

CLIMATE CHANGE (NO. 2) BILL

EXPLANATORY AND FINANCIAL MEMORANDUM

INTRODUCTION

1. This Explanatory and Financial Memorandum has been prepared by the Department of Agriculture, Environment and Rural Affairs in order to assist the reader of the Bill and to help inform debate on it. It does not form part of the Bill and has not been endorsed by the Assembly.
2. The Memorandum needs to be read in conjunction with the Bill. It is not, and is not meant to be, a comprehensive description of the Bill. So where a clause or part of a clause does not seem to require an explanation or comment, none is given.
3. References to “the Department” are to be read as references to the Department of Agriculture, Environment and Rural Affairs.

BACKGROUND AND POLICY OBJECTIVES

4. Climate change is a defining crisis of our time on a global and national scale. In June 2019, the UK amended¹ the Climate Change Act 2008 to set a ‘net zero target’ which commits the UK to reduce greenhouse gas emissions by “at least” 100 per cent below 1990 levels by 2050. While the Climate Change Act 2008 extends to Northern Ireland, specific greenhouse gas emission reduction targets for Northern Ireland are not included in it, or any other legislation.
5. In order to address this legislative gap, the Northern Ireland Executive, through the *New Decade, New Approach* agreement, made a commitment that it will ‘introduce legislation and targets for reducing carbon emissions in line with the Paris Climate Change Accord’. Under the Climate Change section at Appendix 2 of that agreement it further states that ‘The Executive should bring forward a Climate Change Act to give environmental targets a strong legal underpinning’.
6. Northern Ireland is not immune to the severity of the impacts of a changing climate and it is important that it plays its part in the global and UK effort to tackle climate change. The Bill aims to achieve this by creating a framework that will establish a pathway to achieving emission reduction targets which will ensure that Northern

¹ Through the Climate Change Act 2008 (2050 Target Amendment) Order 2019

Ireland makes a contribution to the achievement of the UK 2050 Net Zero target. In doing so this will help to ensure that Northern Ireland develops a greener, low carbon circular economy in which the environment can prosper and be protected.

CONSULTATION

7. The Department consulted on a “Discussion Document on a Climate Change Bill for Northern Ireland” from 8th December 2020 to 1st February 2021. The public consultation received 269 discrete responses which were submitted via Citizen Space or directly to the Climate Change Bill team via e-mail.
8. A majority of respondents (48%) preferred a Northern Ireland Climate Change Bill which sets evidence-based greenhouse gas emission reduction targets to reflect Northern Ireland’s equitable contribution to the UK 2050 Net Zero greenhouse gas emissions reduction target. A lower number of respondents (40%) were in favour of a Bill which requires Northern Ireland to be Net Zero in greenhouse gas emissions by 2050. The remaining 12% of respondents were not sure or had had no opinion on the level of targets to be set in a Bill. Respondents generally supported having a Bill which provided flexibility for reassessing targets, etc. in light of any updates to evidence, science or understanding around climate pressures and measures to address these. The majority of the respondents were also in favour of including provisions in the Bill in relation to public bodies reporting on measures being taken in terms of adaptation to climate change.
9. The Department commissioned the Northern Ireland Statistical Research Agency (NISRA) to conduct a quantitative and qualitative analysis of the outcome on the consultation. The full synopsis of responses, which incorporates this analysis, will be published on the Department’s website.

OPTIONS CONSIDERED

10. In addition to the standard do nothing/business as usual option there were two options considered following the public consultation (Note that ‘Do Nothing’ was not considered a viable option but is presented for comparison purposes):
11. **Option 1: Do Nothing/Business as Usual.**

Northern Ireland would continue to contribute to meeting the requirements of the Climate Change Act 2008 which extends to the whole of the UK. The fundamental purpose of the Act is to set emission reduction targets for the year 2050 to limit the volume of net greenhouse gases emitted in the UK. The Act also provides powers for setting UK carbon budgets and places a duty on the Secretary of State to report on the level of emissions. While the Climate Change Act 2008 contains an overall emissions reduction target for the UK, Scotland and Wales both have their own Climate Change Acts: the Climate Change (Scotland) Act 2009 and the Environment (Wales) Act

2016. Both of these Acts contain long-term targets and other additional elements including reporting requirements. This legislation has helped to provide focus and drive efforts by Scottish and Welsh Ministers to take action to achieve the specific targets within those Acts which in turn will help the UK to reach its 2050 Net Zero target.

Option 1 was not considered viable and therefore was not put forward as an option as part of the Department's consultation. It would not deliver on the *New Decade, New Approach* agreement commitment and would leave Northern Ireland as the only part of the UK without its own specific climate change legislation.

12. **Option 2:** Introduce climate change legislation for Northern Ireland which includes a target that represents Northern Ireland's equitable contribution to the UK 2050 Net Zero target.

This option would achieve the commitment in the *New Decade, New Approach* agreement and would result in Northern Ireland making an equitable contribution towards the UK 2050 Net Zero target. This was the option supported by the majority of the discrete responses to the consultation and this option would result in Northern Ireland adopting the recommendations of the UK Climate Change Committee (referred to as the Committee on Climate Change within the Bill and the Commentary on Clauses section in this Explanatory and Financial Memorandum). The Climate Change Committee is the independent body set up under the Climate Change Act 2008 to provide expert advice to the UK Governments on climate change matters.

13. **Option 3:** Introduce climate change legislation for Northern Ireland which includes a 2050 Net Zero target for Northern Ireland.

