

Agenda Item	11
Report No	HC/35/21

HIGHLAND COUNCIL

Committee: The Highland Council

Date: 9 December 2021

Report Title: COP26 & Net Zero Update

Report By: Executive Chief Officer – Performance & Governance

1. Purpose/Executive Summary

1.1 This report provides an update on the outcomes and potential implications for Highland following on from COP26. It also provides an overview of how a net zero strategy and action plan will be developed to meet both local and national ambition around the climate change agenda.

2. Recommendations

2.1 Members are asked to:

- I. Note the outcomes arising from COP26;
- II. Agree the recommended approach to the development of a net zero strategy and action plan, including clear targets and performance indicators, as set out in section 6 and **Appendix 2** of this report;
- III. Agree that the Climate Change Action Plan will be brought back to Council for approval;
- IV. Agree that a programme management approach will be taken to delivering the Action Plan with the high level programme overseen by Council and the detail of individual thematic workstreams reported to the Climate Change Working Group and approved at the relevant strategic committees and Boards, as set out in **Appendix 2**.
- V. Note the intention to develop a structured and pro-active communications strategy and plan to support the Council's Climate Action activity and roll out carbon literacy training and a series of seminars for staff and Members in 2022;
- VI. Agree the Transformation Fund should continue be used to ensure resources in the Climate Change team are sufficient to provide the strategic leadership required as well as to support delivery against the identified themes; and

- VII. Agree that additional external funding is also required in order to fully deliver the Council's duties and endorse Cosla's statement for additional funding to tackle the climate emergency.

3. Implications

- 3.1 Climate Change: Whilst direct Council and regional implications following on from COP26 are still relatively unclear, it is imperative, more so now during a financially challenging period, that the Council maximises external funding to enable the delivery of low carbon projects to aid our climate change targets and support legally binding national ambition to end our collective contribution to climate change by 2045. The work required to develop a corporately agreed net zero strategy and climate action plan, as well as service-level commitments to this agenda, will help to support external funding applications by demonstrating to funders that the Council is taking its climate commitments seriously.
- 3.2 Resource: An acceleration of the steps being taken to address climate change is required and the Council's resources need to be aligned to investing in this approach. As has been agreed in reports to Council on Medium Term Financial Planning and Strategic Partnerships, the Council's approach must be re-focused on Reduce; Re-use; Recycle; and React; Transformation investment is already being used to enhance the resource available to deliver the projects underpinning the Climate Change Strategic approach; and significant external funding secured to supplement the Council's investment. This is a spend to save approach because any failure to invest now will result in the Council facing far greater additional costs in the future.

The report setting out the proposed 15 year capital programme which is also being taken to this meeting of the Council highlights many of the affordability challenges inherent in addressing climate change requirements in the delivery of the Council's infrastructure ambitions. The long term gains of taking a climate first approach often come with significant additional upfront costs. All councils need to invest millions in infrastructure, the decarbonisation of fleet, heat technology and buildings as well as help with skills and project development. This will be extremely challenging to achieve within existing resources. On 25 November, Cosla issued a press release calling on the Scottish Government to acknowledge the need for local government to be properly funded to tackle the climate emergency and it is proposed that the Council endorses this position: <https://www.cosla.gov.uk/news/2021/a-properly-funded-local-government-is-vital-to-tackle-the-climate-emergency>

The hydrogen economy is estimated to be worth £25billion to the Scottish economy, and it is expected that the Highlands is likely to be the major producer of hydrogen nationally given the significant renewable energy potential of the region. A range of opportunities to both support and benefit from the emerging hydrogen economy are likely to come forward over the coming weeks and months, and to this end, it will be important that the Council has access to financial resources to provide match funding for potential investment, subject to development and approval of business cases relevant to individual opportunities. If the Council is to be a major player and no longer a bystander on new energy provision, it will be important for reserves to be at a level whereby these opportunities can be maximised.

The transition to a net zero economy represents a very significant economic, social, ecological, and industrial opportunity for the Highlands, whilst a failure to do so presents major risks. The Council's approach to all future planning and investment therefore needs to be thought of in terms of "Climate First" whilst acknowledging the very real challenges this presents in terms of policy, operations and resources.

- 3.3 Legal Impact/Risk: The Council has a number of requirements in respect of reporting against its climate change obligations, in addition to being required to directly support Scotland's target to end its contribution to climate change no later than 2045. This is the same for all public bodies and private and third sector organisations likewise have a number of legal obligations and financial incentives in relation to climate change. This was most recently reported to the Economy and Infrastructure Committee on 2 December in the [Annual Report under Public Bodies Climate Change Duties, 2020/21](#).
- 3.4 Community (Equality, Poverty and Rural): Failure to proactively take cognisance of the Just Transition principles in respect of our corporate approach to the net zero agenda will not only have a negative reputational impact, it will have real and lasting effect on people's health and wellbeing. As the report on Fuel Poverty also being considered at this meeting of the full Council sets out, access to affordable fuel, efficient systems alongside variable housing conditions and increasing fuel prices can have a significant and detrimental impact on some of the most vulnerable in society. The main strategic challenge is around decarbonising heat in housing and Council officers are working with the Scottish Government "Heat in Buildings Team" in relation to national planning. In relation to the Council's own housing stock, an initial assessment of options has been commissioned and will report to Committee early next year on options for change. All options will be expensive and there are likely to be difficult decisions about heating choices and costs to be funded from future Council house rents. This is going to be a significant issues affecting all Social landlords.

The Just Transition mechanism is intended to ensure that the transition towards a climate-neutral economy happens in a fair way, leaving no one behind by looking to alleviate the socio-economic impact of the transition. It requires the creation of opportunities to develop resource efficient and sustainable economic approaches, which help address inequality and poverty. Just Transition is essential for our communities but cannot be delivered solely by local government. To be successful, it requires a collaborative approach to be taken, with communities, partners, business and especially governments - particularly in terms of the cost and supply of electricity, and access to the grid.

