Agenda Item	5.
Report No	CCC/3/23

HIGHLAND COUNCIL

Meeting:	**Climate Change Committee**
Date:	**16 March 2023**
Report Title:	**Annual Report under Public Bodies Climate Change Duties, 2021/22**
Report By:	**Interim Chief Executive**

1 Purpose/Executive Summary

1.1 This report is The Highland Council's Public Bodies Climate Change Duties Report for 2021-22. The report is produced annually and is a mandatory requirement of all public bodies.

2 Recommendations

2.1 Members are asked to note the Highland Council's return submitted for reporting year 2021-22 under the Public Bodies Climate Change Duties.

3. Implications

3.1 **Resource** - the amendments to the reporting requirements as outlined within this report require the Council to better align its spending and use of resources to contribute to reducing emissions.

3.2 **Legal** - Public sector bodies are legally required to reduce greenhouse gas emissions and support Scotland's adaptation to a changing climate. They are also legally required to report annually on their greenhouse gas emissions and what they are doing to help adapt to a changing climate. The detail of the legal requirements are set out in section 4.

3.3 **Community (Equality, Poverty and Rural)** – the commitment to a Just Transition will form a major consideration in forming the evidence-based approach to our reporting.

3.4 **Climate Change** - Consistency and clarity in the reporting of our carbon reductions will provide the evidence base for the delivery of the climate change strategy and delivery plan.

3.5 **Risk** –Failure to proactively address the climate and ecological emergency across all service delivery carries significant reputational risk, particularly considering the political ambition at both local and national level around the climate change agenda. In addition,

failure to take a proactive approach to climate change action will necessarily limit opportunities to secure external funding.

The current process for collating emissions data is cumbersome with data collected manually from various teams across the Council this means it is subject to human error with potential for data to be missed or incorrectly input/calculated. Additionally, the current process does not allow for live reporting. As detailed in this report, work is currently underway in conjunction with both Aberdeen City and Aberdeenshire to adopt data reporting software which will allow both the reporting and management of total corporate emissions to be reported in a more detailed and consistent manner.

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

4 Background

4.1 The Climate Change (Scotland) Act 2009 is a statutory framework for greenhouse gas emissions reductions in Scotland. Included within the Act are the following requirements on public bodies in the exercising of their functions:

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

4.2 In 2015, the Scottish Government introduced an Order under the Act requiring all public bodies to submit an annual report detailing their compliance with the climate change duties detailed above.

4.3 In September 2019, the Scottish Parliament passed the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, which sets more challenging emissions reduction targets, namely: -

- a 75% reduction by 2030 against a 1990 baseline.
- and a legally binding, net-zero targets for all greenhouse gases by 2045 ('Net Zero' refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere).

4.4 To ensure and monitor compliance with these revised targets, the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 ("the Order") came into force from November 2020. This order requires public bodies to include the following information in our annual reports, for reporting periods commencing on or after 1st April 2021: -

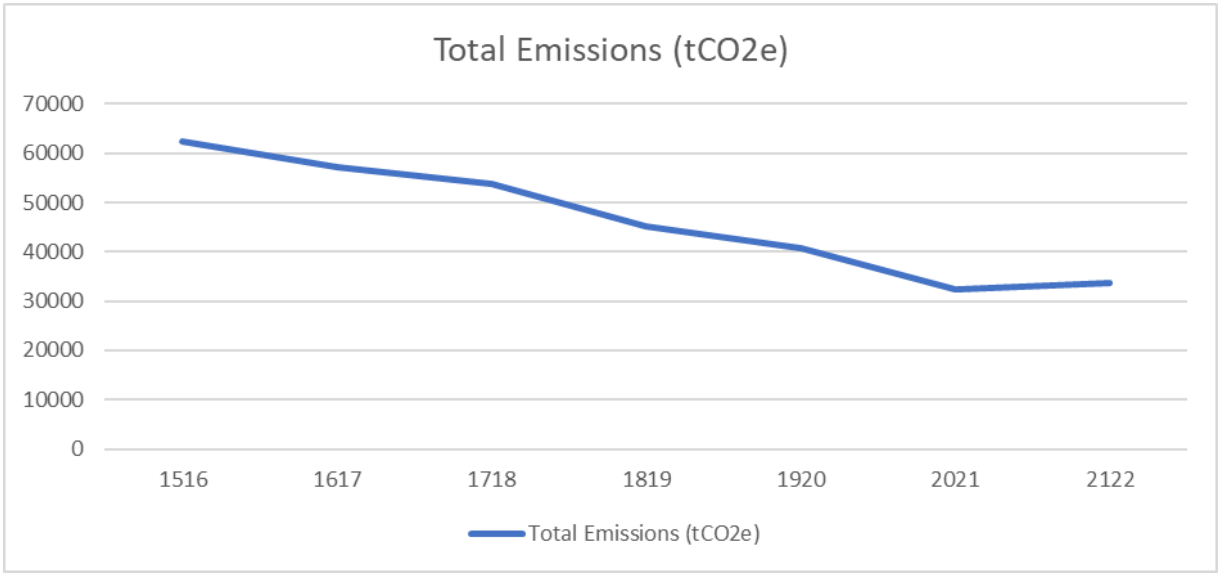
- where applicable, a target date for achieving **zero direct emissions** of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets.
- where applicable, any targets **for reducing indirect emissions** of greenhouse gases.
- how the body **aligns its spending plans and use of resources** to contribute to reducing emissions and delivering its emissions reduction targets.
- how the body will publish, or otherwise make available, its **progress towards achieving its emissions reduction targets**; and
- how the body is **contributing to Scotland's Adaptation Programme**

4.5 This report provides an update to the Scottish Government on how The Highland Council is

performing in respect of its duties and was submitted by the report deadline of 30 November 2022. The Council's climate change duties report for 2021/22 is attached at **Appendix 1**.

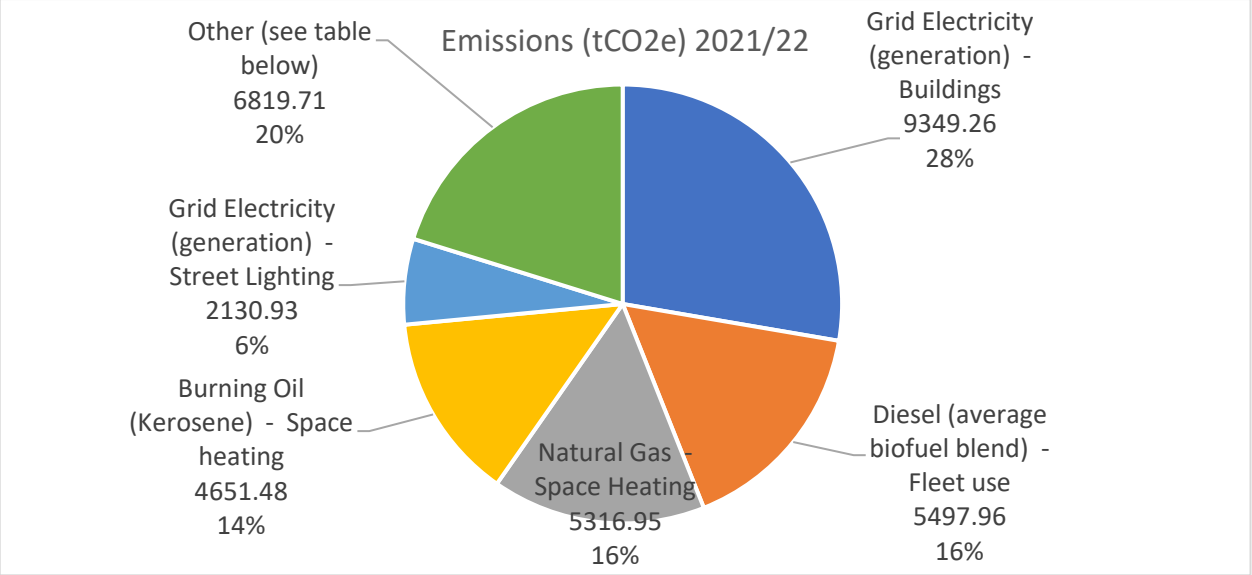
5 Report Highlights

5.1 Over the course of 2021/22, the Council's total carbon footprint **increased** by **1,369 tonnes CO2e** compared to 2020/21, a year-on-year increase of **4.2%.** It should however be noted that emissions from the Corran Ferry have been included to the most previous PBCCD return but were not previously reported on. Omitting the data from the Corran Ferry results in a year-on-year increase of **1.6%** compared to 2020/21, an increase of **512.6 tonnes CO2e**.



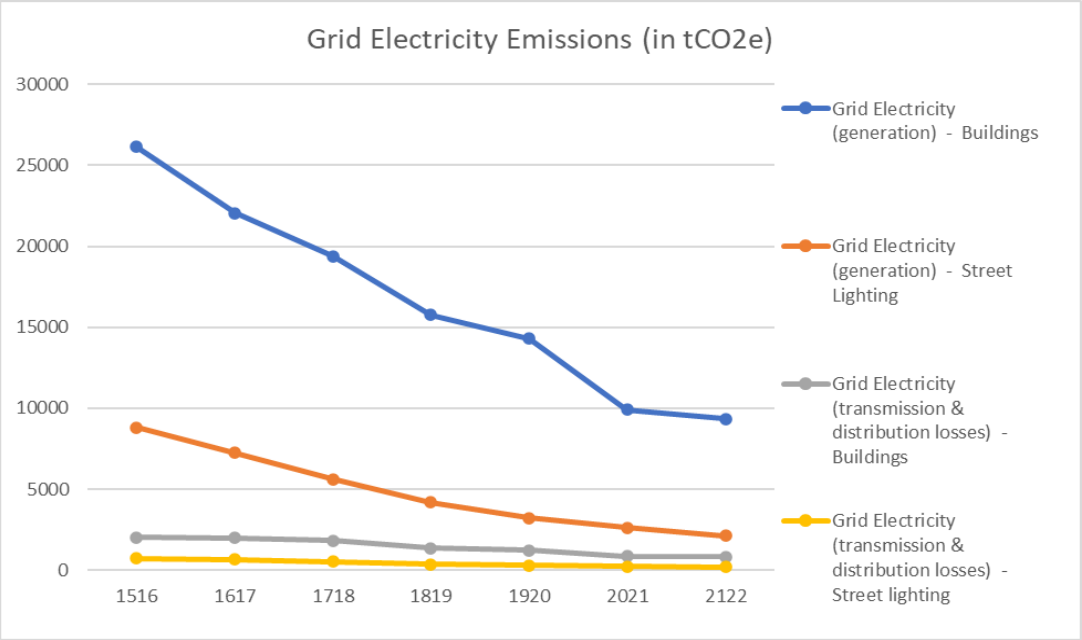
5.2 To calculate the Council's total carbon footprint each year, units such as miles, kWh, tonnes of waste or litres of fuel are converted into CO_2 equivalents (CO_2e) by using specific conversion factors taken from the Department for Business, Energy & Industrial Strategy's official greenhouse gas 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. For example, the emissions conversion factor for electricity fell from **0.233kgCO2e/kWh** in 2020/21 to **0.212kgCO2e/kWh** in 2021/22 – a drop of **9%**. This means that the same level of electricity consumption in 2021/22 would emit **9%** less CO_2e than in 2020/21.

