



City Chambers
DUNDEE
DD1 3BY

10th November, 2023

Dear Colleague

You are requested to attend a MEETING of the **CLIMATE, ENVIRONMENT AND BIODIVERSITY COMMITTEE** to be held remotely on Monday, 20th November, 2023 to follow the meeting of the City Council called for 5.00pm.

Members of the Press or Public wishing to join the meeting should contact Committee Services on telephone (01382) 434205 or by email at committee.services@dundeecity.gov.uk by no later than 12 noon on Friday, 17th November, 2023.

Yours faithfully

GREGORY COLGAN

Chief Executive

AGENDA OF BUSINESS

1 DECLARATION OF INTEREST

Members are reminded that, in terms of The Councillors Code, it is their responsibility to make decisions about whether to declare an interest in any item on this agenda and whether to take part in any discussions or voting.

This will include all interests, whether or not entered on your Register of Interests, which would reasonably be regarded as so significant that they are likely to prejudice your discussion or decision-making.

2 BIODIVERSITY DUTY REPORT 2021-2023 - Page 1

(Report No 321-2023 by the Executive Director of Neighbourhood Services, copy attached).

3 PUBLIC BODIES CLIMATE CHANGE DUTIES – ANNUAL REPORT 2022/23 - Page 31

(Report No 289-2023 by the Executive Director of City Development, copy attached).

4 DUNDEE CITY COUNCIL NET ZERO TRANSITION PLAN – Page 101

(Report No 210-2023 by the Executive Director of City Development, copy attached).

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ITEM No ...2.....

REPORT TO: CLIMATE, ENVIRONMENT AND BIODIVERSITY COMMITTEE–
20 NOVEMBER 2023

REPORT ON: BIODIVERSITY DUTY REPORT 2021-2023

REPORT BY: EXECUTIVE DIRECTOR OF NEIGHBOURHOOD SERVICES

REPORT NO: 321-2023

1.0 PURPOSE OF REPORT

- 1.1 To present Dundee City Council's Biodiversity Duty Report, highlighting biodiversity action from 2021-2023, in compliance with its legal duty under the Nature Conservation (Scotland) Act 2004 and the requirement to make the report publicly available, under the Wildlife and Natural Environment (Scotland) Act 2011.

2.0 RECOMMENDATIONS

- 2.1 It is recommended that Committee approves the report, notes the achievements and remits the Executive Director of Neighbourhood Services to make the report publicly available.

3.0 FINANCIAL IMPLICATIONS

- 3.1 None.

4.0 MAIN TEXT

4.1 Background

- 4.1.1 Reference is made to Article VI of the Neighbourhood Services Committee of 16th November 2020 - report [286-2020](#) refers, which approved the Biodiversity Duty Report 2017-2020. This report presents a further update and provides Dundee City Council's Biodiversity Duty Report for the most recent reporting period 2021-2023.
- 4.1.2 The Nature Conservation (Scotland) Act 2004 places a duty on public bodies 'to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions.' In addition, Local Authorities in Scotland have a requirement to report on their Biodiversity Duty every three years as outlined in the Wildlife and Natural Environment (Scotland) Act 2011. The report should be publicly available and should outline the actions the public body has taken to meet this biodiversity duty. This report is due to be submitted by 31st December 2023 and is attached at Appendix 1. The Biodiversity Duty Report format reflects the latest templates provided by the Scottish Government through communication from Lorna Slater (Minister for Green Skills, Circular Economy and Biodiversity) on 7th September 2023. It is noted that the reporting format is to be reviewed for subsequent periods and will reflect feedback and updated policy drivers.
- 4.1.3 The implementation of Dundee's Biodiversity Action Plan 2020-2030 provides a basis for the reporting required. Annual reports on the progress of actions are submitted to committee with the Biodiversity Duty Report being an amalgamation of these.

4.2 Context

- 4.2.1 There have been a number of significant amendments and additions to national and international policies relating to biodiversity during the current reporting period.
- 4.2.2 In December 2022, the delayed 15th Meeting of the Conference of Parties (COP 15) was held in Montreal at which the Kunming-Montreal Global Biodiversity Framework

(GBF) was adopted. This framework sets out new global targets for biodiversity for 2030. The mission of the framework for the period up to 2030, towards the 2050 vision is 'to take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of the people and the planet'.

- 4.2.3 Shortly after this, the Scottish Government published an updated draft Scottish Biodiversity Strategy (SBS) which seeks to halt biodiversity loss by 2030 and reverse loss with large scale restoration by 2045. The SBS will be implemented through a series of 5-year delivery plans. The first of these, released in late summer 2023, is currently going through a period of consultation alongside frameworks for Nature Networks and protecting at least 30% of our lands and seas by 2030 (30 by 30), which are the key mechanisms for the delivery of targets. The SBS will sit alongside the Scottish Government's Climate Change Plan and the transition to Net Zero.

- 4.2.4 National Planning Framework 4 (NPF4), adopted by Scottish Ministers in early 2023, is another important mechanism for protecting and enhancing Scotland's biodiversity. This contains policies which focus on methods to manage future development sustainably and to optimise the use of land to provide services and resources, including biodiversity. NPF4 must be reflected locally through an updated Local Development Plan and implemented by the planning application procedure.

4.3 Highlights and Achievements

- 4.3.1 In Dundee, biodiversity encompasses the multitude of species and habitats present within the city. Dundee City Council has progressed and completed actions which help safeguard biodiversity and encourage communities to take an active interest in the local environment. These actions have been guided by Dundee's Biodiversity Action Plan (BAP) which focuses on the ecosystems, habitats and species most in need and ensures prioritisation of resources at a local level. The plan sets out clear objectives and targets to enable the monitoring of progress and enables measurement of any achievements. The BAP aligns with other council strategies such as the Climate Action Plan and The City Plan.

- 4.3.2 The planting of 28,000 native trees in spring 2023 has added a significant area to the woodland habitat of Dundee. The Tr-Action: Planting Climate Resilient Woodlands in Dundee Project was funded primarily by a successful application to the Nature Restoration Fund. The £300,000 project resulted in the creation of 12 hectares of native woodland across three sites, Riverside Nature Park, Balgay Hill and an area adjacent to Clatto Country Park. The main aims of this project were to create bigger, better and more connected woodland in Dundee, increase the amount of carbon storage and sequestration in the city and increase woodland diversity and resilience to climate change.

- 4.3.3 Other highlights contained within the Biodiversity Duty Report, at Appendix 1, include: -

- Ash Dieback - this fungal disease has become a significant threat to ash trees in the city. A new GIS based tree management platform has been developed and contains a two-year survey of 3,200 ash trees on council property. Identification of £400,000 by Dundee City Council and the subsequent procurement of additional survey and felling contractor services will enable the Council to further the successful management of the disease and ensure the safety of communities. Dundee City Council is one of the Local Authorities leading the way in this work and is providing examples of best practice to others throughout Scotland.
- Camperdown Growing Hub - the £1.2 million project to transform an area of Camperdown Park into a functional food growing area was realised in 2023, with the completion of a 'climate friendly' building. The project is being run in partnership with 'The Campy Growers' and employs regenerative food-

growing practices including no-dig, on-site composting, agroforestry and chemical free production as an example of good stewardship of the land. The group are actively creating habitat and growing with nature, fruit trees have already been planted and plans to create wetland habitat have begun.

- Biodiversity and naturalised grassland - in addition to existing wildflower meadows across parks and greenspaces, EDEN have established an additional 3.3 hectares in Council owned spaces. The Broughty Ferry and Monifieth Active Travel project includes the creation of 3 hectares of native coastal grassland. Over 50,000 native bulbs have been planted, as well as 10,000 pollinator friendly allium bulbs.
- Herbicide use - building on the success of previous reporting periods, the Council has reduced its use of herbicide by a further 45%, with an overall reduction of 65% since 2018.
- Community engagement - over of 4,000 hours of greenspace volunteering has been completed, 1,800 school children visited greenspaces, 50 hours of STEM teacher training delivered and 169 litter picks carried out by communities and volunteers. A biodiversity themed awareness campaign received 100,500 digital engagements.
- Awards - in recognition of its biodiversity and wider environmental work, the Council received the Wright Sustainability Trophy and were awarded a Gold medal in the Beautiful Scotland campaign. The Council are also in receipt of 7 Green Flags and a Scottish Beach Award. Beautiful Scotland also recognise a number of It's Your Neighbourhood groups.

5.0 POLICY IMPLICATIONS

This report has been subject to the 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.

6.0 CONSULTATION

- 6.1 The Council Management Team have been consulted in the preparation of this report and agree with its contents.

