

Agenda Item	11
Report No	ECI/37/2021

THE HIGHLAND COUNCIL

Committee: Economy & Infrastructure

Date: 1 September 2021

Report Title: Transformation Programme – Update on Climate Change Projects

Report By: Executive Chief Officer Infrastructure, Environment & Economy

1. Purpose/Executive Summary

1.1 This report provides an update on two of the climate change projects currently underway through the Transformation Programme, namely, the development of hydrogen and low carbon heat strategies and the decarbonisation of the Council's fleet.

2. Recommendations

2.1 Members are asked to discuss and note the contents of the report.

3. Implications

3.1 **Resource** - For the purposes of this paper, funding from the Transformation Programme is supporting the employment of two dedicated officers: a Project Manager for the development of low carbon heat and hydrogen strategies, and a Climate Change Co-ordinator for the work related to decarbonisation of the Council's fleet, as well as wider work to enable the identification of key financial and non-financial opportunities around the net zero agenda for the Highland region.

3.2 **Legal and Risk** - There are no legal or risk implications arising from this report.

3.3 **Community (Equality, Poverty and Rural)** - There are no direct community implications arising from this report. However, the development of strategies and projects related to hydrogen, low carbon heat and transport decarbonisation are expected to deliver wide-reaching community benefits across the Highland region.

3.4 **Climate Change / Carbon Clever** - The successful delivery of the climate change projects under the Transformation Programme is likely to result in significant emissions reduction for the Council in support of both national and local net zero ambitions.

3.5 **Gaelic** - There are no Gaelic implications arising from this report.

4. Background

- 4.1 The Scottish Government has pledged to end Scotland's contribution to climate change no later than 2045. All public bodies have a duty to support and work towards this target under the Climate Change (Scotland) Act 2009, as amended by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.
- 4.2 In support of this important agenda, at a meeting of The Highland Council on 4 March 2021, Members agreed a funding contribution of £480k over two years under the Recovery, Improvement & Transformation (RIT) fund for the delivery of projects which will directly support the Council's transition to net zero emissions. For the purposes of this paper, these can be summarised as follows:-
1. Development of corporately agreed hydrogen and low carbon heat strategies, to ensure that the Council benefits from the energy-systems transformation that these technologies will bring to the region. In addition, it is expected that this project will ensure that opportunities within the capital programme are maximised in respect of delivering carbon reduction for both the Council and wider region.
 2. Identification and development of energy and fleet projects with partners which can secure external funding, with a specific focus on decarbonisation of the Council's fleet i.e., through the utilisation of electric and hydrogen alternatives to internal combustion engine vehicles.
 3. Development of a net zero action plan for the Council, identifying key areas of focus across services with a view to developing outline project plans and funding bids.
- 4.3 This paper provides an update on progress to date and sets out some opportunities for how the remaining budget could be allocated.

5. Progress to Date

5.1 Hydrogen & Low Carbon Heat

It is the case that Highland can play a disproportionate role in helping both Scotland and the UK achieve their respective net zero targets, due in large part to the renewable energy resource available as well as the carbon sequestration potential of our forests, peatlands and water bodies. As part of the energy transition required to achieve net zero, the Scottish Government recently released a Hydrogen Policy Statement, which acknowledges that "it is becoming increasingly clear that hydrogen will play a major role globally in the transition to net zero, and Scotland's assets, natural, human and physical mean we can be a major player in this emerging global hydrogen market."