5.3 The carbon emissions are segregated into elements/activities. The **top 5** contributors to carbon emissions within this reporting year account for **80%** of the overall figure, as seen in the following chart.



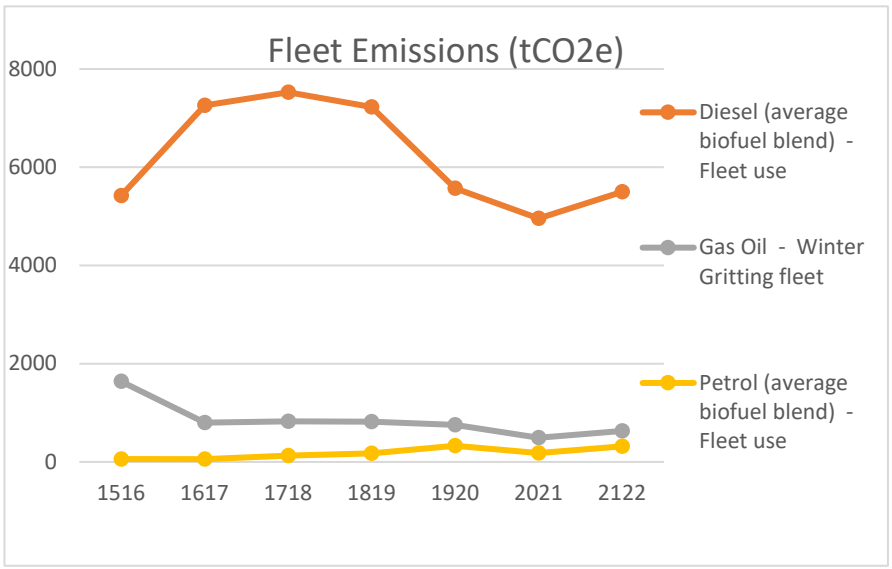
Element (Other)	Emissions (tCO2e)	% Of Total
LPG litres - LPG Off grid gas alt.	860.49	2.55%
Marine Gas Oil litres - Corran Ferry	856.35	2.54%
Grid Electricity (transmission & distribution losses) - Buildings	827.36	2.45%
Hybrid/Homeworking emissions -	820.31	2.43%
Refuse Municipal to Landfill - Waste to landfill – schools	664.90	1.97%
Gas Oil - Winter Gritting fleet	630.89	1.87%
Biomass (Wood Pellets) kWh - Space heating	556.44	1.65%
Average Car - Unknown Fuel - Grey fleet mileage	454.78	1.35%
Petrol (average biofuel blend) - Fleet use	318.11	0.94%
Refuse Municipal to Landfill - waste to landfill - non-schools	290.95	0.86%
Grid Electricity (transmission & distribution losses) - Street lighting	188.58	0.56%
Car - hybrid (average) miles - Car club mileage	126.38	0.37%
Water - Treatment - Water to all buildings	109.25	0.32%
Water - Supply - Water to all buildings	62.06	0.18%
Average Car - Unknown Fuel - Car hire mileage	33.38	0.10%
Mixed recycling - Recycling – schools	7.69	0.02%
Mixed recycling - recycling - non-schools	3.29	0.01%
Rail (National rail) - Staff travel	2.71	0.01%
Bus (local bus, not London) - Coach and bus staff travel	1.65	0.00%
Short-haul flights (average passenger) - Staff travel	1.27	0.00%
Organic Food & Drink Composting - organic food waste - schools	0.97	0.00%
Organic Garden Waste Composting - schools mixed composting	0.93	0.00%
Ferry (average passenger) - staff travel	0.46	0.00%
Organic Garden Waste Composting - Mixed composting - non-schools	0.30	0.00%
Organic Food & Drink Composting - organic food waste - non-schools	0.21	0.00%
Taxi (regular) passenger km - Staff travel	0.00	0.00%

5.4 The 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. Electricity consumption (including street lighting, as well as transmission and distribution losses) accounts for around **37%** 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).



Although emissions from grid electricity in buildings fell by **549 tCO2e** within 2021/22, it should be noted that consumption has in fact **risen** by **3.7%** in comparison to our 2020/21 report return (likely to have been impacted by staff returning to the workplace post Covid). Electricity consumption remains the biggest single source of carbon emissions and the area which requires most work if the organisation is to achieve net zero emissions in the future. Given that the cost of electricity continues to increase year on year, it is critical that the Council finds ways to either reduce its overall consumption of electricity, or to generate much more of its own renewable electricity.

5.5 Accounting for **19%** of the most recent PBCCD return, Fleet can be seen as the second largest contributor of emissions recorded. When this is combined with staff travel (grey fleet, car club and public transport) this equates to a **21%** share of the total emissions reported on. In analysis of diesel, petrol, and gas oil (red diesel) used within fleet operations, a **39% increase** can be seen on last year's PBCCD return. This is attributed to increases in all elements of fuel used – Diesel **+12%,** Petrol +**75%** and Gas Oil **+28%** from 2020/21 to 2021/22.



5.6 It can be assumed that the large increases seen within the majority of fleet and staff travel sectors can be attributed to the relaxation of travel restrictions which were in place throughout the Covid-19 pandemic, however steps should be taken in to reducing fleet and travel consumption to reduce both carbon emissions and cost, given the rising fuel costs. A gradual switch to greener vehicles (electric, hybrid and hydrogen) should result in lower emissions and running costs, however this should not solely be relied on to realise full benefits. Reduction of travel through advances in ICT, route optimisation and controls over non-essential travel are likely to have the largest positive impact within this area, however further analysis should be made into staff behaviours and use of fleet vehicles to maximise efforts into this decrease.

Emissions (tCO2e) % of Annual Report Total	1516	1617	1718	1819	1920	2021	2122
Diesel (average biofuel blend) - Fleet use	8.7%	↑ 12.7%	↑ 14.0%	↑ 16.0%	↓ 13.7%	↑ 15.3%	↑ 16.3%
Average Car - Unknown Fuel - Grey fleet mileage	3.1%	↑ 3.4%	↓ 3.3%	↓ 3.3%	↓ 2.6%	↓ 1.1%	↑ 1.3%
Gas Oil - Winter Gritting fleet	2.6%	↓ 1.4%	↑ 1.5%	↑ 1.8%	↑ 1.9%	↓ 1.5%	↑ 1.9%
Average Car - Unknown Fuel - Car hire mileage	0.5%	↑ 0.5%	↑ 0.6%	↓ 0.5%	↓ 0.3%	↓ 0.0%	↑ 0.1%
Petrol (average biofuel blend) - Fleet use	0.1%	↑ 0.1%	↑ 0.2%	↑ 0.4%	↑ 0.8%	↓ 0.6%	↑ 0.9%
Car - hybrid (average) miles - Car club mileage	0.0%	– 0.0%	– 0.0%	↑ 0.2%	↑ 0.3%	↓ 0.1%	↑ 0.4%
Rail (National rail) - Staff travel	0.0%	↑ 0.0%	↑ 0.0%	↓ 0.0%	↑ 0.1%	↓ 0.0%	↑ 0.0%
Short-haul flights (average passenger) - Staff travel	0.1%	↑ 0.1%	↓ 0.0%	↓ 0.0%	↑ 0.0%	↓ 0.0%	↓ 0.0%
Bus (local bus, not London) - Coach and bus staff travel	0.0%	↓ 0.0%	↑ 0.0%	↓ 0.0%	↑ 0.0%	↓ 0.0%	↑ 0.0%
Ferry (average passenger) - staff travel	0.0%	↓ 0.0%	↑ 0.0%	↓ 0.0%	↑ 0.0%	↓ 0.0%	↑ 0.0%
Taxi (regular) passenger km - Staff travel	0.0%	↓ 0.0%	↑ 0.0%	↑ 0.0%	↓ 0.0%	↓ 0.0%	– 0.0%
Total	15.1%	18.3%	19.8%	22.3%	19.8%	18.7%	20.9%

6 Forward look

6.1 To date, the Council has not set a target for achieving net zero. Consideration of appropriate targets for direct and indirect emissions is a very high priority for the Council and is being addressed through the development of the Council's Net Zero Strategy.

6.2 Reporting has previously focused largely on Scope 1 direct operational emissions arising from sources owned or controlled by the Council e.g., emissions from boilers and fleet

vehicles and Scope 2 indirect emissions from the generation of purchased energy used by the Council e.g., the Council has control over the use of this energy, but the emissions generated from its production are created elsewhere.

6.3 As outlined in this report, public bodies are now required to report in their PBCCD Annual Report, where applicable, targets for their indirect emissions. This covers Scope 2 emissions from purchased electricity and heat and all other indirect Scope 3 emissions in the organisation's value chain.

6.4 Work is currently underway to develop a revised baseline for the Council. This data will direct the evidence-based approach in the development and delivery of a defined route map to net zero, allowing the Council to target carbon releases in a structured way to reduce emissions year on year leading to net zero.

6.5 The Shared Procurement Service has commissioned a supply chain and carbon analysis study. Artificial intelligence software will be used to undertake a full analysis of supply chain emissions at a granular level and to identify carbon 'hotspots' for Highland Council, Aberdeen City Council and Aberdeenshire Council. This will help the three local authorities to focus effort to deliver the most positive outcomes including working in collaboration with prioritised suppliers and contractors to identify how emissions could be reduced.

6.6 Work is currently underway in conjunction with both Aberdeen City and Aberdeenshire to adopt ESG (Environmental, Social & Governance) and sustainability data reporting software that is built across four key pillars: Responsible Procurement, Environmental Management, People, Health & Diversity and Community Engagement & Partnering.

6.7 The Council has agreed on an evidence-based approach in to minimising carbon emissions, and additional resource has now been in place since November 2022. As part of future reporting, additional analysis will take place to supplement results within the PBCCD report as well as any other areas identified through scrutiny of these findings.

6.8 It should be considered that a decrease in emissions should result in decreased expenditure, and so where this information is available, the Climate Change team will include this within their findings. A strategic approach should be developed upon this, with analysis into initial cost against whole life or projected cost savings.

