Agenda	
Item	10
Report	
No	EDI/71/18

### HIGHLAND COUNCIL

Committee:	Environment, Dev	velopment and	Infrastructure
------------	------------------	---------------	----------------

Date: 8 November 2018

1

Report Title: Annual Report under Public Bodies Climate Change Duties, 2017/18.

**Report By:** Director of Development and Infrastructure

## **Purpose/Executive Summary**

1.1 This report presents The Highland Council's mandatory report under the Public Bodies Climate Change Duties, as required under the Climate Change (Scotland) Act 2009.

### 2 Recommendations

2.1 Members are asked to agree that the Council's completed submission for the 2017/18 reporting year is submitted to the Sustainable Scotland Network in compliance with statutory climate change duties.

## 3 Background

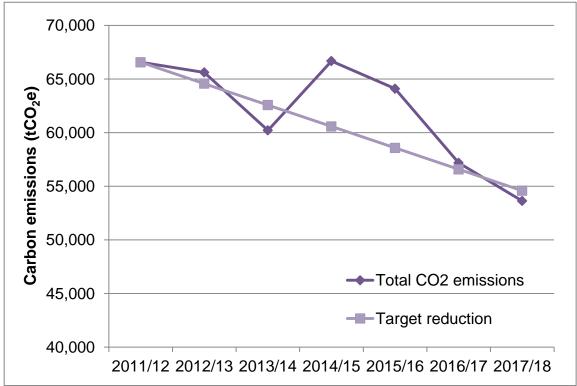
- 3.1 The Climate Change (Scotland) Act 2009 ("the Act") introduced binding targets and legislation to reduce Scotland's emissions by 42% by 2020, and by 80% by 2050 against a 1990 baseline. In addition, the Act places specific duties on public bodies relating to climate change.
- 3.2 The Act requires that a public body must, in exercising its functions, act:
  - In the way best calculated to contribute to delivery of the Act's emissions reduction targets;
  - In the way best calculated to deliver any statutory adaptation programme; and
  - In a way that it considers most sustainable.
- 3.3 In 2015, the Scottish Government introduced an Order under the Act requiring all 151 Public Bodies to submit an annual report to Sustainable Scotland Network (SSN), detailing their compliance with the climate change duties detailed above.
- 3.4 This report provides an update to the Scottish Government on how The Highland Council is performing in respect of its duties, and must be submitted to SSN by 30 November, 2018. The Council's climate change duties report for 2017/18 is attached at **Appendix 1**. The 2017/18 report, on the whole, uses the same template used in previous reporting years. No penalties are yet in place for missing annual targets; however, given increasing public and media awareness around climate change and its effects, it is prudent to expect that there will be increasing external and public scrutiny of the Council's performance in respect of carbon emissions reduction, and its activities and initiatives in terms of addressing climate change at a local level.
- 3.5 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 the top 10 carbon reduction projects as well as 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.
- 3.6 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. It is important to note that this report does not provide an update on progress under the Council's carbon management plan (CMP) this will instead be provided to Council in December, when a new CMP will be presented for approval.

### 4 Key Issues

4.1 One of the most important differences between the Council's mandatory report under the Public Bodies Climate Change Duties and its report on progress under the CMP, is how emissions are calculated. The Council, under its CMP, converts units such as miles, kWh, tonnes of waste or litres of fuel into CO<sub>2</sub> equivalents (CO<sub>2</sub>e) by using specific conversion factors taken from DEFRA's "Environmental Reporting Guidelines for Company Reporting on Greenhouse Gas Emissions" from the baseline year, 2011/12. Whilst these conversion factors are updated annually to take into account changes to behaviours and technologies relating to renewables, energy efficiency, vehicle types and fuel economy and have changed considerably from the baseline year, it was decided that, for the purposes of the CMP 2013-2020, the conversion factors from 2011/12 would be used to ensure consistency in reporting. However, for the purposes of the Public Bodies Climate Change Duties Reporting, the up-to-date conversion factors for each reporting year are used.

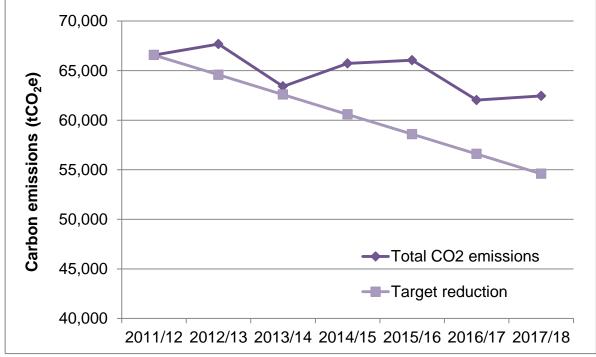
4.2 The graphs below serve to illustrate how the Council's performance in respect of carbon emissions reduction is impacted by using up-to-date, accurate conversion factors (fig.1) or static conversion factors i.e. those which are used to analyse performance under the current CMP(fig.2):





Total carbon emissions based on PBCCD emissions conversion factors (2011/12 - 2017/18)

Fig. 2 – Carbon Management Plan Emissions



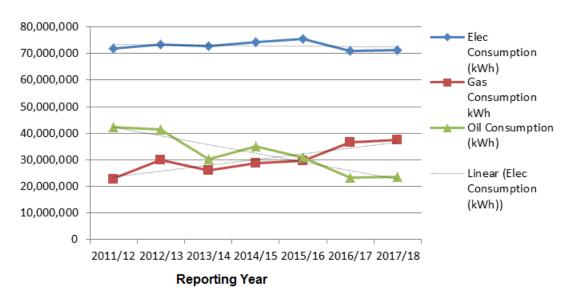
Total annual carbon emissions based on static CMP emissions conversion factors (2011/12 – 2017/18)

2.3 The above graphs tell very different stories: the methodology used to calculate emissions under the CMP (fig. 2) shows that the Council is well behind its emissions reduction target, and has

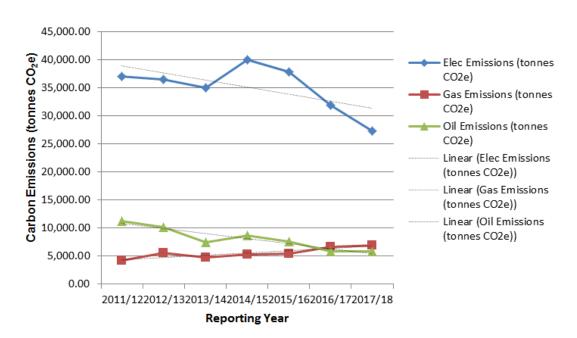
- made only modest progress over the lifetime of the CMP to date. However, when up-to-date emissions factors are considered under fig.1 (as per the PBCCD methodology) the Council is actually performing better than targeted under the CMP.
- 2.4 One of the main reasons why the Council's emissions performance is so much better under the PBCCD is due to the emissions conversion factor for electricity reducing significantly over the past few years (from 0.52kg CO<sub>2</sub>e/kWh in 2011/12 to 0.38kg CO<sub>2</sub>e/kWh in 2017/18). This has been achieved through the shift nationally towards cleaner electricity, via the wide-scale installation of renewables such as wind and solar, and the removal of some fossil fuel generation from the overall energy mix (for example, the closures of the coal-fired Longannet and Cockenzie power stations). Electricity consumption (including street lighting) accounts for around 51% of the Council's total carbon footprint; therefore, the Council's overall emissions have been significantly reduced thanks to the decarbonisation of the electricity sector, rather than an overall reduction in consumption across the organisation (see figs 3 and 4 below):

