

**The Highland Council**  
**Resources Committee – 25<sup>th</sup> November 2015**

|             |                   |
|-------------|-------------------|
| Agenda Item | <b>28(c)</b>      |
| Report No   | <b>RES/121/15</b> |

**Scotland's Climate Change Declaration: Year 8 Report, 2014/15.**

**Report by Head of Policy and Reform**

**Summary**

This report presents the Highland Council's Year 8 and final, annual report to Scotland's Climate Change Declaration.

**1. Background**

- 1.1 Highland Council has been a signatory of Scotland's Climate Change Declaration (SCCD) since its launch in 2007. Through the SCCD, the Council has committed to reducing its greenhouse gas emissions, with publically declared targets and timescales, and to adapting to predicted climate change impacts. There is also a strong emphasis on working with communities to achieve these goals. The Council is also required to issue an annual report detailing progress on the above. The 2014/15 SCCD report is the final report due under this voluntary scheme. The Scottish Government has enacted a new Public Bodies Duties Order under the Climate Change (Scotland) Act 2009 to replace the voluntary reports with a mandatory reporting process from 2015/16.
- 1.2 The 2014/15 SCCD report remains voluntary but uses the same template proposed for required reporting to allow local authorities to adjust to the new requirements prior to the first required reporting year in 2015/16. This will impact how the Council collects and analyses carbon emissions data, and will impose firm submission deadlines for annual reports (the last working day in November, for reporting on the previous financial year). There will also be more external and public scrutiny of the Council's carbon emissions, and activities related to the climate change.
- 1.3 The report is divided into five required sections:
  1. Organisational profile, detailing key statistics about the organisation (e.g. size of the estate and number of employees);
  2. Governance, Management and Strategy relating to climate change;
  3. Details of the Council's own 'corporate' emissions from its estate, services and functions, including details of projects and targets for reducing carbon emissions;
  4. Details on steps taken to adapt to the risks and impacts of climate change including priority action areas for the year ahead; and
  5. Information on how sustainable procurement practices are contributing to climate change goals and targets.
- 1.4 The report also includes a recommended section on the wider impacts and influence on carbon emissions, which includes area-wide emissions estimates, and details of projects demonstrating effective partnership working, capacity building and climate change communications.

1.5 The proposed submission by the Council is attached at Appendix 1.

## 2. **Mandatory required reporting - Key alteration**

2.1 The new template includes a requirement to account for carbon emissions savings on a per-project basis. This will require a significant change in how carbon emissions are monitored across the Council. It will require Services to liaise more closely with the Climate Change team, to maintain an updated project register of all projects that could either positively or negatively impact carbon emissions.

2.2 The report only requires that the top 10 carbon reduction projects each year be listed, but this will require a comprehensive project register in order to identify which projects these are. Given that energy use accounts for the largest share of the Council's carbon emissions, it is likely that energy efficiency projects will comprise the majority of reported projects, but other sectors still need to be included.

## 3. **Implications**

3.1 **Resource:** There are resource implications with regards to staff time to put in place the reporting systems necessary for the required reporting processes that will need input from teams across the Council (namely Energy and Sustainability, Waste, Street lighting, Fleet, and Finance). This will be managed within the resource available for next year.

3.2 **Legal:** The move to required reporting places new legal duties on the Council to report on its carbon emissions in accordance with the information requested by the Scottish Government. This includes complying with any deadlines or monitoring and verification standards that are imposed.

3.3 **Climate Change/Carbon CLEVER:** Accurately monitoring and reporting on carbon emissions and climate change will help to focus attention on action to reduce carbon emissions across the Council and the region.

3.4 There are no risk, rural, equalities, or Gaelic implications arising from this report.

### **Recommendations**

Members are asked to:

1. Agree that the 2014/15 report is submitted as part of the reporting process for Scotland's Climate Change Declaration.
2. Note that this report will be replaced in 2015/16 with new required reporting on climate change to the Scottish Government.

Designation: Head of Policy and Reform

Date: 28/10/15

Author: Gemma Cassells

## APPENDIX 1: Scotland's Climate Change Declaration: Year 8 Report, 2014/15.

### Required Section

#### **1 Organisational Profile**

**1a Name of the organisation** – Highland Council

**1b Type of organisation** – Local Authority

**1c Number of FTE staff in the organisation** – 8,030

**1d Alternative metrics used by the organisation** Specify any other metrics that the organisation uses to assess its performance in relation to climate change and sustainability – N/A

**1e Overall budget of the organisation** ~£570 million net revenue budget

**1f Report year** – 2014/15 Financial Year

**1g Organisational context** The Highland Council is a local authority in the north of Scotland, serving a largely rural and remote population. Inverness is the region's main population centre and only city. The Council is responsible for delivering a wide range of services to residents across Highland including schools, leisure facilities, waste collections and social and welfare services.

#### **2 Governance, Management and Strategy**

##### **2a How is climate change governed in the organisation?**

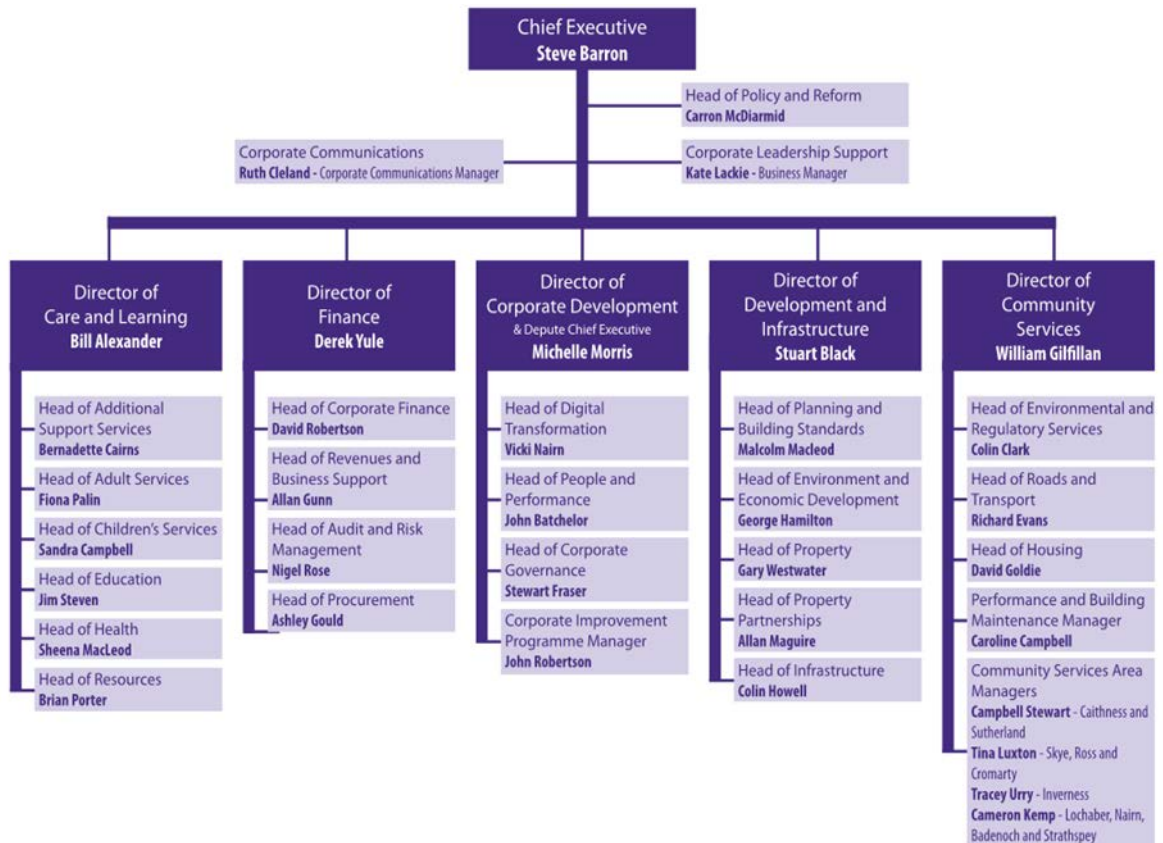
Climate change was identified as one of the Council's key cross-cutting themes, with relevance to all services in the Council's Programme from 2012-15 (covering the reporting year). The Highland First Council Programme, adopted in August 2015, identifies helping communities improve their energy efficiency, developing a local flood management plan and dealing more effectively with waste as key priority areas. The Council's progress towards mitigating and adapting to climate change is within the remit of the Resources Committee, although some activities (such as flood alleviation schemes, or land use management) sit within other committees, such as Planning, Development and Infrastructure. All Council committee reports are required to identify any climate change implications.

