ITEM No …15……..

REPORT TO: **POLICY & RESOURCES COMMITTEE – 21 NOVEMBER 2022**

REPORT ON: **PUBLIC BODIES CLIMATE CHANGE DUTIES – ANNUAL REPORT 2021/2022**

REPORT BY: **EXECUTIVE DIRECTOR OF CITY DEVELOPMENT**

REPORT NO: **272-2022**

1 PURPOSE OF REPORT

1.1 To inform Committee of the work undertaken over the period April 2021 to March 2022 in support of the Council's duties under the Climate Change (Scotland) Act 2009.

1.2 To report on efforts to reduce the Council's organisational emissions and the investment delivered which has resulted in a 50% reduction in total emissions since 2007/2008.

2 RECOMMENDATION

2.1 It is recommended that the Committee note the progress made by the Council in responding to the climate emergency and progress in reducing organisational emissions outlined in the 2021/2022 Public Bodies Climate Change Duties (PBCCD) Report at Appendix 1.

3 FINANCIAL IMPLICATIONS

3.1 Any anticipated costs associated with the implementation of the PBCCD will be contained within existing capital and revenue budgets. The financial implications for the Council in fully reaching net-zero greenhouse gas emissions cannot yet be calculated as it is dependent on future actions and technologies that have not yet been identified. Further costed work will be required to identify future policies and measures and quantify their potential emissions reduction impact.

4 BACKGROUND

4.1 In November 2014, the Scottish Government announced its intentions to use powers in the Climate Change (Scotland) Act 2009 to introduce an annual Public Bodies Climate Change Duties (PBCCD) reporting requirement for 180 "major players" reflecting the expectation that the public sector will lead by example in tackling climate change. The Council continues to report annually on this duty.

5 THE 2021/2022 PUBLIC BODIES CLIMATE CHANGE DUTIES REPORT

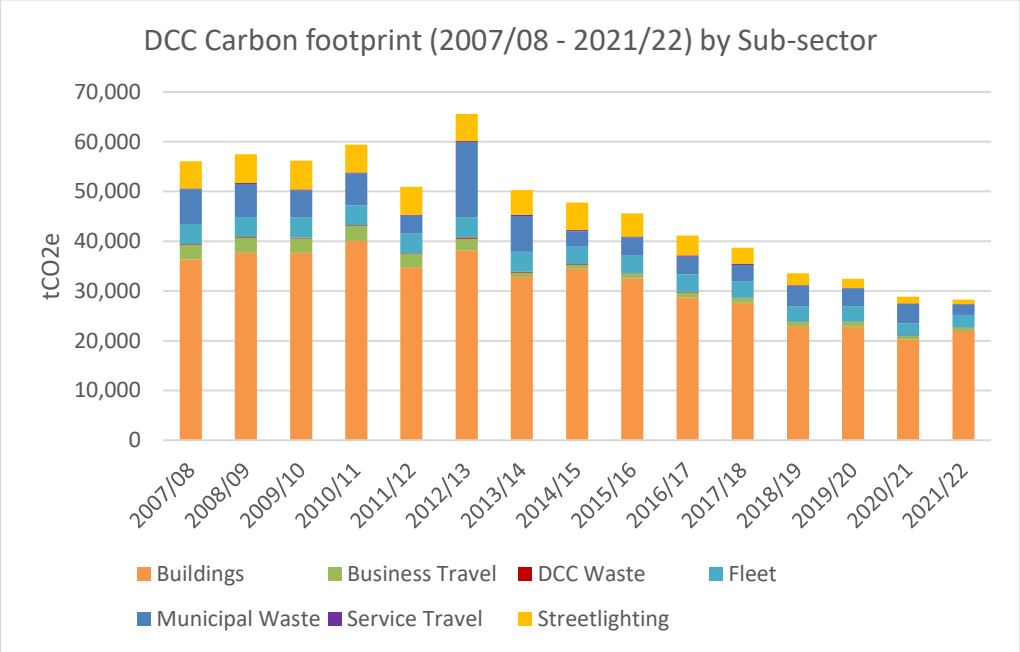
5.1 A detailed analysis of the Council's progress on reducing its carbon footprint can be found in Section 3 of Appendix 1. The key points are:

a the carbon footprint for the Council has reduced by 2% in the past year;

b the carbon footprint has reduced by 50% since the baseline year of 2007/08; and

c investment in the Non-Domestic Energy Efficiency (NDEE) basket of projects and Street lighting LED programme are starting to have positive impact on carbon savings from electricity use in buildings and will continue to have a significant positive impact on carbon savings in future years. However, emissions from natural gas in buildings have continued to increase since 2018/2019. Whilst this is in part due to the pandemic and need for greater ventilation it also typifies the organisation's current reliance on gas to heat its properties. In order to reverse this and enable compliance with Scottish Government

targets, greater investment is required to install and retrofit low and zero carbon technologies to heat the Council's building stock and improve the fabric energy efficiency.



5.6 Potential change in Emissions Boundary in coming years

5.6.1 Public sector bodies in Scotland have been reporting their emissions reduction progress to the Scottish Government for over ten years and have a relatively good understanding of their direct (scopes 1 and 2) emissions. In that time, methodologies and refinements as to how emissions are measured and what carbon emitting activities should be measured have been discussed. Most recently, attention has turned to how the public sector can better understand and report on their scope 3 emissions (i.e. indirect emissions as a result of activities from assets not owned or controlled by the reporting organisation, but that the organisation indirectly impacts in its value chain). These include activities like supply chain, staff commuting and home working emissions.

5.6.2 Reporting on Scope 3 emissions is more challenging due to the multitude of different sources that must be considered and the difficulties obtaining reliable data to support it as it relies on supply chains and third parties to report on their own Scope 1 and 2 emissions. However, as they can account for 90% of an organisations emissions footprint it's important to be able to understand these emissions to be able to identify how to reduce them (e.g. by engaging with contractors, suppliers and staff to reduce their own direct emissions).

5.6.3 It is therefore likely that within a future reporting period, these scope 3 activities will have to be factored into the Council's emissions footprint and systems put in place to capture, track and report on them as standard which will see a significant rise in indirect emissions from the organisation.

6 POLICY IMPLICATIONS

6.1 This report has been subject to the Pre-IIA Screening Tool and does not make any recommendations for change to strategy, policy, procedures, services or funding and so has not been subject to an Integrated Impact Assessment. An appropriate Senior Manager has reviewed and agreed with this assessment.

7 CONSULTATIONS

7.1 The Council Leadership Team have been consulted in the preparation of this report and are in agreement with its content.

8 BACKGROUND PAPERS

8.1 None.

Robin Presswood
Executive Director of City Development

Author: Bryan Harris

Dundee City Council
Dundee House
Dundee

RP/BH/KM

25 October 2022

APPENDIX 1

PUBLIC BODIES CLIMATE CHANGE DUTIES – 2021/2022 ANNUAL REPORT

1 PROFILE OF REPORTING BODY

1a) Name of reporting body

Dundee City Council

1b) Type of body

Local Authority

1c) Number of full-time equivalent staff in the body during the report year

8337

1d) Metrics used by the body

Specify the metrics that the body uses to assess its performance in relation to climate change and sustainability.

Metric	Units	Value	Comments
Population Size Served	population	148,820	NRS Mid-2020 Population Estimates
Other (specify in comments)			

1e) Overall budget of the body

Specify approximate £/annum for the report year.

£372,800,000

1f) Report year

Specify the report year

2021/2022 (financial year)

1g) Organisational context

Provide a summary of the body's nature and functions that are relevant to climate change reporting.

Property Management - Energy use in Council buildings; refurbishments/upgrades and renewables options; street lighting, energy efficiency retrofit and climate change adaptations.

Passenger Transport - Regional transport policy and planning; shared mobility and smart city integration; active travel and behaviour change programmes for modal shift; staff business travel.

Fleet Management – Maintenance and management of Council fleet; investment and promotion in low carbon vehicles and infrastructure; driver training and awareness; fleet telematics and rationalisation.

Waste – Waste policy & planning, collection and disposal of municipal waste, composting operations, collection of recyclates for onward treatment as per national regulations and promotion of waste reduction & reuse activities. Waste education & awareness-raising to encourage behavioural change, route planning & optimisation and statutory waste data reporting."

Land and Open Space - Land use strategy and development of green networks; habitat management and biodiversity opportunities; trees and woodland management.
Emergency Planning and Resilience – planning for and responding to severe weather events.

Flood Risk Management - development of a Local Flood Risk Management Plan and delivery of Flood Protection Schemes.

Education Services – implementation of staff and pupil low carbon behaviours; developing Eco-Schools activity; acting as leader within the community.

Administration - Green office activity; staff awareness and engagement including resource use, energy efficiency and travel.

Procurement - Embedding Sustainable procurement considerations into spending and investment decisions to help to reduce waste and emissions; stimulate the market for more sustainable products and set an example to Council partners and the wider community.

Community Planning - demonstrating leadership in partnership working to increase impact through joint initiatives and knowledge transfer.

Communication - Better integration of sustainability messages into communications through all media at the Council's disposal is critical for bringing about real and positive change to encourage more sustainable and climate friendly behaviour by all stakeholders.

2 GOVERNANCE, MANAGEMENT AND STRATEGY

Governance and management

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

Provide a summary of the roles performed by the body's governance bodies and members in relation to climate change. If any of the body's activities in relation to climate change sit outside its own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify these activities and the governance arrangements.

The Council's **Sustainable Dundee Working Group** is facilitated by the Sustainability and Climate Change (S&CC) team with its broad purpose to take forward ideas, projects, actions and communications relating to sustainability within the Council. The group is responsible for overseeing progress on climate change activity and in turn reports to the Council Leadership Team as required.

Proposals can be agreed at the working group level. Decisions concerning projects with significant financial or strategic considerations will be taken to the Council Leadership Team. Officers from the following Services participate in the working group which meets every two months. These are shown under the Dundee Climate Action Plan topics.

Energy	Transport	Waste	Resilience	Governance/ Strategy/policy
▪ Domestic ▪ Non-Domestic ▪ Street Lighting ▪ Housing ▪ Design and Property ▪ Business Dev. ▪ Planning	▪ Sustainable Transport ▪ Fleet ▪ Air Quality	▪ Municipal Waste ▪ Internal Resources ▪ Circular Economy	▪ Flooding ▪ Environment/ Biodiversity	▪ Sustainable Development/ Climate Change ▪ Finance ▪ Procurement ▪ Funding

The **Dundee Climate Leadership Group** was established in spring 2021 to provide active leadership on Dundee's net-zero challenge, leveraging expertise from across the city in order to engage and inspire collective ownership and a shared commitment to tackling climate change. It's chaired by the Principal of the University of Dundee and its operating principles are to work within the objectives of Dundee Climate Action Plan and strategic vision of Dundee Partnership (Community Planning Partnership).

Dundee City Council	Robertson Group	Scottish Water
University of Dundee	Dundee Climate Action Network	Dundee Heritage Trust
University of Abertay	Creative Dundee	The Poverty Alliance
NHS Tayside	Hillcrest Homes	Michelin Scotland Innovation Parc
Scottish Gas Networks	Scottish & Southern Electricity Networks	DC Thomson

The Group's purpose is to:

- To promote climate change leadership in Dundee, providing expert advice, challenge and encouragement in progressing the city's contribution to tackling climate change.
- To monitor and drive progress of the Dundee Climate Action Plan in meeting the city's net-zero targets and recommend innovative solutions that support a just transition to a net-zero future.
- Support partners to reduce carbon emissions from the key sectors of residential, commercial, industry, transport and the public and private sectors.
- To enable the provision of independent and expert advice on the most effective steps for meeting reduction targets in order to inform policies and actions of members and local stakeholders and decision-makers.
- To identify the social challenges and impacts of climate change on Dundee's communities and ways to mitigate and improve them.
- To help build and support the case for project development and investment in low carbon and climate resilient projects in the city, supporting collaboration and business case development and project implementation.
- To embed best practice in public engagement on climate change and its impacts, in order to support robust decision making and local action.
- To support the exchange of ideas, research findings, info and best practice on carbon reduction and climate resilience.
- To identify and promote the exchange of best practice and lessons learnt with other cities in order to support decision-making at Council Committees.

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

Provide a summary of how decision-making in relation to climate change action by the body is managed and how responsibility is allocated to the body's senior staff, service heads etc. If any such decision-making sits outside the body's own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify how this is managed and how responsibility is allocated outside the body.