Fig.3 & 4 - Energy Consumption 2011/12 - 2017/18

## Energy Consumption 2011/12



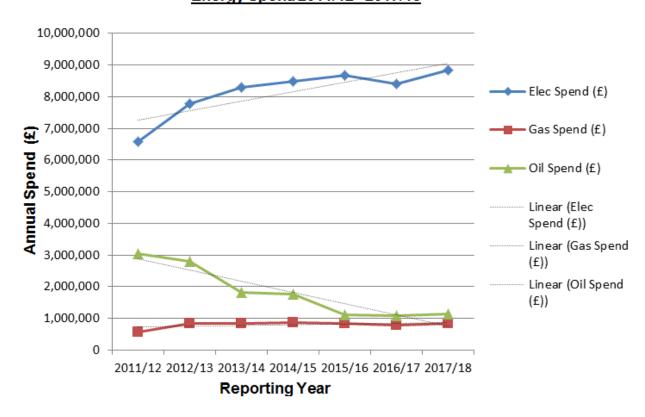
#### Carbon Emissions by Source (2011/12 - 2017/18)



2.5 However, the Council cannot rely solely on continued decarbonisation of electricity to meet its climate change commitments. Electricity and gas consumption continues to rise across the organisation, and this must be reversed to avoid both carbon emissions and additional costs (see fig.5 below). To this end, the annual PBCCD Report highlights at section 2F what the Council's priorities will be in respect of climate change governance, management and strategy throughout 2018/19. It is clear that individual Services need to take more of a lead in reducing cumulative energy consumption across the Council, and the new CMP will set out how this could be achieved over the coming years. Further analysis on cost and carbon performance will be provided to Members when the new CMP is presented to the Council in December 2018.

Fig. 5 – Electricity, Gas & Oil Spends 2011/12 – 2017/18

Energy Spend 2011/12 - 2017/18



### 3 National Policy Changes & Implications for The Highland Council

- 3.1 Action to mitigate against climate change is a key component of the Scottish Government's aim to create a growing, sustainable and inclusive economy. The Act set world-leading emissions reduction targets, including a binding target to reduce emissions by 80% by 2050.
- 3.2 However, following the Paris Climate Change Agreement, it was recognised that these targets would not be sufficient to limit global temperature rise to the agreed 2 degrees centigrade (and ideally 1.5C) above pre-industrial levels by 2050. The Scottish Government therefore intends to introduce a new Climate Change Bill proposing even more ambitious targets, including a 56% reduction in emissions by 2020 and a 90% reduction by 2050. In addition, the proposals include the ability to make provision for a net-zero emissions target to be set when this becomes technically feasible.
- 3.3 As a result, it is clear that the Council's carbon management plan, which was last revised in 2013, will need to be updated to reflect this increased ambition and to better identify ways that the Council can support national, as well as global, climate change ambition. The Climate Change team are currently drafting a new plan in consultation with Services, and this will be taken to The

Highland Council for discussion and approval in December 2018.

- 3.4 The recent special report by the <a href="Intergovernmental Panel on Climate Change">Intergovernmental Panel on Climate Change</a> (IPCC) has stressed that in order to keep global warming to 1.5C above pre-industrial levels, rapid and far-reaching transitions across multiple sectors will need to occur. Whilst limiting global warming to no more than 2C above pre-industrial levels has been the de-facto target for global policy makers for many years, it is now recognised this limit will not be adequate to avoid many of the most severe impacts of climate change. The report highlights that, at current rates, human-caused warming is adding around 0.2C to global average temperatures every decade, and recognises that this is the result of both past and on-going emissions. If this rate continues, the report projects that global warming average is likely to reach 1.5C between 2030 and 2052. There is currently a high level of uncertainty in respect of whether keeping within this upper limit can realistically be achieved.
- 3.5 As a result, it is clear that the need for robust adaptation to climate change becomes increasingly prudent. As a public authority, the Council has a key role in preparing Highland for the likely impacts arising from climate change and to minimise impacts to service delivery. To this end, work is underway to develop a Highland-wide adaptation strategy, in collaboration with Community Planning Partners, to identify and address the key cross-cutting risks that climate change will pose in the coming years.
- 3.6 Nevertheless, it remains vitally important that the Council continues to do all it can to reduce its emissions, wherever feasible. A key message which comes out of the IPCC report is that many of the types of actions which are needed to limit warming to 1.5C are already underway at the Highland Council, and need to be accelerated. There is a clear role for the Council to play through reducing our energy use, being more energy efficient and expanding the scale of our renewable energy generation capacity. It is important to remember that the bulk of Council emissions come from consumption of energy, fuel, water, the production of waste etc, which all have an associated financial cost. Therefore, by reducing how much energy we consume or how much waste we produce, there is a net cost benefit as well as a net carbon benefit policies and initiatives to reduce our carbon footprint mutually reinforce efforts to reduce overall spend across the organisation.

### 4 Implications

- 4.1 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.
- 4.2 Legal The Council has a legal requirement 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. In addition, the Climate Change (Scotland) Act 2009 places a legal duty on the Council to contribute to the delivery of emissions reduction targets and act in the way best calculated to help deliver any statutory climate change adaptation programme.
- 4.3 Community (Equality, Poverty and Rural) There are no community implications arising from this report.
- 4.4 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 wider Highland region.
- 4.5 Risk Climate change is now recognised as a Corporate Risk, and it is therefore important that its impacts are properly assessed. The Council should plan to mitigate against and adapt to the effects of climate change wherever possible.

4.6 Gaelic – There are no Gaelic implications arising from this report.

Designation: Director of Development and Infrastructure

Date: 18 October 2018

Author: Keith Masson, Climate Change Officer

# APPENDIX 1: Annual Report under Public Sector Climate Change Duties, 2016/17

### **Required Section**

- 1 Organisational Profile
- 1a Name of reporting body The Highland Council
- **1b** Type of body Local Authority
- 1c Highest number of full-time equivalent staff in the body during the report year 8,000.8
- 1d Metrics used by the body Specify the metrics that the body uses to assess its performance in relation to climate change and sustainability.
  N/A
- 1e Overall budget of the body
  - ~£560.9 million net revenue budget
- 1f Report year 2017/18 Financial Year
- **1g** Context Provide a summary of the body's nature and functions that are relevant to climate change reporting.

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 its only city. The Council is responsible for delivering a wide range of services to residents across the region, including schools, leisure facilities, waste collections and social and welfare services.

The Highland Council serves a third of the land area of Scotland including the most remote and sparsely populated parts of the United Kingdom. The region has the 7th highest population of the 32 local authorities in Scotland.

The length of coastline including islands at low water is 4,905 kilometres, 21 per cent of the Scottish total, and excluding islands is 1,900 kilometres (49 per cent of Scotland).

### 2 Governance, Management and Strategy

## 2a How is climate change governed in the body?

A new Highland Council programme, Local Voices / Highland Choices 2017-2022, was approved in September 2017. This programme identifies a key commitment to "work with communities and partners to mitigate against and adapt to climate change whilst raising awareness around sustaining and improving our natural, built and cultural environment". The Council's progress towards mitigating and adapting to climate change is now within the remit of the Environment, Development & Infrastructure Committee, whilst each report presented to the Highland Council's strategic committees is required to identify any and all climate change implications.

The Council introduced its first Carbon Management Plan in 2005, and in 2013, launched the Carbon CLEVER initiative. Carbon CLEVER sets a goal of a carbon neutral Inverness in a low carbon Highlands by 2025. Various papers on Carbon CLEVER and its associated projects and initiatives have been presented to full Council meetings, as well as strategic and 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 relevant decision makers with the appropriate tools to adapt to the effects of a changing climate. The document was developed in consultation with multiple stakeholders and with guidance and advice from Adaptation Scotland. Work is now underway to update and refresh the adaptation strategy, in collaboration with community planning partners to better identify solutions to the key cross-cutting risks associated with the changing climate in Highland.