Examples of current successful partnerships include the Energy Efficient Scotland: Area Based Scheme where the Highland Council has secured Scottish Government funding towards energy efficiency measures. This funding in conjunction with Energy Company Obligation (ECO) funding and a homeowner contribution helps owner occupiers and those in private rented properties to improve the energy efficiency within their home targeting fuel-poor areas; offering insulation measures; and first time central heating, solar PV, and battery storage.

In addition, the Highland Adapts initiative is taking a place-based approach; working with communities and partners to deliver climate change adaptation.

3.5 Gaelic: there are no direct implications arising from this report.

4. Background

4.1 The Climate Change (Scotland) Act 2009 and the subsequent Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 (“the Act”) introduced binding targets and legislation to reduce Scotland’s emissions by 75% by 2030 against a 1990 baseline, and to end Scotland’s contribution to climate change no later than 2045. In addition, the Act places specific duties on public bodies relating to climate change.

4.2 The Act requires that a public body must, in exercising its functions, act:-

- In the way best calculated to contribute to delivery of the Act’s emissions reduction targets;
- In the way best calculated to deliver any statutory adaptation programme; and
- In a way that it considers most sustainable.

4.3 Further, and to ensure and continually monitor compliance with these revised targets, the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 (“the Order”) came into force from November 2020. This order requires public bodies to include the following information in our annual reports, for the current reporting year 2021/22:-

- where applicable, a target date for achieving **zero direct emissions** of greenhouse gases (i.e. the emissions arising from our use of oil, gas, petrol and diesel), or such other targets that demonstrate how the Council is contributing to Scotland achieving its emissions reduction targets;
- where applicable, any targets **for reducing indirect emissions** of greenhouse gases i.e. emissions arising from our consumption of electricity;
- how the Council **aligns its spending plans and use of resources** to contribute to reducing emissions and delivering its emissions reduction targets;
- how the Council will publish, or otherwise make available, its **progress towards achieving its emissions reduction targets**; and
- how the Council is **contributing to Scotland’s Adaptation Programme**

4.4 The Highland Council declared a climate and ecological emergency on 9 May 2019 in recognition of the serious and accelerating changes to the world caused by climate change. Many of the actions which have flowed from this declaration are highlighted within the [Council’s annual report](#) under the Public Bodies Climate Change Duties, which was reported to Members of the Economy & Infrastructure Committee on 2nd December 2021.

4.5 Whilst Scotland has already set stretching targets to end its contribution to climate change no later than 2045, the 2021 UN Climate Change Conference (COP26), which was held in Glasgow between 31st October and 12th November 2021, has generated increased awareness and scrutiny across society in respect of both the

unavoidable impacts of the changing climate, and the need to act more robustly if the global target of keeping temperature rise below 1.5 degree centigrade is to be met. It is therefore anticipated that the Council will come under increased pressure to formalise its position in respect of addressing the climate and ecological emergency, as well as how it is planning to continue to deliver services when faced with a changing climate and more frequent extreme weather events.

4.6 This paper summarises some of the key discussions and outputs relevant to Highland arising from COP26, whilst also setting out critical next steps the Council must take if it is to support both regional and national efforts to achieve net zero emissions.

5. COP26 – Summary

5.1 The COP26 summit brought parties together to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change. Fundamentally, the goal of the conference was to secure global net zero emissions by 2050 and to keep the target of a maximum of 1.5 degree temperature rise since pre-industrial times alive through countries coming forward with ambitious 2030 emissions reductions targets (NDCs) that aligned with meeting net zero by the middle of the century. In addition, in recognition of the already changing climate, parties were asked to work together to enable and encourage countries affected by climate change to protect and restore ecosystems, build defences, put warning systems in place and make infrastructure more resilient.

5.2 To achieve these goals, it was recognised ahead of the conference that finance must be better mobilised, and that developed countries must deliver on their promises to raise at least \$100bn in climate finance each year. In addition, there was an aspiration to better turn ambitions into action by accelerating collaboration between governments, businesses, and civil society to deliver on climate goals faster.

5.3 What was achieved?

One of the key achievements to come out of COP26 was the introduction of the broad, political [Glasgow Climate Pact](#), which calls for renewed efforts to raise ambition on cutting emissions, climate finance, adaptation and the loss and damage already being caused by global warming whilst putting the Intergovernmental Panel on Climate Change's (IPCC) recent findings on climate change front and centre. The pact requests that countries raise their ambition again next year, and creates a "Glasgow Dialogue" on funding for loss and damage whilst pledging to double climate adaptation finance. Importantly, the pact recognises that the impacts of climate change will be much lower at 1.5C compared with 2C and resolves to pursue efforts under the lower limit. The wording of the document sets a clear expectation that all countries will raise their ambition ahead of COP27 in 2022, with intense diplomatic pressure likely to fall on those countries who refuse to cooperate.

5.4 Further, this was the first COP to explicitly target action against fossil fuels, calling for a "phase-down" of unabated coal as well as a "phase-out" of inefficient fossil fuel subsidies. Whilst the language was amended from "phase-out" to "phase-down" late in the negotiations, COP26 does now set the expectation that the era of coal is ending.