The Council has had plans in place for reducing its carbon emissions since 2005 through Carbon Management Plans, and in 2013 the Council launched the Carbon CLEVER initiative, which sets the goal of a carbon neutral Inverness in a low carbon Highlands by 2025. Papers on Carbon CLEVER have been reported to meetings of the Highland Council, although individual projects and actions may be taken to strategic or area committees.

In April 2012, the Highland Council published its first climate change adaptation strategy for the Highland region: "Adapting to Climate Change in Highland". This document was approved at a meeting of the Highland Council. The document aims to gather evidence, present regional information, and equip local decision makers with the appropriate tools to adapt to the effects of a changing climate. It was developed in consultation with multiple stakeholders and with guidance and advice from Adaptation Scotland.

The Highland Council has five Services (see figure). The Council's Climate Change

team is responsible for facilitating and promoting climate change actions across the council and is the primary point of contact for climate change issues. The Climate Change team is within the Policy and Reform team in the Chief Executive's Office. It provides support to all Council Services. Reports on climate change are taken to the appropriate Council committee, with all committees/ groups ultimately reporting back to full Council.



## 2b How is climate change action managed and embedded in the organisation?

The Highland Council Carbon Management Plan 2013 - 2020 (CMP) provides a framework for monitoring and reducing carbon emissions from the Council's internal operations. A number of key teams are responsible for taking actions to meet specific targets within the plan. The Climate Change team works collaboratively with services across the council to develop and implement carbon reduction strategies. A Carbon Working Group, composed of key officers helps facilitate this interaction, considers progress towards the targets set out in the CMP, and any other climate change related issues or developments.

The Climate Change team has a strategic overview of the Highland Council's progress to reduce carbon emissions and sits within the Policy and Reform team in the Chief Executive's Office (Figure in section 2a). The team acts as a centre of expertise on climate change for the Council and works with teams across the Council. Reports on climate change produced by the team are reviewed by the Executive Leadership Team, which includes the Chief Executive, Deputy Chief Executive, Service Directors and the Head of Policy and Reform, before being presented to and scrutinised by the appropriate committee, for approval by elected members. Committee minutes are then approved by Full Council (Figure below).

In 2010, the Council introduced Climate Change screenings of all committee papers, covering all committees and all subject matters. This was amended in 2013 to include any Carbon CLEVER implications also. The Highland Council has taken a number of steps to embed climate change action across the organisation. This includes staff engagement and awareness activities including climate change and sustainability training for new staff, an annual programme of events and campaigns focused on climate change including Earth Hour, Cycle to Work Week, Pass it on Week and other national and European campaigns, and an IT switch off campaign. The Council is also working on embedding climate change and sustainability guidelines in the new sustainable procurement framework, and working with heads of service and elected members to provide information on climate change issues and how these issues could impact different agendas across the Council.



**2c Does the organisation have specific climate change mitigation and adaptation objectives in its corporate plan or similar document?**

| Wording of objective  | Name of document                                 |
|---|--|
| <ul style="list-style-type: none"> <li>• The Highland Council will bring forward a Local Flood Risk Management Plan by 2016 and will raise awareness within our communities and individual householders on how they can protect themselves from flood incidents.</li> <li>• Dealing with our Waste: We will develop plans to meet our obligations as a result of the landfill ban of biodegradable municipal waste by 1st January 2021.</li> <li>• Community Resilience Planning: The Council will work with Scottish and Southern Energy and other utility companies to deliver improved resilience planning for our communities including planning for extreme weather events.</li> <li>• Fairer fuel and energy: We will work with UK and Scottish Governments and energy suppliers to promote fair domestic fuel pricing for the Highlands and a fairer system for targeting energy efficiency funding based on levels of fuel poverty.</li> <li>• Helping communities reduce their energy use and costs: The Council, with partners, will support communities to reduce their energy use and associated carbon emissions and costs.</li> </ul> | <p>Highland First<br/>w.e.f. August<br/>2015</p> |

|  |  |
|--|--|
| Climate change is identified as a cross-cutting theme across the Council programme, through commitment to the goals of the SCCD (relevant to the reporting year 2014/15)   | Working Together for the Highlands 2012-2017 |
| Commitments in the Environment Theme:<br>Manage sustainably the outstanding natural heritage of the Highlands to optimise the economic, health and learning benefits;<br>To increase and develop the use of renewable energy; A carbon neutral Inverness in a low carbon Highlands by 2025; Reducing fuel poverty; Supporting communities to be resilient to extreme weather events; and Improving access to the outdoors. | Single Outcome Agreement                     |

**2d Does the organisation have a climate change plan or strategy?** If yes, provide the name and/or link to any such document.

The Council adopted its first Carbon Management Plan in 2005/6, and is now on its third iteration. The [Carbon Management Plan 2013-2020](#), was adopted in 2013, and expands on the ambition and scope of the previous two plans, including setting more ambitious carbon reduction targets, and targeting a wider range of emissions both from internal Council emissions, as well as reporting on community-wide emissions from Council houses and municipal waste (although reduction targets are not set against these). This focused attention has helped to embed climate change awareness across the Council, with climate change being adopted as a cross-cutting theme in the [Working Together for the Highlands 2012-2017](#) programme, adopted in 2013 and relevant for the reporting year 2014/15. Outcomes and actions are also detailed in the [Single Outcome Agreement](#). These commitments have continued with the new Council Programme [Highland First](#), adopted in August 2015, with a focus on supporting communities reduce their energy costs, reducing fuel poverty, improving the management of waste, and building long-term resilience with our communities to cope with events such as flooding, which have the potential to be impacted by climate change.

**2e Does the organisation have any plans or strategies covering the following areas that include climate change?** Provide the name of any such document and the timeframe covered.

| Topic area        | Name of document                       | Time period | Comments   |
|-------------------|--|-------------|--|
| Adaptation        | Adapting to climate change in Highland | 2012-2020   |  |
| Business travel   | Carbon Management Plan                 | 2013-2020   |  |
| Staff Travel      | Carbon Management Plan                 | 2013-2020   |  |
| Energy efficiency | Carbon Management Plan                 | 2013-2020   |  |
| Fleet transport   | Carbon Management Plan                 | 2013-2020   |  |
| ICT               |  |             | Carbon emissions are monitored and reported on annually by Fujitsu, the ICT service provider |
| Renewable energy  |  |             |  |

|                                |                           |               |   |
|--------------------------------|---------------------------|---------------|---|
| Sustainable/<br>renewable heat |                           |               |   |
| Waste<br>management            | Carbon<br>Management Plan | 2013-<br>2020 |   |
| Water and<br>sewerage          | Carbon<br>Management Plan | 2013-<br>2020 |   |
| Land Use                       | Development Plans         |               | Highland wide Local Development Plan, adopted 2012; Inner Moray Firth Local Development Plan, adopted 2015.<br><br>Land allocations within extant Local Development Plans including:<br>West Highland and Islands Local Plan, 2010; Sutherland Local Plan, June 2010; Ross and Cromarty East Local Plan, 2007; Wester Ross Local Plan, June 2006; and Caithness Local Plan, 2002.<br><br>Various Supplementary Guidance & site specific Development Briefs. |
| Other                          |                           |               |   |

**2f What are the organisation's top 5 priorities for climate change governance, management and strategy for the year ahead?** Provide a brief summary of the organisation's areas and activities of focus for the year ahead.