The Highland Council has four directorates (see attached figure). The Council's Climate Change team, consisting of a Climate Change Officer and a Climate Change Coordinator, is responsible for facilitating, reporting and promoting climate change actions across the Council, and is the primary point of contact for climate change issues. The Climate Change team sits within the Environment team in the Development & Infrastructure Service, and provides support to all Council Services. Reports on Climate Change and associated initiatives are generally taken to Environment, Development & Infrastructure Committee. Ultimately, all Committees report back to full Council.



### 2b How is climate change action managed and embedded by the body?

The Highland Council's 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. The Council is currently reviewing its CMP, including the scope and governance arrangements around the CMP, with a view to developing more robust processes for embedding climate change action in the day-to-day operations of each individual Council service.

The Climate Change team has strategic oversight of the Highland Council's progress to reduce carbon emissions. The team acts as a centre of expertise on climate change for the Council, and works collaboratively with teams from all Services. 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, the Head of

Policy & Reform, and the Business Manager, before being presented to and scrutinised by the appropriate committee, for approval by Elected Members. Committee minutes are then approved by full Council.

In 2010, the Council introduced mandatory climate change screenings for all committee papers, covering all committees and all subject matters. This was amended in 2013 to also incorporate any potential Climate Change/Carbon CLEVER implications.

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 (our Green Ambassador network was refreshed and re-branded as the Eco Officer network early in 2018), an annual programme of events and campaigns focused on climate change including Earth Hour, Cycle to Work Week, the Step Count Challenges, behaviour change initiatives on energy saving and active travel utilising the ISM behaviour change tool, national and European campaigns (including National Climate Week). We have also introduced an annual TRIAD-management campaign encouraging all staff to reduce their energy consumption in a bid to reduce the overall energy cost - this will be supported and facilitated in future years by our Eco Officer network. The Highland Climate Challenge game pilot introduced carbon reducing behaviours amongst students at eight primary schools in the Highlands, with the view to rolling this out to all primary schools in 2018/19.

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

Wording of objective	document
Work with communities to mitigate against and adapt to climate change	Local Voices,
whilst raising awareness around sustaining and improving our natural,	Highland
built and cultural environment.	Choices

Name of

2d Does the body 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. The new Highland Council Programme, "Local Voices, Highland Choices", was published in September 2017, and one of its key priorities is to help Highland communities to mitigate against and adapt to climate change.

2e Does the body 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	2012-	Currently being updated in
	Highland	2020	collaboration with community

			planning partners to better reflect key cross-cutting risks
			arising as a result of climate change.
Business travel	Carbon Management Plan	2013- 2020	Currently being updated to reflect increased ambition from Scottish Government and budgetary pressures facing the Council.
Staff Travel	Carbon Management Plan	2013- 2020	As above.
Energy efficiency	Carbon Management Plan	2013- 2020	As above.
Fleet transport	Carbon Management Plan	2013- 2020	As above.
Information and communicati on technology	Carbon Management Plan	2013- 2020	As above.
Renewable energy	Carbon Management Plan	2013- 2020	Onshore Wind Energy Supplementary Guidance adopted November 2016
Sustainable/r enewable heat	Carbon Management Plan	2013- 2020	As above.
Waste management	Carbon Management Plan	2013- 2020	As above.
Water and sewerage	Carbon Management Plan	2013- 2020	As above.
Land Use	Highland wide Local Development Plan, adopted 2012 (currently being revised); Inner Moray Firth Local Development Plan, adopted 2015;  Land allocations within extant Local Plans including: • 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. Local development plans are in preparation that will replace these older local plans.  Local Flood Risk Management	variou s	
	Plan for the Highland & Argyll Local Plan District (LPD01), and Findhorn, Nairn &		

	Speyside Local Plan District (LPD05) (2016 to 2022).
	Various Supplementary Guidance & site specific Development Briefs. Includes Onshore Wind Energy Supplementary Guidance adopted in November 2016
Other	

2f What are the body'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.

<u>Priority 1:</u> Develop a new Carbon Management Plan to better reflect the increased ambition of the Scottish Government in respect of carbon emissions reduction, whilst acknowledging the challenging financial climate currently being faced by The Highland Council.

<u>Priority 2:</u> Develop a new Highland-wide adaptation strategy. It has been recognised that a multi-agency approach to adaptation to address the key cross-cutting risks associated with climate change would benefit all community planning partners in Highland. The level of stakeholder and community engagement, adaptation strategy and governance development included in our proposals typically requires around 18 months, based on previous work by Adaptation Scotland.

<u>Priority 3:</u> Implementation of the recommendations arising from a review of the Council's grey fleet. Council employees and elected members are travelling around 6 million miles in their own vehicles every year - this has carbon, cost and risk implications for the Council. The review indicated that 75% of staff only use their own vehicles due to a lack of available alternatives, and in response, the Council is rolling out low emission hybrid and electric car club vehicles to its key sites, as well as revising the Travel & Subsistence policy to promote zero and lower carbon alternatives to travel.

<u>Priority 4:</u> Continue to work with the Council's redesign board to identify opportunities for rationalisation, and associated reductions in consumption of energy / water / fleet fuel use and grey fleet mileage.

<u>Priority 5:</u> Procurement and Single Use Plastics - development of a strategy to phase out single use plastics from the organisation, whilst increasing the use of contractual conditions through procurement to reduce packaging, and in particular, single use plastic.

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

(a) This refers to the tool developed by Resource Efficient Scotland for self-assessing an organisation's capability / performance in relation to climate change.

The Climate Change team conducted an initial run of the CCAT tool in 2015. A session using the tool to assess the Council's climate change performance to date will be held with the Senior Management Team early in 2018. This will be useful in identifying priorities for a new Carbon Management Plan.

Results from the first run indicate a need to improve the carbon management project register. 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, especially in relation to climate change / Carbon CLEVER monitoring on all committee reports.

**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 2017/18, leadership on climate change issues was best demonstrated through the Council's review of its grey fleet. The rationale for the project was to reduce both spend and carbon emissions arising from the use of grey fleet to deliver services, with climate change now being recognised as a corporate risk on the Council's Risk Register.

The project has clear parallels with the Council's carbon management plan ambition to reduce corporate emissions by 3% per annum, as well as Scotland's legally binding target to reduce emissions by 42% by 2020 and 80% by 2050. A key driver was financial – the need to reduce cost whilst minimising risk. By utilising the Informing our Consulting Employees policy, one of the biggest successes was the outcome achieved from employee consultation. We conducted a staff survey which received 1,400 responses, and held a variety of workshops and focus groups which included staff from all Directorates. The message was resounding: 75% of staff don't want to use their own vehicles for work, but there is often no alternative. This provided a mandate for change for the future, and we are in the process of rolling out a range of low carbon vehicles to better meet demand from staff.

### 3 Emissions, Targets and Projects

3a Emissions from start of the year which the body uses as a baseline (for its carbon footprint) to the end of the 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	63,843	tCO2e
Year 4	2015/16	22,629	39,323	4,088	66,040	tCO2e
Year 5	2016/17	20,899	36,969	4,153	62,021	tCO2e
Year 6	2017/18	21,226	24,983	7,416	53,625	tCO2e

Breakdown of emission sources. Complete the following table with the breakdown of emission sources from the body's most recent carbon footprint (greenhouse gas inventory); this should correspond to the last entry in the table in 3(a) above. Use the 'Comments' column to explain what is included within each category of emission source entered in the first column. If, for any such category of emission source, it is not possible to provide a simple emission factor(a) leave the field for the emission factor blank and provide the total emissions for that category of emission source in the 'Emissions' column.

Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO <sub>2</sub> e)	Comments
Grid Electricity (generation)	Scope 2	55,174,999	kWh	0.35156	kg CO2e/kWh	19,357.32	Buildings
Grid Electricity (generation)	Scope 2	16,003,122	kWh	0.35156	kg CO2e/kWh	5,626.06	Street lighting
Natural Gas	Scope 1	37,413,622	kWh	0.18416	kg CO2e/kWh	6,890.24	Space heating
Burning Oil (Kerosene)	Scope 1	23,743,008	kWh	0.24659	kg CO2e/kWh	5,854.81	Space heating
Petrol (average biofuel blend)	Scope 1	59,188	litres	2.19835	kg CO2e/litre	130.12	Fleet use
Diesel (average biofuel blend)	Scope 1	2,894,330	litres	2.60016	kg CO2e/litre	7,525.73	Fleet use
Gas Oil	Scope 1	279,260	litres	2.95351	kg CO2e/litre	824.8	Gritting fleet
Water - Supply	Scope 3	403,868	m3	0.34400	kg CO2e/m3	138.93	Water to all buildings.
Water - Treatment	Scope 3	364,098	m3	0.70800	kg CO2e/m3	257.78	Water to all buildings.
Refuse Municipal to Landfill	Scope 3	1,465	tonnes	588.9	kg CO2e/tonne	862.75	Waste to landfill - non schools
Refuse Municipal to Landfill	Scope 3	2,796	tonnes	588.9	kg CO2e/tonne	1,646.58	Waste to landfill - schools
Mixed recycling	Scope 3	292	tonnes	21.8	kg CO2e/tonne	6.35	Recycling - non schools

Mixed recycling	Scope 3	591	tonnes	21.8	kg CO2e/tonne	12.86	Recycling - schools
Organic Garden Waste Composting	Scope 3	14	tonnes	6.0	kg CO2e/tonne	0.08	Mixed composting – non-schools
Organic Garden Waste Composting	Scope 3	143	tonnes	6.0	kg CO2e/tonne	0.86	Mixed composting - schools
Car - petrol (average)	Scope 3	5,920,212	miles	0.29881	kg CO2e/mile	1,769.02	Grey fleet mileage - based on average value as only mileage is recorded on expenses claims
Car - petrol (average)	Scope 3	1,112,802	miles	0.29881	kg CO2e/mile	332.52	Car hire mileage - based on average value as only mileage is recorded.
Bus (local bus, not London)	Scope 3	52,678	passenger km	0.12259	kg CO2e/passenger km	6.46	Coach and bus staff travel
Ferry (average passenger)	Scope 3	4,115	passenger km	0.11611	kg CO2e/passenger km	0.48	Staff travel
Short-haul flights (average passenger)	Scope 3	98,525	passenger km	0.16103	kg CO2e/passenger km	15.87	Staff travel
Rail (National rail)	Scope 3	560,335	passenger km	0.04678	kg CO2e/passenger km	26.21	Staff travel
Taxi (regular)	Scope 3	183	passenger km	0.15617	kg CO2e/passenger km	0.03	Staff travel
Grid Electricity (transmission & distribution losses)	Scope 3	55,174,999	kWh	0.03287	kg CO2e/kWh	1,813.6	Buildings
Grid Electricity (transmission & distribution losses)	Scope 3	16,003,122	kWh	0.03287	kg CO2e/kWh	526.02	Street Lighting
					Total	53,665.48	

# 3c Generation, consumption and export of renewable energy

Technology	Total generated (kWh)	Total consumed by the organisation (kWh)	Total exported (kWh)	Comments
Wind				6kW generating capacity
Solar PV				533.18kW generating capacity
Biomass				21.3MW generating capacity
Biogas CHP				414.5kW generating capacity.
Air Source Heat Pump				460.5kW generating capacity
Ground Source Heat				287.3kW generating capacity
Pump				
Solar Thermal				47.5kW generating capacity

## 3d Organisational targets

Name of target	Type of target	Target	Units	Boundary / Scope of Target	Year used as baseline	Baseline figure	Completion year
Carbon Management Plan	annual	3	% (per annum)	All emissions	2011/12	66,579	2019/20
Carbon CLEVER - A carbon neutral Inverness in a low carbon Highlands by 2025	absolute	100	% (absolute)	All emissions	2011/12		2025
Grey Fleet Mileage	Absolute	500,000	£ reduction	Staff travel	2016/17	2,300,000	2018/19

#### Estimated total annual carbon savings from all projects implemented by the organisation in 3e 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".

Emissions source	Total estimated annual carbon savings (tCO₂e)	Comments
Electricity	200	Various projects were implemented to reduce carbon emissions in this area, and these have successfully reduced consumption.
Natural gas	Unknown	Projects were successfully implemented to move away from oil to this lower carbon fossil fuel.
Other heating fuels	690	Projects were successfully implemented to reduce carbon emissions in this area, primarily replacing oil heating systems with biomass boilers. There has been an associated decrease in usage, as a result.
Waste	Unknown	We estimate that our emissions have increased, although we recognise that emissions from waste are over-estimated as a result of the methodology used i.e. that collected bins are estimated to be full.
Business Travel	Unknown	New ICT contract and telephony solutions including Skype for Business should reduce the requirement for business travel as users will be able to more readily utilise video conference (VC) and share documents live with colleagues and others. In addition, a review of the Council's grey fleet has led to the introduction of lower carbon alternatives to private vehicle use, including the roll-out of hybrid car club vehicles at 5 key locations.
Fleet transport	Unknown	Route optimisation, installation of new Euro 6 engines, reduction of service provision. Fleet reductions and minimisation of gritting routes have resulted in carbon savings. A Sustainable Transport Review will be undertaken

	in 2018/19.

## Detail the top 10 carbon reduction projects implemented by the body in the report year Provide details of the top 10 projects (based on estimated emissions savings) implemented in the report year. 3f

Project name	Funding source	First full year of CO2e savings	Are these savings figures estimated or actual?	-	Operational cost (£/annum)	lifetime	Primary fuel/emission source saved	Estimated carbon savings per year (tCO2e)
Fort William Offices Phase 1 - Biomass	Capital	2018/19	estimated	200,000		25	Gas oil (kWh)	150
Fort William Offices Phase 2 - ASHP	Capital	2018/19	estimated	100,000		25	Gas oil (kWh)	80
Arisaig Primary - Biomass	Capital	2018/19	estimated	150,000		25	Gas oil (kWh)	100
Portree Gaelic Primary – Biomass	Capital	2018/19	estimated	300,000		25	Gas oil (kWh)	150
Acharacle Primary – ASHP	Capital	2018/19	estimated	48,568		25	Grid electricity (kWh)	50
Tomnacross Primary – ASHP	Capital	2018/19	estimated	58,620		25	Grid electricity (kWh)	50
Clachnaharry Old School – ASHP	Capital	2018/19	estimated	49,567		25	Gas oil (kWh)	50
Phipps Hall – ASHP	Capital	2018/19	estimated	200,000		25	Gas oil (kWh)	80
Cromarty Primary – ASHP	Capital	2018/19	estimated	70,000		25	Gas oil (kWh)	80
Inverness Royal Academy – CHP	Capital	2018/19	estimated	200,000		25	Grid electricity (kWh)	100

## 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.

Emissions source	Total estimated annual emissions (tCO₂e)	Increase or decrease in emissions	Comments
Estate changes		Decrease	Office rationalisation in Fort William
Service provision		Decrease	Consolidated services online such as SharePoint
Estate Changes		Decrease	Continued consolidation of Council buildings in Inverness.
Estate changes	2,077	Increase	Inverness Leisure is now part of Highlife Highland and therefore carbon use is captured. It is now the highest energy user in the estate.
_			