7.0 BACKGROUND PAPERS

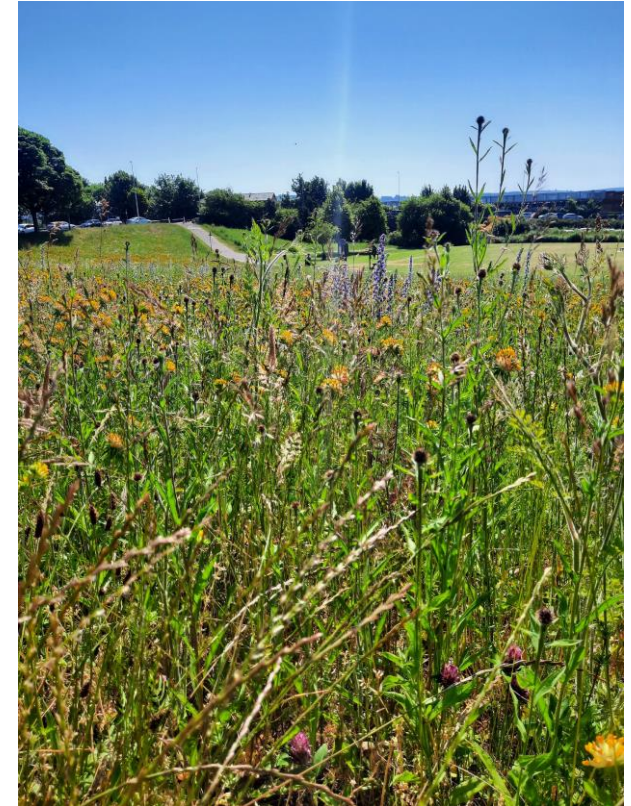
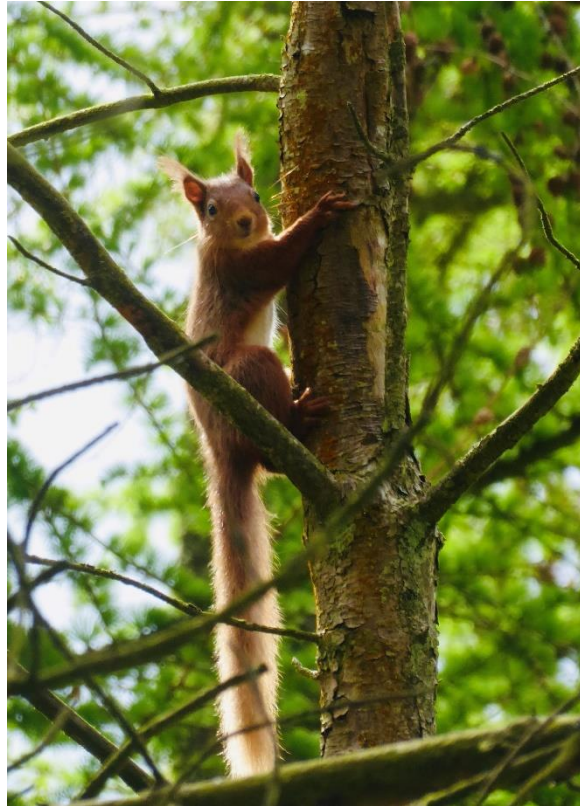
- Article VI of the Neighbourhood Services Committee of 16th November 2020 - report [286-2020](#), which approved the Biodiversity Duty Report 2017-2020.
- Article VII of the minute of the Neighbourhood Services Committee of 13th January 2020 - report [14-2020](#), which approved the Biodiversity Action Plan.
- The Annual Biodiversity Action Plan Updates-
 - Report [18-2021](#)
 - Report [128-2022](#)
 - Report [158-2023](#)

Elaine Zwirlein
Executive Director of Neighbourhood Services

Tony Boyle
Head of Environment

16th October 2023

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BIODIVERSITY DUTY REPORT

2021-2023

DUNDEE CITY COUNCIL

Introduction

The Nature Conservation (Scotland) Act 2004 states that “It is the duty of every public body and office-holder, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions”. This requirement is known as the Biodiversity Duty. The Wildlife and Natural Environment (Scotland) Act (WANE) 2011 requires all public bodies to prepare and publish a report on their delivery of the Biodiversity Duty. Reports should be produced and made public every three years.

As stated in guidance provided by NatureScot, the Biodiversity Duty is not only about protecting biodiversity through managing specific sites, habitats and species, but it also aims to:

- Increase the level of understanding and connection between people and the living environment;
- Promote consideration of all our impacts on the natural world through our actions and decisions, including through procurement and use of resources; and,
- Encourage staff, partners and customers to engage with, understand and consider biodiversity.

This is the third Biodiversity Duty produced by Dundee City Council and covers the period 1st January 2021 to 31st December 2023. It evidences delivery of Dundee City Council’s Biodiversity Duty during this period and follows the most recent Scottish Government / NatureScot guidance.

Report Outline

Section 1: Introductory information about Dundee City Council

Section 2: Actions to protect and enhance biodiversity

Section 3: Mainstreaming biodiversity

Section 4: Nature-based solutions, climate change and biodiversity

Section 5: Public engagement and workforce development

Section 6: Research and monitoring

Section 7: Biodiversity highlights and challenges

This report will be made available on the [Council’s website](#), a copy can also be requested via e-mail: environment@dundeecity.gov.uk.

SECTION 1: INTRODUCTORY INFORMATION

The Dundee City Council area covers 60 square kilometres and is, geographically, the smallest local authority area in Scotland with a population of approximately 149,300. The council is responsible for the management and maintenance of a large amount of land across the city as well as many buildings. It also provides a planning role in regulating development and infrastructure.

Dundee City Council has five direct service areas. Twenty-nine elected members oversee these through various service committees. The delivery of services by Leisure and Culture Dundee and Dundee Health and Social Care Partnership are overseen by boards, on which Dundee City Council is represented.

Dundee City Council service areas:

1. **Chief Executive** - providing strategic leadership for the council, supporting the management team and elected members in the development and delivery of the council's aims and policy objectives, achieving better outcomes for the city. Ensures the council has strong links with partners and the wider Dundee community and national agencies.
2. **Corporate Services** - provide central support functions to all service areas and a number of direct services to the general public.
3. **City Development** - promotion of jobs in the local economy, the maintenance of the city's road network, transportation facilities and council properties and the control of development and building operations.
4. **Children and Families Service** - ensures that children, young people and their families are at the heart of the decision-making process to provide them with the best possible start in life.
5. **Neighbourhood Services** - Services include the management and maintenance of housing and the environment, supporting people to develop their communities and keeping people safe and healthy.

The Environment Service within Neighbourhood Services takes a lead role in delivering the biodiversity duty. The Greenspace Officer has a specific remit to further the conservation of biodiversity through the delivery of Dundee's Biodiversity Action Plan and provides advice, guidance and support to Council services helping to identify and encourage actions to further the conservation of biodiversity, in line with the Biodiversity Duty.

On 10th July 2023 Dundee City Council agreed the formation of a new committee structure. The Climate, Environment and Biodiversity Committee was created and is responsible for a number of issues including biodiversity strategies, activities and reports and climate change activity and reports. Further information is available [here](#).

SECTION 2: ACTIONS TO PROTECT AND ENHANCE BIODIVERSITY

Introduction

Dundee City Council has undertaken a range of projects over the last 3 years to directly benefit biodiversity or to tackle the main drivers of biodiversity loss. The Dundee Biodiversity Action Plan has provided the framework to direct and prioritise work in this area. An update on the actions within the plan are reported back to council committee annually.

Dundee City Council would like to acknowledge the support provided by the Scottish Government through the Nature Restoration Fund. A total of £195K was directly allocated up to April 2023 with an additional £265,000 awarded following a successful application to the competitive strand of the fund in 22/23. This funding has enabled more projects to be completed within a faster timescale or with added value.

Projects

Woodland	Statistics
<p>Dundee City Council continues to manage around 279 ha of urban woodlands. One of the main challenges in the last 3 years has been the damage caused to our woodlands by Storm Arwen and subsequent storms in the winter of 2021/22. Large areas of woodlands were affected, with Templeton Woods, Balgay Hill, Reres Hill and the Law bearing the brunt. Since the removal of fallen and damaged trees, work has been ongoing to address re-planting and regeneration of these areas. Re-planting at Templeton Woods has provided the opportunity to diversify the tree species and habitats, with the Countryside Ranger Service working with volunteers and members of the public to carry out the planting and to enhance educational opportunities.</p> <p>Work has been carried out on Balgay Hill to thin out an area of semi mature woodland and to prune back vegetation from path edges to facilitate access and visitor enjoyment. A number of small native trees have been planted to create a new understory in some parts of the hill and some larger oak trees were planted to replace gaps in the canopy.</p> <p>Trees were planted at Kelly Field Park to help diversify the species mix and to provide additional habitat.</p> <p>The Tr-Action: Planting Climate Resilient Woodlands in Dundee Project. Funded primarily by the Nature Restoration Fund, new native woodland has been created at three sites across Dundee, Riverside Nature Park, Balgay Hill and an area adjacent to Clatto Country Park. Further details provided in Section 4: Nature-based solutions, climate change and biodiversity.</p>	<p>17 ha of storm damaged woodland managed.</p> <p>4,000 native tree whips planted.</p> <p>45 standard sized trees planted in parks</p> <p>12 hectares (28,000 trees) of native woodland created</p>

<p>An internal Ash Dieback Working Group was set up in 2021 to look at the preparation of an Ash Dieback Action Plan. Ash Dieback has become a significant threat to ash trees in Dundee and an assessment of the resources required to ensure the safety of people and property, as well as safeguarding our tree resource for the future, was required. Survey work and management of affected trees commenced in May 2022. Currently DCC continues to assess and manage the threat to ash trees in the city from Ash Dieback. A new GIS based tree management system has been implemented for ash trees. The survey initially focused on high traffic, high risk areas of the city but all areas have now been assessed. A full update on the progress of this plan was sent to Neighbourhood Services committee in January 2023 (report no. 5-2023). Information for the general public on this disease has been provided and promoted on the Council website here. A further report submitted to Neighbourhood Services in August 2023 (report no. 214-2023) made provision of £400,000 to further the management of the disease through the procurement of survey and arboricultural services.</p>	<p>3200 Ash trees surveyed.</p> <p>60 dangerous Ash trees removed.</p>
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Grassland	Statistics
<p>Since 2020 Dundee City Council has been working with local communities to change grassland management in 27 local greenspaces to better benefit biodiversity. Grassland management in these areas is either naturalised grass (where grass is cut once or twice a year and the cuttings are left in situ), or biodiversity grass (where grass is cut once or twice a year and the cuttings are removed). The assigned management type is based on an assessment of the original grassland quality and areas already with a reasonable mix of species have been designated as biodiversity areas. Using additional funding, such as Nature Restoration Fund, some of these areas have since undergone further enhancement with 2 areas being sown with yellow rattle, 2 areas being sown with a perennial wildflower mix and one area has been planted with a mix of spring bulbs to create a spring meadow. Some of the naturalised areas have also been enhanced with the planting of allium bulbs throughout. Not only does this provide some extra forage for pollinators but also provides a welcome splash of colour.</p> <p>The naturalised / biodiversity grassland areas add to the number of perennial wildflower meadows which continue to be maintained across the city at sites such as Riverside Nature Park, Trottick Ponds Local Nature Reserve and the Law.</p> <p>DCC is working in partnership with Friends of Riverside Nature Park to ensure the successful management of the meadow area. Greater yellow rattle, planted under special license, successfully flowered and set seed in the park for the first time during 2021 and continues to be protected and thrive. Access to the meadow areas is restricted for part of the year to protect ground nesting birds especially skylarks. This restriction and its enforcement by council officers and the Friends of Group has</p>	<p>49 ha naturalised grass. 10 ha biodiversity grass (1.3 ha sown with yellow rattle, 0.6 ha sown with perennial meadow wildflower mix). 50,000 spring bulbs planted. 10,000 allium bulbs planted. 3.4 ha perennial wildflower meadows managed Approximately 20</p>