Designation:	Interim Chief Executive
Date:	6 March 2023
Author:	Andrew Morgan, Climate Change Coordinator (Data) Fiona Daschofsky, Project Manager Neil Osborne, Climate Change & Energy Team Manager
Background Papers:	Appendix 1 - Annual Report under Public Sector Climate Change Duties, 2021/22

Appendix 1

Annual Report under Public Sector Climate Change Duties, 2021/22

1 Organisational Profile

1a Name of reporting body

The Highland Council

1b Type of body

Local Authority

1c Highest number of full-time equivalent staff in the body during the report year

8,286

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

£690,226,000

1f Report type

2021/22 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 education, leisure facilities, waste collections and social and welfare services.

The Highland Council area extends over an area of 26,484 square kilometres. This is 33% of Scotland's landmass and 11.4% of Great Britain.

The Highland Road network extends to approximately 7,000 miles. The population is estimated to be 235,180 in 2019 and, at 9 persons per square kilometre, Highland is sparsely populated compared with other Local Authority areas.

Approximately 15% of Highland is forested, including over 300,000 hectares of commercial forest. The length of the coastline, including islands (low water) is 4,905 kilometres (49% of Scotland).

The Highland coastal zone is home to the majority of the region's population, most of which is concentrated around the Inner Moray Firth, but which also includes widely scattered crofting communities on the north and west coasts. The coast is utilised in many different ways, including tourism, fishing, agriculture, aquaculture, residential and commercial use. It is also known internationally for its landscapes and wildlife.

2 Governance, Management and Strategy

2a How is climate change governed in the body?

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.

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 gathered evidence, presented regional information, and equipped 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. Throughout 2020/21, considerable progress has been made in respect of the establishment of a regional, place-based partnership approach to climate change adaptation - Highland Adapts – including the development of a 3-year operational plan and funding for a dedicated Project Manager. This initiative will bring organisations from across the region together to develop a unique approach to adapting to climate change. The initiative will be jointly resourced and rooted in a deep understanding of the needs and priorities of local communities, including the climate risks they face. The initiative will develop a robust evidence base that will be used to develop a shared adaptation strategy and action plan which will embed action to adapt across organisational, community and sector plans, strategies, and investments.

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)

During 2020/21, the Council's progress towards mitigating and adapting to climate change was monitored through the Economy & Infrastructure Committee and the Climate Change Working Group, whilst each report presented to the Highland Council's strategic committees is required to identify all climate change implications.

In 2021/22 In December 2021, the Council approved an approach to develop a Net Zero Strategy for the Council. This was subsequently discussed and agreed at the ELT with agreement that a Net Zero Strategy Group be established comprising officers working across council services to lead on the development of a net zero strategy and action plan.

It was agreed that workstreams will be taken forward in thematic groups with each thematic team developing the evidence base within their respective domains to enable the drafting of the relevant section of the overall strategy. Climate Change and Energy Team members will be assigned to support each thematic group's work. (Diagram attached).

In June 2022, recognizing the climate and ecological emergency, it was agreed to establish a Climate Change committee. With the following remit:

To provide advice and guidance on the climate, ecological and environmental sustainability agenda, and identify, support and champion climate and ecological progress across the Council whilst providing an appropriate level of critical challenge for the organisation.

Public Bodies Climate Reporting Duties - As set out in The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 including emissions baselining and monitoring.

Oversight, on the Net Zero Strategy, Action Plan and Programme, including setting and scrutiny of performance targets relating to the following Programme workstreams

- Built Estate and Energy/Asset Management
- Social Housing (HRA)
- Fleet, Staff Travel
- Waste and Circular Economy
- Procurement and Community Wealth Building
- Planning, Land Use and Environment
- Capital Programme & Net Zero Funding Strategy
- Responses to external policies and consultations.

Policy considerations and project progress and achievements in relation to climate and environmental related matters such as Just Transition, Adaptation, Land Reform, Food Growing and Land Use, Biodiversity etc.

To support and champion Highland's high-quality environment, air, land, water, food products and renewable energy resources to bring appropriate commercial opportunities, maximise income whilst raising awareness of the need to protect and enhance our critical environmental assets.

Review and monitoring of climate impact of Council policies.

Oversight of internal and external communication and engagement, and partnership building in relation to climate change mitigation and adaptation.

Promotion of Climate Change and Ecological issues and actions through the delivery of presentations at committee and oversight of development of internal and external facing events.

To consider and make recommendations to The Highland Council and / or any other appropriate strategic committee in relation to these matters, including any proposed changes or developments to Highland Council policy & strategy.

Additional resources were added to the Climate Change and Energy team to support the net zero strategy development and to assist in the agreed action plans' implementation. The CCET remains responsible for a variety of different functions, including; facilitating, reporting and promoting climate change actions across the Council, delivery of the Energy Efficient Scotland: Area Based Scheme programme, the management of all utility billing and connections for the Council, the deployment of publicly accessible EV charging infrastructure across Highland, development of low carbon heat, hydrogen, and fleet decarbonisation strategies, as well as project support and delivery in respect of property-related activity around the energy / low carbon agendas. The CCET sits within the Environment team in the Infrastructure & Environment Service and provides strategic and project support to all Council Services, where required. Reports on Climate Change and associated initiatives are taken to the Climate Change Committee. All Committees report back to the full Council.

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

On 9th May 2019, The Highland Council declared a climate and ecological emergency in recognition of the serious and accelerating changes to the world caused by climate change. The Council has established a Climate Change Working Group with responsibility for reporting back to full Council on the progress of internal and regional climate change action.

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 & Energy Team (CCET) works collaboratively with services across the Council to develop and implement carbon reduction strategies. The Council is currently developing a new, overarching net zero strategy and action plan, with a view to developing more robust processes for embedding climate change action in the day-to-day operations of each individual Council service. This process has been assisted through a piece of work to better align the Council’s policy and programmes with those of the Scottish Government in respect of the climate change agenda. This commissioned piece of work has identified 15 key actions the Council needs to take to improve its climate change performance and will steer much of the ongoing work in developing a corporate net zero policy - https://www.highland.gov.uk/download/meetings/id/78267/4_climate_change_program_alignment.

The CCET 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 eight Council services. Reports on climate change produced by the team are reviewed by the Executive Leadership Team, which includes the Chief Executive and Executive Chief Officers, 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 several steps to embed climate change action across the organisation, particularly through its Recovery and Transformation programme. As part of the 2021/22 budget setting process undertaken in March 2020, the Ambitious Highland Health & Prosperity Strategy 2021/22 was agreed by Members at full Council, which provides injections of funding to projects aimed at enhancing Highland infrastructure, economy, and wellbeing. 9 key projects and investments have been targeted, including climate change, but there are positive climate outcomes and dependencies linked to most of the other projects and these will be reported in detail through our 2021/22 PBCCD return.

In addition, various staff engagement and awareness activities were undertaken in 2020/21 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, behaviour change initiatives on energy saving, waste and transport through our Green Impact and Energy Sparks programmes, and national campaigns including Climate Week. The Eco Officers network, as well as students from the University of the Highlands and Islands, have played a key role in the adoption of Students Organising for Sustainability's Green Impact Tool. This tool helps to incentivise and measure sustainability "actions" by Council employees. 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.

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	Document Link
Develop a new Carbon Management Plan in collaboration with partners to revise corporate emission reduction targets by December 2018	Corporate Plan	Corporate Plan
Develop a Highland-wide Climate Change Adaptation Strategy with Community Planning Partners	Corporate Plan	Corporate Plan

Reduce energy consumption across the Council's estate (electricity, natural gas, oil)	Corporate Plan	Corporate Plan
Council carbon emissions tonnes CO2e	Corporate Plan	Corporate Plan

2d Does the body have a climate change plan or strategy?

The Highland Council is currently developing a Net Zero Strategy and Action Plan. The strategy is due for completion in early 2023 with a fully costed action plan to be implemented within 2023/24.

2e Does the body have any plans or strategies covering the following areas that include climate change?

Topic area	Name of document	Link	Time period covered	Comments
Adaptation	Adapting to climate change in Highland Indicative Regional Spatial Strategy		2012-2020 2021	The Highland Adapts initiative, developed by The Highland Council, was officially launched in 2020/21, and will deliver a place-based, partnership approach to climate change adaptation in Highland. 2021/22 has the development and specification of the requirements within a regional Climate risk assessment which will be completed 2022/23
Business travel	Carbon Management Plan Travel and 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.
ICT	Carbon Management Plan		2013-2020	As above.

Topic area	Name of document	Link	Time period covered	Comments
Renewable energy	Carbon Management Plan Indicative Regional Spatial Strategy		2013 - 2020 2021	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 (review currently on hold awaiting NPF4) due for completion 2022	Indicative Regional Spatial Strategy to 2050	Various	Broad level strategy for land use and management of assets and infrastructure
Other (please specify in comments)	FW2040 Skye and Raasay Future Northwest 2045		Various	Place-based plans which identify climate change as a critical priority and outcome for all investments, developments, and interventions
Business travel	Travel & Subsistence Policy		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.
Land Use	Highland Indicative Regional Spatial Strategy to 2050	Indicative Regional Spatial	Various	Broad level strategy for land use and management of assets and infrastructure

Topic area	Name of document	Link	Time period covered	Comments
		Strategy to 2050		
Land Use	Inner Moray Firth Local Development Plan, adopted 2015 (review expected to go to Examination early 2023)	Indicative Regional Spatial Strategy to 2050	Various	Broad level strategy for land use and management of assets and infrastructure
Land Use	West Highland and Islands Local Development Plan, 2019	Indicative Regional Spatial Strategy to 2050	Various	Broad level strategy for land use and management of assets and infrastructure
Land Use	Caithness and Sutherland Local Development Plan 2018	Indicative Regional Spatial Strategy to 2050	Various	Broad level strategy for land use and management of assets and infrastructure
Land Use	Area Place Plans: Fort William 2040, Skye & Raasay Future, and looking ahead Inverness Strategy	Indicative Regional Spatial Strategy to 2050	Various	Broad level strategy for land use and management of assets and infrastructure
Land Use	Local Flood Risk Management Plan for the Highland & Argyll Local Plan District (LPD01), and Findhorn, Nairn & Speyside Local Plan District (LPD05) (2016 to 2022).	Indicative Regional Spatial Strategy to 2050	Various	Broad level strategy for land use and management of assets and infrastructure

Topic area	Name of document	Link	Time period covered	Comments
Land Use	Various topic based Supplementary Guidance (Including Onshore Wind Energy Supplementary Guidance 2016 and Addendum Supplementary Guidance: 'Part 2b' 2017) and Site-Specific Development Briefs.	Indicative Regional Spatial Strategy to 2050	Various	Broad level strategy for land use and management of assets and infrastructure
Land Use	Growing Our Future – draft food growing strategy for Highland (consultation to begin in Autumn 2020)	Indicative Regional Spatial Strategy to 2050	Various	Broad level strategy for land use and management of assets and infrastructure

2f What are the body's top 5 priorities for climate change governance, management, and strategy for the year ahead?