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

Emissions source	Total estimated annual carbon savings (tCO₂e)	Comments
Electricity		Energy efficiency improvements at various buildings throughout our estate.
Natural gas		In a conscious move to reduce oil consumption there is a move to natural gas if a renewable energy source is not currently available.
Other heating fuels		There is a continuing programme to replace oil-fired heating systems with biomass boilers.
Waste		The Council uses Warplt (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 savings at £53,000, with a 35 tonne reduction in CO2e.
Business Travel		Reduced travel budgets will continue to reduce staff travel and associated travel emissions. The roll-out of Office 365 and Skype for Business as well as the implementation of car clubs at key locations will also drive down emissions from staff

	travel.
Fleet transport	Route optimisation, more efficient vehicles and equipment.
ICT Equipment	Rollout of more efficient ICT software and equipment, including Skype for Business, across the estate starting 2018/19.
Primary Schools	More efficient energy use at schools participating in the Highland Climate Challenge.
ICT Estate	Depending on new equipment, the Council is keen to adopt an auto hibernate policy to reduce carbon emissions arising from computer equipment being left on standby.
Total	

### 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 (tCO₂e)	Increase or decrease in emissions	Comments
Estate changes		decrease	The programme of office rationalisation is on-going, with the most significant currently being undertaken in Fort William. 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		decrease	The Council is committed to pursuing its 'digital first' communication priority scheme to reduce the number of visits to service centres. This will help reduce carbon emissions relating to in-person visits and staffing requirements at service points, but this has not been quantified.

	Officers and Elected Members can also now video conference in to many committees, removing the requirement to attend in person, which significantly reduces both grey fleet mileage and public transport costs / associated emissions.

Total carbon reduction project savings since the start of the year which the body uses as a baseline for its carbon footprint If the body has data available, estimate the total emissions savings made from projects since the start of that year ("the baseline year").

Total savings	Total estimated emissions savings (tCO₂e)	Comments	
Total project savings since baseline year	-	We do not currently	
		capture this data.	

### 3k Supporting information and best practice

The 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. Recognising the significance of energy use on corporate carbon emissions, the 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 2017/18. There are now multiple systems in place, generating an income of approximately £1.5m per year for the Council through Renewable Heat Incentive payments. The leadership the Council has shown in developing and championing renewable technologies has helped to create a sustainable supply chain in Highland for these systems.

The programme to replace sodium street lights with more energy efficient LEDs continues to produce significant carbon and cost savings. The Highland-wide roll-out of LED street lights is part of a 5 year programme, due to be completed in 2019/20 with 90% of lighting columns being converted and resulting in a 50 reduction in electricity consumption. 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.

Staff engagement on climate change issues has also been a key focus of work for 2017/18, with the Council participating in a number of national and international schemes and campaigns. This includes being awarded joint Local Authority Runner-up of WWF's Earth Hour award, and a series of events designed to promote active travel, including Cycle to Work Week, Big Bike Revival community events which included free bike maintenance checks through partnership with Velocity Cafe & Cycling Workshop, a local social enterprise. The Council continued to engage with staff to reduce energy consumption during potential TRIAD periods in 2017/18 and will renew and refine efforts in 2018/19, largely through our refreshed Eco Officer network, which continues to grow following a relaunch in January 2018.

The Climate Change team were successful in winning the Scottish Council for Development and Industry award for Excellence in Environmental Sustainability in the Highlands and Islands in September 2017 for the Carbon CLEVER Community Grant Fund and Highland Climate Challenge Game.

### 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 Resilience Team 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.

The Highland Council plans to update its adaptation strategy in collaboration with Community Planning Partners over 2018/19 and 2019/20.

## 4b What arrangements does the organisation have in place to manage climaterelated 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/threats.

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, which is currently being reviewed and updated. 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.

Onshore Wind Energy Supplementary Guidance released in November 2016 assists with identifying and designing onshore wind energy projects that can be supported through planning and hence are more likely to gain consent, be implemented and contribute towards renewable energy targets.

The Flood Risk Management Team manages a dynamic risk-based system of watercourse inspections and implements remedial / maintenance works as necessary to reduce flooding. Monthly targets for priority inspections are met and monitored using

performance indicators, and the development of our first Local Flood Risk Management Plan is complete. The publication of our Local Flood Risk Management Plan in June 2016 has helped to raise awareness of flood risk in communities and the riparian responsibilities towards watercourse maintenance. Community Councils have been informed of the publication and further initiatives to raise awareness and increase resilience in communities which will be developed over coming years. Annual reporting on progress will follow publication.

The Local Flood Risk Management Plan (LFRMP) has also identified high risk areas where the development of a Flood Protection Study (leading to a Flood Protection Scheme) should be carried out. The Development & Infrastructure Service is delivering Flood Protection Studies in accordance with the LFRMP, taking into account climate change scenarios when assessing future flood risk.

Development of a Highland-wide Surface Water Management Plan (2016-2019) will assess surface water flooding issues in the highest priority areas, prior to the next Plan publication in 2022.

The Pilot Pentland Firth & Orkney Waters Marine Spatial Plan was published in March 2016. It was collaboration between Marine Scotland, the Highland Council and Orkney Islands Council. Its policies include flooding, well-being and quality of life, amenity of coastal communities. It identifies resilience to climate change as one of its key overarching objectives. It provided guidance for the subsequent, proposed eleven statutory regional marine plans around Scotland, of which three would cover the Highland local planning authority area. The responsibility lies with Scottish Ministers to agree to take forward any of the proposed three Highland Regional Marine Plans, but it is not within the Highland Council remit to progress these.

The Resilience Team 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.

Good progress continues to be made in helping and encouraging communities to prepare local community resilience plans, which 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. This has been achieved by the Resilience Team and Ward Managers working with Scottish & Southern Energy Power Distribution's (SSEPD) staff to increase the adoption of plans within communities. Approximately 50 communities are now engaged in community resilience planning.

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

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 delivered through the Council's Environment

Team, and principally, the Climate Change team. The Countryside Rangers, who now come under the High Life Highland umbrella, 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 adaptation 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 recently published a new Tree Strategy, which specifically references the potential impacts of climate change on management needs for the Council's tree resource. The main role of the Forestry Team is the protection of trees / woodlands through Tree Preservation Orders & Conservation Areas; encouraging the protection of trees on development sites through planning consultation and working with colleagues to maintain and enhance 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 Resilience, Flood Risk Management, 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.

# 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 (2016-2022) published on 22/06/16.  Highland-wide Surface Water Management Plan	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) - main issues report consultation now complete.
			N2-18	Flood Risk Management Plan published in 2016; works with communities on local community resilience plans to address flooding	
			N2-20	Highland Biodiversity Action Plan; Pilot Pentland Firth & Orkney Waters Marine Spatial Plan was published in March 2016	Highland Council will work with partner organisations to develop 3 Regional Marine Spatial Plans for the National Marine Areas identified adjacent to Highland
Sustain and enhance the benefits, goods and services that the natural	N3	Natural Environment			

environment provides.					
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 (2016-2022) published on 22/06/16. Historic Environment Scotland Climate Change Adaptation for Traditional Buildings published in October 2016.	
Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure.	B2	Buildings and infrastructure networks			
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services	B3	Buildings and infrastructure networks	B3-3	Highland-wide Local Development Plan (adopted 2012)	Being updated following public consultation.
provided.			B3-7	Annual Standard Delivery Plan, reported on to Community Services committee details the implementation strategy for the Scottish Housing Quality Standard (SHQS).	The Scottish Government has announced a new Energy Efficiency Standard for Social Housing (EESSH) to be reached by 2020, which supersedes the Scottish Housing Quality Standards (SHQS), with more stringent standards to be achieved. Council housing stock has been being assessed and is currently 67% compliant with EESSH. The Council invested £8.5m in 2017/18 towards improving the energy efficiency of its housing stock and is planning to spend an additional £14.8m in 2018-21.

