are unable to introduce a prescriptive regulation to require the installation of new and replacement condensing boilers in dwellings. However, the proposed standards in the new Technical Booklets are set on the presumption that a condensing boiler will be installed as the norm in new dwellings and, where technically feasible, when an existing boiler is replaced.

Preferred Option

- 26. Based on the previous discussion, it is clear that Option 3 should be adopted, namely:
- a. Amend the Building Regulations to raise national efficiency standards and by so doing transpose and implement Articles 3 to 6 of the EPBD.
- b. Other legislation will be necessary to complete the transposition of all of the elements of the EPBD. The aim is to develop this after this amendment is completed.
- c. In terms of the ensuing discussion of benefits and costs, the point of the debate is not whether to regulate, but rather about the level at which new energy efficiency standards should be set, and the practicality and cost-effectiveness of the proposed ways of implementing the Directive.

Business Sectors Affected

- 27. All sectors of the construction industry will be affected by these proposals:
 - Building owners, tenants, operators and facilities managers
 - Designers
 - Manufacturers
 - Constructors
 - District Councils, Building Control staff
 - Maintenance contractors

Changes in the Proposed Scope of the Building Regulations

Application to existing buildings

- 28. The Building Regulations address the construction of new buildings and the alteration and extension of existing ones. This amendment to Part F now pays much greater attention than before to energy efficiency works to existing buildings.
- 29. Given the goal of reducing total carbon dioxide emissions, such an emphasis is important. The existing stock of dwellings for instance numbers around 670,000 and about 12,250 new units are built each year. Turnover in the building stock (i.e. demolitions replaced by new

development) is relatively low; indeed the total stock is actually increasing at around 10,000 units per year. It is therefore important to improve the existing stock as well as to improve the standards for new buildings.

30. Consequently, this amendment contains new requirements that apply when refurbishing existing buildings, including in some cases provisions to upgrade the overall building performance as well as achieving compliance for the work in hand. This will fulfill our obligation under Article 6 of the EPBD, which requires that where possible existing buildings should be upgraded as part of major renovation work.

Other technical issues

Low and zero carbon (LZC) systems

- 31. As indicated in paragraph 6.b, the EWP suggested that this review of the Building Regulations should encourage greater uptake of such technologies. Analysis has shown however that currently, not all LZC systems are always cost effective, although it seems likely that they will become more so as the technology improves and market volumes increase.
- 32. Consequently, it is not considered justifiable in this amendment to prescribe the inclusion of particular packages of LZC systems. However, for dwellings, information has been included in a supporting publication on how LZC systems can be used to help achieve the target reductions in CO2 emissions. For buildings other than dwellings, there will be an additional reduction in CO2 of 10% over what might be achieved by a typical package of conventional energy efficiency measures. This 10% can be seen as a "notional" LZC contribution, but leaves the developer to decide how best to achieve the improvement. It could be achieved by:
- a. Zero carbon systems like solar water heating,
- b. Low carbon systems like CHP,
- c. A package of conventional energy efficiency measures with no contribution from LZC systems, or
- d. Any combination of these approaches.
- 33. This measure is expected to encourage clients, builders and their designers to seriously consider LZC systems as part of their overall designs for all new buildings. By doing this we are also addressing Article 5 in the EPBD, which requires Members States to ensure, for new buildings with floor areas over 1,000 m2 that consideration is given at the design stage to adopting cost-effective opportunities for introducing LZC systems.
- 34. This flexible approach will enable clients and builders to take advantage of incentive schemes, grants etc, which shift the balance of cost effectiveness in their particular design. However these fiscal measures are outside the scope of Building Regulations and so they have not been included in the cost benefit calculations in this RIA.

Correlation with Part K: (Ventilation), of the Building Regulations – Airtightness

35. A principal aim of this amendment to the Building Regulations was to improve the sealing and hence airtightness of buildings. The numbers of poorly sealed buildings will be reduced

rather than increase the proportion of very airtight ones. The maximum acceptable pressure test performance standard has been set at 10 m3/h/m2 at 50 Pascal (Pa). There will be a distribution of actual performances up to this value however as a result of design choices and construction quality variance. A significant proportion of new buildings will therefore be more airtight than this maximum acceptable value. Therefore it has been decided that a future amendment to Part K will set a minimum standard for ventilation provisions that will be sufficient even in buildings whose fabric envelope is exceptionally airtight.

- 36. The distribution of airtightness that will be achieved in response to this amendment will not be known for several years. Experience has shown however that few current buildings are more airtight than 3 m3/h/m2 at 50 Pa, so this has been adopted as the design target for the ventilation provisions that will be given in the next amendment proposed for Technical Booklet K (Ventilation).
- 37. Because the building fabric will become better sealed, it will be necessary to increase the size of natural ventilation openings such as trickle ventilators. Industry will therefore need time to develop new products that provide the extra positive, controllable ventilation capability in practical ways that are not unattractive to householders.
- 38. It should also be noted that the proposed new approach to compliance based on whole-building performance does not rule out the use of components and products that meet the current E&W standards for ventilation. Products and components necessary to meet the improved E&W standards for ventilation will find their way into the NI market and manufacturers are likely to phase out products that would only meet the minimum standards for ventilation in NI. This approach allows a longer effective transition period at the design stage than previous amendments.
- 39. As a result of these considerations it is proposed to set phase-in periods in Part F for the airtightness provisions and in a future amended Part K for the provision of larger natural ventilators.

Equity and fairness

- 40. It is considered that the changes in the way performance standards are being set and to be enforced for the whole building rather than at constructional element level will remove the perceived unfairness associated with the Elemental and Calculation Methods used in the Technical Booklets to date.
- 41. It is difficult to set standards for every element of building fabric and equipment such that the impact is felt fairly across all sectors. Setting standards at the level of the whole building leaves designers the freedom to choose their own way of achieving the standard required for compliance. This means that no individual technology, system or product is unfairly disadvantaged.
- 42. This principle will also help encourage suppliers of innovative higher performance products, since the compliance system will now fully recognize the benefits of such products in achieving an overall carbon target. The greater emphasis on the inclusion of energy efficiency measures, as part of refurbishment work, will also help to balance a perceived inequality. It had been suggested that continuing to raise the standards of new buildings would create a market distortion, in that the costs of providing a new building are inevitably increased. Procurers of buildings are then faced with a market where the costs of one sector (new construction) has had its costs increased relative to the existing stock, but with no clear signal about the benefits accruing from the better standards provided. This amendment will help to address both aspects

of this by increased demands being placed on existing buildings and by extending the application of the regulations to more building work in the existing stock.

Note

The certification requirements of the EPBD which will be introduced to comply with Article 7 of the EPBD will mean that all prospective purchasers or tenants will be made aware of the comparative energy performance of different buildings in the marketplace. Further, the reports to be made available with the certificate will give advice on what cost-effective measures could be carried out to improve the performance of existing buildings.

General statement of benefits

- 43. The express aims of this amendment are:
- a. to make the best cost-effective contribution to reducing emissions of CO2 from buildings whilst keeping the regulations proportionate, cost-effective, sufficiently flexible for designers, and free from unacceptable technical risks: and
- b. to assist in the implementation of the EPBD in ways that are practical and cost-effective.
- 44. In broad terms the higher performance standards and the provisions for implementing the Directive in the Building Regulations proposals are cost-effective when the social cost of carbon is taken into consideration and they will significantly reduce CO2 emissions. They will also widen the application of the Building Regulations to existing buildings and raise the performance standards when replacement, alteration or extension works are being carried out.
- 45. Implementing the proposals will provide many general benefits to all stakeholders, including the following:
- a. Progress towards achieving the national carbon reduction goals in a cost effective manner.
- b. Running cost savings that will pay for the increased costs of building work within the service life of the building works, in some cases very profitably.
- c. Incentives for the manufacturers of energy efficient products and those designers and builders who effectively integrate such products into their buildings.
- d. Encourage the adoption of low and zero carbon technologies
- e. Encourage innovation and development, which is part of the wider sustainable construction agenda.
- f. As well as improving energy efficiency, many of the proposals will lead to wider performance benefits, such as an improvement in general construction quality thus improving the householders' health and comfort, and creating better comfort and productivity in the workplace; and
- g. The promotion of a culture of continual improvement, reinforced by the proposed regular cycle of review demanded by the Energy Efficiency Action Plan and the Directive.

Quantified Costs and Benefits

46. In coming to a view on what would be reasonable improvements, account has been taken of the results of the consultations conducted with industry and other interests, and the advice received from the NI Building Regulations Advisory Committee. As a result of this work the proposals are set at a level that will achieve an improvement of around 40% over our current standards that were set in April 1999.

Principal Benefits

For new construction

47. An estimate of the carbon savings from new construction work is as indicated in Table 1 and Table 2 below.

Table 1: New Dwellings

Carbon benefits associated with implementing the proposed changes to Part F

Dwelling Type	CO2 savings per year per dwelling (tonnes)	U	of dwellings	Annual national carbon saving in 2010 (tonnes)2
Flats	1.92	0.35	1800	2,500
Mid- Terrace	1.73	0.47	1800	3,380
Semi- detached	1.95	0.62	3530	8,750
Detached	2.40	0.86	5120	17,600
Total per year in 2010 32,230				

Ref. 1. Statistics taken from NHBC published data for year ending March 2003

Ref. 2 Based on 4 full years of construction to the new standards

Table 2: New buildings other than dwellings

Carbon benefits associated with implementing the proposed changes to Part F

Building Type	Carbon saving per year per m2 of floor area (kg)	Annual build rate (m2)3	Annual national carbon saving in 2010 (tonnes)2
Commercial and public buildings	2.98	472,500	5,639
Industrial buildings	1.04	112,000	468
Total per year in 20	10		6107

Ref.3. DETI estimated in 1999 that NI was responsible for 3.5% of the carbon emissions in the UK so these figures are taken as 3.5% of those quoted in the E&W 2006 Part L RIA

For refurbishment (including alterations, extensions and changes of use)

Refurbishment of dwellings

48. No firm estimate has been possible because of the diversity of types and scale of refurbishment work.

Refurbishment of buildings other than dwellings

- 49. One of the outcomes of the EPBD is an increased emphasis on refurbishment of the existing building stock. It is very difficult to assess the likely levels of improvement that will occur, but some indication can be gained from a broad assessment.
- 50. There are no current figures for the carbon emissions from buildings other than dwellings in NI but in 1999 DETI estimated that we accounted for 3.5% of the national output. Using the E&W estimate in the DCLG (formerly the ODPM) consultation papers of about 57 Million tonnes of carbon per year in the UK this would equate to approximately 2.0 Million tonnes for NI. Assuming that this splits about half-and-half between commercial/industrial processes and maintenance of building internal environments, the amount of carbon emissions from the building internal environments would be about 1.0 Million tonnes of carbon per year. Assuming a building is completely refurbished every 25 years, 4% of the stock would be refurbished per year. Assuming, for the purposes of estimating over the next 6 years, that at each refurbishment, there is a 5% improvement in performance, there should be an improvement in the overall stock performance of about 0.2% per year, which relates to annual savings of 2,000 tonnes of carbon. With four complete years of improvement, this would amount to 8,000 tonnes of carbon savings per year by 2010.

Principal Costs

- 51. An examination of the financial costs for this amendment gives rise to the costs set out in Tables 3 and 4. It should be noted however that this amendment requires a greater increase in our standards compared to those for E&W because their standards were amended in 2002 whereas ours was last amended in 1999.
- a. For new dwellings, the extra costs associated with implementing the proposed amendments to the Building Regulations will be as shown in Table 3

Table 3: New dwellings

Costs associated with implementing the proposed changes to Part F

Dwelling Type	Average floor area (m2)	Extra cost per unit (£)	Annual number built4	Extra NI annual cost (£ million)
Flats	80	1500	1800	2.70
Mid – terrace	95	2000	1800	3.60
Semi- detached	120	2500	3530	8.80
Detached	160	5000	5120	25.60
Total				£40.73 million

Ref.4. Figures taken as per Table 1

b. For new buildings other than dwellings the estimated extra cost associated with implementing the proposed amendments to the Building Regulations would be as shown in Table 4

Table 4: New buildings other than dwellings

Costs associated with implementing the proposed changes to Part F

Dwelling Type	Extra cost per m2 of floor area (£)5	Annual build (m2)6	Annual additional NI cost (£ million)
Commercial and public buildings	£ 28.91 (3%)	472,500	13.66
Industrial buildings	£ 10.32(3%)	112,000	1.16
Total			£ 14.82 million

Ref. 5. Figures taken from E&W 2006 Part L RIA

Ref. 6. Figures taken from Table 2

Costs arising from refurbishment

Refurbishment of dwellings

52. It is has not been possible to satisfactorily estimate the degree of improvement and so no estimate is available.

Refurbishment of buildings other than dwellings

53. It is very difficult to assess the likely costs involved in achieving the levels of improvement that will occur, but some indication can be gained from a broad assessment as indicated in the following table.

Table 5: Additional costs of refurbishment of buildings other than dwellings

Building Type	Typical current cost per m2	Estimated extra refurbishment cost / m2	Floor area of total stock7 m2	Estimated refurbishment rate8	Total annual NI cost £ million
Commercial and public	£ 800	£ 11.84(3%)	26.5 million	4%	12.55
Industrial	£ 380	£ 8.11(3%)	12.5 million	4%	4.06
Total additional costs per year					£ 16.61 million

Ref. 7. Taken as 3.5% of national output (DETI 1999)

Ref. 8. Taken from the E&W 2006 Part L RIA

Table 3: For new dwellings in England and Wales

Other Costs

54. There are a number of other costs associated with implementing the measures. These are too difficult to quantify, but are discussed in general terms below.

Industry's costs in adapting to the new standards

- 55. Training: All sectors of industry will have to bear training costs associated with becoming familiar with the new requirements. It is felt that existing Continuous Professional Development budgets will cover a significant proportion of these costs. They are non-recurring costs, and are an inevitable consequence of the drive to achieve our carbon reduction programme. It would appear that the costs of these activities will not be excessive.
- 56. Upgrading catalogues: Materials producers, component manufacturers and builders will need to review, and in some cases, amend their product lines and marketing literature. Although costs will undoubtedly be incurred, it is recognised that all sensible industries have to invest in product development and continuous improvement. Therefore much of the costs should be seen as part of that on-going development cycle. It has been assumed that this activity will incur no extra costs.
- 57. Exceptions to the requirement to switch to condensing boilers: In some specific replacement situations the installation of condensing boilers can be problematical. Providing suitable flues and condensate drainage can be disruptive and vapour pluming at outlets can be upsetting. Based on work carried out by DCLG and DEFRA in conjunction with BRE, the Heating and Hot Water Information Council and other independent parties, the supporting guidance defines those situations where non-condensing (but still high efficiency) boilers and their associated controls would constitute reasonable provision. Some of these exceptional cases might be reduced through product innovation.
- 58. Windows and glazing: The replacement window standard has been changed to reflect the current situation in E&W. This reflects the needs of the glass and window manufacturing industries who require time to implement the higher standards introduced in E&W in 2002. However standards for new construction have been based on the expectation of using higher technology windows and discussions have been started with the glass and glazing industry on extending the higher technology into the replacement market. There is the possibility, for instance, of requiring higher technology replacement windows sooner than in the next general amendment that has been signalled as likely around 2010.

Building control costs

- 59. Other than the need to become familiar with the new standards, it might be argued that the costs for building control should not increase, since most of the changes relate to introducing new standards rather than introducing new requirements for technical expertise. However, feedback from the enforcement workshop held on 10 March 2004, which DCLG officials held in conjunction with the Foundation for the Built Environment, suggests that building control bodies in E&W are having some difficulties with enforcing the 2002 amendments to the E&W Part L. It seems they could be in difficulty in taking on the enforcement of further changes without some support.
- 60. The proposals aim to ease these difficulties by adopting a whole building compliance route based on approved calculation software. With this approach, compliance checking will be made simpler it will in many cases reduce to confirming that the calculated performance is no worse than a defined target value. To a large extent, the necessary technical expertise will therefore be embedded in the approved software tool(s).
- 61. District Councils will incur additional costs if they decide to have available for their own use the calculation software for assessing building energy performance. There will be costs involved in purchasing the software, but perhaps more significantly, in training staff in its effective use. However, as mentioned above, it is not envisaged that Councils will need to calculate the energy performance for each application. They could instead use their discretion on whether to accept claims of compliance based on calculation results and evidence that calculations have been

carried out by a qualified and/or accredited person as envisaged by Article 10 of the EPBD. Such an approach could even reduce the current burden on Councils of having to make detailed assessments of designs.

- 62. To support this approach DCLG is promoting, as part of the dissemination strategy, how the construction industry can be encouraged to develop accreditation schemes. These schemes will take on most of the responsibility for confirming the accuracy and appropriateness of the input data to the whole building compliance calculation. District Councils will then only need to carry out additional checks to confirm that the actual building meets the claimed standard. Aspects of this would include:
- a. Checking that the actual building includes the features that delivered the predicted design performance. To aid this, the compliance software produces a key features list that identifies those elements of the design that are mainly responsible for delivering the predicted performance. That will aid District Councils in their sample checking. As an appendix to the Technical Booklets, we have also included compliance checklists that detail the checks that need to be made, the evidence that needs to be produced to demonstrate compliance and who should produce that evidence.
- b. Considering the results of the commissioning activities including air pressure tests. These are both specialist activities, and so again we state that these aspects of the work are to be carried out and certified by accredited experts.
- 63. As well as easing the burden on building control and improving the level of compliance, we believe the proposals will create a greater degree of consistency between different District Councils, since there will be less scope for variance in interpretation.

Consultation with small businesses: the Small Firms' Impact Test

- 64. The requirements contained in this amendment have been developed in conjunction with the NI Building Regulations Advisory Committee in the light of discussions between officials and groups in E&W representing the construction industry, energy efficiency and environmental interests and other parties. The results of these discussions with stakeholders can be seen on the DCLG web site. The groups interviewed for the Small Firm's Litmus Test covered a wide cross section of companies and interests. Four small and four large companies were interviewed, with a geographical spread across Northern Ireland. In addition, the Construction Employer's Federation was interviewed, and our findings indicate that it is unlikely that there will be a disproportionate impact on small businesses.
- 65. 65. One area where there may be an initial issue for small building firms is that a simple elemental route to compliance with Part F is no longer available. This change is driven by the EPBD, which requires compliance to be based on a whole-building standard. However, it is anticipated that industry will develop guidance that defines model packages of measures (Model buildings) that, if constructed, would deliver the whole building standard required by Part F. Although a significant change, this offers longer-term benefits in allowing multiple sets of elemental standards to be prepared, each targeted at optimising the solution for different market sectors.

Key Findings

Construction

66. Most firms were aware of the forthcoming changes and that adaptation will be required. The level of understanding was even between small and large firms with most confident that they could adapt to the changes. Time was of serious concern for all due to the realization that in adopting the new standards, Northern Ireland was making the largest step change in the UK.

Design

67. Renewables incorporated within the design package was not a favoured option with two thirds opposed to this when considered against the grants available. As a result of the move to a "Whole Building Approach" based on calculation of the energy performance of a building, services engineers are perceived as a future imperative in the design process. Translating the design from drawings to site was identified as a problem with the comment made that "only one in ten architects supervise on site". The view was that good design and good supervision are the keys to a quality building.

Marketing

68. Land costs dominate the delivery of low cost homes to market with many homes being built to astonishingly tight layouts. The view was that the changes to Part F would push cost up by 5 to 10% without a perceived benefit to the purchaser. The view was expressed that Government need to publicize the advantages of energy efficient homes in terms of low running costs and climate benefits to stimulate the housing market.

Competition Assessment

69. It is considered that there will be no detrimental effect on competition. Indeed, the whole building approach adopted by Part F means that there will be more design flexibility in future. This will mean that failing to meet a set of elemental standards disadvantages no product or system because under-performance in one area can be compensated for by an improvement in others. This will also encourage manufacturers and builders to innovate to develop improved products whose benefits can be fairly credited by the compliance system.

Enforcement and sanctions

70. The proposals will be enforced by District Councils through the existing mechanisms and sanctions provided through the Building Regulations Order (NI) 1979, as amended in 1990.

Contrary to the Foundation for the Built Environment study that found that Local Authorities in England and Wales were having difficulty in enforcing aspects of the building regulations, there is no evidence to suggest that District Council Building Control in Northern Ireland have or are likely to face similar difficulties.

Monitoring and review

71. As is customary practice with changes to the Building Regulations, the DCLG propose to carry out a survey about two years after the implementation date of how the construction industry and its clients are responding to the new provisions. This will allow industry to accumulate experience with the new requirements on a significant population of new buildings and refurbishment projects. We will then be able to obtain a realistic insight into the success of the proposals.

72. Such a review timetable will also enable the results to be fed into the next review of Part F, which, because of the requirement in the EPBD, and, in line with the aims in the EWP, is likely to be around 2010.

Consultation

- 73. As discussed in paragraph 66, industry has provided very useful inputs into the development of the proposals. This has been done through two industry advisory groups (IAGs), a number of specialist working panels convened by those groups, and separate industry groups helping in the development of the calculation methodology and the lighting provisions.
- 74. As well as this direct interaction with the IAGs and its panels, notes of the meetings and discussion papers on specific topics were posted on the DCLG website inviting comments from the wider building community.
- 75. The NI Building Regulations Advisory Committee have been actively involved in the development of the attached amendment to the building regulations and have recommended that it is now appropriate to adopt them.

Public Consultation

76. The consultation package seeking comment on this amendment was made up of a number of documents, one of which was a draft of this RIA. The consultation documentation was available in various formats on request and was placed on the Department's website.

The consultation involved distributing hard copies of the consultation documents to over 200 bodies and individuals who have a particular interest in the subject matter. In addition a press release was sent to all of the daily publications and trade/professional journals. The Department also consulted with the Northern Ireland Building Regulations Advisory Committee (NIBRAC) in relation to the proposals.

77. All responses to the consultation were recorded and discussed with the NIBRAC working party prior to the drafting of the final Technical Booklet.

Summary and recommendation

- 78. This RIA covers the amendment of Part F of the Building Regulations for Northern Ireland to raise performance standards and assist in the implementation of most of the EPBD.
- 79. The amendment will deliver:
- a. An updated national calculation methodology for the energy performance of dwellings
- b. Three alternative national calculation methodologies for the energy performance of buildings other than dwellings.
- c. An improvement of around 40% in the energy performance of new dwellings leading to a reduction in the fuel costs and the carbon dioxide emissions.
- d. An improvement of around 40% in the energy performance of new buildings other than dwellings leading to a reduction in the fuel costs and the carbon dioxide emissions.

- e. Savings arising from the wider application of the requirements to more types of work on the existing stock of buildings.
- 80. An explanation of the detailed analyses of these savings and the costs that would be incurred in achieving them are given in paragraphs 46 to 65. The quantified results are summarised in the tables 6 and 7.

Table 6: Carbon savings in 2010

Taken from	Description	Carbon savings in 2010, Tonnes per year
	Flats	2,500
Table 1 New	Mid-terrace	3,380
Dwellings	Semi-detached	8,750
	Detached	17,600
Table 2 Other	Commercial and public buildings	5,639
buildings	Industrial buildings	468
Para 50	Alterations and refurbishment of dwellings	No estimate
Para 52	Alterations and refurbishment of buildings other than dwellings	8,000
Total saving in ca	46,337, Tonnes/year	

Table 7: Additional Annual Costs for Northern Ireland.

Description	Additional Costs £ million/year	
Flats	2.70	
Mid-terrace	3.60	
Semi-detached	8.80	
Detached	25.60	
Commercial and public buildings	13.66	
Industrial Buildings	1.16	
Alterations and refurbishments to dwellings	No estimate	
Alterations etc. to commercial and public buildings	12.55	
Alterations etc. to industrial buildings	4.06	
Total Annual Costs for Northern Ireland (£ million)		
	Flats Mid-terrace Semi-detached Detached Commercial and public buildings Industrial Buildings Alterations and refurbishments to dwellings Alterations etc. to commercial and public buildings Alterations etc. to industrial buildings	

81. The adoption of this amendment to Part F will bring the Building Regulations (Northern Ireland) 2000 broadly into line with the current provisions for the conservation of fuel and power in England and Wales. It will also implement Articles 3 to 6 of the EU Energy Performance of Building Directive.