- Priority 1: Work will continue to embed carbon management across the Council and to reduce carbon emissions from our own estate. This will include: maintaining the good progress in reducing emissions from business travel and fleet; continued water resource management; a programme of LED street lighting improvements; a re-focus on reducing energy use from our buildings through our capital programme (energy efficiency improvements and office rationalisation) and targeted action in those buildings showing an increase compared to the previous year and those buildings with the highest energy consumption; refreshing the climate change and sustainability training provided to new staff; work with services across the Council to investigate potential opportunities for achieving carbon and cost savings; and improve our approach to measuring waste from offices and buildings.
- Priority 2: Supporting the delivery of the Highland First Programme commitment to help communities reduce their energy usage and costs. This encompasses the Council's commitment to improve energy efficiency in Council housing. The Council is responsible for 13,488 Council houses with total carbon emissions related to energy use of 50,751 tCO<sub>2</sub>e, 2014/15. This figure is the same as reported in 2013/14 as it is based on an estimate from the energy performance certificates of the housing stock, which have not been updated. The Council is committed to improving the energy efficiency of Council houses to help alleviate fuel poverty, with reduced carbon emissions being a co-benefit. 88% of Council housing stock now meets the energy efficiency standard of the Scottish Housing Quality Standards (SHQS). Completion of the programme is expected in January 2016.
- Priority 3: Establish and embed a robust process to support the move to

required reporting to Scottish Government.

- **Priority 4:** Work with Carbon Working Group (an officer's group designed to support the implementation of the Carbon Management Plan) to refresh and update the CMP project register.
- **Priority 5:** Explore the potential of area-wide emissions monitoring. To date, this has included working with Fife and Perth & Kinross Councils on utilising and adapting the Scottish Heat Map into a comprehensive energy map that can be used to develop areas for strategic interventions with regard to district heating schemes or renewable energy potential.

It is also critical to increase public awareness and support for reducing area wide carbon emissions. This will be achieved through regular engagement, such as the establishment of a Twitter account, regular press releases, and attendance at a number of regionally important events.

**2g Has the organisation used the Climate Change Assessment Tool or equivalent tool to self-assess its capability / performance? If yes, please provide details of the findings of the self-assessment.**

The Climate Change team has conducted an initial run of the CCAT tool. We are currently scheduling a wider forum to go through the tool, with key officers involved in the carbon management process, elected members, and the senior leadership team in order to get a comprehensive view across different sections of the organisation. Results from this first run indicate a need to improve the carbon management project register, which will be a major focus of work over the next 12 months. The tool also indicated a need to improve communication about carbon management and climate change throughout the organisation, and to senior leadership. Strategies for developing and improving this area will also be examined and implemented over the next year.

**2h Supporting information and best practice.** Provide any other relevant supporting information and any examples of best practice by the organisation in relation to governance, management and strategy.

In 2014/15, the Highland Council has shown leadership on climate change with the Carbon CLEVER initiative, which sets area-wide carbon emissions targets, and provides a framework for coordinating collaborative action on climate change issues across the Highlands.

**3 Corporate Emissions, Targets and Project Data**

**3a Corporate emissions from start of baseline year to end of report year**

| Reference year | Year    | Scope 1 | Scope 2 | Scope 3 | Total  | Units              |
|----------------|---------|---------|---------|---------|--------|--------------------|
| Baseline       | 2011/12 | 24,913  | 37,031  | 4,635   | 66,579 | tCO <sub>2</sub> e |
| Year 1         | 2012/13 | 25,218  | 38,234  | 4,218   | 67,670 | tCO <sub>2</sub> e |
| Year 2         | 2013/14 | 21,024  | 37,858  | 4,519   | 63,401 | tCO <sub>2</sub> e |
| Year 3         | 2014/15 | 20,847  | 38,722  | 4,274   | 63,841 | tCO <sub>2</sub> e |



### 3b Breakdown of emissions sources

| Emission source               | Scope | Consumption data | Units          | Emission factor | Units                                | Emissions (tCO <sub>2</sub> e) | Comments   |
|-------------------------------|-------|------------------|----------------|-----------------|--------------------------------------|--------------------------------|--|
| Grid Electricity (generation) | 2     | 55,146,790       | kWh            | 0.49426         | kg CO <sub>2</sub> e/ kWh            | 27,256.9                       | Buildings  |
| Grid Electricity (generation) | 2     | 19,265,741       | kWh            | 0.49426         | kg CO <sub>2</sub> e/ kWh            | 9,522.3                        | Street lighting  |
| Natural Gas                   | 1     | 28,833,382       | kWh            | 0.18497         | kg CO <sub>2</sub> e/ kWh            | 5,333.3                        | Space heating  |
| Kerosene - Burning Oil        | 1     | 35,233,532       | kWh            | 0.24667         | kg CO <sub>2</sub> e/ kWh            | 8,691.1                        | Space heating  |
| Petrol                        | 1     | 29,689           | litres         | 2.19140         | kg CO <sub>2</sub> e/ litre          | 65.1                           | Fleet use  |
| Diesel                        | 1     | 2,110,733        | litres         | 2.60240         | kg CO <sub>2</sub> e/ litre          | 5,493.0                        | Fleet use  |
| Other 1                       | 1     | 340,085          | litres         | 3.02130         | kg CO <sub>2</sub> e/ litre          | 1,027.5                        | Gas oil for gritting fleet   |
| Water - Supply                | 3     | 561,337          | m <sup>3</sup> | 0.34410         | kg CO <sub>2</sub> e/ m <sup>3</sup> | 193.2                          | Water to all buildings   |
| Water - Treatment             | 3     | 402,325          | m <sup>3</sup> | 0.70850         | kg CO <sub>2</sub> e/ m <sup>3</sup> | 285.0                          | Water to all buildings   |
| Refuse Municipal to Landfill  | 3     | 581              | tonnes         | 289.83554       | kgCO <sub>2</sub> e/ tonne           | 168.4                          | Waste to landfill - non-schools  |
| Refuse Municipal to Landfill  | 3     | 814              | tonnes         | 289.83554       | kgCO <sub>2</sub> e/ tonne           | 235.9                          | Waste to landfill - schools  |
| Mixed recycling               | 3     | 386              | tonnes         | 21.00000        | kg CO <sub>2</sub> e/ tonne          | 8.1                            | Recycling - non-schools  |
| Mixed recycling               | 3     | 515              | tonnes         | 21.00000        | kg CO <sub>2</sub> e/ tonne          | 10.8                           | Recycling - schools  |
| Car - petrol (average)        | 3     | 10,484,662       | passenger km   | 0.19388         | kg CO <sub>2</sub> e/ passenger km   | 2,032.8                        | Grey fleet mileage - based on average value as only mileage is recorded on expenses claims |
| Car - petrol (average)        | 3     | 1,384,107        | passenger km   | 0.19388         | kg CO <sub>2</sub> e/ passenger km   | 268.4                          | Car hire mileage - based on average value as only mileage is recorded.                     |
| Bus (local bus, not London)   | 3     | 29,488           | passenger km   | 0.10946         | kg CO <sub>2</sub> e/ passenger km   | 3.2                            | Coach and bus staff travel   |
| Ferry                         | 3     | 7,922            | passenger km   | 0.11608         | kg CO <sub>2</sub> e/ passenger km   | 0.9                            | Staff travel   |

|   |   |            |              |         |                       |          |  |
|---|---|------------|--------------|---------|-----------------------|----------|--|
| All flights (self-calculated emissions)               | 3 | 117,683    | passenger km | 0.16685 | kg CO2e/ passenger km | 19.6     | Staff travel   |
| Rail (National rail)                                  | 3 | 613,901    | passenger km | 0.04738 | kg CO2e/ passenger km | 29.1     | Staff travel   |
| Taxi (regular)  | 3 | 1,223      | passenger km | 0.17755 | kg CO2e/ passenger km | 0.2      | Staff travel   |
| Grid Electricity (transmission & distribution losses) | 3 | 55,146,790 | kWh          | 0.04322 | kg CO2e/ kWh          | 2,383.4  |  |
| Grid Electricity (transmission & distribution losses) | 3 | 19,265,741 | kWh          | 0.04322 | kg CO2e/ kWh          | 832.7    |  |
|   |   |            |              |         | <b>Total</b>          | 63,860.8 | Emissions are higher than reported in table 3A as those figures are taken from the Carbon Management Plan, using the Defra conversion factors 2011/12. |

### 3c Generation, consumption and export of renewable energy

| Generation of renewables | Total generated (kWh) | Total consumed by the organisation (kWh) | Total exported (kWh) | Comments                   |
|--------------------------|-----------------------|--|----------------------|----------------------------|
| Renewable electricity    | 250,529               | 250,529                                  |                      | Wind turbines and solar PV |
| Renewable heat           | 17,385,641            | 17,385,641                               |                      | Biomass heating systems    |

### 3d Organisational targets

| Name of target   | Type of target | Target | Units         | Scope of target | Baseline year | Baseline figure | Units | Completion year |
|--|----------------|--------|---------------|-----------------|---------------|-----------------|-------|-----------------|
| Carbon Management Plan   | annual         | 3      | % (per annum) | All emissions   | 2011/12       | 66,579          | tCO2e | 2019/20         |
| Carbon CLEVER - A carbon neutral Inverness in a low carbon Highlands by 2025 | absolute       |        |               | All emissions   | 2011/12       |                 |       |                 |

**3e Estimated total annual carbon savings from all projects implemented by the organisation in the report year**

If no projects were implemented against an emissions source, enter "0".