			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.
			B3-6	The Council's Energy and Sustainability Team oversees the delivery of the HEEPS-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.
Understand the effects of climate change and their impacts on people, homes and communities.	S1	Society		The Highland Climate Challenge online game for Primary Schools provides early education of carbon reducing behaviours and activities and to recognise their carbon footprint.	This will be rolled out to all Primary Schools in Highland in 2018/19.
Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.	S2	Society	S2-5	The Resilience 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	The Resilience Team in collaboration with emergency responders has put in place a comprehensive evaluation strategy to assess performance after each training exercise/ event.	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. 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 body 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 Resilience Team is continually assessing preparedness to a variety of acute risks that will be impacted by climate change. The Resilience Team is also 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 body 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 body's top 5 priorities for the year ahead in relation to climate change adaptation?

Priority 1: Climate change has now been incorporated into the Council's corporate risk register. As a result, a new Highland-wide adaptation strategy will be developed in collaboration with Community Planning Partners to ensure that key cross-cutting risks associated with climate change are identified and appropriately addressed.

Priority 2: Continue 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 3: Developing Surface Water Management Plans in accordance with the requirements laid out in the Flood Risk Management (Scotland) Act 2009.

Priority 4: Continue to invest in 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.

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.

**4h** Supporting information and best practice Provide any other relevant supporting information and any examples of best practice by the organisation in relation to adaption.

The Council has recognised the importance of partnership working in order to most effectively address the challenges related to climate change adaptation. The Highland Biodiversity Partnership has focused on developing and conducting public consultation of the Biodiversity Action Plan. 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.

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 have procurement policies contribute to compliance with climate change duties?

The following policies guide sustainable procurement activity at a strategic and operational level, contributing directly to Council commitments under the Scottish Climate Change Declaration. Overarching policies provide strategic and practical guidance at every stage of the procurement process i.e. identification of need, specification development, selection/award and contract management. These policies assist procuring officers to proactively address the three key aspects of the duties i.e. mitigation (ensuring a reduction in greenhouse gases/enhancing carbon storage), adaptation (e.g. flood prevention schemes) in addition to maximising added social, economic and environmental value in the Council's own procurements and call offs from national frameworks.

### The Commercial and Procurement Shared Service

The Commercial & Procurement Shared Service (C&PSS) embraces the procurement function in: Aberdeen City Council, Aberdeenshire Council and The Highland Council. The 2017-2022 Joint Procurement Strategy is fully aligned to: i) The Scottish Model of Procurement (emphasising quality, cost and sustainability) ii) National Outcomes iii) the Public Service Reform Agenda and iv) Scottish Government aspirations to:

"...support Scotland's economic growth by delivering social and environmental benefits, supporting innovation and promoting public procurement processes and systems which are transparent, streamlined, standard, proportionate, fair and business-friendly"

## Procurement Mission Statement

The Procurement Mission Statement commits to delivery of "ethical and sustainable value for money solutions that support the operational needs and wider strategic aims of the councils and the communities they service to further local and national priorities to the fullest extent possible." In particular, the following National Outcomes guide procurement activity at a strategic and operation level:

"We value and enjoy our built and natural environment and protect it and enhance it for future generations" and

"We reduce the local and global environmental impact of our consumption and production."

Policy/strategy/guidance emphasises a commitment (beyond mandatory and regulated thresholds) to identify: "leverage opportunities (including social, economic and environmental value) aligned to the needs and priorities of our communities"

### Policy Statement

"The partner councils aim to act as a role model within the public sector by carrying out activities in a responsible and sustainable manner, considering how the economic, social and environmental wellbeing of the area can be improved and working with all sectors of the business community in order to achieve increased prosperity. As responsible and ethical buyers, the partner councils aim to embed the key principles of sustainability into procurement activity for the benefit of society, the economy and the environment."

The above statement features in sourcing strategies (to guide procurers) and tender documentation (to guide bidders). Communication of these priorities leads to climate change; adaptation/mitigation and sustainable procurement initiatives receiving considered, proactive focus at the sourcing stage. This is turn leads to higher quality, innovative responses from bidders aligned to local priorities and climate change/adaptation duties.

### Specifications/Statements of Requirements

Policy and guidance explain that not all sustainability measures are best achieved through community benefits. Certain measures (particularly environmental/energy efficiency related measures) can be specified as contractual conditions e.g. that a product is made of particular materials or manufactured to a particular eco/industry standard. Methods of production, lifecycle costing, environmental performance measures and reduction of packaging (particularly single use plastic) are suggested in guidance. The following specific examples are provided in this context:

- Environmental/emissions/climate performance levels
- Legislation or regulatory standards (e.g., equalities Climate Change Scotland Act 2009 etc)
- Waste water standards/accreditation
- Production processes and methods at any stage of the life cycle of the supply or service.

Zero Waste Scotland Specification Development guidance has been incorporated into guidance. Sustainable procurement measures achieved in the specification are regarded as "community benefits" and procurers are encouraged to consider utilising community benefits and the specification to maximise the environmental wellbeing of our communities.

### Policy and Guidance

A Sustainable Procurement Policy (PGN 10) has been developed in collaboration with sustainability colleagues with input from Economic Development and Community Planning colleagues. Policy and guidance links to and strongly recommends usage of the following sustainability tools: i) The Sustainability Test, ii) The Prioritisation Tool and iii) Lifecycle Impact Mapping. As with procurement strategy, there are linkages to The Scottish Model of Procurement; National Outcomes and Local Outcome Improvement Plans.

To aid compliance with climate change duties, policy and guidance covers demand management extensively and defines and explains key terms such as "sustainable procurement", "whole of life costing" and "the circular economy." Guidance has been condensed into a 2-page summary... the summary states that:

"Value for money remains as important as ever but our procurements must look to generate wider benefits to society and improve the local environment/minimise environmental damage."

Policy and guidance identifies that councils have influence and responsibilities beyond the geographic areas they serve. Sustainable procurement measures/community benefits can be captured at the following levels: Local (Council/area specific); National (Scotland/UK) or Global (e.g. fairly traded and ethically sourced goods/carbon emission reduction.) Guidance prompts that many national strategic objectives can be addressed locally (e.g. employment & skills, Living Wage, health and wellbeing, poverty, biodiversity, reduced road miles/reduced carbon emissions etc.)

To simplify the subject, policy and guidance link sustainable procurement as a means of increasing prosperity.

- Prosperity of the (local) economy;
- Prosperity of (local) people;
- Prosperity of (local) places and
- Prosperity of the (local) environment

## Fair Trade/Trading Labels

The Sustainable Procurement Policy supports the promotion of the FairTrade Resolution. "FairTrade" can be specified as representing a standard without further enquiries. As with the use of any trading label, to avoid inadvertent discrimination, procurers must offer alternatives to meet the standard without accreditation. Guidance covers compliant use of trading labels and guides where "equivalents" must be offered.

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

The following represents an illustrative sample of procurement activity i) delivering a reduction in CO<sub>2</sub> emissions ii) improving energy efficiency and iii) incorporating meaningful sustainability criteria:

Construction Procurements – follow industry terms/best practice (NEC3, SBCC ICE etc), Building Standards/Building Performance polices. Specifications incorporate sustainability, energy and environmental considerations to a challenging but proportionate and relevant extent per project. Strong ethos that value for money is demonstrated by whole of life costing/best price-quality ratio. Current and future climate change risks factored into procurement processes where proportionate and relevant to safeguard assets/infrastructure /communities to ensure business continuity.