Ministerial Declaration

"I have read the Regulatory Impact Assessment and am satisfied that the benefits justify the costs"

Signed by the responsible Minister

David Hanson MP

Date: August 2006

Contact Point

Enquiries and comments regarding this Regulatory Impact Assessment should be addressed to Seamus McCrystal at:

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DFP response to Sustainable Energy Association

From: Norman Irwin, DFP

Date: 2 May 2008

Summary

Business Area: Properties Division, Building Regulations Unit

Issue: Building Regulations (Amendment) Bill - Response to Sustainable Energy Association (Sea)

Paper Dated 16 April 2008

Restrictions: None

Action Required: To note

Background

SEA submitted written evidence to the Committee on 16th April. Representatives also appeared as witnesses before the Committee on 2nd April.

Key Issues

DFP's response on issues relating to the Building Regulations (Amendment) Bill is as follows:-

1. Clause 1

The Bill (clause 4) proposes to expand the principles of the building regulations to include furthering the protection and enhancement of the environment and the promotion of sustainable development. The reduction of the TER (Target carbon dioxide emissions rate) and the other issues raised here are matters for subordinate legislation and not primary. Further reductions in carbon emissions are planned through additional amendments to Part F (Conservation of fuel and power) of the Building Regulations that will reduce emissions by a further 25% by 2010, rising to 44% by 2013.

Smart metering is being addressed by DETI as part of its obligation to implement the Energy End Use Efficiency & Energy Services Directive.

SAP takes account of all mainstream renewable technologies except wind; with wind turbines the estimated emissions savings may be entered directly into SAP.

2. Clause 2

SEA accepts the proposal.

Demolition of the built heritage is a matter for the DoE, which has legislation in place in relation to protected buildings.

3. Clause 3

The Committee is appointed under the Nolan principles, therefore anyone who meets the required criteria may apply. NIBRAC does not represent particular bodies. Members bring their individual knowledge and expertise to the Committee and are expected not to lobby on behalf of organisations.

4. Clause 4

It is the Department's intention to make as much guidance as possible freely available to anyone who requires it through its website. Certain documents that the Department identifies as guidance may only be available commercially and therefore may have to be purchased by the user.

Building regulations have a much wider remit than domestic property; therefore it would not always be appropriate to use the Code for Sustainable Homes as a template for guidance.

5. Clause 5

The Department already publishes the Technical Booklets on its website and these are free to download. They may also be purchased from TSO. This mirrors policy elsewhere in the UK and in ROI. This policy would remain in place following a move to guidance. The Department will continue to consult on the amendment of regulations. This will remain the case following introduction of guidance.

6. Clause 6

SEA agrees with the proposal.

The Department cannot require one District Council to accept another's Council's type approval, as each Council is autonomous and entitled to make its own decisions. It is for this reason that we have discussed with Building Control representatives the various mechanisms for achieving

cross-Council acceptance, such as lead Councils in specific cases and cross-Council panels to consider applications. However it will be for District Councils themselves, in consultation with Local Government Division in DoE, to come up with either formal or informal mechanisms to facilitate cross—Council co-operation. This matter will also have to be addressed when planning control is devolved to district councils to ensure consistency of application.

7. Clause 9

The Department will consult on the content and format of the statutory registers in due course when revisions are being made to the sub-ordinate legislation and would welcome comments on this matter from the Sustainable Energy Association at that time.

8. Clause 11

The Department does not foresee any difficulty in implementing this clause, and would require additional information from the Sustainable Energy Association as to their perceived difficulties.

9. Clause 12

Building regulations are not retrospective and can only be applied at the time of construction, or for the purposes of regularisation. In the case of regularisation, the work is considered against the regulations in place at the time the work was carried out, and not necessarily against the current regulations.

In relation to Crown occupied buildings, if Departmental officers are to check plans for compliance with Building Regulations they would be expected to operate to the same standards and principles to which Building Control Officers operate (both are public servants).

Microgeneration

DFP's response on issues relating to mandatory microgeneration will be forwarded separately in the near future.

Norman Irwin DFP DALO

DFP response to Sustainable Energy Association evidence on Microgeneration

From: Norman Irwin, DFP

Date: 9 May 2008

Summary

Business Area: Properties Division, Building Regulations Unit

Issue: Microgeneration - Response to Sustainable Energy Association (Sea) Paper Dated 16 April

2008

Restrictions: None

Action Required: To note

Background

Representatives of SEA appeared as witnesses before the Committee on 2nd April when a document was presented. SEA also submitted written evidence to the Committee on 16th April.

We have responded separately to the SEA's comments on the Building Regulations (Amendment) Bill.

This paper contains DFP's response to their comments on microgeneration and are in addition to the comments submitted on 29 February 2008 attached at Appendix A.

Key Issues

Introduction

The Department disagrees with the SEA's assertion that the reasons given to the Minister for not proceeding with the introduction of mandatory microgeneration were invalid.

Examination of the SEA costings show that they are based on the presumption that Government grants will continue to support the installation of microgeneration. The former SoS made it clear that Government grants were for a 2 year period ending in March 2008. Legal advice was that the Department could be open to legal challenge if it placed a financial burden on industry and the public that outweighed the benefits. Microgeneration would therefore need to be cost effective in its own right to be made a mandatory requirement of the building regulations. DEFRA's official figures (see Office of Climate Change bar chart included with Appendix A paper) demonstrate that microgeneration is not cost effective at the present time. Government would therefore need to be prepared to subsidise each installation to make it cost effective.

The amendments to primary powers proposed in the Building Regulations (Amendment) Bill (NI) 2008 (specifically clause 1 and Schedule 1 amendments) will enhance the Department's regulation making powers, thus supporting any future decision to make low or zero carbon technologies mandatory should it be appropriate to do so in the future.

Following the order of points set out in the SEA evidence dated 2nd April, and then picking up on the further points arising in their written submission dated 16th April, DFP's detailed response to the SEA evidence is as follows:-

1. Lack of capacity to deliver in NI (SEA paper 2nd April)

It is acknowledged that the skills base in Northern Ireland for some of the microgeneration technologies has increased due to courses introduced recently by the Installers Academy and several FE Colleges. However the Department's view is that there is uncertainty that the industry could at this point provide adequate installers should microgeneration be made mandatory in all new build at this time, given that the SEA appear to be content that the 4000 dwellings in which Reconnect funded systems have been installed over a 2 year period has provided sufficient work for the trained installers.

2. Lack of cost-benefit in the technologies (SEA paper 2nd April)

The DEFRA figures used to support DFP's Regulatory Impact Assessment had their basis in nationally accepted BRE research and BREDEM modelling and as such are supported by independent scientific research. SEA figures appear to be based on data from manufacturers.

The DEFRA figures for all technologies included in the DFP Draft Regulatory Impact Assessment (RIA) (attached as Appendix B along with a letter dated 19th November 2007 from Peter Robinson to the Committee Chairman) to support the proposed amendment to make microgeneration mandatory are based on the average dwelling (a 3 bedroom semi-detached house). The average dwelling built to current building regulations standards has an energy demand of around 7000 kWh for space heating and hot water. The SEA figures are based on a variety of large existing properties whose energy demands far exceed those of any normal new build house. The SEA figures are not based on the same heat requirement e.g. for biomass the output is 25,734 kWh, but for ground source heat pump a figure of 14,000 kWh has been used. The high demand figure used by SEA for biomass improves the payback on the capital cost.

The DFP Committee asked the SEA for evidence to substantiate their claims for short payback periods. The information provided (Appendix 1 of SEA's submission dated 16 April) does not contain sufficient background data on each system in order to make a full assessment.

The SEA submission dated 16 April 2008 contains the most up-to-date installation / simple payback DEFRA figures. These figures show that the only renewable technology that pays back within the lifespan of the equipment (when compared with gas or oil heating) is micro-CHP. This technology shows great potential but trials in Northern Ireland are still indicating reliability problems.

There is no doubt that if fossil fuel and electricity prices continue to rise steeply the payback periods for microgeneration technologies will become more attractive. Those same price rises will continue to make fabric insulation a more attractive option than renewables, given its lower cost and longer lifespan. This is likely to continue until the diminishing returns from ever thicker insulation make microgeneration the more attractive option.

Grants for microgeneration were not included in the calculations used by the Department when assessing payback because the technology has to be cost effective in its own right.

Reconnect grants ranged from £1125 for solar water heating systems to £7800 for PV. Assuming an average grant of £2000 per dwelling, of which 10,000 are built annually, the total cost to Government would be £20million per annum.

DFP's comments on a number of low or zero carbon systems is at

Annex 1.

In relation to the information provided by SEA in the submission dated 16 April on the cost of heating oil / fuel cost comparisons, DFP would comment that the Department for Business, Enterprise and Regulatory Reform (BERR) energy figures for September 2007 (as used by DEFRA in their latest payback calculations) give a cost of domestic heating oil of 37.06 p/litre. Oil in Northern Ireland has now risen to over 55 p/litre and gas and electricity prices are about to rise again substantially. This trend is likely to mean that microgeneration technologies may in the coming years have a payback of less than their lifespan.

Biomass is competitively priced but may not be suitable for all dwellings. It is likely to be most attractive to customers with a large heat requirement and sufficient space to facilitate delivery and storage of fuel.

3. Unproven nature of the technologies (SEA paper 2nd April)

It is acknowledged that we have some leading companies manufacturing microgeneration technologies, the majority of which are exported to countries with hotter and sunnier climates. There is not yet a significant performance database across the range of technologies to demonstrate that they would deliver their intended performance against installation cost in a local setting.

4. Lack of precedence for the policy (SEA paper 2nd April)

See the Department's response at paragraph 6. below.

5. Effects of not including mandatory renewables in 2008 Building Regulations (SEA paper dated 16 April)

The SEA has stated that the Northern Ireland Building Regulations for the conservation for fuel and power (Part F) have not been updated since 1990. This is incorrect. Part F was upgraded in 1991, in 1998 and again in 2006. The 2006 upgrade brought a 40% improvement in standards over the previous requirements.

The Northern Ireland Building Regulations for the conservation of fuel and power set similar energy standards to England, Wales and Scotland.

Technical Booklets F1 and F2 that support Part F requirements mention specifically the contribution which low or zero carbon systems can make to achieving the reduced emissions standards:

Extract from Technical Booklet F1 (full Booklets available from www.buildingregulationsni.gov.uk)

Low or zero carbon energy sources

2.25 In certain circumstances, low or zero carbon (LZC) energy sources can make a substantial and cost-effective contribution to meeting the TER. Low carbon systems include heat pumps and combined heat and power (at individual dwelling, block or community levels), and zero carbon systems include biofuels (e.g. wood fuels and oil blends), micro-hydro, photovoltaics, solar hot water and wind power.

The Department for Communities and Local Government (DCLG) publication "Low or zero carbon energy sources – Strategic guide" describes a range of potential systems and how their contribution to the DFR can be assessed.

Peter Robinson has announced a programme to make further amendments to the building regulations that will require radical reductions in CO2 emissions from new buildings. It is proposed to tighten the requirements in 2010 and again in 2013. These amendments will be made in tandem with E&W and Scotland. E&W has signalled a move to zero carbon dwellings by 2016 and zero carbon non-domestic buildings by 2020, and in line with current policy it is likely that these timescales will be adopted in Northern Ireland. In evidence to the Committee, the Energy Savings Trust, for example, has identified that these targets will not only encourage but require the installation of renewable technologies. Such amendments will, in such a short timescale, present a serious challenge for regulators to develop the new standards and for the construction industry to address the way they build to achieve compliance.

6. Putting Northern Ireland out of step with the rest of the UK and Ireland (SEA paper dated 16th April)

Microgeneration is not mandatory elsewhere in the UK in Building Regulations. The Merton Rule (used by councils in England & Wales) is a planning consideration rather than a building regulations requirement. It applied initially only to non-domestic buildings but has now been extended to include developments of 10 or more dwellings, but depends on viability.

Planning Service has just completed a consultation on PPS 18, which seeks to facilitate and provide guidance to those developers who wish to make planning applications for buildings incorporating renewable technologies.

The renewables requirement in the Republic of Ireland which commences on 1st July 2008 applies only to dwellings.

7. FOI request regarding planning applications with renewables (SEA paper dated 16th April)

The SEA question to the District Councils refers to the '2006 Regulations' so it appears that they are referring to building regulations applications rather than planning applications.

The Department has set CO2 emissions standards and allowed the market to achieve these in the most cost effective way. The results of the SEA FOI request to Councils (nil response) indicate either that developers view microgeneration as not yet cost effective or that they are able to achieve current Building Regulations standards through improvements to thermal fabric and building services.

Councils may not hold data on whether applications for new dwellings have included microgeneration. It should be noted that one of the proposed changes to be made by the Amendment Bill is a requirement for District Councils to keep registers of information.

8. Background to the decision not to introduce microgeneration. What happened to stop Hain's plan? (SEA paper 16th April)

The payback calculations used by the Department to support the information presented to the Minister were accurate and were provided by DEFRA.

The latest DEFRA figures (included in this SEA paper) do not support SEA's figure of a 4 year payback for pellet boilers (which assumes grant support). These payback calculations are sensitive to the capital cost of the systems and comparative fuel costs, and grants should be excluded from the calculations.

SEA state that the Department failed to inform the Minister that there is no payback for fossil fuel. Fossil fuels are used as the benchmark for the assessment of the microgeneration technologies and therefore cannot have a payback period (as they would be compared with themselves).

SEA state that they employed an accountant to carry out an appraisal on the DEFRA payback figures and that this indicates that the DEFRA figures are inaccurate. Official government information and data is used by Departments in the development of policy and in the RIA the Department used DEFRA's official published figures.

The NI Building Regulations Advisory Committee (NIBRAC) had concerns about the cost-effectiveness of the technologies and the ability of the construction industry to implement the requirement. NIBRAC is of the opinion that at this time reductions in carbon emissions are better achieved by focusing on the more cost-effective improvements to the energy performance of the

fabric of the building through higher insulation standards, better air tightness and improved building services.

Annex 1

DFP's Comments on Sea Evidence on Low or Zero Carbon Systems

1. Biomass

The SEA fuel cost is based on the bulk delivery of pellets. Balcas' minimum order is 3 tonnes, requiring a large store of up to 4 tonnes capacity – around the size of a small greenhouse (2.3m x 2.3m by 2.4m high). The SEA cost of storage, although for basic provision, seems realistic, but is only suitable for boilers which have a hopper requiring filling with pellets by hand. An internal silo including the 'boot' that connects the silo to an augur feed would cost £1,255. An internal store, e.g. an enlarged garage, would cost in the order of £1,600.

The smaller garden space associated with many new housing developments would make storage of bulky pellet fuel a problem. There may also be issues of the visual impact of a pellet silo on a small property.

2. Wind

At £20,000, the turbine in the SEA example represents a significant outlay. The SEA calculations assume that the wind turbine will produce all the electricity used by an average household (about 4,000 kWh per annum). This is an unrealistic assumption because there will be long periods when the turbine does not produce sufficient power to meet the demand within the dwelling. When this occurs electricity will have to be purchased from the grid. On other occasions the turbine will be generating electricity when there is no demand from the dwelling, and electricity will have to be exported to the grid. Currently NIE pays 4.75p/kWh for electricity exported but charges 11.1p/kWh for electricity supplied from the grid.

There is no doubt that with a good windy site on raised ground with few trees or houses in the vicinity, a large freestanding domestic turbine like this can produce more than 4,000 kWh per annum, but much of it will have to be sold to the grid at the low tariff and bought back in times of need at higher rates. Even in Northern Ireland only a small percentage of dwellings are on a suitable site with a strong unobstructed flow of wind.

Building-mounted micro turbines perform significantly below their potential due to the turbulence and attenuation of the wind caused by buildings and trees. As has been identified to the Committee in evidence from other sources, there are also issues relating to structural stability / damage.

3. Solar hot water

The comparison with an electric immersion heater is inappropriate in a new dwelling. The heating controls required by the Building Regulations allow the boiler (efficiency range 86% - 97%) to heat hot water independently when space heating is not required. This is substantially less expensive than using electricity to heat hot water.

4. Ground source heat pumps

The Season Performance Factor (SPF) is an annual measure of efficiency. The SPF is usually 3 – 3.5 for an efficient system. The SEA figures have used an SPF of 4 which is achievable at the top end only of performance.

The SEA comparison is with LPG which is an expensive fuel – oil or natural gas are the more common fuels and should have been used to make the comparison.

Viesmann (a large manufacturer of heat pumps) recommends that the system should be sized for 80% of the peak load with an additional boiler to cover the extra 20% in cold periods. It is likely that this part of the heating load would be met by electricity, so the payback period will be significantly extended.

5. Photovoltaic panels (PV)

The SEA calculations assume that all the electricity produced by the panels can be used by the household as it is produced and that none of it has to be sold back to the grid at the much lower tariff. This is not a realistic scenario – see grid pricing information provided at paragraph 2. above. Additionally, it should be noted that currently PV panels have an efficiency of between 5% and 15%.

DFP response to Association of Building Engineers

From: Norman Irwin, DFP

Date: 2 May 2008

Summary

Business Area: Properties Division, Building Regulations Unit

Issue: Building Regulations (Amendment) Bill - Response to Association of Building Engineers (Abe) Paper Dated 23 April 2008

Restrictions: None

Action Required To note

Background

ABE submitted written evidence to the Committee on 23rd April regarding the provisions in the above Bill and other related matters.

Key Issues

DFP's response is as follows:-

1. Article 2 - Interpretation

The Department has already provided the Committee with information on this matter.

2. Article 3A – Protected buildings

The Department has already provided the Committee with information on this matter.

3. Article 4 – Building Regulations Advisory Committee

The Department has a formal interface with the construction industry in the shape of the Construction Industry Forum for Northern Ireland. This is managed by Central Procurement Directorate. This would be a more appropriate mechanism for bringing the industry's concerns to the Department. NIBRAC, like its counterparts in England & Wales and Scotland, exists to advise the Department on building regulations matters brought before it. However that would not prevent a member from raising any issues of concern relating to building regulations with the Department on a private basis, which would then allow the Department to bring it to the attention of the committee should it be appropriate to do so.

4. Article 8 – Power of district councils to approve types of buildings

The Department has already provided the Committee with information on this matter.

5. Article 17 – Appeals to the Department

The Department does not operate a system of "determinations" for reasons set out in previous correspondence to the Committee. In Northern Ireland the Department is the body to which appeals may be made against the serving of a contravention notice. In England & Wales, such appeals are heard by the county court.

The Department has already undertaken to publish the outcome of appeals on its website and as this is now a matter of policy, it does not consider it necessary to impose a statutory duty to do so.

6. Article 18 - Contravention notices

When giving evidence to the Committee, the ABE witness acknowledged that the Bill provides a 12-month period from notification of completion of the works within which a contravention notice may be served and not a 6-month one as stated in the ABE paper.

7. Article 19 – Deposit of plans to be of no effect

The Office of Legislative Counsel has advised that this would be best addressed by an amendment to subordinate legislation. The Department intends to address this matter when reviewing the regulations, and will consult fully with ABE and other stakeholders in the preparation of the regulations.

8. Article 19A – Registers to be kept by councils

The Bill allows the Department to prescribe in regulations the information to be contained in the register and the circumstances in which the public may access that information. When preparing these regulations, the Department will work closely with its stakeholders and legal advisors to ensure that the requirements of the Freedom of Information Act and the Data Protection Act are not compromised.

Additional comments

9. Council databanks

The Department is proposing that District Councils maintain registers of information submitted to them for Building Regulations purposes. The Department's view is that the powers in the proposed Bill should not extend beyond this remit.

Building Regulations Part F already requires the owner to be provided with information on fixed building services and their maintenance requirements, so that a building can be operated and maintained to maximise the design potential of these services. Technical Booklets supporting Part F require a Building Log Book to be provided and defines the format for the Log Book.

The Construction Design and Management Regulations already place a duty on developers to provide the occupier with information on the building in a Health & Safety file. This file is to include details of any unsafe materials that may have been incorporated, any specific method for demolition etc.

Councils are currently working with Land & Property Service to assess buildings for valuation and rating purposes. Under their enhanced roles following RPA, Councils will hold additional data on the built environment. It should be left to Councils to determine if a single database would serve their various purposes.

10. Existing buildings

The Department has already provided the Committee with information on this matter.

11. Demolition

The Department has already provided the Committee with information on this matter. Demolition is already addressed by other existing legislation and it would not be appropriate to suggest that enforcement of that legislation should be addressed by this Bill.

12. Dangerous structures

The Department has already provided the Committee with information on this matter. We would reiterate that at this stage it has not yet been agreed that the Building Regulations legislation is the most suitable legislative framework in which to prescribe matters relating to dangerous buildings (and widening the provisions to include dangerous places makes the link more tenuous).

Under the principal Order, the term "structure" is included in the overall definition of "building" therefore there is no need to differentiate between the two.

13. Sustainable Communities

Section 109 of the Local Government Act (Northern Ireland) 1972 states that:

- "A council shall take such steps as it considers necessary or expedient to arrange for the publication within its district of information on questions relating to its functions, and may also—
- (a) arrange for the delivery of lectures and addresses, and the holding of discussions, on such questions;
- (b) arrange for the display of pictures, films or models or the holding of exhibitions relating to such questions;

(c) prepare, or join in or contribute to the cost of the preparation of, pictures, films, models or exhibitions to be displayed or held as aforesaid."

As it appears that there are existing provisions that would allow district councils to perform the functions suggested by ABE, the Department does not consider it necessary to provide for this function in the Bill.

14. Future-proofed Buildings

Materials and construction methods are matters for subordinate legislation and would not be addressed by primary legislation.

Norman Irwin DFP DALO

DFP response to Housing Projections

Colin,

If we estimate that 10,000 new houses are built annually then between 2008 and 2020 (12 years) 120,000 new dwellings should be built. NISRA estimate there will be 783,000 dwellings in NI in 2020, so subtracting 120,000 from this figure leaves 663,000 dwellings that would be built before current standards. On the basis of an average of 2.34 people per dwelling (again NISRA figure) then in 2020 just over 1.55m people would be living in dwellings built before 2008 (previous building regulations standards) and around 280,000 would be living in the higher standard dwellings built in 2008 and beyond.

I hope this helps.

Duncan

Duncan Morris

DFP Assembly Section Phone 028 90529183 ext 29183

Legislation Controlling Dangerous Buildings and Demolitions

Dangerous buildings

District councils currently control dangerous buildings under a number of pieces of legislation as follows:

Within Belfast City Council

- The Belfast Improvement Act 1845 (ss.CVII CIX)
- The Belfast Improvement Act 1878 Part IX (ss.116-124)
- The Belfast Corporation Act 1911 (s.76)
- The Belfast Corporation (Special Powers) Act 1948 (s.11)

Outside Belfast City Council

- The Public Health Acts Amendment Act 1907 (s.30)
- Towns Improvement clauses Act 1847 (s.75)

The Department was unable to determine Departmental ownership of the above legislation, despite research by the Departmental Solicitors Office and submissions to all Permanent Secretaries.

Demolitions

Article 11 of the Planning (Northern Ireland) Order 1991 defines "development" as:

"the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land".

Subject to the Order, planning permission is required for all development.

Article 18 of the Planning (Amendment) Order 2003 has amended that Article to introduce a new Article to define "building operations":

- "(1A) For the purposes of this Order "building operations" includes -
- (a) demolition of buildings;
- (b) rebuilding;
- (c) structural alteration of or addition to buildings; and
- (d) other operations normally undertaken by a person carrying on business as a builder.".

The effect of this amendment is to make planning permission necessary for demolitions. This Article has not yet been commenced.

Article 51 of the 1991 Order also includes provisions relating to the control of demolition of buildings within conservation areas, namely that demolition of such buildings may not commence without the written permission of the Department of the Environment.