5.5 Member and Staff attendance, experiences & takeaways

The event was attended by a number of Members including the Council Leader and the Strategic Chair for Environment, Economy and Infrastructure; and by members of the Climate Change Team, representing the Council and the wider Highland region at a variety of events across the 2 weeks of the conference. Their input and experience of the conference, under a variety of headings, can be broadly summarised as follows:

- **Hydrogen**

- The potential for green hydrogen generation in Highland region is being recognised nationally and internationally, with delegates from Germany, Japan and the US all commenting on the prospect of production within an area so rich in natural resources.
- Scottish Power announced a tie-in with Germany to provide green hydrogen to the country through a proposed pipeline. The initial offtake identified in Germany already outstrips the production capability of the 1GW pipeline Scottish Power have identified.
- SSE announced that they now have 5GW of onshore hydrogen generation identified.
- In respect of heavy goods fleet, there is a recognition across the private sector that hydrogen is likely to be the fuel of choice for decarbonisation, but a heavy reliance remains on the 2nd hand market for vehicles which is creating a degree of uncertainty. It is anticipated that the whole asset model will need to be reviewed given the anticipated speed of the transition to hydrogen. Internal combustion engine HGVs purchased after 2025 are likely to retain little or no asset value at end of life. The approach to greening heavy (and light) fleet has been reported to the Communities and Place Committee, this highlights challenges including that while the Council capital purchases its heavy goods vehicles, the predicted cost of hydrogen heavy good vehicles is up to three times the cost of diesel vehicles. The price of hydrogen vehicles is also affected by availability and there is no manufacturing pipeline in place at this time.
- It was recognised that “blue” hydrogen i.e. produced by splitting natural gas into hydrogen and CO₂, is not compatible with net zero ambitions, and this therefore creates increased opportunities for Highland given the size and scale of our current renewables resource as well as future potential.
- The European Commission have proposed a 50% target for “renewable fuels of non-biological origins” i.e. green hydrogen, in the share of hydrogen fuels used in European industry by 2030, whether as a feedstock or in final energy consumption.
- Supply Chain Mapping needs more work – many potential hydrogen providers see a local market opportunity, but are in many cases unclear on how it develops in the medium to long term. The key is in off-take availability; a reliable supply of available green hydrogen will develop a

supply chain opportunity around it. Both research & development and production need guaranteed supply to develop new business models.

- **Food & Agriculture**

- During Nature Day at COP26 The Chair of the Environment, Economy and Infrastructure Committee attended the official presentation of the Glasgow Food and Climate Declaration of which the Council is a signatory.
- Food and agriculture have risen significantly up the climate agenda – it is now recognised that achieving net zero will be impossible without tackling food, so this requires an increased focus and work by the Council particularly following on from the commitment and signing of the Glasgow Food and Climate Declaration (GFCD). There are many inspiring examples world-wide, whereby local food systems are thriving through the support of local government. The GFCD provides guidance and direction on how the Council can work with key partners to work towards a sustainable food system.
- Food waste is a significant contributor to Scotland's collective carbon footprint but a relatively easy one to manage, if infrastructure and systems are in place to deal with and process food waste at a community level, whilst also supporting householders with appropriate messaging and communications. This would have an added financial benefit of reducing the cost of waste collection and opportunities exist for infrastructure to be supported through the Scottish Government's Recycling Improvement Fund as reported to the Communities and Place Committee.

- **Nature Based Solutions**

- Nature-based solutions should form an important part of our regional response to climate change, but it is important to be careful about how they are applied. For Highland, tree planting needs to take into consideration the impact on biodiversity, long-term carbon content of the soil, local socio-economic impacts, and impact on water quality/flow, as well as land ownership considerations.
- Equally, carbon credits offer a simple way to offset those emissions which are impossible/too expensive to reduce or eliminate and should be part of our corporate and regional planning going forwards. The danger is that offsetting replaces efforts to reduce or eliminate emissions, which is the approach which should be prioritised. It is also important that the carbon market is transparent and well-regulated, to make sure that these investments are not causing more harm than good – there is significant work being undertaken to better understand this, with the Landscapes as Carbon Sinks programme in the Flow Country already contributing to the national discussion, particularly in respect of peatland restoration.

- **Transport**

- There are significant changes required to transition to low emission vehicles, however there are many economic opportunities to enable this transition. The private sector will be key in driving this change and helping to develop technical solutions to achieve net zero.
- There are opportunities to reduce our transport carbon emissions by utilising smart technology and reviewing our approach to vehicle use, such as vehicle telematics, smart charging, and car club schemes – many of these are already well advanced within Council operations.
- There was significant interest and focus on the development of the [Go-Hi transport accessibility app](#) as well as the success of The Highland Council car club scheme.

- **Climate Change Adaptation**

- Highland Adapts, the regional, place-based, community-led approach to climate change adaptation initiated by the Council was recognised by delegates as both powerful and necessary. The initiative received a wealth of positive feedback on its operating model, ideas and community-led approach to the changing climate.
- The recognition that the climate is changing and will continue to change even if net zero emissions is achieved, was a key theme running through discussions at COP26, and the need for robust adaptation at both organisational and regional level is now a well-established principle.

- **Climate Messaging & Communications**

- Many people are still unfamiliar with some important climate science. For example, 1.5 degrees of warming globally could mean 3 degrees of warming for parts of Africa. It is therefore important to keep repeating the key climate science in different and innovative ways, for example, through utilisation of the arts. Creative, collaborative climate communications is essential to engaging, educating and supporting our whole community in the scale and opportunity of the climate challenge ahead.
- Highland has an important role to play in both UK and international climate change messaging. The region has significant areas of peatland, woodland as well as renewable energy resources and should therefore be bold in telling a regional story and how it relates to present and future climate change action.

- **General**

- A key takeaway from a variety of presentations and conversations with delegates was that climate change needs to be embedded through all areas of Council work for the organisation to have any chance of achieving net zero corporate emissions - successful climate action is

happening in areas where it is woven throughout all workstreams, rather than as a remit for a single team.