### National Frameworks

The Council works in close collaboration with Scotland Excel (centre of procurement expertise for the local government sector in Scotland) http://www.scotland-excel.org.uk/home/Resources/Publications.aspx. Sustainability criteria is aligned to the Scottish Sustainable Procurement Action Plan which takes a holistic view of the social, economic and environmental implications of product and service choices.

- Asbestos hazardous waste requires specialist landfills. Suppliers only able to direct minimal waste to landfill. Commitment to reducing carbon footprint, producing survey reports electronically and use of Euro 5 and 6 emission standard vehicles + commitments to reuse, recycle and reduce waste.
- Building and Timber materials per UK Government Timber Procurement Policy only use legal and sustainable timber used.

- Catering Sundries range of reusable/recycled products, packing, assisting councils to reduce waste. Euro VI engines in delivery vehicles.
- Domestic Furniture and Furnishings reuse options on key items. Supports transition to a more circular economy ... environmental impacts of deliveries minimised..
- Electrical Materials all meet the Government Buying Standards for energy efficiency ratings (per DEFRA)
- Energy Efficient Contractors for services/works required across Scotland's Energy Efficiency Programme (SEEP)
- Engineering and Technical Consultancy Provides for Environmental Impact Assessments, Environmental Surveys, Noise & Vibration, Water Quality, Ecology & Biodiversity Studies, Habitat Surveys, Air Quality and Landscape Architecture
- Frozen Foods utilises effective route planning, fuel efficiency and dual temperature vehicles to minimise deliveries. 2% increase in sustainably sourced products
- Groceries and Provisions reduced food waste including demand planning systems and forecast accuracy models, tasking supply chains to reduce case/pack, food waste often passed to local farmers as animal feed.
- Vehicle Purchase Framework supports Clean and Energy Efficient Vehicles Directive 2009-33-EC and flexibility for sustainable vehicle procurement measures
- Janitorial Products reduce waste through products and processes improvements. Most paper products 100% recycled.
- Plumbing and Heating Materials all meet the Government Buying Standards
- Recycle/Refuse Containers maximise recycling opportunities through bin refurbishment and take-back schemes. Redundant bins treated to produce new products. Environmental credentials demonstrated through investment in production efficiencies to reduce emissions/increase use of recycled materials.
- Road Maintenance Materials- reduces environmental impact, including fleet reviews, raw material reviews and product recycling.
- Roadstone initiatives to reduce the impact to the environment sustainable methods of recycling/disposing of products at the end of life reduced vehicle emissions.
- Street Lighting Materials compliance with the W.E.E.E. directive ..emphasis on recyclable materials and end-of-life disposal. Lighting columns/projection brackets meet standards for 50 years min carbon neutral columns included.
- Street Lighting Bulk Renewal of Luminaires allows for accelerated LED replacement converting to LED luminare = 50% reduction in energy costs/reduced usage compared to traditional lights.
- Trade Materials (ironmongery, trade tools, paint) reduced vehicle emissions/energy use, materials recycling, community repaint schemes to use leftover paint for communities waste reduction through innovative packaging design.

• Tyres - re-used or recycled, retreads, re-cycling as fuel for use in cement kilns and as planters for community projects. Euro V emissions - plans to upgrade older vehicles – efficient route planning to minimise road miles.

### **Utilities (Scottish Procurement)**

- Electricity Promoting greener power: addresses emissions from energy use mitigation through a range of energy efficiency measures, access to renewable generation sources promoted and opportunities to sell energy back to the grid.
- Natural Gas sustainable measures and energy performance guarantee option to ensure a range of energy conservation measures.

### 5c Supporting information and best practice

In the reporting period, C&PSS has continued to develop the themed approach to community benefits described in the 2016/2017 return. The approach provides procurers and suppliers with a clear, compliant, ideas-driven framework to work consistently within.

In the reporting period, a definitive list of 14 community benefit types has been developed to ensure meaningful, proportionate and relevant community benefits are incorporated and maximised. Considerable care has been taken to ensure that community benefit requirements do not inadvertently create discrimination contrary to treaty principles and that proposals can be evaluated fairly on a "like for like" basis. The list of 14 benefits complements the table of themes referenced in previous returns.

### Community Benefit Clause Example

Environmental Wellbeing (Climate Change Duties) In accordance with Scotland's Climate Change Declaration, local authorities are expected to assume a leadership role at a local level in terms of responding to the challenges presented by climate change.

The Council will not require any information not already routinely produced by the Bidder. However, Bidders are strongly encouraged to volunteer good practice and co-operate with The Council in terms of environmental/emissions/climate performance levels and any measures (e.g. production processes and methods at any stage of the life cycle of the works) that serve to reduce harmful emissions during the life of the contract, demonstrate good practice in terms of sustainability/waste water standards/accreditation etc. Requirement: As and when called upon to do so, co-operate with the Council in terms of Climate Change reporting.

### Effective Collaboration/Partnership Working

C&PSS has strengthened close partnerships with community planning partners, local third sector interface organisations and Senscot in order to raise awareness of and capability within the 3<sup>rd</sup> sector re sustainable procurement/community benefits.

Closer ties with the 3<sup>rd</sup> sector will identify areas where there might be an active role for community planning partners; 3<sup>rd</sup> sector organisations and our communities to shape, support or deliver requirements. The Councils' approach to community benefits relies on identifying potential sources of financial and practical support to assist suppliers in the delivery of social value. If this converges with the social purposes of a 3<sup>rd</sup> sector organisation (including supported businesses) or the interests of a community group, a key objective is to engage early and make this information available to bidders.

This approach ensures that as far as possible, social value is aligned to community priorities.

If social/economic value can be supported by the 3<sup>rd</sup> sector, this allows increased scope for procurers and suppliers address "environmental wellbeing". The Council's approach/strategy has secured supportive feedback from The Scottish Government, Ready for Business, Sustainable Procurement Limited, Senscot, Ready for Business and 3<sup>rd</sup> Sector Interfaces.

#### **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 provided 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 Community Services.

### 6b Peer validation process

No peer validation is currently 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.

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

NA

#### 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: Keith Masson

Role in the organisation: Climate Change Officer

**Date:** 10/10/18

**End of Required Section** 

## **Recommended Reporting:** Report on the Wider Influence (Not required)

Wider Impact and Influence on GHG Emissions

## 1. Historic Emissions (Local Authorities Only)

## Table 1a

Dataset	Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Units
DECC Sectors	Total Emissions	2374.30	2347.6 7	2315.36	2140.95	2298.85	2113.19	2109.85	2048.86	1867.21	1983.57	ktCO2
	Industry and Commercial	951.32	932.19	913.62	799.20	904.58	836.34	814.06	796.33	699.78	840.69	ktCO2
	Domestic	812.65	796.46	806.05	748.72	802.91	693.50	717.03	671.46	580.46	534.01	ktCO2
	Transport total	610.33	619.02	595.68	593.03	591.37	583.35	578.77	581.07	586.97	608.87	ktCO2
	Per Capita	10.75	10.48	10.20	9.36	9.96	9.08	9.06	8.80	8.01	8.47	tCO2
Other Sectors	Waste											tCO2e
	N. LULUCF Net Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		ktCO2
	Other (specify in 'Comments')											tCO2e