This option would achieve the commitment in the *New Decade, New Approach* agreement and would result in Northern Ireland making emission reductions beyond what is considered to be an equitable contribution towards the UK 2050 Net Zero target. It would not be in line with the advice of the Climate Change Committee.

Option 2 was the option applied to the policy of the Bill as introduced to the Assembly on the basis of the best available evidence, however Option 3 was voted through by the Assembly during the Bill's Consideration Stage as a result of amendments to the Bill as introduced.

OVERVIEW

14. The Bill has 65 clauses and is divided into 5 Parts.

COMMENTARY ON CLAUSES

A commentary on the clauses is provided below. Comments are not given where the wording is self-explanatory. Note that references to the Committee on Climate Change within the Bill and this commentary means the UK Climate Change Committee.

PART 1 - EMISSIONS TARGETS

Clause 1: The emissions targets for 2050.

This clause imposes a duty on all Northern Ireland departments to ensure that the net Northern Ireland emissions account for the year 2050 is at least 100% lower than the baseline. Subsection (3) clarifies that this duty does not require the net Northern Ireland emissions account for methane for the year 2050 to be more than 46% lower than the baseline for methane. In addition, the clause imposes a duty on all Northern Ireland departments to ensure that the net Northern Ireland emissions account for carbon dioxide for the year 2050 is 100% lower than the baseline for carbon dioxide.

The baseline is defined in clause 7 as the aggregate amount of net Northern Ireland emissions of certain listed greenhouse gases for the baseline years of those gases (either 1990 or 1995 for each gas). The target for 2050 is set by reference to baseline years rather than a particular quantum of emissions because the baseline years are subject to revision, as understanding of historic emissions improves. Using a baseline for this calculation is consistent with the methodology employed for the purposes of the Kyoto Protocol to the United Nations Framework Convention on Climate Change 1998, an international agreement to limit emissions of greenhouse gases, to which the UK is party. The baseline for carbon dioxide is the amount of net Northern Ireland emissions of carbon dioxide in 1990 and similarly the baseline for methane is the amount of net Northern Ireland emissions of methane in 1990.

The term “net Northern Ireland emissions account” is defined in clause 8.

Clause 2: Emissions targets for 2030 and 2040

This clause imposes a duty on the Department to set targets for 2030 and 2040 which are consistent with the target in clause 1.

Clause 3: The emissions target for 2040

This clause imposes a duty on all Northern Ireland departments to ensure that the net Northern Ireland emissions account for the year 2040 is in line with the overall target for the year 2050.

Clause 4: The emissions target for 2030

This clause imposes a duty on all Northern Ireland departments to ensure that the net Northern Ireland emissions account for the year 2030 is at least 48% lower than the baseline.

Clause 5: Power to amend emission targets

This clause firstly provides the Department with the power to amend the emissions targets in the Bill to either specify an earlier year for an emissions target, or a higher percentage for a particular year. In effect, it allows the Department to alter the 2030, 2040 and 2050 emissions reduction targets to bring them forward or increase the volume of reductions required.

Subsection (2) provides a further power for the Department to add a further emissions reduction target for a specified year.

The powers may only be used if one of the conditions in clause 54 is met. Before draft regulations are made to amend the targets in clauses 1, 3 or 4, the Department must seek advice from the Committee on Climate Change (clause 56(1)) if the amendment is as a result of significant developments in UK or international law or policy, scientific knowledge on climate change or technology relevant to climate change. The advice provided to the Department by the Committee must also include the Committee's opinion on the matters provided in clause 57(2) and (3). Clause 57(2) requires that, where the Department is proposing to specify a different year for a particular emissions target, the Committee must advise whether the year proposed is the earliest year for which the target could be achieved and, if not, what the earliest year for the target to be achieved would be. Clause 57(3) requires that, where the Department is proposing to specify a different percentage for a particular emissions target year, the Committee must advise whether the percentage proposed is the highest percentage achievable for that year and, if not, what the highest percentage achievable would be.

The purpose of linking use of the powers in clause 5 to the conditions set out in clause 54 is to ensure that changes to the emission targets are only made where expert advice or significant developments mean that it is appropriate to do so. Where the amendment is as a result of a recommendation which has been provided by the Committee, the Department does not have to seek its advice under clause 56.

Clause 6: Emissions targets for 2030 and 2040

This clause requires the Department to consider whether the emissions targets in sections 3 and 4 are consistent with the target in section 1(1). The Department is further required, within 2 years of the Act achieving Royal Assent, to either update these targets using the powers in section 5 or lay a statement before the Assembly explaining why one or both of the targets doesn't need to be updated.

Clause 7: Meaning of "baseline"

This clause defines the "baseline" and the baseline for carbon dioxide and methane for the purposes of the Bill, and enables the Department to make regulations to amend that baseline. The Department can only modify the baseline year for a greenhouse gas if it is satisfied that it would be appropriate to do so as a result of significant developments in UK or international law or policy relating to climate change (clause 55).

Clause 8: Meaning of “net Northern Ireland emissions account” for a year

This clause defines the net Northern Ireland emissions account as the aggregate amount of net Northern Ireland emissions of each greenhouse gas for that year, minus any carbon units credited to the account for the period plus any carbon units debited from the account for the period. This clarifies how emissions are to be determined for the purposes of comparing the amount of emissions for a year against the emission reduction targets in the Bill and any carbon budgets set under clause 23. The clause similarly sets out how to determine the net Northern Ireland emissions account for carbon dioxide and methane. Clause 11 sets out requirements relating to the crediting and debiting of carbon units to the net Northern Ireland emissions account.