- Climate change needs high profile leadership, at both political and officer levels. Everyone needs to be a climate leader and the senior management team needs to lead by example. To address the climate and ecological emergency, the culture of our region and organisation must be transformed and this is going to take strong leadership alongside new ways of working and delivering services to the people of Highland.
- At an event to launch the start of work on the Scottish Government's new Energy Strategy and Just Transition Plan, it was suggested that retrofitting of buildings to meet net zero targets will become more place-based, with more control handed over to local authorities to manage this transition. It will be important to closely monitor the development of this policy and to ensure that responses are drafted and submitted to consultations which will follow and that sufficient resources accompany any new requirements.
- It was confirmed that the Just Transition Commission will be visiting Highland over the coming months to gather data for their phase 2 report.

5.6 Post-COP26 Opportunities for Climate Action & Net Zero Strategy

A variety of benefits and new opportunities have been secured through staff and Members' attendance at COP26 which can support and strengthen the Council's approach to climate action. These can be summarised as follows:

- Highland Adapts has been selected to join the OpenCLIM project. This project is a £2m research project designed to support UK assessment of climate risks and adaptation. It has been commissioned by the UK Climate Resilience research programme for the Climate Change Committee, the UK Government, and the devolved administrations. It will form the basis of the next UK Climate Change Risk Assessment. A PhD student will join Highland Adapts in January 2022 to develop a technical climate risk assessment scope which can then be used as a basis for funding applications/ further research collaborations.
- There is potential, which is now being explored, for the Go-Hi app to be further developed to include additional transport options (such as Calmac ferries) and potentially link to other Council areas which adopt similar technology.
- There is clear potential to develop the car club scheme further within the Highland Council fleet to reduce reliance on petrol / diesel grey fleet vehicles, whilst helping to expedite the switch to electric vehicles for the light commercial fleet through increased deployment of EV chargers.
- There are opportunities to explore alternative delivery/operating models for the Council fleet, fleet EV infrastructure and public EV infrastructure which would attract commercial investment into the Highlands through public/private partnership approaches.
- It is important that the Council works with local partners to 'develop and implement integrated food strategies' as per the commitment detailed in the

Glasgow Food and Climate Declaration. This would see good food embedded across all policy areas.

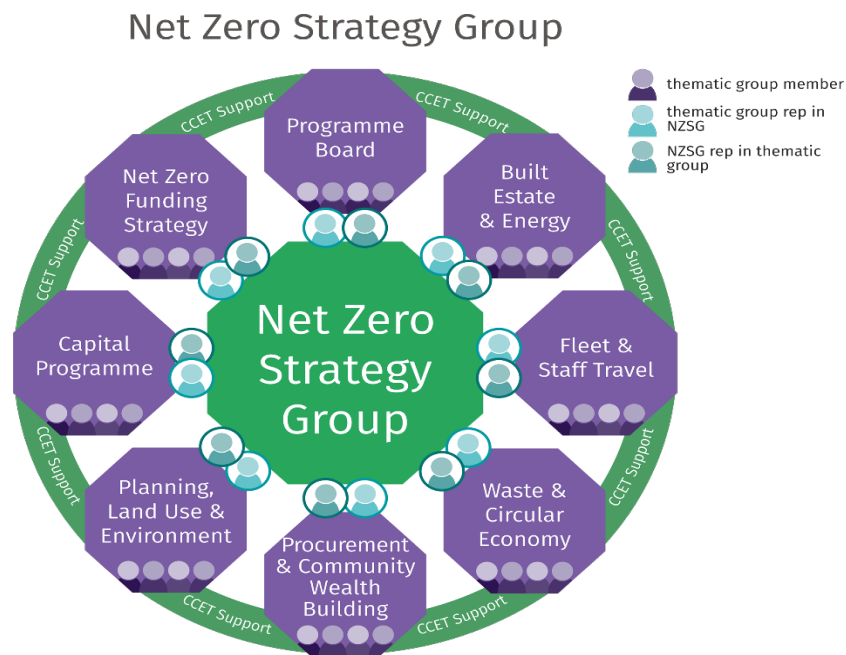
- There is an opportunity to work with and support key partners in the design and implementation of a “collecting and composting” food waste scheme at community level. Evidence where this has been done elsewhere suggests there is scope to reduce food waste by around a third by collecting it locally, given that householders receive immediate feedback about waste quantities arising in their area. Also, the compost can be used locally in community growing schemes, so what was a waste problem becomes a resource. Work carried out by the Highland Good Food Partnership illustrates clear opportunity for the Council to work in partnership with Zero Waste Scotland, Cairngorms National Park Authority and HIE to develop solutions and this includes bidding for the Scottish Government’s Recycling Improvement Fund as there is no additional Council resource to support new community infrastructure.
- Blended finance, i.e. a mix of both private and public sector investment, is a significant opportunity and could be beneficial in climate action in Highland for 4 key reasons:
 1. Both private and public sector are at risk from the impacts of climate change and therefore both benefit from climate action.
 2. Blended finance improves risk management, as the private sector is well-equipped to deal with project implementation risks, while the public sector is better suited to take on policy risks in innovative approaches that competitors could easily replicate.
 3. Public finance is insufficient alone to meet mitigation and adaptation finance needs.
 4. Blended finance encourages the private sector to invest in mitigation and adaptation.

6. Developing the Council’s Approach to Net Zero

- 6.1 Attached at Appendix 1 is a brief summary of the main areas of work being taken forward by the Climate Change and Energy Team to date. Progress on these is reported on to the Climate Change Working Group and through the Economy, Infrastructure and Environment Committee and the Communities and Place Committee. Whilst significant progress has been and continues to be made to reduce the Council’s corporate carbon footprint and to prepare the region for change, an overarching corporate net zero strategy and action plan is required to clearly set out roles and responsibilities across this agenda and in order to meet our legal requirements. Much of the groundwork required to prepare this strategy has already been undertaken, and guidance has now been published by the [Scottish Government and the Sustainable Scotland Network \(SSN\)](#) which will assist the Council in the development of its approach. To drive this work forward, it is recommended that the Council establishes a Net Zero Strategy Group (NZSG) and the remainder of this paper sets out the rationale for the establishment of this group, a proposed governance model, as well as some of the strands of work which will be required to deliver a robust net zero strategy.