<p>resulted in increased breeding pairs of skylarks to approximately 20 pairs, up from 7 in 2018.</p> <p>Dundee City Council continues to sow a number of annual wildflower areas along road verges which provide a welcome to the city as well as food and habitat for pollinators and other species.</p>	<p>breeding pairs of skylarks</p> <p>1 ha annual wildflower areas.</p>
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Freshwater	Statistics
<p>Den O Mains is an area of Caird Park, Dundee in which two large ponds have been formed on the Gelly Burn. Whilst originally largely ornamental, the ponds have become more natural over time providing habitat for a wide variety of wildlife. However, during this time silt has built up reducing the amount of open water, slowing water flow and enabling successional plants such as willow to establish decreasing the water habitat. SEPA (Scottish Environment Protection Agency) granted Dundee City Council a license to dredge the area. This work was carried out over two years to minimise disruption to biodiversity.</p> <p>Work was carried out at Trottick Mill Ponds Local Nature Reserve to improve the flow of water into and out of the ponds. This involved removal of silt from historic lades and repairs to the stone walls, replacement of a sluice gate and an outflow grill. There were also repairs made to gabions which reinforced part of the ponds edge. This work will allow the control of waterflow through the ponds, reducing flooding in the winter and prevent drying out in the summer.</p> <p>After consultation with representatives from the Stobswell Community Forum and The Friends of Stobsmuir Park, improvements were carried out at Stobsmuir ponds. These included the installation of rock islands with aquatic plants, new interpretation and wildflower planting to increase the biodiversity of the north pond and surrounding area, improve water quality.</p> <p>As part of the council's internal green flag assessment of our parks, two ponds at Camperdown Park were highlighted as requiring improvements. Some invasive vegetation was removed from around the ponds, new rock islands were created and planted with a mix of water plants and the surrounding areas were improved with new tree planting and wildflower seed. Two new pond dipping platforms and new interpretation signs were installed.</p>	<p>500m³ of silt removed from ponds.</p> <p>4 city ponds enhanced for wildlife through planting, the creation of new rock islands and lade restoration.</p>

Marine	Statistics
<p>Works are ongoing to protect and manage the Broughty Ferry sand dune range to provide effective natural flood protection. 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 being undertaken to identify additional opportunities to protect and enhance the sand dune habitat. Following recent inspections, there is now confirmation that these works have supported the growth of the dunes and further establishment of grasses and embryo dunes.</p> <p>Upstream Battle on the Tay launched in August 2021, this Keep Scotland Beautiful campaign has a source to sea approach to tackling marine litter and involves collaboration across the relevant local authority areas and community involvement. Community-led Anchor Groups have been identified for Dundee, each of which will raise awareness, gather litter data, and encourage participation.</p> <p>Broughty Ferry Beach continues to achieve Scotland's Beach Award and an 'Excellent' classification for EU bathing water quality.</p> <p>Dundee City Council works with and supports a number of individuals and community groups who help to litter pick along the beach front area. This helps to reduce the amount of litter which is harmful to our intertidal and marine wildlife.</p>	<p>1 ha of sand dunes managed for natural flood defence.</p> <p>5 community Anchor groups in Dundee for Upstream Battle on the Tay.</p> <p>91 litter picks.</p>

Urban	Statistics
<p>Dundee City Council continuously reviews its use of herbicide with the aim to reduce overall use and to consider suitable alternatives which support biodiversity in Dundee. Mechanical weed rippers have been purchased for use on hard surfaces and street sweeping has been reviewed, this removes the detritus that builds up allowing weeds to colonise.</p> <p>In order to improve the biodiversity within our cemeteries, bird and bat boxes have been installed. This provided additional homes for these animals and an opportunity for awareness raising work with the cemetery staff by the Countryside Rangers.</p> <p>Ornamental flower beds were updated and improved at Seabraes. Plant species, although not all native, were all pollinator friendly and the site has become a haven for invertebrates.</p>	<p>Overall reduction in herbicide of over 65% in the last 5 years with a 45% reduction in herbicide usage in the current reporting period.</p> <p>75 bird boxes and 50 bat boxes installed.</p>

<p>New pocket parks were created, one at Lorimer Street and one at Moncur Crescent. The planting here involved new trees and herbaceous perennials and grasses, creating new habitats in very urban areas.</p> <p>Road drains occurring on routes which frogs and toads use regularly have been shown to have a significant effect on their mortality. Working in partnership with the Tayside Amphibian and Reptile Group, two areas of Dundee in Panmurefield and Ballumbie were identified as being suitable for the installation of bespoke amphibian ladders. The site at Ballumbie complemented an ongoing Angus Council project. Two workshops were held for volunteers to learn more about amphibians and assist with the assembly and installation of the ladders.</p>	<p>650m² of ornamental flower beds planted with biodiversity friendly species.</p> <p>2 new pocket parks created.</p> <p>100 amphibian ladders in roadside gully pot drains.</p>
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Invasive Non-Native Species (INNS)	Statistics
<p>Dundee City Council has carried out grey squirrel control across the city for a significant number of years. This has been supported by Scottish Forestry funding but came to an end in 2022. Alternative funding continues to be sought in order to help protect Dundee's population of Red Squirrels.</p> <p>Using available legislation, Environmental Health Officers request that private landowners control giant hogweed on their property resulting in mixed success. More appropriate legislative powers lie with NatureScot. To aid the implementation of this, the Council provided information on all known landowners within Dundee, and also in Angus's Dighty catchment to assist NatureScot in delivering action. Ongoing mapping shows a significant reduction of giant hogweed particularly on Dundee City Council controlled sites, where regular control is carried out. However, new infestations continue to appear and will do so until control further upstream in Angus is delivered. While the Scottish Invasive Species Initiative (SISI) has supported with advice to private owners up stream of Dundee, NatureScot has advised that they do not have the resources to deliver legal action or grants for landowners within the city boundary. In addition to giant hogweed, Himalayan balsam and Japanese knotweed are also subject to targeted control.</p>	<p>250 grey squirrels removed.</p> <p>40 ha of DCC owned areas with giant hogweed, mapped and controlled.</p> <p>90 ha of privately-owned areas with giant hogweed mapped.</p>

Planning	Statistics
<p>Council Officers from the Greenspace Team provide advice on trees and biodiversity for appropriate planning applications. In the last 3 years advice on 128 applications has been given. Of these, 6 were on or near Locally Important Conservation Sites (LINCS), 23 involved trees with Tree Preservation Orders (TPO's), 32 were in Conservation Areas. In addition, comments have also been provided for 13 pre-applications, 2 EIA Scoping Reports and officers have assisted in discharging conditions on 25 applications.</p> <p>Planning Enforcement Officers have worked on several cases relating to the unauthorised felling of trees with Tree Preservation Orders (TPO) or those within Conservation Areas. They continue to work with the members of the public, DCC Forestry Officer and the Greenspace Team to investigate such cases and resolve them with replacement planting.</p>	<p>128 Applications assessed in terms of biodiversity in total.</p> <p>11 TPO enforcement cases</p>

SECTION 3: MAINSTREAMING BIODIVERSITY

In order to effectively carry out the biodiversity duty, Dundee City Council incorporates biodiversity measures into its wider policies, plans and strategies. Those most relevant to biodiversity are: -

- [Dundee's Biodiversity Action Plan 2020-2030](#)
- [Dundee Climate Action Plan 2019](#)

Other plans and strategies which incorporate measures for the conservation of biodiversity are: -

- [TAYplan Strategic Development Plan 2016-2036](#)
- [City Plan 2017-2026](#)
- [The Council Plan 2022-2027](#)
- [Local Development Plan 2019](#)
 - [Green Network Supplementary Guidance](#)
- [Strategic Forest Plan for Dundee City Woodlands 2015-2025](#)

Other plans and strategies which refer to biodiversity include the [Local Housing Strategy](#) and the [Local Food Growing Strategy](#).

All new policies, plans and strategies are screened for an Environmental Impact Assessment. This process ensures that significant environmental effects (including biodiversity) arising from the development of strategies, plans and programmes are identified, assessed, mitigated, communicated to decision-makers, monitored and that opportunities for public involvement are provided. All screening determinations and Environmental Reports are publicised on the Council's website [here](#).

In September 2021 Dundee City Council demonstrated their ongoing commitment to tackle climate change and shift towards a lower-carbon, more inclusive society through becoming signatories to a number of pledges. These included C40 Cities: Race to Net Zero, The Edinburgh Declaration and the Glasgow Food and Climate Declaration.

SECTION 4: NATURE-BASED SOLUTIONS, CLIMATE CHANGE AND BIODIVERSITY

Climate change is one of the direct drivers of biodiversity loss and also increases the effects of other drivers such as the spread of invasive, non-native species and pests and diseases. Nature based solutions can play an important role in helping and enhance biodiversity whilst working towards achieving net zero targets and improving quality of life for everyone who lives and works in the city.

