Agenda Item	13
Report No	EDI/75/19

HIGHLAND COUNCIL

Committee: Environment, Development and Infrastructure

Date: 7 November 2019

Report Title: Annual Report under Public Bodies Climate Change Duties, 2018/19

Report By: Executive Chief Officer Infrastructure and Environment

1. Purpose/Executive Summary

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

2. Recommendations

2.1 Members are invited to agree that the 2018/19 report is submitted as part of the mandatory reporting process under the Public Bodies Climate Change Duties.

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 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.

3.3 Community (Equality, Poverty and Rural) – There are no community implications arising from this report.

3.4 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.

3.5 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.

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

4 Background

4.1 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.

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

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

4.3 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.

4.4 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, 2019. The Council's climate change duties report for 2018/19 is attached at **Appendix 1**. The 2018/19 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.

4.5 The Highland Council declared a climate and ecological emergency on 9 May 2019; this, and the work which flows from the declaration, will be reported in the 2019/20 report next year and is therefore not covered within the narrative of this year's submission.

4.6 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.

4.7 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.

5 Report Highlights

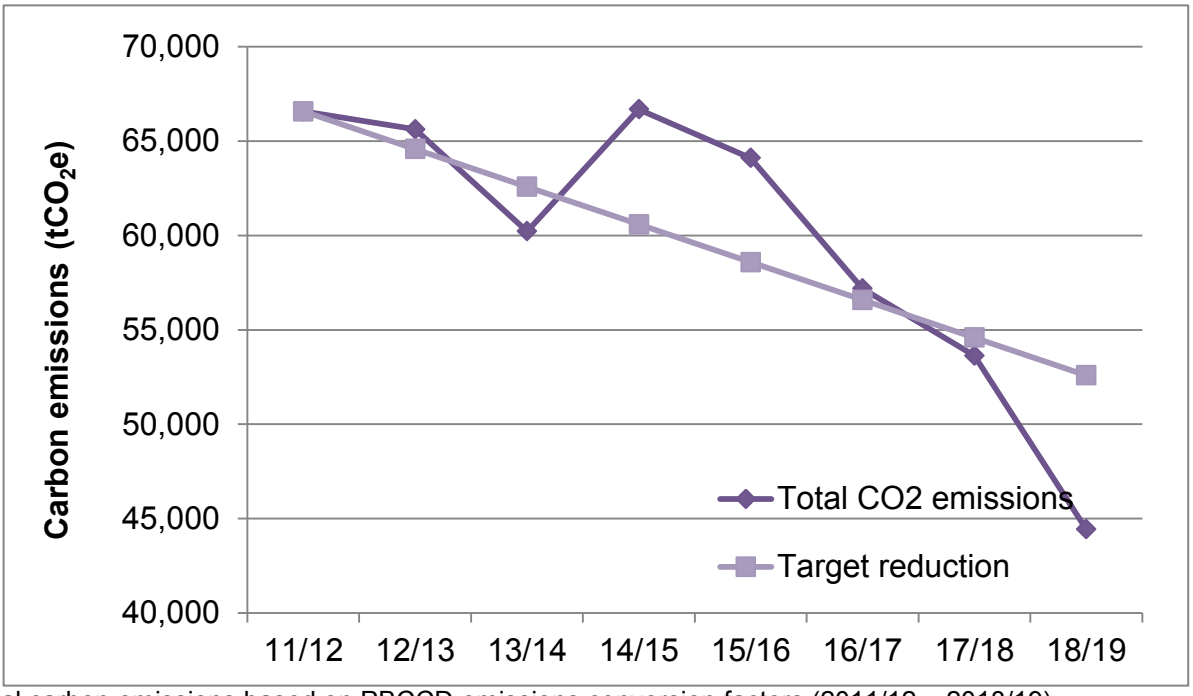
5.1 Over the course of 2018/19, the Council's total carbon footprint fell by **8,550 tonnes CO_2e** compared to 2017/18, a year-on-year reduction of **16%**. This fall can be attributed to a variety of different projects, as well as a significant reduction in the emissions conversion factor for electricity.

5.2 In order to calculate the Council's total carbon footprint each year, units such as miles, kWh, tonnes of waste or litres of fuel are converted into CO_2 equivalents (CO_2e) by using specific conversion factors taken from the Department for Business, Energy and Industrial Strategy's official greenhouse gas company database. These conversion factors are updated annually and consider changes to behaviours and technologies relating to renewables, energy efficiency, vehicle types and fuel economy. The emissions conversion factor for electricity fell from **0.38443kg/kWh** in 2017/18 to **0.3072kg/kWh** in 2018/19 – a drop of 20%. This means that the same level of electricity consumption in 2018/19 would emit 20% less CO_2e than in 2017/18.

5.3 This reduction in the carbon footprint of electricity 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 49% 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, as well as through an overall reduction in consumption across the organisation (see figs 2 and 3 below).

5.4 The graph below provides an illustration of the Council's performance in respect of carbon emissions reduction over the past few years:

Fig. 1 – PBCCD Carbon Emissions



Total carbon emissions based on PBCCD emissions conversion factors (2011/12 – 2018/19)

5.5 Whilst it is the case that a significant proportion of the Council's reduction in emissions over the past few years can be attributed to the greening of the electricity sector, several internal projects and initiatives have also significantly contributed to this. These include the following:

- the widescale replacement of oil-fired boilers with biomass boilers, which has reduced the carbon footprint from oil consumption from 11,219tCO_2e in 2011/12 to 4,824tCO_2e in 2018/19 – a 57% reduction, with a year-on-year reduction of 1,031tCO_2e;
- the replacement of sodium streetlights with LEDs. This has reduced the energy consumption from our streetlighting estate from 18.3MWh in 2011/12 to 14.8MWh in 2018/19; and
- the Grey Fleet Redesign project helped to change the way many of the Council's staff travel for business. The project has reduced the number of miles travelled by staff by 825,000 in 2018/19 compared to 2017/18, saving around £400k and reducing the corporate carbon footprint by around 400tCO_2e.