If the organisation does not have any information for an emissions source, enter "Unknown".

If the organisation does not include the emissions source in its carbon footprint, enter "N/A".

| <b>Emissions source</b> | <b>Total estimated annual carbon savings (tCO<sub>2</sub>e)</b>  | <b>Comments</b>  |
|-------------------------|--|--|
| Electricity             |  | Projects were implemented to reduce carbon emissions in this area, but usage increased due to external factors (primarily prolonged cold and damp spring and staff behaviour)  |
| Natural gas             |  | Projects were implemented to reduce carbon emissions in this area, but usage increased due to external factors (primarily prolonged cold and damp spring)  |
| Other heating fuels     | ~820 (average annual decrease compared to 2011/12 baseline year) | Projects were successfully implemented to reduce carbon emissions in this area, primarily replacing oil heating systems with biomass boilers, and usage has decreased compared to the baseline year (2011/12). Usage increased compared to 2013/14, primarily due to the prolonged cold and damp spring. |
| Waste                   |  | We estimate our emissions have increased although we recognise that emissions from waste are over-estimated.   |
| Water and sewerage      |  | Emissions increased slightly over the baseline year. Due to better metering, costs associated with water use have decreased 28%.   |
| Travel                  | 820  | Staff travel reductions have arisen from reduced travel budgets, as well as more coordinated travel arrangements, the use of a travel hierarchy for staff and encouraging public transport use.  |
| Fleet transport         | 2532   | Route optimisation, installation of new Euro 6 engines, reduction of service provision.  |
| <b>Total</b>            | <b>3,352</b>   | This total differs from the total change in emissions reported at 3a because reductions reported here were offset by increases in other areas.   |

**3f Detail the top 10 carbon reduction projects implemented by the organisation in the report year**

Provide details of the top 10 projects (based on estimated emissions savings) implemented in the report year.

| Project name                                     | Funding source | First full year of savings | Capital cost (£) | Operational cost (£/annum) | Project lifetime (years) | Primary fuel/ emission source saved | Est. carbon savings per year (tCO <sub>2</sub> e) | Est. costs savings (£/annum) | Savings figures are estimated or actual |
|--|----------------|----------------------------|------------------|----------------------------|--------------------------|-------------------------------------|---|------------------------------|---|
| Electrical Heating Replacements                  | Capital        | 2014/15                    | 2,000,000        |                            | 25                       | Grid Electricity (generation)       | 2,400   |                              | est.                                    |
| Lighting upgrades                                | Capital        | 2014/15                    | 200,000          |                            | 20                       | Grid Electricity (generation)       | 211   |                              | est.                                    |
| Building Management System replacements          | Capital        | 2014/15                    | 200,000          |                            | 20                       | Gas oil                             | 30  |                              | est.                                    |
| Biomass Heating Replacements                     | Capital        | 2014/15                    | 345,000          |                            | 25                       | Gas oil                             | 4,692   |                              | est.                                    |
| CHP to Nairn Academy                             | Capital        | 2014/15                    | 288,000          |                            | 20                       | Natural Gas                         | 11  |                              | est.                                    |
| Photovoltaic installations                       | Capital        | 2014/15                    | 10,000           |                            | 20                       | Grid Electricity (generation)       | 5   |                              | est.                                    |
| Micro wind turbines                              | Capital        | 2014/15                    | 30,000           |                            | 15                       | Grid Electricity (generation)       | 4   |                              | est.                                    |
| LED street lighting trial                        | Capital        | 2014/15                    | 58,000           |                            | 20                       | Grid Electricity (generation)       | 100   |                              | est.                                    |
| Installation of Euro 6 engines in Fleet vehicles | Capital        | 2014/15                    |                  |                            |                          |                                     | 1,000   |                              | est.                                    |
| Route optimisation for fleet vehicles            | Capital        | 2014/15                    |                  |                            |                          |                                     | 500   |                              | est.                                    |

**3g Estimated decrease or increase in emissions from other sources in the report year**

If the organisation's corporate emissions increased or decreased for any other reason in the report year, provide an estimate of the amount and direction.

| <b>Emissions source</b>       | <b>Total estimated annual emissions (tCO<sub>2</sub>e)</b> | <b>Increase or decrease in emissions</b> | <b>Comments</b>  |
|-------------------------------|--|--|--|
| Estate changes                |  | Decrease                                 | An office rationalisation programme was completed in Dingwall, with another underway in Wick (likely to be completed in 2015/16) It is expected that there will be significant carbon savings once these projects are completed. |
| Service provision             |  |  |  |
| Staff numbers                 |  |  |  |
| Other 1 (specify in comments) |  | Increase                                 | Weather-related increase in energy use due to prolonged wet winter and spring.   |
| Other 2 (specify in comments) |  |  |  |
| Other 3 (specify in comments) |  |  |  |
| <b>Total</b>                  |  |  |  |

**3h Anticipated annual carbon savings from all projects implemented by the organisation in the year ahead**

| Emissions source    | Total estimated annual carbon savings (tCO <sub>2</sub> e) | Comments  |
|---------------------|--|---|
| Electricity         |  | <p>Energy efficiency improvement projects at 3 primary schools are being undertaken with an estimated carbon saving of 117 tCO<sub>2</sub>e. The Council is also improving the energy efficiency of several industrial units which will help reduce energy costs and carbon emissions.</p> <p>The wider roll out of the LED street lighting programme (trialled in 2014/15) will also have a significant impact on carbon emissions by reducing electricity use. Once the project is completed, it will save ~5000 tCO<sub>2</sub>e per year.</p> |
| Natural gas         |  |   |
| Other heating fuels |  | <p>There is a continuing programme to replace oil-fired heating systems with biomass boilers. This has helped to reduce carbon emissions from oil use by 2,459 tCO<sub>2</sub>e since 2011/12.</p>  |
| Waste               |  | <p>The Council has started to use WARP-IT (an asset redistribution portal) to promote the re-use of assets rather than procuring new in order to reduce costs and reduce carbon emissions. To date, the Council estimates saving over £10,000 and 5 tCO<sub>2</sub>e by using WARP-IT.</p> <p>Additionally, there has been work to improve recycling provision and on behaviour change activity to encourage more recycling among staff.</p>  |
| Water and sewerage  |  |   |
| Travel              |  | <p>Reduced travel budgets will continue to reduce staff travel and associated carbon emissions.</p> <p>The continued use and uptake of the e-bike hire scheme will further help to reduce grey fleet mileage, by encouraging the use of active travel by staff in Inverness.</p>  |
| Fleet Transport     |  |   |
| <b>Total</b>        |  |   |

**3i Estimated decrease or increase in emissions from other sources in the year ahead**

If the organisation's corporate emissions are likely to increase or decrease for any other reason in the year ahead, provide an estimate of the amount and direction.

| Emissions source              | Total estimated annual emissions (tCO <sub>2</sub> e) | Increase or decrease in emissions | Comments  |
|-------------------------------|---|-----------------------------------|---|
| Estate changes                |   |                                   | The programme of office rationalisations is on-going, with the most significant currently being undertaken in Wick. It is expected that there will be significant carbon savings once these projects are completed although these savings have not yet been quantified.                         |
| Service provision             |   |                                   | The Council is committed to pursuing its 'digital first' communication priority scheme to reduce the number of visits to service centres. This will help to reduce carbon emissions relating to in-person visits and staffing requirements at service points, but this has not been quantified. |
| Staff numbers                 |   |                                   |   |
| Other 1 (specify in comments) |   |                                   |   |
| Other 2 (specify in comments) |   |                                   |   |
| Other 3 (specify in comments) |   |                                   |   |
| <b>Total</b>                  |   |                                   |   |