Clause 9: Meaning of “net Northern Ireland emissions”

This clause defines Northern Ireland emissions and Northern Ireland removals of greenhouse gases, and provides that Northern Ireland emissions for a period minus Northern Ireland removals for a period are net Northern Ireland emissions for a period.

Subsection (4) provides the Department with a power to amend the definition of Northern Ireland removals. The current definition covers nature-based approaches to greenhouse gas removal and the use of carbon capture and storage technology.

Clause 10: Meaning of “Northern Ireland emissions”: international aviation and shipping

This clause enables the Department to make regulations providing for emissions of a greenhouse gas from international aviation and international shipping to count as Northern Ireland emissions of the gas.

Clause 11: Crediting and debiting of carbon units

This clause enables the Department to set out in regulations the circumstances in which carbon units may or may not be credited to, or debited from, the Northern Ireland net emissions account and the Northern Ireland net emissions account for carbon dioxide. Clause 59 of this Bill defines what a carbon unit is.

Subsection (2) provides that the regulations must ensure that, where carbon units are used to reduce the net Northern Ireland emissions account, they are not also used to offset other emissions elsewhere. This could otherwise lead to “double-counting”.

Subsection (3) requires that any regulations made under subsection (1) set out a limit on the net amount of carbon units by which the net Northern Ireland emissions account for a period may be reduced through the debiting and crediting of carbon units. The subsection further restricts this limit to a maximum of 25% of emissions for a period.

Subsection (4) enables the Department to specify that carbon units of a certain description do not count towards any of the limits set. Subsections (5) to (8) deal with the crediting and

debiting of carbon units to the Northern Ireland net emissions account for carbon dioxide and how any purchased carbon units will be apportioned to this,

Advice will be sought from the Committee on Climate Change on these issues and what might be appropriate before the Department brings forward any regulations under the powers within this clause.

Clause 12: Carbon units: accounting scheme

This clause enables the Department to make regulations to establish a scheme, or use an existing scheme, to register and track carbon units and to establish and maintain accounts in which carbon units may be held. Subsection (3) identifies some of the administrative elements which can be covered in such regulations, including the potential appointment of an administrator for such a scheme.

Clause 13: Sectoral plans

This clause requires Northern Ireland departments to develop and publish sectoral plans setting out how sectors will contribute to achieving the targets in the Bill.

Clause 14: Sectoral plans for energy

This clause requires the Department for the Economy to develop and publish a sectoral plan setting out how the energy sector will contribute to achieving the targets in the Bill.

Clause 15: Renewable electricity consumption

This clause requires the Department for the Economy to ensure that at least 80% of electricity consumption is from renewable sources by 2030.

Clause 16: Sectoral plans for infrastructure

This clause requires the Department for Infrastructure to develop and publish a sectoral plan setting out how the infrastructure sector will contribute to achieving the targets in the Bill.

Clause 17: Sectoral plans for industrial processes

This clause requires the Department for the Economy to develop and publish a sectoral plan setting out how the industrial processes sector will contribute to achieving the targets in the Bill.

Clause 18: Sectoral plans for waste management

This clause requires the Department to ensure that at least 70% of waste is recycled, and to develop and publish a sectoral plan setting out how the waste sector will contribute to achieving the targets in the Bill.

Clause 19: Sectoral plans for agriculture

This clause requires the Department to develop and publish a sectoral plan setting out how the agricultural sector will contribute to achieving the targets in the Bill.

Clause 20: Sectoral plans for fisheries

This clause requires the Department to develop and publish a sectoral plan setting out how the fisheries sector will contribute to achieving the targets in the Bill.

Clause 21: Sectoral plans for transport

This clause requires the Department for Infrastructure to develop and publish a sectoral plan setting out how the transport sector will contribute to achieving the targets in the Bill.

Clause 22: Active Travel

This clause requires the Department for Infrastructure to develop and publish a sectoral plan for transport which sets a minimum spend on active travel from the overall transport budgets of 10%.

PART 2 - CARBON BUDGETS

Clause 23: Carbon budgets

This clause places a duty on the Department to make regulations that set the maximum total amount of carbon emissions for each 5 year budgetary period, which is known as a ‘carbon budget’. This clause sets out what the budgetary periods are, and also provides a power to amend the periods subject to the restrictions set out in clause 55. The clause also outlines consultation requirements and requirements in terms of impact assessments in respect of proposed carbon budgets.

The first budgetary period will be 2023-2027 and the remaining budgetary periods are each succeeding period of five years.

Clause 24: Emissions not to exceed carbon budget

This clause requires the Northern Ireland departments to ensure that the net Northern Ireland emissions account for each carbon budget period does not exceed the carbon budget set for that period.

This duty is therefore similar to the duties placed on Northern Ireland departments under clauses 1, 3 and 4 with further provision regarding this duty set out in clause 52.

Clause 25: Setting of carbon budgets: principles

This clause places a duty on the Department to set specified carbon budgets at a level consistent with meeting the emissions targets set out in clauses 1, 3 and 4 for 2050, 2040 and 2030. This reflects the fundamental purpose of carbon budgets which is to act as a mechanism for limiting emissions over shorter periods in order to achieve longer term emission reduction targets.

Clause 26: Setting of carbon budgets: Social, environmental and economic factors

This clause outlines factors to be taken into account when setting carbon budgets.

Clause 27: Setting of carbon budgets: timing

This clause places a duty on the Department to set the carbon budgets for the first three budgetary periods before the end of 2023, and to set the carbon budgets for the fourth and subsequent budgetary periods at least 12 years in advance of the budget period commencing.