5.6 However, it must be recognised that the Council's electricity consumption remains its biggest single source of carbon emissions. It is therefore critical that the Council finds ways to either reduce its overall consumption of electricity, or to generate much more of its own renewable electricity, to meaningfully reduce emissions from this sector. Fig. 2 below details the Council's energy consumption from 2011/12 through to 2018/19, whilst Fig.3 sets out the emissions from each of these sources (biomass is excluded from the emissions table, as biomass is near carbon neutral, as the trees which are used for fuel are replanted, maintaining a continuous carbon cycle):

Fig.2 – Energy Consumption 2011/12 – 2018/19

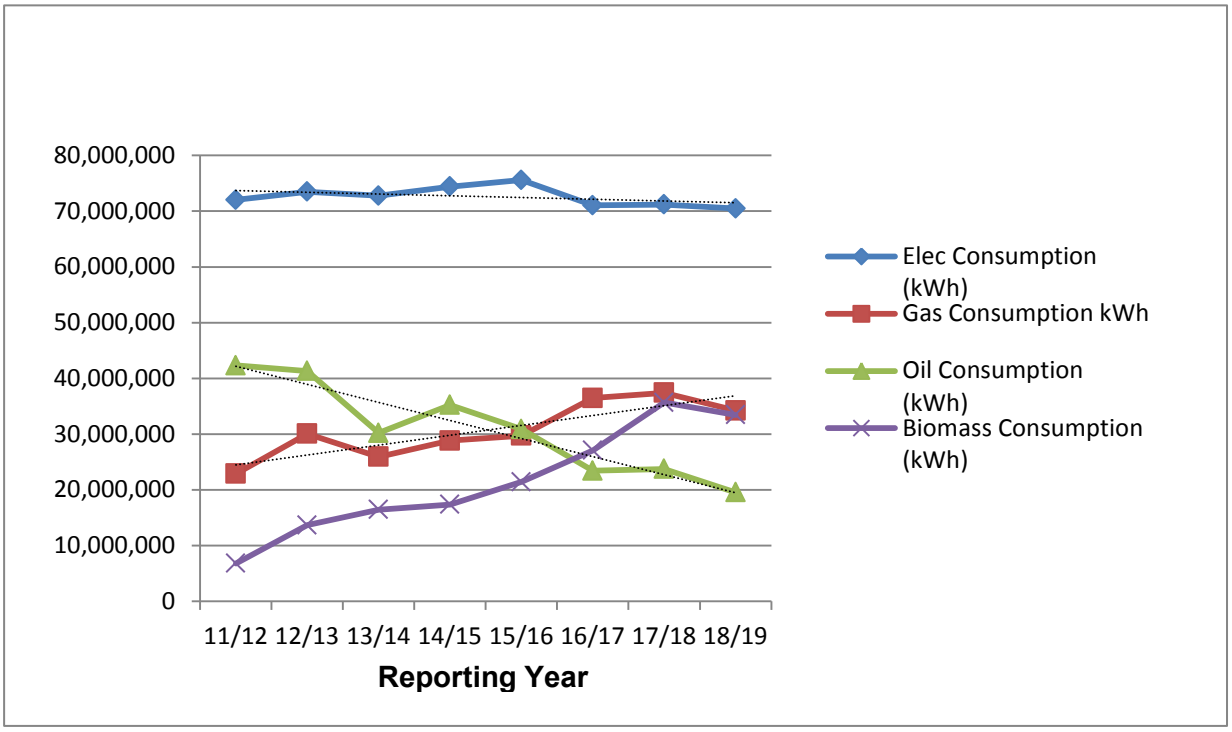
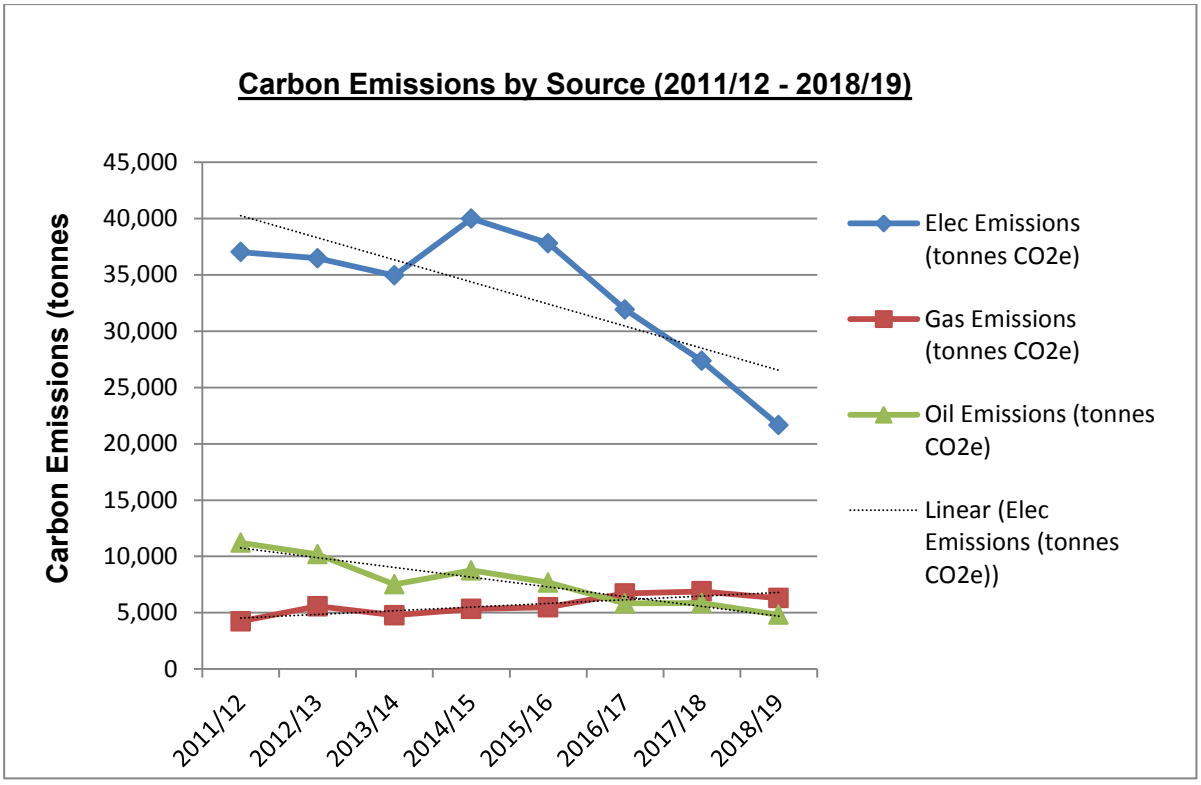