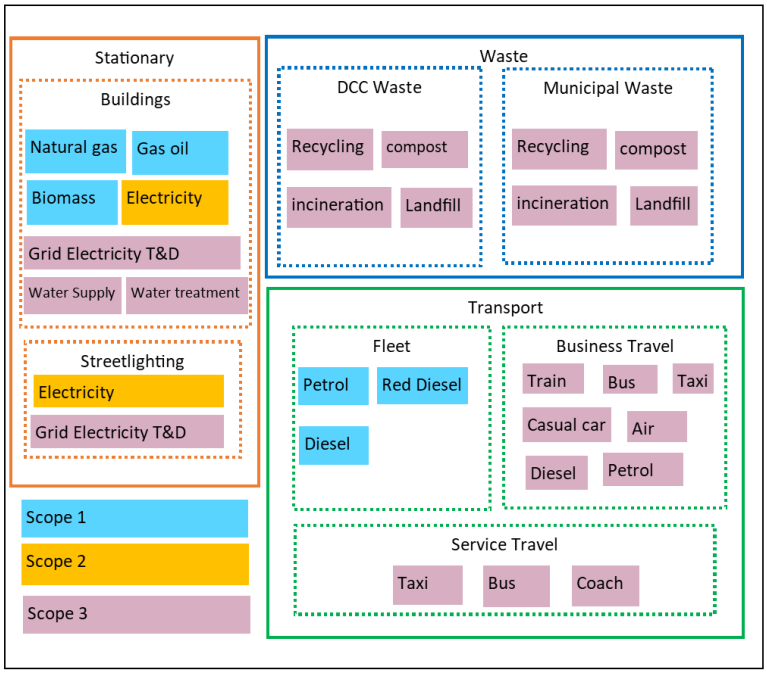
For reporting period 2021/22, the Council Service Areas with the most direct role in climate change activity were:

- City Development (lead on sustainable development/climate change strategy, monitoring/reporting, strategic environmental assessment, adaptation, behaviour change, asset management, energy management, flooding and coastal, land use planning, transport planning, street lighting, fleet);
- Corporate Services (procurement, finance, IT, staff travel);
- Neighbourhood Services (housing, community facilities, waste, air quality, greenspace, biodiversity).

<u>Carbon Emissions</u>

- The Council's emissions boundary is shown in Figure 1 below. It should be noted that the boundary is subject to annual change as, over the target period 2007/2008 to 2021/2022, assets are disposed of, new assets are acquired and the functions of the organisation evolve. The boundary is therefore reassessed on an annual basis, along with the Council's asset list, to make sure that the carbon management boundary is applied consistently to new sources. The data is presented to Council Leadership Team and Policy & Resources Committee as part of the Council's statutory 'Public Bodies Climate Change Duties' report.

Figure 1: Dundee City Council Carbon Footprint Boundary for 2021/22:



Scope1: Direct emissions from Council owned and controlled sources using fossil fuel
Scope 2: Emissions from the consumption of purchased electricity / grid electricity
Scope 3: Indirect emissions from all other Council activities which occur at the sources that Council doesn't own and/or control

Embedding Climate Change within the organisation

- The **Dundee Climate Action Plan** contains a number of Council led carbon emission reduction actions across various Services. These have been captured in **ClimateView** emissions modelling software to provide an understanding of how far the current action sin the plan will take us to net zero. Dundee's emissions dashboard can be explored at: https://app.climateview.global/public/board/261e36a2-915d-47d6-8e65-e63e14b7b970

- Current arrangements for assessing committee reports prior to submission require officers to screen their reports for any policy implications in respect of Sustainability and Strategic Environmental Assessment. An **Integrated Impact Assessment tool** was re-launched in 2022 that incorporates climate change mitigation and adaptation impacts into the committee reporting process.

- In 2020 the Council joined **Adaptation Scotland's Benchmarking Working Group –** working with other local authorities in Scotland to mainstream resilience actions within the public sector according to the Adaptation Capability Framework (ACF). In June 2021 a Benchmarking Assessment was undertaken by Council officers using the Benchmarking Assessment Tool, whereby our progress on the ACF was assessed. A number of actions were identified from this and the internal Adaptation Working Group are taking these forward.

- A bespoke Climate Literacy Leadership Training course was developed for 120 Council managers and ran from November 2021 to March 2022 in partnership with **Keep Scotland Beautiful** and the **Carbon Literacy Project.** The training provided managers with an understanding of the impact climate change will have on their respective Service delivery areas and how Service areas can take action to support the Council in its transition to net-zero.

- The Council developed mandatory online **Climate Literacy Training** for staff as part of Dundee's COP26 programme. This provides staff with an understanding of the causes of climate change, why it matters and how the climate will change. It covers climate change reduction and adaptation measures on individual areas, personal action that can be taken as well as Dundee specific material which provides staff with local insights and actions the Council is taking.

Provide a diagram to show how responsibility is allocated to the body's senior staff, dept. heads etc.

See Strategic Service Areas above.

Strategy

2c) Does the body have specific climate change mitigation and adaptation objectives in its corporate plan or similar document? *Provide a brief summary of objectives if they exist.*

Wording of objective	Name of document
Building Strong and Empowered Communities: Improve housing quality, choice and affordability. Increase District Heating Systems and Maximise External Wall insulation programme	City Plan (2017 – 2026) p. 43-44 https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf
	Council Plan 2017-2022 p.42 https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf
Building Strong and Empowered Communities: Improve access to healthy green and open spaces	City Plan (2017 – 2026) p. 43-44 https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf
	Council Plan 2017-2022 p.42 https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf
	Biodiversity Action Plan 2020-2030 https://www.dundeecity.gov.uk/sites/default/files/publications/dundees_biodiversity_action_plan_2020-2030.pdf
Building Strong and Empowered Communities: Improve transport connections to communities.	City Plan (2017 – 2026) p.43-44 https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf
	Council Plan 2017-2022 p.42 https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf
Strong and Safe Communities: Recycling waste to meet Scotland's' Zero Waste ambitions.	Council Plan 2017-2022 p.40-41 https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf
Fair Work and Enterprise: Publish a Climate Change Action Plan: Deliver sustained reductions in CO_2 emissions and increased use of renewables in energy production and consumption.	Council Plan 2017-2022 p.34 https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf

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

If yes, provide the name of any such document and details of where a copy of the document may be obtained or accessed.

Since signing the City up to the **Covenant of Mayors for Climate and Energy** on March 2018, the Council has worked with public, private and community organisations via the Dundee Partnership to co-design a **Dundee Climate Action Plan** which contains actions on Energy, Waste, Transport and Resilience that will help reduce emissions and prepare for climate change. The Plan was launched in December 2019. The Council declared a **Climate Emergency** in summer 2019, and the Plan represents the first set of actions in a long-term pathway to achieve net-zero greenhouse gas emissions by 2045 or sooner. A new organisational Net Zero Transition Plan and Carbon Budget is currently in development.

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

Provide the name of any such document and the timeframe covered.

Topic Area	Name of document	Time period covered	Comments
Adaptation	Dundee Coastal Study Stage 2	2013-	Identifies a framework within which local flood prevention and coastal erosion defence schemes are developed at different locations along Dundee's 16.9km of coastal frontage. http://www.dundeecity.gov.uk/reports/reports/256-2013.pdf
	Tay Estuary and Montrose Basin Local Flood Risk Management Plan	2016-2022	In partnership with other responsible authorities, the plan has been developed to detail the actions adopted to reduce the risk of flooding in the Tay Estuary and Montrose Basin (TEAMB) local plan district (LPD) as required by the Flood Risk Management (Scotland) Act. http://www.angus.gov.uk/sites/angus-cms/files/2017-07/Tay_Estuary_and_Montrose_Basin_Local_Flood_Risk_Management_Plan.pdf
	Local Development Plan	2019-2029	Policy 30: Green Infrastructure Maintenance Policy 36: Flood Risk Management Policy 37: Sustainable Drainage Systems Policy 38: Protecting and Improving the Water Environment
	Dundee Climate Action Plan	2019	Co-designed by the Dundee partnership, contains actions across the themes of Energy, Transport, Waste and Resilience. https://www.dundeecity.gov.uk/sites/default/files/publications/climateactionplan.pdf
	Biodiversity Action Plan	2020-2030	Protecting and enhancing ecosystems, habitats and species diversity in Dundee. https://www.dundeecity.gov.uk/sites/default/files/publications/dundees_biodiversity_action_plan_2020-2030.pdf
Energy efficiency	Energy Management Policy	2012-2020	The adoption of the Energy Policy demonstrates the City Council's commitment to the principles of responsible energy and water management in its operational buildings. The City Council will aim to improve its energy and water efficiency and reduce its energy and water consumption in line with the targets set out in this policy. http://www.dundeecity.gov.uk/reports/reports/470-2012.pdf
	Local Housing Strategy (LHS)	2019-2024	The LHS is the primary strategy for the provision of housing and associated services to address homelessness, meeting housing support needs and tackling fuel poverty. Tackling

			climate change has been identified as one of a number of main areas for consideration within the strategy given the major role housing can play in reducing emissions. The 2019-2024 Local Housing Strategy launched September 2019. https://www.dundeecity.gov.uk/reports/agendas/ns300919ag.pdf
Renewable energy/ Sustainable/ Renewable heat	Invest in Dundee – Energy Dundee	2018-	The energy sector is an important part of the future for Dundee and the broader local economy encompassing: offshore wind, oil & gas, decommissioning (driven by the proximity of the Scottish Offshore Wind projects) and emerging and growing areas such as hydrogen, electric vehicle and a general market demand to lower energy costs and become more sustainable. Scottish Government identified Dundee Port in the National Renewables Infrastructure Plan (NRIP) as the most suitable port location on the East Coast of Scotland and recognised the major investment to support offshore construction and O&M activity made by both the public and private sector in the city. Significant public and private investments have been made in infrastructure to ensure the city and port meets the needs of the offshore wind sector. Alongside investment in infrastructure Dundee offers skills, R&D facilitates, competencies across the supply chain and world class centre of excellence. Dundee's cluster approach brings together regional strengths from across Tayside and Fife in the engineering/manufacturing sectors via networks, such as Energy Dundee, East Coast Renewables and the Forth and Tay Cluster to support the offshore sector. www.investindundee.co.uk www.energydundee.com
	District Heating Strategy	2018-2028	The District Heating Strategy sets out the Council's vision for the delivery of district heating in the Dundee City Council area, identifying potential heat network opportunities, stakeholder engagement plans and next steps required to realise its ambitions. https://www.dundeecity.gov.uk/reports/reports/166-2018.pdf
	Local Development Plan	2019-2029	Local Development Plan contains a number of policies that act as enablers to the development and generation of renewable energy and low carbon heat technologies: - Policy 45: Energy generating Facilities - Policy 46: Delivery of Heat networks - Policy 47: Wind Turbines - Policy 48: Low and Zero Carbon Technology in New Development https://www.dundeecity.gov.uk/sites/default/files/publications/local_development_plan_2019_for_web.pdf

Land use	TAYplan	2016-2036	Recognises the long term implications of climate change and sea level rise. It supports the switch to a low carbon economy and zero waste economy by providing for appropriate infrastructure and improvements in our resilience to climate change and other potential risks. It seeks to deliver better quality development and places which respond to climate change by ensuring resilience built into the natural and built environments through a presumption against development in areas vulnerable to coastal erosion, flood risk and rising sea levels. http://www.tayplan-sdpa.gov.uk
	Local Development Plan	2019-2029	Local Development Plan seeks to deliver the TAYplan vision in relation to climate change resilience. Climate change policies have been strengthened with an emphasis on delivering green networks, environmental protection and supporting heat networks in the City. https://www.dundeecity.gov.uk/sites/default/files/publications/local_development_plan_2019_for_web.pdf
Staff travel (commuting)	TACTRAN Regional Transport Strategy (RTS) refresh	2015-2036	RTS refresh sets out a vision for improving the region's transport infrastructure, services and other facilities to 2036. Formally approved by the Minister for Transport and Islands on 23 July 2015, it updates policies and proposals and now identifies 31 Strategic Actions which are aimed at supporting regional economic prosperity; connecting our communities and being socially inclusive; and promoting environmental sustainability and improved health and wellbeing. The horizon of 2036 aligns with the second TAYplan Strategic Development Plan covering much of the Tactran region. http://www.tactran.gov.uk/documents/RTSRefresh-FinalReport.pdf
Cycling	Dundee Cycling Strategy	2019	This strategy sets out how Dundee City Council will deliver its duties, powers and policies to enable and encourage more people to cycle more often. The Council recognises the role of walking and cycling to make a significant impact on the success of the city and the lives of its citizens. In Dundee promoting cycling can help achieve the strategic priorities in the Council Plan and therefore seeks to give due advantage to pedestrians and cyclists in its management of the transport network. https://www.dundeecity.gov.uk/sites/default/files/publications/dundee_cycle_strategy_2019.pdf
	Local Development Plan	2019-2029	Policy 54: Safe and Sustainable Transport
Business travel	Staff Travel Policy	2011-	This policy aims to reduce staff need to travel for work and, when they do need to travel, explicitly prioritise walking, cycling, public transport and car share over single-occupancy car. This will not only reduce carbon emissions from travel, but also contributed to cost savings and

			the Council's duty of care to its employees and others. The increased use of Electric Vehicle pool cars also ensures that those trips made by car are as sustainable as possible. http://www.dundeecity.gov.uk/reports/reports/413-2011.pdf
Fleet transport	Plant/Vehicle Asset Management Plan		Internal document, unpublished.
Climate Change	Dundee Climate Action Plan	2019	Co-designed by the Dundee partnership, contains actions across the themes of Energy, Transport, Waste and Resilience. https://www.dundeecity.gov.uk/sites/default/files/publications/climateactionplan.pdf
ICT	Digital Strategy	2016	Outlines how the Council aims to innovate and re-design services to provide them in the most effective way, makes best use of its spending power and maximises the use of new technologies so that it can become a digital Council. https://www.dundeecity.gov.uk/sites/default/files/publications/2017%20Digital%20Strategy.pdf
Waste and Recycling Strategy and Action Plan	Waste Management Strategy	2020-2025	Adopted in 2020 setting out long term plans to reduce and recycle waste. https://www.dundeecity.gov.uk/service-area/neighbourhood-services/environment/waste-policy
Water/Sewerage	Tay Estuary and Montrose Basin Local Flood Risk Management Plan	2016-2022	Developed in close partnership between all responsible authorities, SEPA and Scottish Water to set the objectives to tackle flooding and identify actions which will make a real difference to managing the risk of flooding and recovering from any future flood events. http://www.angus.gov.uk/sites/angus-cms/files/2017-07/Tay_Estuary_and_Montrose_Basin_Local_Flood_Risk_Management_Plan.pdf
Other	Dundee Air Quality Action Plan	2011	Defines the scope for the Air Quality Management Area (AQMA) and sets out measures together with targets and indicators to achieve the compliance with the objectives for PM_{10} and NO_2. It supports the integration of local air quality considerations within the Council's wider policies, strategies and plans to deliver co-benefits, particularly those relevant to sustainable development, reduction in greenhouse gases and carbon emissions. https://www.dundeecity.gov.uk/service-area/neighbourhood-services/community-safety-and-protection/air-quality-dundee
	Local Development Plan	2019-2029	Policy 40: Air Quality

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

Provide a brief summary of the body's areas and activities of focus for the year ahead.