Completed Projects

Tr-Action: Planting Climate Resilient Woodlands in Dundee	Statistics
<p>The main aims of this project were to create bigger, better and more connected woodland in Dundee, increase the amount of carbon storage and sequestration in the city and increase woodland diversity and resilience to climate change. Native woodland has been planted at three sites across Dundee at Riverside Nature Park, Balgay Hill and an area adjacent to Clatto Country Park. The trees planted are all native to the UK. Some species such as whitebeam and hornbeam are usually native to regions further south in the UK but the decision was made to include them as they are already present in the area and may adapt well to our locally changing climate. The 17 species chosen were mainly broadleaved, with the exception of Scots pine. In addition to being native, the mix of species was chosen based on site conditions as well as consideration given to local residents in terms of final canopy height. This £300,000 project was mainly funded through a successful application to the Nature Restoration Fund (£265,000).</p>	<p>12 ha of new native woodland, 28,000 native trees planted.</p>
Community Growing	Statistics
<p>The Dundee Local Food Growing Strategy was agreed in August 2020 with the aims including ‘to promote good environmental practice within growing spaces’. Growing your own produce has a number of proven benefits for health and the environment. In addition to the traditional allotment sites, there is a wide and inspiring network of community growing spaces throughout Dundee, which have been developed by organisations, as well as Dundee City Council. A number of Council developed projects are now run by local communities.</p> <p>One of the largest projects in the last three years has been the £1.2 million construction of Camperdown Growing Hub at</p>	<p>26 Community Gardens 550 Allotment plots 200 Fruit trees planted</p>

Camperdown Park. This is a functional food growing garden with several growing tunnels. With significant officer support from the Council's Community Allotment Officer, the Campy Growers are progressing the project and have received funding for 3 new staff members. This project will employ regenerative food-growing practices including no-dig, on-site composting, agroforestry and chemical free production as an example of good stewardship of the land. The Campy Growers will be actively creating habitat and growing with nature, fruit trees have already been planted and plans to create wetland habitat have begun.	
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Broughty Ferry and Monifieth Active Travel Project	Statistics
Work has been ongoing since 2019 to develop and carry out proposals to improve the NCN-01 coastal path between Broughty Ferry Castle and Monifieth. The project involves a number of improvements to the local wildlife and biodiversity in the area. Landscaping and grassland/wildflower planting to create new coastal grassland habitat and improved protection of existing dunes, extending the tree planting along the Esplanade, removal of invasive plant species throughout the area and planting of screening species to protect an important bird roosting area within the Monifieth SSSI. Further information on this project can be found here .	3 ha new coastal grassland.

Ongoing projects

Eden Project

Dundee City Council has been working with the Eden Project to bring an exciting **new development to the city**. This new project will draw on the city's rich history and will play an important role in the ongoing regeneration of the Dundee waterfront area. The proposed project will transform a former gasworks into a beacon for regeneration and tourism. Initial plans show that the proposal will create a number of new habitats on the site including freshwater, woodland and grassland.

In the last 3 years, in preparation for the project, the council has worked with Eden to create several **new wildflower meadows** across the city extending to 3.3ha. Sites include Camperdown Park, Morgan Academy and Riverside Drive. The creation of these new areas has involved community participation in seed growing and collection. Each area has interpretation signage highlighting the benefits that these habitats will bring.

St Mary's/ St Leonard's Park

The St Leonard's Park project is the first phase of a storm water drainage strategy for the St Mary's area of Dundee, developed jointly by Scottish Water and Dundee City Council in consultation with partners such as SEPA and NatureScot. The main focus is to reduce the risk of flooding in this area by **introducing blue-green infrastructure**. The strategy proposes to reinstate the historic Back Burn above ground through St Leonard's Park and surrounding area, which floods regularly during periods of heavy rainfall. Planned landscaping will allow this water to flow into the Dighty Burn, taking with it any excess surface water. This will then enable Scottish Water to disconnect surface water from the combined sewer, freeing up capacity in the system and significantly reducing the risk of flooding. A feasibility study and outline design for the project has now been completed with funding identified to take this on to a more detailed design stage. Further information on this project can be found [here](#).

Water Resilient Dundee: City Wide Blue-Green Infrastructure Project

Dundee City Council are working with NatureScot and Scottish Water to develop a **city-wide strategic SUDS strategy using nature-based solutions** to rain and stormwater management to provide a wide range of long-term benefits for people and nature, such as health, placemaking and biodiversity benefits. Existing information held has been collated and will assist in the formation of a blue-green baseline highlighting future opportunities to

improve connectivity and its overlap with strategic drainage flows. The project will also explore the feasibility, scope and design of drainage retrofitting or other opportunities to add to existing blue-green infrastructure, and is expected to report in early 2024.

Dighty Restoration Project

Dundee City Council were approached by SEPA to work in partnership on a new project to make improvements to around 4km of the Dighty Burn. Areas for enhancement were identified following morphological surveys of the burn carried out by SEPA. The project vision is to deliver **significant ecological improvements, enhance the biodiversity and expand the natural habitat of the Dighty Burn**. The project will align with the development of the proposed active travel network serving a new school to create better connected communities and amenity along the river corridor. There are also opportunities to improve surface water drainage across the catchment improving climate resilience for the local community. A recent successful funding application to the Water Environment Fund (WEF) will allow for an 18-month feasibility report to be developed, starting in 2024, including funds towards a co-ordination resource.

The main climate change related challenges for biodiversity over the next three years

As stated in Dundee's Climate Action Plan, Dundee's climate is set to get warmer and drier in the summer and milder and wetter in the winter. It is also expected that Dundee will experience higher incidences of extreme weather events such as flooding and storms and a rise in sea level around the coast. What is considered a heatwave or extremely hot summer today will occur more frequently in future.

In preparation for the Climate Action Plan and as required by the Covenant of Mayors, a Risk and Vulnerability Assessment of ten policy sectors was carried out in small workshops with key resources in each policy sector to determine the nature and extent of climate related risks in Dundee. The expected impacts to Environment and Biodiversity were thought to be ecosystem degradation, species migration, insect infestation, habitat loss due to flooding and access to food.

As the climate changes, species will need opportunities to colonise areas with more suitable conditions. To achieve this and within the Dundee's urban fabric, appropriate routes and areas of habitat are imperative via a network. Dundee City Council currently have supplementary Green Network guidance supporting the Local Plan. This guidance will provide a basis to more accurately map the current Nature Network. Working with the new Scottish Government and NatureScot Nature Network Framework guidance, this process will assist in highlighting future opportunities for improvement and also

identify constraints. One of the main constraints already identified is that Dundee is a small and very urban Local Authority. The opportunities for creating new habitats are therefore limited. National Planning Framework 4 (NPF4), recently issued by the Scottish Government, sets out how planning authorities can move towards sustainable development. NatureScot has developed guidance to support this and issued biodiversity advice for developers. This new guidance is already being taken forward by Dundee City Council and will be embedded into the next Local Development Plan.

SECTION 5: PUBLIC ENGAGEMENT AND WORKFORCE DEVELOPMENT

Public Engagement

Beautiful Scotland	Statistics
<p>Beautiful Scotland is a long-established environmental improvement campaign and run by Keep Scotland Beautiful (KSB) in partnership with the Royal Horticultural Society (RHS), under the Britain in Bloom campaign. This competition supports community groups across Scotland which seek to improve and enhance their local environment. The Council is a key partner in the Dundee city entry, known as Bonnie Dundee, and works closely with the local volunteers who take forward the city's application each year. A separate entry has also been submitted by the Broughty Ferry in Bloom volunteer group for the Broughty Ferry ward area in the past, which also has the support of the council. Both entries have had success in recent years having now achieved gold medal level. In the 2022 and 2023 Beautiful Scotland campaigns, Dundee City Council were awarded the Wright Sustainability Award for their work, including the Take Pride Campaign, the biodiversity grassland sites, the community work carried out by a variety of groups across the city and the city's commitment to active travel. Bonnie Dundee also won the RHS Growing Communities Discretionary Award in 2021.</p>	<p>Gold level City Award</p> <p>Wright Sustainability Award</p> <p>RHS Growing Communities Discretionary Award</p>

It's Your Neighbourhood	Statistics
<p>It's Your Neighbourhood (IYN) is a sister programme of Beautiful Scotland. This is a non-competitive scheme designed to attract volunteer led community groups who wish to clean and beautify their local neighbourhood. The Council encourages groups to apply, where appropriate, so that they may benefit from the support, advice and encouragement on offer. Dundee's entrants vary from community allotments to out of school groups looking to encourage wildlife and grow fresh vegetables</p>	<p>12 IYN Groups</p>

Take Pride	Statistics
<p>The 'Take Pride' campaign is regularly promoted and public involvement encouraged via DCC media channels, branded signage and graphics, newsletters and local campaigns. National campaigns which tie into the Take Pride actions have also been promoted, such as the annual Spring Clean. Topics have included how to report an issue, promoting responsible behaviour, highlighting positive action, and encouraging participation in local and national environmental activities. The SMART action plan was revised by the Steering Group and approved by Neighbourhood Services Committee to take the campaign forward for 2022-24, this encompasses over 100 actions under the four strategic themes of - Local Environmental Quality, Recycling, City Centre and Businesses and Communications.</p>	<p>169 Litter picks across the city.</p>

Green Flag	Statistics
<p>The Keep Scotland Beautiful Green Flag Awards aim to ensure that everyone has access to high quality green spaces and to ensure that these spaces are appropriately managed by setting a standard of good management. Green flag sites are independently judged against several criteria including biodiversity, landscape and heritage.</p> <p>Dundee has a number of Green Flag sites across the city and new sites are added when resources are available.</p> <p>In addition to the independently judged Green Flag sites Dundee City Council has adopted this standard as a way of monitoring the quality of additional greenspaces across the city. Results have been fed back to local management teams and actions collated, which have been used to inform potential capital projects.</p> <p>Many parks in the city have an associated 'Friends Of' group. These groups are involved in the Green Flag audits and input their ideas and concerns into the resulting actions plans.</p>	<p>7 Green Flag Awards</p> <p>24 internal Green Flag site audits.</p> <p>10 Friends of Parks groups</p>