Subsection (2) enables the Department to amend the carbon budget for any budgetary period before the start of a budget period, and to amend the date by which a carbon budget should be set. Use of the power to amend the carbon budgets is subject to one of the conditions in clause 54 having been met. Use of this power may be necessary, for example, in a situation where the emissions targets in the Bill have been amended.

Clause 28: Carrying amounts from one budgetary period to another

This clause provides a power for the Department to “bank” and “borrow” emissions between budgetary periods.

The Department may “borrow” up to 1% of the next budget. An amount from the next budget is “carried back” to the budget preceding it. Where this power is used, the next budget (which will already have been set by regulations) is reduced by the amount that has been borrowed.

The Department may carry forward any part of the carbon budget that exceeds the net Northern Ireland emissions account for that period (i.e. to “bank” a budget surplus, but not necessarily all of it). The banked amount is added to the next carbon budget.

Subsection (7) requires the Department to consult with the Committee on Climate Change, the Climate Commissioner and the other Northern Ireland departments before the carrying back or forward of any part of carbon budgets using the powers in this clause.

PART 3 - REPORTS AND STATEMENTS AGAINST TARGETS AND BUDGETS ETC

Clause 29: Proposals and policies for meeting carbon budgets

This clause places a duty on the Department to prepare and publish a report for each budgetary period setting out the policies and proposals for meeting the carbon budget for that period. These reports are to be called “climate action plans” and will effectively outline the planned actions that will be taken across a budgetary period by all Northern Ireland departments in order to try and lower emissions across relevant sectors.

Subsection (3) requires the report to cover the areas of responsibility of each Northern Ireland department. Each Northern Ireland department is required to provide the Department with detail on its proposals and policies within its areas of responsibility. Similar requirements are included in respect of all the reporting duties placed on the Department in Part 3 of the Bill in order to require effective contributions from all Northern Ireland departments to assist with planning and implementing measures to reduce emissions.

Subsection (7) requires the Department to lay the report for a budgetary period in the Assembly before the end of the first year of that period and subsections (8) and (9) set out consultation requirements

Clause 30: Requirements for proposals and policies under section 29

This clause sets out a range of requirements that each Northern Ireland department should have regard to when developing the reports under clause 29. These requirements cover transboundary co-ordination and consultation, the need to have regard to the just transition principle and the desirability of supporting nature based projects.

Clause 31: Just Transition Fund for Agriculture

This clause requires the Department to make regulations to establish a scheme to be known as the “Just Transition Fund for Agriculture” to provide financial assistance and advice to the agricultural sector to help it deliver its contribution under proposals and policies brought forward under clause 29. The clause outlines a range of aspects which the regulations may make provision for.

Clause 32: Policies and proposals: targets

This clause requires the climate action plans under clause 29 to set out targets for soil quality and biodiversity to be achieved during carbon budget periods. The targets have to be set after a number of specified matters are taken into account. The clause further requires that annual targets for greenhouse gas emissions and air quality are included in the climate action plans.

Clause 33: Policies and proposals: further provision

This clause requires the climate action plans under clause 29 to include policies and proposals to ensure that a range of specified sectors contribute towards achieving carbon budgets.

Clause 34: Policies and proposals: nature based solutions

This clause requires the climate action plans under clause 29 to include policies and proposals which support nature based solutions.

Clause 35: Policies and proposals: workforce, employers and communities

This clause requires the climate action plans under clause 29 to explain how the proposed policies and proposals within the plans are expected to affect the workforce, employers and communities and to include proposals and policies to support them. Subsection (2) requires that the explanation, proposals and policies under subsection (1) must make particular reference to small businesses. A “small business” is defined in subsection (3) and subsection (4) includes a power to amend this definition.

Clause 36: Policies and proposals: carbon leakage

This clause requires each Northern Ireland department, when setting out proposals and policies in climate action plans produced under clause 29 to take into account the risk of the implementation of those proposals and policies leading to carbon leakage and the desirability of eliminating or reducing that risk. Subsections (2) and (3) define terms used in subsection (1).

Clause 37: Just Transition Commission

This clause requires the Department to establish through regulations a Just Transition Commission to oversee the implementation of the just transition elements of the Bill, and provide advice to Northern Ireland departments on how to ensure their proposals, strategies, plans and policies comply with just transition principles. The clause further outlines the range of aspects which the regulations must or may cover including sectors, areas and groups who should be represented on the Commission.

Clause 38: Interim progress reporting for budgetary period

This clause places a duty on the Department to lay a report before the Northern Ireland Assembly, setting out what progress has been made in implementing the proposals and policies contained in a climate action plan produced under clause 29. This is to be laid before the end of the third year of each budgetary period.

Clause 39: Final statement for budgetary period

This clause places a duty on the Department to prepare and lay a statement before the Northern Ireland Assembly on the final emissions, removals and net emissions for Northern Ireland

during a budgetary period. These figures are used to determine whether a carbon budget has been met. The report must be laid before the end of the second year after the budgetary period in question.

Subsections (3) and (5) require the statement to also state the amount of carbon units credited to, or debited from, the net Northern Ireland emissions account for the period, and whether a decision has been made to carry back or forward any carbon units (and the level of any such amounts).

Subsections (8) and (9) require the statement to explain why the target has or has not been met, and to include an assessment of the extent to which the relevant proposals and policies for meeting the carbon budget have been carried out and contributed to, the budget being met or not.