**3j Total carbon reduction project savings since baseline year**

If the organisation has data available, estimate the total emissions savings made from projects since the organisation's baseline year.

| Total savings                             | Total estimated emissions savings (tCO <sub>2</sub> e) | Comments |
|---|--|----------|
| Total project savings since baseline year | -  |          |

### **3k Supporting information and best practice**

Highland Council has developed and implemented a number of projects aimed at targeting climate change across the organisation. Many of these projects are aimed at achieving cost reductions as well as carbon savings. The capital budget programme "Carbon Saving Capital Works for Council Buildings and Properties" seeks to replace expensive, carbon-intensive oil-based and electric heating systems with biomass boilers, which continued throughout 2014/15. In 2014/15, £2.822m was spent by the Council on energy measures. Many of these projects are spend to save initiatives, saving the Council future revenue costs. There are now 75 biomass systems in place, generating an income of approximately £850,000 per year through Renewable Heat Incentive payments. In 2014/15, 13% of the energy used in the Highland Council's buildings came from biomass heating, up 3% from last year. Carbon emissions from oil use have reduced 22% compared to 2011/12, and costs from purchasing heating oil has decreased by £1,287,261. The leadership the Council has shown in developing and championing this technology has helped to create a sustainable supply chain in Highland for these systems, and has led to the Council's Energy and Sustainability Team being awarded the best innovation prize in the 2014 Energy North Awards, 1st place in the CES Scottish National Renewables League and 3rd in the RES European Champions League.

The programme to replace old style sodium street lights with more energy efficient LEDs will also produce significant carbon and cost savings. The initial pilot project has already shown some of these benefits, which will continue as the Highland-wide roll-out occurs over the next 5 years.

Reducing electricity consumption and moving all properties towards automated metering (some properties are still on estimated supplies), will enable better reporting and help reduce payments under the CRC scheme.

Fleet emissions have seen significant reductions this year. These have been achieved as a result of investment in more energy efficient Euro 6 standard engines for fleet vehicles, route optimisation and a reduction in services due to budget pressures.

Staff engagement on climate change issues has also been a key focus of work for 2014/15, with the Council participating in a number of national and international schemes and campaigns. This includes being awarded joint Local Authority Winner of WWF's Earth Hour, and a number of events designed to promote active travel, including European Mobility Week and Cycle to Work Week, which included free bike maintenance checks through partnership with Velocity, a local social enterprise. Fuel efficient driver training has been undertaken by staff across Highland who drive significant distances on Council business. Work to refresh the Green Ambassador scheme, and on improving how climate change is embedded across the Council through the induction process has also been undertaken.

## **4 Adaptation**

### **4a Has the organisation assessed current and future climate-related risks?**

The Highland Council produced the Adapting to Climate Change in Highland report in 2012. This report contained an assessment of the potential risks and



benefits of different climate change scenarios on the Highlands, as well as identifying priority action areas.

The Highland Council considers current and future climate-related risks in a number of its development and planning processes, primarily through the use of UKCPO9 climate change scenarios to predict changes to various risks to new developments and current infrastructure. Areas of focus include flood risk management, coastal and marine planning, and sustainable design, which all have specific planning guidelines and supplementary guidance associated with them aimed at assessing future sustainability as part of the planning process.

There are other strategies in place for managing risk which may or may not include climate-related risks. For example the Emergency Planning Unit conducts regular risk assessments at a variety of geographic scales across Highland, in collaboration with partner agencies including the NHS, Police and Fire Services and other local authorities in the region. These assessments are consequence-based, for example when considering a power outage or a coastal pollution incident the cause is less important than the response. However these response plans cover a number of areas which are expected to be influenced by climate change, for example an increase in winter storms could mean an increased chance of power outages in rural communities.

Climate change was the subject of the Director of Public Health's annual report for 2014/15, and this prompted discussion on these links at the Community Planning Partnership (CPP). The report focused on a range of issues including:

- the changing climate and its impact on health and on global inequalities, and related mitigation and adaptation measures
- the impact of the modern obesogenic environment
- the significance of the natural environment and physical activity as contributors to good health
- the importance of developing sustainable health and social care services, including a more mobile and flexible workforce and increased levels of care at home
- heightened Highland/rural risks such as fuel poverty, private water supplies and vulnerability to extreme weather events
- the need to extend impact assessments of new development proposals to include the impact on human health and the views and expectations of local communities.

Many of the key suggestions highlighted by the report to address the impacts future climate change may have on public health issues are already being addressed through current Council and CPP policies and practices. The report highlighted the various links between climate change adaptation and healthcare, including the issue of fuel poverty, future energy security, the impacts of severe weather events, and the need for integrated transport systems, particularly in rural areas. The underlying message of developing community resilience is also being taken forward through community resilience planning.

**4b What arrangements does the organisation have in place to manage climate-related risks?**

There are two components that need to work together in order to effectively manage climate-related risks, namely future forecasting and prediction of potential climate-related impacts based on best available climate modelling, accompanied by developing strategies to manage these long-term risks and acute or emergency response plans to immediate impacts.

From its role as a planning authority, the Highland Council takes steps to manage climate-related risks from new developments and to existing infrastructure. This is primarily managed for new developments through the planning process and the policies contained in the Highland-wide Local Development Plan. Reviews of the risks to existing infrastructure are carried out on a per project basis, with the support of relevant Council services such as the Flood Risk Management Team as well as external partners such as SEPA.

The Highland Council is partnering with Marine Scotland on the development of Local Marine Spatial Plans for the 3 marine regions that Highland borders. The first of these is the Pentland Firth and Orkney Waters Marine Spatial Plan. These plans include policies on coastal processes and flooding, well-being, quality of life and amenity of coastal communities and identify climate change as an over-arching theme.

The Emergency Planning Unit provides acute response plans and strategies for events that may or may not have a climate component. For example flooding may be exacerbated by heavier winter rainfall (as predicted in the models presented in the Adapting to Climate Change in the Highlands report), but the emergency response is a generic document that is not concerned with the cause but rather the consequence of a particular emergency.

The Council is also supporting communities to be better prepared for extreme weather events through the development of community resilience plans. These plans focus on steps communities can take to help themselves in the event of extreme weather events, as well as providing for vulnerable members of the community, or those who will become vulnerable in the event of prolonged power cuts or disruptions to water supply or essential transport links.

**4c What action has the organisation taken to adapt to climate change?**

Include details of work to increase awareness of the need to adapt to climate change and build the capacity of staff and stakeholders to assess risk and implement action.

The Highland Council has a joint focus on climate change adaptation. The first is to work with local communities to raise awareness about a range of different issues from flood risk management to biodiversity that has a climate change component. The second is a focus on the Council's responsibility to ensure the provision of basic services and infrastructure in the face of particular risks or threats.

The majority of engagement work is promoted through the Council's Environment Team. The Countryside Rangers work with wider community,

schools and initiatives to promote natural, built, and cultural heritage. Climate change is woven through the whole programme of activities and forms part of risk assessment for their facilities. The Access Team safeguards access and implements access related projects across the Highlands. They deal with climate change adaptations on regular basis, for example conducting risk assessments for particular sites in terms of the impact of sea level rises, or from increasing frequency of storm damage and flooding. On the basis of these risk assessments, the Access Team focuses on adapting routes and materials used to mitigate effects of climate change. The Forestry Team is currently working on a new Tree Strategy, which specifically references the potential impacts of climate change on management needs for the Council's tree resource.

The Highland Council is also a partner in Flows to the Future, an initiative to restore peatland in Caithness, and broaden understanding of the importance of peatland ecology, as well as the carbon benefits provided by well-managed peatlands. Additionally, a number of strategies are being developed related to natural resource management, including a land use strategy, a revision of the peatland strategy, and a forest and woodland strategy that will all take climate change into account.

With regard to ensuring the provision of essential services, and fulfilling the Council's role as a planning authority and emergency responder, there are a number of different services that are impacted directly and indirectly by climate change. For example, the Emergency Planning, Flood Prevention, and Planning teams all consider potential climate change impacts as part of their risk assessment and project planning processes. This varies depending on particular circumstances, but may include assessing flood risk based on UKCP09 climate scenarios while designing flood prevention schemes, or the potential impact of more frequent severe winter storms on power and water supplies, particularly to vulnerable rural communities. Additionally, as mentioned in section 4a, the Council is working with community groups to develop community resilience plans, to help communities take steps to protect themselves in advance of, and during extreme weather events.