1) Develop a new **Net-Zero Transition Plan and Carbon Budget** for the Council based on the latest carbon management data provided by the Carbon Footprinting and Project Register Tool and the carbon reduction actions identified during the climate action planning process.

2) Create a new £750,000 **Community Climate Choices** Fund based on the principles of Participatory Budgeting for local climate change solutions.

3) Utilise the **ClimateView emissions modelling platform** to monitor progress, inform decision making, engage stakeholders and communicate results on the Cities net-zero target

4) Develop the statutory **Local Heat and Energy Efficiency Strategy (LHEES)** setting out a long-term plan for decarbonisation of heat in the city. In line with the LHEES also develop a partnership **Local Area Energy Plan (LAEP)** which will set out plans for the most efficient decarbonisation pathways of local energy systems (along with heat).

5) Embed C**limate Adaptation** across services in line with Adaptation Scotland's Capability Framework.

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

If yes, please provide details of the findings and resultant action taken. This refers to the tool developed by Resource Efficient Scotland for the purposes of self-assessing an organisation's capability / performance in relation to climate change.

The Council has completed its CCAT process to help self-evaluate performance under the Climate Change (Scotland) Act Public Sector Duties, identify the key priorities and actions for improvement.

<u>Supporting Information</u>

2h) Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to governance, management and strategy.

The **Dundee Climate Action Plan** was led by the Council and co-designed with public, private and community organisations, recognising the fact that a concerted city-wide effort is required. The Plan has been informed by a Baseline Emissions Inventory, Climate Risk & Vulnerability Assessment, statutory Strategic Environmental Assessment, partnership workshops and public consultation.

The Council are now trialling **ClimateView Emissions modelling software** to help measure carbon abatement of actions, policies and strategies and their impact on our net-zero target, one of 5 pilot cities in the UK to do so and the first in Scotland.

3 CORPORATE EMISSIONS, TARGETS AND PROJECTS

Emissions

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

Complete the following table using the greenhouse gas emissions total for the body calculated on the same basis as for its annual carbon footprint / management reporting or, where applicable, its sustainability reporting. Include greenhouse gas emissions from the body's estate and operations (a) (measured and reported in accordance with Scopes 1&2 and, to the extent applicable, selected Scope 3 of the Greenhouse Gas Protocol (b). If data is not available for any year from the start of the year which is used as a baseline to the end of the report year, provide an explanation in the comments column.

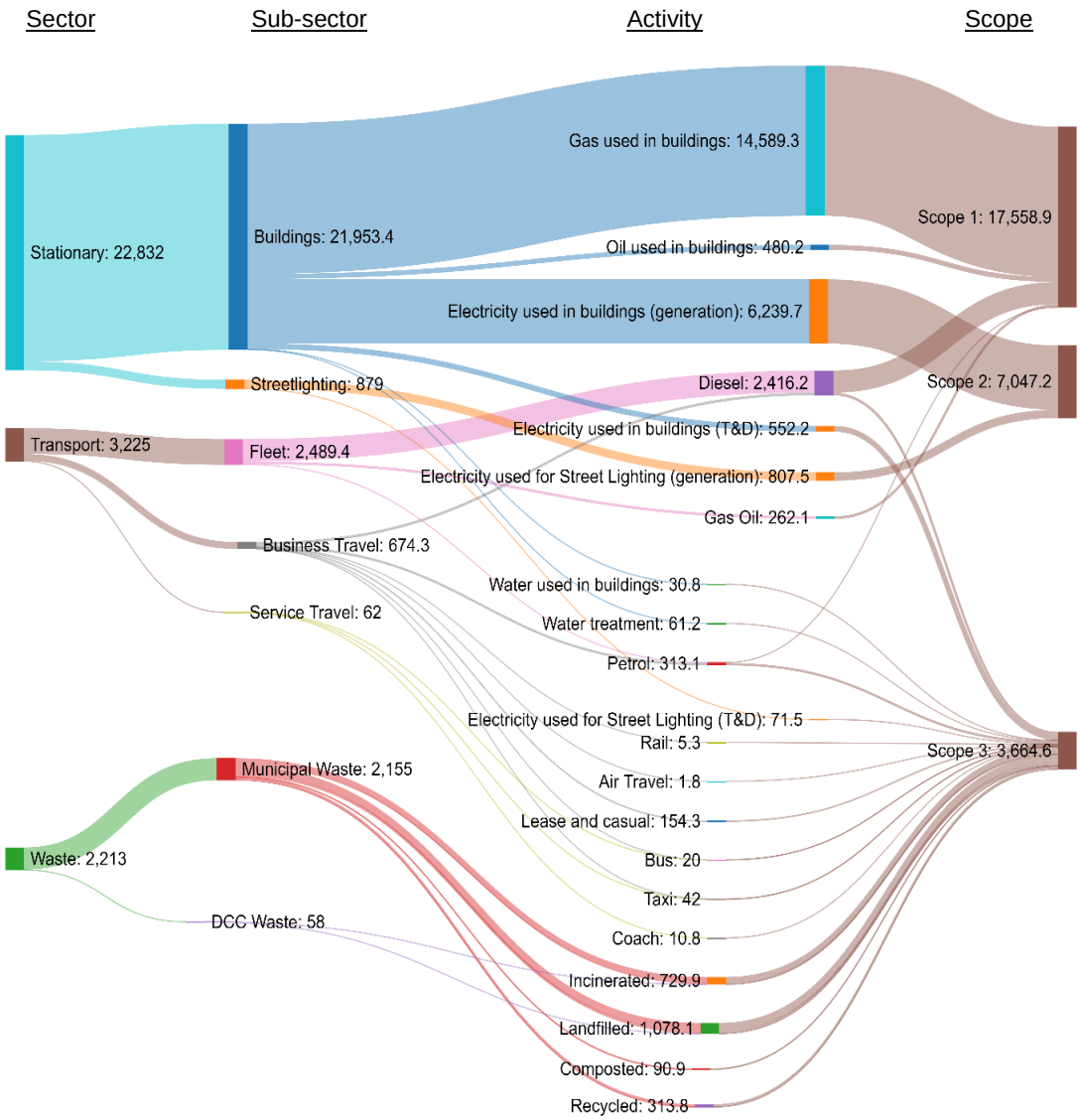
(a) No information is required on the effect of the organisation on emissions which are not from its estate and operations.
(b) This is the "The Greenhouse Gas Protocol. A corporate accounting and reporting standard (revised edition)", World Business Council for Sustainable Development, Geneva, Switzerland / World Resources Institute, Washington DC, USA (2004), ISBN:1-56973-568-9.

Reference year	Year	Year type	Scope 1	Scope 2	Scope 3	Total	Units
Baseline Year	2007/08	Financial	20,029	23,664	12,472	56,165	tCO_2e
Year 1 carbon footprint	2008/09	Financial	20,520	24,815	12,247	57,582	tCO_2e
Year 2 carbon footprint	2009/10	Financial	20,551	24,662	11,077	56,290	tCO_2e
Year 3 carbon footprint	2010/11	Financial	20,208	27,032	12,284	59,524	tCO_2e
Year 4 carbon footprint	2011/12	Financial	18,197	23,857	8,939	50,993	tCO_2e
Year 5 carbon footprint	2012/13	Financial	21,215	24,159	20,320	65,694	tCO_2e
Year 6 carbon footprint	2013/14	Financial	17,991	21,579	10,815	50,385	tCO_2e
Year 7 carbon footprint	2014/15	Financial	16,845	24,097	6,819	47,761	tCO_2e
Year 8 carbon footprint	2015/16	Financial	16,144	22,321	7,090	45,555	tCO_2e
Year 9 carbon footprint	2016/17	Financial	15,980	18,244	6,908	41,132	tCO_2e
Year 10 carbon footprint	2017/18	Financial	16,592	15,735	6,371	38,698	tCO_2e
Year 11 carbon footprint	2018/19	Financial	15,339	11,724	6,511	33,574	tCO_2e
Year 12 carbon footprint	2019/20	Financial	16,244	10,191	5,999	32,434	tCO_2e
Year 13 carbon footprint	2020/21	Financial	15,557	7,553	5,741	28,851	tCO_2e
Year 14 carbon footprint	2021/22	Financial	17,559	7,047	3,664	28,270	tCO_2e

3b) Breakdown of emission sources

Figure 2 below shows the Council's emissions (tCO_2e) by Sectors, Sub-sectors, Activities and Scopes for 2021/22. On the left there are three sectors; divided into seven sub-sectors; which are then divided into 21 activities. These activities are then categorised into the three emission scopes.

Figure 2: DCC's carbon footprint (tCO_2e) in 2021/22 by sectors, sub-sectors, activities and scopes



In the 2021/22 reporting period:

- Stationary sector emissions accounted for the 81% of the Council's total emissions followed by Transport (11%) and Waste (8%). Among Stationary, the Buildings sub-sector alone accounted for 77.6% of total organisational emissions.
- Fleet and Municipal waste sub-sectors accounted for 9% and 7.6% of total emissions respectively.
- Among activities, natural gas use in buildings was responsible 51.6% of total emissions followed by electricity used in buildings (22%) and diesel (primarily used in fleet) at 8.5%.
- In terms of scopes, the scope 1 (direct emissions) accounted for the highest emissions (62%) followed by scope 2 (grid electricity emissions) at 25% and scope 3 (indirect emissions) at 13%.

The progress trends of Dundee City Council's emissions are shown in Figures 3, 4, 5 and 6.