Priority 1: Priority 1. Develop a net zero strategy and action plan which encompasses all services within the Council. The plan will consider the requirements for carbon literacy and training for both members and officers to ensure a greater understanding of the Council's carbon emissions. It will help inform and engage across all services to embed the behaviour change needed to deliver the transformation required. It will focus on data to deliver an evidence-based road map for net zero.

Priority 2: A granular benchmarking exercise of the Council's total emissions with a focus on our scope 3 and embedded carbon. This data will help shape an organisation wide Carbon management and monitoring plan which will help shape a more sustainable approach to the Council's operational model.

Priority 3: Asset Rationalisation / Hybrid working Rise of energy costs and a meaningful change in working behaviour has left the council with an Estate that is underutilised and unsustainable. A working group has been established but it is vital a sustainable model for rationalisation needs to be introduced with full option appraisals carried out to identify the key buildings on which a net zero approach can be adopted to ensure a fabric first approach is adopted across the reduced estate. Maximising the efficiency of energy costs and delivering the net zero agenda.

Priority 4: Development of Low Carbon Heat and Hydrogen strategies - corporately agreed this strategy encompasses LHEES (Local Heat and Energy Efficiency Strategy) and EESH2. The Council will focus on how various programmes such as EEs: ABS and both social and private properties can be brought together to deliver a whole house approach within clearly identified areas of need. The work will include the opportunity to develop heat networks and utilise recent technologies such as hydrogen to ensure the Council benefits from the energy-systems transformation that these technologies will bring to the region. Ensuring that opportunities within the capital programme are maximised in respect of delivering carbon reduction for both the Council and the wider region.

Priority 5: Fleet Decarbonisation Strategy implementation – The CCET (Climate Change & Energy Team) team in conjunction with fleet management has developed a transition strategy to rationalise the light vehicle white fleet while transitioning the remainder to EV (Electric Vehicle) in alignment with National targets the next year will deliver the implementation phase to begin the restructuring of the fleet which will look to reduce the existing fleet by 20%.

2g Has the body used the Climate Change Assessment Tool (a) or equivalent tool to self-assess its capability / performance?

The Climate Change team conducted a trial 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 identifying priorities for a new Climate Change Plan and where the organisation performed poorly.

The Council scored well in respect of governance, which reflected the commitment of the Senior Management Team and the organisation to achieving the targets set out in the previous CMP (Carbon Management Plan). 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 have been reviewed annually as part of the carbon reporting process, and this is used by the Climate Change & Energy 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.

The CCET are currently revisiting tool kits to better understand how we can make the management and reporting of carbon more interactive across the Council.

There are also key strengths within the adaptation and behaviour sections. A Highland-wide approach to adaptation through the Highland Adapts programme is continuing to develop a regional presence at pace a dedicated adaptation officer has been resourced to the CCET to develop an organisational adaptation strategy.

Increasing the focus on Scope 3 has highlighted gaps, not just within the procurement process but in current governance and behaviours across the Council. This is being addressed as part of the strategy development. While this has previously been considered, there is a clear need for an understanding of carbon impact on projects from an early stage. There is an increasing need for a live project register which can be updated regularly by various teams across the Council to review changes and how they may impact on a project's overall emission.

In addition, the work of the additional resource added to the CCET (Climate Change & Energy Team) will focus on a review of governance arrangements around carbon management while ensuring progress measured and managed more effectively across the Council. Delivering an Internal communication and engagement strategy inclusive of Members, management, and staff. 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

In 2020/21 The Highland Council successfully secured £3.5m in match funding from Salix, giving the Council a total of £7m in 2021/22 this increased

significantly to 17.5m. Delivering the largest fund ever awarded through Salix in Scotland, this is also the largest ever awarded to a Local Authority in the UK. This fund has enabled officers to proactively prioritise initiatives that reduce the organisation's carbon emissions. The recycling nature of the fund ensures savings are ring fenced for long-term investment in savings are ring-fenced is fund will drive long-term sustainability and support economic growth in Highland through the continued use of trusted local contractors.

In 2021, the Council continued its successful development of online Climate Change Conferences. Taking place over two days in October 2021, the conference and its associated workshops took place on Thursday 21st and Friday 22nd of October 2021. Several eminent speakers from a variety of sectors took part. Day 1 focusing on Energy, saw the likes of Joanne Allday from the Port of Cromarty Firth, Andy Sloan from SSE Renewables, and a representative from Energy Sparks take the virtual stage with the afternoon focus - Land and Sea: including talks from the Cairngorms National Park Authority, Nature Scot, the Highland Good Food Partnership and Highland Council officers working on land use in Highland. Day 2, the conference covered Net Zero in the morning with presentations from Highlands and Islands Enterprise, Students Organising for Sustainability, and again Council officers working on the transition to net zero. In the afternoon, as part of the Resilient Communities section, conference attendees heard from inspiring Highland community groups and initiatives such as Thurso Community Development Trust, Highland Adapts, the Rose Project and many more.

The Council has continued to pursue workstreams that reduce reliance on grey fleet and personal car use by staff. Through the appointment of a dedicated officer to develop a fleet decarbonisation strategy with the initial focus on the white fleet it has targeted a fleet reduction of 20% along with the development of a strategic transition to low-carbon alternatives across the rest of the fleet. Small fleets focused on EV (Electric Vehicle) use while future heavy fleet development is likely to include Hydrogen as an alternate fuel source. Workshops have been held with both officers and Councillor's to identify the vision, values, and focus areas for the net zero strategy.

In December 2021, the Council agreed on the recommended approach for the development of a net zero strategy and action plan which would establish Clear targets and performance indicators for the achievement of net zero. The intention is to develop a structured and proactive communications strategy and plans to support the Council's climate action activity through the development of carbon literacy training and a strategic engagement plan aimed at staff and Members.

3a Emissions from the 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	Year type	Scope 1	Scope 2	Scope 3	Total	Units
Baseline Year	2011/12	Financial	24,913	37,031	4,635	66,579	tCO_2e
Year 1 carbon footprint	2012/13	Financial	25,218	38,234	4,218	67,670	tCO_2e
Year 2 carbon footprint	2013/14	Financial	21,024	37,858	4,519	63,401	tCO_2e
Year 3 carbon footprint	2014/15	Financial	20,847	38,722	4,274	63,843	tCO_2e
Year 4 carbon footprint	2015/16	Financial	22,629	39,323	4,088	66,040	tCO_2e
Year 5 carbon footprint	2016/17	Financial	20,899	36,969	4,153	62,021	tCO_2e
Year 6 carbon footprint	2017/18	Financial	21,226	24,983	7,416	53,625	tCO_2e
Year 7 carbon footprint	2018/19	Financial	19,849	19,946	5,281	45,076	tCO_2e
Year 8 carbon footprint	2019/20	Financial	18,493	17,533	4,596	40,622	tCO_2e
Year 9 carbon footprint	2020/21	Financial	18,665	11,480	5,263	35,408	tCO_2e
Year 10 carbon footprint	2021/22	Financial				-	tCO_2e

3b Breakdown of emissions sources

Emission	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO_2e)	Comments
Electricity	Grid Electricity (generation)	Scope 2	44,031,752	kWh	0.21233	kg CO2e/kWh	9,349.3	Buildings
Electricity	Grid Electricity (generation)	Scope 2	10,035,958	kWh	0.21233	kg CO2e/kWh	2,130.9	Street Lighting
Fuels	Natural Gas	Scope 1	29,028,974	kWh	0.18316	kg CO2e/kWh	5,316.9	
Fuels	Burning Oil (Kerosene) litres	Scope 1	1,831,191	litres	2.54014	kg CO2e/litre	4,651.5	
Fuels	Petrol (average biofuel blend)	Scope 1	145,021	litres	2.19352	kg CO2e/litre	318.1	
Fuels	Diesel (average biofuel blend)	Scope 1	2,188,389	litres	2.51233	kg CO2e/litre	5,498.0	
Fuels	Gas Oil litre	Scope 1	228,701	litres	2.75857	kg CO2e/litre	630.9	
Biofuels	Biomass (Wood Pellets) kWh	Scope 1	36,777,517	kWh	0.01513	kg CO2e/kWh	556.4	

Emission	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO_2e)	Comments
Water	Water - Supply	Scope 3	564,179	m3	0.11000	kg CO2e/m3	62.1	
Water	Water - Treatment	Scope 3	475,012	m3	0.23000	kg CO2e/m3	109.3	
Waste	Refuse Municipal to Landfill	Scope 3	652	tonnes	446.24150	kgCO2e/tonne	290.9	waste to landfill - non-schools
Waste	Mixed recycling	Scope 3	155	tonnes	21.29357	kg CO2e/tonne	3.3	recycling - non-schools
Waste	Mixed recycling	Scope 3	361	tonnes	21.29357	kg CO2e/tonne	7.7	recycling - schools
Waste	Organic Garden Waste Composting	Scope 3	33	tonnes	8.95070	kgCO2e/tonne	0.3	non schools mixed composting
Waste	Organic Garden Waste Composting	Scope 3	104	tonnes	8.95070	kgCO2e/tonne	0.9	schools mixed composting
Transport	Average Car - Unknown Fuel	Scope 3	194,639	km	0.17148	kg CO2e/km	33.4	car hire mileage - based on average value
Transport	Average Car - Unknown Fuel	Scope 3	2,652,088	km	0.17148	kg CO2e/km	454.8	grey fleet - based on average value

Emission	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO_2e)	Comments
Transport	Car - hybrid (average) miles	Scope 3	657,051	miles	0.19235	kg CO2e/ mile	126.4	car club
Transport	Bus (local bus, not London)	Scope 3	14,036	passenger km	0.11774	kg CO2e/passenger km	1.7	staff travel
Transport	Ferry (average passenger)	Scope 3	4,068	passenger km	0.11286	kg CO2e/passenger km	0.5	staff travel
Transport	Short-haul flights (average passenger)	Scope 3	8,266	passenger km	0.15353	kg CO2e/passenger km	1.3	staff travel
Transport	Rail (National rail)	Scope 3	76,466	passenger km	0.03549	kg CO2e/passenger km	2.7	staff travel
Transport	Taxi (regular) passenger km	Scope 3	-	passenger km	0.14876	kg CO2e/passenger km	-	
Electricity	Grid Electricity (transmission & distribution losses)	Scope 3	44,031,752	kWh	0.01879	kg CO2e/kWh	827.4	

Emission	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO_2e)	Comments
Electricity	Grid Electricity (transmission & distribution losses)	Scope 3	10,035,958	kWh	0.01879	kg CO2e/kWh	188.6	
Waste	Refuse Municipal to Landfill	Scope 3	1,490	tonnes	446.24150	kgCO2e/tonne	664.9	waste to landfill - schools
Waste	Organic Food & Drink Composting	Scope 3	24	tonnes	8.95070	kgCO2e/tonne	0.2	organic food waste - non-schools
Waste	Organic Food & Drink Composting	Scope 3	108	tonnes	8.95070	kgCO2e/tonne	1.0	organic food waste - schools
Fuels	Marine Gas Oil litres	Scope 1	308,550	litres	2.77539	kg CO2e/litre	856.3	Corran Ferry - Public RORO and passenger service
Fuels	LPG litres	Scope 1	552,630	litres	1.55709	kg CO2e/litre	860.5	LPG Off grid gas alt.
	Hybrid/Home working emissions	Scope 3	33.00%	percentage of total FTEs	0.30000	tCO2e/FTE/annum	820.3	

3c Generation, consumption, and export of renewable energy

Technology	Renewable Electricity	Renewable Heat	
	Total consumed by the body (kWh)	Total consumed by the body (kWh)	Comments
Solar PV	861,330		Estimate based on available data No export due to Insurance connection issue
Biomass		36,777,517	Actual consumption Data
Air Source Heat Pump		1,946,819	Estimated - Based on sites regularly measured.
Wind	10,000		Estimated - Unmetered solution for Off-Grid schools
Ground Source Heat Pump		214,552	Estimated - Based on sites regularly measured.

