

Chathair Dhoire & Cheantar an tSratha Báin

Derry Cittle & Stràbane

13th April 2021

Ms Michelle McIlveen MLA Chairperson Committee for Infrastructure

Committee.Infrastructure@niassembly.gov.uk

Dear Michelle

Decarbonising Road Transport in Northern Ireland

Thank you for your correspondence dated 25th March 2021 in respect of the above.

Please find below information, as requested:

What are the main challenges to the uptake of ULEV?

Council Fleet

Capital Investment – A fully Electric 26000Kg Refuse Collection Vehicle costs short of £500,000. This excludes the local charging infrastructure required at each Operating Centre to provide overnight charging capabilities to ensure consistency of service provision. This compared to £170,000 for an identical Diesel Powered vehicle. Serious consideration will be given to significantly increasing the annual Fleet replacement budget if projected reductions in CO₂ are to be realised.

Battery Range - Of the selection of small/medium sized Electric Vehicles Council previously trialled from the van sector it was found that the mileage stipulated within the manufacturers brochures was unrealistic leaving them incapable of reaching the boundaries of the Council area and returning to base without the need to recharge. Drivers stated that charging points were not always available on-route and where they were, not all were in serviceable condition. There was also the added inconvenience and extra journey time required. Concerns were also raised about Battery consumption during cold and wet weather where the use of ancillaries such as wipers, heater and lights has a detrimental effect on available battery life even with 'range extenders' deployed.

Managing the Transition Process – The Local Authority arena is not most receptive of change whether forced or planned. Staff at all levels must be kept constantly informed of the need for this radical change, the rationale behind it and the fact that there is no alternative but to embrace it.

Public Charging Infrastructure

Lack of capacity – there is a lack of dedicated resource and expertise within councils to take this work forward. There is no statutory requirement for EV or Hydrogen infrastructure and without additional revenue funding or third-party support, progress in these area likely to be slow.

Institutional barriers – local councils are not responsible for roads and footpaths so legal assurances are required from DfI to ensure EV chargepoints installed under any funding scheme will be in place for at least 3 years from the date of installation with adequate enforcement provisions.

ChargePoint Operator – Although the Utility Regulator recently removed the cap on the Maximum Resale Price of electricity to stimulate the EV market, there is no chargepoint operator in Northern Ireland who is responsible for the operation and maintenance of the charging infrastructure. Ideally, Council's would like to see at least 2 or 3 chargepoint operators to enable the market to evolve on an NI wide basis.

EV Owner Resistance – High Capital costs, battery reliability, range anxiety, the availability of Rapid EV charging infrastructure and the accessibility of hybrid vehicles limits the uptake of Electric only vehicles

Alternative Fuels

Access to Alternative Fuel Supply – Dependant on the strategic direction chosen in order to comply with the Governments 'Clean Air Strategy' of 2019 will hinge on on a number of factors including cost, supply-chain, production methods and performance of the vehicles in the long term. If all electric, considerable investment will be required within NI especially in rural areas where Council must operate. The use of Hydrogen Cells as a fuel source is seeking increased attention especially from the Bus market with local companies Translink and Wrightbus both investigating the option of a NI wide distribution network.

Hydrogen Technology – This technology is still relatively new and there is a reluctance to make the transition due to uncertainty around performance and the high capital cost of vehicles.

Hydrogen Refuelling Stations – There is currently no hydrogen refuelling stations in the any Council area. However, DCSDC is willing to investigate the feasibility of installing a refuelling station in conjunction with possible partners, such as Translink, Donegal County Council and private bus operators.

What are the main benefits to the uptake of ULEV?

Decarbonisation of Council's fleet

Decarbonisation of local transport system

Meeting or exceeding government targets of 2030 will also show an organisation that is focused on compliance and the nurturing of a corporate culture that is flexible and can react quickly to fiscal change.