The Construction (Design & Management) Regulations (NI) 2007 (the "CDM regulations") address the health and safety aspects of the way construction is planned, organised and managed. Regulation 29 states that:

- "29.—(1) The demolition or dismantling of a structure, or part of a structure, shall be planned and carried out in such a manner as to prevent danger, or, where it is not practicable to prevent it, to reduce danger to as low a level as is reasonably practicable.
- (2) The arrangements for carrying out such demolition or dismantling shall be recorded in writing before the demolition or dismantling work begins."

The Health & Safety Executive for Northern Ireland, which has day-to-day responsibility for the CDM regulations, is also responsible for legislation relating to health and safety at work and for enforcing the provisions relating to the health and safety of people on construction sites. The CDM regulations are accompanied by an Approved Code of Practice that includes a requirement

for a plan of works for demolition that identifies potential dangers and outlines methods to mitigate them. The Approved Code of Practice also requires that the client and his contractors are competent and aware of their duties and responsibilities under the CDM regulations.

The Control of Asbestos Regulations (Northern Ireland) 2007 requires that if asbestos is identified and is of a notifiable type, its removal must be carried out under licence and the Health & Safety Executive must be notified of the work.

Article 35 of the Housing (Northern Ireland) Order 1981 allows the Housing Executive to issue a demolition order for a house or flat that is unfit for human habitation. The work carried out under this order would be subject to the CDM regulations.

The British Standards Institute has produced a Code of Practice for Demolition (BS6187:2000) that sets out the recommended route for safe demolition.

DFP response to Association of Building Engineers Proposed Amendments and further information on Protected Buildings

From: Norman Irwin, DFP

Date: 9 May 2008

Summary

Business Area: Properties Division, Building Regulations Unit

Issue: Building Regulations (Amendment) Bill - Response to Association of Building Engineers

(ABE) Proposed Amendments and Further Information on Protected Buildings

Restrictions: None

Action Required: To note

Background

ABE representatives appeared in front of the Committee as witnesses on 23 April 2008. The Committee also raised issues relating to Protected Buildings in discussion with NIEL witnesses on 7 May.

Key Issues

DFP's response on issues relating to proposed amendments to the Building Regulations (Amendment) Bill is as follows:-

1. Protected Buildings

The Department has reviewed the use of the wording "have regard to" with the Office of Legislative Counsel (OLC). We have been advised that where an absolute duty is created, the Bill must also include appropriate sanctions for occasions when the duty has not been carried out. For this reason it is common drafting practice to use a "softer" form of words such as "have

regard to" where it is not proposed to include sanctions such as fines for failure to carry out a duty. Should a firmer wording be required, OLC has suggested substituting "have regard to" with "take account of".

The Bill defines a "protected building" as one listed within the meaning of the Planning (NI) Order 1991 or one within a conservation area designated as such under the same Order. This Order is the responsibility of DoE. These are the only buildings or areas of special architectural or historic interest defined by and protected by legislation. "Buildings of local architectural or historic interest" may already be listed or be within conservation areas, however they are not specifically addressed by statute, rather it is the policy of Planning Service to consider their characteristics when looking at an application. The Department would not consider it appropriate to include this wording in the definition of "protected building". This would not prevent Building Control from adopting the same policy approach as Planning Service in this matter. Further background on the definitions contained in the Planning Order is appended.

2. Building Regulations Advisory Committee

There already exists a formal interface between the construction industry and the Department in the form of the Construction Industry Forum for Northern Ireland. The remit of this Forum is to provide a platform for the discussion of any issues related to construction (including building regulations). Expanding the brief of NIBRAC beyond an advisory committee would create an overlap and duplication of functions that may lead to ambiguity.

The equivalent Committees in England & Wales, Scotland and the Republic of Ireland serve in a similar advisory capacity to the Northern Ireland Building Regulations Advisory Committee albeit to their respective Minister or Secretary of State rather than the Department.

The Department does not consider this proposed amendment to be necessary.

3. Deposit of plans to be of no effect

OLC has advised the Department that it is more appropriate to address this matter through an amendment to subordinate legislation, and the Department intends to proceed in this manner. The amendment to the subordinate legislation currently being considered by the Department is similar to that proposed by ABE.

The Department does not consider this proposed amendment to be necessary.

Norman Irwin DFP DALO

Appendix

Definitions In The Planning (Ni) Order 1991 And Further Background

Listed Buildings

A listed building is defined by Article 41(7) of the Planning (NI) Order 1991 as:

- " a building which is for the time being included in a list compiled under this Article; and, for the purposes of the provisions of this Order relating to listed buildings, the following shall be treated as part of the building—
- (a) any object or structure within the curtilage of the building and fixed to the building;
- (b) any object or structure within the curtilage of the building which, although not fixed to the building, forms part of the land and has done so since before 1st October 1973."

When buildings are listed they are placed on statutory lists of buildings of 'special architectural or historic interest' in accordance with the Article 42 of the Planning (Northern Ireland) Order 1991. The lists of buildings of special architectural or historical interest in Northern Ireland are compiled and maintained by Environment and Heritage Service.

The purpose of listing is to protect the character of a historic building and its setting. This does not mean that it must remain unchanged from the day it was listed. It is recognised that every building has to have a function for it to survive, and that some buildings must undergo changes of use that often necessitate alterations and extensions. The legislation, however, places the main responsibility for achieving its stated aims with the person who is best placed to take it - the owner.

Environment and Heritage Service can offer historic information and technical advice to owners. This can include advice on the acceptability of proposed works and information on historically correct materials and detailing. This is an advisory service and it is recommended that where an owner proposes to carry out works, consultants experienced in this specialist field be employed.

A common misconception is that only the outside of a building, or part of a building, is listed. In fact the whole building is listed including the interior and there are no exceptions to this, although some elements can be considered to be more important than others. The listing can often include other related freestanding items such as gates or gateposts.

Before compiling or amending a list Environment and Heritage Service consult with the Historic Buildings Council, an advisory body set up by statute in 1974. The Council is comprised of members from different walks of life, with a wide range of knowledge and experience of historic buildings. We also consult with the appropriate District Council.

Listed buildings are selected with great care. The main criteria for listing buildings are as follows:

Age:-The older and rarer a building is, the more likely it is to be listed as fewer examples remain. In Northern Ireland buildings built before 1830 in good original condition are usually listed. Later buildings are selected on the basis of their individual character and quality and the listing criteria becomes tighter. In line with the rest of the United Kingdom, Environment and Heritage Service now considers all buildings that are more than 30 years old for listing. Buildings less than 30 years old are rarely listed.

Each listed building will fall into one of the following categories:

- All buildings pre 1830 that remain in a reasonably unaltered form;
- Buildings constructed between 1830 1935 of definite quality and character. Including the best works of principal architects; or
- Buildings constructed between 1935 1965 outstanding buildings only. Including the very best works of principal architects.

Architectural Interest:- Architectural interest looks at attributes such as the style, proportion, ornamentation etc of the building and also any alterations to the building. Alterations may have added interest or similarly inappropriate alterations may have radically damaged a buildings architectural and historical worth.

Historical Interest:- Relates to the importance of the building in relation to an historic event or development. Some buildings will be of interest within the context of Northern Ireland or even in an International context. The buildings of architects who are recognised as being the leading exponents of their era will be given special attention. A transient association with owners, lodgers or tenants, however eminent, will not normally be considered important.

Conservation Areas

Article 50 of the Planning (NI) Order 1991 defines conservation areas as:

"areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance."

There are currently 59 designated conservation areas within Northern Ireland and further areas may be designated in the future. They range in scale from city and town centres to villages and relatively small residential parks and streets. Development plans will identify existing conservation areas and may include local policies or proposals for their protection and enhancement

In April 1998 the Heritage Lottery Fund (HLF) launched the Townscape Heritage Initiative (THI), focused on Conservation Areas. The THI aims, in partnership with the public, private and voluntary sectors, to secure the long-term future of the built heritage.

(Information taken from EHS website)

DFP response to Renewables Advisory Board Report on the Role of Onsite Energy Generation in Delivering Zero Carbon Homes

From: Norman Irwin, DFP

Date: 13 May 2008

Summary

Business Area: Properties Division, Building Regulations Unit

Issue: Response to Renewables Advisory Board Report on the Role of Onsite Energy Generation

in Delivering Zero Carbon Homes

Restrictions: None

Action Required: To note

Background

Representatives of Northern Ireland Environment Link appeared as witnesses on 7 May to give evidence on the Building Regulations (Amendment) Bill. The above report by the Renewables Advisory Board (RAB) was submitted as part of their written evidence to the Committee.

Key Issues

DFP's response to this paper is as follows:-

General comments

1. Scope

In England & Wales, responsibility for the Code for Sustainable Homes (CSH) and the move to zero carbon homes by 2016 lies with the Department for Communities and Local Government (DCLG). The remit of DCLG is much broader than that of DFP and includes responsibility for housing, planning and local government. Local responsibility for the areas covered in this report would also fall across DETI, DoE and DSD. DFP's role would be limited to matters concerning the building regulations.

2. Stimulation of onsite renewables sector

The aim of the CSH includes the stimulation of new onsite technologies and the reduction of the cost of low carbon technologies for existing homes. The Department notes that RAB paper identifies the achievement of these policy aims depends largely on the Ministers accepting the trade-off between cheaper remote generation (e.g. wind farms) and the accelerated improvements to technology brought by forcing more expensive onsite generation.

3. Mandatory microgeneration through building regulations.

The report does not propose that microgeneration become mandatory through building regulations; instead it recommends that the regulations set increasingly more onerous targets that encourage the use of low or zero carbon technologies. This is the same method favoured by the Department. We also note the importance of the planning system in achieving the 2016 target of zero carbon new homes.

Executive Summary

4. Section iii

The Department notes the importance of offsite generation in meeting Level 6 of the CSH (zero carbon homes), and the additional costs that would arise from the installation of expensive electricity generating technologies such as photo-voltaic panels if offsite generation is not permitted.

5. Section iv

The Department notes the Report's findings on the use of biomass CHP, and notes that there is no mention of the availability of bio-fuel. Should uptake exceed fuel availability, carbon savings may be potentially offset by emissions from fuel transportation.

6. Section v

The Department notes with interest the importance of community heating networks in achieving the zero carbon goal by 2016. Such networks would be difficult to require under building regulations as the regulations apply separately to each building (or each type of building once type approvals are available). Community heating networks in large developments would be a matter best addressed by planning policy and/or legislation.

7. Section vi

The Department is concerned that the cost of including onsite technology in new homes averages at around £6000 per dwelling, and notes that this cost does not include building fabric costs or contractor overheads (i.e. the installation costs).

Norman Irwin DFP DALO

DFP response to the Committee's follow-up questions on the Building Regulations (Amendment) Bill

From: Norman Irwin, DFP

Date: 16 May 2008

Summary

Business Area: Properties Division, Building Regulations Unit

Issue: Response to the Committee's Follow-up Questions on the Building Regulations

(Amendment) Bill

Restrictions: None

Action Required: To note

Background

Due to time restrictions at its session on 14 May 2008 on the above Bill, the Committee agreed to write to the Department with follow-up questions.

Key Issues

DFP's response to this paper is as follows. The Department has retained the numbering of the Committee paper:-

Building Regulations (Amendment) Bill

Biomass

1. Any definition of "biomass" would be a matter for the supporting regulations or the guidance produced to support the regulations. The Department will consider the sustainability of the fuel source in any future consultation in this area.

The Bill (and the supporting regulations) uses the term "low or zero carbon systems". Any differentiation between renewable and non-renewable technologies that fall under this category would be a matter for supporting guidance, the proposed wording of which would be subject to full consultation.

Type approvals

- 2. This would be a matter for DoE to implement. During the consultation on the review of public administration, Building Control submitted a paper proposing that the forthcoming RPA legislation should establish a statutory duty for district councils to consult with each other and with central government. This view was mirrored in the consultation response submitted by DFP's Office Estates & Building Standards Division (the predecessor to Properties Division).
- 3. The decision of the Department on any type approval matter brought to it under appeal would be binding on all councils subject to the type approval. If the Department were to be asked to take an additional role beyond this, it may remove from an applicant the opportunity to appeal to the Department.

Crown occupation

4. 1979 Order currently defines "Crown authority" as being "the Crown Estate Commissioners, a Minister of the Crown, a department of the Government of Northern Ireland or of the United Kingdom or any other person whose functions are performed on behalf of the Crown (not being a person or body whose functions are performed on behalf of Her Majesty in Her private capacity)".

This in practice means that bodies such as hospitals, schools or council buildings would not be considered Crown buildings.

This definition would be used to determine the Crown status of a public company where this has not already been established by statute (for example, the legislation that created NI Water clearly states that it does not have Crown status).

Plans of no effect

5. It was originally the intention of the Department to amend the primary legislation to address this issue, and indeed the question about how best to address the matter formed part of both public consultations on the Bill and also our instructions to the Office of Legislative Counsel (OLC). However on further consideration of the matter, OLC advised that the current wording of Article 19 of the principal Order would allow the matter to be addressed through the subordinate legislation and that this would be the most appropriate mechanism by which to address the issue

The Department is considering an amendment to the (subordinate) Building Regulations that will address multiple-unit applications by treating each unit as a separate application for the purposes of Article 19. This would effectively require work to commence on all units within 3 years or the approval for the uncommenced works would become null and void. In formulating its original policy, the Department had considered preparing a definition of "commencement of work", however it was advised by solicitors that any definition may have human rights issues. The Department will consider this matter further when preparing its consultation on the amended subordinate regulations.

Dangerous buildings

6. The proposals in relation to dangerous buildings were not written to fill a statutory void, but rather at the request of Building Control to harmonise existing provisions. The removal of the proposal from the Bill has not weakened the existing legislation in any way. Indeed revoking the existing legislation as originally planned would have restricted district councils' powers to address the full scope of matters covered by the existing legislation (detail of this legislation has already been forwarded to the Committee). It must also be emphasised that the Department has not yet determined that this falls under its legislative remit in the first instance. The Committee may wish to note the views expressed by Paul Everall of Local Authority Building Control in his evidence that this should not be addressed by building regulations.

Backland development

7. Where the point of access forms part of the site for the purposes of building regulations, then it is addressed by Part E (Fire safety) of the regulations. However where the point of access is more remote (such as in the example given to the Committee by Building Control) it falls beyond the scope of building regulations and should be addressed by Planning Service.

Access for emergency vehicles is already addressed under Planning Policy Statement PPS 3, paragraph 5.23 of which states:

"The suitability of access arrangements for the fire service and ambulance service can be an important consideration in the layout and design of development, particularly in relation to backland development or sites with restricted access. Designers should therefore consider the needs of the emergency services early in the design process and may be required to submit information to accompany their proposals indicating how the matter has been addressed."

Additionally, Planning Service and Roads Service have a joint guidance document, "Creating Places", which includes figures for the minimum vertical clearance of arches to allow access for emergency service vehicles. A copy of these papers accompanies this submission.

The Department liaises closely with colleagues in Planning Service during the development of policy in relation to planning and to building regulations.

Demolitions

8. As this lies outside the remit of building regulations, the Department has not entered into any discussions with the Health & Safety Executive about a potential role for Building Control in the control of demolitions. We have discussed this matter with Building Control on a number of occasions and advised them to pursue it directly with the Health & Safety Executive.

Application to existing buildings

9. When carrying out alterations to existing buildings, some of the requirements of the building regulations are likely to be triggered; for example Part F (Conservation of fuel and power) requires cost-effective consequential improvements to be carried out to the existing building fabric when carrying out major refurbishment of certain buildings.

It is not normal practice to introduce a new primary power unless there is a specific intention to use it at a later stage, and any proposal to introduce a speculative power in relation to existing buildings would be likely to meet with resistance from OLC. In addition, any change to primary legislation would require it to be assessed at drafting stage rather than after it has become enshrined in legislation (by which stage it has to a great extent become a fait accompli). There are major potential human rights, economic and enforcement issues associated with introducing

such a power and it could not be written into the existing Bill without full consideration and consultation.

Council databanks

10. The introduction of Home Information Packs would be a matter for the Department for Social Development. However this Department understands that there are no current proposals to introduce such a requirement in Northern Ireland.

The format of the register that District Councils will have to maintain under clause 9 of the Bill will be established by subordinate legislation, which will be subject to full consultation. The Department will consider any proposals put forward then as to the type of information that should be included. The prescribed register itself may form part of a larger database held by district councils. The Department accepts the logic of having uniformity in the data stored across council areas, however the retention of data outside the scope of the building regulations register would be a matter for the councils themselves to agree upon.

Duty to promote sustainable development

11. Section 25(1) of the Northern Ireland (Miscellaneous Provisions) Act 2006 states that:

"A public authority must, in exercising its functions, act in the way it considers best calculated to contribute to the achievement of sustainable development in Northern Ireland, except to the extent that it considers that any such action is not reasonably practicable in all the circumstances of the case"

In addition s.109 of the Local Government Act (Northern Ireland) 1972 allows councils to inform their constituents by a number of means of any matter relating to their functions.

As this duty is already established by statute, the Department does not consider it necessary to impose similar duties on District Councils through the Bill.

Microgeneration

- 1. The Department for Social Development has responsibility for housing matters in Northern Ireland. Minister Ritchie has announced that from April 2008, the Code for Sustainable Homes will apply to all new social housing in Northern Ireland, aiming initially at achieving Level 3 of the Department for Communities & Local Government's Code for Sustainable Homes. There has been no further adoption of the Code within Northern Ireland; however the Code was intended to be a road map for the future development of building regulations and the proposed 2010 and 2013 amendments to the regulations will raise the standard to Levels 3 and 4 respectively of the Code.
- 2. There has not yet been a declaration by any Minister that the 2016 target for zero-carbon homes will be adopted in Northern Ireland. As it is Departmental policy to harmonise with England & Wales in the making of building regulations, it is likely that we will continue to review Part F (Conservation of fuel and power) of the Building Regulations (NI) 2000 to bring it to a comparable standard to that in England & Wales as has been stated for the 2010 and 2013 standards.
- 3. Houses built to Levels 5&6 of the Code for Sustainable Homes will require the use of renewables to achieve these targets. According to evidence submitted to the Committee by the Energy Saving Trust, microgeneration will become necessary in most apartments from Code level 3 (i.e. the proposed 2010 amendment). Many more buildings will require microgeneration to

achieve the 2013 target of 44%, and beyond this target renewable energy sources will become mandatory for all new buildings.

- 4. The proposed amendment to building regulations that will eventually result in a further 44% reduction in carbon by 2013 equates to Level 4 of the Code for Sustainable Homes.
- 5. Both the Energy Saving Trust and the Carbon Trust have carried out research on the cost-effectiveness of renewable technology that has been used to inform national strategy on microgeneration. The EU has produced a renewable energy policy that requires the UK to generate 15% of its energy from renewable sources by 2020. The National Action Plan for achieving this target is being developed by the Department for Business, Enterprise and Regulatory Reform, with local input to the Plan provided by the Department for Enterprise, Trade and Investment. It is up to each member state to determine how much of the target comes from onsite energy generation. Evidence presented to the Committee has indicated that if the industry is give sufficient notice of the requirements of new standards, it will gear itself up to meet these requirements. The Minister has already announced the proposed new standards for building regulations that will come into effect by 2013.
- 6. When building regulations were first introduced in Northern Ireland, they came under the remit of the Ministry of Finance, primarily due to that Ministry's responsibility for the Crown estate. In 1984, responsibility for the estate transferred to DoE along with responsibility for building regulations and sponsorship of the construction industry. Officials were not privy to the reasons behind the 1999 transfer of these functions to the Department of Finance & Personnel.
- 7. "Macro-generation" schemes such as community heat networks or larger-scale wind generation for new housing developments are matters that have been taken forward elsewhere in the UK through the planning framework, and locally Planning Service included such a proposal in its recent consultation on Planning Policy Statement 18 Renewable Energy.

Protected Buildings

The Department has given further consideration to the wording of clause 2 and will put forward an amendment at the next stage to replace "have regard to" with "take account of". It would not be possible to introduce a more stringent duty on a district council without also introducing an appropriate sanction should it not carry out that duty.

DoE's Environment & Heritage Service, in conjunction with Building Control, issued guidance to district councils on the application of Part F (Conservation of fuel and power) to historic buildings. Rather than impose additional statutory duties on district councils it would be preferable to expand this approach to address those buildings not covered by the definition in clause 2, and the Department will raise this matter at its next meeting with Building Control officials.

Publishing the outcome of appeals

During evidence on 14th May the Department stated that information in relation to appeals is published on its website. Whilst such information is published for circulation to District Councils, it is still in the process of being summarised for inclusion on the Departmental website. We would anticipate that this information will start to appear on the website within the next few weeks.

Additional comments from the Northern Ireland Building Regulations Advisory Committee

The Department welcomes Mr Martin's comments and looks forward to working closely with Building Control to develop a robust mechanism for considering type approvals.

Additional comments from Northern Ireland Environment Link (NIEL)

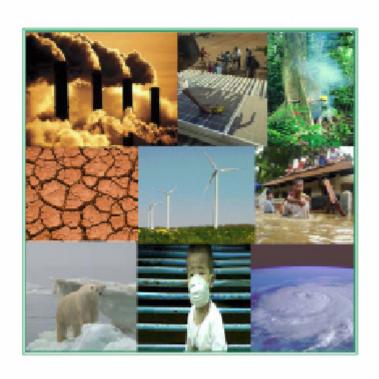
The proposals in the NIEL paper are broadly in line with future policy development as enabled through the provisions in this Bill, particularly those relating to the expansion of the principles to include sustainable development, the expanded matters on which regulations may be made and low or zero carbon systems. The Building Regulations already encourage and facilitate the incorporation of renewable technologies which are anticipated will become more commonplace as emissions standards are tightened. This should lead to an expansion of the renewables market and a consequent reduction in cost. Paragraph 9 above (Building Regulations (Amendment) Bill) refers to the contribution which Building Regulations can make to existing buildings.

A number of proposals in the NIEL paper come under the remit of DETI, which has existing programmes in place through for example the Carbon Trust, Action Renewables and the Energy Savings Trust.

Norman Irwin DFP DALO

Memoranda and Papers
Other

CLIMATE CHANGE COALITION



What is the Climate Change Coalition NI?

Vision

A world in which human-induced climate change is contained at a level that will allow all of humanity to prosper, by means that enables social, environmental and economic justice for all.

Mission Statement

The Coalition will publicise the need for individual action to combat climate change and will promote policy changes that will encourage and facilitate individual, governmental and corporate action to stop human-induced climate change having terrifying consequences.



Manifesto

Without urgent action, climate change is very likely to devastate life on earth as we know it. Hundreds of millions of people, particularly the world's poorest and most vulnerable, will be put at severe risk of drought, floods, starvation and disease. Species and habitats are also at risk with scientists warning that by the middle of the century significant numbers of species could face extinction.

High emitting countries, with their responsibility for historic emissions, must reduce their greenhouse gas output as well as helping poorer countries adapt to existing climate change. But because all countries share the obligation to ensure that damaging global warming is permanently avoided, each must commit to policies to guarantee that global greenhouse gas emissions decline beyond 2015.

The Coalition believes that there are strong moral, economic, social and environmental imperatives for Northern Ireland to contribute its fair share of global emissions cuts in order to combat global climate change, and that the Northern Ireland Assembly should:

- Support the International Negotiation Process for global warming to peak at no more than 2° Celsius above pre-industrial levels – there is international consensus that this is the threshold beyond which we risk catastrophic climatic change. This will mean global greenhouse gas emissions must peak by 2015 and then decline thereafter.
- Set an Annual Northern Ireland Carbon Budget to enable an immediate and sustained decline in Northern Ireland's greenhouse gas emissions by an average of at least 3% per annum. Having opted into a UK. Climate Change Bill, Northern Ireland should set legally binding regional targets to reduce our carbon dioxide emissions by 80% of 1990 levels by 2050, which will be necessary to try to ensure temperatures do not breach this 2°C threshold.
- Assist the Poorest Countries and Biodiversity (in Northern Ireland and around the world) to Adapt to the Unavoidable Effects of Climate Change by urging the UK, Ireland and the EU to support and strengthen the UN's international adaptation fund helping developing countries to protect themselves against climate change happening now. They should also transfer low/zero carbon technology to developing economies to allow for sustainable growth and support programmes helping biodiversity locally and across the world adapt to climate change.