**4d Where applicable, what progress has the organisation made in delivering the policies and proposals referenced N1, N2, N3, B1, B2, B3, S1, S2 and S3 in the Scottish Climate Change Adaptation Programme(a) (“the Programme”)?**

If the organisation is listed in the Programme as an organisation responsible for the delivery of one or more policies and proposals under the objectives N1, N2, N3, B1, B2, B3, S1, S2 and S3, provide details of the progress made by the organisation in delivering each policy or proposal in the report year. If it is not responsible for delivering any policy or proposal under a particular objective enter “N/A” in the ‘Delivery progress’ column for that objective.

(a) The Programme aims to address impacts identified for Scotland in the UK-wide climate change risk assessment which are not otherwise addressed by the UK-wide National Adaptation Programme through policy in relation to reserved matters.

| Objective  | Objective reference | Theme                                 | Policy ref. | Delivery progress made   | Comments  |
|--|---------------------|---------------------------------------|-------------|--|---|
| Understand the effects of climate change and their impacts on the natural environment.               | N1                  | Natural Environment                   | N1-10       | Flood Risk Management Plan due in 2016. Flood Risk and Drainage Impact Assessment Supplementary Guidance   | The Council is currently finalising its Flood Risk Management Plan, which draws together multiple datasets to support flood risk management in the Highlands. |
| Support a healthy and diverse natural environment with capacity to adapt.                            | N2                  | Natural Environment                   | N2-2        | Highland-wide Local Development Plan. policies 28 (Sustainable Design), 51 (Trees and Development), 55 (Peat and Soils), 56 (Travel), 64 (Flood Risk), 67 (Renewable Energy Developments), 74 (Green Networks), 75 (Open Space). | Updates to the Highland-wide Local Development Plan in response to the new Scottish Planning Policy (SPP) are out for public consultation.                    |
| Support a healthy and diverse natural environment with capacity to adapt.                            | N2                  | Natural Environment                   | N2-18       | Flood Risk Management Plan, due in 2016; currently working with communities on local community resilience plans to address flooding  |   |
| Support a healthy and diverse natural environment with capacity to adapt.                            | N2                  | Natural Environment                   | N2-20       | Highland Biodiversity Action Plan; Pentland Firth and Orkney Waters National Marine Spatial Plan (due March 2016)  | Highland Council will work with partner organisations to develop 3 Marine Spatial Plans for the National Marine Areas identified adjacent to Highland         |
| Understand the effects of climate change and their impacts on buildings and infrastructure networks. | B1                  | Buildings and infrastructure networks | B1-13       | Flood Risk Management Plan due in 2016.  |   |
| Increase the resilience of buildings and infrastructure networks to sustain and                      | B3                  | Buildings and infrastructure networks | B3-3        | Highland-wide Local Development Plan (adopted 2012)  |   |

|   |    |                                       |      |  |   |
|---|----|---------------------------------------|------|--|---|
| enhance the benefits and services provided.   |    |                                       |      |  |   |
| Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.                               | B3 | Buildings and infrastructure networks | B3-7 | Annual Standard Delivery Plan, reported on to Community Services committee details the implementation strategy for the Scottish Housing Quality Standard (SHQS).   | Since 2007 the Council have been working towards achieving the SHQS. Of the remaining stock, the majority are temporary exemptions, with the intention of reaching compliance during 2015/16. This will involve over 1,400 new heating installations.   |
| Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.                               | B3 | Buildings and infrastructure networks | B3-8 | Annual Standard Delivery Plan, reported on to Community Services committee details the implementation strategy for the Scottish Housing Quality Standard.  | All social housing meets the tolerable standard outlined.   |
| Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.                               | B3 | Buildings and infrastructure networks | B3-6 | The Council's Energy and Sustainability Team oversees the delivery of the HEAPS-ABS programme, in collaboration with E.ON.   | Intended to assist home owners to improve the energy efficiency of their properties and effect energy and cost savings to individuals. The Council scheme allows householders to access measures that are carried out on an area based format. All areas of the Highlands are being targeted over the course of the scheme.   |
| Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.                                       | S2 | Society                               | S2-5 | The Emergency Planning Team and Flood Risk Management Team are both working with communities and partner organisations to develop local community resilience plans.  |   |
| Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate. | S3 | Society                               | S3-6 | Emergency Planning Team in collaboration with emergency responders has put in place a comprehensive evaluation strategy to assess performance after each training exercise/ event.<br>The Director of Public Health's annual report on climate change (see section 4a) also provides a number of actions to support public health issues that may be influenced by climate change. | These evaluations are not specifically about climate related risk, but are about responding more effectively whatever the scenario, which may include a variety of situations that could be impacted by climate change.<br>Many of the actions related to public health, climate change and community resilience are either already in place or being developed by the CPP. |

**4e What arrangements does the organisation have in place to review current and future climate risks?**

The Highland Council uses the UKCP09 climate change scenarios to inform future planning decisions, and incorporates any changes in these scenarios into the relevant decision making processes. Examples of this are illustrated in section 4c and 4g. The Emergency Planning Unit is continually assessing preparedness to a variety of acute risks that will be impacted by climate change. They are also currently working on developing Community Resilience Plans with support from partners to allow communities to assess their own unique risks and prepare contingency plans for these risks. This includes risks from severe weather and other risks which will be exacerbated by future climate change, although the plans are more generic and do not specifically reference future climate risks.

**4f What arrangements does the organisation have in place to monitor and evaluate the impact of the adaptation actions?** Please provide details of monitoring and evaluation criteria and adaptation indicators used to assess the effectiveness of actions detailed under Question 4(c) and Question 4(d).

There are different strategies for monitoring and evaluation depending on the specific nature of the threat or sector being addressed. This can be in the form of implementing policies or strategies in response to national legislation, that contain specific indicators as required. As much of the future climate change adaptation considerations are done through risk assessment processes, the monitoring and evaluation processes are included as part of individual project requirements.

**4g What are the organisation's top 5 climate change adaptation priorities for the year ahead?**

Much work around climate change adaptation focuses on working with communities on community resilience projects across Highland in a number of areas including flooding, biodiversity, and emergency planning. Each sector involved in climate-related risk assessment has their own priorities within these broad areas. There is also significant investment from the Council's capital programme into flood alleviation schemes, with approximately £30 million committed over the next 6 years.

- Priority 1: Work with emergency response partners to develop community resilience plans alongside local communities to help assess what communities can do to prepare for and mitigate the impacts of severe weather events, particularly for vulnerable individuals (or those who will become vulnerable in the event of prolonged power cuts or disruptions to water supply).
- Priority 2: The completion and public consultation on the Highland Council's Biodiversity Action Plan.
- Priority 3: The Flood Risk Management Team is prioritising community engagement to raise awareness of flooding and flood risks with local communities, and to develop flood resilience plans with local communities.
- Priority 4: Developing Surface Water Management Plans in accordance with the requirements laid out in the Flood Risk Management (Scotland) Act 2009.
- Priority 5: Continue to invest and implement flood alleviation schemes across Highland. This includes continuing the programme of assessing watercourses to investigate whether maintenance would substantially reduce the flood risks.

**4h Supporting information and best practice** Provide any other relevant

supporting information and any examples of best practice by the organisation in relation to adaptation.

Developing projects that consider the potential impacts of climate change often involves balancing competing priorities and agendas. The Projects and Facilities Team (part of the wider Environment Team) have been focusing on improving the condition of bridges on the Great Glen Way. In 2014/15 this included the replacement of the Inverloch Great Glen Way Bridge. For this project, the potential impacts of climate change have been specifically incorporated into the project scope. The potential for increased frequency of flooding led to a more substantial specification for the bridge, and used new materials, for example using plastic instead of wood, which was a first for Projects team. It was recognised that there was a need to balance the longevity of the project with a desire to use local, natural materials which would have been more expensive, and prone to failure given the amount of flooding expected. The Projects and Facilities team are also considering adding Climate change impacts into standard risk assessments for Council facilities.