Figure 3: DCC Carbon Footprint by Sector: 2008/09 to 2021/2022

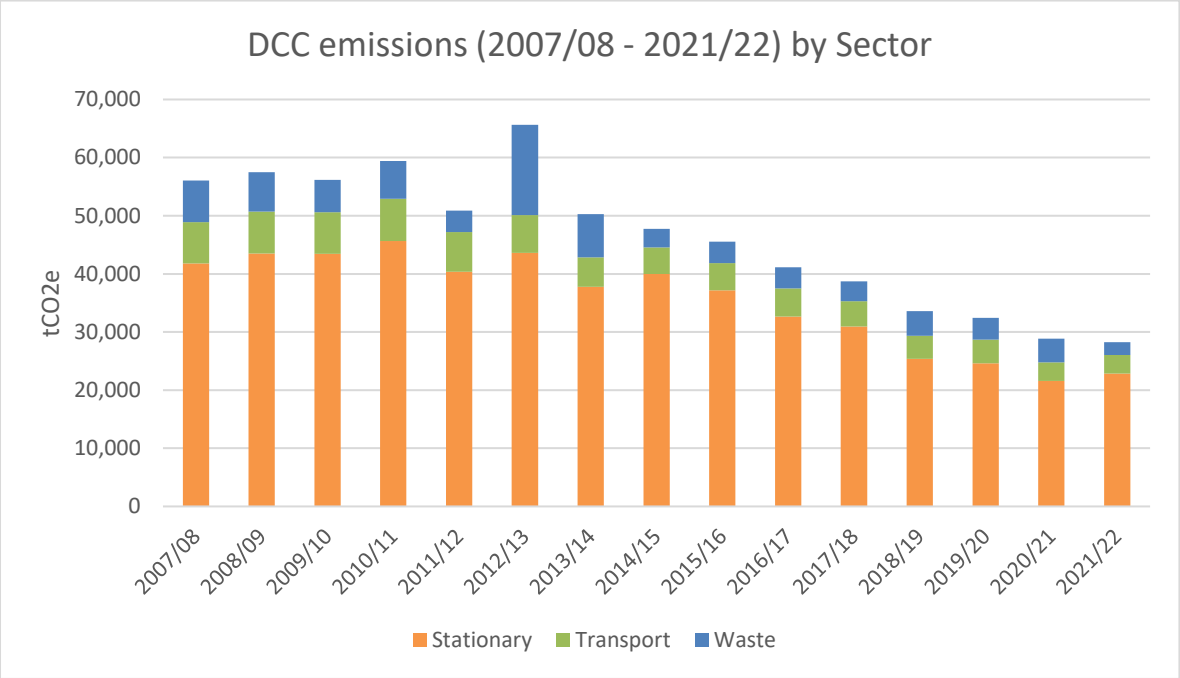


Figure 4: DCC Carbon Footprint by Sub-sector: 2008/09 to 2021/2022

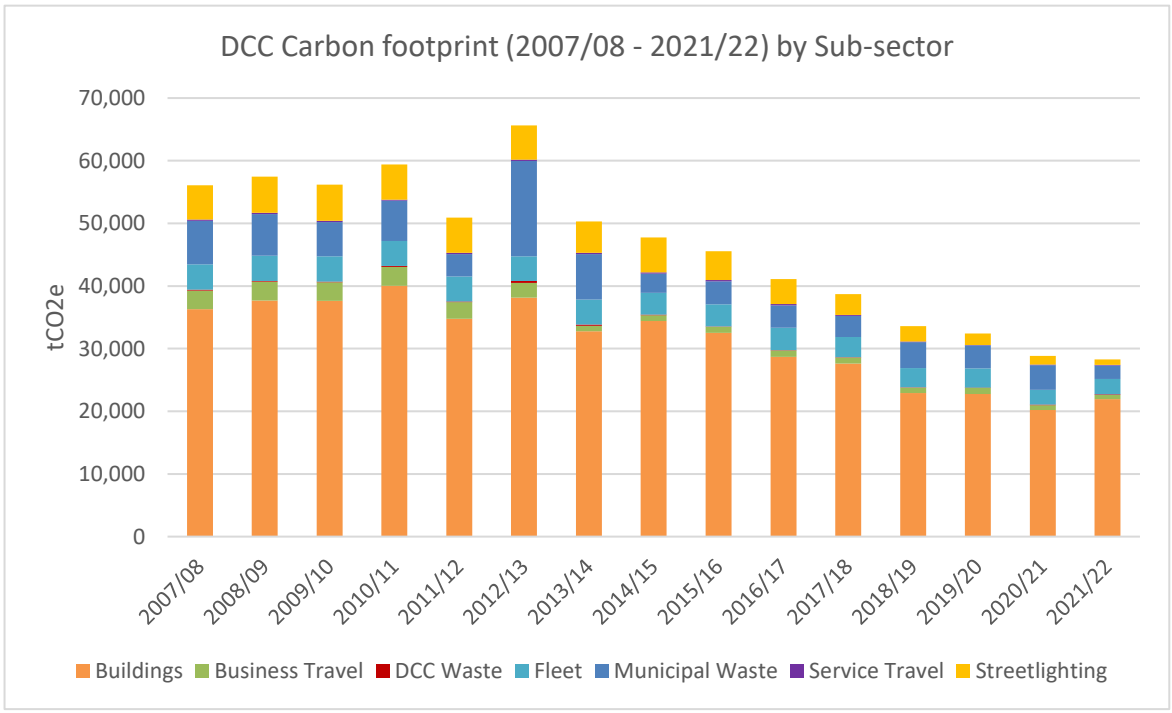


Figure 5: DCC Energy in Buildings Carbon Footprint: 2007/08-2021/22

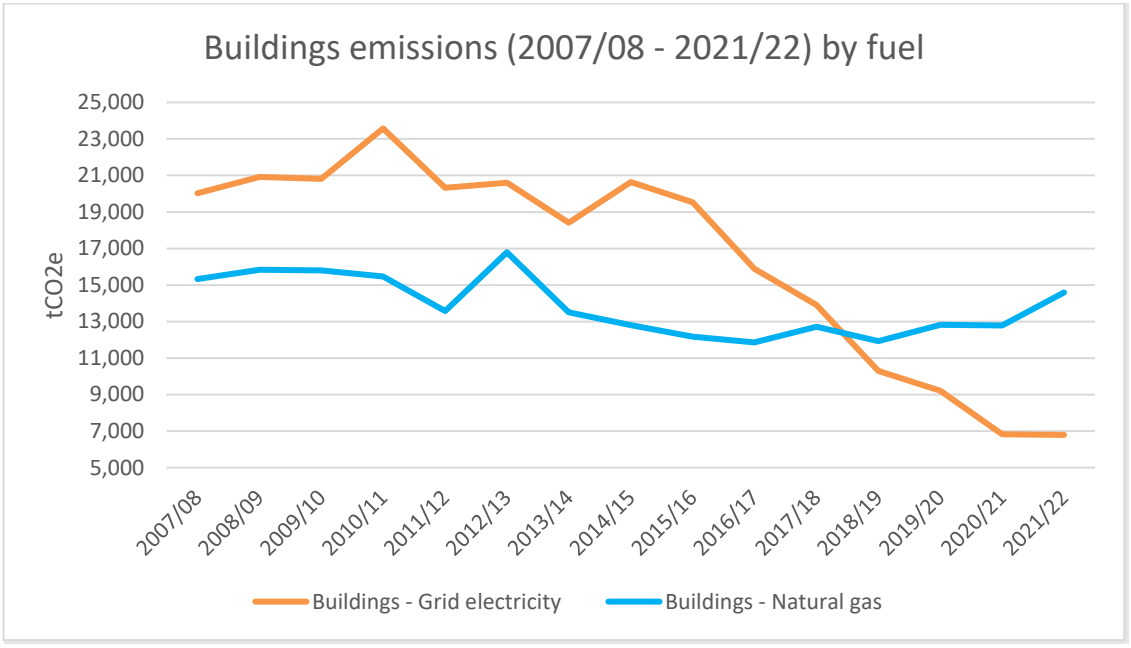
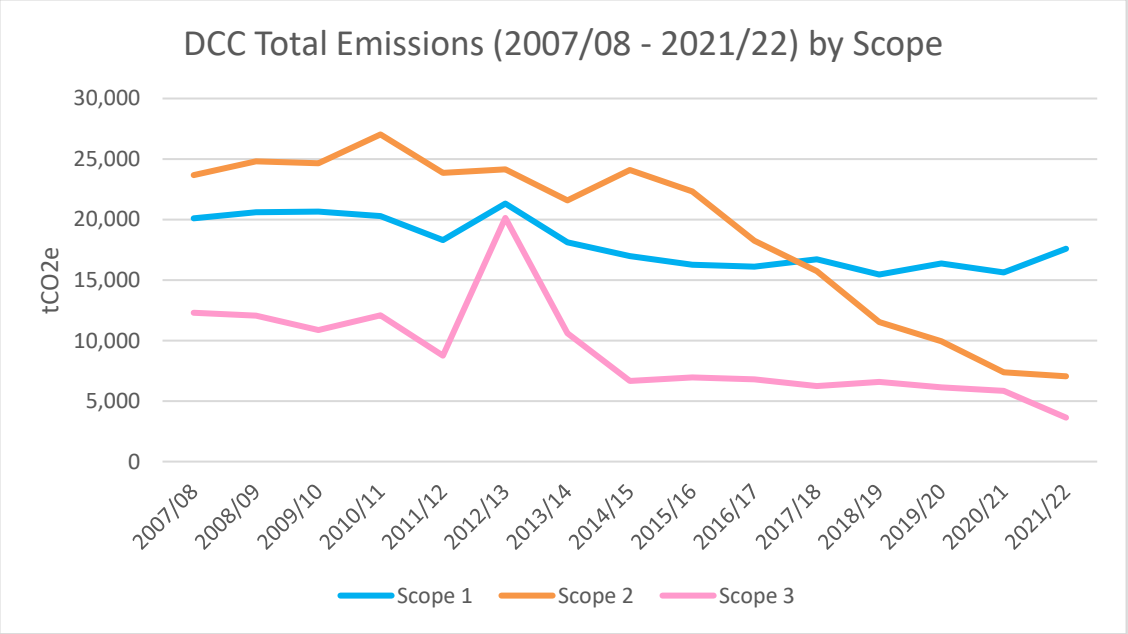


Figure 6: DCC carbon footprint by Scope



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

(a) Emissions factors are published annually by the UK Government for environment, Food and Rural Affairs (DEFRA).

Emission	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO_2e)
Fuels	Natural Gas	Scope 1	79,653,484	kWh	0.18316	kg CO2e/kWh	14,589.3
Fuels	Gas Oil kWh	Scope 1	1,870,094	kWh	0.25679	kg CO2e/kWh	480.2
Electricity	Grid Electricity (generation)	Scope 2	29,386,613	kWh	0.21233	kg CO2e/kWh	6,239.7
Electricity	Grid Electricity (transmission & distribution losses)	Scope 3	29,386,613	kWh	0.01879	kg CO2e/kWh	552.2
Electricity	Grid Electricity (generation)	Scope 2	3,803,154	kWh	0.21233	kg CO2e/kWh	807.5
Electricity	Grid Electricity (transmission & distribution losses)	Scope 3	3,803,154	kWh	0.01879	kg CO2e/kWh	71.5
Water	Water - Supply	Scope 3	279,895	m3	0.11000	kg CO2e/m3	30.8
Water	Water - Treatment	Scope 3	265,900	m3	0.23000	kg CO2e/m3	61.2
Fuels	Petrol (average biofuel blend)	Scope 1	34,308	litres	2.19352	kg CO2e/litre	75.3
Fuels	Diesel (average biofuel blend)	Scope 1	856,575	litres	2.51233	kg CO2e/litre	2,152.0
Fuels	Gas Oil kWh	Scope 1	1,020,566	kWh	0.25679	kg CO2e/kWh	262.1
Transport	Taxi (regular) passenger km	Scope 3	258,208	passenger km	0.14876	kg CO2e/passenger km	38.4
Transport	Bus (local bus, not London)	Scope 3	108,178	passenger km	0.11774	kg CO2e/passenger km	12.7
Transport	Coach	Scope 3	400,550	passenger km	0.02684	kg CO2e/passenger km	10.8
Transport	Taxi (regular) passenger km	Scope 3	23,931	passenger km	0.14876	kg CO2e/passenger km	3.6
Transport	Bus (local bus, not London)	Scope 3	61,948	passenger km	0.11774	kg CO2e/passenger km	7.3
Transport	Rail (National rail)	Scope 3	148,357	passenger km	0.03549	kg CO2e/passenger km	5.3

Emission	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO_2e)
Transport	Domestic flight (average passenger)	Scope 3	7,390	passenger km	0.24587	kg CO2e/passenger km	1.8
Fuels	Diesel (average biofuel blend)	Scope 3	105,151	litres	2.51233	kg CO2e/litre	264.2
Fuels	Petrol (average biofuel blend)	Scope 3	108,404	litres	2.19352	kg CO2e/litre	237.8
Transport	Average Car - Unknown Fuel	Scope 3	899,686	km	0.17148	kg CO2e/km	154.3
Waste	Refuse Municipal /Commercial /Industrial to Combustion	Scope 3	34,275	tonnes	21.29357	kgCO2e/tonne	729.8
Waste	Refuse Municipal to Landfill	Scope 3	1,724	tonnes	446.24150	kgCO2e/tonne	769.3
Waste	Refuse Commercial & Industrial to Landfill	Scope 3	660	tonnes	467.04580	kgCO2e/tonne	308.3
Waste	Organic Food & Drink Composting	Scope 3	10,156	tonnes	8.95070	kgCO2e/tonne	90.9
Waste	Mixed recycling	Scope 3	14,737	tonnes	21.29357	kg CO2e/tonne	313.8

3c) Generation, consumption and export of renewable energy

Provide a summary of the body's annual renewable generation (if any), and whether it is used or exported by the body.

Technology	Renewable Electricity		Renewable Heat		
	Total consumed by the body (kWh)	Total exported (kWh)	Total consumed by the body (kWh)	Total exported (kWh)	Comments
Biomass			278,056		Biomass is supplied through a heat supply contract – input figure is estimated using a figure of 85% boiler efficiency. All heat is consumed by DCC.
Solar PV	245,700				Includes generation from multi-storeys, DISC, Unit T Claverhouse, The Crescent and schools e.g. Morgan Academy.