The Climate Change Coalition (NI) will strive to generate public support for personal and political action pursuant to the above objectives. Within this shared framework members will promote their own approaches to aspects of the challenge ahead.















































CLIMATE CHANGE COALITION

THE

NORTHERN IRELAND

Contact us at Northern Ireland Environment Link 89 Loopland Drive BT6 9DW info@nienvironmentlink.org 028 90455770





The Climate Change Coalition (NI)

- Willhout urgent action, climate change is very likely to devastate life on earth as we know it.
 The world's poorest and most volneable are, and will confinue to be, affected most.
 Species and habitats are also at lisk.
 Northern leveland will not escape negative impacts.
 High emitting countries must reduce their emissions.

- There are strong moral, economic, social and environmental imperatives for Northern Ireland to contribute its fair share of global emissions cuts

Симите Сников Сольтон

The NI Assembly Should:

- Support the international Negotiation Process for global warming to peak at no more than 2 degrees Celsius above pre-industrial levels.
- > Set an Annual Northern Ireland Carbon Budget to enable an immediate and sustained decline in Northern Ireland's greenhouse gas emissions by an average of at least 3% per annum.
- Assist the Poorest Countries and Biodiversity (in Northern Ireland and around the world) to Adapt to the Unavoidable Effects of Climate Change.

Симяте Симное Сольтом

A Northern Ireland Climate Bill

Legally binding CO₂ reduction targets for Northern Ireland.

- At least 80% reduction on 1990 carbon dioxide emissions levels by 2050.
 Aviation and Shipping emissions included in
- Average of 3% annual reductions with action plans for 5 year carbon budgets.

Сымкте Снаже Сольтом

A Northern Ireland Climate Bill

- Emissions reductions achieved in Northern Ireland (developing countries supported through technology transfer)
 Emissions credits a last resort and only if additionality can be proven
 Annual progress reports to the Assembly from the Committee on Climate Change.
 Collection proceedible on Emission than the

- Collective responsibility on Executive to achieve targets

Симите Снамов Солитом

The Department's Role.....

Budget, Investment Strategy and Strategic Investment Board

- Investment Board

 > Sustainable Development: move towards a low carbon economy

 > Conduct Climate Change Assessments of all policies and major spending programmes

 Carbon Budgets key component in annual budgets and in CSRs

 The Stern Review Invest to save'

CLINATE CHANGE COALTTON

Summary of Actions	
Support a NI Climate Bill – sign NDNM Invest to save – lead NI towards becoming a low carbon economy Move towards Sustainable Procurement Improve Building Regulations Support renewable energy Introduce Rates Incentives Create Action Plan for achieving a Zero Carbon by 2015	
CLINATE CHANGE COALTON	

4

Sustainable Energy Association

SUSTAINABLE ENERGY ASSOCIATION

will in itself ensure that only the best products and quality suppliers will survive, lowering costs and improving the already high efficiencies of renewable technologies.

The recent announcement by the EU commission included a UK target of "15% of energy derived from renewable resources by 2020." This would be a seven fold increase from our current figure of 2% in just 12 years. Again, this is undentably a case for mandatory micro-generation. The very implementation of the Code for Sustainable Homes in England and Scotland, whiting his being fast-tracked in Wales, and soon to be implemented in a similar way in the Republic of Ireland, will leave Northern Ireland as the only part of these islands not following the highest form of these standards. By the time it comes for us to have zero carbon homes in 2016, we could be playing catch-up without a renewable sector, it having been undermined in 2008.

In the Budget, the Minister stated that "The DETI will receive an additional £14 million to fund projects including the promotion of investment in innovation amongst local firms, as well as the commercial exploitation of research projects in the renewable/energy sector and research into the Renewables Technologies." Aswell as this, "The Department of Agriculture and Rural Development will

receive an additional £7 million for research into

renewable energy and the promotion of research and development in agri-food and rural enterprises"

Whilst money for renewable is welcomed, we would urge that this be directed to a continuation of the Reconnect grant scheme or similar alternative, which can then provide ample time for the Assembly to pass the necessary legislation on renewables in building standards.

Whilst in the Republic of Ireland and indeed in the mainland UK there appears to be greater government support for the renewable energy industry, here in Northern Ireland we are pulling back from previous commitments and indeed almost all parties Manifesto commitments made only last year.

It appears that the Northern Ireland Building Regulations Advisory Committee were in favour of reducing carbon emissions but opposed to mandatory renewables. This does not take into consideration the fact that the decision of the Department was based on 2006 figures which do not properly reflect the comparison of renewable and fossil fuels and which are, in any case, based on pay back.

Table 6 of the Regulatory Impact Assessment by DEFRA is based on payback. It states that a Biomass Boiler costs on average £4000, an annual cost saving of £410 is made and lifespan is 20 years. Payback therefore is 9.76 years. However, an oil boiler and tank will cost £1500 now under the 2006 regulations has the same efficiency of around 92%. In this case, there is no payback and there is no saving. Rather, over the lifespan of 20 years, fuel will continue to rise as oil stocks run out, pollution and emissions will continue to rise and people living in fuel poverty will increase.

Regarding the decision of the Minister, some Questions which we believe to be relevant are;

What level of consultation was there on this decision?

What lobby interests were involved?

What other plans are there in place or to be announced to help us meet our draft programme commitments?

Can this decision be revisited with a view to make recommendations that it is reversed?

How is Northern Ireland going to play its role in achieving the 15% target by 2020?

SUSTAINABLE ENERGY ASSOCIATION

will in itself ensure that only the best products and quality suppliers will survive, lowering costs and improving the already high efficiencies of renewable technologies.

The recent announcement by the EU commission included a UK target of "15% of energy derived from renewable resources by 2020." This would be a seven fold increase from our current figure of 2% in just 12 years. Again, this is undentably a case for mandatory micro-generation. The very implementation of the Code for Sustainable Homes in England and Scotland, whiting his being fast-tracked in Wales, and soon to be implemented in a similar way in the Republic of Ireland, will leave Northern Ireland as the only part of these islands not following the highest form of these standards. By the time it comes for us to have zero carbon homes in 2016, we could be playing catch-up without a renewable sector, it having been undermined in 2008.

In the Budget, the Minister stated that "The DETI will receive an additional £14 million to fund projects including the promotion of investment in innovation amongst local firms, as well as the commercial exploitation of research projects in the renewable/energy sector and research into the Renewables Technologies." Aswell as this, "The Department of Agriculture and Rural Development will

receive an additional £7 million for research into

renewable energy and the promotion of research and development in agri-food and rural enterprises"

Whilst money for renewable is welcomed, we would urge that this be directed to a continuation of the Reconnect grant scheme or similar alternative, which can then provide ample time for the Assembly to pass the necessary legislation on renewables in building standards.

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How is Northern Ireland going to play its role in achieving the 15% target by 2020?

SUSTAINABLE ENERGY ASSOCIATION

We wish to speak to the Committee on this matter and would appreciate it if they would allow us to make an oral presentation on these issues.
Many thanks
John Hardy
Secretary
Sustainable Energy Association
Saint Patrick Centre
Downpatrick
County Down
BT30 6L2
07515733347

Sustainable Energy Association Briefing to Finance and Personnel Committee April 2nd 2008

This document[1] is intended to provide evidence to the Committee that demolishes the advice given to the Minister which resulted in his decision not to proceed with mandatory 10% renewable in all homes in the new building regulations.

The arguments given were:

1. Lack of capacity in industry to deliver.

Dealt with in this document. There are now over 850 qualified installers in Northern Ireland.

2. Lack of cost benefit in the technologies.

Dealt with in this document and by industry representatives.

3. Unproven nature of the technologies.

To be dealt with by Gabe McArdle of Thermomax, who have been manufacturing and exporting world-class renewable technology from Bangor, County Down for over 20 years.

4. Lack of precedence for this policy direction.

London: The Mayor of London has introduced proposals that developments must achieve carbon emission reductions through mandatory onsite renewable energy from 10-20%.

Dublin: In the Republic of Ireland on the 1st July 2008 new building regulations will mandate 10kwh per annum of thermal energy per metre squared of building or 4kw per annum of electrical power, whilst reducing overall energy consumption by 40% initially and 60% later.

[1] Appendices were provided but were not in a suitable format to include in this report.

Northern Ireland Building Regulation Advisory Committee (Nibrac)

Briefing Note to Committee for Department of Finance and Personnel

The Building Regulations (Amendment) Bill 2008

1.0 INTRODUCTION

- 1.1 The purpose of this briefing note is to set out the views of the Northern Ireland Building Regulation Advisory Committee on the compilation of the proposed Building Regulations (Amendment) Bill 2008.
- 1.2 Role of NIBRAC and Sub-Committee Membership

The Northern Ireland Building Regulations Advisory Committee (NIBRAC) was set up by the government to advise the Department on the introduction of new building regulations. Its members, sixteen in all, are appointed by the Minister in line with the rules of the Nolan Commission. They are appointed as individuals and representative of their expertise in the industry. They do not represent their employer or any other grouping. They are appointed for a three year term, with members serving only two consecutive terms, and are subject to the normal rules governing such bodies e.g. vested interest declaration, probity and confidentiality. The full NIBRAC meets three or four times a year but sub-committees set up to look at sections of the regulations meet more frequently, reporting to the main committee. The committee is facilitated by officers from the Building Regulation Unit of the Department.

As Chairman I chair the main Committee and am an ex-officio member of all sub-committees

Membership of the NIBRAC sub-committee that considered the policy proposals of the new bill was as follows:

- Orla McCann (Disability Action) Chairperson
- Billy Gillespie (Northern Group Building Control)
- Cllr Jack Patterson (Down DC)
- Brian Grahame (Royal Society of Ulster Architects)
- Douglas Fairweather (Royal Inst of Chartered Surveyors)
- Tom Kirk (NHBC)
- Cllr Anne McAleenan (Down DC)
- Stephen McAuley (Federation of Small Businesses)
- Donald McQuillan (Inst Structural Engineers)

2.0 BACKGROUND

- 2.1 NIBRAC very much welcomes the opportunity to present its views, along with other professional organisations to the Committee on the Amendment Bill and its involvement in the production of that Bill.
- 2.2 To date two public consultations on the draft bill were carried out in 2004 and 2005 We received a 10% response rate, mostly positive, a few negative or non committal on a variety of amendments proposed. We have been working closely on the issues with our parent organisation, the Building Regulations Unit in the Department of Finance & Personnel in acknowledging and addressing the concerns and views, not just of our members but also of the industry through their responses to the consultations. Not everything that the various consultees thought should be in the Amendment was included, however we firmly believe that to the best of our ability, and to get the process to the Assembly all issues have been addressed and are where possible incorporated in the proposed Amendment. We believe that this joined-up approach has resulted in a document that will deliver better regulations, better control and also where possible future proof regulatory needs.

My presentation, to the Committee, therefore, focuses only on those issues that were raised through the Committee as items for debate and I will detail our findings and rationale for our recommendations.

2.3 At the Committee we know that the Building Regulations Order is a document only reviewed every 25-30 years and so must contain provisos that serve the public, government, the industry and the practitioners well over the forthcoming years. It must be inclusive enough to accommodate new technologies, design methodologies and political initiatives. In order to progress the legislation we had to draw a line under it at some point. To keep on including new ideas might delay progress of the Bill. Whilst we hoped to include everything we appreciate that one of the advantages of the current Assembly is that we can, where necessary and subject to parliamentary time, get additional ideas through on amendments. Such a proviso would have proved more difficult under direct rule.

We believe that this amendment proposed by the Department will modernise and future proof the Order.

3.0 COMMENTS ON THE PROPOSED AMENDMENT BILL

3.1 Article 5A – Guidance for purposes of Building Regulations

The move from Technical Booklets (Deemed–to-Satisfy Provisions) to Approved Documents is beneficial to the industry as it permits the Department to include good guidance notes prepared by other bodies that facilitate compliance to be easily included when named.

3.2 Article 8 – Type Approvals by District Councils

The facility for type approvals was welcomed by the Committee as an essential piece in any good regulatory jigsaw. It allows architects and developers who want to build the same building across council boundaries to submit a scheme once for approval. This means that if essentially the same scheme is presented to other councils, they only check those items that are site specific, not recheck the whole application. This saves time, money and ensures conformity of interpretation throughout Northern Ireland. Discussion did take place as to the mechanism of such a scheme and the Committee were of the view that whilst there was not a role for this Department, that the Department for Environment who look after local government issues would need to factor something into any building control system during the Review of Public Administration to ensure the scheme works easily and carries validity.

3.3 Article 19 A – Registers to be kept by District Councils

The Committee felt that this area needed addressing due to the sometimes conflicting demands of Freedom of Information and the Data Protection Act. Unlike applicants to the Planning Service where information is already in the public domain, and rightly so, building control data was judged by some to be privileged between the applicant and the Council. Clarity would be welcomed in this respect.

4.0 ADDITIONAL ISSUES

4.1 Dangerous Buildings and Places

This area came late into the consultation process but there was a general move to include this proviso within the Order as many Councils operate with complex and archaic legislation. The difficulties came when drafting a provision that would encompass all the aspects of the various Council Byelaws but did not either restrict too much, or widen the parameters to far, such as to render the law impossible to enforce. Some authorities, Belfast being one, thought the proposed provision worse than their current legislation. It was deemed better to take it out and think about it more carefully possibly bringing an amendment in at a later date.

4.2 Harmonisation of Regulations

This was discussed by Committee and generally thought, that if possible, it would be a good thing. It must be emphasied that the harmonisation would apply to regulations and not systems as the Committee was of the opinion the system (Local Authority Building Control) worked well in Northern Ireland. Harmonisation was thought to be less likely with the devolution of power to local assemblies. as they might wish to move quicker than other jurisdictions on areas such as reduction of CO2 emissions or to use regulations to tackle important local issues

The current system employed by the Department ensures that Northern Ireland follows closely to England & Wales, building on their experiences, tweaking if required, with a minimum time lag.

4.3 Programme of Work

For planning purposes it is essential that NIBRAC agree with the Department a programme of work. Work can come from a variety of routes:

- Pre-programmed amendments
- European Directives
- Assembly/Ministerial direction.

It was felt that the flexibility is contained within NIBRAC for the public or industry to lobby for changes in that programme where required. The Committee is very aware of impact of the regulations on the industry and does its best to provide the time, and include the right information early enough in the process for changes to be accommodated. The changes made by the Department in on Part F were a model to other jurisdictions as to how this should be done.

4.4 Building Regulations & Microgeneration

Whilst not part of the Order this debate received full attention of the Committee especially the requirement to provide compulsory micro-generation or renewable energy sources on building. The Committee is very aware of the recent public debates following Minister Robinson's announcement on the previous decision. The Committee is absolutely committed to tackle the issues of climate change and to do everything in its power to ensure regulations play their full role. The unanimous recommendation of the full Committee which included renowned academics such as Professor Chris Tweed and Dr Patrick Waterfield was that this was not the best route or methodology to cut CO2 emissions. It was much more preferable to raise the standard level of requirement across the board and leave industry and technology to provide the answers. The Committee requested this recommendation be made to the Minister by the Department. Our understanding is that the Minister has acknowledged our recommendation and instructed the Department to begin preparation for more onerous standards to be introduced.

End of Briefing Note

Trevor Martin Chairman of Northern Ireland Building Regulations Advisory Committee 11 April 2008

Department of the Environment, Hertage and Local Government, Republic of Ireland



Circular Letter PD 3/2007

06 March 2007

To all County and City Managers, Directors of Services for Planning, Town Clerks.

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Planning and Development Regulations 2007 – Micro Renewable Energy Technologies

A Chara,

The event-statement I have been directed by Mr. Dick Roche, T.D., Minister for the Environment, Heritage and Local Government, to refer to the Planning and Development Regulations 2007 (S.I. 83 of 2007) which were signed by the Minister and came into effect on 28 February, 2007.

Purpose of the Regulations

The Planning and Development Regulations, 2001 (5.I. 600 of 2001) have been amended by the substitution of a new Class 2 into Part 1 of Schedule 2 of the Regulations. The effect of the change is to allow the erection or installation of certain micro-renewable technologies without planning permission in specified circumstances. The attached schedule summarises the limitations and conditions involved. The exemptions complement the limits on the grants available from Sustainable Energy Ireland under the Greener Homes Scheme, with the exception of micro wind turbines, for which no grants are available under that scheme.

The limits and conditions were determined following a public consultation process undertaken by the Department in late 2006.

The exemptions are consistent with the Government's overall approach of facilitating a greater penetration of renewable technologies at residential, commercial and power generation levels.

Implementation of the Regulations

In implementing the new provisions it should be noted that:

· It is not intended that the exemptions thresholds should influence decisions by planning authorities on applications for permission for installation or erection of micro renewable technologies which fall outside the scope of the exemptions.

In other words, applications for permission to exceed the exemption limits, for example, an application to install a salar panel with a total aperture area in excess of 12 square meters should be considered in their own right, in keeping with the proper and sustainable development of the area and in line with relevant policies and guidelines.

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 The existing restrictions on exempted development as set out in Article 9 of the Planning and Development Regulations, 2001 still apply. This article states that the carrying out of particular development, notably where there is an impact on sites or objects of archaeological, geological or historical interest, shall not be exempted development.

In these circumstances, where an individual wishes to install any of the micro-renewable technologies that are otherwise exempt, they must apply for planning permission.

It should be further noted that, notwithstanding the exempted development provisions of Section 4 of the Planning and Development Act 2000, Section 57 requires that the carrying out of works which materially affect the character of protected structures shall continue to require planning permission.

Under the new provisions, solar panels within the limits set out in the Regulations
will be allowed on either the front or back of a roof without the need to seek
planning permission.

However, the position in relation to the installation of Veluce windows remains unchanged.

Further Role of the Planning Code in Supporting Renewable Energy Uptake
These draft regulations are the first set of proposed exemptions designed specifically to
enable the planning system to help expand the use of renewable energy. Further
research will be carried out later this year in the context of farms, industrial sites and
commercial/retail centres, as a precursor to consultation on the planning implications of

these issues.

In the meantime, any views based on practical experience in the operation of these Regulations would be welcomed and should be directed to the Planning Section of the Department by email at: planning@environ.ie. A copy of the Regulations and a summary of the exemptions are attached for information.

Any queries in relation to these Regulations should be addressed to Ms. Goretti Reynolds, tel: 01-888 2895, e-mail@goretti.Reynolds@environ.ie.

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Philip Nugent

Assistant Principal Officer

Planning Section



Proposed Amendments to the Exempted
Development Provisions of the Planning and
Development Regulations 2001 in Respect of MicroRenewables for Domestic Use

Summary Paper on Public Consultation Process held in November 2006

Overview

A total of 65 submissions were received from a wide variety of stakeholders during the 3-week consultation period. Almost all of the submissions indicated support for the introduction of planning exemptions for micro-renewables as a means of encouraging wider uptake.

Some respondents favoured extension of the exemptions to commercial and small industrial buildings. However, on the basis of the significant disparity between home energy requirements and those of industrial and commercial buildings, it was considered that this would not be practical at this time. In other words, while the level of energy output from the technologies at the proposed exemption thresholds could meet a significant proportion of home energy/heating requirements, they would provide a negligible proportion of the needs of commercial or industrial developments. To make a significant contribution to these buildings' energy requirement, the power output and, by extension, the physical scale of the renewable technologies would obviously need to be considerably greater than those for domestic use. For these reasons the current proposals set out exemptions for micro-renewable technologies for domestic use only.

It was therefore recommended that further research be carried out to examine how the planning system can facilitate increased uptake of renewable energy usage in other sectors (for example, in the context of agricultural, industrial, or commercial applications).

Following the public consultation process the draft Planning and Development Regulations 2007 were laid before both Houses of the Oireachtas on 31 January last and referred for debate at the Joint Oireachtas Committee on the Environment and Local Government on 15 February. On foot of the message conveyed by the Committee to the Dail and Seanad, the Oireachtas approved the regulations on 20 February. The Minister for the Environment, Heritage and Local Government, Mr. Dick Roche T.D., signed the regulations on [...] March.

Legislative Background

The installation of many domestic renewable energy developments, including the placing of solar panels to the rear of houses, would already be exempted development under section 4(1)(h) of the Planning and Development Act 2000. This provides that development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure is exempted development if the works affect only the interior of the structure or do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures. However, this provision does not make specific reference to micro-renewable technologies, nor does it provide planning authorities with any degree of guidance as to where any such apparatus may be sited, or what conditions are to be attached.

Last year, therefore, Minister Roche directed the Department to review the exempted development regulations and to carry out research into the planning implications of microrenewable energy technologies, with a view to providing specific exemptions wherever possible to encourage uptake. On foot of this work a consultation paper outlining proposed exemptions was issued in November 2006 inviting submissions from members of the public, key interest groups and stakeholders.

1. Key Points Raised In The Submissions

Below is a summary of the main points raised. In this summary for reader convenience, in the case of each technology covered by the exemptions the main conditions are set out as they appeared in the original consultation document. The main points related to these are then discussed, followed by a summary of how the proposed condition appears in the final regulations.

As anticipated, the bulk of the submissions focused on the proposed exemptions for micro wind turbines and solar panels.

1.1 Micro Wind Energy

Turbine Height

Consultation Document Recommendation

The tower height conditions set out in the November Consultation Document provided for a maximum mast height of 10m on the basis of visual impact and a minimum of 6m for safety reasons.

Submissions received

A large number of the respondents were of the view that the maximum exempted tower height of 10m was too restrictive. It was argued that turbines up to a height of 18-24m should be exempt from planning permission. Many of the submissions argued that the proposed exemption, allowing a maximum tower height of 10m, would restrict the capacity of a turbine to harness sufficient wind, compromising financial viability of project, as well as potentially increasing turbine noise and wear and tear.

Regulations as commenced

As is the case with regard to the other technologies, the exemptions are designed to strike a balance between encouraging uptake and minimising safety risks and unfavourable impacts on neighbouring properties. For this reason, it was not considered prudent to exempt turbines of 20m+. However in order to provide as much flexibility as possible to users, only a maximum overall turbine height (mast + rotor), and a minimum clearance of 3m between the lowest tip of the blade in the lowest point of its arc and the ground are required. In effect this means that the overall maximum height has been increased to 13m.

Rotor Length

Consultation Document Recommendation

It was proposed that maximum exempted blade length would be set at 2m.

Submissions received

The blade length exemption was considered to be too restrictive by many of the respondents, as this would effectively exclude turbines with output of up to 2.5kW. There was also some concern over the phrase 'rotor length' as blades can be attached to a large diameter hub allowing a much larger rotor diameter.

Regulations as commenced

On the basis of the submissions received the recommended maximum size of the turbine blade was increased from 2m per single blade to a 6m blade diameter. This removes any ambiguities in interpretation with regard to the size of the blades and of their central hub.

More significantly from an energy generation perspective the more generous limit will bring the 2.5KW range of turbines under the exemptions. This will potentially result in an increase in the electricity generating potential and economic viability of the turbines to a level that will enable households to run a greater level of appliances.

Distance to Boundary

Consultation Document Recommendation

The proposed condition would have required wind turbines to be located one and a half times the total structure height from any party boundaries. On the basis of the previous height conditions which allowed a maximum overall height of 12m (10m mast + 2m rotor blade length), this would have required the turbine to be positioned up to 18m from any neighbouring boundary.

Submissions received

This condition generated a lot of commentary from respondents. Most of those who addressed this specific issue argued that it would be unduly restrictive, and would mean that the exemption would favour rural users over urban users.

On the other hand, a number of respondents raised concerns regarding the potential cumulative visual impact arising where a number of neighbouring households erect micro-wind turbines. A minimum distance from adjoining boundaries will help allay and counter these concerns.

