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# **HIGHLAND COUNCIL**

Committee:	Climate Change Panel
Date:	17 <sup>th</sup> October 2019
Report Title:	Working Towards 2025 - A Carbon Baseline for Highland
Report By:	Director of Development & Infrastructure

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## 1. Purpose/Executive Summary

1.1 This report provides a summary of a report commissioned jointly by The Highland Council and Highlands and Islands Enterprise (HIE) to provide a greenhouse gas inventory for Inverness, as covered by the Inverness City Area Committee, and seeks outline support from the Climate Change Panel for a wider study for the whole Highland region to be undertaken.

## 2. Recommendations

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- 2.1 Members are invited to:
  - i. agree that funding opportunities should be explored to allow a greenhouse gas inventory to be prepared for the whole Highland region

#### 3. Background

3.1 Following the establishment of the Carbon CLEVER initiative in 2013, which aims for a carbon neutral Inverness in a low carbon Highlands by 2025, a report was commissioned jointly by The Highland Council and HIE through the University of the Highlands and Islands (UHI) to provide a greenhouse gas (GHG) inventory for Inverness. The report, Which can be found here, has calculated the net carbon balance for the area, and is the first such inventory produced specifically in Highland. Pages 4 – 13 of the report provide a detailed executive summary of the key findings and opportunities arising.

- 3.2 The baseline report, which estimates emissions generated in 2014, helps to identify areas where action is required in order to meet the 2025 target, and provides a methodology which can be utilised for a wider examination of greenhouse gas emissions for the whole Highland region.
- 3.3 Following on from the Council's declaration of a climate and ecological emergency, and its renewed commitment towards achieving a carbon neutral Highlands by 2025, it is clear that a baseline emissions inventory for the whole region would be helpful in assessing the region's current contribution to the climate and ecological emergency whilst identifying critical areas of focus going forward.

## 4. Emissions Baseline & Key Findings

- 4.1 The gross emissions for the Inverness Greenhouse Gas Inventory area in 2014 were calculated to total 692,879tCO2e. The area's population in 2014 was officially estimated at 79,728, giving a per capita figure of 8.6tCO2e. The annual sequestration of carbon in the Inventory Area's woodlands was estimated as 383,918tCO2e, which would reduce the Inventory Area's net emissions to 364,496 tCO2e, the equivalent of 3.8tCO2e per resident. This reflects the significant role the area's forests play in mitigating the overall climate change impact of the region, and supports increasing efforts to expedite forestry planting in appropriate locations.
- 4.2 The key findings from the report can be summarised as follows:
  - Wide areas of peatland are under threat of damage and degradation. There is now greater awareness of the carbon storage role of managed peatland, and this is helping to reverse the historical passive management and commercial exploitation/extraction of peatland, thus improving its capacity for carbon storage. Support for peatland preservation and restoration should therefore continue.
  - Stationary residential emissions from domestic energy use were the largest single contributor to the inventory area's overall GHG emissions, at 187,456tCO2e, with emissions from grid-supplied electricity the largest proportion of this figure. The Scottish Government has designated energy efficiency as a national infrastructure priority in the form of the Scottish Energy Efficiency Programme (SEEP), and the Council will have a key role to play in its delivery, whilst tackling the effects of fuel poverty where possible. There are likely to be a range of ways that the Council and others can encourage increased domestic and business energy efficiency in the coming years.
  - Cars are by far the biggest source of road transport emissions, and were responsible for 63,182tCO2e in 2014 (roughly equivalent to the Council's total annual carbon footprint at the time). There is growing interest in the promotion of low carbon and active transport, and this will receive continued policy support and funding. In addition, there will be an increasing reliance on electric vehicles and the sharing economy i.e. car clubs, in meeting local transport needs. The Scottish Government has committed to the phasing out of sales of new petrol and diesel cars by 2032. The Council can play a key role in supporting this vision by improving access to electric vehicle charging infrastructure both for its staff and the public whilst supporting the provision of access to shared electric vehicles in communities.
  - Total renewable electricity produced in the Inventory Area in 2014 was 1,436,000,000kWh - nearly three times the amount of electricity consumed in the area. Renewable electricity production also exceeds the combined kWh consumption of grid supplied electricity and mains gas in the Inventory Area. From a theoretical perspective, if local renewable energy production displaced the consumption of grid electricity and mains gas (through the electrification of heat, for example), the annual carbon sequestration of the area's forests would be greater than the remaining emissions from stationary fossil fuel consumption and the emissions from waste, transport etc. This emphasises the important role that

renewable energy can play in reducing emissions across the region.

• Healthcare has an important role to play in contributing towards reduced operational emissions, as well as a requirement to adapt service delivery to meet the emerging challenges which will arise from the changing climate. Climate change is widely considered to be a "threat multiplier" in respect of global health, given that it can potentially amplify pre-existing health problems and inequalities.

## 5. Key Next Steps

5.1 As mentioned above, the Inverness GHG Baseline report is the first such inventory produced in Highland, and provides a detailed summary of the emissions footprint of the area for 2014. To understand what the picture looks like across the whole region, it is recommended that funding opportunities are explored to allow an inventory to be produced for the whole region for 2017, which is the most up-to-date reporting year from a data availability perspective. This would be of benefit in terms of understanding where the Council should be focusing its efforts in respect of communicating with Highland residents and businesses about the region's climate change performance whilst identifying critical actions for further reducing the region's footprint, going forward. Identifying how the region can realistically meet the ambition of being carbon neutral by 2025 will be impossible without actually baselining where we currently are in the first instance.

## 6 Implications

- 6.1 Resource It is anticipated that the cost of producing a carbon baseline report for the whole Highland region would be in the region of £20,000.
- 6.2 Legal The Council has a legal duty to assist Scotland achieve its national carbon emission reduction targets as set out by the Climate Change (Scotland) Act 2009. The Council is required to mandatorily report to the Scottish Government on action taken to tackle climate change. The reporting covers action taken within the Council's own estate, but also action taken by the Council to work with its partners and communities to tackle climate change. A Highland-wide Greenhouse Gas Inventory Report would identify key opportunities to work with communities to mitigate against climate change impacts.
- 6.3 Community (Equality, Poverty and Rural) A Highland-wide GHG Baseline report would identify a number of ways in which climate change and carbon emissions reduction can have equality, poverty and rural impacts. If supported, the Climate Change Panel will have a key role in supporting and identifying key ways to mitigate these impacts.
- 6.4 Climate Change/Carbon CLEVER a Highland-wide GHG baseline would, for the first time, provide an accurate picture on Highland's contribution to the climate and ecological emergency.
- 6.5 Risk Climate change is recognised as a Corporate Risk, and it is therefore important that efforts are made to reduce its impacts a Highland-wide GHG baseline report would outline several key action areas which should be addressed to minimise risk to service delivery..
- 6.6 Gaelic There are no Gaelic implications arising from this report.

Designation: Climate Change Officer

Date: 4<sup>th</sup> October 2019

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