Fig.3 - Carbon Emissions by Source



5.7 Non-streetlighting electricity consumption continues to rise across the organisation (up slightly from 55.2MWh in 17/18 to 55.7MWH in 18/19), and this must be reversed to increase the pace of our carbon emissions reduction and to avoid additional costs (see fig.4 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 2019/20. The Council restructure will provide an excellent opportunity for individual Services to take more of a lead in reducing cumulative energy consumption across the Council, and the new Climate Change Plan and Energy Strategy & Action Plan will set out how this could be achieved over the coming years.

Fig. 4 – Spend related to individual sectors 2011/12 – 2018/19

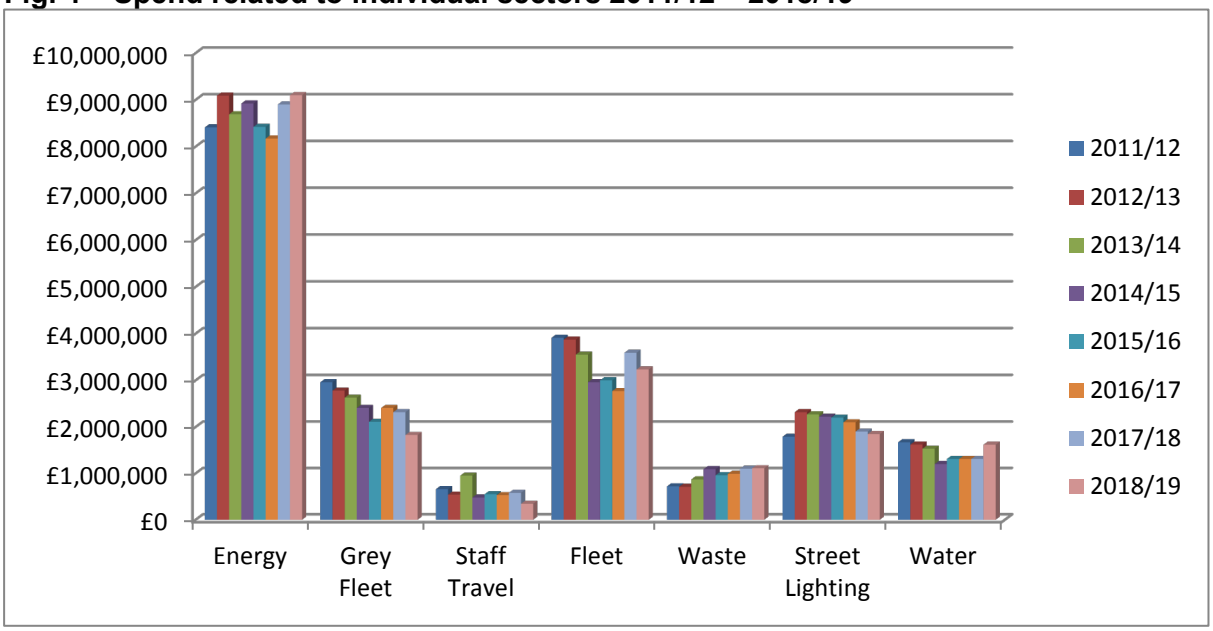
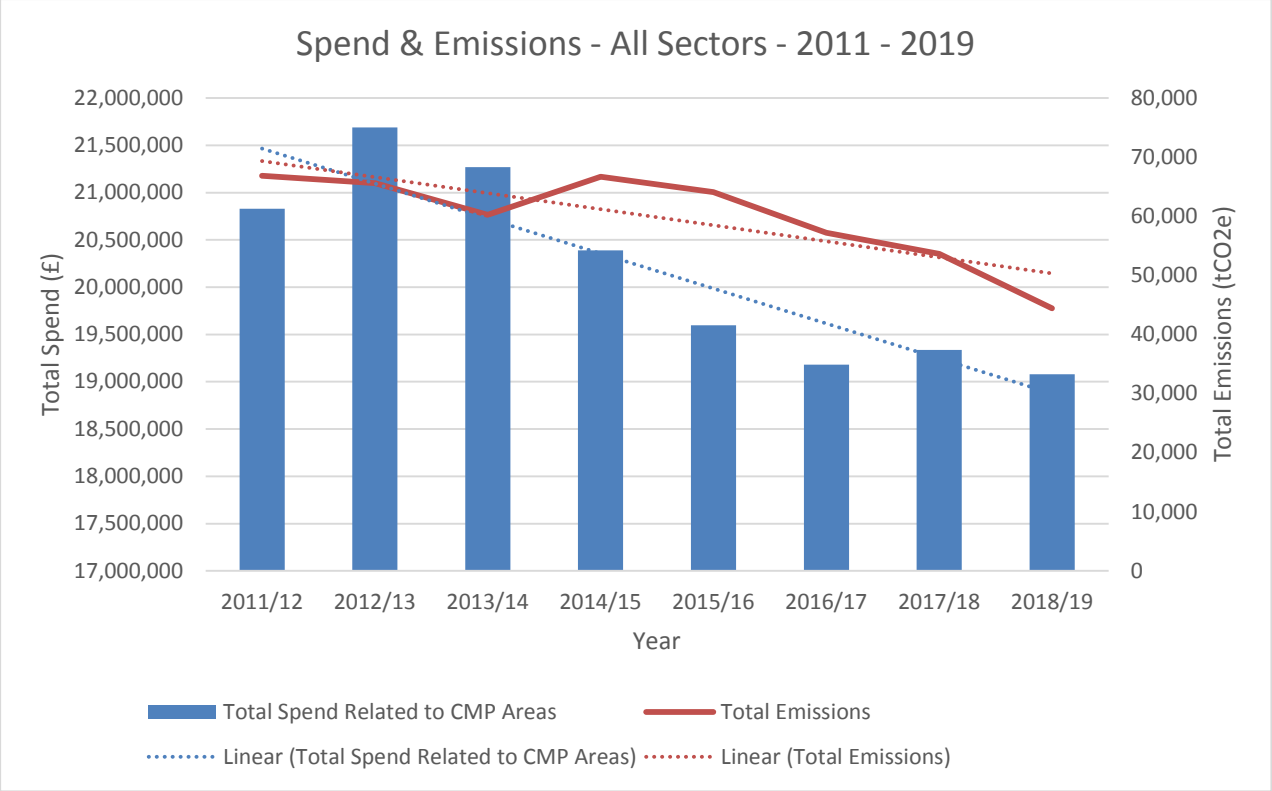