Regulations as commenced

The condition was inserted primarily on safety grounds. The intention of course was to ensure that in the event that the turbine structure was to fall down, there would be no potential to impact upon neighbouring properties. It is considered that this remains a valid concern. It is also worth bearing in mind that proximity to building structures can have a deleterious impact on the efficiency of turbines by compromising the wind take. However, it was agreed that the previous condition was unduly onerous and this has therefore been amended in the final regulations to require that a turbine must be the total tower height + 1m from an adjoining boundary. For turbines of maximum tower height this requires a clearance of 14m, but will obviously be less for turbines below the maximum allowable height.

Industry comments were quite unequivocal about the fact that wind turbines require clear, uninterrupted air flows to work effectively. Otherwise they would be subject to wind-take and to high levels of turbulence, thereby reducing efficiency and increasing maintenance requirements.

Noise

Consultation Document Recommendation

No condition relating to noise thresholds had been included in the consultation document.

Submissions received

A large number of concerns were raised by respondents over potential excessive noise emissions from the operation of the turbine, and in particular from poorly operated turbines. The inclusion of a noise related condition was suggested by members of the public and industry representatives alike.

Regulations as commenced

In response to these concerns a maximum noise level based on noise levels at neighbouring properties is stipulated. This particular level is chosen on the basis primarily of the submission received from Sustainable Energy Ireland.

While on the face of it this noise condition actually introduces a second distance condition, the intention here is entirely distinct from the boundary distance stipulation. It is a practical condition that will help achieve a balance between encouraging uptake and minimising unfavourable impacts on neighbouring properties. Manufacturers of such turbines are in effect being incentivised by this condition to reduce noise levels to this level or below as an operating industry standard, so the condition is also a means by which the quality of turbines available on the Irish market will be improved.

Building Mounted Turbines

Consultation Document Recommendation

The issue of exempting wind turbines attached or erected on buildings elicited a wide range of views. The consultation paper proposed that these turbines would not be exempt. The majority of support for exempting these turbines came from end users and prospective users.

Submissions received

It was argued that the approach set out was unnecessarily restrictive and that they should be included as exempted development subject to conditions such as distance from neighbouring house, inserting vibration absorbing brackets and proper grounding. It was suggested that as there are grants for building mounted turbines in the UK, these should be included under the current proposals.

On the other hand, a number of respondents including industry experts and manufacturers agreed with the Department's proposals because of concerns that poorly maintained turbines are likely to be a risk to people directly underneath if a mounting failure occurs. It was also suggested that visual impact, noise and shadow flicker are likely to be most severe in urban residential areas. It was also argued that the questionable performance of such small turbines means that a limited contribution is likely to be made to reducing emissions. This argument is supported to an extent by arguments made in relation to rotor blade size on stand-alone turbines, whereby smaller blades would hardly contribute enough power to boil a kettle. Also, turbulence around a building is likely to be greater, increasing the need for more frequent inspections and maintenance.

Regulations as commenced

Very careful consideration was given to all of the arguments for and against exemptions for building or roof mounted turbines. On balance however, it was felt that at the present time the weight of arguments was against extending the exemptions. It should be noted that in the UK strict building standards apply to the installation of these turbines, meaning that the situation there is somewhat more complex than simply fixing a turbine to a building. No equivalent

standard has been developed here in Ireland yet and as such the planning code is the only means by which safety considerations relating to these turbines can currently be addressed. The Department will further examine issues relating to building mounted turbines.

Other issues

The following conditions did not attract significant response during the consultation process. As a result, the recommendations as they originally appeared in the November consultation document have not been altered.

Behind the front wall of the house

The requirement that turbines can only be located behind the front wall of a house, thereby limiting their visibility from the road, is unchanged from the original consultation document. This is in line with conditions attached to other exemptions set out in the current regulations, e.g., the construction of a garage or a shed, or the erection of a satellite dish. This condition did not attract significant response.

Number of Turbines

The number of turbines is limited to one per house despite suggestions that the number of turbines should be determined by the site/plot size. The potential impact on visual amenity from a mini wind energy development is considered inappropriate.

Absence of logos or advertising

This condition is proposed on the basis of concerns that wind turbines would be used as a means of advertising either the name of the manufacturer or indeed of any product or service and which could lead to inappropriate visual impacts, particularly if luminous signs or paint were used.

1.2 Solar

Surface Area

Consultation Document Recommendation

The consultation document set out a maximum panel area of 12 square metres or 50% of the available roof area, whichever is the lesser.

Submissions received

While the majority of the submissions supported the exemption generally, some considered this to be too restrictive. However, this exemption is based on the threshold used by Sustainable Energy Ireland in assessing applications for grant aid under the Greener Homes Scheme. It is also considered to be ample in terms of the water heating requirements for a large household.

Regulations as commenced

In order to eliminate uncertainty, the condition has been amended to clarify that the 12 square metres refers to the total aperture area – the active part of the solar panel – and not the gross area of the installation.

Distance From Wall or Roof

Consultation Document Recommendation

A maximum distance of 15cm between the plane of a pitched roof and the solar panels was allowed under the earlier proposed recommendations.

Submissions received

It was suggested that the distance should be changed to allow at least a 25 degree variance from the roof's pitch. However, this condition had been included to minimise the visual impact of solar panels and on balance it was not considered necessary to amend it.

It was also argued and it has been accepted that the 15cm requirement is not practical for solar panel installation on flat roofs.

Regulations as commenced

The final regulations maintain the 15 cm maximum distance for pitched roofs but allow a distance of 50cm between the plane of a flat roof and the upper edge of a solar panel.

Distance from roof edge

Consultation Document Recommendation

This condition was not included in the consultation draft.

Submissions received

A number of respondents suggested that the same condition applying to air source heat pumps in relation to distance from wall or roof edges should was equally valid for solar panels. This is based on safety considerations, to minimise potential for the air pump collectors to be lifted from walls or roofs by strong winds.

Regulations as commenced

The regulations require that solar panels be placed a minimum of 50cm from the edge of the roof on which they are mounted.

Height of Free Standing Arrays

Consultation Document Recommendation

It had been recommended that the maximum height of a free-standing solar array would be 1m.

Submissions received

This condition was chosen on the basis of a similar threshold applying to decking. However, a number of the submissions suggested that this condition was too restrictive. It was suggested a small relaxation of this condition to allow, for example, a maximum height of 2 – 3 metres, could significantly increase the viability of free standing solar arrays.

Regulations as commenced

In recognition of the fact that in reality the installation of decking to the rear or side of a dwelling raises different planning considerations (e.g. overlooking adjoining properties), this exemption threshold was doubled to 2m.

Minimum Open Space Condition – Free Standing Arrays

Consultation Document Recommendation

This condition was not included in the consultation recommendations.

Regulations as commenced

While the absence of this condition did not attract any comment, it was considered that the new exemptions for free standing solar arrays should be consistent with other exempted developed to the side or rear of a dwelling. The condition requiring a minimum of 25 square metres of free space on installation of a free standing array is consistent with the exempted development provisions for building an extension or erecting a shed where a minimum area for recreational space must be ensured.

1.3 Air Source Heat Pumps

Consultation Document Recommendation

Air source heat pumps were recommended to be exempted development provided that:

- Noise levels at the nearest neighbouring inhabited dwelling is <43dB(A) or <5dB(A) above background noise.
- They are at least 50cms from the edge of the roof
- They are located not forward of the front wall of the house
- Submissions received

While there were very few submissions received in relation to air source heat pumps one respondent suggested that the collector area allowed should be increased to 5 square metres.

Regulations as commenced

On balance it was considered that the exemption as originally set out was appropriate.

1.4 Ground Source Heat Pumps

Consultation Document Recommendation

The only proposed condition attached to ground source heat pumps was that on installation of the apparatus there would be no more than a 1m alteration to the pre-installation ground level. This corresponds to an existing requirement in relation to landscaping works.

Submissions received

No respondents addressed the proposed condition.

Regulations as commenced

The final regulations maintain the earlier recommended 1m condition regarding ground works.

1.5 Small Scale Biomass

Consultation Document Recommendation

It was recommended that the previous Class 2 of the exempted development provisions be amended to introduce an exemption for biomass flues and to provide a more general exemption for fuel storage tanks/sheds (the previous exemption had applied only to oil storage tanks).

Submissions received

The main area to receive commentary was the provision of an exemption for biomass storage. It was suggested that an exemption should be considered for a sustainable fuel store up to 6-10 cubic metres.

Regulations as commenced

On balance it was considered that the exemption as proposed was adequate and the final regulations are in line with the original recommendations.

1.6 Small Scale Hydroelectricity

In general, there were very few suggestions regarding this technology. One respondent suggested that small units up to 1kW with certain provisions (fish guards and maintenance of a residual flow) should be considered exempted development. Another submission suggested that where there is a pre-existing mill, mill-race, dam, weir or sluice, a relatively limited set of conditions might allow exemption of certain small scale hydroelectricity developments without compromising the protection of an aquatic habitat. As there is unlikely to be a large demand for this technology, it is still considered that the planning process is the best way to handle applications for small-scale hydroelectricity. Therefore, it is not intended to amend the proposed Regulation. The weight of industry comment agreed with the proposed approach as set out in the consultation document.

1.7 Other Issues Raised

Potential Impact on Protected Structures

There were some concerns expressed regarding the installation of micro-renewable technologies within archaeological areas and the curtilage of protected structures, etc. However, there is no question of the exemptions set out under the Planning and Development Regulations 2007 applying to protected structures.

This is because Article 9 of the Planning and Development Regulations 2001 requires that where the carrying out of development that is otherwise exempt could have one or other of a number of listed effects, including impacts on sites or objects of archaeological, geological or historical interest, it shall not be exempted development. In these circumstances, where an individual wishes to install any of the micro-renewable technologies that are otherwise exempt, they must apply for planning permission. While the 2007 regulations amend the exempted development

provisions of the 2001 regulations, they have no impact on the restrictions on exemptions as set out under Article 9.

Applications for Planning Permission for Development Outside Scope of the Exemptions

A number of respondents asked whether the exemptions thresholds set out implied that applications for development falling outside of the scope of the exemptions would be automatically refused. This is not the case. It is not intended that the exemptions thresholds should influence decisions by planning authorities on applications for permission for installation or erection of micro renewable technologies which fall outside the scope of the exemptions.

In other words, applications for permission to exceed the exemption limits, for example, to install a solar panel with a total aperture area in excess of 12 square metres, will be considered in their own right, in keeping with the proper and sustainable development of the relevant area and in line with relevant policies and guidelines.

Treatment of Renewable Energy Development in Non-Domestic Sectors

Some respondents suggested that the planning code should support the increased uptake of renewable energy across all sectors, not just domestic. The 2007 regulations are the first set of proposed exemptions designed specifically to enable the planning system to help expand the use of renewable energy. Further research is underway to examine how the planning system can facilitate increased uptake of renewable energy usage in other sectors (for example, in the context of agricultural, industrial, or commercial applications), and on issues relating to building mounted turbines.



STATUTORY INSTRUMENTS.

S.I. No. 83 of 2007.

PLANNING AND DEVELOPMENT REGULATIONS 2007.

(Prn. A7/0327)

S.I. No. 83 of 2007.

PLANNING AND DEVELOPMENT REGULATIONS 2007.

The Minister for the Environment, Heritage and Local Government, in exercise of the powers conferred on him by section 4(2) of the Planning and Development Act 2000 (No. 30 of 2000) hereby makes the following Regulations:

Citation and commencement.

- (1) These Regulations may be cited as the Planning and Development Regulations 2007.
- (2) These Regulations and the Planning and Development Regulations 2001 to 2006 shall be construed as one and may be collectively cited as the Planning and Development Regulations 2001 to 2007.

Amendment of Schedule 2.

2. Part 1 of Schedule 2 of the Planning and Development Regulations 2001 (S.I. 600 of 2001) is hereby amended by the substitution of the following for Class 2:

CLASS 2	
(a) The provision as part of a heating system of a house, of a chimney or flue, boiler house or fuel storage tank or structure.	The capacity of an oil storage tank shall not exceed 3,500 litres.
(b) The construction, erection or placing within the curtilage of a house of a wind turbine.	The turbine shall not be erected on or attached to the house or any building or other structure within its curtilage.
	2. The total height of the turbine shall not exceed 13 metres.
	3. The rotor diameter shall not exceed 6 metres.
	4. The minimum clearance between the lower tip of the rotor and ground level shall not be less than 3 metres.
	5. The supporting tower shall be a distance of not less than the total structure height (including the blade of the turbine at the highest point of its arc) plus one metre from any party boundary.
	6. Noise levels must not exceed 43db(A) during normal operation, or in excess of 5db(A) above the background noise, whichever is greater, as measured from the nearest neighbouring inhabited dwelling. 7. No more than one turbine shall be erected within the curtilage of a house.

Notice of the making of this Statutory Instrument was published in "Iris Oifigiáil" of 6th March, 2007.

- 8. No such structure shall be constructed. erected or placed forward of the front wall of
- All turbine components shall have a matt, non-reflective finish and the blade shall be made of material that does not deflect telecommunication signals.
- 10. No sign, advertisement or object, not required for the functioning or safety of the turbine shall be attached to or exhibited on the wind turbine.
- (c) The installation or erection of a solar panel on, or within the curtilage of a house, or any buildings within the curtilage of a house.
- The total aperture area of any such panel, taken together with any other such panel previously placed on or within the said curtilage, shall not exceed 12 square metres or 50% of the total roof area, whichever is the
- 2. The distance between the plane of the wall or a pitched roof and the panel shall not exceed 15 centimetres.
- 3. The distance between the plane of a flat roof and the panel shall not exceed 50
- The solar panel shall be a minimum of 50cm from any edge of the wall or roof on which it is mounted.
- 5. The height of a free-standing solar array shall not exceed 2 metres, at its highest point, above ground level.
- A free-standing solar array shall not be placed on or forward of the front wall of a house.
- 7. The erection of any free standing solar array shall not reduce the area of private open space, reserved exclusively for the use of the occupants of the house, to the rear or to the side of the house to less than 25 square
- (d) The installation on or within the curtilage of a house of a ground heat pump system (horizontal and vertical) or an air source heat pump.
- The level of the ground shall not be altered by more than 1 metre above or below the level of the adjoining ground.
- The total area of such a heat pump, taken together with any other such pump previously erected, shall not exceed 2.5 square metres.
- The heat pump shall be a minimum of 50cm from any edge of the wall or roof on which it is mounted.
- No such structure shall be erected on, or forward of, the front wall or roof of the house. S. Noise levels must not exceed 43db(A) during normal operation, or in excess of 5db(A) above the background noise, whichever is greater, as measured from the nearest neighbouring inhabited dwelling.



GIVEN under my Official Seal, 28 February 2007

DICK ROCHE

Minister for the Environment, Heritage and Local Government

EXPLANATORY NOTE

(This note is not part of the Instrument and does not purport to be a legal interpretation.)

The purpose of these Regulations is to amend Class 2, Part 1 of Schedule 2 of the Planning and Development Regulations 2001 to provide for exemptions in respect of micro-renewable technologies.

Summary Briefing Note on the Rationale for the Introduction of Exemptions to the Planning System for certain Renewable Technologies



The Minister for the Environment, Heritage, & Local Government secured the approval of the Oireachtas on changes to the Planning and Development Regulations in February 2007. The new regulations amend the exempted development provisions of the Planning and Development Regulations 2001 to encourage the uptake of cleaner and cheaper energy from small-scale renewable sources in the home. The exemptions are consistent with the Government's overall approach of facilitating a greater penetration of renewable technologies at residential, commercial and power generation levels.

Where do the new regulations fit into the planning code?

The amendments to the Regulations were made under section 4(2) of the Planning and Development Act 2000. This section sets out the Minister's power to provide, through regulations, for classes of development to be exempted development. Section 262 of the 2000 Act sets out that Regulations made under section 4(2) require positive resolution by both Houses of the Oireachtas. The exemptions for micro-renewable technologies replace the current Class 2, Schedule 2, Part 1 of the Planning and Development Regulations 2001, wherein exemptions relating to development within the curtilage of a house are set out.

How were the proposals shaped?

The installation of many domestic renewable energy developments, including the placing of solar panels to the rear of houses, would already be exempted development under section 4(1)(h) of the Planning and Development Act 2000. This provides that development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure is exempted development if the works affect only the interior of the structure or do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures. However, this provision did not make specific reference to micro-renewable technologies, nor did it provide planning authorities with any degree of guidance as to where any such apparatus may be sited, or what conditions are to be attached.

In 2006, therefore, the Minister directed the Department to review the exempted development regulations and to carry out research into the planning implications of micro-renewable energy technologies, with a view to providing specific exemptions wherever possible to encourage uptake. On foot of this work a consultation paper outlining proposed exemptions was issued in November 2006 inviting submissions from members of the public, key interest groups and stakeholders.

Some 65 submissions were received in total. Almost all of the submissions indicated support for the introduction of planning exemptions for micro-renewables as a means of encouraging wider uptake.

Each submission was carefully considered, and the final regulations were amended quite significantly on the basis of the issues raised. In the main, and in line with the thrust of most submissions, the final regulations were more ambitious.

Will there be further regulations?

These regulations are the first set of proposed exemptions designed specifically to enable the planning system to facilitated the expanded the use of renewable energy.

The Department is currently examining a wide range of issues with a view to encouraging renewable energy uptake in other sectors. As a general rule, it is intended that where possible,

exemptions from planning requirements will be provided. Where planning considerations relating to specific technologies or sectors preclude exemption, the Department will provide guidance to planning authorities to ensure that the planning system plays its part in achieving Ireland's ambitious renewable energy targets.

These include:

- Ambitious targets for the development of renewable-sourced electricity 30% by 2020;
- 30% co-firing of biomass in peat stations by 2015;
- An energy efficiency action plan leading to a 20% improvement in energy efficiency by 2020;
- 5.75% biofuels penetration by 2010;
- 5% of domestic and commercial heat requirements from renewables by 2010; and
- Up to 400 megawatts of electricity from combined heat and power by 2010.

Following on from a recent public consultation process further developments in relation to potential industrial sector users of renewable energies are being examined with a view to presenting proposals for further exemptions to the Oireachtas for positive approval in June.

Do the Exemptions mean that, e.g. larger wind turbines are not allowed?

No. Where an individual wishes to install any class of micro-renewable technology that does not fall within the draft exemptions they may apply, as normally, for planning permission from their planning authority. Planning authorities have been provided with clear guidance on the operation of the exemptions. In this guidance Planning Authorities are advised that any application for permission should be assessed on its own merits, and that wherever possible, applications in respect of micro-renewable technologies should be viewed favourably.

Planning Section, Department of the Environment, Heritage and Local Government, Dublin 25 April 2008.

Briefing Note on Building Control and Building Regulations



Background

- 1. Modern (performance based) Building Regulations were introduced under the Building Control Act 1990 with effect from 1 June 1992. These regulations replaced local (prescriptive) building bye-laws under legislation dating back to 1878.
- 2. The Building Regulations apply to the construction of new buildings and material alterations/extensions/change of use of existing buildings.

3. The Building Regulations comprise of 12 Parts as follows:

Part A (Structure); Part B (Fire Safety); Part C (Site Preparation); Part D(Materials and Workmanship); Part E (Sound); Part F (Ventilation); Part G (Hygiene); Part H (Drainage and Waste Water Disposal); Part J (Heat Producing Appliances); Part K (Stairways, Ladders, Ramps and Guards); Part L (Conservation of Fuel and Energy); Part M (Access for People with Disabilities)

In addition, a set of 12 Technical Guidance Documents (TGDs) are available giving guidance on how to comply with Parts A - M of the regulations.

4. The regulations have been amended periodically, as required.

Responsibility for Complying with the Regulations

5. Compliance with the Building Regulations is primarily the responsibly of the owners and builders of the buildings.

Responsibility for Enforcement of the Regulations

- 6. Enforcement of the Building Regulations is primarily the responsibility of the 37 local Building Control Authorities, each of whom has appointed a Building Control Officer. The authorities are empowered under the 1990 Act to-
- (i) inspect building works in progress and completed new buildings;
- (ii) serve enforcement notices for non compliance with Building Regulations;
- (iii) institute proceedings for breaches of Building Regulations; and
- (iv) seek High Court injunctions if non compliance poses considerable and serious danger to the public.

Building Regulations (Amendment) Bill 2008.

The following text offers a comparison between the proposals now before the Northern Ireland Assembly and arrangements here. DEHLG means the Department of the Environment, Heritage and Local Government, Dublin

Clause 1: Building Regulations: Schedule 1 to the 1979 Order is amended to enable Building Regulations made by the Department to regulate energy performance of buildings, including the proportion of energy used which is to come from a particular source.

DEHLG Position

DEHLG statutory basis for making Building Regulations to transpose the EU Energy Performance of Buildings Directive is under the European Communities Act 1972 and S. I. No. 872 of 2005 titled the European Communities (Energy Performance of Buildings) Regulations 2005. Moreover, S. I. No 666 of 2006 titled the European Communities (Energy Performance of Buildings) Regulations 2006 transposed the requirements of the Directive.

The Building Control Act 1990 provides the statutory basis for making Building Regulations for the Conservation of Fuel and Energy. Part L of the Building Regulations 1997 (Conservation of Fuel and Energy - S. I. No. 497 of 1997, as amended in 2007) sets out the legal requirements for this purpose. Technical Guidance Document L provides guidance on how to comply with Part L.

Part F (Ventilation) sets out the legal requirements for this purpose. Technical Guidance Document F provides guidance on how to comply with Part F requirements.

Clause 2: Protected Buildings: this amendment requires District Councils to have regard to the preservation of the character of protected buildings when carrying out their functions under building regulations.

DEHLG Position:

There is no specific statutory provision under the Building Control Act 1990 in respect of Protected Buildings. Under Class 8 (Exemptions) of the Building Regulations 1997, buildings under the National Monuments Acts 1930 to 1994 are exempt from the requirements of the regulations. Such buildings are also exempt from the requirements of the EU Energy Performance of Buildings Directive. However, under Departmental Architectural Heritage Protection Guidelines for Planning Authorities, which were published in 2004, there is reference to the Building Regulations and their application to historic buildings. These references would be relevant to Part A (Structure), Part B (Fire Safety), Part L (Conservation of Fuel and Energy) and Part M (Access for People with Disabilities)

The legislative provisions for protecting the architectural heritage are contained within Part IV of the Planning and Development Act 2000. Particularly relevant are S.57 (1) which states that any works that would affect the character of a protected structure or proposed protected structure cannot be considered exempted development and S.82 (1) has the same provision for Architectural Conservation Areas. This is regardless of whether or not the works are required to meet the Building Regulations.

Clause 3: Building Regulations Advisory Committee: The process for appointing members is amended to reflect the Office of the Commissioner of Public Appointments for Northern Ireland's Code of Practice, which recommends that nominations to public bodies should come from suitable individuals who meet the application criteria.

DEHLG Position:

There is no such requirement for appointment of members to our Building Regulations Advisory Body (BRAB) under the Building Control Act 1990. Members of BRAB are appointed by the Minister in consultation with appropriate bodies/organisations and are representative of the construction industry, local authorities, Irish Building Control Institute, representative of National Disability Authority and professional organisations. There is a Government requirement for 40% female membership of all state or semi-state Boards. This is complied with in the membership of BRAB.

Clause 4: Provisions as to the making of Building Regulations: the deemed-to-satisfy provision is removed and replaced by a guidance-based system. The scope of Building Regulations is extended to include the protection and enhancement of the environment and the promotion of sustainable development.

DEHLG Position:

DEHLG Technical Guidance Documents are drafted in conjunction with Building Regulations to provide guidance on how to comply with the regulations. Where works are carried out in accordance with the Technical Guidance Documents, this will, prima facie, indicate compliance with the regulations. However, this does not restrict the use of other approaches, provided that the user can demonstrate compliance with the regulations. The primary purpose of our regulations is to provide for the health and safety of people in and around buildings. There are no specific parts of the regulations dealing with Protection and Enhancement of the Environment and the Promotion of Sustainable Development.

Clause 5: Guidance documents: Procedures are set out under which guidance will be prepared and published.