3d Organisational targets

Name of target	Type of target	Target	Units	Boundary/scope of target	Year used as baseline	Baseline figure	Units of baseline	Target completion year	Progress against target	Comments
Carbon Management Plan	Annual	3 % Annual Reduction	annual % reduction	All emissions	168	66,579	tCO2e	2019/20	Missed	Greater understand of Emissions has identified areas previously unreported.
Carbon Clever	Absolute	Carbon Neutral Inverness & Low Carbon Highland by 2025	total % reduction	All emissions	134		Please select from drop down box	2024/25	Ongoing	To be replaced with Net Zero Targets.
Net Zero Strategy	Absolute	Muti Service Road map to net zero	total % reduction	All emissions	168	To be determined	tCO2e	2044/45	To be finalised 2023	While the overarching target is currently aligned with

Name of target	Type of target	Target	Units	Boundary/scope of target	Year used as baseline	Baseline figure	Units of baseline	Target completion year	Progress against target	Comments
		across the organisation								National targets the full net zero strategies will be evidence-led and will incorporate various milestone targets which will align with or improve on the relevant National targets.

3da How will the body align its spending plans and use of resources to contribute to reducing emissions and delivering its emission reduction targets?

Within the development of the net zero strategy. Each thematic group has been tasked with delivering a detailed road map to reducing emissions in alignment with achieving net zero. Both policy and governance are under review to ensure the consideration of emissions at every process stage from design to delivery.

3db How will the body publish, or otherwise make available, it's progress towards achieving its emissions reduction targets?

As part of the development of the Council's net zero strategies and action plan, the climate team is developing a toolkit designed to provide in-depth reporting and monitoring of scopes 1,2 and three emissions across the organisation. This is being developed in conjunction with a communication strategy to ensure a consistent level of reporting both internally and to the Council.

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

Emissions source	**Total estimated annual carbon savings (tCO_2e)**
Electricity	1084
Natural gas	669
Other heating fuels	
Waste	
Water and sewerage	
Travel	
Fleet transport	

3f Detail the top 10 carbon reduction projects to be carried out by the body in the report year

Project name	Funding source	First full year of CO_2e 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 (tCO_2e/annum)	Estimated costs savings (£/annum)	Behaviour Change	Comments
Hydro Ness	Salix	2021/22	Estimated	2,700,000		25	Grid Electricity (transmission & distribution losses)	140	85k	Yes	While the project has limited operation impact on behaviour change, we have partnered with stem to develop the site into an interactive learning site to help visitors understand the impact renewable energy can have in the area.
Street Lighting LED upgrades	Salix	2021/22	Actual	2,056,522		20	Grid Electricity (generation)	520	330k	No	
Leisure Facility ED upgrades	Salix Capital			778,000		20	Grid Electricity (generation)	97	63k	No	
LED upgrades	Salix	2021/22	Actual	484,000		20		72	33k	No	

Project name	Funding source	First full year of CO_2e 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 (tCO_2e/annum)	Estimated costs savings (£/annum)	Behaviour Change	Comments
non-domestic.											
BMS	Salix Capital	2021/22	Actual	2,600		25	Grid Electricity (generation)	11	3.65K	Yes	Pilot to improve the live understanding of energy consumption within a school and how this information can be used to ensure improved operational energy efficiency.
Sconser Quarry	Salix	2020/21	Actual	45,000		20	Fuel Oil tonnes	7	54k		
Grantown Grammar School Heating	Capital										
Smart Cities											
Estate rationalisation											

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

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Electricity	1,560	5.2 LED Phase 1: >£2.3m has been invested in improving the lighting condition of 77 buildings throughout the estate. Replacing older bulbs with new energy efficient bulbs is expected to save almost 1.8 million kWh annually and result in estimated annual carbon savings of over 500,000 kgCO2e. 5.3 LED Phase 2: >£1.9m has been invested in improving the lighting condition of buildings throughout the estate. Replacing older bulbs with new energy efficient bulbs is expected to save almost 1.2 million kWh annually and result in estimated annual carbon savings of over 283,000 kgCO2e Solar PV programme: ~£2m of solar PV has been deployed across 30 a mixture of schools, leisure facilities and offices, displacing a reliance on grid supplied electricity and the associated increasing costs. The PV installations have a life expectancy of over 25 years and are expected to generate over 1.3million kWh annually, resulting in yearly carbon savings of ~300,000 kgCO2e. This provides reassurance in the process, modelling and performance of the assets, although given the unpredictability of the Highland weather, there is likely to be annual fluctuations that alter the total generation figures. However, it should be noted that the actual benefit realised for the organisation may be slightly eroded by COVID19 and significant changes to building occupancy levels and general building usage and behaviours. 5.6 River Ness Hydro: £2.55m installation of a 92kW Archimedes screw, hydroelectric power turbine in the river Ness, making use of existing infrastructure from a historical hydroelectric system at the site. The project is self-financing; energy generated will be “sold” to Inverness Leisure Centre displacing a reliance on grid supplied electricity and protecting the organisation from increasing energy prices. The system, which has a life expectancy of over 60 years, is expected to generate ~550,000 kWh of renewable electricity annually (approximately 50% of the leisure centres total consumption), reducing carbon emissions by ~140,000 kgCO2e annually.

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
		System commissioned and working. Street Lighting: In FY 21/22 the RF worked across 19 wards with a spend of £514,000 on 1,490 fittings. Estimated savings of 531,689kWh, resulting in estimated annual energy savings of >£85,000 an estimated annual CO2e saving of 122,000kgCO2e. To date the fund has worked across 21 wards with a spend of >£3M on ~14,000 fittings. Estimated savings of 531,689kWh, resulting in estimated annual energy savings of >£500k an estimated annual CO2e saving of 715,000kgCO2e.
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		3 boiler sites identified with priority need - switch from oil > gas with a view to adopting a greener solution in the future. Wider work is underway to rationalise the estate and adopt new ways of working, after which further funding can be directed to the decarbonisation of heat across the retained estate.
Waste		
Water and sewerage		Further 5 pilot sites identified for BMS upgrades – lessons learned and finding will inform wider programme of which £1m has been earmarked notionally through the Salix RF. Pilot site completion date by EOFY 2021/22.

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Travel		Review of Car club and Grey Fleet usage in progress option to improve Car club are being considered along with an approach to target services grey fleet usage with reduction targets.
Fleet Transport		Development of a transition strategy for the light commercial fleet. The work has identified a possible 20% reduction in vehicles to be phased in from 2022/23
Other (please specify in comments)		5.5 Boiler replacements: Raigmore Primary School and St. Joseph's Primary School have both benefitted from the replacement of outdated and inefficient oil boilers. This was a capital led project with a financial contribution from the RF.

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

Emissions source	Total estimated annual emissions (tCO_2e)	Increase or decrease in emissions	Comments
Estate changes			It is important that the programme of office rationalisation is accelerated in the coming year. Hybrid working has provided the opportunity to move to a more agile and flexible provision of office accommodation. This provides a clear opportunity for carbon savings although these have yet to be quantified.
Service provision			The Council is committed to pursuing its 'digital first' communication priority scheme to reduce the number of visits to service centres. This will help reduce carbon emissions relating to in-person visits and staffing requirements at service points, but this has not been quantified.
Staff numbers			

Emissions source	Total estimated annual emissions (tCO_2e)	Increase or decrease in emissions	Comments
Other (please specify in comments)			Officers and Elected Members can also now video conference into 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 used as a baseline for its carbon footprint

Total savings	Total estimated emissions savings (tCO_2e)	Comments
Total project savings since baseline year	1,753	

3k Supporting information and best practice

The Highland Council has developed and implemented several projects aimed at targeting climate change across the organisation. In the built estate where increased energy costs directly impact the council, aligned with its net-zero ambition, has explored the Net Zero Public Sector Building Standard (NZPSBS) on the new Nairn Academy project. The main contractor (Balfour Beatty) performed a gap analysis highlighting the impact of adopting the standard in capital cost, programme, and consultant fees. Due to the project being at stage 3, the study confirmed that a separate project team would be required to prevent any impact on the programme.

The Net Zero Public Sector Building Standard sets specific targets across 6 objectives to improve the delivery of new buildings. The key objectives are

Inclusive net zero carbon economy outcomes

Embodied carbon

Operation Energy

Whole life Carbon

Indoor Environmental Quality

Environmental Aspects

Discussions with the client are currently ongoing to ascertain if progression of the standard for Nairn Academy is possible.

A key lesson learned is that to minimise disruption and maximise the benefits of the NZPSBS it needs to be included at project inception.

The Council has evaluated the non-domestic energy efficiency framework (NDEEF). Completing an energy survey report across 10 buildings to assess the diverse options open via the framework. We have reviewed the process with 3 other local authorities to gain a greater understanding of their experience with NDEEF. We are currently involved in an internal discussion to agree on the next steps.

As part of the team's initial development of LHEES (Local Heat and Energy Efficiency Strategy), we have completed the pre-feasibility work for a district heat network to the area running along the west bank of the river ness. The area includes several council-owned properties including Inverness leisure and Highland Council Headquarters. The area offers potential connection opportunities with several external stakeholders from both the public and the third sector along with commercial operations. The Council just received funding to progress this to a feasibility project with Zero Waste Scotland to develop a commercial opportunity.

The council continues its programme of sodium streetlight replacement with energy efficient LED producing significant carbon savings. Delivered through the Salix recycling fund.

The additional resource added to the Climate Change team is giving us the opportunity to develop educational and engagement strategies to assize climate awareness across the council.

The programme to replace sodium streetlights with more energy-efficient LEDs continues to produce significant carbon and cost savings. The Highland-wide roll-out of LED streetlights is part of a 5-year programme, due to be completed in 2021/22 with 90% of lighting columns being converted which will result 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 support more targeted behaviour change interventions across the estate.