**These are the list of entries provided within the form that can be selected from the dropdown menu and the corresponding consumption / export data can be entered under the appropriate heading.*

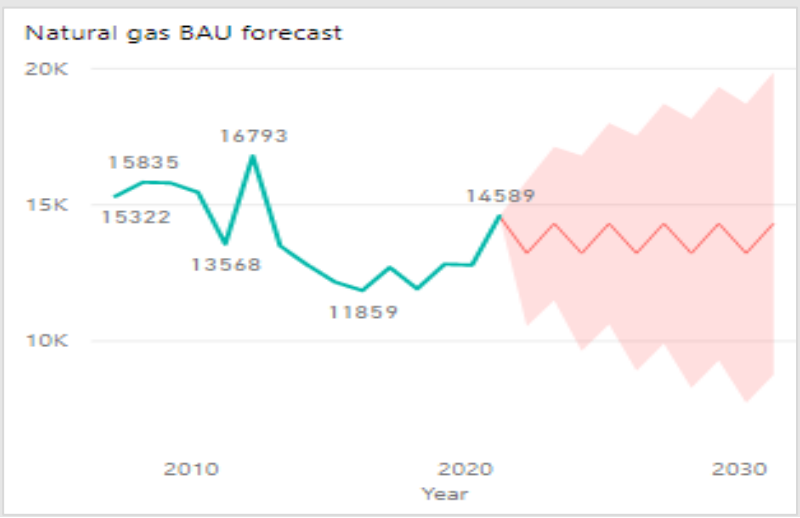
Targets

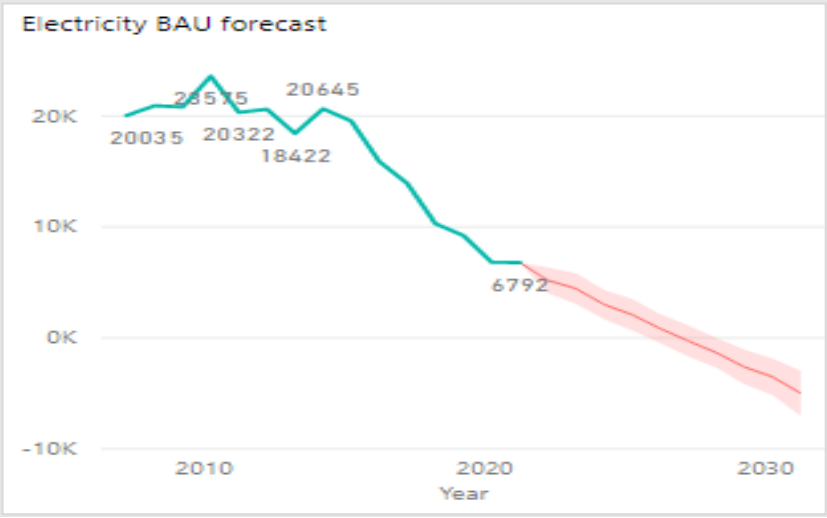
The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 requires public bodies to report targets on their operational/organisational emissions. These include reducing direct emissions, where possible, to 'absolute zero', and reducing indirect emissions, in advance of Scotland's 2045 net zero target.

The Council's current trend in emissions from the use of natural gas (see Figure 7), particularly from gas used as space heating in our building stock, presents a significant challenge in our ability to reach 'absolute zero' emissions from Scope 1 and risks non-compliance.

A forecast of emissions from continued use of natural gas and grid electricity under a business as usual (BAU) scenario suggests that emissions from natural gas use in Council buildings is likely to remain static at around 14,500 tCO_2e. In contrast, under a BAU scenario (with continued reduction of electricity grid emission factor), it is expected that the Council will achieve zero emissions from electricity use in Council buildings by 2027. However, the downward trend in electricity emission is likely to slow and become flatter in coming years as current Council emissions savings projects are completed and the influence of emerging external UK energy policy.

Figure 7: Gas and electricity use in building forecast for up to 2030 based on historical trend





3d) Organisational targets

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

Name of target	Type of target	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 Target	Annual	5	annual % reduction	Energy use in buildings	2015/16	32,163	tCO2e	2021/22	32% reduction in emission from buildings in 2021/22 from 2015/16 level	This target is based on energy and water use in buildings. We are working on the Council's Net Zero Transition Plan which will set an overall emission reduction target. The NZTP will be published in 2022/23.

3da. How will the body align its spending plans and use of resources to contribute to reducing emissions and delivering its emission reduction targets? Provide any relevant supporting information.

A new organisational Net Zero Transition Plan and a Carbon Budget is being prepared. The Carbon Budget will allocate an assigned amount of CO_2e per year per Council service. It will include targets, actions, estimated emission reduction, responsibility and cost and financing.

3db. How will the body publish, or otherwise make available, it's progress towards achieving its emissions reduction targets? Provide any other relevant supporting information. In the event that the body wishes to refer to information already published, provide information about where the publication can be accessed.

The new Net Zero Transition Plan will include an updated emissions inventory, carbon budget and a delivery plan for the next 5-year period. This will be made public once fully developed and will be refreshed every two years.

Project and changes

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

If no projects were implemented against and emissions source, enter "0". If the organisation does not have any information for an emissions source, enter "Unknown" in the comments box. If the organisation does not include the emissions source in its carbon footprint, enter "N/A" in the comments box.

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Electricity	562	NDEE Projects
Natural gas		-
Other heating fuels		Unknown
Waste		Unknown
Water and sewerage		Unknown
Travel		Unknown
Fleet transport		Unknown

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

Provide details of the projects which are estimated to achieve the highest carbon savings

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
NDEE projects	Scottish Government initiative	2021/22	Estimated	3,105,721	-	20	Natural Gas	562	245000	No

3g) Estimated decrease or increase in the body's emissions attributed to factors (not reported anywhere else in this form) in the report year.

If the emissions increased or decreased due to any such factor in the report year, provide an estimate of amount and direction.

Emissions source	Total estimated annual emissions (tCO_2e)	Increase or decrease in emissions	Comments
Estate changes		Increase	If the COVID risk mitigation measures such as running ventilation systems (where they existed) 24/7 in all buildings (occupied and unoccupied) continue to remain in place next year, the direct emissions from the Council estates are likely to remain static or even increase.
Other (please specify in comments)		Decrease	Waste emission is likely to continue decreasing as more efficient EfW is in operation in Baldovie.
Other (please specify in comments)		Decrease	Business travel is likely to remain static or decrease as the Council has formally adopted hybrid working .

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

If no projects are expected to be implemented against an emissions source, enter "0". If the organisation does not have any information for an emissions source, enter "Unknown" into the comments box. If the Organisation does not include the emissions source in its carbon footprint, enter "N/A" into the comments box.

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Electricity	513	Non-Domestic Energy Efficiency (NDEE) framework buildings energy efficiency improvement

3i) Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere in this form) in the year ahead.

If the emissions are likely to increase or decrease due to any such factor in the year ahead, provide an estimate of the amount and the direction.

Emissions source	Total estimated annual emissions (tCO_2e)	Increase or decrease in emissions	Comments
Estate changes		Increase	Energy consumption in buildings in 2021/22 increased by 12% compared with the previous year. Due to COVID risk mitigation, measures the ventilation systems (where they existed) were set up to run 24/7 in all buildings. This has resulted in greater than normal consumption of electricity and gas throughout the stock.

3j) Total carbon reduction project savings since the start of the year which the body uses as a baseline for its carbon footprint.

If the body has data available, estimate the total emissions savings made from projects since the start of that year ("the baseline year").

Total savings	Total estimated emissions savings (tCO_2e)	Comments
Total project savings since baseline year	27,791	This is the total reduction since the baseline year of 2007/08. However, it is not certain that all of this is due to carbon reduction projects or alternatively that this figure does not also include some increases from estate changes, therefore underestimating the savings from energy efficiency projects.

3k) Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to its emissions, targets and projects.

Total emissions

- The carbon footprint for the Council has reduced by 2% in the past year;
- The carbon footprint has reduced by 50% since the baseline year of 2007/08;

Stationary Sector

- Total emission from Stationary sector increased by 5.7% compared to previous year due to the increase in energy consumption in buildings.
- Energy consumption in buildings in 2021/22 increased by 12% compared with the previous year. There was a significant increase in all three main activities; natural gas consumption (+14%), electricity consumption (+9%) and gas oil consumption (+25%).
- Building energy consumption increase should be treated with caution as the pandemic and various responses has had a disruptive effect on energy management data collection, trends and analysis, including property usages. One consequence of COVID risk mitigation, was ventilation systems (where they existed) were set up to run 24/7 in all buildings. This has resulted in greater than normal consumption of electricity and gas throughout the stock.
- Streetlighting electricity consumption reduced by 30% compared to previous year as a result of the LED streetlamp replacement.
- Similar to previous year approximately 245,700 kWh of electricity was generated from the Council's solar PV systems.

<u>Transport Sector:</u>

- There was a slight increase of 0.9% in emissions from Transport sector compared to previous year due to increase in fleet use. Overall, the emission from fleet use has been decreasing due to transitioning to EVs but the year 2020/21 saw a sharp drop in fleet use due to pandemic and when council operations came back to normal there was a slight increase in fleet use and subsequent emission.
- Among Transport sector emissions, Service Travel and Business Travel decreased by 22% and 10% respectively, this suggests that staffs are continuing to meet online and are travelling less even after COVID restriction is removed. There was an increase of 5% in fleet emissions. The return to office and 'business as usual' opening of Council facilities are likely to have played a role in this increase.

<u>Waste Sector:</u>

- There was a significant 45% decrease in emissions from waste compared to previous year.
- There are three main reasons for the decrease; firstly, overall production of waste was decreased. Secondly, new far more efficient energy from waste (EfW) plant at Baldovie went through the commissioning phase from March onwards last year. As a result, the output such as IBA (Incinerator Bottom Ash) can be recycled instead of landfilled (landfilled waste tends to have very high emissions). Thirdly, as a legacy of COVID19 there was an upsurge in people spending time gardening and separating composting waste, hence decreasing landfilled waste and increasing in composting.

Emissions by Scope:

- Scope 1 (direct emissions) increased by 13% compared to previous year due to the increase in consumption of natural gas in buildings. The consumption of natural gas has increased from 2011/12 level with a continuous increase since 2018/19.
- Scope 2 emissions (grid electricity emissions) decreased by 7% compared to previous year and has been falling steadily since 2014/15 mainly due to the continued reduction in grid emission factor and the success of the Council's LED streetlighting programme. Emissions savings have also made from the Council's Non-Domestic Energy Efficiency (NDEE) project (e.g. lighting replacement in Central Library). The UK's grid electricity has become a lot less carbon intensive due to the increased renewable electricity generation primarily from wind resulting in an average annual decrease of 7% in the emission factor in the last decade which has largely contributed in our total emissions reduction.
- Scope 3 emissions (indirect emissions) decreased significantly by 36% compared to previous year primarily due to the reduction in emissions from waste and also due to continued reduction in emissions from Business and Service Travel.

4 ADAPTATION

Assessing and managing risk

4a) Has the body assessed current and future climate-related risks?

If yes, provide a reference or link to any such risk assessment(s).

- In autumn 2018 a **Risk and Vulnerability Assessment (RVA)** of ten policy sectors was carried out in small workshops with key stakeholders in each policy sector to determine the nature and extent of climate related risks in Dundee. Climate impacts were identified for each of the climate hazards/scenarios for the policy sectors with an estimate of how likely they are to occur, the level of impact and the timeframe for occurrence, short, medium or long term. The policy sectors and some examples of impacts are shown below:

Policy Sector	Expected Impact(s)
Buildings	Increased demand for cooling and insulation, higher costs for repair and maintenance.
Transport	Damage to transport infrastructure, extreme weather impact on mobility, higher maintenance costs.
Energy	Damage to electrical infrastructure and power generation facilities.
Water	Increased water scarcity and drought, impacts upon flora and fauna, lower ground water recharge.
Waste	Damage to waste infrastructure and treatment facilities, site and access disruption.
Land Use Planning	Urban heat island effect, erosion and floods, including coastal.
Environment & Biodiversity	Ecosystem degradation, species migration, insect infestation, habitat loss due to flooding, access to food.
Health	Increased disease and mortality rate, hygiene issues, increased incidence of injury.
Civil Protection & Emergency	Increased number of disasters/deployments, increased insurance costs.
Tourism	Decline in tourism and demand, closure of museums, increased maintenance costs, reduction in bathing water quality.

- During this RVA exercise, climate resilience actions were **co-designed with stakeholders**, including NHS Tayside, Scottish Water, SEPA and Scottish Natural Heritage. Many of the actions

identified were already in progress by various organisations; some new actions were identified during the Climate Action Plan visioning event and the remaining actions were devised in partnership with the stakeholders. All identified impacts and actions can be found in the full RVA. https://www.dundeecity.gov.uk/sites/default/files/publications/consultative_draft_secap_-_risk_vulnerability_assessment.pdf

- The resultant actions will be implemented, monitored and evaluated as part of the on-going climate action planning process and aligned with **Adaptation Scotland's Capability Framework** in which we are currently at stage **P12C** ('Planning and Implementation – we have developed an initial adaptation strategy and action plan').

- The Council is participating in **Adaptation Scotland's Benchmarking Working Group** comprising a group of public sector organisations actively using their adaptation capability framework and benchmarking the development of capabilities, developing case studies and sharing good practice in order to improve climate adaptation strategies in Scotland. The Benchmarking tool was used internally with colleagues from Planning, Green Space, Housing, Energy and Infrastructure to assess where we are on the Capability Framework and identified a number of initial steps to engage all services within the Council.