DEHLG Position:

DEHLG Technical Guidance Documents are drafted in conjunction with Building Regulations to provide guidance on how to comply with the regulations. Where works are carried out in accordance with the Technical Guidance Documents, this will, prima facie, indicate compliance with the regulations. However, this does not restrict the use of other approaches, provided that the user can demonstrate compliance with the regulations. The consultation process proposed is somewhat similar for DEHLG proposed amendments to the regulations/ Technical Guidance. There is consultation with the BRAB, a public/ industry consultation process and all submissions are again considered in consultation with the BRAB, prior to the making of definitive regulations by the Minister. Publication of a notice of making of definitive regulations/TGDs is standard practice.

Relevant Standards and accepted Codes of Practice are called up in Annexes to the individual TGDs.

Clause 6: Type-approvals: District Councils are to be given the power to 'type-approve' non-site specific building matters (e.g. house type superstructures) in consultation with prescribed bodies, allowing for greater flexibility. Applicants may appeal the decision of a District Council to the Department. Building Regulations will detail the matters for which 'type-approval' may be sought.

DEHLG Position:

Compliance with the Building Regulations is primarily the responsibly of the owners and builders of the building. Responsibility for enforcement of the Building Regulations is a matter for the 37 local Building Control Authorities.

Our Building Regulations do not provide for approval by Building Control Authorities of products or systems. Under Part D of the regulations (Materials and Workmanship), the requirement is that all materials used must be suitable for the purpose for which they are used and the conditions in which they are used. Innovative materials /systems must have specified appropriate Agreement Certification from the Irish Agreement Board or "equivalent" certification from an approval body in a Member State of the European Union.

Clause 7: Power to require or carry out tests: The Department is given the power to prescribe, in Building Regulations, the type of tests which a District Council may carry out or require to be carried out to ensure that Building Regulations are not being contravened.

DEHLG Position:

The Building Control Act 1990 sets out the powers of inspection of authorised persons. The "Authorised Person" from the Building Control Authority is empowered "to take such samples of the materials used in the carrying out of any construction work or take such other action in relation to such construction work as may be necessary to establish whether the requirements of the Building Regulations are being complied with in relation to the building."

He/she may also require the owner, occupier of the building or the builder to provide such plans, documents or information as may be necessary to establish whether the Building Regulations have been complied with in relation to the building.

Clause 8: Contravention notices: District Councils will not be allowed to issue contravention notices after a time (not exceeding 12 months after works are completed) to be prescribed by Building Regulations. Regulations will be made by the

Department to make it mandatory to inform a District Council of the date when those works are completed.

DEHLG Comment:

Section 8 of the Building Control Act 1990 sets out the requirements for serving of Enforcement Notices for works which are not in compliance with the Building Regulations. An Enforcement Notice may be served for a period of up to 5 years from the date of completion of the works in question. A similar period applies for the taking of summary prosecutions. The Regulations do not specify for or require notification of completion of works.

Clause 9: Registers of information: A new requirement for District Councils to keep registers of information for public inspection formalises current practice and allows the Department to prescribe the format and content of registers.

DEHLG Comment:

Similar provisions exist under our Building code in regard to retention by Building Control Authorities of specified documents in a public register (cited under Building Control Regulations – S. I. No. 496 of 1997), such as valid Commencement Notices, Fire Safety Certificates, enforcement notices or applications for relaxations/dispensation and the decisions on such applications. Such documents should be available for inspection by the public who may obtain copies of the documents.

Clause 10 Civil liability: Article 20 is omitted as it has never been activated and the Department has not received representations asking it to do so.

DEHLG Comment:

There is a provision under the Building Control Act 1990 which limits the bringing of civil proceedings under the Act, by reason only of the contravention of any provision of the Act, or any order or Regulation made thereunder.

Clause 11 False or misleading statements: This creates a new criminal offence of knowingly or recklessly submitting false information.

DEHLG Comment:

Under the Building Control Act 1990, it is an offence to give false or misleading material or information to the Building Control Authority. The authority is responsible for enforcement of the Building Regulations. Under the Building Control Act 2007, all prosecutions may now be taken by way of summary prosecution in the District Court rather than by indictment by the Director of Public Prosecutions and the fines for breaches of the regulations have been significantly increased.

Clause 12 Application of Building Regulations to the Crown: Article 22 has not been commenced. To reflect modern procurement practice within the Crown estate,

we now intend to do so and include a redefinition of "Crown building" as a building occupied by the Crown and to require Crown buildings (except where prescribed) to be compliant with the substantive requirements of Building Regulations.

DEHLG Comment:

Certain State Buildings as defined under the Building Control Regulations 1997 are exempt from the requirements of these regulations. However, if built after 1 June 1992, they must comply with the requirements of the Buildings Regulations. Prisons or places of detention are exempt from the regulations

Clause 16 Commencement: provisions of this Order will be brought into operation on such day or days as the Department may appoint, by Order.

DEHLG Comment:

Similar provisions exist under our statutory building code.

Briefing Note on Irish Building Regulations



Part L (Conservation of Fuel and Energy) of the Building Regulations

The Programme for the newly-elected Government (June 2007) provided that the Minister for the Environment, Heritage and Local Government would "introduce new national building standards in 2007 to ensure that new housing has 40% lower heat energy demand than existing buildings standards and revise them again in 2010 to achieve a 60% target in further years".

On 24 December, 2007, Minister Gormley signed new Part L Building Regulations – SI 854 of 2007 - which gives full effect to the commitment in the Programme for Government insofar as 2007 is concerned. Moreover, the firm intention is that the commitment relating to 2010 will also be implemented in full.

The Minister made these Regulations based on the recommendations of consultants – the Energy Research Group of University College, Dublin – and only after a process of public consultation in which no less than 47 submissions were made to him on the proposals. The Minister also consulted the statutory Building Regulations Advisory Body on two occasions in this matter.

Key elements of the new Part L Building Regulations

- The Regulations which, with the exception of the provision relating to condensing boilers, apply to new dwellings only, will achieve, on average, at least a 40% reduction in primary energy consumption and a 40% reduction in related CO2 emissions.
- They will take effect from 1st July 2008. This meets the demand of industry for some transitional period.
- From 1st July 2009 they will apply to all new homes that have not been substantially completed at that stage, regardless of when planning permission was sought
- The key requirement is that specified values of both a calculated Primary Energy Performance Coefficient (EPC) and a calculated Carbon Dioxide Performance Coefficient (CPC) must be met for each dwelling. The values are set to ensure achievement of the 40% targets.

For the first time, the measures will introduce the following requirements:

- the mandatory use of Renewable Energy Sources a minimum of 10 kilowatt hours per square metre per annum, approximating to 50% of annual water heating energy consumption, and representing the contribution of a typical solar water heating system;
- provision of efficient boiler or water heat source for gas and oil-fired systems, this will
 effectively require condensing boilers;
- energy-efficient mechanical ventilation systems, where such are installed;
- improved airtightness of the building fabric, including mandatory airtightness testing of an approximately 5% sample of dwellings;
- a focus on the performance of completed dwellings and on commissioning of services, with an emphasis on ensuring that the design and construction processes are such that the completed building satisfies compliance targets and design intent; and
- user information for the owner of the new dwelling to ensure that adequate operating and maintenance instructions are available to facilitate operation in an energy-efficient manner.

Other Implications of new Regulations

- The additional cost for a semi-detached dwelling is estimated at approximately €10,000.
- The annual average saving on energy bills per householder will be in excess of €400 at current prices.
- The effect of the new requirements will be a reduction in domestic energy demand and will lead to a cumulative reduction of some 435,000 tonnes of CO2 emissions by 2012.
- There is a commitment to review and improve Regulations to 60 per cent in 2010 with the ultimate aim of achieving a zero carbon standard for new houses in the medium to long term.
- In the design and construction of new dwellings, the importance of anticipating the need for retrofitting for greater energy-efficient upgrading at a later stage is also emphasised.

For the first time there is also a requirement that all oil and gas-fired boilers installed as replacements in existing dwellings shall meet minimum 86% efficiency standards where practicable. This will effectively require condensing boilers, as is the case for new dwellings as outlined above. This particular provision was introduced with effect from 1st April, 2008.

Department of the Environment, Heritage and Local Government, Dublin.
25 April 2008

Energy Saving Trust follow-up to submission

1. Introduction.

The Energy Saving Trust welcomes this legislation which should help Northern Ireland to contribute to both the UK target and its own targets for reducing greenhouse gas emissions. For some 12 years EST has set energy efficiency standards for house builders that go beyond the minimum set by building regulations.

2. Background to the Energy Saving Trust.

The Energy Saving Trust was established as part of the UK Government's action plan in response to the 1992 Earth Summit, which addressed worldwide concerns on sustainable development issues. It is the UK's leading organisation working through partnerships towards the sustainable and efficient use of energy by households, communities and the road transport sector, and is one of the key delivery agents of the Government's climate change objectives. It has offices in each of the countries in the UK, and has had a dedicated office in NI since 1996.

EST undertakes a significant amount of activity in NI including:

- Advice and information programmes.
- Grant programmes.
- Collaborative awareness raising programmes.
- Forging partnerships with key businesses and organisations.
- Developing a framework for programmes funded by the NI Energy Efficiency Levy (EEL) and monitoring its operation.

These activities are funded by EST's grants from DEFRA and BERR and is not a charge on the NI public sector budget. It should, however, be noted that DSD acts as the sponsoring Department for EST(NI) and is consulted by DEFRA on EST's Annual Work Plans.

3. Building Regulations (Amendment) Bill.

We do not intend to offer comments on all 17 clauses and will limit our comments to those clauses which relate to those areas which are of particular interest to the EST remit.

Clause 1 – Building Regulations. We welcome the intention to enable building regulations to regulate energy performance of buildings. In this context we note that Northern Ireland has not yet set a target date by which all new build should be zero carbon, we believe that it should, and that this date should be around 2016. In this context it is important that any forthcoming changes to NI Building Regulations are seen as intermediate stages on the way to zero carbon buildings. Under the Code for Sustainable Homes, which has been adopted in England and Wales, microgeneration becomes necessary in pretty much all cases at code level 4, which will be Building Regulations in 2013. Code level 3 needs microgeneration in most flats, and becomes

Building Regulations in 2010. We believe that developers should go for energy efficiency where they can, so there will be no need for universal microgeneration in England and Wales until 2013, but we would encourage developers to aspire to Code level 3-4 well before these standards are introduced in the Building Regulations. In this context we also note that from 1 April 2008 it became mandatory for all new build self contained social housing schemes in Northern Ireland to achieve the Code for Sustainable Homes three star rating.

Clause 4 – Building Regulations Advisory Committee. We welcome the specific directions in making building regulations to "further the conservation of fuel and power", further the "protection and enhancement of the environment", and to "promote sustainable development".

Clause 5 – Guidance Documents. We look forward to responding to forthcoming consultations on these guidance documents – particularly those relating to the conservation of fuel and power.

Clause 7 – Power to Require or Carry Out Tests. Testing in areas such as air tightness is important in context of energy saving. A survey commissioned by the Energy Efficiency Partnership for Homes showed that some one third of new homes failed the indicative air tightness levels set out under the previous Building Regulations regime, Part L (2002) for England and Wales (equivalent to Part F in Northern Ireland). It is unclear the extent to which these findings would be transferable to Northern Ireland. However, it is clearly sensible to have a robust compliance and enforcement regime (involving testing) that ensures that newbuild homes meet the specification and contain the necessary design features to be truly low-carbon.

Clause 12 – Application of Building Regulations to the Crown. We welcome the extension of building regulations to Crown buildings.

Association of Building Engineers amendments to wording of Order

Suggested amendments to the wording of the Building Regulations (Northern Ireland) Order 1979 as requested by the Finance and Personnel Committee, 23 April 2008

Protected buildings

- 3A. (1) In carrying out any of its functions under building regulations a district council shall (have regard to the desirability of preserving) aim to preserve the character of protected buildings.
- (2) In this Article "protected buildings" means-
- (a) listed buildings within the meaning of the Planning (Northern Ireland) Order 1991 (NI II); and
- (b) buildings situated in conservation areas within the meaning of that Order: and
- (c) buildings of local architectural and historical interest.

Building Regulations Advisory Committee

4.- (1) The Building Regulations Advisory Committee (in this Order referred to as the "Advisory Committee") shall continue to exist to advise the Department upon the amendment of building

regulations and upon any matter arising out of or connected with the amendment or operation of building regulations which may be referred to the Advisory Committee by the Department.

- (2) Members of the Advisory Committee shall be appointed by the Department after consultation with such bodies persons as appear to it to be representative of the interests concerned.
- (3) The Department may, with the approval of the Department of the Civil Service, pay to members of the Advisory Committee such out-of-pocket expenses (including travelling expenses and subsistence allowances) reasonably and properly incurred in connection with the business of the Advisory Committee, as the Department may determine.
- (4) The Building Regulations Advisory Committee may advise the Department of matters of concern to the building industry arising out of or connected with the amendment or operation of the building regulations.

Deposit of plans to be of no effect after certain interval

- 19. Where
- (a) plans of any proposed works have, in accordance with building regulations, been deposited with a district council; and
- (b) the works to which the plans relate have not been commenced within three years from the deposit of the plans. (where the works to which the plans relate involve more than one building all buildings must be commenced.)

the district council may, at any time before the works are commenced, by notice to the person by whom or on whose behalf the plans were deposited, or the owner for the time being of the land to which the plans relate, declare that the deposit of the plans shall be of no effect, and when such a notice is served, this Order and the regulations made thereunder shall as respects the proposed works have effect as if that deposit had not been made.

Republic of Ireland Housing Projections





8 May, 2008.

Mr. Shane McAteer, Committee Clerk, Committee for Finance and Personnel, Northern Ireland Assembly, Committee Office, Room 419 Parliament Buildings Belfast BT4 3XX.

Dear Mr. McAteer,

Thank you for your letter of 2 May and for your kind sentiments in connection with the appearance of Sarah Neary and me before the Committee recently.

In reply to your request for additional information, as promised during our briefing to the Committee, the position is as follows:

- projections of the percentage of the population living in the Republic of Ireland in houses built after 2008, up to 2020: I regret that we have no estimates or forecasts of the number or percentage of households who would be living in houses newly built for such a long period, particularly since the population forecasts, recently published by our Central Statistics Office, project a variance of some 1 million people by 2020; however, for the information of the Committee, some work carried out by our Department in advance of the publication of the Statement on Housing Policy last year suggested that we could need about 600,000 new houses in the 9 years to 2015 (2007 to 2015), which would make up about 25% of the State's housing stock by 2015:
- evidence to show that renewable products tend to reduce in cost as their usage increases, in particular, the European Energy Agency statement that if a product's market doubles, its cost decreases by approximately 20%: A recent International Energy Agency study of Renewables for Heating and Cooling (ref. page 39, and downloadable at http://www.iea.org/textbase/publications/free_new_Desc.asp?PUBS_ID=1975) found that, for solar thermal technology, "during the past decade capital cost reductions of around 20% have been observed for each doubling of installed capacity of solar water heaters... Further research and development investment can help drive these costs down further".

I trust that the foregoing information will be of some assistance to the Committee in their ongoing deliberations.

Yours sincerely,

Christopher O'Grady, Principal Officer, Building Standards Section.

Northern Ireland Building Regulations Advisory Committee Follow Up to Evidence Session

Trevor Martin BSc(Hons) BA MSc FCIOB Head of Building Control Belfast City Council Clarendon House Adelaide Street Belfast

Dear Paula

Sorry for delay in responding to the Committee but I was in the United States all week speaking at a Fire Engineering Conference and only got back today.

In relation to the written response to the Chairman of your Committee I would submit the following statement.

The officers in building control throughout Northern Ireland fully agree that Type Approvals are a good facility for the industry. It allows developers to achieve approval once for project that can then be submitted in all other Council areas. This should be fully achievable as the regulations are the same for the whole of Northern Ireland. It leads both to savings in time and money for the developer and also consistency of approach in determining the project under the regulations. The application would only need to be checked in each area for site specific issues such as drainage and foundations.

We are equally conscious that in order for type approvals to work a fail safe mechanism must be put in place otherwise the system loses credibility. The system used in England and Wales where one council issues the type approval and the others on occasions has been questioned. Whilst many councils are not happy with it they accept it as a necessary evil in a competitive market place.

The system proposed by my colleagues in Northern Ireland is based on our already fully operating 'Executive Committee' in which all twenty sic councils are represented. As your committee are aware, for building control purposes in Northern Ireland the twenty six councils are divided up into five group area (25 councils) and Belfast. All those groups are represented in person at the Executive Committee and on any sub-committee set up by that Committee.

The proposal for type approvals would follow that line and is likely to be:

- 1. Elected a Type Approval Committee representative of the 26 Councils
- 2. Members of that Committee would receive all applications for type approval
- 3. They would assess that application as a group
- 4. The assessment results would be discussed in each of their areas by their representative
- 5. The subcommittee would then meet to approve the scheme
- 6. Once approved it would be valid for all twenty six councils.

This is a better, more transparent scheme that England and Wales as it includes all the councils in the decision making process. This brings more accountability and broader experience to the decision. The only flaw in the process (as in England & Wales) is that it must be voluntary acceptance of the end result by council. We cannot by law bind any council into the decision. Staff must accept the decision as the best way to give credence to the scheme. We have also relayed to colleagues and the Department that failure on our side to effect such a voluntary scheme would possibly require intervention from DoE (Local Government Branch) to amend legislation. This course of action is lengthy, difficult and, if people see reason and logic, should not be necessary.

We are very confident our proposed scheme will work effectively and efficiently delivering the best type approval system for Northern Ireland. If we cannot achieve it, and there is no reason to believe we can not deliver, it would constitute a failure on us as professionals.

Should the Committee wish to hear more on our proposals I recommend you speak with John Dumigan who is the Chair of the Executive Committee in Northern Ireland. He presented to the Committee and would be prepared to elaborate on this proposal. I have copied John into this response.

Building Regulations (Amendment) Bill Committee Consultation Phase



- 1. NIEL Forum and networking body for environmental NGOs, representing 50 organisations and some 100,000 citizens
- 2. Role of Building Regulations in Climate Change
 - Energy usage in buildings 81% of non-transport energy consumption
 - Need for action 3% reduction per year
- 3. Building Regulations Role
 - Standards need to be higher
 - Insulation reduce waste, reduce cost
 - Financial drivers will increase cost, security of supply
 - Lead by example and as 'driver' in government
- 4. Opportunities for renewable generation
 - Micro generation on buildings 'Zero Carbon' standards £6,000 per dwelling
 - Macro generation through local systems, including CHP
 - NI excellent source of renewable energy including waste
- 5. Appropriate Technologies
 - Lifetime costings carbon, including 'carbon pricing'
 - Environmental and Social impact assessments as well as Economic
 - Thermal treatment best available technology with highest energy outputs
- 6. Specific Points
 - Historic Buildings Preferred term to protected not all are; could be 'get out'
 - Need explicit mention of promoting conservation of energy
 - Need explicit guidance on use of recycled materials in building construction
 - Need for a 'rating system' easily understood by customers like in appliances

Northern Ireland Environment Link Briefing for Committee Meeting 7 May 2008



Building Regulations (Amendment) Bill Committee Consultation Phase Additional Points after oral evidence by Northern Ireland Environment Link

- 1. Enabling Legislation. We understand that this is the 'first stage' and that much detail can be added in subordinate legislation and regulations. It is vital that the legislation be written in as broad a fashion as possible to allow all future requirements to be delivered rapidly and efficiently without the need for additional primary legislation.
- 2. Existing buildings. This legislation deals only with new buildings. Obviously the vast majority of buildings, and hence the vast majority of CO2 production and cost of heating, will take place in existing buildings. While it is vital to get the standards of new buildings as high as possible, there is also a great need to encourage energy efficiency measures for existing buildings and we would encourage the Committee to consider how this can be done. Some possibilities include grant aid programmes, planning conditions to include upgrading of insulation etc. for alterations and promotion programmes to encourage 'retrofitting' of insulation, double glazing etc. as cost effective as energy prices rise. Whilst the Building regulations are very good at targeting new build, and now ask for consequential improvements to existing buildings, it is very difficult to apply requirements directly in existing properties. The new Energy Performance Certificates (EPCs) will, perhaps, drive improvement obliquely by making purchasers aware of the shortcomings of a house that is poorly insulated, and achieve improvements through education and suggestion. Increases in the price of oil and other fossil fuels will also drive that forward as people will not wish to live in an inferior house energy wise as it will be just too expensive. Dealing with existing buildings is a challenge, with ideas put forward by the Sustainable Development Commission in its report entitled Stock Take. Consideration needs to be given as to how the many recommendations in that report can be advanced. Also, the Building Regulations ought to consider more subtle ways of achieving improvement using a similar approach as per the EPC's, which in effect are regulations imposed on existing buildings.
- 3. Planning and Building Regulations. These areas are obviously closely related and we would encourage greater integration at both the policy (DoE/DFP) level and at delivery (Council) level.
- 4. Renewables. Although increasing thermal efficiency is a prime role of building regulations, we feel that promotion of renewable technologies is also vital; there are energy uses such as hot water and lighting which will always require input, and renewables are thus a vital component of 'carbon neutrality'. There is a role in building regulations, and also a role for continuing grant aid through a 'new EREF' grant programme. As the cost of fuel rises the paybacks for these technologies will rapidly decrease and it is in the interests of individuals, businesses and government to decrease CO2 production through promoting development and use of renewable technologies.
- 5. Biomass and Biofuels. Although both can play an important role in both cutting CO2 emissions and agricultural changes, they should only be implemented after comprehensive environmental impact assessments and life cycle costings to ensure true 'carbon benefits'. This is true on both local and global scales and applies particularly to biofuels made from 'primary' crops which either are food crops or are grown on land which could otherwise be used for food production. Production of fuels from products now designated as 'wastes' provides a huge opportunity to address energy, waste disposal and pollution issues and should be promoted.

- 6. Carbon Currency. The economy and SD should not be seen as mutually exclusive. It is possible, and indeed imperative, that both work hand in hand. This is now increasingly recognised by The NI Assembly. With the relentless increase in oil prices the figures for SD measures will look better immediately, but money should not be the only measure. Carbon should be seen as the new currency, as recommended by CBI in its recent report. All costings for buildings, renovations or other activities must take this into full account when determining the viability of various options for insulation standards, fuel type and renewable installation. Europe will be imposing this approach and it would well serve NI to be prepared and primed for this legislation when it comes into force.
- 7. Protecting Historic Buildings. It is very important to ensure that historic buildings are protected and that renovations are done sensitively. The legislation needs to be worded in an appropriate fashion that ensures this. We have concerns that using the term 'protected' could be interpreted narrowly to exclude historic buildings which are not quite worthy or have not yet been processed through the listing process, or buildings which are important in their setting. Wording which will ensure that this does not occur needs to be developed for the legislation.
- 8. Supporting NI Businesses. While we understand that government cannot support particular businesses, it would seem in Northern Ireland's interests if government policy could encourage the development of indigenous businesses and industries in the CO2 reduction fields. The Committee appears to be very concerned about supporting this particular industry. The very essence of Regulation will by definition supports some industry. The EPC's already mentioned will spawn an industry of Accredited Assessors and organisations to compile the appropriate database of certificates issued. This has defined an industry and supports it by the regulations. In 1977, when the thermal standards for external walls were raised to a level that traditional construction could not achieve, it resulted in an industry being developed in thermal insulation blocks. At that time the innovation was welcomed by the public as the blocks offered a cost effective solution to meeting the new standards. Of course, as standards increased the blocks themselves became obsolete, and other materials had to be developed – and they were. Here again the regulations supported a new, and in some cases diversified, industry. We would suggest that the opportunities for NI businesses to develop into new local, national and international markets should be encouraged, not discouraged. Obviously no particularly company must be promoted to the exclusion of others, but promoting NI industry seems a valid role of the government, as has been demonstrated repeatedly through businesses being supported by Invest NI and its predecessors.
- 9. Conserving Water and Using Recycled Materials. It is very important that the new legislation allow for these and similar matters to be included, with specified and increasing targets able to be set through future regulation.

briefing note



Code for Sustainable Homes

New build housing

Relevant to: England

Introduction

A number of developments are taking place in the arena of new build housing that are highly relevant to local authorities and registered social landlords (RSLs) in England. Most importantly, in December 2006 the Government launched the much-awaited Code for Sustainable Homes, together with consultations on 'zero carbon development' and on a draft Planning Policy Statement (PPS) on planning and climate change (supplement to PPS1). This briefing note sets out the details of the Code, its relevance, and the action that local authorities need to take.