Staff engagement and involvement on climate change issues has also been a key focus of work for 2020/21, which has been principally led by the Climate Change Working Group (CCWG). The CCWG provides a forum to highlight the range of work being undertaken across the Council by multiple teams in respect of the climate change agenda, and as the reports are publicly accessible, scrutiny of the Council’s actions becomes much easier. Further, several key public and private sector partners have been given an opportunity to present to the CCWG, updating Members on key actions and projects which are addressing climate issues locally and nationally.

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 opportunities 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 climate resilience 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, SEPA, 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 an active partner in the Highland Adapts initiative, which is a partnership approach to building a climate-ready Highland. An outline business case and operational plan were completed for the Highland Adapts initiative in 2019/20. The initiative has a number of committed partners including The Highland Council, NatureScot, NHS Highland, Zero Waste Scotland, Highlands and Islands Enterprise, Forestry and Land Scotland, Changeworks, SNIFFER, and Highland and Islands Climate Hub. Each partner has provided a financial contribution to the project. This funding enabled the recruitment of full-time Principal Project Manager, who was appointed in May 2021 and has been working to develop and implement the project plan.

There is a clear strategic need for the Highland Adapts initiative region-wide, and corporately within The Highland Council. This is confirmed by the increasing emergence of climate impacts affecting the region, legislative requirements to adapt and strong support for joint action among organisations and individuals.

Highland Adapts is working with land managers, public sector, and communities to build a place-based adaptation strategy. The working model is outlined below (Figure TBC) with a number of thematic groups feeding into the Core Group. The Highland Council currently chair the Programme Board.

The outline operational plan for Highland Adapts is comprised of three work packages, which will be completed over the first three years of the initiative:

1. Governance, leadership, and communication – The governance approach taken by Highland Adapts is based on sociocracy principles and endeavour's to be inclusive, empowering, and deep-rooted in climate justice. There are 6 thematic groups that collectively provide space for all sectors of the community to be part of this iterative, place-based journey towards a climate-ready Highland.
2. Understanding the challenge – In the autumn of 2022 phase one the regional climate risk and opportunity assessment was launched. This is assessment is grounded in placed-based practices and will weave together both quantitative and qualitative data, ensuring that lived experience is central. Interim outputs include a regional climate economic risk and opportunity assessment, as well as a regional package of the Open CLIM data. Before the end of 2023 a high-level risk assessment for the region will be launched and this will also highlight key next steps and the scope for phase two.
3. Planning and implementation - The main planning and implementation phase of the Highland Adapts initiative will take place following completion of the risk and opportunity assessment. The governance established to run the Highland Adapts initiative and the engagement process used to develop the risk and opportunity assessment will build understanding, trust and a shared vision and sense of urgency among partners. The planning and implementation phase will build on this work and will identify priority actions that multiple partners are able to commit to. This phase is likely to involve developing a regional adaptation strategy and action plan and will be agreed by Highland Adapts partners.

4b What arrangements does the body 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 particularly the policies contained in the Highland-wide Local Development Plan, a review of which has commenced. The Council's recent planning response (particularly during 2021-22) has included the refinement of the Indicative Regional Spatial Strategy for Highland, a comprehensive response to Scottish Government on the policies in Draft National Planning Framework 4 and the development of some new policies included in the Inner Moray Firth Proposed Local Development Plan 2 (March 2022), these strategies and policies having a greater climate emergency focus.
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 Highland Council continues to add further guidance to it through a continuing programme of landscape sensitivity appraisals and identification of strategic capacity. 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 second Local Flood Risk Management Plan is on target to be published by 31 December 2022. The publication of our Local Flood Risk Management Plans has helped to raise awareness of flood risk in communities and the riparian responsibilities towards watercourse maintenance. Mid-term of the plan cycle (every 6 years) reporting on progress. An end of term report on progress will published by 31 December 2022. 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 Infrastructure, Environment and Economy Service is delivering Flood Protection Studies in accordance with the LFRMP, considering climate change scenarios when assessing future flood risk. Development of a Highland-wide Surface Water Management Plan will assess surface water flooding issues in the highest priority areas. The Highland Council makes use of Scottish Government's initial 'Dynamic Coast' and subsequent Dynamic Coast 2 research at a strategic level within the current review of the Inner Moray Firth Local Development Plan as one of a number of data sources informing which sites to prefer for development. The Pilot Pentland Firth & Orkney Waters Marine Spatial Plan was published in March 2016. It was a collaboration between Marine Scotland, the Highland Council and Orkney Islands Council. Its policies include flooding, well-being and quality of life and 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; whilst the Highland Council will be one of the key organisations involved, it is not within its 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.

The Highlands & Islands Local Resilience Partnership (HILRP), comprising Highland, Shetland, Orkney, and Western Isles Council areas, sits within the North of Scotland Regional Resilience Partnership (NoSRRP). There are three RRPs in Scotland, based on the three Police Scotland hubs. RRPs bring the organisations involved in dealing with emergencies together to plan for, and respond to, all kinds of events, which are regularly tested in joint exercises and during real emergencies. Since their inception, RRPs have improved local cooperation between councils and emergency response partners and evolved in each area to consider local circumstances. Each of the three RRPs is tasked with producing a regional 'Community Risk Register' which directs organisational and collaborative emergency planning activities within their area.

This risk assessment process is led by the Scottish Fire and Rescue Service and is conducted using a formal 'Risk and Preparedness Assessment' methodology. The latest version (Sept 2021) of the NosRRP Community Risk Register is available here. It identifies 8 main risks pertinent to the North of Scotland RRP area, comprising Pandemic Diseases, Severe Weather, Flooding, Interruption to Utilities, Industrial Site Accidents, Transport Disruptions, Pollution and Contamination and Significant Cyber Attack. RRP Community Risk Registers are informed by the Scottish Risk Assessment (SRA) (revised 2020), produced by the Scottish Government, which identifies the civil contingencies emergencies that Scotland may face in the next 5 years, including those which are climate related. The HILRP Work Plan 2022-23 sets out a number of climate-related preparedness actions. Work within the partnership, Highland Council and other organisations is progressing to complete these. Recently a NoSRRP Extreme Heat Session was held to consider the risks associated with a Heat Wave and the ways to mitigate impacts, with a further session covering Coastal and Fluvial Flooding planned for early 2023.

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 55 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.

4c What action has the body 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. Most engagement work is delivered through the Council's Corporate Communications and Ward Manager teams. 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 a 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 continues to work collaboratively with SEPA, the Met Office and other partner agencies to plan for and respond to weather related incidents. In Q3 of 2020, a series of exercises were held at a local level involving each of our five Emergency Liaison Groups (ELGs) to test the multi-agency response to weather-based scenarios. The annual River Ness flood gate maintenance exercise is held to test the operation of flood gates. In Summer 2022, the Council will complete the Drumnadrochit Flood Protection Scheme which will provide increased protection from flooding of the river Enrick to the local community. The flood scheme was designed with allowance for climate change, thus ensuring risk of flooding is reduced going into the future.

The Highland Council is a key partner in The Flow Country Partnership, which is delivering two substantial projects in Caithness and Sutherland. The Partnership will submit a full nomination to UNESCO in late 2022 with the aim of seeing The Flow Country inscribed as the world's first peatland World Heritage Site. The Flow Country has successfully passed through the demanding Technical Evaluation stage and The Highland Council has taken the lead in two thorough community consultations, the first in 2019 and the second in 2022. If The Flow Country does become a Heritage Site, this will bring multiple benefits to the north, including increased income from tourism and increased protection for the peatlands.

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.
In response to the Dynamic Coasts report, The Council has applied for Green Growth Accelerator funding and successfully secured Pathfinder funding for the Climate Action Coastlines project. The project aims to identify and develop green solutions to mitigate the effect of coastal flooding in Golspie, with the expectation it can be replicated at other at-risk coastal area. Initial funding will be used to progress the project and develop a business, strategic, and financial case. The funding will also enable research through St Andrew's and Edinburgh University on potential nature-based solutions and landscape architecture for the area. Additionally, the North Highlands and Island Climate Hub plan to host in person engagement sessions with the local community to identify their concerns and thoughts on the potential nature-based solutions.
The Flow Country Green Finance Initiative is an innovative green finance project, which seeks to attract private finance to peatland restoration and other green projects in Highland. The Highland Council, as a key partner of The Flow Country Partnership, has played an important role in community consultation, strategic workshops, and the development of a financial vehicle through which this project will be delivered. It is anticipated that the first green finance investments will be made through this project in 2023.
Green Impact is an online sustainability tool which encourages Council employees to consider whether their use of energy is appropriate. The tool suggests sustainable and low-energy approaches to keeping homes and offices cool in the summer and warm in the winter. 75 Highland Council employees registered for the tool and engaged 375 colleagues. Additionally, 268 sustainable actions were taken as part of the programme, including adaptation-based activities.
The Highland Council is committed to supporting our local fire and rescue service with their engagement and partnership working on deliberate fires and wildfires. Highland is home to vast expanses of peatlands, which have experienced significant fires in recent years and are under increased risk due to hotter summers. The Council also supports this service in its response to flooding, by promoting safety warnings and enhancing community engagement. These efforts are underpinned by the Highland Local Fire and Rescue Plan and the Highland Outcome Improvement Plan, both produced by the Scottish Fire and Rescue Service.

4d Where applicable, what contribution has the body made to helping deliver the Programme?

Objective - Understand the effects of climate change and their impacts on the natural environment. Objective reference - N1 Theme - Natural Environment
Policy ref. - N1-10 Delivery progress made - Flood Risk Management Plan (2016-2022) published on 22/06/16. Comments - Draws together multiple datasets to support flood risk management in the Highlands. Delivery progress made - Highland-wide Surface Water Management Plan.

Objective - Support a healthy and diverse natural environment with capacity to adapt. Objective reference - N2 Theme - Natural Environment
Policy ref. - N2-2 Delivery progress made - 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). Comments - Review of HwLDP commenced in response to Scottish Planning Policy 2014. Policy work has been rolled into preparation and refinement of Indicative Regional Spatial Strategy (IRSS) for Highland, the Council's policy submissions to inform National Planning Framework 4 (NPF4) including comprehensive response to draft NPF4 and development of some new policies included in the Inner Moray Firth Proposed Local Development Plan 2 (IMFPLDP2), all these documents having a climate emergency focus.
Policy ref. - N2-18 Delivery progress made - Flood Risk Management Plan published in 2016; works with communities on local community resilience plans to address flooding Comments - Interim update reports available.
Policy ref. - N2-20 Delivery progress made - Highland Biodiversity Action Plan; Pilot Pentland Firth & Orkney Waters Marine Spatial Plan was published in March 2016 Comments - Highland Council will work with partner organisations to develop 3 Regional Marine Spatial Plans for the National Marine Areas identified adjacent to Highland

Objective - Sustain and enhance the benefits, goods, and services that the natural environment provides. Objective reference - N3 Theme - Natural Environment
Delivery progress made - Highland Nature; Biodiversity Action Plan, 2021-2026; Highland Nature Actions 2015-2020. Highland Adapts. Highland wide Local Development Plan Comments - Update to Biodiversity Action Plan to be published in 2020/21.
Growing Our Future – draft food growing strategy for Highland Comments - Consultation on draft food growing strategy to be launched in Autumn 2020

Objective - Understand the effects of climate change and their impacts on buildings and infrastructure networks. Objective reference - B1 Theme - Buildings and infrastructure networks Policy ref. - B1-13 Delivery progress made - Flood Risk Management Plan (2016-2022) published on 22/06/16. Historic Environment Scotland Climate Change Adaptation for Traditional Buildings published in October 2016.