Fig. 5 – Spend & Emissions – All Sectors Total



6 National Policy Changes & Implications for The Highland Council

6.1 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. All public bodies in Scotland, including the Highland Council, are legally required to help deliver these targets.

6.2 However, in September 2019, the Scottish Parliament passed the Climate Change (Emissions Reduction Targets) (Scotland) Bill, which sets more challenging emissions reduction targets, namely:

- a 56% reduction by 2020 against a 1990 baseline; and
- a legally binding, net-zero target for all greenhouse gases by 2045.

6.3 The Scottish Government is currently consulting on plans for public sector bodies to set a date for net-zero emissions. The consultation paper also raises the question of how the public sector should align spending plans with these targets. A draft response to the consultation will be presented to the next meeting of the Climate Change Panel.

6.4 As a result of this change in legislation, and following on from the Council's declaration of a climate and ecological emergency, it is clear that the Council needs to re-examine its own targets around climate change. The Council's current carbon management plan was last revised in 2013, and will need to be either replaced or updated to reflect increased ambition and to better identify ways that the Council can support national, as well as global, climate change action. The Climate Change Panel will have a key role in shaping this document prior to a final version being presented to the Highland Council for approval.

6.5 The need for robust adaptation to climate change also becomes increasingly prudent, given the likelihood of ever more frequent and extreme weather events. 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, the Climate Change team is working closely with Adaptation Scotland and Climate Ready Clyde to develop an outline business case for a Highland-wide approach to climate change adaptation, in collaboration with Community Planning Partners. Ultimately, it is hoped that this will provide a mechanism to identify and address the key cross-cutting risks that climate change will pose in the coming years.

6.6 Nevertheless, it remains vitally important that the Council continues to do all it can to reduce its emissions, wherever feasible. Positively, many of the types of actions which are needed to limit global warming to 1.5°C are already underway at the Highland Council, but 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.

Designation: Executive Chief Officer Infrastructure and Environment

Date: 7 October 2019

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 – 7,888

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

~£571,944,000 million net revenue budget

1f Report year – 2018/19 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?

The Highland Council's programme, Local Voices / Highland Choices 2017-2022, was updated in 2018/19. Under the theme, "A Place to Live", this programme identifies a key priority to "introduce a range of strategies and plans to support our commitment to sustainability, including phasing out single use plastics from Council sites and schools and developing solutions for residual waste treatment that will meet the requirements of the ban on landfilling Biodegradable Municipal Waste (BMW) by 1st January 2021.

The Council's progress towards mitigating and adapting to climate change sits 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, Climate Conversations sessions with staff, the Step Count Challenges, behaviour change initiatives on energy saving and active travel utilising the ISM behaviour change tool, national and European campaigns (including 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.

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

Wording of objective	Name of document
Develop a new Carbon Management Plan in collaboration with partners to revise corporate emission reduction targets by December 2018	Corporate Plan
Draft a revised Highland Adaptation Strategy in collaboration with partners and communities to manage regional climate change risks by December 2018	Corporate Plan

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 document can be accessed at the following link:
https://www.highland.gov.uk/downloads/file/3232/carbon_management_plan_2013_to_2020

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 Highland	2012-2020	An outline business case is currently being developed in collaboration with Adaptation Scotland and community planning partners to scope out whether there is an opportunity for a joined-up Highland-wide approach to adaptation.
Business travel	Carbon Management Plan Travel & Subsistence Policy	2013-2020 2018 onwards	T&S policy has been updated to reflect increased ambition from Scottish Government re low carbon travel as well as 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 communication technology	Carbon Management Plan	2013-2020	As above.
Renewable energy	Carbon Management Plan	2013-2020	Onshore Wind Energy Supplementary Guidance adopted November 2016
Sustainable/renewable 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;	various	

	• 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 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.

Priority 1: Develop a new Climate Change 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.

Priority 2: Develop an outline business case (OBC) and approval for the setting up of a Highland-wide partnership approach to climate change adaptation . 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. If the OBC creates a compelling case for a Highland-wide approach, it is likely that this process would take around 3 years, based on similar partnerships across Scotland.

Priority 3: Development of an Energy Strategy & Action Plan for the Highland Council. It is recognised that energy (including street lighting) accounts for 75% of the Council's total carbon footprint, whilst costing the organisation £12.5m annually. Given that there is an expected £1m budget pressure in respect of energy in 2019/20, there is a pressing need to develop a strategy and action plan focusing on how the Council can generate its own energy, become more efficient regarding the energy it uses, whilst increasing the energy literacy of staff in order to promote positive energy behaviours.

Priority 4: Analysis / rationalisation of the Council's White Fleet: It is recognised that there are opportunities to review the Council's white fleet (vehicles under 3.5t which are used to transport either goods or people, but excluding minibuses and casual car hire) to assess levels of utilisation, actual business requirements for white fleet vehicles and improve processes in respect of the renewal of leases. The project will also address idling in white fleet vehicles.

