

Committee for Infrastructure

Subject: Decarbonisation of Road Transport in Northern Ireland

Submitted: 22 April 2021

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Written Evidence

A. Background

1. Council is pleased to engage with the Committee for Infrastructure on the issue of Decarbonisation of Road Transport in Northern Ireland.
2. As an award winning organisation, Mid and East Antrim Borough Council leads the way in the delivery and the transformation of ever-more efficient, improved public services for our 139,000 citizens.
3. The Port of Larne continues to be a key gateway for Northern Ireland. As the shortest, fastest crossing between Northern Ireland and Scotland, it continues to be a critical arterial route between Northern Ireland, Scotland and England.
4. On a national scale, the UK is moving towards a zero carbon future with a target date of 2025. By 2030, new cars and vans powered wholly by petrol and diesel will not be sold in the UK.
5. These UK Government policy & regulation drivers, technological change and environmental concerns will play a key role in the transition to zero carbon and Mid and East Antrim Borough Council are well placed to support firms in the Borough to seize the opportunities arising.
6. *'Sustainable Jobs and Tourism'* and *'Protecting Our Environment'* are key strategic priorities at the heart of the 15-year Community Plan for the Borough "Putting People First". Council's Corporate Plan for 2019-2023 is aligned with these themes. Whilst the Borough has traditionally been very strong in the areas of manufacturing, industry, power generation and agri-food, it has suffered a number of economic shocks including recent large-scale job losses within the manufacturing sector. In response, we have spearheaded an economic fight-back plan, refocusing economic activity on innovative and emerging job growth and the development of investment areas.
7. The emergence of the Clean Growth Sector has presented a variety of opportunities for local businesses, particularly around hydrogen technologies. Council strongly believes there is a defined link between Clean Growth and economic growth, which is energy efficient and utilises sustainable practices and renewable energy sources. Council has therefore developed many strengths and assets to support companies in the Borough to be at the forefront of this new sector.

8. Through Mid and East Antrim's Manufacturing Task Force, Council and industry partners are proactively collaborating with local SME's, universities and industry specialists in developing an integrated roadmap for the transition to carbon zero by the year 2050 target.
9. The Borough forms an important part of energy infrastructure within Northern Ireland, with several key businesses operating in the sector that place special emphasis on investment, not only on innovation and R&D activity, but, also, on collaborative approaches to industry challenges.

B. Mid and East Antrim as an innovative area for Green Transport/Hydrogen

10. Mid and East Antrim Borough Council recognises that the Hydrogen Energy sector is currently one of the fastest growing sectors in the world and believe Northern Ireland is well positioned to become a global player in the future Hydrogen Economy.
11. It is estimated that the sector is set to be worth \$2.5 trillion dollars and create 30 million jobs worldwide by 2050 - according to a press statement quoted by Baroness Brown - Vice Chair of the UK Climate Change Committee.
12. Council are working hard to build on our excellent foundations to position the Borough at the forefront of hydrogen economy and align opportunities with the UK Government's 10-point plan for a Green Industrial Revolution, announced in late 2020. This plan will create £12 billion of government investment to create and support up to 250,000 highly-skilled green jobs in the UK. The Hydrogen Economy is a key part of this plan with up to £500 million of investment earmarked, including for technology development and test-beds.
13. The application of clean hydrogen for use in transportation, domestic and commercial heating and industrial processes is significant. The current COVID pandemic has helped refocus minds and industrial strategies, on what our future energy usage will look like and how we can best protect our global environment.
14. A number of businesses from across the Mid and East Antrim Borough have already begun to develop products and services that look at how energy can be generated cleanly and used efficiently. For example, Wrightbus has currently teamed up with Energia and Translink to work on a circular economy research project costing several million pounds. As part of the project, Energia will convert electricity generated from its windfarm at Rasharkin into hydrogen fuel via electrolyser technology, and that will be stored and used to power several Wrightbus manufactured hydrogen fuel cell buses, operated by Translink in Belfast.
15. Similarly, opportunities exist to scale up hydrogen technology and manufacturing across the Borough and NI, both within the Engineering sector and in the management of power and gas grids. The proposed £600m Kilroot

Energy Park offers potential for hydrogen to facilitate growth in industries such as data centres, which will help support growth post-COVID.

16. In February 2021, Council's Chief Executive, Ms Anne Donaghy OBE, contributed towards a virtual roundtable, facilitated by Ulster Business and corporate law firm A&L Goodbody, to discuss how hydrogen could soon play a much bigger part in our Energy sector's future. The Chief Executive discussed Mid and East Antrim Borough Council's view that hydrogen is one of the biggest tools we have in a post-COVID economy, stating that the emerging sector presents huge opportunities in terms of job creation and investment.
17. Hydrogen energy continues to form an integral part of the Council's Economic Recovery Plan post-COVID and, given the focus on the Green agenda at a strategic level, both nationally and regionally, skills development and delivery are essential to support this high growth sector. As such, Council has begun work on establishing the Hydrogen Training Academy.