Countryside Ranger Service and Community Environment Officer	Statistics
<p>Dundee City Council's Countryside Ranger Service are responsible for activities that benefit both the natural environment and associated public access and recreation. Their role is to encourage people to use their local greenspaces responsibly and promote awareness of the natural environment.</p> <p>The Rangers engage with a wide variety of volunteers from children to retired people, corporate groups, charity groups and recent refugees. Volunteers take on a wide variety of tasks including litter picks, habitat creation, bird and bat box building, butterfly and bee recording transects and invasive species removal. Volunteering increases the public's knowledge of biodiversity and their local places as well as fostering a sense of stewardship.</p> <p>The Ranger Service run a number of seasonal public events each year. These include tree planting, bat walks, dolphin watching and children's activities.</p> <p>Rangers work with schools by facilitating and leading trips to local greenspaces as well as informative school-based sessions. In 2022 they worked in partnership with local schools and NatureScot as part of 'Raising Aspirations in Science Education' (RAiSE). This Scottish Government backed project aims to improve science teaching in Scotland's schools. In addition to assisting in outdoor visits to give students memorable experiences that help to educate and inspire them to find out more about nature, they also provided teacher training.</p> <p>Branching Out is an outdoor therapeutic programme for adults who use mental health services in Scotland. This project is run in Dundee by the Rangers and funded by Scottish Forestry. Participants of this programme receive a John Muir Award and are encouraged to continue their connection to nature by joining public volunteer groups. The feedback from participants has been overwhelmingly positive.</p> <p>Dundee City Council received funding that enabled the creation of a short-term Community Environment Officer post in October 2021. This officer raises awareness and promotes actions in Dundee's parks and greenspaces which contribute to the city's Climate Action Plan, particularly the role that they have in climate resilience and adaptation. Engaging local groups in the promotion of biodiversity and woodlands in greenspaces is key to this role and has been mainly achieved through engagement in the naturalised and biodiversity grasslands project. Activities have included wildflower seed sowing, bulb planting, bat box building and installation and running the City Nature Challenge for Dundee in 2023.</p>	<p>4,000 hours of volunteering</p> <p>45 Public Events</p> <p>1800 children engaged</p> <p>50 Hours of STEM teacher training</p> <p>6 (12 week) Branching Out sessions</p> <p>15 Public Volunteer Sessions</p>

Social Media and Radio campaign	Statistics
<p>In the spring of 2023 a short animation was produced to run online and via social media (can be viewed here). The animation highlighted the benefits of leaving longer grass areas within city parks. The wording from the animation was also turned into an engaging radio advert which was played on local radio stations through the Bauer Media group.</p>	<p>5600 people reached by Radio advert</p> <p>100,500 Engagements on Social Media</p>

Aligned initiatives	Statistics
<p>Green Health Partnership - together with the wider partnership of NHS Tayside, the third sector, communities, and universities a new referral route of the Green Health Prescription has been established, which links health care professionals, patients and opportunities for nature-based activities together. The Green Health Prescription has been rolled out to all GP surgeries in Dundee and also takes in many allied health professionals. Green health initiatives including SAMH, Wellbeing Works and The Conservation Volunteers (TCV) among others have facilitated volunteer activities across a range of local greenspaces. Activities have included therapeutic gardening, general conservation, woodland management, invasive species removal, citizen science projects and food production.</p> <p>Further Information on this project can be found here.</p> <p>An event was held in Slessor Gardens in September 2021 to promote the opening of the new Cycle Hub and the COP26 in Glasgow. This event was well attended and included many stalls from various organisations, including Dundee City Council, highlighting the importance of biodiversity and ways in which members of the public could get involved at home.</p> <p>Green Health Week is run on an annual basis by the Green Health Partnership. Local providers run events and activities to encourage people to get active in their local greenspaces and to get involved with groups working to improve them.</p> <p>The Dundee City Council Sustainability & Climate Change team run several events to celebrate Climate Week. Biodiversity is an integral part of this.</p>	<p>More than 4000 Hours of volunteering</p>

Workforce Development

Council Wide Development Opportunities

Promoted as part of WWF's Earth Hour in March 2021, a series of **online staff briefings on Climate Change** were promoted throughout the organisation. Biodiversity was highlighted as a main topic for one of these briefings.

All staff have been asked to complete **Climate Literacy** e-modules which includes the importance of biodiversity.

In the run up to the 26th UN Climate Change Conference of Parties (COP26) in Glasgow information was made available to all staff from the Council's Sustainability & Climate Change Team including information on biodiversity projects in the city and suggestions of actions that staff can take personally.

Staff Bulletins are prepared monthly for Neighbourhood Services. These bulletins highlight the work of Service Areas including many of the projects mentioned in this report. This ensures that more staff are aware of the projects and their expected outcomes.

Specific Training Opportunities

A number of Council Officers undertook training on **Climate Resilience** organised by the Council's Sustainability & Climate Change team. This training explained what climate resilience is and how this could be promoted and implemented for both short-term and long-term benefits.

A tool box talk was delivered to the Area Supervisors within Environment regarding **management of grasslands for biodiversity**. This covered how grassland management was changing and the reasons why. Potential issues and public perceptions were discussed and information provided to allow officers to speak with confidence to members of the public on the multiple benefits this would have for biodiversity, staff and the public.

Greenspace Scotland's **Park Managers Forum** provides support for people working for local authorities on parks and greenspaces in Scotland. The forum regularly shares information on topics such as nature restoration in parks and greenspaces, Open Space Strategies and best practice. DCC Greenspace Team gave a presentation on the Naturalised and Biodiversity Grasslands project to the forum in 2022.

The **Biodiversity Officers Forum** runs with support from NatureScot to allow Biodiversity Officers or staff responsible for Biodiversity Action Plans to meet quarterly to discuss relevant topics such as NPF4 and Nature Networks and to share best practice. This forum is attended by the Greenspace

Officer.

The **Scottish Tree Officers Group** is organised and run by a number of local authority Tree Officers on a voluntary basis. This group provides training on relevant arboricultural and forestry topics and facilitates the sharing of best practice. This is attended by staff in the forestry team and the Greenspace Officer attends an Ash Dieback subgroup.

SECTION 6: RESEARCH AND MONITORING

Invasive Species Control

In order to correctly and efficiently control giant hogweed along the Dighty Burn, annual monitoring and mapping is required. This is carried out by Dundee City Council's Access Officer each spring. This information is then passed to the operatives who spray each section. A re-assessment is carried out in the summer to identify any patches missed or requiring further treatment and this is carried out as soon as possible. These maps are stored in the Council's GIS system. This information has been particularly useful to partnership working with NatureScot, Angus Council and local private landowners allowing for a co-ordinated response at a catchment level and the source of seed highest upstream being identified.

Ash Dieback Disease

The progress of Ash Dieback in the city highlighted the need for an efficient tree management system. Officers have worked to develop the Environmental Systems Research Institute's (ESRI) Tree Management Solution and adapt it for a specific ash dieback survey. Survey work was carried out over the last two years to locate and assess all ash trees on council owned land. As a result, there are now around 3200 trees logged and assessed on the system. A GIS based process has also been set up to allow for future re-surveys at appropriate timescales. This survey work and new system will allow the council to manage their ash trees in a safe and efficient manner and will also inform re planting plans. The new system will be adapted again and rolled out in the future for all council owned urban trees.

Monitoring of Local Plans and Strategies

All local plans and strategies are carefully monitored and progress is reported on through Council Committees. The Biodiversity Action Plan and Climate Plan are both monitored annually with reports being submitted to council committee.

In general Council performance is monitored using **a mix of local and national performance indicators** which cover all core areas including Environment. These performance indicators are used for Council benchmarking against other Scottish Councils, Best Value Assurance Reports, The Council Plan and The City Plan.

Natural Capital Baseline Assessment

Dundee City Council commissioned a natural Capital Baseline assessment for the city in 2023. This report calculated the natural capital assets and ecosystem service flows within the council area. The report used a specially adapted Scottish biodiversity metric to calculate the number of biodiversity units that the natural assets provide with an average of 10.4 units per hectare for Dundee. However, it was highlighted that some areas such as Riverside Nature Park, provide a very high number of units for the size of the area. This report will provide baseline data that will be taken forward in other local plans and strategies to identify opportunities for enhancement, set targets and measure progress in the longer term.

Citizen Science Projects

Dundee City Council supports a number of citizen science projects. The Countryside Ranger Service hold events for the RSPB's Big Garden Birdwatch, they promote various projects to local community groups and assist volunteers in carrying out surveys at nature sites across the city.

Dundee was registered for the City Nature Challenge for the first time in 2023 and was one of only 2 cities in Scotland to take part. This annual global survey focuses on biological recording in urban settings and challenges individuals, in a light-hearted way, to compete to record the most observations of nature and species using the free iNaturalist app. Over the period of the challenge there were: -

- 741 Observations (367 research grade) across all wards.
- 300 Species
- 122 Identifiers
- 30 Observers

The Dundee Page for this event can be viewed here: [CNC Dundee](#)

Urban ReLeaf

Urban ReLeaf is a new four-year cross-cultural EU project that aims to co-create citizen-powered data ecosystems to support climate change adaptation, green infrastructure, and urban design planning. The Horizon Europe-funded project builds on design-led research into citizen observatories. Urban ReLeaf is a collaboration between 15 academic and private sector partners as well as the cities of Athens (Greece), Cascais (Portugal), Dundee (UK), Mannheim (Germany), Riga (Latvia) and Utrecht (Netherlands).

Dundee City Council will collaborate with the University to deliver a two-year citizen sensing pilot monitoring a range of environmental issues that relate to Dundee's green transitions for the built environment. Their research will also support a range of pop up, co-design and insights labs across six cities; the leadership of a community of practice; and storytelling activities.

Thousands of members of the public will be asked to install sensors and use mobile phone apps to capture data on the local environment. By gathering evidence and raising awareness of the problems they face, citizens can organise an effective grassroots, community or local government response. Dundee is one of six cities across Europe to have joined forces to enable people to participate in citizen science for public sector innovation through the implementation of nature-based solutions to decrease issues such as air pollution and improve mental health, among other benefits.

Have you added any data collected to the National Biodiversity Network or your Local Records Centre?

Any records gathered as part of citizen science projects are passed to the National Biodiversity Network (NBN) either through the iRecord or iNaturalist apps or through the co-ordinating organisation, such as RSPB or Butterfly Conservation.