Priority 5: Establish a governance board for climate change action at The Highland Council, with strategic oversight and input into relevant workstreams.

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 was held with the Senior Management Team in May 2018. This was a useful exercise in terms identifying priorities for a new Climate Change Plan, as well as where the organisation is performing poorly.

The Council scored relatively well in respect of governance, which reflects the commitment of the Senior Management Team and the organisation as a whole to achieving the targets set out in the CMP. In addition, systems in respect of the collation of emissions data are robust, with all statutory and voluntary reporting being up-to-date. However, it is recognised that this could be used more effectively for communication.

Carbon reduction targets are reviewed annually as part of the carbon reporting process, and this is used by the Climate Change Team in collaboration with colleagues to identify key priority areas, projects and initiatives to improve overall performance in the next reporting year. However, it is proposed that, going forward, an annual CCAT review is used to widen the scope of the performance improvement process.

There are also key strengths within the adaptation and behaviour sections. A Highland-wide approach to adaptation through the Community Planning Partnership is currently being developed, whilst the Eco Officer network will play a vital role in embedding low carbon practices in offices throughout the region.

The overall scores for emissions, behaviour and procurement were low. In preparing a new Climate Change Plan, it will be necessary to revisit overall emissions reduction targets as well as projects in the pipeline, whilst also recalculating business as usual forecasts. Developing a robust Project Register, updated regularly by key teams across the organisation, is also an important next step.

In addition, governance arrangements around carbon management will be fundamental in the new CMP to ensure progress is measured and managed more effectively across the Council. Internal communication and engagement of Members, management and staff has also been identified as a key area requiring improvement. Key successes in respect of good carbon management, with associated financial benefits, should be communicated more frequently and more effectively. This will pave the way for better staff engagement and grassroots activity through the Eco Officer network to identify and implement further carbon reduction actions.

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 2018/19, leadership on climate change issues was best demonstrated through the implementation of outcomes from a report into the Council's management 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 and 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.

Over the course of 2018/19, a variety of initiatives were launched to reduce corporate reliance on the grey fleet. These included the launch of shared-access car club vehicles at several key Council offices, an updated travel and subsistence policy with increased focus on low carbon alternatives, as well as the installation of Skype for Business on Council devices. In addition, various communications were sent to staff throughout the year, reminding them of the importance of avoiding unnecessary travel from carbon, cost and efficiency perspectives.

As a result of this work, the Council's corporate grey fleet mileage fell by over 850k miles in 2018/19, reducing our corporate carbon footprint by over 350tCO2e whilst saving the Council over £400k.

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_2e
Year 1	2012/13	25,218	38,234	4,218	67,670	tCO_2e
Year 2	2013/14	21,024	37,858	4,519	63,401	tCO_2e
Year 3	2014/15	20,847	38,722	4,274	63,843	tCO_2e
Year 4	2015/16	22,629	39,323	4,088	66,040	tCO_2e
Year 5	2016/17	20,899	36,969	4,153	62,021	tCO_2e
Year 6	2017/18	21,226	24,983	7,416	53,625	tCO_2e
Year 7	2018/19	19,849	19,946	5,281	45,076	tCO_2e

3b	**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_2e)**	**Comments**
Grid Electricity (generation)	Scope 2	55,700,506	kWh	0.28307	kg CO2e/kWh	15,767.14	Buildings
Grid Electricity (generation)	Scope 2	14,762,598	kWh	0.28307	kg CO2e/kWh	4,178.85	Street lighting
Natural Gas	Scope 1	34,243,060	kWh	0.18396	kg CO2e/kWh	6,299.35	Space heating
Burning Oil (Kerosene)	Scope 1	19,562,996	kWh	0.24665	kg CO2e/kWh	4,825.21	Space heating
Petrol (average biofuel blend)	Scope 1	79,429	litres	2.20307	kg CO2e/litre	174.99	Fleet use
Diesel (average biofuel blend)	Scope 1	2,751,497	litres	2.62694	kg CO2e/litre	7,228.02	Fleet use
Gas Oil	Scope 1	275,172	litres	2.97049	kg CO2e/litre	817.40	Winter Gritting fleet
Biomass (wood chips)	Scope 1	33,448,661	kWh	0.01506	Kg CO2e/kWh	503.74	Space heating
Water - Supply	Scope 3	499,957	m3	0.344	kg CO2e/m3	171.99	Water to all buildings.
Water - Treatment	Scope 3	449,961	m3	0.708	kg CO2e/m3	318.57	Water to all buildings.
Refuse Municipal to Landfill	Scope 3	681	tonnes	586.5	kg CO2e/tonne	399.43	Waste to landfill - non schools
Refuse Municipal to Landfill	Scope 3	1,436	tonnes	586.5	kg CO2e/tonne	842.26	Waste to landfill - schools

Mixed recycling	Scope 3	157	tonnes	21.4	kg CO2e/tonne	3.36	Recycling - non schools
Mixed recycling	Scope 3	326	tonnes	21.4	kg CO2e/tonne	6.97	Recycling - schools
Organic Garden Waste Composting	Scope 3	32	tonnes	10.3	kg CO2e/tonne	0.33	Mixed composting – non-schools
Organic Garden Waste Composting	Scope 3	144	tonnes	10.3	kg CO2e/tonne	1.48	Mixed composting - schools
Average Car – Unknown Fuel	Scope 3	5,071,557	miles	0.29072	kg CO2e/mile	1,474.40	Grey fleet mileage - based on average value as only mileage is recorded on expenses claims
Average Car – Unknown Fuel	Scope 3	827,783	miles	0.29072	kg CO2e/mile	240.65	Car hire mileage - based on average value as only mileage is recorded.
Car – hybrid (average) mileage	Scope 3	493,398	Miles	0.20227	kg CO2e/mile	99.80	Car club mileage
Bus (local bus, not London)	Scope 3	10,619	passenger km	0.12007	kg CO2e/passenger km	1.28	Coach and bus staff travel
Ferry (average passenger)	Scope 3	2,039	passenger km	0.11287	kg CO2e/passenger km	0.23	Staff travel
Short-haul flights (average passenger)	Scope 3	36,262	passenger km	0.16236	kg CO2e/passenger km	5.89	Staff travel
Rail (National rail)	Scope 3	324,093	passenger km	0.4424	kg CO2e/passenger km	14.34	Staff travel
Taxi (regular)	Scope 3	209	passenger km	0.15344	kg CO2e/passenger km	0.03	Staff travel
Grid Electricity (transmission & distribution losses)	Scope 3	55,700,506	kWh	0.02413	kg CO2e/kWh	1,344.05	Buildings