C. Hydrogen Training Academy

18. The development of the Hydrogen Training Academy is an exciting first step in developing the workforce of the future, responding to current issues and gearing up for future opportunities in the emerging Hydrogen economy. Brought together by Council, a consortium of key players including Energia, Wrightbus, Horizon Engineering, local colleges and the Transport Training Academy have been exploring skills and hydrogen training from across industry and education to investigate and agree the most appropriate steps forward.
19. The Hydrogen Training Academy will focus on High Voltage System Operation and Low Voltage Competency training. This will help fill the demand for technicians to install, manage and maintain emerging hydrogen and wider clean technologies. The Academy will also function to up-skill and re-skill those who have lost their jobs, including those who have lost jobs as a result of the COVID-19 pandemic.
20. The Academy will deliver a range of entry-level introductory hydrogen training in the short term to ensure talent is developed at the grassroots and, in the long term, we see this as a pathway that will attract new talent into the sector through apprenticeship and graduate level provision. The Academy forms a key plank in our wider ambition for the Borough to be at the forefront of the Green Economy, as a key hub for clean technology and the Hydrogen Economy in Northern Ireland.
21. Council has already been able to secure significant new investment and Foreign Direct Investment into the Borough in the Clean-Tech sector and this clearly demonstrates Mid and East Antrim has a growing reputation in this sector. The Academy also links to Council's ambition to develop Ballymena as a test bed for the introduction of hydrogen technology in Northern Ireland and the wider UK, to become the "Hydrogen Town" within NI.

D. Local businesses

22. As already stated, a number of businesses from across the Mid and East Antrim Borough have already begun to develop products and services that look at how energy can be generated cleanly and used efficiently. These have already resulted in significant investments and economic growth opportunities, which will secure jobs.
23. In January 2021, Council welcomed the announcement that Ryobi Aluminium Casting (UK) Ltd had secured a new £15m contract with an emerging transmission supplier specialising in electrified drivetrains for the automotive market. The deal will see the Carrickfergus manufacturer produce 150,000 clutch and transmission cases per year for new hybrid vehicles, commencing 2023. Additionally, this new contract will secure the jobs of around 70 highly skilled people and will run for at least the next seven years. Ryobi Aluminium Casting (UK) Ltd currently employs almost 600 staff, making it one of the largest contributors to the economy within the Borough.
24. Council also welcomed the announcement by Wrightbus that it has successfully been awarded deals totalling £8m to build 45 buses for Hong Kong and Japan. Following the announcement by the UK government, promising funding for green projects to produce electric trucks and hydrogen-powered buses, the company was awarded £11.2m to develop and manufacture low-cost hydrogen fuel cell technology for buses and create a Hydrogen Centre of Excellence. As a result, Wrightbus has announced the creation of 40 new jobs for Ballymena.

E. The move to decarbonise transport

25. In March 2021, Mid and East Antrim Borough Council submitted a response to the Programme for Government draft Outcomes Framework consultation. Council stated that by taking a Green Growth approach, we will manage our resources efficiently and effectively, reducing our carbon emissions to ensure our environment is protected and enhanced while achieving sustainable economic growth, to create a living and working active landscape that can be enjoyed and valued by everyone.
26. Mid and East Antrim Borough Council are proactively encouraging the move to decarbonise transport and have been active in delivering initiatives to avoid, reduce and mitigate the effects of transport through alternative means, where possible.
27. Council are developing infrastructure to reduce GHG emissions from vehicles, such as the re-development of Sullatober Household Recycling Centre in 2021/22. This re-development will improve waste compaction and reduce fuel consumption by over 17,000 litres per year, equating to 52tCO₂e saved each year.
28. In recent months, Council have invested in route optimisation software that will result in a reduction of the number of vehicles and fuel required to deliver

refuse and recycling collection services. At present, Council have 4 electric vehicles in use, which are proving to be effective. Council intends that a ultra-low emission vehicles (ULEV) equivalent is considered in the replacement of any future vans, subject to the alternative having the required range.

29. Council's Cycle Masterplan provides a programme for greenway and cycle route development within Council sites. It will help to inform the statutory planning process and influence cycling provision on our roads.
30. As previously stated, Mid and East Antrim is home to a range of key stakeholders including Wrightbus, Ryobi and EPUK. Council are continually encouraged by the innovative and creative work undertaken by these organisations to develop green and low emission transport.
31. Mid and East Antrim has become a key hub in the development of the emerging Hydrogen Transport sector and the potential of integrating this into Northern Ireland's current Transport Strategy for transition into carbon-neutral is significant.
32. Given the rural nature of Northern Ireland, the move to decarbonise road transport will be challenging. However, it is also an opportunity to create world-leading examples of innovation and best practice.

F. Impact of the pandemic

33. The recent COVID pandemic has shown what is possible through the embracing of remote-working and digitalisation. For many people the need to move from one place to another can be avoided completely. Council understand that this will not always be the case; however, where transport is needed, then it should be planned in such a way to maximise the use of public transport with appropriately designed walking and cycling routes to link to rail and bus hubs. The move towards remote working and digitalisation will result in a different demand on transport. This should be factored into future planning and development. To support Council staff and additionally, reduce transport costs and impact on the environment, Council have approved an Agile Framework that is currently being taken forward to implementation.