Dundee City Council, along with Perth and Kinross Council and Angus Council, is not currently covered by a local Records Centre. This impacts on the flow of biodiversity data among partners within the area. However, Dundee is now a member of the Better Biodiversity Data Project Group. Through this group it is hoped that a solution to this issue can be found to bring the Tayside area into alignment with the rest of Scotland. The Better Biodiversity Data project (BBD), which the NBN Trust will lead and manage, was approved in October 2022. This is a partnership project funded by Scottish Government and NatureScot to develop the first steps in a strategic approach to the collection, collation and sharing of biological data across Scotland.

SECTION 7: BIODIVERSITY HIGHLIGHTS AND CHALLENGES

Describe your organisation's main achievements for biodiversity over the reporting period and what you are most proud of (this can include processes, plans, projects, partnerships, events and actions).

One of the highlights for this reporting period has been **the Tr-Action: Planting Climate Resilient Woodlands in Dundee** Project. This project is expected to deliver several positive outcomes for Dundee and the natural environment including bigger and better-connected woodlands in the city and an increase in the diversity of woodland in the city. There were various challenges to overcome for this project. Short timescales for funding spend limited the meaningful involvement of local communities in planning the project, but opportunities have been identified for the future. Despite this pressure to spend the funding within the financial year, a successful project has been delivered made possible by effective teamwork across Council service areas. The improved relationships, communication and co-operation between council service areas will be utilised in future projects.

Another major project for Dundee City Council has been preparing for the management of **Ash Dieback** disease. It was recognised that this issue will not be 'business as usual' for tree management in the city and that the focus must be on managing the safety and environmental impacts of the decline of ash trees and initiating the recovery process through replanting. An internal Ash Dieback Working Group was set up in 2021 to look at the preparation of an Ash Dieback Action Plan. In order for this to progress, it was recognised that a full survey of Council ash trees was necessary. A generic GIS based tree management system was remodelled to accommodate the collection of appropriate ash tree data. In the future it is anticipated that this system will form the base of a full tree asset inventory for Dundee's trees. Ash trees at greatest risk to the public have been removed by the Council, but it has been recognised that additional resources are needed for successful Ash Dieback management in the future. To this end £400,000 has been identified to procure additional services from external contractors, both for survey and arboricultural works. As a result of this support and commitment Dundee is now one of the leading Local Authorities in dealing with this issue and shares their work with others through the Scottish Tree Officer subgroup for Ash Dieback.

Looking ahead, what do you think will be the main challenges over the next three years?

The city is currently undergoing an era of major transformation which provides both challenges and opportunities. As previously discussed in section 4, ensuring that future development is sustainable and supports and enhances the city's Nature Network is vital. Dundee City Council are taking forward work to incorporate new national strategies and policies relating to biodiversity and planning such as the Scottish Biodiversity Strategy and the National Planning Framework 4 into the upcoming Local Development Plan review. This will involve updating several supporting policies relating to biodiversity such as The Open Space Strategy, Nature Network Guidance and the Urban Tree and Woodland Strategy.

Reliable and well managed data is an integral component for both future planning and in the monitoring and reporting of progress on biodiversity actions. Both internal and external partnership working is key to this process, ensuring that data is used productively and collaboratively to produce multiple benefits and outcomes for the city as a whole. The council is working to improve how data is held and managed internally and partnerships where data is shared between the council and external organisations such as Scottish Water and NatureScot are providing a better picture of our natural assets than ever before. Working with the new 'Better Biological Data' project will help to ensure that relevant biological records are held locally and available to a range of organisations to inform new projects and future development.

As with many other Local Authorities and public bodies, Dundee City Council carefully balances its resources to provide high quality services. External funding, such as the Scottish Government's Nature Restoration Fund has enabled greater focus on delivering Dundee's Biodiversity Action Plan directly benefitting the city's biodiversity. This funding has allowed delivery of actions more effectively, often with added value and scale. Despite this welcome biodiversity boost, it puts pressure on an already scant officer resource. This added to the requirement to deliver projects within a financial year and the time taken to gain approval and procure services is exceedingly challenging. The challenge in delivering biodiversity projects is also compounded by relatively specialist nature of contractors and equipment, which public sector procurement processes are not able to easily accommodate.

ITEM No ...3.....

REPORT TO: CLIMATE, ENVIRONMENT AND BIODIVERSITY COMMITTEE – 20 NOVEMBER 2023

REPORT ON: PUBLIC BODIES CLIMATE CHANGE DUTIES – ANNUAL REPORT 2022/2023

REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

REPORT NO: 289-2023

1 PURPOSE OF REPORT

- 1.1 To inform Committee of the work undertaken over the period April 2022 to March 2023 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 56.4% 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 2022/2023 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.

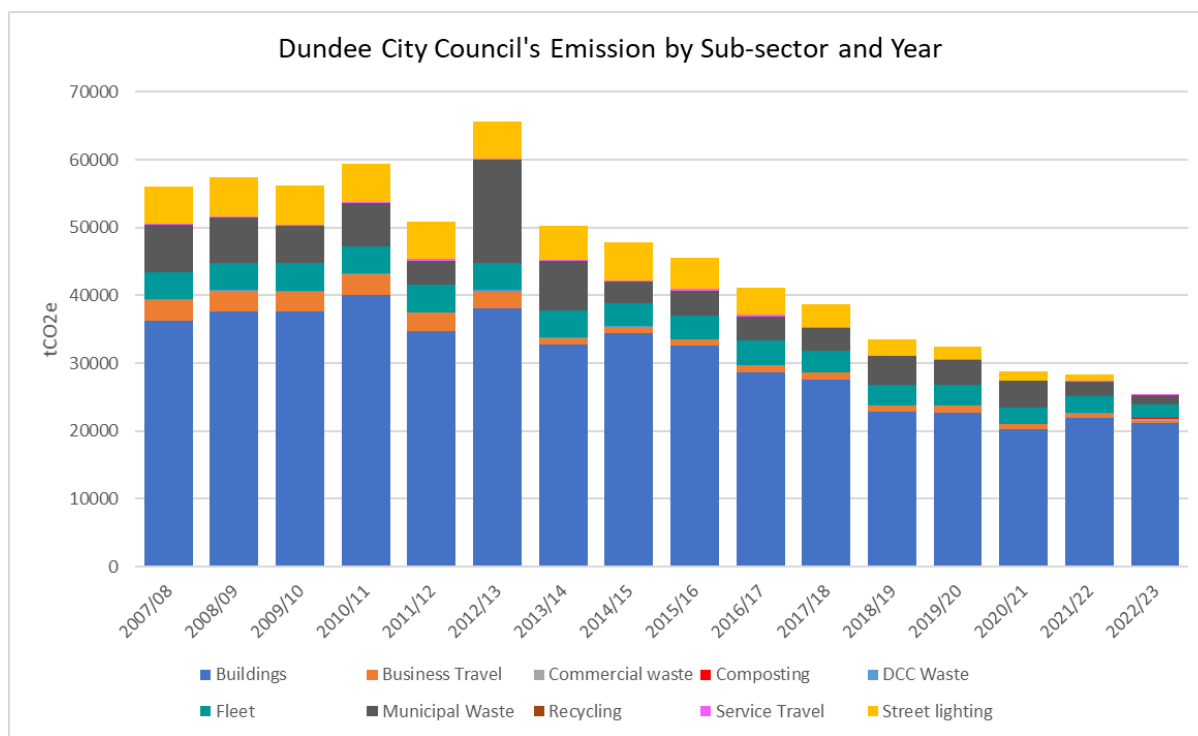
4 BACKGROUND

- 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 2022/2023 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 13.6% in the past year. This was as a result of all 3 sectors (Stationary - energy use in buildings, Transport - fleet, business and service travel and Waste - municipal and Dundee City Council waste) showing significant emissions reduction compared to previous year and removal of Street Lighting related emissions from accounting due to the fact that the council purchases green electricity to power streetlight;
 - b the carbon footprint has reduced by 56.4% since the baseline year of 2007/2008; and
 - c investment in the Non-Domestic Energy Efficiency (NDEE) basket of projects and Street lighting LED programme are having a 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. Emissions from natural gas in buildings still remains unchanged. In order to bring down this emission 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.



5.2 Potential Change In Emissions Boundary In Coming Years

- a This PBCCD report covers Scope 1 (direct emissions from fuel use e.g. gas for heating) and Scope 2 (indirect emissions e.g. purchased energy such as electricity) emissions only. It is likely that within a future reporting period, Scope 3 (indirect emissions such as procurement related emissions / purchased goods and services) 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 an Integrated Impact Assessment to identify impacts on Equality & Diversity, Fairness & Poverty, Environment and Corporate Risk. A positive impact on one or more of these issues was identified. An appropriate Senior Manager has checked and agreed with this assessment. A copy of the Integrated Impact Assessment showing the impacts and accompanying benefits of/mitigating factors for them is attached to this report.

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.

Gregor Hamilton
Head of Planning and Economic Development

Author: Barbara Whiting

Robin Presswood
Executive Director of City Development

Dundee City Council
Dundee House
Dundee

RP/GH/BW/NC/KM

25 October 2023

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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

6083

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.

£403.954m

1f) Report year

Specify the report year

2022/2023 (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 and planning, collection and disposal of municipal waste, composting operations, collection of recyclates for onward treatment as per national regulations and

promotion of waste reduction and reuse activities. Waste education and awareness-raising to encourage behavioural change, route planning and 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** was formed in March 2018 and is facilitated by the Sustainability and Climate Change (S&CC) team. The broad purpose of the group is to take forward ideas, projects, actions and communications relating to sustainability within Dundee City 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. These are shown under the Dundee Climate Action Plan topics.

Energy	Transport	Waste	Resilience	Governance/ Strategy/policy
<ul style="list-style-type: none"> ▪ Domestic ▪ Non-Domestic ▪ Street Lighting ▪ Housing 	<ul style="list-style-type: none"> ▪ Design and Property ▪ Business Dev. ▪ Planning 	<ul style="list-style-type: none"> ▪ Sustainable Transport ▪ Fleet ▪ Air Quality 	<ul style="list-style-type: none"> ▪ Municipal Waste ▪ Internal Resources ▪ Circular Economy 	<ul style="list-style-type: none"> ▪ Flooding ▪ Environment/Biodiversity ▪ Sustainable Development/Climate Change ▪ Finance ▪ Procurement ▪ Funding

With the launch of the Council's Net Zero Transition Plan in 2023, a new **Net Zero Transition Delivery Group** will be set up with Heads of Service from each of the Council's seven service areas to ensure delivery of the plan.