Grid Electricity (transmission & distribution losses)	Scope 3	14,762,598	kWh	0.02413	kg CO2e/kWh	356.22	Street Lighting
					Total	45,075.98	

3c Generation, consumption and export of renewable energy

Technology	**Renewable Electricity**		**Renewable Heat**		**Comments**
Technology	**Total consumed by the organisation (kWh)**	**Total exported (kWh)**	**Total consumed by the organisation (kWh)**	**Total exported (kWh)**	
Wind					6kW generating capacity
Solar PV					533.18kW generating capacity
Biomass					22.4MW generating capacity
Biogas CHP					414.5kW generating capacity.
Air Source Heat Pump					460.5kW generating capacity
Ground Source Heat Pump					287.3kW generating capacity
Solar Thermal					47.5kW generating capacity

3d Targets

List all of the body's targets of relevance to its climate change duties. Where applicable, overall carbon targets and any separate land use, energy efficiency, waste, water, information and communication technology, transport, travel and heat targets should be included.

Name of Target	Type of Target	Units	Boundary / Scope of Target	Progress Against Target	Year used as Baseline	Baseline figure	Units of Baseline	Target Completion Year	Comments	Targets
Carbon Management Plan	Annual	Annual % reduction	All emissions		2011/12	66,579	tCO2e	2019/20		
Carbon CLEVER	Absolute	Total % reduction	All emissions		2014/15			2024/25		
Grey Fleet Mileage	Absolute	£ reduction	Staff travel	£400,000	2017/18	£2,550,000	£	2021,22		£575,000

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”.

Emissions source	**Total estimated annual carbon savings (tCO_2e)**	**Comments**
Electricity	1,617	Various projects were implemented to reduce carbon emissions in this area, and these have successfully reduced consumption.
Natural gas		Projects were successfully implemented to move away from oil to this lower carbon fossil fuel.
Other heating fuels	1,031	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	1,275	A revision to the methodology used to calculate our internal waste arisings has resulted in a decrease in emissions from waste.
Business Travel	350	New ICT contract and telephony solutions including Skype for Business has reduced the requirement for business travel as users are now able to more readily utilise video conference (VC) and share documents live with colleagues and others. In addition, the Council's grey fleet project has led to the introduction of lower carbon alternatives to private vehicle use, including the roll-out of hybrid car club vehicles at various key locations.
Fleet transport	260	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 review of the Council’s white fleet as well as a Sustainable Transport Review will be undertaken in 2019/20.
Total	**4,533**	

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

Provide details of up to 10 projects implemented in the reporting year which are estimated to achieve the highest carbon savings.

Project name	Funding source	First full year of CO2e savings	Are these savings figures estimated or actual?	Capital cost (£)	Operational cost (£/annum)	Project lifetime (years)	Primary fuel/emission source saved	Estimated carbon savings per year (tCO2e)	Behaviour change aspects including use of ISM
Grey Fleet / Staff Travel Project	Revenue	2018/19	Actual	0	£180,000	3 years	Diesel & Petrol	350	ISM was used widely throughout this project to identify barriers to change, then develop interventions to overcome these.
HQ – installation of CHP	Capital	2018/19	estimated	750,000		25	Gas	30	
Inverness High School – Refurbishment & Installation of biomass boiler	Capital	2018/19	estimated	540,000		25	Gas	20	
Kingussie High School – Boiler Replacement	Capital	2018/19	estimated	333,000		25	Oil	6	
Dingwall Leisure Centre – Pool Ventilation Upgrade	Capital	2018/19	estimated	40,000		25	Gas	2	
Lochaber Leisure Centre – Air Handling Replacement	Capital	2018/19	estimated	350,000		25	Oil	2	
Inverlochy Primary – Window Replacement & ASHP	Capital	2018/19	estimated	87,000		25	Electricity	0.55	
Helmsdale Primary – Window Replacement	Capital	2018/19	estimated	150,000		25	Gas oil (kWh)	0.3	

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 (tCO_2e)	Increase or decrease in emissions	Comments
Estate changes			
Service provision			
Estate Changes			
Estate changes			

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

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Electricity	430	LED lighting upgrades through SALIX investment (£1.8m)
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 viable or available.
Other heating fuels		Upgrade of oil boilers through SALIX investment (£1m). Level of emissions savings still to be quantified.
Waste	20	The Council uses WarpIt (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 £83,000, with a 56 tonne reduction in CO2e.
Business Travel	400	Reduction in emissions from staff travel expected via reduction in overall travel, and continued shift of grey fleet mileage onto EV / petrol hybrid car club vehicles.
Fleet transport		Route optimisation, more efficient vehicles and equipment. A review of the Council's white fleet is currently underway, which it is hoped will reduce the overall size of the fleet whilst converting vehicles to hybrids / EVs wherever feasible.
ICT Equipment		Rollout of more efficient ICT software and equipment, including Skype for Business, across the estate starting 2018/19.

Total	**850**	

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_2e)	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.

3j 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 (tCO_2e)	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 2018/19. There are now multiple systems in place, generating an income of approximately £1.8m 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 2018/19, with the Council conducting climate conversations sessions with staff at multiple locations, whilst participating in a number of national and international schemes and campaigns. This includes being 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 2018/19 and will renew and refine efforts in 2019/20, largely through our Eco Officer network, which continues to grow following a relaunch in January 2018.

4 Adaptation

4a Has the body 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 UKCP18 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 is currently working with community planning partners to develop a place-based approach to adaptation in Highland, with the working title *Highland Adapts*.