- 5.2 The Statement sets out a vision: "for Scotland to become a leading Hydrogen nation in the production of reliable, competitive, sustainable hydrogen and secure Scotland's future as a centre of international excellence as we establish the innovation, skills and supply chain that will underpin our energy transition".
- 5.3 The approval of RIT funding in March has enabled the Climate Change & Energy Team to appoint a dedicated Project Manager, who will lead on the development of both hydrogen and low carbon heat strategies for the Council to put Highland at the forefront

of this national transition. Neil Osborne was appointed to post on 7 June 2021 and work undertaken to date can be summarised as follows:-

- An assessment of the current policy landscape from both hydrogen and low carbon heat perspectives has been undertaken, at both a local and national level.
- A variety of meetings have been held with key internal stakeholders who will have a direct interest and involvement in shaping both the hydrogen and low carbon heat strategies. This has included sessions with officers from the Climate Change & Energy Team, Fleet, Property and Housing.
- Conversations with all colleagues have been constructive and positive; these have flagged a variety of opportunities and challenges in respect of decarbonisation of both our estate and our fleet. It is understood across services that a cohesive long-term strategy is vital, and that focus on rationalisation of assets and improvement to the fabric of buildings will be critical to reduce operational costs and to give the Council the best opportunity to achieve net zero emissions.
- A key issue identified to date is in respect of the storage and distribution of hydrogen across a region of the size and scale of Highland, and this will need some early focus in collaboration with partners.
- A variety of meetings have been held with the Scottish Government, which have been positive; they recognise Highland as a major contributor to the national hydrogen strategy, and have invited the Council to prepare a proposal, which will be co-funded by SG, to fully understand the scale of opportunity and early wins that could be realised through the development of the hydrogen economy across the region. This work will provide a detailed study on production potential whilst allowing us to develop an informed picture for the potential of use within the various areas of the Highlands, and to better understand potential areas for production based on a variety of different factors.
- In respect of low carbon heat, the Scottish Government are looking for all Councils across Scotland to progress to the next phase of development of their individual Local Heat & Energy Efficiency Strategy (LHEES). Following a funding call in late July, an application for £50k has now been submitted to enable the Council to advance the work carried out under the initial LHEES pilots. It is hoped that this work will put the Council in an advanced position in development of the LHEES toolkit, as we will be one of the first local authorities to be at the stage of testing the strategy and methodology within two very different demographics across Highland.
- Early interaction has been undertaken with Aberdeen City Council (ACC) and has provided a hands-on introduction to their hydrogen heavy goods fleet as well as the operation of a generation and refuelling site. ACC have offered funding to the Council to assist with the conversion of some of our own heavy goods vehicles, and discussions are on-going in this respect. It is anticipated that this work will be undertaken in the latter half of 2022.
- An agreement has been reached with The Procurement Partnership Ltd and with support from the Climate Change & Energy Team, Shared Procurement Service and the Executive Chief Officer – Resources & Finance for the Council to co-create a new Dynamic Purchasing System (DPS) for hydrogen and EV infrastructure to assist public sector bodies in making the transition to low carbon transport. The Highland Council and TPPL recognise the move towards zero emission vehicles are accelerating as a result of the Scottish Government's net zero carbon strategy. TPPL's range of contracts are addressing this emerging marketplace and have identified there is growing demand for a national procurement solution for hydrogen refuelling infrastructure, as well as supply of hydrogen, vehicle retrofits and large-scale EV recharging infrastructure. TPPL aim to bring a contract to the market in 2021, available to the wider public sector in the United Kingdom, including all current and future TPPL members. The Council will benefit in a number of ways

from this partnership – it demonstrates our commitment to the emerging hydrogen economy and the net zero transition, whilst we will also receive a fee-split for any procurement undertaken through the DPS.

5.4 Fleet Decarbonisation

The operation of the Council's fleet accounts for 17% of our total corporate carbon footprint, and the Scottish Government have set an ambition for all local authorities across Scotland to decarbonise their light commercial fleet vehicles (under 3.5 tonnes) by 2025, and their heavy fleet vehicles (those over 3.5 tonnes) no later than 2030.

5.5 Whilst a number of light commercial fleet vehicles have already been transitioned to electric vehicles (EVs), the critical challenge for the Council in meeting the 2025 ambition is in respect of provision of sufficient charging infrastructure to fully enable this transition.