Contribution to local, national and international carbon reduction targets Cleaner air/ healthier environment to live in

The synergy to be gained by aligning with other Council initiatives such as the 'Climate Emergency Pledge', the Regional Energy Strategy and Air-Quality monitoring programs to ensure a unitarist perspective where all departments are striving to achieve a common set of objectives in order to achieve optimal organisational performance.

Climate Change mitigation

What support to assist a move to ULEV would you like to see from the NI Executive?

Council Fleet

The main determinant in the successful roll out of a net zero-carbon DCSDC Fleet by 2030 will undoubtedly be capital cost and realistically this can only be achieving by financial assistance from Government grants as is the case within Scotland where £4.5 Million was awarded to Aberdeen City Council from the 'Energy Transition Fund' to help with the development of the Hydrogen infrastructure and to assist with procurement of a number of small Electrically Powered Vans and Precinct Sweepers.

Public Infrastructure

Preference for a strategic approach to delivery – there is a general desire among councils for cohesion in the development of the EV charging network, in partnership with other councils, the Department for Infrastructure and the private sector. Issues such as chargepoint interoperability, pricing and procurement will require careful consideration and ideally would be centrally coordinated and procured through a consortium mechanism.

Lack of policy direction—there are no clear targets, strategy or policies on sustainable mobility or electric vehicles in Northern Ireland, making developing a coherent approach to advancing EV infrastructure challenging, but not insurmountable. Similarly, there are no clear targets, strategy or policy on hydrogen.

• Do you believe there should be official targets for your sector and have you any views on the potential timescale this could take?

Yes, the Executive should identify targets for the decarbonisation of the transport sector, coupled with financial support to ensure targets are achievable. Ideally, the target should be more ambitious than the UK government target of 2030 for new vehicles. There is an opportunity in the forthcoming DfE Energy Strategy to identify clear targets, timescales and support mechanisms

Council Fleet

Council must adopt a policy to ensure that all future Fleet procurement should specify Hydrogen, Dual-Fuel, Hybrid or Electric as the preferred sources of fuel. Only by starting now can we possibly hope to be totally zero-carbon by 2030.

To this end Government should establish an agency (certainly among the Local Authorities and larger Fleet Operators) to continuously monitor progress in the quest towards net zero-carbon. This should involve an annual review to discuss progress against objectives and timeframes and be accompanied by a Fleet Strategy depicting how and when they intend to achieve compliance.

Have you begun to plan for decarbonising your fleet and if so could you provide some detail on this?

The decarbonisation of the fleet forms part of the Council's and region's energy strategy to decarbonise by 2045 and to date have been focusing on a carbon reduction program as follows:

- **Vehicle Procurement** The development of Technical Specifications which produce vehicles that are fit for purpose whilst meeting or exceeding the current emission regulations at time of delivery.
- **Driver Training** In particular 'Safe and Fuel Efficient Driving (SAFED) which is delivered as a module of the Driver CPC Training program.
- Monitoring Driver Performance Via vehicle based Telemetry system.
- Route Optimisation Designed to examine the routes/distance travelled by Refuse Collection, Streetscape and Waste Management in an attempt to eliminate unnecessary journeys.
- **Optimal Vehicle Maintenance** program designed in accordance with the various manufacturers to ensure all Councils vehicles are running efficiently and producing minimal levels of CO₂.

Have you estimated the cost of decarbonising your fleet?

No, the Council has not estimated the cost of decarbonising its fleet, but officers have been researching a number of electric and Hydrogen vehicles. Based on this research, an example of the costs associated with decarbonisation would be: The DCSDC Refuse Collection Fleet of 28 vehicles has a current replacement policy of 7 years' life expectancy, thus this requires council to purchase 4 vehicles/year to meet the replacement policy. Based on the 2020 prices this involves a capital investment of £680,000/year. To replace these 4 vehicles with 'All Electric' vehicles similar in size and payload would require £2,000,000. An increase of 294%.

Please do not hesitate to contact me should you require further information.

Yours sincerely

John Kelpie
Chief Executive