Clause 40: Proposals and policies where carbon budget not met

This clause applies where a final statement has been laid in the Assembly in respect of a budgetary period and the net Northern Ireland emissions account for the period exceeds the carbon budget. It requires the Department, within 3 months of laying the final statement, to lay a further report in the Assembly setting out the proposals and policies in subsequent budgetary periods to compensate for the excess emissions.

Clause 41: Statements on compliance with emissions targets

This clause places a duty on the Department to prepare a statement for each of the target years in clauses 1, 3 and 4 and lay this statement in the Assembly before the end of the second year after the year to which it relates. The requirements are largely similar to those set out in respect of carbon budgets under clause 39.

Subsections (2) to (4) require the statement to provide detail on the amount of emissions, removals and net emissions as well as the total amount of carbon units credited to, or debited from, the Northern Ireland emissions account for the year (or to the Northern Ireland emissions account for carbon dioxide) to which the statement relates.

Subsection (5) provides that the question of whether the 2050, 2040 or 2030 target has been met is to be determined by referring to the information provided in the statement for the target year to which it relates.

Subsection (6) requires that the statement explains why the target has or has not been met.

Clause 42: Climate change reporting by public bodies

This clause requires the Department to make regulations, within 18 months of the Act achieving Royal Assent, to impose climate change reporting duties on specified public bodies. The clause defines what a public body is, and under subsection (3) identifies some of the aspects that the regulations can make provision for reports to contain. Subsection (5) further identifies some of the elements which the regulations can cover.

Subsection (7) requires the Department to consult with public bodies and other appropriate persons before making the regulations.

PART 4 - REPORTS BY COMMITTEE ON CLIMATE CHANGE

Clause 43: Progress report during budgetary period

This clause places a duty on the Committee on Climate Change to send a report to the Department, before the end of 2027, on its view on the progress that has been made towards meeting the targets in the Bill and the carbon budgets set under clause 23. The report is to indicate whether the targets and carbon budgets are likely to be met and identify further action required to meet these targets. This will be the first significant assessment of progress made towards the targets set out under the Bill by the Committee on Climate Change. The subsequent clauses in Part 4 place further requirements on the Committee on Climate Change concerning the assessment of progress against targets and carbon budgets and progress with the implementation of adaptation programmes.

Subsection (2) places a duty on the Department to lay the report in the Northern Ireland Assembly. A similar requirement is set out in respect of other reports provided by the Committee on Climate Change under Part 4 of the Bill.

Clause 44: Progress reports after statement about each budgetary period

This clause places a duty on the Committee on Climate Change to provide the Department with a report on the meeting (or otherwise) of a carbon budget. This should be provided within 6 months of the Department laying its final statement for a budgetary period under clause 39. The report must set out the Committee's views on the way in which the carbon budget was or was not met, actions taken by the Northern Ireland departments to reduce net Northern Ireland emissions of greenhouse gases during the period, progress that has been made towards meeting the emissions targets and carbon budgets set under the Act, whether those targets and budgets are likely to be met and any further measures that are needed to meet those targets and budgets.

Clause 45: Progress report after each statement about emissions target for 2030

This clause places a duty on the Committee on Climate Change to send a report to the Department within 6 months of the Department laying its statement, under clause 41, on compliance with the 2030 target.

The report should advise whether the targets for 2040 and 2050 are the highest targets that are achievable and, if not, what the highest achievable targets are and what measures are needed for Northern Ireland to meet those targets.

Clause 46: Progress report after each statement about emissions target for 2040

This clause places similar duties on the Committee on Climate Change to that set out in Clause 45. This duty is in regard to the statement laid in respect of compliance with the 2040 target.

The report should advise whether the 2050 targets are the highest targets that are achievable and, if not, what the highest achievable targets for 2050 are and what measures are needed for Northern Ireland to meet those targets.

Clause 47: Response to progress reports

This clause places a requirement on the Department to respond to the Committee on Climate Change on any points it raises within reports produced under clauses 43 to 46 within 6 months of receiving one of the reports from the Committee.

Clause 48: Adaptation programme reports

This clause places a duty on the Committee on Climate Change to provide a report to the Department on progress which is being made with the implementation of adaptation programmes. The report must be provided within 3 years of the Department laying an adaptation programme under section 60 of the Climate Change Act 2008. The Committee is required to set out its assessment of the progress made towards implementing the objectives, proposals and policies set out in the programme and any recommendations it has for the next adaptation programme. This report will help to influence the development of the subsequent adaptation programme.

Clause 49: Response to adaptation programme reports

This clause places a duty on the Department to respond to the Committee on Climate Change report under clause 48 on the progress which has been made with adaptation programmes.

Clause 50: Northern Ireland Climate Commissioner

This clause places a duty on the Executive Office, within 24 months of the Act achieving Royal Assent, to establish, through regulations, an independent Northern Ireland Climate Commissioner. The clause further specifies the range of aspects which the regulations can cover.

Clause 51: Climate action plan

This clause places a duty on the Department to publish a climate action plan within 2 years of the Act achieving Royal Assent. The clause sets out consultation requirements and requires the climate action plans to include annual greenhouse gas and air quality targets.

PART 5 - SUPPLEMENTARY

Clause 52: Duties to ensure that targets etc. are met

This clause explains the duties that are placed on the Northern Ireland departments under clauses 1, 3, 4 and 24 and the duty which may be placed on Northern Ireland departments under clause 5.

Clause 53: Regulations: general

This clause provides the Department with a power, when making regulations under the Act, to make consequential or supplementary provisions. This includes a power to amend the Act itself, or a carbon budget before the budgetary period begins.