- Detailed analysis of long-term climate trends was used to prepare the Dundee Coastal Study Stage 2 which informed the design of the now complete Dundee and Broughty Ferry Coastal Flood Protection Schemes, and will continue to be developed and used as part of ongoing coastal flood risk and erosion management projects.

- The **Downfield and Dundee, Monifieth and Sidlaws Flood Protection Study** (2019) identifies flood risk areas along the Dighty Water, Gelly Burn and Fithie Burn in the Downfield and Dundee/Monifieth and Sidlaws area and assess options (including economic viability) for flood protection measures that can be introduced to reduce flood risk to residential and non-residential properties. The appraisal considered a range of flood risk management measures which would also provide resilience to climate change. The study and its recommended options are going through a national prioritisation exercise which will feed directly into the allocation of any Scottish Government funding available for the next grant funding cycle for flood protection schemes.

- The Council continue to work with Scottish Water, SEPA and NatureScot to develop and implement a **Surface Water Drainage Strategy** for the St Mary's area of Dundee. This will include disconnection of surface water from the existing combined sewer and conveying it to the water environment through sustainable drainage/SUDS infrastructure which will provide multiple benefits to the community and the partner organisations including a reduction in flood risk, improved blue/green networks which will enhance amenity and biodiversity, an opportunity to improve active travel infrastructure. The strategy will also unlock future development in the City by providing a surface water conveyance route from future development sites in the area to the water environment, and by freeing up capacity in the downstream sewer network. Further details can be found in Committee Report 32-2021 available at: https://www.dundeecity.gov.uk/minutes/report?rep_id=32-2021.

- The Council prepared the Flood Risk Management Cycle 1 **Tay Estuary and Montrose Basin Local Flood Risk Management Plan** as required by the Flood Risk Management (Scotland) Act. The Plan gives actions to reduce flood risk within the city. The Flood Risk Management Cycle 2 **Tay Estuary and Montrose Basin Local Flood Risk Management Plan** is currently being prepared in partnership with other authorities for publication in December 2022.

- The Council has prepared and operates a **Flood Emergency Plan** that is periodically updated. The plan identifies known areas of flooding and measures to be taken when Flood Alerts and/or reports of flooding are received and clearly assigns roles and responsibilities within the organisation when responding to these events.

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

Provide details of any climate change adaptation strategies, action plans and risk management procedures, and any climate change adaptation policies which apply across the body.

- The Council's **Generic Emergency and Business continuity Plans** are wide enough in scope to apply to risks associated with:
  - Disruption to energy, transport, water and ICT infrastructure and delivery networks;
  - Rising sea levels for coastal communities
  - Impacts on health and well-being of individuals and communities

- **Service Risk Registers** may include 'climate-related' risks but are more likely to be referenced as severe weather impacts.

- The Council has prepared and operates a **Flood Emergency Plan** that is updated periodically. The plan identifies known areas of flooding and measures to be taken when Flood Alerts and/or reports of flooding are received and clearly assigns roles and responsibilities within the organisation when responding to these events.

- All Council strategies, plans and programmes continue to undergo **Strategic Environmental Assessment** (SEA) to assess their environmental impact including climate change adaptation risk and opportunities.

- The Council's **Integrated Impact Assessment** (IIA) tool assists Committee report authors to consider the likely climate change adaptation impacts of their report and provide details on any required mitigating action to manage or overcome negative impacts.

Taking Action

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

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

Building adaptive capacity

- As a result of the Climate Risk and Vulnerability Assessment (discussed in section 4a), **21 actions have been identified** to help the city build resilience against climate change (and included in the Dundee Climate Action Plan). These include physical measures, such as flood protection and infrastructure improvements as well as societal measures that build community resilience.

- Council Officers have undertaken training on a **Climate Just** software tool which allows social vulnerability in the face of climate change to be assessed so that adaptation can be tailored to people as well as places.

Delivering adaptation action

- Following on from the Dundee Coastal Study Stage 2, the "**Dundee" and "Broughty Ferry" Coastal Flood Protection Schemes are:**
  - *City Quay to Central Waterfront* and *Central Waterfront to Dundee Airport*. Construction works completed in August 2018 creating a 4km set back wall and flood gates, providing protection from a 1 in 200-year flood. The use of local stone minimised the carbon footprint, with the project receiving successful match funding from Sustrans to improve lighting and create a small section of combined cycle footway at Bridgeview Café.

  - *Broughty Ferry Town - Douglas Terrace to Broughty Castle*. Construction of a new seawall, walkway/cycleway, and a combination of setback walls and food-gates was completed in June 2022. The new seawall/setback walls/flood-gates will reduce the risk of flooding to residential, community and business properties, whilst the walkway/ cycleway improves and enhances active travel along the main shoreline of Broughty Ferry.

  - Since 2019 a programme of **dune restoration works** has been implemented, with the ongoing objective to effectively manage the dune range to provide natural flood protection. Chestnut pale Fencing has been installed to limit access by members of the public, with the

aim of preventing erosion and protecting the natural grasses and fragile habitat. Non-indigenous plants have been removed and new native species have been planted to stabilise the sand dunes. The management of the dunes is ongoing and regular inspections are undertaken to identify further works to protect and enhance the area. These works have been undertaken to complement the natural flood protection that the dunes provide to Broughty Ferry.

- **Greenspace / Biodiversity / Green infrastructure:**
  - The Council's Biodiversity Action Plan, published in January 2020, includes actions for safeguarding and enhancing existing habitats and species as well as actions on potential sites and projects. Progress is reported to Council committee annually (https://www.dundeecity.gov.uk/minutes/article?articlekey=86181) as well as to the Scottish Government every 3 years as part of its legal Biodiversity Duty (due in January 2024).
  - As a result of extensive and ongoing dialogue with local communities and interested organisations, areas in 27 of Dundee's parks and greenspaces are now being managed as biodiversity grasslands or naturalised grasslands, thus improving their resilience to the effects of climate change. The Scottish Government's Nature Restoration Fund has enabled the introduction of native wildflowers, as well as the installation of bespoke interpretation (https://www.dundeecity.gov.uk/service-area/neighbourhood-services/environment/biodiversity-and-naturalised-grasslands-frequently-asked-questions) In addition to these, the Council is supporting the Dundee EDEN project to create 14 hectares of wildflower meadows throughout the city.
  - 20 parks and greenspaces are assessed annually for quality by staff and members of the community against the national Green Flag criteria. A number of criteria directly or indirectly consider the impact of climate change. Each assessment results in an individual park action plan. In addition to these, seven parks successfully attained a Green Flag award in 2022/23, by submitting a Management Plan and hosting a site visit by an external assessor.
  - Over 250 ha of Dundee is woodland, which performs an important environmental function storing carbon, sheltering the built environment from wind and filtering pollutants, as well as being appreciated by visitors and wildlife. Dundee continues to benefit from grant funding awarded by Scottish Forestry and has recently secured a significant award from the competitive element of the Nature Restoration Fund which will enable 12 hectares of new woodland planted throughout Dundee in 2022/23. Trees planted will be a mix of native species, predominantly broadleaved with a few Scots pine where appropriate. There will also be a number of fruit trees planted in a small orchard area.
  - The Council is working with Scottish Water, SEPA and NatureScot to implement proposals for a Sustainable Urban Drainage System (SUDS) within St Leonards Park as part of the St Mary's Stormwater Strategy. Using this learning a city-wide study is to commence to identify additional SUDS opportunities, into which proposals for biodiversity and active travel will be incorporated.

- The **Mobility Integration Living Laboratory project (MILL)** is a public-private-people partnership which is seeing Dundee become a real-life test and experimentation environment for mobility solutions that integrate with the transport network. Current activities include:
  - Clean Streets Project – installation of 26 pop up chargers to support the transition to electric vehicles. 162,756 electric miles powered by the innovative chargers.
  - GetGo Dundee saw the launch of the city's first MaaS Platform which combined a number of sustainable transport options in a single location. This included car club, e-bike hire, bus and train. A number of pilots were run with the citizens of Dundee to help develop and improve the app.
  - Research and development of equipment to make charging of electric vehicles more accessible saw live trials in the city with disabled users and has produced two prototypes that are set for future investment.

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

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

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

Objective Reference	Theme	Policy/ Proposal reference	Delivery progress made
[N1] Understand the effects of climate change and their impacts on the natural environment	Natural Environment	[N1-8] Understand the risks associated with coastal flooding through development and implementation of local flood risk plans.	Dundee City Council has engaged in the development of the Local Flood Risk Management Plan through membership of the Tay Estuary and Montrose Basin (TEAMB) Local Plan District.
		[N1-10] Developing datasets to support flood risk, river and coastal management. A requirement of the Flood Risk Management (Scotland) Act is to develop a programme to integrate necessary data.	• **The Flood Risk Management Cycle 1 Tay Estuary and Montrose Basin Local Flood Risk Management Plan** was published on 22nd June 2016 in co-ordination with Angus Council, Aberdeenshire Council, Perth and Kinross Council, Scottish Water and SEPA. The plan is reviewed and updated in 6-year cycles from the date of the inaugural Plan published in June 2016. The Flood Risk Management Cycle 2 Tay Estuary and Montrose Basin Local Flood Risk Management Plan is programmed for publication in December 2022 and is currently being prepared. Subject to being prioritised favourably at a national level by the Scottish Government/SEPA, Flood Protection Schemes being considered for inclusion in the Cycle 2 Tay Estuary and Montrose Basin Local Flood Risk Management Plan include extending the Dundee Coastal Flood Protection Scheme, and also implementing a Fluvial Flood Protection Scheme. • Local Development Plan – Policy 41 recognises the implications of climate change and sea level rise and there is a presumption against development in areas vulnerable to coastal erosion, flood risk and rising sea levels.
[N2] Support and healthy and diverse natural	Natural Environment	[N2-2] The Scottish Planning Policy includes green networks, green space, street trees and	• The 2019 Local Development Plan (LDP) remains the key land use planning document for Dundee. It contains policies on green networks, green and blue infrastructure, enhancing natural assets, and others covering the topics of placemaking, economic development, housing, retail and transport. Supplementary guidance on Low and Zero

environment with capacity to adapt		other vegetation, green roofs, wetlands and other water features, and coastal habitats in helping Scotland to mitigate and adapt to climate change. [N2-11] Embed climate change adaptation considerations, and potential responses such as habitat networks and green networks, into wider land use planning decisions through the use of Forestry and Woodland Strategies, regional land use strategies, and Strategic and Local Development Plans and development master-plans.	Carbon Technology in New Developments was also published in 2019. Further planning guidance documents on Surface Water and Drainage and Heat Networks were published in 2020. • We are in the process of preparing the evidence report for the next LDP expected to be published in 2027. As part of this, we are carrying out initial scoping of the 20-minute neighbourhood concept in a Dundee context. A revised Street Design Guide is also in preparation which will include technical guidance on EV and active travel infrastructure. Further, we are in the early stages of preparing an Open Space Strategy and Play Sufficiency Assessment to fulfill our statutory duties which is intended will outline policies and proposals to the development, maintenance and use of green infrastructure in Dundee. • The City Council's Biodiversity Duty report was agreed in June 2017. A new Biodiversity Plan was published in January 2020.
		[N2-18] / [N2-20] Support the development of Local Flood Risk Management Plans. This will manage waters and coasts at a river catchment level and include local flood risk management plans.	Dundee City Council has engaged in the development of the Local Flood Risk Management Plan through membership of the Tay Estuary and Montrose Basin (TEAMB) Local Plan District.
[N3] Sustain and enhance the benefits, goods and services that the natural environment provides	Natural Environment		N/A Dundee City Council is not listed as a responsible authority for this objective. This question is only applicable to organisations such as Historic Environment Scotland, SEPA, NatureScot.
[B1] Understand the effects of climate change and their impacts on	Buildings and infrastructure networks	[B1-13] Flood Risk Management Plans - The Flood Risk Management (Scotland) Act 2009 requires the	The Flood Risk Management Cycle 1 Tay Estuary and Montrose Basin Local Flood Risk Management Plan was published on 22nd June 2016 in co-ordination with Angus Council, Aberdeenshire Council, Perth and Kinross Council, Scottish Water and SEPA. The plan is reviewed and updated in 6-year cycles from the date of the inaugural Plan published in June 2016. The Flood Risk Management Cycle 2 Tay Estuary and Montrose Basin Local Flood Risk Management Plan is programmed for publication in December

