The Highland Council

Minutes of Meeting of the **Climate Change Working Group** held **REMOTELY** on Friday, 6 November 2020 at 10.30am.

Present:

Mr B Boyd
Mrs M Davidson
Mr C Fraser
Mr J Gordon
Mr D Louden
Mr D Macpherson
Mr D Rixson
Mrs T Robertson

Officials in Attendance:

Mr M MacLeod, Executive Chief Officer, Infrastructure & Environment
Mr K Masson, Climate Change Officer
Ms Fiona Boyd, Energy Advice Officer
Ms Fiona Conti, Category Manager, Finance Service
Mr Joe Perry, Climate Change Co-ordinator
Mr Martin MacDonald, Corporate Improvement Project Manager
Ms Nicole Wallace, Environment Manager
Ms Susan Carstairs, Library Assistant, HLH Management and Admin
Ms Pamela Burns, Corporate Communications Officer (Secondment)
Miss M Zavarella, Administrative Assistant

Also in attendance:

Ms Fiona Landy, Delivery Manager for the Hydrogen Accelerator
Mr Maarten Verbraeken, Hydrogen Accelerator
Mr Archie Prentice, Practically Green

Mrs T Robertson in the Chair

1. Apologies for Absence

Apologies for absence were intimated on behalf of Mr J Bruce, Mrs I Campbell, Mr A MacInnes, Mr S Mackie, Mrs A Maclean, Mr R MacWilliam, Mr C Fraser, Mr J Gray, and Mr B Thompson.

2. Declarations of Interest

There were no declarations of interest.

3. Hydrogen Accelerator Presentation

A presentation had been undertaken by Fiona Landy, Delivery Manager for the Hydrogen Accelerator. It was reviewed that the mission of Hydrogen Accelerator was to begin to coordinate many of the initiatives going on in Scotland and to lead, support and provide a level of expertise, particularly to the public sector. The key question was how Hydrogen Accelerator could expedite, at-scale, the opportunities

for decarbonisation, particularly as it related to transport. Key stakeholders and funding were outlined and a significant portion of the activities of Hydrogen Accelerator were identifying Scottish supply chain, sharing learning and experience, identifying overlap in existing projects, developing risk management strategies, promoting health and safety and identifying funding.

During discussion, the following comments were raised:-

- appreciation was expressed for the presentation and echoed by Members;
- the possibilities and timescales for hydrogen fuelled boats was queried given the keenness to see a greener alternative when replacing low requirement boats such as ferries and considering that battery powered ferries would be extremely heavy relative to their size;
- regarding economics, there were three elements to consider; round trip efficiency of an electrolyser, cost of water (sea rather than tap water) and cost of electricity. Locating a hydrogen project in the Highlands would be extremely beneficial because onshore and offshore wind meant that the Highlands would not suffer transmission losses;
- it was queried whether movers such as Kawasaki Heavy Industries, Ltd. had been contacted with respect to transport and storage for ammonia given they already produced vessels for this kind of transport;
- there was a mixture of intimidation and disappointment following the presentation given that the Highlands was so far behind the curve with respect to hydrogen;
- Highland had considerable buying power with respect to large-scale machinery and this provided a significant opportunity to decarbonize the fleet of vehicles that worked across the Highlands;
- it was key to get coordinated swiftly with partnerships across the public and business sector as Highland had a role in influencing and supporting politically, therefore it was requested that a follow up session on Hydrogen was provided as soon as possible;
- It was queried how soon the decarbonised vehicles would likely to be readily available for purchase and if there had been work done around procurement;
- it was queried whether the Scottish Power contact person could be shared with the Leader of the Council given their collaborative work and support with Hydrogen Accelerator thus far;
- the harbours business had 20 000 tonnes of marine gas oil per year being sold through Highland pumps and there may be an opportunity to decarbonize the fishing fleet by switching to hydrogen as some of these boats used huge amounts of fuel and generated massive emissions;
- water was a safe and copious storage medium for hydrogen, it was believed that the ocean was a huge capacitor in terms of energy, and it was surprising that water had not been discussed more. It was suggested that the way of thinking be adapted to make much more use of the oceans and to involve University of Highlands and Islands (UHI) in the process;
- it was queried if the hydrogen-powered-train prospect that was showcased COP26 had been delayed; and
- it was requested that a copy of the presentation be circulated to Members.