Objective - Provide the knowledge, skills, and tools to manage climate change impacts on buildings and infrastructure. Objective reference - B2 Theme - Buildings and infrastructure networks Policy ref. - Delivery progress made - Comments - Highland Adapts will develop a strategy and action plan which will highlight critical areas for action across partner agencies. The regional risk assessment will provide data and guidance to support informed decision making.

Objective - Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided. Objective reference - B3 Theme - Buildings and infrastructure networks Policy ref. - B3-3 Delivery progress made - Highland-wide Local Development Plan (adopted 2012) Comments - Being updated following public consultation. Policy framework is being updated through review of the HwLDP, recent preparation and refinement of Highland IRSS, inputting to NPF4 and review of the IMFLDP.
Policy ref. - B3-6 Delivery progress made - The Council's Climate Change & Energy Team manages the delivery of the Energy Efficiency Scotland: Area Based Scheme (EES: ABS), in partnership with E.ON Energy Installation Services Limited. Comments - Intended to support privately owned and rented households to improve energy efficiency. The programme aims to reduce fuel poverty by reducing energy costs, carbon emissions and improving comfort levels to the household. The Council programme allows householders to access the following measures:
Cavity Wall Insulation
Loft Insulation
Air Source Heat Pump
Solar Panels & Battery storage
The Council is currently in the 10th year of delivering and has installed measures Highland Wide.
Policy ref. - B3-7 Delivery progress made - Annual Standard Delivery Plan, reported on to Community Services committee details the implementation strategy for the Scottish Housing Quality Standard. The Annual Return of the Social Housing Charter to the Scottish Housing Regulator provides detail of compliance with the Scottish Housing Quality Standard Comments - The Scottish Government's Energy Efficiency Standard for Social Housing (EESSH) supersedes the Scottish Housing Quality Standard (SHQS), with more stringent standards to be achieved. Council housing stock has been being assessed and is 76.3% compliant with EESSH. The Council intends to invest over £9m in 2022-23 £5.3m in 2020/21 towards improving the energy efficiency of its housing stock and is planning to spend an additional £9m in 2022-23.
Policy ref. - B3-8 Delivery progress made - Annual Standard Delivery Plan, reported on to Community Services committee details the implementation strategy for the Scottish Housing Quality Standard. The Annual Return of the Social Housing Charter to the Scottish Housing Regulator provides detail of compliance with the Scottish Housing Quality Standard Comments - All social housing meets the tolerable standard outlined.

Objective - Understand the effects of climate change and their impacts on people, homes, and communities. Objective reference - S1 Theme - Society Policy ref. - Delivery progress made - The Highland Climate Challenge online game for Primary Schools provided early education of carbon reducing behaviours and activities and helped to recognise their carbon footprint. Comments - Highland Adapts will

have a heavy focus on community engagement to help develop a strong evidence base for locally appropriate solutions to climate change across the region. 11 teams from schools across the Highlands are involved in the programme.

Objective - Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events. Objective reference - S2 Theme - Society Policy ref. - S2-5 Delivery progress made - The Resilience Team and Flood Risk Management Team are both working with communities and partner organisations to develop local community resilience plans. Energy Sparks uses smart meter data, to show pupils, staff, and volunteers how much energy the school is using each day. The unique online tool presents bespoke analysis of the energy data with suggestions of actions the school community could take to save energy and reduce the school's carbon emissions. Comments - 19 schools are signed up for Energy Sparks and engaging with the platform. A campaign, "Get Energised" was launched in collaboration with Green Impact.

Objective - Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate. Objective reference - S3 Theme - Society Policy ref. - S3-6 Delivery progress made - The Resilience Team in collaboration with emergency responders has put in place a comprehensive evaluation strategy to assess performance after each training exercise/ event. Comments - These evaluations are not specifically about climate related risk, but are about responding more effectively whatever the scenario, which may include a variety of situations that could be impacted by climate change. Many of the actions related to public health, climate change and community resilience are either already in place or being developed by the CPP.

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

The Highland Council uses the UKCP18 climate change scenarios to inform future planning decisions and incorporates any changes in these scenarios into the relevant decision-making processes. The Resilience Team is continually assessing preparedness to a variety of acute risks that will be impacted by climate change by using a formal ‘Risk and Preparedness Assessment’ methodology. 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. Highland Adapts will develop a place-base climate risk assessment for Highland which will help the Highland Council plan for potential climate risk and build resilience.

As part of the development of the Council's Net Zero Strategy and Action Plan, the Climate Change and Energy team received funding for the 2022/23 financial year for new staff resources to assist in the delivery of the project. A full-time officer will be appointed to work through the Adaptation Scotland Capability Framework and embed adaptation within the Council. Their role will be focussed on working with service heads to identify operational risks and create an action plan to help build a climate-ready Council.

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.

Highland Adapts will develop a high-level dataset which will provide baseline data which can be used to monitor and evaluate different adaptation actions.

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

Priority 1: Contribute to Highland Adapts to support the production of a regional wide climate risk and opportunity assessment. Take an evidence-based and place-centred approach to inform the regions adaptation actions.

Priority 2: Through the NPF4 consultation and development of an indicative Regional Spatial Strategy (iRSS) for Highland, continue to highlight and demonstrate the need for strong adaptation and resilience principles to be embedded in national and local planning policy.

Priority 3: 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 adapt to 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 4: Developing Surface Water Management Plans in accordance with the requirements laid out in the Flood Risk Management (Scotland) Act 2009. Subsequently, 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.

Priority 5: Recruit an Adaptation Officer to establish a strategy and action plan for adapting Council services to ensure they are suitable and resilient to present and projected climate change (heatwaves, cold winters, and flooding).

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

The Highland Environment Forum has focused on developing and conducting public consultation of the Biodiversity Action Plan for 2021-2026. The Biodiversity Action Plan (BAP) 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.

Through the work of the Biodiversity Working Group, the results of the 2015 – 20 action plans have been summarised and the 2021 - 2026 plan completed. Consultation with partners and forum members has already been undertaken and will continue as the plan is developed. As part of the process of creating the 2021 - 2026 action plan the Highland Environment Forum has strengthened the biodiversity group membership, creating a stronger partnership for delivery of the plan.

The Highland-wide Local Development Plan will help Highland to meet the targets of NPF4 by ensuring that development has a positive impact on biodiversity. This impact is currently limited to the region described in the Inner Murray First Development Plan.

The Highland Council's capacity to have a positive impact on biodiversity has been strengthened through the addition of employment positions and through new funding sources being secured. A third ecologist has been employed to help deliver on statutory requirements for biodiversity in planning. A joint-funded Biodiversity Partnership Officer with NatureScot has been appointed and has been helping both organisations deliver on the ecological emergency. The Officer has helped secure Nature Restoration Funding for over 27 community groups throughout Highland, which included projects delivering tree planting, wildflower creation, removal of invasive non-native species, and wetland creation.

The Council's Historic Environment Team is currently 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 Council is guided by an internal policy covering sustainable procurement and community benefits at a strategic and operational level, contributing positively and progressively to duties and commitments under Scottish Climate commitments. The policy is sufficiently agile to contribute to broader climate positive aspirations which support global energy transition, application of meaningful circular economy measures and a net zero future for Highland. Strategic and practical guidance is provided at key stages: identification of need, specification development, selection/award, and contract management. Policy/guidance assists procurers to proactively address 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 procurements and 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. 2017-2022 Joint Procurement Strategy fully aligned to: i) Scottish Model of Procurement (balance of quality, cost, and sustainability) ii) National Performance Framework iii) 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"

The Council's Procurement Mission Statement followed 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 serve to further local and national priorities to the fullest extent possible." This converges with the National Performance Framework outcome "valuing, enjoying, protecting and enhancing our environment" and wider vision for the environment. Policy/strategy/guidance emphasizes a commitment (beyond mandatory 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 by 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 policy statement appears prominently in sourcing strategies and tender documents guiding procurers and bidders. Communication in this manner leads to climate-positive measures receiving early, considered focus resulting in higher quality, more innovative bids aligned to local priorities and climate change duties.

Policy/guidance explains not all sustainability measures are solely achieved through community benefits. Outcomes can be specified as contractual conditions e.g., particular eco standards (or equivalent), product composition, and opportunities to introduce circular economy measures. Methods of production, lifecycle costing, environmental performance, reduction of packaging (particularly single-use plastic) wastewater standards/accreditation, and production methods at any stage of the lifecycle of supply or service promoted. Example Climate Clause

Zero Waste Scotland Specification Development (Category and Commodity) guidance is promoted. Sustainable procurement measures achieved in the specification are regarded as "community benefits" and procurers are encouraged to consider utilising community benefits and the specification to maximise environmental well-being.

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/guidance recognises 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 well-being, poverty, biodiversity, reduced road miles/reduced carbon emissions, etc).

To simplify, sustainable procurement is strongly recognised as a means of increasing prosperity. The prosperity of the (local) economy; Prosperity of (local) people; Prosperity of (local) places and Prosperity of the (local) environment.

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 practices (NEC3, SBCC ICE, etc), Building Standards/Building Performance policies. Specifications incorporate sustainability, energy, and environmental considerations to a challenging but proportionate extent per project. A strong ethos that value for money is demonstrated by whole-of-life costing/best price-quality ratio. Current and future climate risks factored into procurement processes were relevant to safeguarding assets/infrastructure and communities. In the reporting period, procurer and supplier knowledge/awareness of circular economy principles and opportunities increased.