- 6.2 The Council undertakes a huge amount of work across multiple services and sectors that impacts the net zero agenda, either positively or negatively, as highlighted in the Council’s annual report under the Public Bodies Climate Change Duties (link at para 4.4 above). Therefore, to achieve the aim of net zero emissions, whilst also recognising the need to adapt service delivery to reflect the changing climate, a corporately coordinated strategy and costed action plan is required, setting out key targets, milestones and budget implications for approval and regular monitoring by the full Council. To deliver this significant piece of work, it is intended to adopt a programme management approach.
- 6.3 The proposed officer governance model for the NZSG as set out in fig. 1 below, has been designed to assist officers in respect of accountability for this agenda whilst providing sufficiently robust supporting structures, largely through the Climate Change & Energy Team (CCET). A more detailed description of the function of each of the thematic groups, and the proposed Council and Committee governance routes can be found at **Appendix 2**.

Fig. 1



- 6.4 To prepare an evidence-based, deliverable net zero strategy and action plan, a wide range of Council services will need to be involved, in the Programme Board, the NZSG, and the thematic groups. This approach is designed to move the Council forward in terms of net zero. It supports the outcomes reached at a workshop with senior managers from across the Council held earlier this year where it was agreed that a cross service collaborative approach was essential if progress is to be made. The establishment of a Net Zero Strategy Group with workstreams being taken forward in thematic groups presents a comprehensive and agile approach to delivering across all the Council’s functions at pace, utilising resources and existing strategic groups as efficiently as possible. It is important to reiterate that this is an

extremely complex and multi-faceted agenda, and it is therefore vital that a robust officer and member governance structure is implemented to deliver a strategy and action plan which can be approved by Members.

6.5 Approaches and Workstreams

Combatting climate change is one of the most complex challenges facing the public sector. Local authorities are at the heart of delivering against national net zero ambition, and residents are looking to councils to facilitate the change that is necessary to address this challenge. Given the scale and complexity of achieving net zero, it is intended that external technical support will be procured, through existing approved Transformation Fund investment, to ensure that the Council's net zero strategy and climate action plan are well-evidenced and deliverable.

6.6 Based on an assessment of experience and approaches from other local authorities across the UK, a multi-step process will be needed in order to develop the Council's approach to net zero and this is broadly summarised below. It should be noted that whilst there are a number of steps described, this will still need to be delivered at pace with as many steps as possible developed in parallel. This may also require further resource being provided through the RIT Fund to resource the Climate Change Team to support the acceleration of the Council's approach:

1. Inception & Formal Establishment of Net Zero Strategy Group – to ensure all internal stakeholders are aligned in respect of scope, expectations, and timescales.
2. Emissions Baseline – build on work already undertaken by the Council to develop a new, formal emissions baseline, including any relevant Scope 3 emissions (i.e. emissions arising from our procurement, business-related travel, waste etc).
3. Net Zero Pathways – development of a business-as-usual scenario, as well as alternative mitigation pathways to net zero over varying time periods (e.g. 2025, 2035, 2038, but no later than 2045). It is intended that a formal report will be presented to Council following conclusion of this stage to seek approval for the most effective pathway, which will then inform the subsequent stages.
4. Implementation Plan – development of detailed action plan to enable the Council to deliver against its net zero target date. The action plan will also highlight the monitoring, evaluation and KPIs required to facilitate the continual assessment of progress towards net zero.
5. Funding - a key challenge in achieving net zero is funding. This stage will identify a list of potential funding sources which could be utilised to reduce pressure on the Council's capital and revenue budgets.
6. Area-Based Analysis – a high-level assessment of the net zero trajectory for the Highland region, and how this links with net zero at organisational level. This stage will be essential to map the types of partnerships which will be required to deliver net zero regionally. There are many ways in which taking a partnering approach to collaborate on major projects will achieve best value whilst contributing positively to the net zero transition; lever investment; comply with the ban on landfill of residual municipal waste; co-locate and share assets

and resources; and jointly tackle the major challenges of housing, infrastructure, economic development, and the ageing demographic.

6.7 Additional Workstreams – Carbon Literacy, Communication and Transformation

One of the biggest challenges in achieving net zero emissions is the general lack of awareness of the impact of service delivery on corporate emissions. Whilst the Council has had dedicated climate change staff for some considerable time, the scale of the challenge to get to net zero necessitates a much wider upskilling of both staff and elected Members to ensure that opportunities to contribute positively to this agenda are not missed, and this has been well-referenced in the new Scottish Government and SSN guidance referenced at para 6.1 above.

6.8 To this end, a phased programme of carbon literacy training for staff and Members, facilitated and delivered by the Climate Change & Energy Team, will be developed and rolled out throughout 2022, alongside the preparation and publication of much more robust guidance for officers to ensure that any climate change and net zero implications arising from reports are picked up much more robustly, and giving Members a firmer basis on which to scrutinise and question specific approaches being proposed. This will also include a series of seminars which will be scheduled for the new year.

6.9 A recent focus that COP26 has brought to the agenda is the need for communications around roles, responsibilities, opportunities, and challenges arising from climate change, both internally and externally. As suggested at para 6.7 above, it is difficult for people to act in the right way in respect of the climate agenda if they do not have the requisite skills and knowledge, and much of this comes down to lack of communication or access to relevant information. Whilst residents look to the Council to lead on climate change, and much positive work is being undertaken, it is accepted that a current challenge is delivering regular positive and proactive two-way conversations and communications with Highland communities, businesses, and partners.