Officers responded in detail to the points/questions raised, during which it was confirmed that:-

- batteries would be inadequate for ferries due to the weight and this was where hydrogen would store enough energy. It was believed that the future would see fuel cell operated boats;
- Scottish Power had set up a hydrogen office with ambition to assist public and private sectors to do this decarbonisation and to support with investment. Key project areas included decarbonising heavy fleet vehicles, forestry, and distilleries. It was agreed that the contact person would be shared with the Leader of the Council;
- large scale production of hydrogen drove down the cost of the hydrogen fuel and as a fuel hydrogen had a premium price, if it was being pumped into the grid the opportunities to use as a fuel was reduced;
- in terms of decarbonisation of the public sector fleet, Highland could lead the way on this initiative given the remoteness, mass distance of travel and connection to the grid which could generate energy and electricity, converting to hydrogen locally;
- refuse collectors, gritters, and forestry vehicles would be at the forefront of vehicles in development and likely the first to be ready for purchase. In a few years, it was suggested that those would be the mainstream vehicles and Highland could have the opportunity to join in the testing of the prototypes and thereafter go into full production;
- from a procurement perspective, there were many lessons to be learned from the Aberdeen examples that have been running hydrogen vehicles for some time and collaboration was key;
- procurement was a major challenge in Scotland as projects were getting delayed by years to secure the necessary infrastructure. It was necessary to work together to produce procurement routes for the public sector for them to utilize for hydrogen technology;
- it was paramount that academics worked together and Hydrogen Accelerator was supportive of working with University of Highland and Islands; and
- the hydrogen-powered-train prospect that was showcased COP26 was on target.

Thereafter, Members **NOTED** the contents of the presentation and **AGREED** that a copy of the presentation would be circulated to Members.

4. Greenhouse Gas Baseline Inventory Report for Highland

There had been circulated Report No. CCWG/15/20 dated 20 October 2020 by the Executive Chief Officer, Infrastructure & Environment.

In this regard, a presentation had been undertaken by Archie Prentice, Practically Green which reviewed the findings of emissions for the Highland Council area and how it was distributed across sectors. Overall, commercial properties, agriculture and consumption of diesel for road transport were the largest sustained sources of emissions. It was highlighted that agricultural emissions would be challenging to reduce if meat consumption was maintained. Moreover, carbon stocks in Highland soils were a very important resource and emerging knowledge showed that peatland emissions made serious inroads into the sequestration caused by forestry. From the

Highland figures there was work currently being done to finalize draft reports that teased out figures specific to the six local areas assigned to the Executive Chief Officers across the Highlands. Finally, with respect to the Changing Agenda in October of 2020 there was change in regulation resulting in a responsibility on Highland Council as an organization to articulate its own carbon neutral journey and how this would assist the Scottish Government to achieve its target of net zero by 2045.

During discussion, the following comments were raised:-

- appreciated was expressed for the presentation and echoed by Members;
- it was queried at what temperature peat began to dry and at what point it began to emit carbon rather than absorb it. Further, which trees would continue to thrive in a warming climate;
- there were issues with solar panels as they should be able to be hooked up to the grid to tackle emissions, however, the distribution grid was full and would not allow for it;
- oil and gas companies were looking to offset emissions by planting trees and some of the communities were not in agreement as it was viewed as 'green washing', however, it would be much more beneficial to benefit community land rather than commercial;
- regarding commercial timber, the forested areas needed to be as close to main roads as possible, so extraction was easier;
- most people were not familiar with 'blue carbon' though it was highlighted that marshes, forest, oyster reefs, seagrass, meadows, plankton and seabed were all forms of blue carbon and the top ten centimetres of the seabed sediment in Scotland had been found to store over eighteen times more carbon than the Scottish peatlands and forest put together. It was queried if a report could come back to the Climate Change Working Group on blue carbon and how this could be harnessed;
- the Climate Change Working Group was under resourced and the Officers did a remarkable and formidable job with what they had, however, a proper discussion had to take place on how they can be supported with additional resources;
- the Council passed a motion some time ago for Highland to become a carbon sink for the rest of the country, the report gave the right reasons for tree planting, it was just a matter of selecting the right tree in the right place;
- with respect to tree planting, the Highland Council should not take complete ownership rather landowners, crofters and land managers who currently exist should be used and Highland should play a major role as a facilitator. Highland had to be marketed as a place which could help those who want to offset and could put their money towards having Highland sequestrate. Complications included issues of deer management and fencing; and
- there was new technology emerging on how houses could be built without disturbing peatland.

Officers responded in detail to the points/questions raised, during which it was confirmed that:-

- when peat was drained manually or mechanically that was when it began to dry out and the importance was maintaining the water logging;
- there was not a clear answer on the tipping point for when peat began to dry out, however, there had been some work that had suggested that peat had been drying out very slowly over hundreds of years. There were scientists with expertise on this matter in Scotland and it would be useful to coordinate them and have them work for Highland;
- the species of tree that were best suited for Highland would be that way for some time. Even the best suited tree for maximizing carbon removal could result in damaged carbon stocks in the soil and issues with biodiversity if they were planted at high levels, so it was a balancing act;
- there was a Scottish National Heritage report in 2017 that outlined many of the areas mentioned and would be forwarded to the Climate Change Officer for circulation;
- Forest and Land Scotland were interested in how to increase planting, with the right trees in the right place as well as looking at peatland; and
- the Woodland Carbon Code was an accredited scheme and allowed a calculation of every tonne of carbon that was sequestered by a tree that had been planted. The peatland equivalent called the Peatland Code would be accredited next year and would allow for a regimented process for calculating the amount of carbon stored by peat and how that could be funded.