Subsection (3) requires that regulations made under the Bill must be made under the draft affirmative resolution procedure except those regulations referred to in subsection (4) which are to be made under negative resolution. The regulations which can be made under negative resolution by virtue of subsection (4) are those made under clause 9(4) or 42(1) (to either amend the definition of Northern Ireland removals or to set out requirements in respect of public body reporting) unless such regulations contain consequential or supplementary provision of the kind mentioned in subsection (2) of this clause.

If consequential or supplementary provision is made under subsection (2) to amend an emissions target, add a new target or amend a carbon budget, section 54 will be applicable. If consequential or supplementary provision is made under subsection (2) to specify a different baseline year for a greenhouse gas or change a budgetary period, then clause 55 applies.

Clause 54: Regulations that amend or add an emissions target or amend a carbon budget

This clause sets out the conditions which must be met before the Department can make regulations which amend an emissions target or add a new target or amend a carbon budget.

Under subsection (2), the Department is only able to make such regulations if–

- The provision made by the regulations has been recommended by the Committee on Climate Change or is not substantially different from their recommendation, or
- It is appropriate to make changes due to significant developments in United Kingdom or international law or policy, scientific knowledge about climate change or technology relevant to climate change.

Subsection (3) places a duty on the Department to have regard to certain matters when making such regulations. The matters are -

- the views of the Climate Commissioner and the Just Transition Commission,
- United Kingdom and international law or policy relating to climate change,
- scientific knowledge about climate change, and
- technology relevant to climate change.

If the Department is satisfied that it is appropriate to make the regulations as a result of significant developments in one of the above matters it does not have to have separate regard to that matter.

The purpose of this clause is essentially to ensure that there is a strong justification and/or evidence to support making amendments to the key targets and elements of the Bill.

Clause 55: Regulations that specify a different baseline year or change a budgetary period

This clause sets out the restrictions that apply if the Department is making regulations that specify a different baseline year for a greenhouse gas or that change a budgetary period. The Department can only make such regulations if it is appropriate to do so as a result of significant developments in United Kingdom or international law or policy relating to climate change

Clause 56: Requirement to obtain advice about proposals to make regulations

This clause sets out requirements on the Department in relation to obtaining advice from the Committee on Climate Change when making Regulations under any provision in the Bill, with the exception of regulations being made in accordance with clause 54(2)(b).

Subsection (2) places a duty on the Department, when making regulations under clause 9(4) or 43(1) or laying draft regulations under clause 53(3), to request advice from the Committee on Climate Change and to take this advice into account.

Subsection (3) places a duty on the Department to specify a reasonable period as to when the advice should be provided. Under subsections (4) and (5) the Committee has to provide the advice within the prescribed timescale and to provide reasons as to why particular advice has been recommended.

Subsection (6) requires the advice supplied by the Committee to be published by the Department.

Subsections (7) to (9) apply if the Department intends to make regulations that differ from what the Committee has recommended. The Department must either publish or lay in the Assembly (depending on the process through which the regulations in question are being made) a statement setting out the reasons for the difference.

Clause 57: Advice about proposed regulations relating to targets

This clause sets out how the Committee on Climate Change must respond to requests under clause 56 for advice on proposed regulations which will amend emission reduction targets (either to specify a different year in respect of a target or to specify a different target for a year).

Subsection (2) requires that in relation to proposed regulations changing the year for a particular emissions target, the Committee's advice must include its opinion on whether the year proposed is the earliest year for which the target could be achieved and, if not, what the earliest year for the target to be achieved would be.

Subsection (3) requires that, where the Department is proposing to specify a different percentage for a particular emissions target year, the Committee must advise whether the percentage proposed is the highest percentage achievable for that year and, if not, what the

highest percentage achievable would be. The Committee must also have regard to the matters specified in subsection (4) when giving such advice.

Clause 58: Advice about proposed regulations relating to budgets

This clause sets out how the Committee on Climate Change must respond to requests under clause 56 for advice on proposed regulations which will set or amend carbon budgets.

Subsection (2) requires the Committee to advise on the levels at which carbon budgets should be set and on the extent to which budgets should be met by reducing the amount of net Northern Ireland emissions, or by the use of carbon units credited to the net Northern Ireland emissions account.

The Committee must advise on the respective contributions towards meeting carbon budgets that should be made by sectors of the Northern Ireland economy covered by trading schemes (taken as a whole) and by other sectors not covered (taken as a whole). The Committee is also required to advise on sectors of the Northern Ireland economy in which there are particular opportunities for contributions to be made towards meeting carbon budgets through reductions in emissions of greenhouse gases.

Clause 59: Meaning of “carbon unit”

This clause enables the Department to make regulations setting out specifically what “carbon units” can be used for carbon accounting purposes. “Carbon units” in the regulations can only be units representing:

- a reduction in an amount of greenhouse gas emissions,
- the removal of an amount of greenhouse gas from the atmosphere, or
- an amount of greenhouse gas emissions which are allowed under a scheme or arrangement which limits such emissions.

Clause 60: Meaning of “greenhouse gas”

This clause lists the greenhouse gases for the purposes of the Bill and enables the Department to make regulations to add a gas.

Clause 61: Meaning and measurement of emissions

This clause defines “emissions” and provides that emissions, emissions reductions and removals of greenhouse gases are to be measured in tonnes of carbon dioxide equivalent, and defines that term.