The Council has recognised the importance of partnership working in order to most effectively address the challenges related to climate change adaptation. The Biodiversity Team, in collaboration with the Highland Biodiversity Partnership, has focused on developing and conducting public consultation of the Biodiversity Action Plan in 2014/15. The Biodiversity Action Plan specifically references the importance of climate change as a factor to drive environmental change in Highland. For example, working with the Invasive Species Forum to deal with the threat of new species moving north due to climate change.

A recent Highland Environment Forum meeting was held on the theme of marine environments. It acknowledged and evidenced that climate change is already evident in marine environment in Highland, for example species are expanding their ranges northwards, alongside the loss of more northern species.

The Highland Biodiversity Partnership has been running the Seashore Project since 2012 (continuing to December 2015). The project has had significant community engagement and highlighted the importance of climate change on the marine environment.

The Historic Environment Team is currently developing and implementing new management techniques to be used where peatland restoration is being undertaken to ensure that important historic environments and archaeology is preserved or maintained during peatland restoration projects.

## **5 Procurement**

### **5a How do procurement policies contribute to compliance with climate change duties?**

The Council has had a Sustainable Procurement Policy in Place since 2005 when it was endorsed by the Highland Council Sustainable Development Select Committee. This has been updated in line with legislative freedoms and the 2015-20 version of the Procurement Policy and Strategy was approved at Resources Committee in August 2015. A Procurement Improvement programme is now in its third phase includes a Sustainable Procurement work stream which will: establish what this means to the Council in the context of the Procurement Reform Act and the

Community Empowerment Act; Assess the Council's current position; Assess what needs to change in order to meet the needs of the new regime and to deliver sustainability and community benefits; Consider means of assessing sustainability impacts of the Council's commitments and requirements including the new Scottish Government toolkit; Consider the usefulness of the new sustainable procurement self- assessment framework; and make recommendations for an approach to assessing and building in sustainability in respect of each project. Flexible Framework status updated September 2015.

**5b How has procurement activity contributed to compliance with climate change duties?**

Participation on National collaborative contracts/ frameworks have contributed to sustainability principally in provision of utilities and particularly in support of the Council's Biomass Heat provision. 2014-15 heat generation was 17,385,641 kWh and this is a 15% increase on 2013-14; 4,692 tonnes of CO2 from heating were saved in 2014-15; Fuel cost avoided is £347,712.90; CRC saving of £75,072

**5c Supporting information and best practice** Provide any other relevant supporting information and any examples of best practice by the organisation in relation to procurement.

See section 5a.

**6 Validation and Declaration**

**6a Internal validation process**

Corporate emissions data is compiled by 6 teams across the Council. This data is validated by each service prior to being given to the Climate Change team. The Climate Change team then provides an additional 'sense check', scrutinising the data for consistency with previous year's reporting. Requirements for the data are carefully discussed with each team, and a written process tailored to each specific team has been developed to ensure consistency in the type and scope of data provided each year, along with an agreed person responsible for delivering the data to the Climate Change team. Data is stored securely with both the service providing the data, and with the Climate Change team. Data on staff travel is subject to internal scrutiny through the Finance Service.

**6b Peer validation process-** No peer validation is undertaken.

**6c External validation process**

Individual services that supply data to the Climate Change team have additional audit and scrutiny requirements for their data. For example, the majority of the energy use data provided is scrutinised under the CRC process, while waste data is reported to SEPA. The Council held the Carbon Trust Standard until April 2015, and follows the processes put in place during this process.

**6d No Validation Process** Indicate this in the space provided and the reasons why this has not been undertaken.

**6e Declaration**

I confirm that the information in this report is accurate and provides a fair representation of the organisation's performance in relation to climate change.

**Name:** Gemma Cassells  
**Role in the organisation:** Policy Officer - Climate Change  
**Date:** 26/11/15

**End of Required Section**



**Recommended Reporting: Reporting on Wider Influence (Not required)**

**Wider Impact and Influence on GHG Emissions**

**1 Historic Emissions (Local Authorities Only). Table 1**

| <b>Local Authority: Highland</b> |                               |             |             |             |             |             |             |             |             |             |              |
|----------------------------------|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>Source</b>                    | <b>Sector</b>                 | <b>2005</b> | <b>2006</b> | <b>2007</b> | <b>2008</b> | <b>2009</b> | <b>2010</b> | <b>2011</b> | <b>2012</b> | <b>2013</b> | <b>Units</b> |
| DECC Sectors                     | <b>Total Emissions</b>        | <b>2397</b> | <b>2360</b> | <b>2340</b> | <b>2300</b> | <b>2125</b> | <b>2281</b> | <b>2101</b> | <b>2094</b> | <b>203</b>  | <b>ktCO2</b> |
|                                  | Industry and Commercial       | 1014        | 954         | 937         | 915         | 797         | 908         | 835         | 808         | 799         | ktCO2        |
|                                  | Domestic                      | 769         | 784         | 772         | 778         | 723         | 770         | 671         | 694         | 647         | ktCO2        |
|                                  | Transport total               | 613         | 622         | 630         | 607         | 604         | 603         | 595         | 591         | 591         | ktCO2        |
|                                  | Per Capita                    | <b>11.0</b> | <b>10.7</b> | <b>10.5</b> | <b>10.1</b> | <b>9.3</b>  | <b>9.9</b>  | <b>9.0</b>  | <b>9.0</b>  | <b>8.7</b>  | <b>tCO2</b>  |
| Other Sectors                    | Waste                         |             |             |             |             |             |             |             |             |             | tCO2e        |
|                                  | N. LULUCF Net Emissions       | -1500       | -1547       | -1544       | -1576       | -1540       | -1588       | -1656       | -1644       | -1637       | ktCO2        |
|                                  | Other (specify in 'Comments') |             |             |             |             |             |             |             |             |             | tCO2e        |

**2a Targets** Please detail your wider influence targets. **Table 2**

| <b>RPP Sector</b>             | <b>Action Type</b> | <b>Description</b>   | <b>Base-line year</b> | <b>Target year</b> | <b>Comments</b>   |
|-------------------------------|--------------------|--|-----------------------|--------------------|---|
| All Sectors                   | Master-planning    | A carbon neutral Inverness in a low carbon Highlands by 2025   | 2011                  | 2025               | A baseline emissions inventory for developing a monitoring and evaluation framework will be completed by August 2016. |
| Waste and Resource Efficiency | Enhanced recycling | Compliance with the Zero Waste Scotland Plan, including 70% recycling rate with less than 5% of waste going to landfill by 2025. | 2011                  | 2025               | Measurement is percentage of waste being recycled, re-used or sent to landfill.                                       |

|                       |                              |  |  |      |  |
|-----------------------|------------------------------|--|--|------|--|
| Homes and Communities | Energy Efficiency - Combined | Compliance with the Scottish Housing Quality Standards and the Energy Efficiency Standard for Social Housing |  | 2020 | Percentage of houses complying with the new standards.   |
| Energy                | Other                        | Highland Renewable Energy Strategy and Planning Guidance   |  |      | <ul style="list-style-type: none"> <li>• Recognition of the need for cleaner forms of energy with minimal CO2 emissions;</li> <li>• The need for energy savings and efficiency, based on cleaner energy;</li> <li>• Balance between social, economic and environmental interests;</li> <li>• The importance of local involvement in any renewables industry and the retention of associated wealth;</li> <li>• Retention of the regional diversity, scenic qualities and local distinctiveness of landscapes;</li> <li>• The importance of protecting biodiversity, including rare and endangered habitats and species;</li> <li>• The aim of maximising employment and income;</li> <li>• The aspiration for viable energy self-sufficiency, with a reliable supply;</li> <li>• The need to integrate renewables within the existing energy framework;</li> <li>• Recognition of energy poverty and the aim of eradicating it;</li> <li>• Utilisation of the valuable, high calibre energy resources available in Highland</li> </ul> |