Thereafter, Members:-

- **NOTED** the contents of this report;
- **AGREED** that a workshop should be held to discuss and agree priorities for action, which could potentially be supported and enabled by the Council, to reduce emissions across the region;
- **AGREED** that the presentation would be circulated to Members; and
- **AGREED** that the 2017 Scottish National Heritage report as it related to blue carbon would be circulated to Members.

5. Solar PV Programme Update

There had been circulated Report No. CCWG/16/20 dated 22 October 2020 by the Executive Chief Officer, Infrastructure & Environment.

During a verbal update, the Corporate Improvement Project Manager reviewed that since the report had been finalized Lot 1, 2, 3 and two sites on Lot 6 had been completed. It was reviewed that Lockdown had slowed progress as many of the sites being undertaken were school sites in which the school break over summer would have been an ideal opportunity. Working with new Covid-19 restrictions post-lockdown was going well and there was only limited disruption as a result. Sites were taking slightly longer to complete given new Health and Safety standards. It was expressed that charge out rates that were in place internally proved challenging when managing a fund of this nature by enforcing a multiplier on staff's time. Overall, progress was being made with the Solar PV Programme, however, there

was room for improvement, the spend on internal resource was disproportionately high and this would put a further strain on the fund when moving towards more complex sites or technologies. Finally, next steps were to establish a business case for an additional phase of solar and try to proactively address some of the legacy issues from previous installations.

During discussion, the following comments were raised:-

- appreciation was expressed for the report and efforts of the team in grid completions; and
- with respect to grid capacity, the issue in Highland was that renewable energy by wind and solar could be overproduced and the solution was to increase the size of the grid or put in more taps. If the size of the energy grid could not be increased, a Highland grid would have to be created. It was queried why the population in Highland should have to pay a premium on something on their doorstep when cities were getting a reduction.

In response to queries, it was explained that

- grid restrictions were hugely problematic however, it was unclear as to the scale and infrastructure required and whether Highland would be in a position to address this as outlined.

Members **NOTED** the contents of the report.

6. Updates to Annual Public Bodies Climate Change Reporting Duties Reporting Requirements

There had been circulated Report No. CCWG/17/20 dated 20 October 2020 by the Executive Chief Officer, Infrastructure & Environment.

During a verbal update, the Climate Change Officer reviewed that the Public Bodies Climate Change Reporting Duties process was designed to capture all the actions with respect to climate change mitigation and adaptation which was undertaken by public bodies in Scotland in the most recent financial year. A recent change in legislation required that for 2021-22 the Council would be required to detail the following; a target for net zero direct emissions from operations; a plan on how to align spending and use for resources to reduce emissions across the Corporate Estate; and how the Council would publicise its progress for meeting those targets to provide confidence to the public that the issue of climate change was being taken seriously. This would require a cross service and collaborative approach to determine a realistic date to achieve net zero direct emissions and ensuring that Council spend was contributing to national climate change ambitions. As a result, it was being proposed that a serious of workshops and meetings would be arranged with Members and senior managers with a view to take proposed recommendations to Council in 2021. Formal guidance from the Scottish government with respect to proposed changes was being awaited at this time.

During discussion, the following comments were raised:-

- there were significant challenges in achieving the agreed targets and more collaboration and involvement was required to push forward the cost issues.

Members **NOTED** the contents of the report.

7. Climate Change Workstreams

There had been circulated Report No. CCWG/18/20 dated 21 October 2020 by the Executive Chief Officer, Infrastructure & Environment.

The Climate Change Co-Coordinator provided a summary of the 2020 Highland Climate Change Conference and expressed appreciation for the Climate Change Officer, Chair of the Climate Change Committee, Leader of the Council and Corporate Communications for their assistance with the organizing and assisting with the event. It was reviewed that there were 130 attendees watching various talks with over 30 speakers, and 200 filled slots on the workshops which followed. There had been a positive response from the public following the conference and appreciation had been expressed to the team. A summary of the event and workshops was being put together and would be circulated more broadly by Corporate Communications and the speaker portion of the conference would be published on YouTube in the near future.

Members commended all officers involved in the 2020 Highland Climate Change Conference and **NOTED** the contents of the report.

The meeting ended at 12:29pm.