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. The operating principles are to work within the objectives of Dundee Climate Action Plan and strategic vision of Dundee Partnership (Community Planning Partnership) and includes representatives from education, energy, housing, heritage, community and business.

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.
- 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 influence the required changes in Dundee.

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 2022/23, the Council was structured as five Strategic Service Areas with main roles in climate change activity categorised as follows:

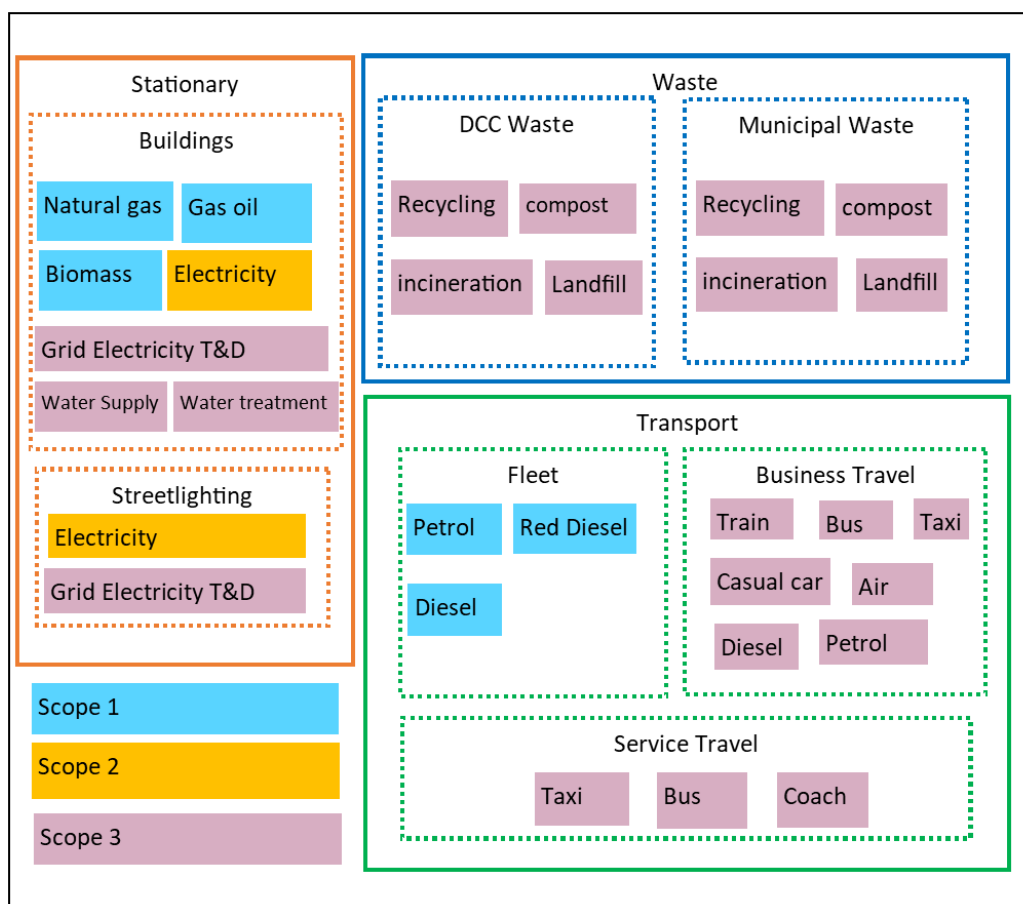
- City Development (sustainable development/climate change strategy, monitoring/reporting, strategic environmental assessment, adaptation, behaviour change, asset management, energy management, flooding and coastal, land use planning, transport planning, street lighting, fleet);
- Corporate Services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

Responsibility for climate change activity is led by City Development. The internal Sustainable Dundee Working Group meets every 2 months to embed carbon management across Services and assist with the communication, facilitation and promotion of initiatives.

Carbon Emissions

- The boundary was fully re-scoped and extended in 2016 as 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 2022/2023, 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.
- As part of the 2016 re-scoping exercise, a **Carbon Footprint Projects Register** has been compiled using the 'Carbon Footprint Forecast & Projects Register Tool' as developed by Resource Efficient Scotland. This register is updated annually by identifying and including existing and proposed Council projects that will help the Council better measure and manage progress of carbon reduction interventions.

Figure 1: Dundee City Council Carbon Footprint Boundary established 2016/17 unchanged for 2022/23:



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 Council has been co-designing an organisational **Net Zero Transition Plan** with Senior Managers from each Council Service. The plan sets out organisational and service specific targets for emissions reduction as well as actions on Circular Economy, Climate Resilience and Just Transition. Governance, monitoring, reporting and engagement of the plan are also detailed.
- 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 actions in 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 key officers at DCC using the Benchmarking Assessment Tool, whereby our progress on the ACF was assessed.

Climate resilience has been included as one of 4 key themes in the Council's new Net Zero Transition Plan with actions that build on the outcomes of this assessment.

- 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. Training continues where budget allows.
- The Council also developed mandatory online **Climate Literacy Training**. The training provides staff with an understanding of the causes of climate change, why it matters and how the climate will change.
- The Council has also developed a Sustainable Dundee Website <https://www.sustainabledundee.co.uk/> and Sustainable Dundee Goals Map which showcases all of the local initiatives under each of the UN SD goals. <https://map.sustainabledundee.co.uk/>

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
Tackle Climate Change and reach net zero emissions by 2045 or sooner	City Plan (2022 – 2032) page 33-35 https://www.dundee.gov.uk/city-plan-for-dundee-2022-32
	Council Plan 2022-2027 page30-33 https://www.dundee.gov.uk/council-plan-2022-2027

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.

The Council has been co-designing an organisational **Net Zero Transition Plan** with Senior Managers from each Service. The plan, due to be published Autumn 2023, will set out organisational and service specific targets for emissions reduction as well as actions on Circular Economy, Climate Resilience and Just Transition. Governance, monitoring, reporting and engagement of the plan are also detailed.

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 the Dundee and Broughty Ferry Coastal flood protection schemes and coastal erosion defence schemes have been developed along Dundee's 16.9km of coastal frontage. http://www.dundee.gov.uk/reports/reports/256-2013.pdf
	Tay Estuary and Montrose Basin Local Flood Risk Management Plan	2016-2022	The Plan is developed in partnership with other responsible authorities and details 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. The Flood Risk Management Cycle 1 (2016-2022) Plan will be replaced with the Cycle 2 Plan which was to be published in December 2022, but is now to be published in 2023. 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.dundee.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.dundee.gov.uk/sites/default/files/publications/dundeess_biodiversity_action_plan_2020-2030.pdf

Topic Area	Name of Document	Time period covered	Comments
Energy efficiency	Energy Management Policy	2012-2020	<p>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.</p> <p>http://www.dundee.gov.uk/reports/reports/470-2012.pdf</p>
	Local Housing Strategy (LHS)	2019-2024	<p>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.</p> <p>The 2019-2024 Local Housing Strategy launched September 2019.</p> <p>https://www.dundee.gov.uk/reports/agendas/ns300919ag.pdf</p>
Renewable energy/ Sustainable/ Renewable heat -	Invest in Dundee – Energy Dundee	2018	<p>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.</p> <p>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.</p> <p>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.</p> <p>www.investindundee.co.uk www.energydundee.com</p>

Topic Area	Name of Document	Time period covered	Comments
	District Heating Strategy	2018-2028	<p>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.</p> <p>https://www.dundeeccity.gov.uk/reports/reports/166-2018.pdf</p>
	Local Development Plan	2019-2029	<p>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:</p> <ul style="list-style-type: none"> • Policy 45: Energy generating Facilities; • Policy 46: Delivery of Heat networks; • Policy 47: Wind Turbines; and • Policy 48: Low and Zero Carbon Technology in New Development. <p>https://www.dundeeccity.gov.uk/sites/default/files/publications/local_development_plan_2019_for_web.pdf</p>
Land use	TAYplan	2016-2036	<p>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.</p> <p>http://www.tayplan-sdpa.gov.uk.</p>
	Local Development Plan	2019-2029	<p>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.</p> <p>https://www.dundeeccity.gov.uk/sites/default/files/publications/local_development_plan_2019_for_web.pdf.</p>

Topic Area	Name of Document	Time period covered	Comments
Staff travel (commuting)	TACTRAN Regional Transport Strategy (RTS) refresh	2015-2036	<p>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.</p> <p>http://www.tactran.gov.uk/documents/RTSRefresh-FinalReport.pdf</p>
Cycling	Dundee Cycling Strategy	2019	<p>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.</p> <p>https://www.dundee.gov.uk/sites/default/files/publications/dundee_cycle_strategy_2019.pdf</p>
	Local Development Plan	2019-2029	Policy 54: Safe and Sustainable Transport
Business travel	Staff Travel Plan	2023-2026	<p>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.</p> <p>Internal document, unpublished.</p>
Fleet transport	Plant/Vehicle Asset Management Plan		Internal document, unpublished.

Topic Area	Name of Document	Time period covered	Comments
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.dundee.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.dundee.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.dundee.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.dundee.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 Begin implementation phase of **Net-Zero Transition Plan and Carbon Accounting** across the organisation.
- 2 Deliver part 2 of £750,000 **Community Climate Choices** Fund based on the principles of Participatory Budgeting for local climate change solutions.
- 3 Facilitate updating the city-wide Climate Action Plan by the Dundee Climate Leadership Group utilising the **Climate View emissions modelling platform**.
- 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 Facilitate a refresh of the Climate Risk and Vulnerability Assessment and identify priority actions.

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.

An internal CCAT workshop was held in August 2015 with officers present from a wide range of Council services. Its purpose was to help the Council self-evaluate its performance under the Climate Change (Scotland) Act Public Sector Duties, identify the key priorities and actions for improvement.