6.10 In order for the Council to deliver transformational change in support of the just transition to a net zero future, a priority action for the Climate Change and Energy Team is to implement a structured and pro-active communications strategy and plan. It is anticipated that the Recovery & Transformation programme for 2022/23 and 2023/24 could provide a mechanism to support the resourcing of this, and a Recovery & Transformation workshop focussing on climate change and energy is being held week commencing 6th December to examine this and other opportunities to provide additional resources and support in more detail. In addition, there will be an opportunity to include questions about Climate Change in the refreshed Citizen's Panel which is due in Spring 2022 and consideration will also be given to enhanced engagement with young people.

6.11 Partnership & Region-wide Net Zero Target

It is the case that achieving net zero emissions at a regional level is outwith the sole control of the Council. However, it is well recognised that achieving a net zero region will take a coordinated, partnership approach, and the Council will play an important

role in this. The work which is underway through the Future Highlands – Health and Prosperity Strategic Plan for a green energy hub for Highland, as agreed by Members at Council on 28th October 2021, will be vitally important in pulling together various strands and opportunities for collective climate action across the region, such as Opportunity Cromarty Firth’s bid for free/green post status. Likewise there is significant potential provided by the Levelling Up Fund – as demonstrated by the successful bid for Inverness and the learning from this has been taken so that there is a strong focus on climate action in the development of future bids to the Fund for other parts of the Highlands.

Designation: Executive Chief Officer – Performance & Governance

Date: 22nd November 2021

Author: Keith Masson, Climate Change & Energy Team Manager and Kate Lackie, ECO Performance and Governance

Appendix 1

Current Workstream	Objective(s)	Timescale / Dates
<p>Development of Net Zero Strategy & Action Plan</p>	<ul style="list-style-type: none"> • To set out clearly defined and costed route map to net zero for the Council, and where relevant, wider Highland region. • To establish targets and performance indicators to measure progress. • To establish a Net Zero Strategy Working Group to provide input and governance to the development of the strategy. • To allocate specific service-level responsibility for climate action. • To identify critical partnership opportunities to help expedite the region's shift to net zero. • To provide regular progress reports against the action plan to Council 	<p>Dec 2021 - ongoing</p>
<p>Hydrogen & Low Carbon Heat Strategies (inc. Local Heat & Energy Efficiency Strategy (LHEES)) This programme of work is part-funded by the Transformation Programme.</p>	<ul style="list-style-type: none"> • To set out the Council's role and relevant actions to support the emerging hydrogen economy, particularly in respect of transport decarbonisation. • To set out our policy position in respect of low carbon heat for Highland. • To support Opportunity Cromarty Firth's freeport proposals. • To identify and secure funding opportunities for hydrogen and low carbon heat projects. • To progress the development of LHEES - delivering a full LHEES will provide insight into heat requirements across the region which will be an important part of the delivery of an overarching low carbon heat strategy. 	<p>30/04/2023</p>
<p>Highland Adapts</p>	<ul style="list-style-type: none"> • To enable the Highlands to adapt to the unavoidable impacts of climate change. 	<p>31/05/2024</p>

	<ul style="list-style-type: none"> To bring organisations, businesses, and communities together to develop a shared vision and understanding of climate change risks and opportunities across the Highland region. To identify adaptation and mitigation priorities for communities, areas and sectors that will establish where (both spatially and thematically) and how the region can increase resilience and adapt. 	
Salix Workstreams inc: LED replacements Street Lighting Programme Boiler Replacements Building Management Systems (BMS) River Ness Hydro Solar PV	<ul style="list-style-type: none"> To deliver carbon and cost saving to the Council through the deployment of specific asset-improvement interventions via the £17m Salix fund. To reinvest savings via a recycling fund in order to create a sustainable pot of funding for on-going improvement works. 	On-going
Fleet Decarbonisation This programme of work is part-funded by the Transformation Programme.	<ul style="list-style-type: none"> To develop and implement a high-level fleet decarbonisation plan. To secure funding and deploy EV charging infrastructure to expedite the decarbonisation of the Council's light commercial fleet. To ensure deliverables are aligned with vision set out in the fleet decarbonisation Strategic Control Plan. To install 26 pre-procured fleet chargers at depots across Highland. To dovetail with the hydrogen strategy work to ensure opportunities to decarbonise HGVs via hydrogen are taken at an early stage. 	Dec 2030
Smart Highlands, Smart Buildings Project (ERDF funded)	<ul style="list-style-type: none"> Development of a holistic building information system - combining billing, BMS and generation information to establish benchmarks and improve efficiencies. Develop IoT system that can be deployed across the estate to establish sight of buildings with little/no alternative control systems. 	September 2022
Energy Efficient Scotland: Area Based Scheme (EES:ABS)	<ul style="list-style-type: none"> £3.5m externally funded programme (SG) to enable the Council to deliver an Area Based Scheme to Highland 	On-going

<p>Delivers the following improvements to Highland homes:</p> <ul style="list-style-type: none"> • External wall insulation (EWI) • Cavity wall insulation (CWI) • Loft insulation • First-time Central Heating systems, inc. Air Source Heat Pumps (ASHP) • Solar PV and battery storage 	<p>residents, providing energy efficiency measures to owner-occupiers and private rented tenants.</p> <ul style="list-style-type: none"> • The project aims to reduce fuel poverty and provides significant carbon savings. • Explore renewable opportunities and innovation measures for inclusion in the programme 	
<p>Renewables Income Fund</p>	<ul style="list-style-type: none"> • Development of action plan detailing what The Highland Council needs to do to fully benefit from the green energy/renewables schemes which utilise and profit from the significant natural resources that exist within the Highland region. • 	<p>30/04/2022</p>
<p>Flow Country World Heritage Site Project</p>	<ul style="list-style-type: none"> • To secure World Heritage Site status for The Flow Country Peatlands. • To build strong community engagement on integral issues such as the boundary and buffer zones. • To raise the profile of peatlands in Scotland and worldwide. • To produce a draft management plan for a Flow Country world heritage site which will protect the 'outstanding universal value' of the site. • To producing a strong business case for a Flow Country world heritage site. 	<p>On-going (2024)</p>
<p>Landscapes as Carbon Sinks</p>	<ul style="list-style-type: none"> • In collaboration with EIT Climate KIC, Edinburgh University and The Peatlands Partnership, The Flow Country is being used as a case study for low or negative carbon landscapes. • The initiative brings together research, policy development, business innovation, access to financial investment, and land management expertise to co-design and deliver low-carbon economies and landscapes. 	<p>On-going</p>