buildings and infrastructure networks		development of Flood Risk Management Strategies (FRMS) and Local Flood Risk Management Plans (LFRMP).	2022 and is currently being prepared. Subject to being prioritised favourably at a national level by the Scottish Government/SEPA, Flood Protection Schemes being considered for inclusion in the Cycle 2 Tay Estuary and Montrose Basin Local Flood Risk Management Plan include extending the Dundee Coastal Flood Protection Scheme, and also implementing a Fluvial Flood Protection Scheme.
[B2] Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure	Building and infrastructure networks		N/A Dundee City Council is not listed as a responsible authority for this objective. This question is only applicable to organisations such as Historic Environment Scotland, SEPA, NatureScot.
[B3] Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided	Buildings and infrastructure networks	[B3-3] Scottish Planning Policy (SPP) (Climate Change) identifies that short and long term impacts of climate change should be taken into account in all decisions throughout the planning system.	Adopted LDP policies encourage installation of low and zero carbon generating technology in new buildings, active travel and development of network of green infrastructure. Review in forthcoming Main Issues Reports/SEA process and supplementary planning guidance. New non-statutory planning guidance published for public consultation on the Dundee Green Network to promote opportunities to enhance and protect.
		[B3-6] Home Energy Efficiency Programme for Scotland. Delivering heating and insulation measures across Scotland to help improve energy efficiency and reduce energy demands of existing housing stock in the most fuel poor areas. [B3-7] The Energy Efficiency Standard for Social Housing sets a minimum standard for energy efficiency in social housing. All social housing	The Housing Department continues to try to maximise the impact of the Home Energy Efficiency Programme Scotland – Area Based Schemes (HEEPS:ABS) funding by combining it with its own capital budget to externally insulate mixed tenure blocks of flats in former Council estates that are either solid wall or non-traditional construction. This process is becoming increasingly difficult for several reasons. Changes to rules for ECO funding mean that it can no longer be blended with HEEPS:ABS funding meaning that ECO funding is lost and this leaves a funding gap. Improvements to insulation standards brought about by PAS 2035/PAS 2030:19 have led to an increase in prices. The after-effects of COVID and the war in Ukraine have led to increases in the price of materials and labour meaning that prices have increased even further. Although HEEPS:ABS levels of funding for individual properties have been increased by the Scottish Government, it is still very challenging to deliver EWI works as before. For all of these reasons, it proved difficult to carry out any EWI work in 2021/22 other than some preparatory works, this following a disappointing year in 2020/21 when COVID was still at its height, when numbers of properties insulated were greatly reduced to 274 (Alpin/Foggyley) whereas, over previous 5 years, average installation rate had been ~ 800.

		will be expected to meet the standard by 2020.	Notwithstanding any of this, total investment in EWI in the city since the inception of the EWI Programme in 2013 exceeds £50m with more than 5,000 residents in Dundee seeing their properties thermally upgraded.
		[B3-8] Improve Housing Quality by ensuring all houses meet the tolerable standard, and that all social housing meets the Scottish Housing Quality Standard (SHQS) by 2015.	The Housing Service is committed to improving the energy efficiency and performance of properties to benefit tenants. In 2021/22 the service, still suffering the aftermath of the pandemic, delivered the following projects/installations: • 20 properties had either loft or underfloor insulation installed • 259 new boilers were installed, 2 properties were connected to district-heating and 19 electric to gas properties completed. • 128 properties had new windows installed. • Stock total is 12413 (not including HMO/ Homeless accommodation.) The Housing Service also aims to drive forward change and improvement. It is recognised that there are challenges ahead which include the requirement to maximise the number of Council properties achieving EPC Band B (which starts at SAP 81) by the target year of 2032 to meet EESSH2 (Energy Efficiency Standard for Social Housing 2). The Housing Service is keen to contribute to the Scottish Government's stated aim of Scotland being net-zero across all sectors by 2045. The Service will endeavour to ensure that this transition is just and that the fuel poor are prioritised in projects and programmes (all of this within the context of PAS 2035 and COVID-19 as discussed above.) The results of the Scottish Government's review of EESSH2 to better align it with net zero is awaited and it is still to be understood the extent to which Hydrogen will be deployed to displace natural gas from the gas grid. It is clear that there will be a phasing out of gas heating with a prohibition already on the installation of gas-boilers in new-build housing after 2025. This will require consideration of different types of electric heating, including heat-pumps, which will be able to operate optimally because of the high insulation standards to which the new properties will be built. Within the existing stock, which currently has sub-optimal insulation standards, the Housing Department will not install replacement heating that leads to an increase in running costs for tenants. Heat pumps currently cannot compete with gas central heating and this is an issue where gas heating in properties is at the end of its life and needs to be replaced. Therefore, whilst contrary to our desire to reduce carbon emissions by installing renewable heat, it is likely that we may be forced into installing new gas heating, potentially hybrid gas with an element of heat-pump, for at least the next few years. Therefore, we will continue to take a fabric first approach by improving the thermal

performance of stock through installation of insulation. This means that, whatever heating system is inside homes, less will be required of it and this cuts carbon emissions. We may also look at installing PV arrays on suitable roofs and properties to reduce tenants' electricity costs and reduce demand on the grid. The Housing Service also has a new-build social rented housing programme, constructing properties itself or in partnership with local Housing Associations. The Council set itself a challenging target of 200 social rented house completions per annum within the Local Housing Strategy and Council Plan (See Table below). Whilst this has been difficult to achieve, increases in completions are expected in 2022/23 which will be close to or possibly exceeding the target and provide a 77% completion against the overall target.

Number of Social Rented Houses Completions by Year

2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
108	138	62	161	58	27	100

Difficulties with supply chains and price inflation may yet have an impact, however, there is a healthy pipeline of projects and developments on site which will result in improved outcomes in the long run. There are currently a total of 592 Social rented and Mid-Market Rent units on site or due to start during 2022/23.

Within our new build programme, we continue to aim for the Scottish Government Greener Standard through a fabric first approach. However, we are mindful of the Scottish Government Heat in Buildings Strategy document for Achieving Net Zero Emissions in Scotland's Buildings which is currently out to consultation. This sets out plans that would mean direct emission heating systems (DEH), such as those run on fossil fuel, would no longer be installed in any homes and non-domestic buildings warranted from April 2024. Individual gas boilers would be replaced by alternatives such as heat pumps, solar and electric energy. In advance of this target we are trialling the installation of hybrid air-source/gas heat pumps and continuing to maximise the benefits being directly gained by tenants through solar photo voltaic panels. We continue to review designs to allow for the adoption of air source heat pumps as the standard heating installation for all future new build developments.

Dundee Energy Efficiency Advice Project (DEEAP), which forms part of the Council's Advice Services in Corporate Services, aims to carry out 4,000 energy advice home visits per year and staff attend 100 community and public events to raise awareness of the energy advice service. DEEAP advisors, Private Sector Services Unit (PSSU), Care and Repair and Asset Management staff continue to raise awareness and make referrals to Home Energy Scotland (HES) for private owners and tenants.

Objective Reference	Theme	Policy/ Proposal reference	Delivery progress made
[S1] Understand the effects of climate change and their impacts on people, homes and communities	Society		N/A Dundee City Council is not listed as a responsible authority for this objective; however, its Flood Emergency Plan identifies known areas of flooding and measures to be taken when Flood Alerts and/or reports of flooding are received and clearly assigns roles and responsibilities within the organisation for responding to these events.
[S2] Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events	Society		N/A Dundee City Council is not listed as a responsible authority for this objective however, in partnership with other responsible authorities, the development and implementation of the Local Flood Risk Management Plan includes elements of awareness raising.
[S3] Support of our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate	Society		N/A Dundee City Council is not listed as a responsible authority for this objective however, the Council support health service and emergency responders within the duties of the Civil Contingencies (Scotland) Act 2005.

Review, monitoring and evaluation

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

Provide details of arrangements to review current and future climate risks, for example, what timescales are in place to review the climate change risk assessments referred to in Question 4(a) and adaptation strategies, action plans, procedures and policies in Question 4(b).

- The Council has led the development of the citywide **Dundee Climate Action Plan** which will provide the leadership, commitment and planning necessary for the transition to a low carbon future. Resilience has been identified as one of the plan's four strategic programme areas and to assist in plan preparation, a **'Climate Change Risk and Vulnerability Assessment' (RVA**) was undertaken to determine the nature and extent of climate-related risks by analysing potential hazards and assessing the vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment of Dundee.
- The Council's Adaptation Working Group will regularly review the climate risks as part of the ongoing development Adaptation and Resilience work across all services.
- The Council's **Integrated Impact Assessment** (IIA) tool assists Committee report authors to consider the likely climate change adaptation impacts of their report and provide details on any required mitigating action to manage or overcome negative impacts.

4f) What arrangements does the body have in place to monitor and evaluate the impact of the adaptation actions?

Please provide details of monitoring and evaluation criteria and adaptation indicators used to assess the effectiveness of actions detailed under Question 4(c) and Question 4(d)

- **Surface Water Management Planning Group** will be set up to monitor the effectiveness of flood protection measures carried out. Annual surveys are also carried out to monitor coastal erosion and assess bodies of water.
- The **Flood Emergency Plan** requires the Council to record effectiveness of implementation of mitigation measures and record new areas that require attention.
- The Council will work in partnership with SEPA to review and update their **Flood Maps**.

Future priorities for adaptation

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

Provide a summary of the areas and activities of focus for the year ahead.

1) Review the Risk and Vulnerability Assessment and Actions in the Dundee Climate Action Plan with internal and external Sustainable Dundee partners.

2) Develop organisational Climate Resilience plans via the Net Zero Transition Planning process.

3) Participate in Adaptation Scotland's Benchmarking Working Group

4) Work with partners across the region to develop a Tayside Adapts approach to Climate Resilience Planning.

5) Increase participation in Eco-Schools and related programmes in Dundee, via improved local support and pilot projects with appointed schools.

4h) Supporting information and best practice

Provide any other relevant supporting information and any examples of adaptation best practice.

None.

5 PROCUREMENT

5a) How have procurement policies contributed to compliance with climate change duties?

Provide information relating to how the procurement policies of the body have contributed to its compliance with climate changes duties.

- A Sustainable Procurement policy (http://www.taysideprocurement.gov.uk/strategy) was introduced a number of years ago to support the Council to comply with its climate change duties, and commits the Council to buying more sustainably which in turn offers cost efficiency, support the Councils commitment to Corporate Social Responsibility and promotes health improvements amongst stakeholders. Key outcomes included in the policy are:
  - Reduce carbon emissions
  - Contribute to climate change adaption through procurement activity
  - Embed sustainability at the heart of procurement activity
  - Deliver a variety of sustainable outcomes

Examples of where the Councils approach to its procurement has had an impact include:

- Electric Vehicle Charging Points
- Education and Office Furniture
- Street Lighting
- Janitorial products
- Audio Visual Equipment

- Dundee became Scotland's first **Fairtrade City** in 2004 and updated it Fairtrade Policy in 2012. The Council continues to undertake activities in support of its policy:
  - Only Fairtrade tea and coffee is now provided by the City Chambers when providing hospitality for meetings and events;
  - The Council's Community Benefits Officer is working with Dundee Fairtrade Forum to explore ways to promote fair trade among private sector contractors working on major Council projects.
  - Information about fair trade on the Council's website and staff intranet has been expanded and high profile 'we are a fair-trade city' signs have been installed on the three main routes into the city;
  - The Council has hosted fair trade breakfasts and a stall aimed at staff during Fair Trade Fortnight as well as paying for window stickers issued by Dundee Fair Trade Forum to local cafes and shops which sell fair trade products;
  - Fairtrade footballs have been purchased by the Council and its leisure partner Leisure and Culture Dundee;
  - Further information: http://www.dundeecity.gov.uk/fairtrade

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

Provide information relating to how procurement activity by the body has contributed to its compliance with climate change duties.

- Examples of positive outcomes delivered include:

  - The Grounds Maintenance Equipment Framework includes outcomes a range of sustainable measures including reusing packaging, using biodegradable packaging materials, recycling of all general waste, waste fuel, oils and oil filters, uplifting old batteries from customers for collection direct to the manufacturer for recycling, and adoption of the latest model delivery vehicles with Euro 5/6 engines

  - The Supply of Education Materials Framework incorporates a number of sustainability aspects, including supply chain sustainability, waste reduction, environmental considerations and end-of-life processes as well as transportation considerations. Suppliers source fair trade and ethical products, and seek to minimise their environmental impact, minimising the packaging required in deliveries and maximised recycling of waste generated by their operations. Suppliers consolidate deliveries to reduce their carbon footprint. One supplier has confirmed that, as a result of sustainable initiatives, they are now a “zero to landfill” company. Supplier’s delivery methods also include the trialling of electric and hybrid vehicles.

- The **IT peripherals framework** includes minimum specification for the latest energy efficiency, recyclable and environmental accredited products.

Further information

5c) Supporting Information and best practice

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

None.

6 VALIDATION AND DECLARATION

6a) Internal validation process

Briefly describe the body's internal validation process, if any, of the data or information contained within this report.

Data and information is sourced from relevant Services and collated by the Senior Sustainability and Climate Change Officer. The report is then circulated internally for verification before being presented to Council Management Team for further comment before submitted to the Council's Policy and Resources Committee for approval.

6b) Peer validation process

Briefly describe the body's peer validation process, if any, of the data or information contained within this report.

The report is circulated internally to Sustainable Dundee Working Group officers for verification.

6c) External validation process

Briefly describe the body's external validation process, if any, of the data or information contained within this report.