What is the Code for Sustainable Homes?

The Code for Sustainable Homes sets six levels of sustainability for new build housing in England. These levels are indicated by stars. Each level includes mandatory requirements for energy performance and water usage, together with tradable requirements for other aspects of sustainability. On energy, the requirements are a percentage reduction in carbon emissions compared with Building Regulations Part L1 (2006), as follows:

ফ 10 per cent কম 18 per cent ফারের 25 per cent ফারের 44 per cent ফার্মার্কির 100 per cent ফার্মার্কির Zero carbon

("Zero carbon" means zero carbon produced (net over the year) from all energy use in the home – cooking, washing and appliances as well as space heating, cooling, ventilation, lighting and hot water.)

Why has it been developed?

There are two reasons for the development of the Code: first, it offers, for the first time, an independently accredited, Government-endorsed sustainability rating for all now build housing. This rating can be used by prospective home purchasers, local authorities and others to authoritatively define and recognise a 'green' home. It is hoped that it will enable developers to use sustainability as a credible selling feature.

Second, the levels of the Code indicate the direction of future Building Regulations. This allows industry to build to specific levels with confidence, developing experience and expertise they can use when new revisions to Building Regulations come into force. For instance, the energy performance standard of Code level 3 (a 25 per cent improvement on current Building Regulations) is proposed to become the new standard for Building Regulations in England in 2010.



^{The Code currently applies to England only, as de Planning} Poticy Statements, Building Regulations Part L apply to both England and Wales. Government intends that all new build herms should be zero cardson by 2016 in England and is proposing 2011 in Wates.

Operation

As with Ecohomes, the Code will rely on independent assessors to advise on achieving specific Code levels. But it also requires them to undertake a post-completion check before issuing a final certificate. Energy performance will be assessed using Building Rogulations software.

Communities and Local Government has published a technical guidance document and the Energy Saving Trust will also provide practical guidance on how to reach the energy performance standards within the Code. Guidance is already available on reaching the energy performance standard for level 3 of the Code under the Energy Saving Trust's energy efficiency best practice in housing programme. For further information, visit the website?

Implementation

Currently, use of the Code is voluntary for private developers. In July, the Government published its consultation³ on the future of the Code, including whether a rating against the Code should be mandatory for all new homes from April 2008. The aim is to encourage house builders to build to at least Code level 1 and preferably higher.

For all publicly supported developments, achievement of Code level 3 will be mandatory. In the case of registered social landlords (RSLs), this applies to all plane from the Housing Corporation's April 2008 funding cycle [until which time the



Ecohomes 'very good' standard will continue to apply). In the case of homes developed by English

Partnerships or with support from the Government's housing growth programmes, it applies to all plans from April 2007.

Wider context

In December 2006, the Government issued a consultation document on moving towards "zero carbon development" within ten years, ie: by 2015. In July 2007, the Government published a policy statement which confirms this ambition together with the progressive tightening of the energy efficiency building regulations - by 25 per cent in 2010 and by 44 per cent in 2013 - up to the zero carbon target in 2016.

The policy statement also makes if clear that local authorities should use the Code for Sustainable Homes to set higher environmental standards for new residential developments. Guidance on achieving this objective is provided in the PPS on planning and climate change which was published in December 2007. This supplement means that planning authorities need to assess their area's potential for accommodating renewable and low-carbon technologies and alongside devalopers should be considering onsite renewables for all new developments.

Application

RSLs must build to Code level 3 or higher from April 2008. Whilst local authorities very rarely build new homes themselves, they still have a number of roles they can play if they wish to go beyond legal minimum requirements:

- When negotiating plans for new development, local authorities should set out the desired sustainability credentials of the development. This should include a minimum Code performance level. The Energy Saving Trust recommends Code level 3 as minimum.
- Local authorities should set out their proposed approach in the Development Plan Document, highlighting specific development opportunities where higher levels of the Code seem appropriate. This should be examined by a Planning inspector to ensure it will indeed lead to the delivery of the required amount of high-quality housing.

www.communities.gov.uk/sccuments/blanningandbuilding/pdf/ 163125



briefing note

¹www.pianningportal.gov.uk/upicadsicoda for sustainable ho mes, techquide.pdf

yww.energysavngtrust.org.uk/flousingtrutdings/professionals/ standards/.

³www.communities.gov.uk/documen/sicorsoraleiptf/Makingarat ingresendatory.

Reference to these Code levels in relevant English regional strategies (notably Regional Spatial Strategies) will help with local adoption of such planning policies, as well as avoiding competition between neighbouring local authorities at the expense of sustainability.

 When running local promotions and/or promoting the benefits of new housing developments, local authorities can use the achievement of specific Code performance levels as a sales feature.

The Energy Saving Trust recommends widespread application of the energy performance standard of Code level 3 because:

- This can be achieved relatively easily and in general without the use of microgeneration technologies.
- The supply chains are generally available to build to this standard. The easiest solutions tend to entail better workmanship and quality products, which the developer should be able to secure.
- It paves the way for building to the legal minimum Building Regulations expected in 2010.

The Energy Saving Trust encourages the adoption of higher levels of the Code as exemplar and demonstration projects. We would be interested in hearing about such proposed developments, in order to help inform progress at national level.

Energy Saving Trust support

The Energy Saving Trust runs a number of support schemes to assist with the achievement of lowcarbon developments. These include:

- Practical help, offering a free enquiries service to local authorities and housing associations on issues surrounding sustainable energy use.
- The energy efficiency best practice in housing programme, offering technical information, advice and training, primarily to industry players.
- The Department for Business Enterprise and Regulatory Reform's (BERR) Low Carbon Buildings Programme, offering grants for the installation of microgeneration technologies for both new build and existing housing.

Further information

To download the full text of the Code for Sustainable Homes, please visit www.communities.gov.uk/fleecde.

The Energy Saving Trust offers a free enquiries service via our dedicated Practical help toam – the team will undertake to answer any query regarding sustainable energy or sustainable road transport within a maximum of three working days.

Abbreviations used

BERR The Department for Business Enterprise

and Regulatory Reform

PPS Planning Policy Statement RSL Registered social landlord

At the time of publication and to the best of our knowledge, the information contained in this briefing note was correct. This briefing note was first published in April 2007 and updated in August 2007.

Practical help cannot youch for any of the organisations involved.

Practical help

T: 0870 241 2089

F: 0870 130 8831

E: practicalhelp@est.org.uk

W: www.energysavingtrust.org.uk/housingbuildings.



Appendix 5

Northern Ireland Assembly Research Papers

Research and Library Services



Bill Research Paper

29 February 2008

The Building Regulations (Amendment) Bill

This paper provides some background to the Building Regulations (Amendment) Bill, which was presented to the Northern Ireland Assembly on 22 October 2007. The Bill seeks to simplify the existing provisions of the primary legislation, and proposes a number of amendments to reflect the increasing importance of sustainability and environmental issues.

To facilitate Members' consideration of the Bill, the paper begins by examining the background to building regulations and summarises the current legislative position. The key provisions of the Bill are outlined, and any issues raised during the consultation exercises identified.

Jodie Carson

Research Officer

Research Papers are compiled for the benefit of Members of The Assembly and their personal staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public.

Summary of Key Points

On 22nd October 2007, the First and Deputy First Ministers presented the Building Regulations (Amendment) Bill to the Northern Ireland Assembly and it is scheduled to reach committee stage on 5 March 2008.

The Bill seeks to update the primary legislation in respect of building control; it proposes new powers and amended provisions to reflect the increasing importance of sustainability and environmental issues. It is also intended to simplify some of the existing regulatory and enforcement provisions.

The Department has carried out two public consultations; the first occurred between January and May 2004, and the second was undertaken from July to November 2005. Stakeholder workshops were also held, involving representatives of both district councils' Building Control function and of the construction industry in Northern Ireland.

The proposals contained in the Bill are similar to those that have already been implemented in England, Wales, Scotland and the Republic of Ireland. It has two key components:

• It is intended to refine the powers, duties and rights of the Department, district councils (which enforce the regulations) and applicants.

 It is also concerned with extending the general principles of the principal Order to include the protection and enhancement of the environment and the promotion of sustainable development.

The key amendments proposed by the Bill are contained in clauses 1-12 and are in respect of the following:

- 1. Building Regulations
- 2. Protected Buildings
- 3. Building Regulations Advisory Committee
- 4. Further provisions as to the making of building regulations
- 5. Guidance documents
- 6. Type-approvals
- 7. Power to require or carry out tests
- 8. Contravention notices
- 9. Registers of information
- 10. Civil Liability
- 11. False or misleading statements
- 12. Application of building regulations to the Crown

1. Introduction

The Building Regulations (Amendment) Bill was presented to the Northern Ireland (NI) Assembly on 22 October 2007[1]. The Bill seeks to update the primary legislation in respect of building control; it proposes new powers and amended provisions to reflect the increasing importance of sustainability and environmental issues. It is also intended to simplify some of the existing regulatory and enforcement provisions.

This paper provides some background to the Bill, including how building regulations developed locally, in the rest of the UK and the Republic of Ireland (ROI). The background to the Bill is then outlined, as are its key provisions and any issues that were raised during the consultation process.

2. Background

The Northern Ireland Building Regulations are legal requirements made by the Department of Finance and Personnel (DFP) and administered by the 26 District Councils. The regulations seek to:

"..protect the health, safety, welfare & convenience of people in or about buildings and of others who may be affected by buildings or matters connected with buildings, and of furthering the conservation of fuel & power"[2]

2.1 The Development Of Building Regulations in the UK & ROI

Scotland was the first country in the United Kingdom to adopt national building regulations. The Building (Scotland) Act in 1959 was adopted as a result of the recommendations of the Committee on Building Legislation in Scotland. The first set of Building Regulations was published in 1963 and implemented in 1964.[3] Since 1959, there have been reviews of the regulations in 1970, 1971, 1983 and 1990. The Building (Scotland) Act was introduced in 1970, which made a number of amendments to the 1959 Act. Another review of the primary legislation in Scotland was recently undertaken, and the Building (Scotland) Act was passed by the Scottish Parliament and came into force in April 2005.[4]

In England and Wales, the Public Health Act of 1961 was the statutory instrument and the first regulations were published in 1965. They came into operation on the 1st February 1966 throughout England and Wales. The Building Act 1984 is the existing primary legislation under which the Building Regulations and other secondary legislation are made. The Building Regulations are made up of the Building Regulations 2000 and the Building (Approved Inspectors etc.) Regulations 2000.[5]

Building Regulations in the Republic of Ireland have followed a similar path. The Town and Regional Planning Act of 1934 created local planning authorities. This was replaced by the Local Government (Planning and Development) Act of 1963, which included the power to create national building regulations. The more comprehensive Building Control Act 1990 established building control authorities. Building regulations were published under that Act and have since been revised periodically. On 21 April 2007, the President signed the Building Control Act of 2007. This Act, amongst other things, strengthened the enforcement powers of Local Building Control Authorities. [6]

2.2 The Development of Building Regulations in Northern Ireland

On the same day that England and Wales introduced building regulations, the 1st February 1966, a committee was established in NI to:

"..examine the existing law for the general regulation of building in Northern Ireland in light of recent changes in Scotland, England and Wales... "[7]

The committee recommended that the existing control of building under local authority bye-laws and local Acts should be replaced by a new Building Act and regulations applying uniformly across NI. The Buildings Regulation (NI) Order 1972 was introduced, but was subsequently superseded by the Building Regulations (NI) Order 1978 and the Building Regulations (NI) Order 1979 (the 1979 Order). These pieces of legislation were made as Orders in Council as they were introduced during periods of direct rule in Northern Ireland.

DFP carried out a review of the Order in 1983-84, proposing to adopt similar changes to those being introduced to England and Wales at that time. [8] This occurred during a period of devolved government in NI and so was referred to the Environmental Committee of the NI Assembly. The Committee agreed to amending the Order and introduced the Planning and Building Regulations (Amendment) (Northern Ireland) Order 1990 (the 1990 Order).

3. The Legislation at Present

The Building Regulations (NI) Order 1979 (hereafter referred to as the principal Order) (as amended by the 1990 Order):[9]

- gives DFP the power to make regulations in consultation with an Advisory Committee and to issue supporting technical documentation
- sets out the enforcement powers of District Councils including requirements to submit
 plans for their approval, their right to issue contravention notices and powers of entry &
 inspection; and
- establishes an appeals mechanism and creates offences & associated penalties

The Building Regulations are the sub-ordinate legislation; these state the required standards when undertaking building work. Specifically, they are:

■ The Building Regulations (NI) 2000 (amended 2005 & 2006)

These regulations set out detailed functional (or performance) requirements which buildings must attain, and apply to new build, structural alterations and buildings undergoing a material change of use. They do not apply retrospectively. They are split into a number of parts, for example Structure, Fire Safety; Conservation of Fuel & Power

The Buildings (Prescribed Fees) Regulations (NI) 1997

These regulations set out the structure & rates of charges which District Councils may impose in relation to submissions for building regulations approvals.

The proposed Bill is concerned with amendments to the primary legislation; the 1979 Order.[10]

4. Building Regulations (Amendment) Bill

4.1 Background to the Bill

In June 2003, Ministerial approval was granted for a review of the Building Regulations (NI) Order 1979 (the 1979 Order) (as amended). The aim of the review was to account for changes in industry practices, bringing the legislation into line with the rest of Great Britain and the Republic of Ireland. The review was not concerned with the regulations made by the Department under the primary legislation. [11]

The Department carried out two public consultations on a number of proposals; an initial consultation occurred between January and May 2004, which invited comments on the existing scope of the Building Regulations framework within NI. The second consultation was undertaken from July to November 2005; this took account of the responses received and set out firmer Departmental proposals. Approximately 450 consultees were invited to respond to each exercise, and information was placed in the press and online. The response rate to both consultations was about 10%.

The Department also ran stakeholder workshops for representatives of both district councils' Building Control function and of the construction industry in Northern Ireland. Officials also met the Northern Ireland Building Regulations Advisory Committee (NIBRAC), District Council building Control Officers and industry representatives in late August / early September 2007 to consider further refinements to the proposed amendments. [12]

4.2 The Content Of the Bill

The proposals contained in the Bill are similar to those that have already been implemented in England, Wales, Scotland and the Republic of Ireland. [13] It has two key components:

- It is intended to refine the powers, duties and rights of the Department, district councils (which enforce the regulations) and applicants.
- It is also concerned with extending the general principles of the principal Order to include the protection and enhancement of the environment and the promotion of sustainable development.

The Bill consists of 17 clauses and 1 Schedule, which follow the order of the Articles as they appear in the principal Order. The key amendments are contained in clauses 1-12 and are as follows: [14]

Clause 1: Building Regulations

- The principal Order is amended to define "low or zero carbon system" and "other greenhouse gases".[15]
- Schedule 1 to the principal Order is amended to enable building regulations made by the
 Department to regulate energy performance of buildings. This includes the use of reused
 or recycled materials, the proportion of energy used from a particular source and the
 sustainable use of water.[16]

Clause 2: Protected Buildings

- The principal Order is amended to define, and create a new provision for, protected buildings [17]
- "Protected Buildings" are defined as listed buildings and buildings situated in conservation areas within the meaning of the Planning (NI) Order 1991.
- The amendment requires district councils to consider the preservation of the character of protected buildings, when carrying out functions under building regulations.

Clause 3: Building Regulations Advisory Committee

- The principal order is amended to adjust the process for appointing members to the Building Regulations Advisory Committee [18]
- To reflect the recommendation of the Office of the Commissioner of Public Appointments for Northern Ireland's Code of Practice that nominations to public bodies should come from suitable individuals who meet the application criteria, "bodies" is substituted for "persons" in the following paragraph:

"Members of the Advisory Committee shall be appointed by the Department after consultation with such bodies as appear to it to be representative of the interests concerned." [19]

Clause 4: Further provisions as to the making of building regulations

• The deemed-to-satisfy provision is removed and replaced by a guidance-based system; "document" is replaced by "guidance" in the following sentence:

[&]quot;...building regulations may...be framed to any extent by reference to a document published..." [20]

• The scope of building regulations is extended to include the protection and enhancement of the environment and the promotion of sustainable development.

Clause 5: Guidance documents

• The Bill proposes a new provision enabling the Department to prepare and publish guidance relating to the requirements of building regulations.[21]

Clause 6: Type-approvals

District councils are to be given the power to type-approve non-site specific building
matters after consulting with prescribed bodies. If a district council does not approve any
particular type of building matter as complying with particular requirements of building
regulations, the applicant may appeal to the Department[22]

Clause 7: Power to require or carry out tests

 The Department is given the power to prescribe the types of tests which a district council may, or be required to, carry out to ensure that building regulations are not being contravened.

Clause 8: Contravention notices

 District councils will not be allowed to issue contravention notices after a time (not exceeding 12 months after works are completed) to be prescribed by building regulations.

Clause 9: Registers of information

• A new requirement for district councils to keep registers of information is added; the format and content of the information may be prescribed by the Department.[25]

Clause 10: Civil Liability

• The article relating to Civil Liability is omitted, since it has never been activated and the Department has never received representation requesting this. [26]

Clause 11: False or misleading statements

• This makes it a criminal offence to knowingly or recklessly submit an application which contains false or misleading information.[27]

Clause 12: Application of building regulations to the Crown

Article 20 applies to the application of building regulations to the Crown and has not been commenced. It is intended that it will be, and it has been amended to require Crown buildings to comply with the substantive requirements of building regulations. "Crown building" is also redefined –previously a building "in which there is a crown interest", it is now a building "occupied by the Crown". [28]

4.3 Consultation Outcome

This section outlines a number of the consultation responses to relevant policy proposals outlined in the second exercise. [29] Although these comments were made prior to the publication of the Bill, they are still relevant to its contents:

Extension of Building Regulation principles to sustainability and environmental issues

The vast majority of consultees (35 out of 38) were in favour of extending the principles of Building Regulations to include issues of sustainability and the environment. (Relates to what has become clause 1):

"This is a logical progression for building regulations...Experience has shown the industry only reacts when the playing field is raised for all and that can only be through statute"

However, some argued for the inclusion of other factors:

"...should also include enhancement of the built environment (i.e. new proposals and alterations) to facilitate people with disabilities"

Change to NIBRAC appointment process

Nine consultees (out of 35) disapproved of this proposal (now clause 3). Three of the critics suggested that:

"NIBRAC should be so constituted that the various professional technical, trade etc bodies are represented. Self-nomination may well result in a NIBRAC body that is not representative of the broader building industry"

However, the Department's response to this argued that members were appointed to NIBRAC to bring their own experience and expertise to the committee, rather than to represent particular bodies, and that self-nomination would not prevent this.

Move from "deemed-to-satisfy" to guidance based system

The rationale behind this proposal (now clause 4) was the fact that the existing system means that if the deemed-to-satisfy route is followed, building regulation approval is guaranteed. The power of building control officers is also restricted in that they cannot demand anything over and above this system. However, under a guidance system, building control can request more of a builder to satisfy various requirements. The guidance system is in place in the rest of the British Isles and the Republic of Ireland.[30]

Most consultees (35 out of 36) agreed with this proposal:

"Will promote greater harmonisation wit other EU countries and will allow greater flexibility in material selection as technologies develop"

However, one comment suggested that this could be problematic in certain contexts:

"In the school building environment, deemed to satisfy sometimes is the only standard that can be achieved when upgrading part of an older building. Financial constraints and user disruption sometimes prevents higher standards being achieved within existing buildings"

Power to require tests

Almost all consultees (35 out of 37) approved of this proposal (now clause 7), however it was suggested that it was:

"Vitally important that a list of tests (is) detailed"

Contravention Notices

The original proposal in respect of contravention notices was that no changes would be made, however, 22 out of 35 consultees disagreed with this, resulting in the inclusion of clause 8. It was at the request of stakeholder groups that the period was changed to 12 months.

Application of regulations to Crown

Only 1 of 35 consultees disagreed with this proposed amendment (clause 12), stating that it should be looked at on a:

"Case-by-case basis. May cause unnecessary burden on the district council staff resources"

4.4 Key Stakeholders

The stakeholder workshop conducted by the Department as part of the 2nd consultation exercise included individuals from the following organizations:

- Royal Society of Ulster Architects
- Royal Institute of Chartered Surveyors
- Chartered Institute of Architectural Technologists
- Chartered Institute of Building

Other relevant groups include:

NIBRAC Building Control Northern Ireland: the umbrella group for building control in NI
[1] http://www.northernireland.gov.uk/news-ofmdfm-221007-first-minister-and
[2] DFP website
[3] SPICE briefing "Building (Scotland) Bill", 4 October 2002
[4] SPICE briefing "Building (Scotland) Bill", 4 October 2002
[5] These have been amended a number of times since 2000 – most recently on 7 April 2007, via The Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007. www.planningportal.gov.uk
[6] The Act also provided for registration of titles of certain building professions,

(architect / quantity surveyor) and took account of the adopted EU Directive 2005/36/EC

of 7 September 2005 on Mutual Recognition of Professional Qualifications. http://www.environ.ie/en/DevelopmentandHousing/BuildingStandards/ [7] Review of the Building Regulations (Northern Ireland) Order 1979 – Initial Consultation, DFP 2004 [8] The changes were being introduced per The Building Act 1984 [9] DFP [10] The Bill does not relate to sub-ordinate legislation, i.e. the specific regulations. [11] These are reviewed periodically, in line with the powers contained in the Order [12] DFP website [13] archive.niassembly.gov.uk/finance/2007/mandate/moe/071107_build.htm [14] This list is not exhaustive, it highlights the key provisions of the Bill. [15] Draft Building Regulations (Amendment) Bill 2007, Pg 1 [<u>16</u>] Ibid, Pg 2 [<u>17</u>] Ibid, Pg 2 [<u>18</u>] Ibid, Pg 2 [19] Building Regulations (NI) Order 1979 (as amended), Pg 4 [20] Building Regulations (NI) Order 1979 (as amended), Pg 4 [21] Draft Building Regulations (Amendment) Bill 2007, Pg 3 [22] Ibid, Pg 4 [<u>23</u>] Ibid, Pg 5 [24] Ibid, Pg 5 [<u>25</u>] Ibid, Pg 5 [26] Refers to Article 20, Ibid, Pg 6 [<u>27</u>] Ibid, Pg 6 [28] Ibid, Pg 6 [29] The consultation included policy proposals which have not been pursued and are thus not included in the Bill – any responses relating to these proposals are not included. "Analysis of 2nd Public Consultation on new Building Regulations Bill, DFP

[30] archive.niassembly.gov.uk/finance/2007mandate/moe/071107_build.htm

Research and Library Services



Bill Research Paper

April 2008

The Reliability and Costs of Renewable Technology

Meadhbh McCann

Research Officer Research and Library Service

This paper provides a synopsis of the Republic of Ireland's regulatory impact assessment in relation to mandatory renewables and an overview of the status of mandatory renewables in Scotland.

Research Papers are compiled for the benefit of Members of The Assembly and their personal staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public.

Summary of Key Points

- Microgeneration is defined as follows, "The small-scale production of heat and/or electricity from a low carbon source".
- The Energy Saving Trust states that many microgeneration technologies will produce cost competitive energy by 2020.
- The high cost of the technology is perhaps the most significant barrier, with most suggestions for overcoming this relating to the provision of grant schemes.
- The Stern Review concluded that the potential costs of unchecked climate change are far higher than the costs of taking action.
- The Code for Sustainable Homes has been developed using the Building Research Establishment's (BRE) EcoHomes System. The Code for Sustainable Homes can be used as a tool for home builders to highlight the sustainable performance of their homes.
- There are six levels to the Code; level 1 refers to the minimum energy efficiency/carbon emissions and water efficiency standards with level 6 indicating the maximum.
- Dennis Anderson from Imperial College London states that "This technology (renewable) is technologically and economically feasible".
- As most renewable technologies are in their infancy, potential for further reductions through innovation exist.