Highland Climate Change Conference 2022	<ul style="list-style-type: none"> • To organise a two-day conference on the topic of climate change, with a particular focus on the Highlands and its disproportionate contribution to national net zero ambition. • To engage the general public with the topic of climate change and involve them in the conference itself. 	31/10/2022
Green Growth Accelerator	<ul style="list-style-type: none"> • To develop the business case for a pathfinder project under the Scottish Government's £10m Green Growth Accelerator Programme, which will deliver both mitigation and adaptation benefits, utilising £120k Scottish Government funding secured through initial application. • To meet the carbon-saving and nature-based targets required to retrospectively claim the available funding. 	01/07/22
Annual Public Bodies Climate Change Duties Report	<ul style="list-style-type: none"> • To provide legally-required update on climate action by the Highland Council to Scottish Government for FY 2020/21. 	30/11/2021
River Ness Hydro Project	<ul style="list-style-type: none"> • To deliver carbon savings of 142tCO₂e per annum that will help the Council meet ambitious Climate and Ecological Emergency targets; • To generate and supply ~50% of the electricity demand to Inverness Leisure Centre – one of the highest consuming buildings in Highland Council's estate; • To further protect the Council from future energy price increases, providing long-term financial stability; • To develop an innovative structure with in-built media content that will be fully accessible by the public and serve to enhance the visitor experience (video content and projection mapping will offer an immersive experience for visitors); • To providing a hub for STEM learning • To ensure strong partnership working is maintained. 	April 2022
Green Impact	<ul style="list-style-type: none"> • To reduce energy and resource waste within the Council at the same time as raising awareness of the value of sustainability. • To develop strong relationship with the University of Highlands and Islands, whilst creating new opportunities for students to assist in the development, operation and management of Green Impact. 	On-going

	<ul style="list-style-type: none"> To deliver financial and carbon savings to the Council. 	
Energy Sparks	<ul style="list-style-type: none"> To increase energy efficiency of the Council's school estate through delivery of school-specific energy analysis and education programme. To increase awareness of both pupils and school staff in respect of the measures required to reduce energy consumption and waste. 	On-going
Electric Vehicle Infrastructure – Local Authority Installation Programme (LAIP) and Low Carbon Travel & Transport (LCTT) Project	<ul style="list-style-type: none"> To deliver Transport Scotland and ERDF-funded publicly accessible EV charging infrastructure across Highland. To utilise best practice and lessons learned from across the sector to continue to deliver positive infrastructure outcomes and expedite the shift to zero carbon transport. 	On-going
Net Zero Buildings Project	<ul style="list-style-type: none"> To build an evidence-based picture of what the shift to net zero buildings means for THC, from a design, retrofit and investment perspective To engage with stakeholders to show the value in taking a holistic, fabric first approach to achieving a net zero estate. To align with the Asset Rationalisation / New Ways of Working programme and mutually support each team's objectives. To secure external funding to pilot a retrofit approach to achieving net zero buildings. To draw down £50k through the Scottish Government's Non-Domestic Energy Efficiency framework to enable robust assessment of a selection of Council assets against net zero criteria. 	31/03/2022
Post-occupancy Evaluations	<ul style="list-style-type: none"> To drive down on-site energy consumption through a Post-Occupancy Evaluation process by assessing, identifying and rectifying performance gaps at a variety of new school buildings. 	On-going
Low Carbon Funding Opportunities	<ul style="list-style-type: none"> To take a strategic, targeted approach underpinned by a Strategic Control Plan to maximise funding available for carbon-reduction projects and interventions. 	On-going

	<ul style="list-style-type: none"> • To assist in bridging the anticipated funding gap between current resource and net zero ambition. 	
Climate Change Working Group	<ul style="list-style-type: none"> • To increase Member and public awareness and scrutiny of climate change action at The Highland Council. 	On-going
Committee Papers / Business Cases	<ul style="list-style-type: none"> • To develop guidance and mechanisms to ensure climate and ecological emergency-related issues are properly considered and factored into Council and committee papers, business cases and project development. • To increase awareness of impact of Council decisions on ability to meet net zero targets. • To improve accountability re climate change agenda 	30/04/2022

Appendix 2 – Net Zero Strategy Group Governance Model

Background

The proposed NZSG governance model is designed to help the Council be more intentional and structured about how it does its work and makes decisions around net zero; how it creates accountability; and how it communicates. Through this process, we want to learn as much as we can and work with all the data we can access, to feed into and support our net zero strategy development. This model is based on the value of shared ownership of responsibility. It is the role of the central NZSG to facilitate this and support officers involved on this journey to create meaningful transformation.

This model will provide a governance structure that is dynamic without rigidity, allowing us to grow, adapt and be nimble

Political Governance - The Council will be the governing body for the Climate Change Strategy and Action Plan. Progress reports for the whole programme will be overseen by the Climate Change Working Group prior to bringing to Council. The detailed Action Plans arising from each of the Thematic Groups will report to the appropriate Strategic Committees and Boards.

Programme Board (PB) - Leads on planning, vision setting, allocation of tasks and reporting to relevant strategic committees and Boards and to Council. Chaired by the ECO for Performance and Governance, the Programme Board is the strategic decision-making body (at officer level) and provides general direction and support. Progress in terms of the development of the net zero strategy and action plan will be monitored through the Board, which would meet monthly, at least initially. Once the programme is properly established, the Board can change to meeting quarterly, timed for reporting progress to Full Council.