FINANCIAL EFFECTS OF THE BILL

15. The Bill will have financial implications for all Northern Ireland sectors and all Northern Ireland departments. Precisely where, and when, costs of implementation of the Bill will fall and how they will impact on output by each Northern Ireland sector

and department will depend upon the pathways and policies chosen to deliver the emissions reductions required by the Bill. The Bill however, does not state what those pathways and policies should be.

16. The UK Climate Change Committee in their independent and expert analysis could not model on a sound basis, a scenario where Northern Ireland would reach net zero greenhouse gas emissions reductions by 2050. Therefore, the costs of reaching net zero by 2050 in Northern Ireland as set by the Bill as amended at Consideration Stage, could not be accurately assessed or quantified.
17. However, the Climate Change Committee have assessed on the basis of current modelling, that for Northern Ireland to meet an at least 82% greenhouse gas emissions reduction target by 2050 (lower than the net zero by 2050 target as set by the Bill as amended) requires large sustained low-carbon capital investment that will need to scale up, adding around £1-1.5 billion annually by 2030, as part of UK-wide required increase in investment of around £50 billion (compared to current UK-wide investment of nearly £400 billion). The largest increases are for low-carbon power capacity, retrofit of buildings and the added costs of batteries and infrastructure for electric vehicles. This required increase in investment can be delivered largely by the private sector. These investment costs should not be interpreted as capital expenditure that would be delivered solely through the Northern Ireland Budget, nor as costs that only Northern Ireland businesses and consumers have to bear. Many of the actions to reduce emissions will likely be paid for at UK level and/or socialised across the whole of the UK. However, it should be noted that to bridge from at least 82% by 2050 to net zero by 2050 as set by the Bill, will incur much higher costs and require additional investment.
18. Based on the advice and analysis of the Climate Change Committee the cost of meeting the at least 82% net greenhouse gas emissions reductions by 2050 is estimated to be:

	Outlay indicative costs 2022-2050 (£ millions)	Net indicative cost per year (£ millions)
Net Emissions At least 82% Reduction by 2050	Gross*: 33,995 Net**: 4,057	140

*Gross cost is the entire acquisition cost.

**Net cost is the gross cost reduced by any benefits gained.

19. To meet net zero greenhouse gas emissions by 2050 from an at least 82% reductions of the same year, the Climate Change Committee have stated that the remaining 5 Metric tons of carbon dioxide equivalent (MTCO_{2e}) of emissions, would be removed at the additional cost of up to £900 million per year by 2050.

20. The up to £900 million per annum to meet net zero by 2050 is in addition to the costs to meet at least 82% emissions reductions, and is assuming that the extra costs will be entirely due to engineered greenhouse gas removals. The other potential pathway would be a significant reduction of livestock in Northern Ireland, this could be in place of, or in combination with, engineered removals. The inclusion of subsection (3) in clause 1, which was added at Further Consideration Stage, likely removes the pathway(s) of a significant reduction of livestock in order to meet net zero, as it provides some protection from such significant impacts on the agricultural sector. Therefore for the purposes of the financial effects of the bill within this EFM, significant reduction of livestock is not assessed.
21. The Climate Change Committee indicates that net zero by 2050 annual costs for engineered removals would possibly not begin at £900 million but would scale up in the years preceding 2050, and continue after 2050 unless other removals of residual emissions were achieved. The Climate Change Committee also stated that the cost profile could vary significantly, depending on the type of engineered greenhouse gas removals technology used and the rate of scale-up.
22. In addition, there is difficulty in isolating and accurately quantifying all of the costs and benefits of the impacts from decarbonisation and the actions which will be taken forward as a result of the Bill, the implementation of the Bill and the related policies taken forward as a result of it.
23. Also, the Bill as amended requires the establishment of a Climate Change Commissioner, a Just Transition Commission and a Just Transition Fund for Agriculture. The costs of setting up and delivering these were not provided prior to Assembly agreement for their inclusion in the Bill. It has therefore not been possible to cost such bodies and funds at this time. The monetised and non-monetised costs and benefits of such bodies and funds, are as such, unknown at this time, and it will be for the relevant Department to scope, cost and establish these bodies and funds after the Bill is enacted and implemented. The staffing implications for specific Northern Ireland departments and the wider public sector will depend on the policies developed and taken forward within those departments to reduce emissions, and to meet other targets required of the Bill (air quality, biodiversity and soil quality) within their area of responsibility. Staff resources will also be impacted by the functions that have been placed on the relevant Departments by the Bill as amended. Also, additional resources within other public bodies may be required to deliver the necessary actions to achieve the targets set out within the Bill. Climate change should be at the forefront of the development of potential policies across all Northern Ireland departments, and reducing emissions should form a prominent part of business as usual and future activities.

HUMAN RIGHTS ISSUES

24. All proposals have been screened and are considered to be Convention compliant.

EQUALITY IMPACT ASSESSMENT

25. In accordance with its duty under section 75 of the Northern Ireland Act 1998, the Department conducted a screening exercise on the provisions in the Bill, concluding that they did not have significant implications for equality of opportunity and that an equality impact assessment was therefore not necessary. This is based on the fact that the Bill will largely create duties for Northern Ireland departments to achieve reductions in emissions and duties to meet targets relating to air quality, soil quality and biodiversity, and as such the legislation itself will have no direct impact on the section 75 groups. Any significant actions taken or policies implemented by a Northern Ireland department to fulfil these duties will however, be assessed for equality impacts.