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/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. Highland Council Resilience structures, along with those of partner agencies within the Highlands & Islands Local Resilience Partnership actively prepare for severe weather events, training key staff, and have activated these special arrangements to protect the public, property and the environment. 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 have engaged in community resilience planning. Individual resilience, in the event of significant impacts arising from severe weather events, has been promoted through Corporate Communications. In the aftermath of pluvial flooding in Dingwall, warning and informing for flooding events has been updated.

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 fall 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 Council's Access Team safeguards access and implements access related projects across the Highlands. They deal with climate change adaptation on regular basis, for example, and where relevant, 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 UKCP18 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.

4d Where applicable, what progress has the body 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 body is listed in the Programme as a body 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 body in delivering each policy or proposal in the report year.

(a) This refers to the programme for adaptation to climate change laid before the Scottish Parliament under section 53(2) of the Climate Change (Scotland) Act 2009 (asp 12) which currently has effect. The most recent one is entitled "Climate Ready Scotland: Scottish Climate Change Adaptation Programme" dated May 2014.

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	Interim reports due to be published in 2019/20.
			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

Objective	Objective reference	Theme	Policy ref.	Delivery progress made	Comments
Sustain and enhance the benefits, goods and services that the natural environment provides.	N3	Natural Environment			
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 provided.	B3	Buildings and infrastructure networks	B3-3	Highland-wide Local Development Plan (adopted 2012)	Being updated following public consultation.
			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 72% compliant with EESSH. The Council invested £4.6m in 2018/19 towards improving the energy efficiency of its housing stock and is planning to

Objective	Objective reference	Theme	Policy ref.	Delivery progress made	Comments
					spend an additional £12.1m in 2019-21.
			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.	
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	S3	Society	S3-6	The Resilience Team in collaboration with emergency responders has put in	These evaluations are not specifically about climate related risk, but are

Objective	Objective reference	Theme	Policy ref.	Delivery progress made	Comments
responders to enable them to respond effectively to the increased pressures associated with a changing climate.				place a comprehensive evaluation strategy to assess performance after each training exercise/ event.	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 UKCP18 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?

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. Following discussions and workshops with Community Planning Partners, it is clear that a place-based, region-wide approach to adaptation is required to meaningfully address the risks of a changing climate and protect service delivery. To this end, a strategic business case will be developed in consultation with partners throughout 2019/20.

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 contributed 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. Accompanying guidance and overarching policies provide strategic and practical guidance at every stage: identification of need, specification development, selection/award and contract management. Policies/guidance assist procurers to proactively address the three key aspects of the duties: mitigation (ensuring reduction in greenhouse gases/enhancing carbon storage), adaptation (e.g. flood prevention) and maximising added social, economic and environmental value in our own procurements national frameworks call offs.

The Commercial and 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 (balance of quality, cost and sustainability) ii) The National Performance Framework 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”

Our 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.” This converges with the National Performance Framework outcome re “valuing, enjoying, protecting and enhancing our environment” and wider vision for the environment.. Policy/strategy/guidance emphasises a commitment (beyond mandatory/regulated thresholds) to identify: “leverage opportunities (including social, economic and environmental value) aligned to the needs and priorities of our communities”
Policy

“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 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 statement appears prominently in sourcing strategies and tender documentation guiding procurers and bidders. Communication of these priorities leads to climate change; adaptation/mitigation and sustainable procurement measures receiving considered, proactive focus. This leads to higher quality, innovative responses from bidders aligned to local priorities and climate change/adaptation duties.

Policy/guidance explains not all sustainability measures are best or solely achieved through community benefits. Some measures (particularly environmental/energy related) can be specified as contractual conditions e.g. that a product is made of particular materials or manufactured to a particular eco standard. Methods of production, lifecycle costing, environmental performance and reduction of packaging (particularly single use plastic) is promoted e.g: environmental/emissions/climate performance levels; legislation or regulatory standards (e.g Equalities, Climate Change (S) Act 2009); waste water standards/accreditation and production processes/methods at any stage of the life cycle of supply or service.

Guidance cites the following illustrative example:

“In a contract involving the delivery of goods, possible to address environmental considerations such as the emissions class of vehicles, reduced packaging /reduced plastic content of packaging or effective route planning (all of which would serve to reduce harmful emissions and improve “environmental wellbeing).”

Zero Waste Scotland Specification Development (Category and Commodity) guidance is promoted. Sustainable procurement measures achieved in the specification regarded as “community benefits” and procurers are encouraged to consider utilising community benefits and the specification to maximise environmental wellbeing.
Sustainability tools are promoted in policy and guidance: i) Sustainability Test, ii) Prioritisation Tool and iii) Lifecycle Impact Mapping. As with procurement strategy, linkages to The Scottish Model of Procurement; The National Performance Framework and Local Outcome Improvement Plans.

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/ethically sourced goods/carbon emission reduction.) Guidance prompts that many national strategic objectives are addressable locally (employment & skills, Real Living Wage, health and wellbeing, poverty, biodiversity, reduced road miles/reduced carbon emissions etc.)

To simplify, sustainable procurement strongly recognised 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.

Guidance promotes the FairTrade Resolution. “FairTrade” can be specified as representing required standards without further enquiry. As with any trading label, to avoid inadvertent discrimination to bidders, alternatives must be offered to meet the standard without accreditation. Guidance covers compliant use of trading labels and “equivalency”.

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

The following represent illustrative samples of procurement activity i) delivering a reduction in CO2 ii) improving energy efficiency and iii) incorporating meaningful sustainability criteria:

Construction – follows 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 extent per project. Strong ethos that value for money demonstrated by whole of life costing/best price-quality ratio. Current and future climate risks factored into procurement processes where relevant to safeguarding assets/infrastructure and communities .

Electric Vehicles – The Highland Council continues to expand the fleet and network of electric vehicles and additional charge points. New grant funding has been secured from Transport Scotland for additional charge points across the region and Switched on Fleets funding is being used to procure and provision new electric and petrol hybrid cars at key locations.