Table 1b

Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Units
Total Emissions	1583.73	1625.57	1418.60	1215.99	1498.82	1409.49	1586.56	1202.87	911.22	1162.54	ktCO2
Industry and Commercial	1049.08	1031.01	1003.59	888.90	997.27	941.35	917.44	903.23	791.64	937.21	ktCO2
Domestic	812.65	796.46	806.05	748.72	802.91	693.50	717.03	671.46	580.46	534.01	ktCO2
Transport	620.22	630.24	606.98	604.28	602.57	594.28	589.80	592.11	598.17	619.76	ktCO2
Per Capita	7.17	7.26	6.25	5.32	6.50	6.06	6.81	5.16	3.91	4.97	tCO2
Waste											tCO2e
Land Use (LULUCF)	-898.23	-832.13	-998.02	-1025.90	-903.92	-819.64	-637.72	-963.92	-1059.06	-928.43	ktCO2
Other (specify in 'Comments')											tCO2e

2a Targets
Please detail your wider influence targets
Table 2

Sector	Description	Type of Target (units)	Base-line year	Target / End Year	Comments

All Sectors	A carbon neutral Inverness in a low carbon Highlands by 2025	Absolute (tCO <sub>2</sub> e)	2011		The first part of a baseline emissions inventory for developing a monitoring and evaluation framework was completed in 2018.
Waste	Compliance with the Zero Waste Scotland Plan, including 70% recycling rate with less than 5% of waste going to landfill by 2025.	Percentage emissions (%)		2025	Measurement is percentage of waste being recycled, reused or sent to landfill.
Buildings	Compliance with the Scottish Housing Quality Standards and the Energy Efficiency Standard for Social Housing	Percentage emissions (%)	2015	2018	Percentage of houses complying with the new standards.
Electricity	Highland Renewable Energy Strategy and Planning Guidance	Cumulative (tCO <sub>2</sub> e)			Recognition of the need for cleaner forms of energy with minimal CO2 emissions;  • The need for energy savings and efficiency, based on cleaner energy;  • Balance between social, economic and environmental interests;  • The importance of local involvement in any renewables industry and the retention of associated wealth;  • Retention of the regional diversity, scenic qualities and local distinctiveness of landscapes;

	The importance of protecting biodiversity, including rare and endangered habitats and species; The aim of maximising employment and income; The aspiration for viable energy self-sufficiency, with a reliable supply; The need to integrate renewables within the existing energy framework; Recognition of energy poverty and the aim of eradicating it; Utilisation of the valuable, high calibre energy

2b Does the organisation have an overall mission statement, strategies, plans or policies outlining ambition to influence emissions beyond your corporate boundaries? If so, please detail in box below.

The Highland Council's programme, Local Voices, Highland Choices, commits the Council to "work with communities to mitigate against and adapt to climate change whilst raising awareness around sustaining and improving our natural, built and cultural environment."

## 3 Policies and Actions to Reduce Emissions

Table 3

Sector	Start year	Year that policy / action will be fully implemeneted	Annual CO2 saving	Latest year measured	Status	Metric / indicators for delivering progress	During project / policy design and implementation, has ISM or equivalent behaviour change tool been used?	Further details of behaviour change activity
Electricity	2014	2020	5000	2018	In implementation	Reduction in consumption from street lighting estate (kWh and CO2e)	No	
Transport	2018	2020	350	2018	In implementation	Reduction in	Yes-ISM	ISM workshops were held with staff to identify reasons for high private vehicle utilisation

				across
				organisation
				and to
				identify
				alternatives.

## 4 Partnership Working, Communications and Capacity Building

Please detail your Climate Change Partnership, Communication or Capacity Building Initiatives below.

Table 4

Key Actio n Type	Description	Action	Organisation' s project role	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comment
Education	Highland Climate Challenge Gamification tool - online portal to educate primary school pupils about impact of behaviours on climate change	Behaviour Change	Lead	Twenty Squares			Online portal for all primary schools	To be rolled out in 2018/19

Communi cations	Partnership working on climate change or sustainability	Awarenes s Raising	SNH	Highla Cound		Building and maintaining links across organisations and professionals working on environmental issues in Highland. Collaborative working to deliver relevant outcomes from the Highland Outcome Improvement Plan.	
Investme	Partnership working of climate change specifically looking at Climate Change Adaptation Projects and Land use, Food Growing and Allotments.	Partnershi p Working of Climate Change	Lead		Farmer Jones Academy, Seaboard Community Polytunnel Project, MOO Food Community Interest Company, Knockbreck & Inver Primary Schools, Broadford & Strath Community Company, & Highland LEADER Programme.	Distributing £100,000 in grant funding to Council and community groups and organisations across Highland to support projects that adapt to climate change.  Distributing £50,000 in grant funding to Council and community groups and organisations across Highland to support projects that promote food growing and benefit the community.	Funding fully committed

Partnershi p Working	Roll-out of alternatives to private vehicle usage for business purposes.	Behaviour Change	Lead	Enterprise Car Club E-Car Club			Roll-out of low carbon alternatives for staff travel	To be continued throughout 2018/19
Communi cations	Partnership working of climate change or sustainability	Awarenes s Raising	Highland Environment Network		Highland Council, SNH & others	Highland Environment Network	Dissemination of environmental information with a focus on climate change to the Highland community	
Communications	Partnership working of climate change or sustainability	Multi- organisati on Communi cation	Lead	70 signatories from public, private and third sector including. Private sector includes Inverness Caledonian Thistle FC, Tomatin Distillery, and Korrie Renewables	70 signatories from public, private and third sector including. Public sector includes SNH, Cairngorms National Park Authority, SEPA, NHS Highland and UHI.	70 signatories from public, private and third sector including. Third sector includes Sleat Community Trust, Transition Black Isle, Broadford and Strath Community Company Ltd and Isle of Eigg Trust	Declaration signatories commit to: Take action to reduce the carbon emissions from their organisations Work with signatories in the Highlands and share information to promote good practice Motivate and work with others to take action to reduce carbon emissions and adapt to the potential impacts of climate change Produce a short annual update of actions taken and progress achieved towards reducing carbon emissions, so that this good practice can be shared.	Could be refreshed in 2019/20

Investme	£250,000 match	Partnershi	Lead		Transport	Velocity Café &	The Inverness Low	To be
nt	funding towards	p working	Load		Scotland, NHS	Bicycle	Carbon and Active Travel	delivered
110	low carbon travel	of climate			Highland	Workshop	Hub will be located within	
	and transport hub	change			Tilgillariu	Workshop	the Rose Street Multi-	by Dec
	at Rose Street Car	Change						2020
	Park, Inverness						Storey Car Park. The hub	
	Park, inverness						will establish a high profile	
							EV charging hub with a	
							series of multi-use	
							electrical vehicle charging	
							points that is capable of	
							further expansion and will	
							trial innovative energy	
							supply sources and	
							storage that can act as a	
							catalyst for encouraging	
							the transition to ULEV	
							across the Highlands. The	
							project will also develop	
							an ambitious active travel	
							hub which will help	
							Inverness capitalise on its	
							position as Scotland's	
							cycling city with the	
							highest number of	
							journeys by bike. The hub	
							will provide walking and	
							cycling advice, bike hire,	
							cycling workshop and	
							support outreach	
							programmes including	
							cycle to health.	
							A secondary multi modal	
							satellite hub will be	
							located at Raigmore	
							Hospital. This will provide	
							a large bike hub for staff	
							and patients, EV rapid	
							charge points, E car club,	
<u> </u>	1		<u> </u>	l		<u> </u>	oriarge poirtes, L car club,	l

			and provide improved public transport facilities and information.	

## 5. Other Notable Reportable Activity

Please detail key actions relating to Food and Drink, Biodiversity, Water, Procurement and Resource Use in the table below

Table 5

Key Action Title	Key Action Description	Organisation's Project Role	Impacts	Comments
Biodiversity	Flow to the Future project		Caithness, including the construction of a visitors centre to promote education about	Project started July 2014 and is set to last 5 years. Revisiting an application to progress the site to be a World Heritage Site.