5.6 The approval of RIT funding has enabled the Climate Change and Energy Team, in collaboration with colleagues from the Communities & Place Service, to establish a plan to support this transition and to appoint a new Climate Change Coordinator to focus on the decarbonisation of the fleet through the strategic deployment of charging infrastructure. Roslyn Clarke took up her new post on 3 August 2021, and a more in-depth summary of work will be presented at a future meeting of the Economy & Infrastructure Committee. However, for the purposes of this paper, work undertaken as part of the wider project can be summarised as follows:-

- A number of external meetings and discussions with prospective partners have been held to explore options to work together.
- Internal meetings have been held between the Fleet team and the EV Infrastructure team to commence work on a baseline dataset from which fleet decarbonisation planning will be taken forward. In addition, it has been agreed that the EV Infrastructure team will now manage the Council's funding award from Switched-on Towns & Cities going forward (expected to be £126k for 2021/22), and largely direct this towards charging infrastructure installation across the Council's estate.
- A number of internal meetings have been held (more are scheduled) to introduce the scope of this project among other services and teams, raising awareness of the significant impact fleet decarbonisation has on the Council's transition to net zero and breaking down barriers to delivery by aligning interconnected workstreams at an early stage.
- The roll-out of publicly accessible EV charging infrastructure across Highland under the Local Authority Installation Programme has now restarted following COVID-19 restrictions, with 16 new chargers having been commissioned in the past 6 months. In addition, a provisional funding award of £100k for additional charging infrastructure is expected for 2021/22.

6. RIT Funding

6.1 The funding awarded through RIT to Climate Change is for two separate purposes; to cover staff costs for specific project related work, and to enable the identification of key financial and non-financial opportunities around the net zero agenda for the Highland region. A significant opportunity to put Highland at the forefront of the national transition to net zero relates to the proposed development of a hydrogen hub as part of the Opportunity Cromarty Firth freeport proposal and following Members' endorsement of this project at a meeting of the Highland Council on 25 March 2021, an allocation of £20k

has been made from the available funding to co-fund the bid writing process, which is being undertaken by KPMG. A summary of the committed spend and remaining funding can be found below:-

	2021/22	2022/23
RIT Funding Allocation	£240,000	£240,000
Staffing Costs: 1 x HC09 2 x HC08 (inc. costs for Community Food Growing Coordinator)	(£144,000)	(£144,000)
OCF Bid Writing	(£20,000)	£0
Remainder	£76,000	£96,000

- 6.2 One of the key next steps for the Council in its decarbonisation journey is to agree a corporate net zero target date – this is an essential precursor to the development of a net zero strategy and action plan, and it is anticipated that a proposal around this will be taken to a meeting of The Highland Council in December 2021. Thereafter, it is anticipated that a piece of work will be commissioned, utilising RIT funding, to set out the scope of work and actions required to reach organisational net zero emissions, but also placed within the wider context of achieving regional net zero ambitions. It is expected that this work will cost in the region of £40-50k.
- 6.3 In addition, it is recognised that there are various challenges within the current non-domestic estate, particularly in respect of plant (including fossil fuel boilers), which are coming to the end of their useful life and risk being replaced on a like-for-like basis, creating a significant additional emissions burden for many years to come. As a result, it would be prudent to take an urgent, systematic approach to identify opportunities for investment in a whole building retrofit approach to decarbonisation (potentially with SALIX and through the Non-Domestic Energy Efficiency Framework, wherever feasible), including the assessment of likely heat loads and how to reduce these, as well as opportunities for conversion of heating systems to hydrogen once this technology is fully established.
- 6.4 There are officers within the CCET team who could undertake this transformational work, in collaboration with Property & Housing, utilising RIT funding to cover some of the recharge costs. The CCET has access to IES-VE software, which is an in-depth suite of integrated analysis tools for the design and retrofit of buildings, with a view to maximising the energy and carbon reduction capability of any potential interventions. This tool is likely to be a critical asset in developing plans, strategies and business cases for a net zero estate, but is currently underutilised.
- 6.5 Formal proposals in respect of additional spend will be taken to future meetings of the Economy & Infrastructure Committee.

Designation: Executive Chief Officer Infrastructure, Environment & Economy

Date: 6 August 2021

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