SUMMARY OF THE REGULATORY IMPACT ASSESSMENT

26. A draft Regulatory Impact Assessment of the Bill as introduced remains under review to reflect the outcome of the amendments made during the two Consideration Stages. It has not been possible to fully cost and assess the impacts of the Bill as amended during the Consideration Stages at this time, due partly to the complexity and unknown impacts (including cost impacts) of setting an un-evidenced net zero emissions by 2050 target. Some of the potential costs and complexities related, are detailed in the 'Financial Effects of the Bill' section above.
27. The Bill as amended does not specify the methods by which the greenhouse gas emissions' reductions targets for 2050, 2040, and 2030, carbon budgets, soil quality, biodiversity and air quality targets, sectoral plans, and climate action plans (and targets within) are to be delivered. The actual impacts of meeting all of the targets, carbon budgets and sectoral plans depends on the measures and policies chosen. These policies will be set out in the climate action plans that are required to be produced for each carbon budget period, and sectoral plans under the Bill as amended. Climate action plans set under the Bill will be subject to a consultation process and relevant impact assessments. In addition any secondary legislation made under this Bill will be accompanied by a costed regulatory impact assessment and other assessments as required. Consequently it is not possible to provide exact costings for the provisions of this Bill until after implementation, and full costings and benefits may also not be able to be accurately quantified due to reasons discussed below.
28. Local legislation with emissions reduction targets will drive further climate action in Northern Ireland, and should help to a transition to a low carbon Northern Ireland economy. However, current evidence shows it will be very challenging and may not be feasible for Northern Ireland to achieve a just transition to meet a net zero by 2050

target. The full costs and impacts of meeting the net zero by 2050 target for Northern Ireland is unknown, as highlighted earlier in this EFM. However, co-benefits of local legislation includes greater clarity and predictability to plan effectively for, and invest in a low carbon economy, with increased likelihood of climate resilience and adaptability, a more sustainable globally competitive green economy, increased opportunities for green investment and other substantial co-benefits, particularly for the natural environment and public health.

29. There are further challenges and difficulties also however, in isolating and accurately quantifying all the costs and benefits of the impacts from decarbonisation and actions that will be carried out as a result of the Bill. For example, creating new woodland could deliver substantial health benefits from increased physical activity and could provide flood alleviation, or implementing measures to improve biodiversity and air quality could also provide substantial health benefits. The Climate Change Committee have stated that such benefits could “partially or fully offset costs”, for example by reducing hospital admissions, and enabling people to be more productive. It is not possible to quantify these potential cost savings at this stage, and some costs and benefits will not be known until during the implementation of the Bill and related policies.
30. In addition, the costs and benefits for Northern Ireland arising as a result of meeting the targets within the Bill will also depend on, and be impacted by, a large number of interrelated and often exogenous factors which can be difficult to accurately isolate, quantify and predict, such as economic and global market variables, unilateral actions on climate change and impacts from the climate change we cannot prevent, behavioural change, and innovation, availability and cost of abatement technologies.

DATA PROTECTION IMPACT ASSESSMENT/DATA PROTECTION BY DESIGN

31. The Bill has no data protection impacts.

RURAL NEEDS IMPACT ASSESSMENT

32. A Rural Needs Impact Assessment in respect of the Bill as amended is currently being finalised by the Department. The cost of a net zero emissions reduction by 2050 target for Northern Ireland is not fully quantifiable, as sound modelling which would see Northern Ireland achieve such a scenario is not possible on the basis of current available and independent evidence. However, the UK Climate Change Committee have indicated that the impact of such a target on the rural and agriculture sector has the potential to be highly significant. However the Department considers that the inclusion of subsection (3) in clause 1, which was added at Further Consideration Stage, provides some protection from such significant impacts on the agricultural sector. Clause 1(3) ensures that the levels of methane reductions required to achieve the overall net zero target is not disproportionate and is in line with the Climate Change

Committee's recommended emissions reduction Balanced Pathway for Northern Ireland. Furthermore, the full impacts on the rural and agriculture sector of achieving the targets set out in the Bill as amended will depend on the policies, approaches and pathways implemented for that purpose.

33. Nonetheless, there are likely to be a range of impacts on the agricultural sector arising from focussed efforts to reduce emissions in that sector. This will likely lead to a requirement for behavioural changes in terms of farming practices, changes in land-use and/or a need to reduce outputs from the sector e.g. in terms of livestock numbers. Further analysis of such impacts will be carried out when the Department is developing and implementing policies to try and achieve emission reductions in the sector and, where appropriate, options will have to be considered on the most effective way to support the sector in taking action, along with the Department's required development, establishment and implementation of a Just Transition Fund for Agriculture, after the Bill is enacted and implemented.
34. Achieving significant emissions' reductions in terms of transport, energy and housing may result in policy interventions in the longer term which could impact positively on the social and economic needs of people in rural areas, provided these needs are built into the development of such policies at an early stage.
35. Improvements to the environment and actions which reduce the impacts of climate change should also potentially benefit the rural sector although again it will be important to ensure that the needs of the sector are taken into account in the design and implementation of all relevant interventions.

LEGISLATIVE COMPETENCE

36. At Introduction the Minister of the Department of Agriculture, Environment and Rural Affairs had made the following statement under section 9 of the Northern Ireland Act 1998:

"In my view the Climate Change (No. 2) Bill would be within the legislative competence of the Northern Ireland Assembly."

SECRETARY OF STATE CONSENT

37. A statement is required under section 8 of the Northern Ireland Act 1998, on Secretary of State consent:

"The Secretary of State had consented under section 8 of the Northern Ireland Act 1998 to the Assembly considering this Bill."