- Anderson states that the market costs of the low carbon options are higher than those of fossil fuels.
- Renewable technologies differ greatly in terms of their technical characteristics, costs and technological maturity.
- Biomass for heat and electricity production contributes approximately 4% of primary energy in the US, 11% in Austria, 17% in Sweden and 20% in Finland.
- With the exception of biomass, renewable generation is both intermittent and unpredictable, presenting challenges for electricity system operators, particularly in relation to peak supply

Introduction

This paper provides an overview of research that has been conducted into the reliability and costs associated with renewable technology for the Finance Committee. The paper details the various types of renewable technologies that could be employed in Northern Ireland in order to reduce the level of Carbon Dioxide emissions in relation to the domestic sector. The paper refers to academic research that has been conducted into the reliability of supply and the cost associated with the integration of renewable technologies.

A Microgeneration Strategy for Northern Ireland

Microgeneration is defined as follows,

"The small-scale production of heat and/or electricity from a low carbon source"[1]

The Energy Saving Trust states that at a UK level, many microgeneration technologies will produce cost competitive energy by 2020. The rate at which cost competitive technologies enter the market will depend on a number of factors including[2]:

- (1) the speed at which industry can increase production and installation capacity
- (2) awareness in, and the size of, the early adopter market
- (3) policy interventions in terms of their type, effectiveness and extent

There are a variety of dates cited in relation to when microgeneration will become a source of cost competitive energy with the earliest estimate between 2015 and 2020. It is stated that domestic photovoltaics (PV) are unlikely to produce competitive cost energy before 2030[3]. There are currently less than 100,000 microgeneration installations in the UK (of which most are solar water heaters installed pre-2000). The annual number of installations is closely correlated with the level of available grant funding. Most installations in relation to PV and solar water heating[4].

Barriers to introduction of Microgeneration

The barriers to microgenration include:

- (1) high cost
- (2) legislation/planning permission

(3) the level of consumer awareness

The Energy Saving Trust state that the high cost of the technology is perhaps the most significant barrier, with most suggestions for overcoming this relating to the provision of grant schemes. There will be a continuing need to provide significant capital support for these technologies [5].

Stirling Engine and Fuel Cell Combined Heat and Power (CHP)

Combined Heat and Power is a technology that generates electricity and heat simultaneously, and can be fuelled by a variety of sources such as gas, coal, oil, biomass and hydrogen[6]. This technology is not far from being cost effective, however this is strongly dependent on achieving lifetime and maintenance costs close to those of oil/gas boilers. It could take another 10-15 years, once it is cost effective before a significant proportion of domestic energy is generated by this technology. Two types of CHP can be installed; firstly, Stirling engine is likely to be successful in larger dwellings and older dwellings with higher than average heat loads. Over 8 million UK homes could be reached by 2050, supplying 40% of domestic heating requirements and 6% of UK electricity supplies[7]. Secondly, Fuel Cell CHP is more suited to smaller dwellings with lower than average heating loads, particularly new buildings. Cost effective use is likely around 2015. Indeed, it is estimated that in 2050, small fuel cells could supply 9% of the UK electricity requirements and reduce domestic sector carbon dioxide emissions by 3%[8].

Wind

The Energy Saving Trust notes that the current market for wind turbines is not based on cost-effective purchasing and is likely to slow down. Small wind systems are generally not cost effective currently. However, a number of new products have recently been produced with the potential for significant cost reductions. The potential for small wind systems is significant or with appropriate support, could supply 4% of the UK electricity requirement and reduce domestic carbon dioxide emissions by 6%[9]. This technology will need to be supported until commercialisation is achieved, suggestions of a capital grant of 25-50% could be sufficient to support uptake levels. However, commercial viability is dependent on acquiring an equitable price for exported electricity[10].

Photovoltaics

Photovoltaics (PV) are not generally cost effective at present and are not predicted to be so until 2030. Incentives are required to maintain the market for small grid connected systems. A lack of planning issues means that the market potential for PV is amongst the largest. If cost issues were overcome, this technology could supply almost 4% of UK electricity demand, and reduce domestic sector carbon dioxide emissions by up to 3%[11].

Biomass heating and heat pumps

Both biomass heating and Ground Storage Heat Pump (GSHP) technologies can be viable when compared to electric or Liquid Petroleum Gas (LPG) heating, but in general these technologies are not competitive with natural gas or oil fired heating (comparison made using 2006 statistics). The carbon dioxide emissions savings are disproportionately large (due to the high CO2 emissions of electric/LPG heating). These technologies could reduce domestic sector CO2 emissions by 3% by 2050[12].

Solar Water Heating

Currently, solar water heating is the largest microgeneration industry, installing 2000 units annually. However solar water heating is not cost effective at present. Significant grant funding (in the order of 50% of capital costs) would be needed[13].

Building a greener future: Towards Zero Carbon Development

The UK document entitled 'Building a greener future: Towards zero carbon development' highlights The Stern Review conclusion that the potential costs of unchecked climate change (up to 20% of global GDP) are far higher than the costs of taking action (around 1% of global GDP)[14].

In 2004 the UK's total carbon dioxide emissions were 152.5 Million metric tons of Carbon (MtC). Emissions from the domestic housing sector represent around 27% of this figure. Moreover, climate change itself may lead to further developments, for example a growth in the take-up of home air conditioning units[15].

The Existing Buildings Review in the UK, led by Communities and Local Government, has examined the potential for reducing energy usage and carbon emissions in the existing housing stock, the Review concluded that a large cost-effective potential exists. In relation to the existing homes, a maximum saving of 7MtC could be made per annum. The building of new homes will need to accommodate the predicted population and demographic changes; early estimates suggest that we would need to reduce emissions by about 30MtC in the domestic sector by 2050[16].

Estimates based on experience of low and zero carbon technologies indicate that costs could be reduced significantly with the doubling of installation capacity. Predictions state that if there were 12 million installed Micro-Combined Heat and Power (CHP) units the additional cost might fall from around £2,000 to £400 for example[17].

Code for Sustainable Homes: A step-change in sustainable home building practice

The Code for Sustainable Homes has been developed using the Building Research Establishment's (BRE) EcoHomes System[18].

The Code states that due to a more environmentally conscious public there is a growing demand for homes that offer reduced environmental impact and lower running costs. There is an increased need for home builders to demonstrate their capacity in sustainable home building, and to market the sustainability of their homes to homebuyers. The Code for Sustainable Homes can be used as a tool for home builders to highlight the sustainable performance of their homes, and to differentiate themselves from their competitors [19]. The Code is based on performance against each element but does not state how to achieve each level [20].

Costs and benefits approach

There are six levels to the Code; level 1 refers to the minimum energy efficiency/carbon emissions and water efficiency standards with level 6 indicating the maximum. It is stated that on average achieving Code level 3 would save households around £50 per year, and achieving Code Level 4 around £100 per year, compared to current consumption levels in new houses. Work has been commissioned by the Housing Corporation and English Partnerships on the costs of delivering Code level 3, or a 25% improvement in energy/carbon levels, which estimates the costs to be around 2-3%, or around £2,000 per dwelling, on the basis of current technologies[21].

Costs of abating carbon emissions in the energy sector

Dennis Anderson from Imperial College London states that as a society the potential exists to move towards low carbon emissions, and achieve a virtually zero carbon energy system in the long term, if energy is used more efficiently and low carbon technologies are employed. Indeed, he states that [22];

"This technology (renewable) is technologically and economically feasible" [23].

The document 'Costs and finance of abating carbon emissions in the energy sector' states that renewable energy resources are significant, for example solar energy alone could meet world energy demand using less than 1% of land now under crops and pasture. Resources also with potential are wind, tidal, stream, wave, geothermal energy[24].

Cost trends for such technologies are said to be encouraging with the cost of wind has fallen fourfold since the mid1980s. Most technologies are in their infancy and potential for further reductions through innovation exist. The issue of intermittency will need to be addressed if solar and wind technologies are to provide energy on the scale required. Examples provided to demonstrate how this could be achieved include the development of storage technologies, such as hydrogen and changes to the way power grids are operated [25].

Energy infrastructures

Fuel cells for combined heat and power and solar PV offer possibilities for decentralised generation on a small scale. There could then be millions of small scale generating sets on electricity grids resulting in millions of consumers becoming independent of grids. The technological options that are currently the most promising include the full range of renewable energy technologies (wind, biomass, solar, geothermal, wave and tidal stream technologies[26].

Costs and policies

Anderson states that the market costs of the low carbon options are higher than those of fossil fuels and that a substantial task of transforming energy infrastructure to accommodate the new technologies exists[27]. The impacts on economic growth and development are likely to be very small – approximately a loss of 6 months growth over 50 years[28].

The experience of the Global Environment Facility with investments under the UN Framework Convention on climate Change shows that funding mechanisms can achieve financial leverage. Funds could be taken from the private financial sector and industry. The past decade has seen progress in the technologies discussed and in our understanding of how energy systems might evolve[29].

Technologies

Renewable technologies differ greatly in terms of their technical characteristics, costs and technological maturity. Some technologies are better suited to specific geographical regions and many technologies have non-carbon environmental impacts and implications for other policy priorities, for example security of supply[30].

Renewables

Wind, geothermal, wave and tidal technologies have the potential to supply significant amounts of energy. There is potential for technical improvements and cost reduction – though technical advancement differs considerably between renewable technologies. However, all are currently under used compared to both their potential and size of the global energy market; currently accounting for just 1% of world primary energy consumption[31].

Solar

In terms of solar energy, approximately 30% of the spectrum is theoretically available for electricity generation and the rest can provide heat. The coincidence between solar outputs and energy needs is better in sunny latitudes where there is a strong demand for electricity for daytime air conditioning; however, the overall resource potential is still large even in cloudy climates; studies for the UK government (DTI 1998) suggest that photovoltaics (PV) on buildings in principle could supply around two-thirds of UK annual electricity demand[32].

There are two technologies for turning solar energy to commercial energy:

- (1) Photovoltaics (PV) which directly convert light into electrical current
- (2) Solar-thermal systems

PV Technologies

PV is typically available in the form of panels and can be used for four main types of application[33]:

- (1) small scale provision of electricity in remote regions
- (2) very small scale applications such as calculators
- (3) building integrated systems (BIPV) that may also be connected to the grid
- (4) central station supplies, providing electricity to the grid

PV systems currently cost around £2500 per kW, plus installation costs. They are still several times the cost of other renewable energy technologies such as wind. In a limited number of cases PV materials are able to offset the costs of alternative building materials and this can improve the economics considerably[34].

In 1960s and 1970s costs were as high as approximately £150,000 per kW, but costs declined rapidly. However, world markets still remain small with shipments amounting to 250 MW in 2001 (as compared to over 70,000 MW of new electricity generating plant); but they are expanding at over 25% per year. Many independent studies suggest that the costs of the PV will continue to fall[35].

High Temperature Solar Thermal Technologies

Most operational experience to date has been obtained from schemes in California, whose aggregate capacity is 400 MW; they were installed in the 1980s, and have a good operational rating over a 15 year period. Aside from the projects in California there has been operational experience in research centres in Spain and Israel[36].

Wind

Estimates of wind resources depend on the availability of sites, turbine size and wind speeds. Wind resources are large on a global scale and, in principle, exceed global electricity demand. Wind technologies have two types: large turbines, designed to supply electricity to the grid, which are typically in the range 1-2 MW rated capacity and have a blade diameter of around 100 meters. Small turbines rate from around 3kW up to around 100kW, which are widely used in the leisure and off-grid markets[37].

Since the first wind farms of the late 1980s:

- (1) the annual energy output per turbine has increased 100-fold
- (2) turbine rated capacity (for typical commercial machines) has increased from 55kW to 1MW
- (3) From 1995-2000 the weight of turbines per kW installed has halved
- (4) From 1997-2000 noise levels were halved

These factors have reduced the capital costs and improved the efficiency and reliability of the turbines. Costs for onshore wind are likely to fall to around 3.0 cents/kWh at good sites. At present little offshore wind capacity is installed anywhere in the world[38].

Wind regimes are generally higher and more stable offshore and the absence of noise constraints mean that turbines can spin faster, increasing the output for a given size of machine. Costs are widely predicated to fall; the UK Energy Review suggested that costs could fall to around 1-2 pence/kWh as development proceeds. Despite limited experience of offshore generation, costs have already fallen. Offshore wind currently delivers electricity at a cost of 3 to 4 pence/kWh[39].

Biomass Energy

Biomass for heat and electricity production contributes approximately 4% of primary energy in the US, 11% in Austria, 17% in Sweden and 20% in Finland. Biomass for district heating and CHP is also well established in Denmark and Germany. Biomass already has significantly more market experience than any other renewable option[40].

Biomass can be used in multiple ways[41]:

- (1) direct combustion in small and large boilers for electricity, district heating and combined heat and power (CHP)
- (2) gasification to produce a fuel for heat and electricity generation
- (3) production of liquid and gaseous fuels for transport.

The potential for increased use of biomass resources is substantial. Biomass technologies are undergoing development both for small and large scale applications. Short-term market growth in biomass energy is likely to be based on the production of heat and electricity using combustion and gasification technology. Future biomass electricity costs from dedicated plants fuelled with energy crops could be around 0.025 pence/kWh[42].

Electrical integration issues

With the exception of biomass, renewable generation is both intermittent and unpredictable. Thus, presenting challenges for electricity system operators, particularly in relation to peak supply[43]. Renewable sources of energy give rise to a number of differences in the way in which power is fed into electricity networks and in which networks These include: intermittency (variable outputs); decentralisation of generation (smaller scale generating units); and remoteness of some generation options (distance from existing infrastructures and demands)[44].

Fluctuation of energy supply from renewable sources arise from the fact that intermittent supplies are not able to provide much of the firm capacity to ensure reliable supplies in the event of high demands and failure of other forms of generation. It appears that the potential for renewables will come to depend increasingly upon the costs and viability of a range of options for coping with intermittency, such as increased interconnection, demand management techniques and storage technologies[45].

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Research and Library Services



Research Briefing

May 2008

Synopsis of ROI Regulatory Assessment and Mandatory Renewables in Scotland

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Research Officer Research and Library Service

This paper provides a synopsis of the Republic of Ireland's regulatory impact assessment in relation to mandatory renewables and an overview of the status of mandatory renewables in Scotland.

Research Papers are compiled for the benefit of Members of The Assembly and their personal staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public.

Summary of key points

Republic of Ireland

- The Republic of Ireland (ROI) currently seeks to secure a 40% improvement in primary energy consumption and a reduction of 40% in CO2 emissions
- Under the Greener Homes Scheme ROI have had a grant system for the last five years. The grants provide approximately one third of the cost of various types of renewable energy including biomass boilers, wood pellet stoves, solar panels and heat pumps.
- Building Regulations for new dwellings makes it mandatory for approximately 10% of the total energy used by a 'typical semi-detached house' to be renewable.
- The intention of the Regulatory Impact Assessment (RIA) is to raise the energy efficiency standards of new dwellings and to provide for the use of a minimum level of renewable energy sources.
- The regulations state that each dwelling should have a minimum level of energy provision from renewable energy technologies equivalent to 11;

10 kWh/m²/annum of heat energy, or 4 kWh/m²/annum of electricity energy

Scotland

- The objective of the Renewables Obligation (Scotland) Order 2007 is to simplify some of the processes which participants in the Renewables Obligation (Scotland) (the ROS) currently have to follow and to extend the financial benefits available to some generators.
- ROS requires licensed electricity suppliers to ensure that the specified and increasing amounts of the electricity they supply are from renewable sources. For 2006/07, this amount is 6.7% and under current legislation rises to 15.4% in 2015/16.

Introduction

This paper prepared for the Finance and Personnel Committee provides a synopsis of the Republic of Ireland's regulatory impact assessment in relation to mandatory renewables and an overview of the status of mandatory renewables in Scotland. The paper details the Republic of Ireland's targets and mandatory requirements in relation to renewable energy. Also provided are the Scotlish Executives requirements for the generation and capacity of renewable energy.

Republic of Ireland Regulatory Impact Assessment of Mandatory Renewable

The Republic of Ireland (ROI) currently seeks to secure a 40% improvement in primary energy consumption and a reduction of 40% in CO2 emissions. Targets that have been set by the ROI government include;

- 30% of electricity to be renewable-sourced by 2020;
- 30% of co-firing of biomass in peat stations by 2015;
- an energy-efficient action plan leading to a 20% improvement in energy efficiency across the economy by 2020;
- 5.7% biofuels up-take by 2010;

- 5% of domestic and commercial heat requirements from renewables by 2010;
- and up to 400 megawatts of electricity from combined heat and power by 2010

The Planning System regulation relating to micro-renewables was introduced in February 2007; a debate on renewables of greater capacity for use in the commercial, industrial and agricultural sectors will take place in June 2008.

Under ROI Building Control Acts of 1990 and 2007, the responsibility for complying with the regulations rests with the owner or the builder. ROI enforcement system consists of 37 building control authorities. The target enforcement rate for buildings that are subject to commencement orders that are lodged with the building control authorities is 12%-15%.

Although the ROI Minister responsible for renewable energy brought in 40% improvements for new dwellings on Christmas Eve 2007, an announced was made at the Energy Forum, stating that this would be increased to a 60% improvement for new dwellings in 2020. Local authorities will be asked to come forward and demonstrate projects in their housing programmes for the use of renewables and movement towards zero-carbon homes in local authorities.

Under the Greener Homes Scheme ROI have had a grant system for the last five years and there has been a significant up-take of those grants. The grants provide approximately one third of the cost of various types of renewable energy including biomass boilers, wood pellet stoves, solar panels and heat pumps. To be eligible for a grant, an approved installer has to be used and, the renewable energy system has to meet the required standard.

Part L (Conservation of Fuel and energy) of the Building Regulations for new dwellings makes it mandatory for approximately 10% of the total energy used by a 'typical semi-detached house' to be renewable. Indeed, this relates to 10 kilowatt hours per meter squared per year for heat energy and 4 kilowatt hours per metre squared per year for electricity energy.

ROI has moved form the grant scheme to the mandatory system, which is in line with our overall programme for improving energy efficiency and reducing carbon emissions. New houses have 40% lower heat energy demands than buildings in the 2005 regulations. ROI intends to achieve a 60% target by 2010, and eventually move towards very low, or zero, carbon housing. All aspects of this relate to Part L of the Building Regulations.

Regulatory Impact Assessment

The intention of the Regulatory Impact Assessment (RIA) is to raise the energy efficiency standards of new dwellings and to provide for the use of a minimum level of renewable energy sources. Specifically, the amendment responds to commitments made in Ireland's 'National Climate Change Strategy 2007-2012' and the commitment made in the Programme for Government June 2007 to[2]:

"Introduce new national building standards in 2007 to ensure that new housing has 40% lower heat energy demand than existing building standards and revise them again in 2010 to achieve a 60% target in further years".

Cost of Common Renewable Methods

The new regulations require a proportion of the energy demand to be met from renewable energy sources. Government policy on renewables identifies strategic goals for sustainable

energy, including accelerating the growth of renewable energy sources and sets targets of 5% up-take of renewables in the heat market by 2010 and 12% by 2020.[3]

The regulations state that each dwelling should have a minimum level of energy provision from renewable energy technologies equivalent to; $\boxed{4}$

- (1) 10 kWh/m²/annum of heat energy, or
- (2) 4 kWh/m²/annum of electricity energy

The mandatory integration of renewables into new dwellings was set out in the ROI Programme for Government, June 2007. Solar water heating, Wood pellet boiler and Ground source heat pump are common renewable methods that are currently available to meet the necessary requirements in CO2 reduction. [5]

The Renewables Obligation (Scotland) Order 2007

This Order is made under section 32 of the Electricity Act 1989 and imposes an obligation (renewables) on all electricity suppliers, which are licensed under that Act and which supply electricity in Scotland and other parts of Great Britain; stating that a specified amount of electricity generated must be by using renewable sources. Renewable sources of energy include as wind, water, solar and biomass.[6]

The objective of the Renewables Obligation (Scotland) Order 2007 is to simplify some of the processes which participants in the Renewables Obligation (Scotland) (the ROS) currently have to follow and to extend the financial benefits available to some generators. This will be achieved through some limited changes to the existing ROS 2006. The proposals will affect all licensed electricity suppliers, all ROS eligible electricity generators, and Ofgem, who administer the ROS.[7]

The ROS was introduced in 2002, and is the Scottish Executive's policy to encourage the development of electricity generation using renewable energy sources. The ROS is a key driver towards the Executive's targets that 18% of electricity generated in Scotland as a proportion of demand by 2010, rising 40% by 2020 will be from renewable sources.[8]

ROS requires licensed electricity suppliers to ensure that the specified and increasing amounts of the electricity they supply are from renewable sources. For 2006/07, this amount is 6.7% and under current legislation rises to 15.4% in 2015/16. Without the financial support provided by the ROS, most forms of renewable electricity would not be economic. [9]

Regulatory Burdens

The Renewables Obligation (Scotland) (ROS) imposes some regulatory burdens on renewable generators and the electricity supply industry. The amendments to the ROS will include a small number of detailed changes that will make it easier for renewable generators to benefit from the Obligation. This will reduce the regulatory burdens on business and reduce the administrative processes for microgenerators (can be individuals as well as businesses). [10]

The Scottish Executive proposes to introduce measures that will make it easier for small generators to benefit from the ROS (in this context small generators are those with a declared net capacity of 50 kW or less). Two changes are proposed; [11]

- (1) allowing agents to act on behalf of smaller generators in seeking accreditation and claiming of ROCs and that these ROCs are then issued to the agent
- (2) allowing ROCs to be issued to agents; and allowing agents to amalgamate the output of smaller generators for the purposes of claiming ROCs

The main differences between this Order and the 2006 Order are the introduction of minimum wave and tidal requirements as part of the Renewables Obligation. [12]

The Renewables Obligation requires the electricity supplier to produce evidence of the supply of electricity generated from the renewable sources to the Authority. The evidence required is certificates issued by the Authority. Those certificates issued under this Order are referred to as Scottish Renewable Obligation Certificates (SROCs). This includes a specified minimum amount of energy which must be generated from wave and tidal generating stations located in Scottish waters or the Scottish area of the Renewable Energy Zone. Special arrangements enabling generating stations with a declared net capacity of 50 kilowatts or less to be able to claim SROCs on an annual rather than monthly basis. [13]

generating stations with a declared net capacity of 50 kilowatts or less to be able to claim SROCs Provision has been made for the exchange of information between the Authority and the Northern Ireland Authority relating to NIROCs produced to the Authority and SROCs produced to the Northern Ireland authority under the Northern Ireland Renewables Obligation orders.[14] [1] Regulatory Impact Assessment, building Regulations Part L and Technical Guidance Document L, http://www.environ.ie/en/egislation/developmentandhousing/buildingstandards/filedownload,166 44,en.pdf [2] Regulatory Impact Assessment, building regulations Part L and Technical Guidance Document L. http://www.environ.ie/en/egislation/developmentandhousing/buildingstandards/filedownload,166 44,en.pdf [3] Regulatory Impact Assessment, building regulations Part L and Technical Guidance Document L, http://www.environ.ie/en/egislation/developmentandhousing/buildingstandards/filedownload,166 44,en.pdf [4] Regulatory Impact Assessment, building regulations Part L and Technical Guidance Document L, http://www.environ.ie/en/egislation/developmentandhousing/buildingstandards/filedownload,166 44,en.pdf [5] Regulatory Impact Assessment, building Regulations Part L and Technical Guidance Document L. http://www.environ.ie/en/egislation/developmentandhousing/buildingstandards/filedownload,166 44,en.pdf [6] The Renewables Obligation (Scotland) Order 2007 No. 267,

http://www.opsi.gov.uk/legislation/scotland/ssi2007267_en_12#legislation-exnote

http://www.legislation.gov.uk/legislation/scotland/ssi2007/en/ssien_20070267_en.pdf

[7] Executive Note: The Renewables Obligation (Scotland) Order 2007,