National Frameworks - via participation in User Intelligence Groups, the Council works in close collaboration with Scotland Excel (SXL) to improve sustainability credentials in the development of new national frameworks. Comprehensive sustainability test carried out by SXL for each new framework e.g., policies on managing waste, minimising carbon footprint, fair work, innovation, and commitments to delivering community benefits explored and subject to robust contract/supplier management. Extensive use made of national frameworks. SXL Contracts Register lists each operative framework and contains a summary of sustainability considerations representing a minimum standard that can be enhanced through purchasing decisions made in “call-offs” In any framework involving delivery of supplies, increasingly superior emissions class of vehicles/ willingness to work towards a particular standard during engagement promoted. Food-related frameworks incorporate reduced packaging/waste and circular economy principles. Scottish Government Frameworks and Contracts cover a wide range of goods and services. Sustainability standards represent a minimum that can be enhanced through purchasing decisions made in “call-offs.” Utility Electricity - Promoting greener power,

Renewable Energy Guarantee of Origin (REGO) certificates at fixed rates; a range of Energy Efficiency Services 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. Water – intelligent water management program for reducing usage with an associated reduction in CO2.
Utilities

- Electricity - Promoting greener power: option of Renewable Energy Guarantee of Origin (REGO) certificates at a fixed rate; a 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.
- Water – Climate Change Emergency measures including intelligent water management program for reducing water usage with an associated reduction in CO2 emissions

5c Supporting information and best practice

In the reporting period, the Commercial and Procurement Shared Service (CPSS) continued to engage actively and positively in the net zero/sustainable procurement agenda at a local, regional, and national level e.g., via working groups, User Intelligence Groups, and statutory consultations. Options continued to be challenged in cross-functional teams e.g., Climate Friendly criteria options (including appraisal of carbon calculator tools) and assessment of how impacts can be reliably monitored and reported upon. Internally, CPSS continue to contribute to themed corporate climate groups. Activity feeds into the Climate Change Plan supporting enabling actions to integrate actions into systems/processes, build internal and supplier awareness, knowledge, and capacity building of climate positive/circular economy principles.

The Policy guides sustainable procurement activity at a strategic and operational level and contributes positively and progressively to duties and commitments under Scottish Climate Change Commitments. The policy is sufficiently agile to contribute to broader climate positive aspirations which support global energy transition, application of meaningful circular economy measures and a net zero future.

Strategic and practical guidance is provided at key stages: identification of need, specification development, selection/award, and contract management. Policy/guidance assists procurers to proactively address 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 procurements and national frameworks call offs.

An increasingly significant number of outcomes relate to “environmental wellbeing” and promote the Council’s leadership role in net zero transition. The approach provides a framework to work consistently within.
An example of a climate clause within the Policy is that Bidders are asked to outline commitment on areas directly related to performing the contract,

which may include: energy efficiency in buildings, emissions class of fleet vehicles, effective route planning measures, energy/fuel efficiency measures in buildings/vehicles/operations, minimisation of waste, circular economy initiatives, reuse of materials, carbon neutrality initiatives, reduction of material/ packaging/reduced plastic content of packaging, avoidance of single use plastics etc. Performance against these commitments will be monitored during ongoing contract management.

Forward pipeline of procurements for FY2022-2023 reviewed opportunities to include climate friendly criteria identified. Projects reviewed on a continuous basis. Systems options will be reviewed with a view to adopting a system to monitor, measure and report on community benefits, Fair Work, sustainability/climate outcomes achieved.

Go Awards Scotland- CPSS were finalists in three categories in a ceremony held on 19 April 2022: Social Value Award – City Region Deal Gigabyte Framework (outright winner) COVID-19 Outstanding Response Award - (Finalist) and Procurement Team of the Year (Finalist)

Effective Collaboration/Partnership Working - CPSS has strengthened relationships with Edinburgh Science, the Supplier Development Programme, community planning partners, the local business community, local third sector interface organisations, and Senscot to raise awareness of and capability within the 3rd sector re sustainable procurement/community benefits/net zero. Approach ensures as far as possible, social value is aligned to community priorities. If social/economic value can be supported by the local 3rd sector, this allows increased scope for procurers and suppliers to address “environmental measures” and the net zero agenda.

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 & Energy team. The Climate Change & Energy 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 & Energy team. Data is stored securely with both the service providing the data, and with the Climate Change & Energy team. Data on staff travel is subject to internal scrutiny through the Communities and Place Service. As our understanding improves it is becoming increasingly clear that a more focused means of managing our day-to-day carbon emissions needs to be established across the services with a fully embedded behaviour change and carbon literacy programme initiated to ensure a council wide understanding of the impact, they can have on carbon emissions.

6b Peer validation process

Although no external peer validation is currently undertaken in respect of our annual Public Bodies Climate Change Duties return, we would welcome additional external scrutiny and suggestions regarding performance and opportunities for improvement.

6c External validation process

Individual services that supply data to the Climate Change & Energy 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

N/A

6e Declaration

Name:	Neil Osborne
Role in the body:	Climate Change and Energy Team Manager
Date:	30/11/2022

1 Recommended Reporting: Reporting on Wider Influence

Local Authority:(Please State)	Highland
BEIS Dataset:(full or sub-set)	Subset

Source	Sector	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Units
BEIS Sectors	Total Emissions	2,019.75	2,172.68	1,999.90	2,004.31	1,956.81	1,793.71	1,726.07	1,619.95	1,571.85	1,532.13	1,438.48	1,268.37	**ktCO2e**
	Industry and Commercial	562.15	645.45	595.32	578.40	565.23	503.78	467.74	398.11	366.94	344.95	289.14	264.33	**ktCO2e**
	Domestic	693.90	748.51	643.39	674.89	643.10	555.79	518.86	475.35	443.78	437.20	417.98	410.94	**ktCO2e**
	Transport total	575.88	572.06	561.21	553.51	553.79	555.72	575.33	592.97	607.37	600.42	582.31	455.59	**ktCO2e**
	Per Capita	8.83	9.42	8.59	8.61	8.40	7.70	7.37	6.90	6.68	6.50	6.10	5.39	**ktCO2e**

2 **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 this in the box below.**

The Highland Council is currently developing its net zero strategies based on the emissions within the corporate organisation. There is recognition that this will influence emissions beyond corporate boundaries. However, mechanisms for measuring and recording this impact on emissions do not form part of the Council's current remit and will require further development and understanding as an additional phase to the internal net zero strategies.

Key Action Type	Description	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Partnership Working	The Highland Council continues to be an active partner in the Highland Adapts initiative. This is a partnership approach to building climate adaptation within Highlands.	Participant			Zero Waste Scotland; Forestry and Land Scotland; Changeworks; Adaptation Scotland (SNIFFER); NHS Highland; Highlands and Islands Enterprise; NatureScot.	North Highlands and Islands Climate Hub	Highland Adapts is currently working on a Highland-wide climate risk assessment which will provide data and guidance to support informed decision making	During the 2021/22 period, Highland Adapts has formalised its governance structure and started to contribute to other initiative working towards adaptation.

Key Action Type	Description	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
							around climate adaptation.	
Communications	The Council's Climate Change and Energy team hosted the 2021 Highland Climate Change Conference.	Lead		Port of Cromarty Firth; SSE Renewables; Islands Centre for Islands Technology; Energy Sparks	Scottish Government; Zero Waste Scotland; Highlands and Islands Enterprise; NatureScot; National Trust for Scotland; Cairngorms National Park Authority; Scottish Cities	Highland Good Food Partnership; Thurso Community Development Trust; ROSE Project; Lochaber Environmental Group: Trees for Life; Planet Sutherland	The conference attracted over 200 people across both days from people all over Highland and beyond. Of the people who completed	The purpose of HCCC 2021 was to showcase the breadth and variety of work being undertaken across the whole Highland region to address the climate and ecological emergency, whilst giving

Key Action Type	Description	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
					Alliance; Scottish Land Commission		the survey, over 60% said the conference was excellent or very good.	residents, businesses and the third sector opportunities to discuss and highlight areas where increased focus may be required. This would then help to inform the preparation of the Council's approach to achieving net zero emissions' 2021 and its associated workshops took place virtually on

Key Action Type	Description	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
								Thursday 21st and Friday 22nd October 2021. Several eminent speakers from a variety of sectors took part in the conference, which explored topics relating to energy, land and sea, net zero and resilient communities.

Key Action Type	Description	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Communications	The Council's Climate Change and Energy team operate an Instagram and Twitter account under the name 'Carbon CLEVER	Lead					Over 1000 followers on Twitter and 140 followers on Instagram	The platforms provide a mechanism for communicating climate change news, share the Council's current and planned projects which will have a positive effect on our journey to net zero, and encourage engagement from the public.

Key Action Type	Description	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Partnership Working	The Hydro Ness project. A hydro-electric scheme on the banks of the river Ness, providing 50% of the electricity required for the Inverness Leisure Centre. The site also features interpretative visitor experience which has been developed	Lead		SSE Renewables; Visit Inverness Loch Ness; Creative Services Scotland	Highlife Highland; Highlands and Islands Enterprise; Zero Waste Scotland; University of Highlands and Islands		A functional hydro-electric scheme generating power to the nearby Inverness Leisure Centre and a destination for visitors to interact with on the river Ness	The scheme will be fully operational in May 2022 and will be open to the public in July 2022.

Key Action Type	Description	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
	in partnership with local projects and organisations							

Partnership Working	The Highland Council is a key partner in The Flow Country Partnership, which is delivering two key peatland and green finance projects and advocates for healthy peatlands in Caithness and Sutherland.	Participant		Wildland Ltd., ConFor	Scottish Natural Heritage, Scottish Forestry, Visit Scotland, Highlands, and Islands Enterprise	RSPB Scotland, CVS North,	The Flow Country World Heritage Site Project and The Flow Country Green Finance Initiative.	The Highland Council is a key partner in The Flow Country Partnership, which is delivering two substantial projects in Caithness and Sutherland. The Partnership will submit a full nomination to UNESCO in late 2022 with the aim of seeing The Flow Country inscribed as the world's first peatland World Heritage Site. The

								Flow Country has successfully passed through the demanding Technical Evaluation stage and The Highland Council has taken the lead in two thorough community consultations, the first in 2019 and the second in 2022. If The Flow Country does become a Heritage Site, this will bring multiple benefits to the north, including

								increased income from tourism and increased protection for the peatlands. The Flow Country Green Finance Initiative is an innovative green finance project, which seeks to attract private finance to peatland restoration and other green projects in Highland. The Highland Council, as a key partner

								of The Flow Country Partnership, has played an important role in community consultation, strategic workshops, and the development of a financial vehicle through which this project will be delivered. It is anticipated that the first green finance investments will be made through this project in 2023.

Please use the text box below to detail further climate change related activity that is not noted elsewhere within this reporting template

During our initial review, it is clear that there will be a significant impact across the organisation when the measurement of scope 3 is fully realised. the reporting within section 3 of this report is based on the various services within the council's understanding of scope 3. The CCET team has carried out an initial high-level review the results of this indicate that Council's Scope 3 emissions are going to see a significant increase. the initial overview suggests a figure in excess of 110,000 tonnes.
As a result, we have taken steps to engage an independent assessment which will provide the Council with a definitive baseline on current emissions. In order to drive behaviour, change within procurement and supply chain the Council are exploring toolkits to provide like information that can be interrogated in the same way as financial budgets so services can actively monitor and target service specific improvements to reduce carbon emissions.