Net Zero Strategy Group (NZSG) – connects all the ‘thematic’ teams and is the delivery mechanism in respect of strategy development. This group effectively delivers on the Council’s requirement to develop a net zero strategy and action plan. The NZSG holds the thematic teams responsible and supports their functioning, as well as upskilling thematic team members as required. All information and updates will fundamentally flow through this group. The NZSG sets the aims and domain of each of the thematic teams, and will meet monthly.

Group membership – each Council Directorate would be represented in the NZSG, and each thematic team will nominate a representative to sit on this group thus ensuring a two-way flow of information.

Thematic Teams

Each thematic team fulfils a set function, of which details are set by the NZSG. Each team will develop the evidence base within their respective domains to enable the drafting of the relevant section of the overall NZ strategy, but will seek feedback (and information) where required via the NZSG. Whatever thematic team is performing the work in one area of responsibility determines the approach for that area, as they are deemed to be the subject matter experts. Although each team has the full autonomy over the aspect of strategy development relevant to their particular function, they are also part of a whole system that will be required to respond to each other’s needs, so feeding back through the NZSG is imperative. This has the added benefit of ensuring that opportunities for collaboration / crossover are not missed. The themes also have varying degrees of complexity and so will not require equal levels of resource/staff commitment.

There are 7 thematic teams (excluding the Programme Board), and the Climate Change & Energy Team will act as a support mechanism for the NZSG, Programme Board and the thematic teams.

Built Estate & Energy – will lead on the developing the evidence base and strategy development in respect of decarbonising our built estate (the biggest contributor to our corporate emissions), with a significant focus on energy (electricity, oil, gas, propane and biomass consumption) and how behaviour change of staff can impact the achievement of net zero. The Group will take cognisance of building maintenance implications and opportunities arising from the transition to net zero. There are key linkages between this thematic group and the Asset Rationalisation / New Ways of Working project, and these need to be represented. This work is already underway and so this does not represent an additional layer or workload, however the creation of a specific thematic group provides a route for over-seeing and reporting progress. In addition, there needs to be a workstream focusing on the decarbonisation of the Council's social housing/HRA estate, tackling fuel poverty and Just Transition. This may need to become a separate Thematic Team but as many of the considerations will be the same for housing as they are for the rest of the built estate, the intention is to keep them under one thematic group at least initially. Progress against both will be reported on a quarterly basis through the Housing and Property Committee. The NWoW and Asset Rationalisation projects will monitor climate change impacts as part of their regular reports to the Redesign Board.

Fleet & Staff Travel – will lead on the strategy development in term of both the decarbonisation of fleet vehicles (through conversion of existing fleet to low carbon alternatives and deployment of charging / refuelling infrastructure) but also wider staff travel, including both commuting and business travel. This work is already underway and so this does not represent an additional layer or workload, however the creation of a specific thematic group provides a route for over-seeing and reporting progress. Progress against the Fleet & Staff Travel Action Plan will continue to be reported to the Communities and Place Committee.

Waste & Circular Economy – will develop the Council's approach to reducing emissions arising from our corporate waste, as well as how the Council can employ and benefit from circular economy principles through service delivery. This will pick up the work of the Member Waste Strategy Working Group, the officer project board and support from the Transformation Programme, so that the outputs are reflected in the Net Zero Action Plan. Progress will continue to be reported routinely to the Communities and Place Committee.

Procurement & Community Wealth Building – the emissions arising from the Council's procurement decisions are currently poorly understood, but are likely to be significant. It is therefore proposed that procurement is specifically scoped into the Council's new net zero strategy to ensure that opportunities to reduce the carbon footprint arising from our purchasing are not missed, whilst also seeking to maximise community wealth in Highland by procuring as much as possible from local sources. This would be a new area of work and will require engagement with the Shared Procurement Service. Progress will be reported on a quarterly basis to the Corporate Resources Committee.

Planning, Land Use & Environment – it is important that the response to the ecological emergency is factored into the Council's net zero strategy, whilst we must also begin to plan for how we will "offset" any emissions which we cannot practically reduce to zero by our net zero target date. In addition, the Development Plans team have a critical role in ensuring that future development in Highland, both by the Council and wider public / private sectors, contribute both to the transition to net zero as well as creating a climate ready Highland. There is already very close working across the respective teams, the formalisation of a Thematic Team would give greater structure and reporting route through to the Board.

Progress against the Planning, Land Use & Environment Action Plan will be reported on a quarterly basis to the Infrastructure, Environment and Economy Committee.

Capital Programme – the Council's capital programme should contribute significantly to both the Council's own pathway to net zero, but also that of the wider Highland region. In addition, the Council is now required to report annually to Scottish Government on how it aligns its spending plans and use of resources to contribute to reducing emissions and delivering emissions reductions targets. Once the net zero strategic approach has been agreed and integrated into the capital programme this could ultimately become a subset of the existing senior officers Strategic Asset Management Group (SAMG), rather than a standalone thematic group. Enhanced Capital Programme Governance arrangements are being developed and will be taken to the next meeting of the Council. This will include measures for reporting progress on the climate change impacts and opportunities of the programme.

Net Zero Funding Strategy – the Council now has a requirement to report on how it will align its spending plans and use of assets with net zero ambitions. It is therefore important for this group to develop a funding strategy which will enable much of the work identified by the other thematic groups to be undertaken, with a particular focus on maximising the Council's capacity to secure external funding but also to dovetail with the development of the Council's budget and spending plans from April 2022 onwards. This will therefore be a critical element underpinning the budget which will be taken to Council in March 2022. Progress will be reported on a quarterly basis to the Corporate Resources Committee and will include a close interrelationship with Capital Programme reporting.