G. Rail infrastructure and investment

34. Council value the fact that the Mid and East Antrim Borough is well serviced by a good rail network with a route from Belfast, through Carrickfergus, to Larne and a route from Belfast, through Ballymena and Cullybackey to Londonderry. Future opportunities could be harnessed through the development of housing situated within an appropriate distance of the existing rail infrastructure; however, continued investment and support should be prioritised to sustain these important routes.
35. Council welcomes the announcement of the All-Island Strategic Rail Review being conducted by the Department for Infrastructure in conjunction with the

Republic of Ireland's Government and looks forward to any opportunities to engage with and contribute towards the review.

H. Wider infrastructure Concerns

36. It is important that a review of the Transport Strategy also takes on board issues that are arising in relation to infrastructure, more generally. In order to ensure that public transport is fully embraced and maximised, the prioritisation of the sewage and water infrastructure upgrades should take on board and complement the Transport Strategy. This should all be carefully considered as part of the development of Local Development Plans.

I. Committee Questions

37. Below are Council's responses to the Committee's specific questions on the move to electric and/or hydrogen vehicles:

- **What are the main challenges to the uptake of ULEV?**

Lack of infrastructure - Council believes that there is a lack of charging infrastructure to accommodate an increase in the use of ULEVs. It is understood that grants are available to support the development of on street charging facilities; however, Council does not own the street or lay-bys and therefore, has no access to the electricity. Additionally, residents who do not have adequate driveways/gardens to support charging ports are only able to avail of on-street chargers. Council believes that as the Department of Infrastructure (DfI) have ownership of the road network and access to electricity, it would seem more appropriate that applications for funding and roll-out of such on street charging infrastructure is taken forward by DfI.

Lack of a strategic approach to delivery and lack of capacity - There is a general desire among councils for cohesion in the knowledge and development of ULEVs, in partnership with other councils, the Department for Infrastructure and the private sector. There is a lack of dedicated resource and expertise within councils to take this forward. Without additional revenue funding or third-party support, progress in this area is likely to be slow.

Lack of range - While Council acknowledges there have been significant improvements in the level of range available, there remains a lack of options. Additionally, Council are concerned that not all vehicles have alternative ULEV replacement options. For example, of Mid and East Antrim Borough Council's fleet of 140 vehicles, 17% of these vehicles would have no alternative ULEV options.

Cost - Recently, Council have become aware of an issue relating to the funding being provided through Westminster by the Office for Zero Emission Vehicles. As previously mentioned, Council acknowledge that grants are available; however, without adequate infrastructure or access to suitable locations, significant issues remain.

- **What are the main benefits to the uptake of ULEV?**

The main benefits are the contribution to proposed Climate Change targets, the reduction of emissions that impact human health and the wider environment, reduced maintenance costs and, for Councils and all public sector bodies, the ability to demonstrate leadership in this area. There is a desire from Council and the public to increase the uptake of ULEV.

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

Mid and East Antrim Borough Council believe that a central lead department or team, based within the Department for Infrastructure, should be tasked with leading on a Decarbonisation Transport Policy. This view is based on the success of a similar team, '*E-cars Team*', established in 2010, which proved very effective at forming partnerships with councils across Northern Ireland and through which, the first tranche of vehicle charging points were rolled out. The establishment of a similar team could drive this agenda forward.

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

Yes - Council believes there should be statutory annual carbon emission reduction targets set to ensure all 11 councils are working towards decarbonisation by 2030. Initially, the focus should be on replacing those vehicles that can be replaced with as low as cost as possible, unless central government intends to provide financial support to balance out the difference in cost.

Since vans are typically replaced on a 10-year cycle, it would make sense to set a target that all vans within the public sector should be replaced with a ULEV equivalent within 10 years. Once the vans are completed, Council could then move onto more expensive vehicles, like Refuse Collections Vehicles (RCV) where the differentiation between the diesel vehicle and the current hydrogen/electric vehicle is excessive. For example, the diesel RCV costs £200,000 but the equivalent hydrogen / electric RVC is currently costing £430,000.

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

Yes - Council currently have 4 electric vehicles in use and these are proving to be effective. It is the intention of Council that for the replacement of any van, a ULEV equivalent will be considered, subject to the alternative having the required range.

- **Have you estimated the cost of decarbonising your fleet?**

Yes - Council currently have 140 vehicles. The cost to replace these vehicles with a diesel equivalent, at today's prices, would be £9.25m. Only 70% of the fleet can be replaced by a ULEV equivalent, as some of the vehicles do not have a hydrogen

/ electric alternative. The cost to replace 70% of the fleet with ULEV equivalent is £20.94m.

J. Conclusion

38. Mid and East Antrim Borough Council will continue to work to maximise all opportunities from the emerging Hydrogen Economy with our industry partners within the Manufacturing Task Force and other key stakeholders.
39. Council welcomes the opportunity to contribute to this Inquiry into the decarbonisation of Northern Ireland's road transport.
40. Council would welcome the opportunity to provide more detail on any aspect of this submission and provide oral evidence to the Committee, if required.