**3 Policies and Actions to Reduce Emissions** Please detail any of the specific policies and actions which are underway to achieve your emission reduction targets. **Table 3, part 1**

| No. | RPP Sector            | Action Type  | Description                                       | Start year | Year of full implementation | Annual CO <sub>2</sub> saving once fully implemented (tCO <sub>2</sub> ) |
|-----|-----------------------|--|---|------------|-----------------------------|--|
| 1.  | Energy                | Other  | Replacing street lights with LED lanterns         | 2014       | 2020                        | 5,000.0  |
| 2.  | Homes and Communities | Energy Efficiency - Combined                                     | Energy efficiency improvements in council housing | 2004       | 2020                        |  |
| 3.  | Homes and Communities | Energy Efficiency - Combined                                     | Affordable Warmth Plan                            | 2010       | 2015                        |  |
| 4.  | Transport             | Modal Shift - Private Vehicle to Active Travel (Cycling/Walking) | Improving cycling infrastructure provision        | 2014       | 2015                        |  |

|    |                               |  |   |      |      |  |
|----|-------------------------------|--|---|------|------|--|
| 5. | Waste and Resource Efficiency | Enhanced recycling   | The Highland Council is committed to achieving the goals outline in Zero Waste Plan achieving a 70% recycling rate. | 2012 | 2025 |  |
| 6. | Transport                     | Decarbonising Private Vehicles                                   | Expanding electric vehicle charging point provision across Highland   | 2013 | 2016 |  |
| 7. | Transport                     | Modal Shift - Private Vehicle to Active Travel (Cycling/Walking) | Cycling, Walking and Safer Streets Programme  | 2014 | 2015 |  |
| 8. | Transport                     | Modal Shift - Private to Public Transport                        | Solar-powered bus-stop displays   | 2014 | 2015 |  |
| 9. | Transport                     | Decarbonising Public Transport                                   | Installation of electric vehicle charging point at Inverness bus station  | 2014 | 2015 |  |

**Table 3b, part 2**

| No. | Status            | Indicators for monitoring progress  | Delivery Role   | Has ISM or equivalent behaviour change tool been used? | Investment (£) | Primary Funding Source | Comments   |
|-----|-------------------|---|-----------------|--|----------------|------------------------|--|
| 1.  | In Implementation | Number of lanterns replaced, CO2 savings  | Direct delivery | No   | 16,000,000     | Capital investment     |  |
| 2.  | In Implementation | Meeting standards legislated by Scottish Housing Quality Standard, and the new Energy Efficiency Standard for Social Housing  | Direct delivery | No   | 60,000,000     | Capital investment     | These programmes are not directly aimed at targeting carbon emissions reductions, but will have emissions reductions implications. |
| 3.  | In Implementation | Improvements in energy efficiency measures in private and social housing, Uptake of the HEEP-ABS programme, improvements in benefit uptake, awareness and financial inclusion activity, | Direct delivery | No   |                | Capital investment     | These programmes are not directly aimed at targeting carbon emissions reductions, but will have emissions reductions implications. |
| 4.  | Complete          | Completion of Millburn Road Cycling Route   | Direct delivery | No   | 300,000        | Capital investment     | Council investment was matched by EU funding, HITRANS and Sustrans   |

|    |                   |  |                 |    |         |                    |  |
|----|-------------------|--|-----------------|----|---------|--------------------|--|
| 5. | In Implementation | Compliance with the goals laid out in the Zero Waste Scotland Plan, including 70% recycling rate and less than 5% waste going to landfill by 2025.   | Direct delivery | No |         | Other              | Funding is coming from Council capital and revenue funding and from Scottish Government  |
| 6. | In Implementation | Number of charging points installed, in accordance with Transport Scotland guidance  | Direct delivery | No |         | Capital investment | These programmes are not directly aimed at targeting carbon emissions reductions, but will have emissions reductions implications. |
| 7. | Complete          | This is part of an on-going programme, reporting only on the 2014/15 projects, which included the development of a Safer Routes to School travel plans for Wick High School and Noss Primary School, and re-designing pick up and drop off facilities at Balloch Primary School. | Direct delivery | No | 348,000 | Other              | Funding from Scottish Government. Detail is for 2014/15 funding and projects, although this is part of an on-going programme.      |
| 8. | Complete          | Installation of displays completed   | Direct delivery | No | 10,000  | Capital investment |  |
| 9. | Complete          |  | Direct delivery | No | 15,000  | Capital investment |  |

**Please provide any detail on data sources or limitations relating to the information provided in Table 3**

Many of the actions detailed in Table 3 were not specifically undertaken to achieve a carbon reduction goal, but to contribute to overall improvements in the communities of the Highlands as part of a transition to a low carbon Highlands.

**4 Partnership Working, Communications and Capacity Building** Please detail your Climate Change Partnership, Communication or Capacity Building Initiatives below. **Table 4**

| Key Action Title | Action Type              | Organisation's project role | Lead Organisation                   | Private Partners | Public Partners | 3rd Sector Partners | Outputs  | Total Investment into Partnership |
|------------------|--------------------------|-----------------------------|-------------------------------------|------------------|-----------------|---------------------|--|-----------------------------------|
| Education        | Skills/Capacity Building | Participant                 | University of Highlands and Islands |                  |                 |                     | Establishing a Low Carbon Institute at the University of Highlands and Islands | £250,000                          |

|                 |   |             |                                      |  |  |   |  |  |
|-----------------|---|-------------|--------------------------------------|--|--|---|--|--|
| Communica-tions | Partnership working of climate change or sustainability | Participant | Highland Environment Forum           |  | SNH, Highland Council                                |   | Building and maintaining links across organisations and professionals working on environmental issues in Highland. Collaborative working to deliver the Environment theme of the Highland SOA.   | £12,000  |
| Communica-tions | Awareness Raising                                       | Participant | Kyle of Sutherland Development Trust |  |  |   | Raising awareness of fuel poverty, including causes and drivers in Kyle of Sutherland  | In-kind contributions from staff time.                       |
| Investment      | Partnership working of climate change or sustainability | Lead        |                                      |  |  | Community groups across Highland                                  | £200,000 grant fund to support projects that mitigate or adapt to climate change.  | £200,000   |
| Other           | Multi organisation Communications                       | Participant | Scottish Cities Alliance             |  | Local authorities representing all 7 Scottish Cities |   | A key theme of SCA is "Sustainable Cities", which focuses on cities making the shift to a low carbon economy by maximising resource efficiencies. Being a SCA member provides opportunities for partnership working and sharing good practice with the other cities in Scotland. |  |
| Other           | Partnership working of climate change or sustainability | Participant | Community Planning Partnership       |  | All Public sector community planning partners        | Highlands and Islands Enterprise, Highland Third Sector Interface | Delivering the goals outlined in the Single Outcome Agreement.   | The Council contributes funding across the goals of the SOA. |
| Communica-tions | Partnership working of climate change or sustainability | Supporting  | Highland Environment Network         |  | Highland Council                                     | Highland Environment Network                                      | Dissemination of environmental information with a focus on climate change to the Highland community  | £10,000  |

|                 |   |      |  |  |   |  |   |  |
|-----------------|---|------|--|--|---|--|---|--|
| Communica-tions | Partnership working of climate change or sustainability | Lead |  | 68 signatories<br>Private sector includes Inverness Caladonian Thistle FC, Tomatin Distillery, and Korrie Renewables | 68 signatories<br>Public sector includes SNH, Cairngorms National Park Authority, SEPA, NHS Highland and UHI. | 68 signatories<br>Third sector includes Sleat Community Trust, Transition Black Isle, and Isle of Eigg Trust | Carbon CLEVER Declaration.  |  |
| Communica-tions | Partnership working of climate change or sustainability | Lead |  |  |   | Citizens' Panel  | The Highland Council designed and sent out a survey to the Citizens' Panel to assess the attitudes of Highland residents on a variety of topics related to climate change. The results of the survey will be analysed and presented in 2015/16. |  |

## 5 Please detail key actions relating to Food and Drink, Biodiversity, Water, Procurement and Resource Use

**Table 5**

| Key Action Title | Key Action Description                               | Organisation's Project Role | Impacts   |
|------------------|--|-----------------------------|---|
| Biodiversity     | Flow to the Future project                           | Supporting                  | Restoring Flow country peatland in Caithness, including the construction of a visitors centre to promote education about the importance of peatlands.   |
| Water            | Pentland Firth and Orkney Waters Marine Spatial Plan | Participant                 | Developing integrated marine and coastal management strategies, prioritising local planning needs and taking a coherent approach to ecosystem management.   |
| Procurement      | Sustainable Procurement Strategy                     | Lead                        | The Council is updating its procurement strategy and processes in line with the Procurement Reform Act 2014 and the Community Empowerment Act 2015. This will involve sustainability assessments for all procurement being undertaken by the Council. For more detail see required reporting Section 5. |