National Frameworks
Through participation in User Intelligence Groups (UIGs), the Council works in close collaboration with Scotland Excel (SXL) to improve sustainability credentials in the development of new national frameworks. A comprehensive sustainability test is carried out by SXL for each new framework. Amongst other considerations, the bidder's policies on managing waste, minimising carbon footprint, fair work practices, innovation and commitments to delivering meaningful community benefits are routinely explored and subject to robust contract/supplier management.
The Council makes extensive use of national frameworks (particularly SXL.) The SXL Contracts Register lists each operative SXL framework. In most cases the SXL Contracts Register contains a summary of sustainability considerations. These considerations represent a minimum standard which can (where options allow) be enhanced through purchasing decisions made in "call offs" from the framework…some illustrative examples below:

- 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.

Scottish Government Frameworks and Contracts cover a range of goods and services and can be used by central government and the wider public sector (e.g. Stationery and office paper) In many cases, sustainability credentials are summarises

Utilities

- Electricity - Promoting greener power: option of Renewable Energy Guarantee of Origin (REGO) certificates at a fixed rate; range of Energy Efficiency Services available as additional services 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, sustainable procurement/community benefits approaches continue to evolve and improve guiding sustainable procurement activity at strategic and operational levels, contributing directly to Council commitments under the Scottish Climate Change Declaration. The approach provides procurers and suppliers with a clear, compliant, ideas-driven framework to work consistently within. A list of 14 community benefit types has been developed to ensure meaningful, proportionate and relevant community benefit outcomes are incorporated and maximised.

1) Fair Work Practices/Real Living Wage 2) Equalities 3) 3rd Sector Support (Community Timebank) 4) Apprenticeships 5) Placements 6) Qualifying the Workforce 7) School visits 8) Curriculum support (schools/universities/colleges) 9) Employability engagement activities 10) Supplier development/Subcontracting Opportunities 11) Innovation/Case Studies 12) Prompt payment 13) Local Economic Development measures 14) Environmental measures

In the reporting period, a 15th community benefit is in development that relates to suppliers promoting adoption and fostering and reporting positive outcomes. Community Benefits Performance for 2017/2018 is contained in Highland Council Procurement Annual Report (Section 3 Pages 9-12) The themed approach to community benefits first described in the 2015/16 return continues to evolve and improve in close alignment to the Highland Outcome Improvement Plan and National Performance Framework..

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. During the reporting period, there has been increasing incorporation of community benefit clauses promoting the Council’s leadership role, the duties and a general (proportionate) obligation to co-operate with the Council as required.

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.

Go Award
In October 2018, C&PSS secured “Highly Commended” status in the Scottish “Go Awards” (social and community benefit in procurement in procurement category) in a submission relating to Aberdeen City Council. The submission is illustrative of the innovative approach to maximising social, economic and environmental impact through procurement activity. In addition to the physical build, the project aimed to deliver the

community's consensus vision (through co-design) to improve community wellbeing and positively address socio-economic inequality in a priority regeneration area. As a shared procurement service, Aberdeenshire Council and The Highland Council will benefit from good procurement practice in this area in addition to sharing good practice at a national level.

Effective Collaboration/Partnership Working

In the reporting period C&PSS has worked in close collaboration with sustainability colleagues on a number of initiatives e.g Single Use Plastics Strategy and Action Plan (approved Nov 18). Highland Council is the first local authority in Scotland to develop a holistic strategy and action plan to reduce the consumption of single use plastics from its sites and schools, and the wider community.

As a shared procurement service it has been possible to facilitate meaningful collaboration between counterpart sustainability/climate change teams in Aberdeenshire Council on initiatives and good practice such as Resources and Circular Economy Commitment.

C&PSS has strengthened close partnerships with community planning partners, local third sector interface organisations and Senscot to raise awareness of and capability within the 3rd sector re sustainable procurement/community benefits. Closer ties with the 3rd sector identifies areas where there might be an active role for community planning partners; 3rd sector organisations and our communities to shape, support or deliver requirements. The approach to community benefits relies on identifying potential sources of financial and local practical support to assist suppliers in the delivery of social value. If this converges with the social purposes of a 3rd 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 3rd sector, this allows increased scope for procurers and suppliers to address increasingly meaningful "environmental wellbeing" measures.
The Council's approach/strategy has secured supportive feedback from The Scottish Government, Ready for Business, Sustainable Procurement Limited, Scotland Excel, Senscot, Ready for Business, 3rd Sector Interfaces and Social Enterprises.

6 Validation and Declaration

6a Internal validation process

Corporate emissions data is compiled by a variety of 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.

6d **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:	07/10/2019

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	2347.67	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_2e)	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, re-used 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_2e)			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

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

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.

NA

3 Policies and Actions to Reduce Emissions

Table 3

Sector	Start year	Year that policy / action will be fully implemented	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	2019	In implementation	Reduction in consumption from street lighting estate (kWh and CO2e)	No	
Transport	2018	2020	350	2018	In implementation	Reduction in staff travel (mileage and CO2e)	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 Action Type	Description	Action	Organisation's project role	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Communications	Partnership working on climate change or sustainability	Awareness Raising	SNH		Highland Council		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.	
Partnership 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

Key Action Type	Description	Action	Organisation's project role	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Communications	Partnership working of climate change or sustainability	Awareness 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-organisation Communication	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
Investment	£250,000 match funding towards low carbon travel and transport hub at Rose Street Car Park, Inverness	Partnership working of climate change	Lead		Transport Scotland, NHS Highland	Velocity Café & Bicycle Workshop	The Inverness Low Carbon and Active Travel Hub will be located within the Rose Street Multi-Storey Car Park. The hub will establish a high profile EV charging hub with a series of multi-use	To be delivered by Dec 2020

Key Action Type	Description	Action	Organisation's project role	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
							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, 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	Supporting	Restoring Flow Country peatlands in Caithness, including the construction of a visitors centre to promote education about the importance of peatlands.	Project started July 2014 and is set to last 5 years. Revisiting an application to progress the site to be a World Heritage Site.