No external validation undertaken. The Council will continue to work with Sustainable Scotland Network, Scottish Government and other Scottish Local Authorities to determine a future process for external validation.

6d) No Validation Process

If any information provided in this report has not been validated, identify the information in question and explain why it has not been validated.

N/A

6e) Declaration

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

Name:	Bryan Harris
Role in the organisation:	Sustainability and Climate Change Manager
Date:	10th October 2022

PART 2

RECOMMENDED REPORTING: REPORTING ON WIDER INFLUENCE

1a) Historic Emissions (Local Authorities Only)

Please select which dataset you use for setting area-wide emission targets or for monitoring emission reduction projects and actions. Please note that both datasets will show on the form, the response you provide in the dropdown will be used as a note for which dataset you use as a local authority. You can include further data sources by selecting the 'other' dropdown. You can 'add' or 'remove' rows as necessary. For further information on the differences between the 'full' and 'subset' datasets, please view the SSN reporting resources page or view the UK Government datasets and associated technical guidance. Links to both of these resources can be found at the very top of this form.

*Table 1a – Subset (**2020 is latest data available, published in September 2022**)*

Source	Sector	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Units
BEIS Sectors	Total Emissions	962.28	978.18	896.74	923.53	886.24	781.82	760.92	702.84	668.42	648.32	604.38	584.69	ktCO2e
	Industry and Commercial	268.73	273.70	250.67	261.41	252.30	218.17	209.68	183.02	163.57	157.37	128.68	159.54	ktCO2e
	Domestic	333.17	351.91	311.05	330.51	313.54	262.49	252.30	228.44	217.55	208.94	204.46	192.68	ktCO2e
	Transport total	261.74	251.62	242.02	234.23	224.70	219.53	218.27	217.33	215.73	210.58	202.65	166.45	ktCO2e
	Per Capita	6.63	6.70	6.09	6.25	5.98	5.28	5.13	4.74	4.49	4.36	4.05	3.93	ktCO2e

2a) Targets

Please detail your wider influence targets.

Table 2

Sector	Description	Type of Target (units)	Baseline value	Start year	Target	Target/End year	Saving in latest year measured	Latest Year Measured
Overall Reduction Target	Covenant of Mayors (CoM)for Climate and Energy target	Percentage Emissions (%)	1058235.0	2005	40% reduction in GHG emissions	2030	45%	2020
Overall Reduction Target	Climate Emergency Declaration	Other (please specify in comments)	1058235.0	2005	Net Zero emissions	2045	45%	2020
Overall Reduction Target	C40 Cities: Race to Net Zero	Please select from drop down box	1058235.0	2005	Net Zero emissions	2045	45%	2020

2b) Targets

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.

In September 2021 Dundee City Council signed three pledges; the C40 Cities: Race to Net Zero, the Edinburgh Declaration and the Glasgow Food and Climate Declaration. The C40 Cities: Race to Net Zero pledge publicly highlights the message that the city of Dundee recognises the global climate emergency and will reduce the city's emissions to net zero by 2045 at the latest. This would be led by partnership working to deliver the Dundee Climate Action Plan.

The Edinburgh Declaration is Scottish Government initiative through the 'Edinburgh Process' which is a means for local authorities to be formally represented in the international process and to show support for global action to protect and enhance biodiversity. The city will work on actions set out within Dundee's Biodiversity Action Plan 2020-2030 and Dundee's Climate Action Plan.

By signing the Glasgow Food and Climate Declaration Dundee City Council will commit to accelerate climate action by building and facilitating sustainable food systems transformation by developing and implementing integrated food policies and strategies, for example building on Dundee's Local Food Growing Strategy and reducing greenhouse gas emissions from urban and regional food systems.

In March 2018, the Lord Provost and Leader of Dundee City Council, signed the Covenant of Mayors for Climate and Energy, a global initiative that brings together local governments in a voluntary commitment to reduce emissions and develop an action plan that adopts a joint approach to tackling climate change mitigation and adaptation. The Dundee Climate Action Plan is the culmination of collaborative work, led by Dundee City Council and co-designed with public, private and community organisations, recognising the fact that a concerted city-wide effort is required. It represents the first set of actions in a long-term pathway to first surpass the Covenant of Mayors target of 40% reduction in greenhouse gas emissions by 2030 and then to achieve net-zero greenhouse gas emissions by 2045 or sooner. "

3) Partnership Working, Communications and Capacity Building

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

Table 3

Key Action Type	Description	Action	Org. role	Partners	Outputs
Partnership Working	Sustainable Dundee Network	Partnership working of climate change/ sustainability	Lead	+20 orgs inc. Dundee Partnership	The Sustainability and Climate Change team created this communications and partnership banner to promote and take forward sustainability and climate change activity in Dundee. Tasked with developing the Climate Action Plan for city.

					A COP26 Dundee planning group on 2021 led to the widening of the **Sustainable Dundee Network** which continue to meet regularly to coordinate events, activities and campaigns and develop tools to support sustainability in Dundee. A new Sustainable Dundee Map has been created which links the UNSDG's to locally relevant initiatives on a map. A new Sustainable Dundee website has been created to provide a one stop shop for all locally relevant support and information on sustainability. And a calendar of events is continuously updated between partners allowing cross promotion and participation.
Partnership Working	Dundee Climate Leadership Group	Partnership working: net-zero	Lead	13 organisations across sectors in Dundee	The Dundee Climate Leadership Group was established in spring 2021 to provide active leadership on Dundee's net-zero challenge, leveraging expertise from across the city in order to engage and inspire collective ownership and a shared commitment to tackling climate change. It is chaired by the Principal of the University of Dundee and its operating principles are to work within the objectives of Dundee Climate Action Plan and strategic vision of Dundee Partnership (Community Planning Partnership). DCLG has established sub-group Energy System Working Group which is led by the Council and consists of Scottish and Southern Electricity Network (SSEN), Scottish Gas Network(SGN), Scottish Water and University of Abertay. The working group has initiated the Local Area Energy Planning work which is currently underway and looks at different cost effective pathways for the decarbonisation of local energy systems in Dundee City area.
Partnership Working	Eco-Schools Dundee	Partnership working of climate change/ sustainability	Lead	Keep Scotland Beautiful	Dundee has a low Green Flag attainment compared to other local authority areas in Scotland. The Sustainability and Climate Change team have worked with internal and external partners to produce a support pack of local resources and information designed to help schools embarking on the Eco-Schools programme. Over 20 schools are now engaging in the process; 15 schools and 800 pupils took part in an online conference led by the Sustainability and Climate Change Team. Work continues to ensure schools are receiving support on continuing their work on climate change.

Partnership Working	Michelin Scotland Innovation parc – Future Skills Academy	Partnership working of climate change/ sustainability/Just transition	Partner	Michelin Scotland Innovation Park, Dundee and Angus College, DCC	
Communications	Sustainable Dundee Map – UNSDG's in Dundee	Awareness Raising and Behaviour change	Lead	Sustainable Dundee Network -+20 organisations across sectors in Dundee	A new Sustainable Dundee Map has been created which links the UNSDG's to locally relevant initiatives on a map. Was launched during Climate Week wk/b September 26th.
Communications	COP26	Behaviour Change	Lead	+20 organisations across sectors in Dundee	A diverse group of organisations across the city planned and implemented a very successful 6-week programme of events linking local climate action to COP26.
Communications	Our Low Carbon Story	Awareness Raising	Lead	Dundee City Council depts.	Provides key examples of existing work, & future plans, which align to Climate Action Plan and strive to meet a number of ambitious aims. https://www.dundeecity.gov.uk/sites/default/files/publications/lowcarbonstory.pdf
Communications	Earth Hour 2022	Behaviour change	Lead	Leisure and Culture Dundee	Net Zero Business event held at Chamber of Commerce with over 50 businesses attending and 10 speakers offering advice, support and inspiration for and support for businesses trying to achieve net zero emissions. Extensive Social media campaign including professional drone footage and photography of Dundee's iconic buildings lit up green.
Communications	Drive Dundee Electric	Behaviour change	Lead	Scottish Government, Office for Low Emission Vehicles	Launched in June 2017 to encourage and support the uptake of electric vehicles in the area. It is now the face of all the charging infrastructure, regulation, events and acts as a point of information and contact to ensure all response is accurate and quick, providing the best experience to electric vehicle owners. https://drivedundeeelectric.co.uk

Communications	Waste Education and Awareness programme	Behaviour change	Lead	Schools, Zero Waste Scotland	Internal Waste Education programme delivered in two main Council premises to encourage proper use of recycling facilities and to reduce contamination. Briefings held, reusable bottles and coffee cups distributed and internal bins monitored for contamination. Supporting Zero Waste Scotland's Food waste reduction pilot project in schools and small businesses in Dundee Schools Waste Awareness programme commenced Autumn 2019.
Partnership Working	Baldovie Community Reuse Hub	Skills/capacity building	Lead	Tayside Re-users, Transform, Dundee Social Enterprise Network.	Joint partnership repair items that could be saved from the skip including unwanted furniture and other household items, thus reducing waste to thermal treatment or landfill. The Hub also offers opportunities for the unemployed to learn skills needed to repair, reuse and extend the life of products via training and employment programmes. https://www.dundeecity.gov.uk/service-area/neighbourhood-services/environment/community-re-use-hub
Partnership Working	Dundee Local Area Energy Plan (LAEP) and DCC Local Heat and Energy Efficiency Strategy and Delivery Plan (LHEES)	Skills/capacity building	Participant	Dundee Climate Leadership Group	Dundee City Council / SSEN / SGN and Scottish Water are working collaboratively with the assistance of Arup and Advanced Infrastructure to help create a Local Area Energy Plan (LAEP) and Local Heat and Energy Efficiency Strategy (LHEES). The Dundee LAEP will provide the level of detail for the city equivalent to a master plan; identifying near-term actions and projects, providing stakeholders with a basis for taking forward activity and prioritising investments and action. Additional detailed design work is required for identified projects to progress to implementation. It will explore potential pathways that consider a range of technologies and scenarios, and when combined with stakeholder engagement leads to the identification of the most cost-effective preferred pathway and a sequenced plan of proposed actions. The LAEP scope addresses electricity, heat, and gas networks, future potential for hydrogen, the built environment (industrial, domestic and commercial) its fabric and systems, flexibility, energy generation and storage, and providing energy to decarbonised transport e.g. electricity to electric vehicles and

					charging infrastructure. The Local Heat and Energy Efficiency Strategies (LHEES) Order came into force on the 21st May 2022. It places a duty on Scottish local authorities to prepare, publish and update a LHEES Strategy and Delivery Plan on or before 31 December 2023. An LHEES is intended to set out the long-term plan for decarbonising heat in buildings and improving energy efficiency across an entire local authority area. Its scope is focused on energy efficiency and heat decarbonisation but does extend to wider local energy system planning (hence the need for a Dundee LAEP that encompasses LHEES). The LHEES is required to identify strategic heat decarbonisation zones, set out the principal measures for reducing buildings emissions within each zone and prioritise areas for delivery, against national and local priorities. Both of these strategies take a data driven, evidence-based approach that sets out to identify the most effective route for Dundee to meet its net zero target by 2045 or sooner.
Partnership Working	Invest in Dundee - Energy Dundee	Skills/capacity building	Lead	Public, private and academic sectors in Dundee	Dundee and Dundee Port provide the ideal location to create an Offshore Wind construction port and deliver Incoming logistics, preassembly and loadout. In addition to the number of jobs created over the construction years basing the subsequent Operations and Maintenance activity would provide high quality and secure jobs for Dundee and region for the following decades. Significant public and private investments have been made in infrastructure to ensure the city and port meets the needs of the offshore wind sector. Alongside investment in infrastructure Dundee offers skills, R&D facilitates, competencies across the supply chain and world class centre of excellence. Scottish Government identified Dundee Port in the National Renewables Infrastructure Plan (NRIP) as the most suitable port location on the East Coast of Scotland and recognised the major investment to support offshore construction and O&M activity made by both the public and private sector in the city.

					The level of support and enthusiasm for the offshore sector includes the following investments: • Forth Ports have invested over £10m to create a new quayside with an industry-leading “heavy lift” capability, coupled with a significant onshore operational area. Further investment will be forthcoming to enable offshore wind marshalling to be supported at the port should a suitable project be awarded. • Dundee City Council has invested in access and trunk roads into the port and offsite land for supply chain development. • There is significant local community support for developing industries. We have two brilliant Universities and a College which can provide any support needed during both the construction and operational phases. Dundee’s cluster approach brings together regional strengths from across Tayside and Fife in the engineering/manufacturing sectors via networks, such as Energy Dundee, East Coast Renewables and the Forth and Tay Cluster to support the offshore sector. Energy Training East: A division of Energy Dundee, is a partnership of universities, research institutions and colleges across Tayside, supported by Skills Development Scotland, creating a unique combination of training and R&D expertise to support the energy sector. Jobs creation would include the following work areas; Civil/ Mechanical/Technical and Electrical Engineering, Planning, Environmental, Welding and a range of support services. http://www.energydundee.com