The CCAT uses the organisational responses to 28 questions on Governance, Emissions, Adaptation, Behaviour and Procurement to create a targeted and achievable action plan to help guide the short-term improvement plan. The results of the self-assessment are shown in the diagram.

Overall results				
	Organisation score	Total score available	Percentage score	Traffic light assessment
Governance	12	28	43%	43%
Emissions	9	30	30%	30%
Adaptation	13	28	46%	46%
Behaviour	6	20	30%	30%
Procurement	6	16	38%	38%
Overall	46	122	38%	38%

Twelve actions were suggested by the tool and a follow-up meeting was held in November 2015 to prioritise these actions.

Action Priority 1 – is to clearly define the Council's carbon footprint in terms of organisational and operational boundary in a way that can be easily communicated. This action was completed during 2016.

Action Priority 2 - is to develop a more accurate Business As Usual forecast to help engage and alert the Council Management Team to risks relating to resource consumption, especially in terms of future costs. The Resource Efficient Scotland Carbon Footprint and Project Register tool is now used to develop this forecast. This action is on-going.

Action Priority 3 and 4 - focus on reviewing the governance and operational structure for climate change; this should include a very clear remit in terms of roles, responsibilities and decision-making. This action is now complete with the development of the Council's Sustainable Dundee Working Group (SDWG) incorporating key resources from relevant Services across the Council. The group meets every two months to take forward sustainability and climate change related projects and activities. The group report directly to the Council Management when significant decisions are required regarding financial expenditure or changes in strategic direction.

New Action priorities were identified by the Sustainable Dundee Working Group in March 2018:

Action Priority 5 - improve sustainability in design by undertaking whole life costing at the start of projects to ensure best available technology is selected to reduce running costs and carbon emissions. This action is included in the Dundee Climate Action Plan and the new Net Zero Transition Plan.

Action Priority 6 - develop a Sustainable Dundee communication strategy that links the various aspects of sustainability projects and makes clear, both internally and externally, the activities the Council are undertaking to improve sustainability and the reasons for acting. This is ongoing and has seen significant progress with new Sustainable Dundee website, and a partnership approach to engagement across the city with 20+ organisations meeting under the Sustainable Dundee Network.

Supporting Information

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 new organisational **Net Zero Transition Plan** was developed with Senior Managers in each Council Service through a series of workshops and consultation. The Plan covers Emissions Reduction, Circular Economy, Climate Resilience and Just Transition as well as detailing governance, monitoring, reporting and engagement measures.

The **Dundee Climate Action Plan** is the culmination of two years' worth of collaborative work, 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.

We use **Climate View 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. We will be refreshing data in the tool as the Climate Action Plan is updated next year.

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.

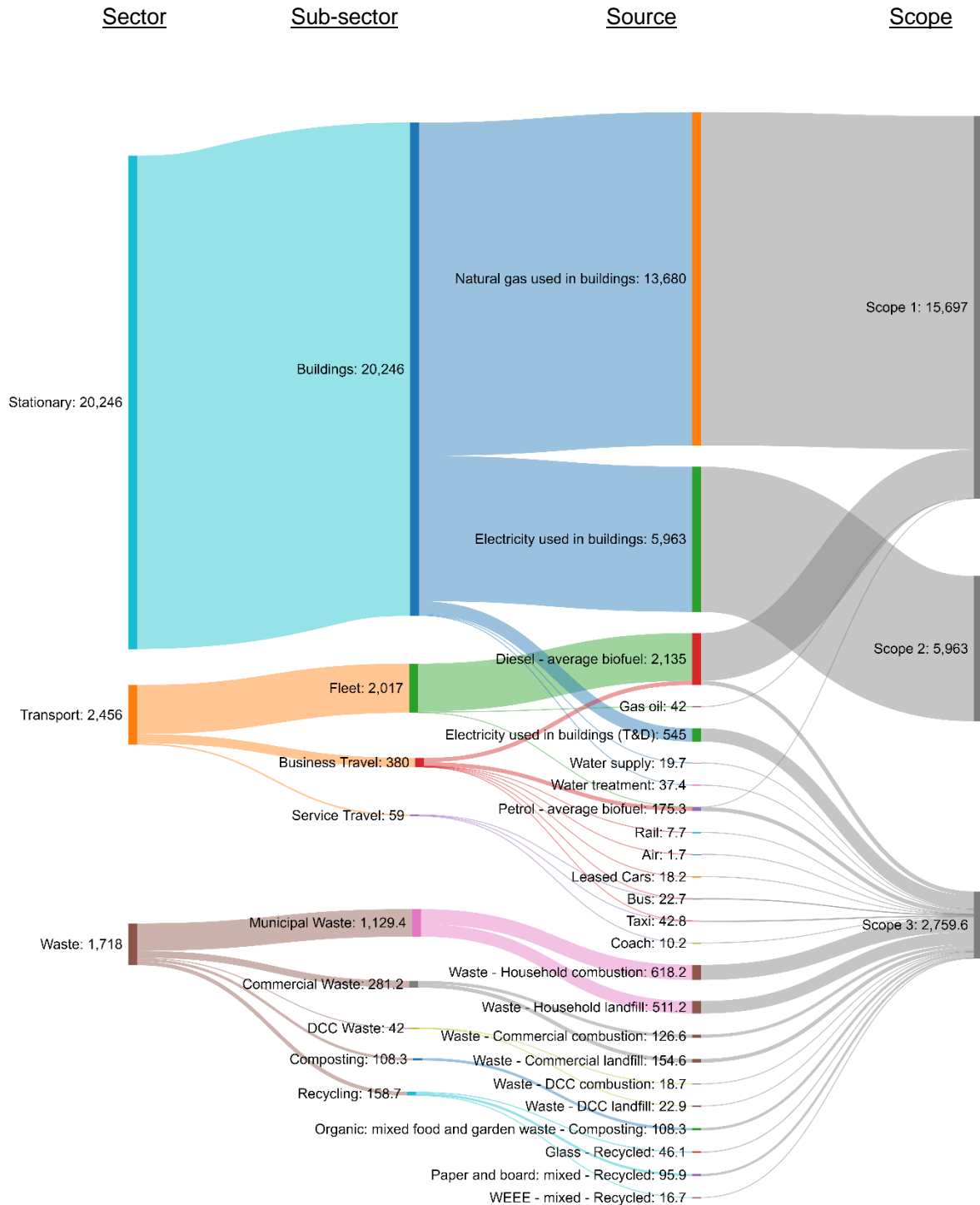
b This is the "The Greenhouse Gas Protocol. A corporate accounting and reporting standard (revised edition)", World Business Council for Sustainable Development, Geneva, Switzerland / World Resources Institute, Washington DC, USA (2004), ISBN:1-56973-568-9.

Reference Year	Year	Year Type	Scope 1	Scope 2	Scope 3	Total	Units
Baseline Year	2007/2008	Financial	20,029	23,664	12,472	56,165	tCO ₂ e
Year 1 Carbon Footprint	2008/2009	Financial	20,520	24,815	12,247	57,582	tCO ₂ e
Year 2 Carbon Footprint	2009/2010	Financial	20,551	24,662	11,077	56,290	tCO ₂ e
Year 3 Carbon Footprint	2010/2011	Financial	20,208	27,032	12,284	59,524	tCO ₂ e
Year 4 Carbon Footprint	2011/1012	Financial	18,197	23,857	8,939	50,993	tCO ₂ e
Year 5 Carbon Footprint	2012/2013	Financial	21,215	24,159	20,320	65,694	tCO ₂ e
Year 6 Carbon Footprint	2013/2014	Financial	17,991	21,579	10,815	50,385	tCO ₂ e
Year 7 Carbon Footprint	2014/2015	Financial	16,845	24,097	6,819	47,761	tCO ₂ e
Year 8 Carbon Footprint	2015/2016	Financial	16,144	22,321	7,090	45,555	tCO ₂ e
Year 9 Carbon Footprint	2016/2017	Financial	15,980	18,244	6,908	41,132	tCO ₂ e
Year 10 Carbon Footprint	2017/2018	Financial	16,592	15,735	6,371	38,698	tCO ₂ e
Year 11 Carbon Footprint	2018/2019	Financial	15,339	11,724	6,511	33,574	tCO ₂ e
Year 12 Carbon Footprint	2019/2020	Financial	16,244	10,191	5,999	32,434	tCO ₂ e
Year 13 Carbon Footprint	2020/21	Financial	15,557	7,553	5,741	28,851	tCO ₂ e
Year 14 Carbon Footprint	2021/22	Financial	17,559	7,047	3,664	28,270	tCO ₂ e
Year 15 Carbon Footprint	2022/23	Financial	15,697	5963	2,753	24,413	tCO ₂ e

3b) Breakdown of emission sources

Figure 2 below shows the Council's emissions (tCO₂e) by Sectors, Sub-sectors, Sources and Scopes for 2022/23. 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 (tCO₂e) in 2022/23 by sectors, sub-sectors, sources and scopes



In the 2022/2023 reporting period:

- Stationary sector emissions accounted for the 83% of the Council's total emissions followed by Transport (10%) and Waste (7%). Among Stationary, the Buildings sub-sector alone accounted for 83% of total organisational emissions. It should be noted that this year's buildings sub-sector figure also includes the emission from electricity used for EV charging.
- Emission from Street Lighting sub-sector is removed from this year as the council is purchasing green electricity for Street Lighting.
- Fleet and Municipal waste sub-sectors accounted for 8.3% and 4.7% of total emissions respectively.
- Among activities or sources of emission, natural gas use in buildings was responsible for 56% of total emissions followed by electricity used in buildings 26% and diesel (primarily used in fleet) at 8.7%.
- In terms of scopes, the scope 1 (direct emissions) accounted for the highest emissions (64.2%) followed by scope 2 (grid electricity emissions) at 24.4% and scope 3 (indirect emissions) at 11.3%.

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

Figure 3: Dundee City Council Carbon Footprint by Sector: 2008/09 to 2022/2023

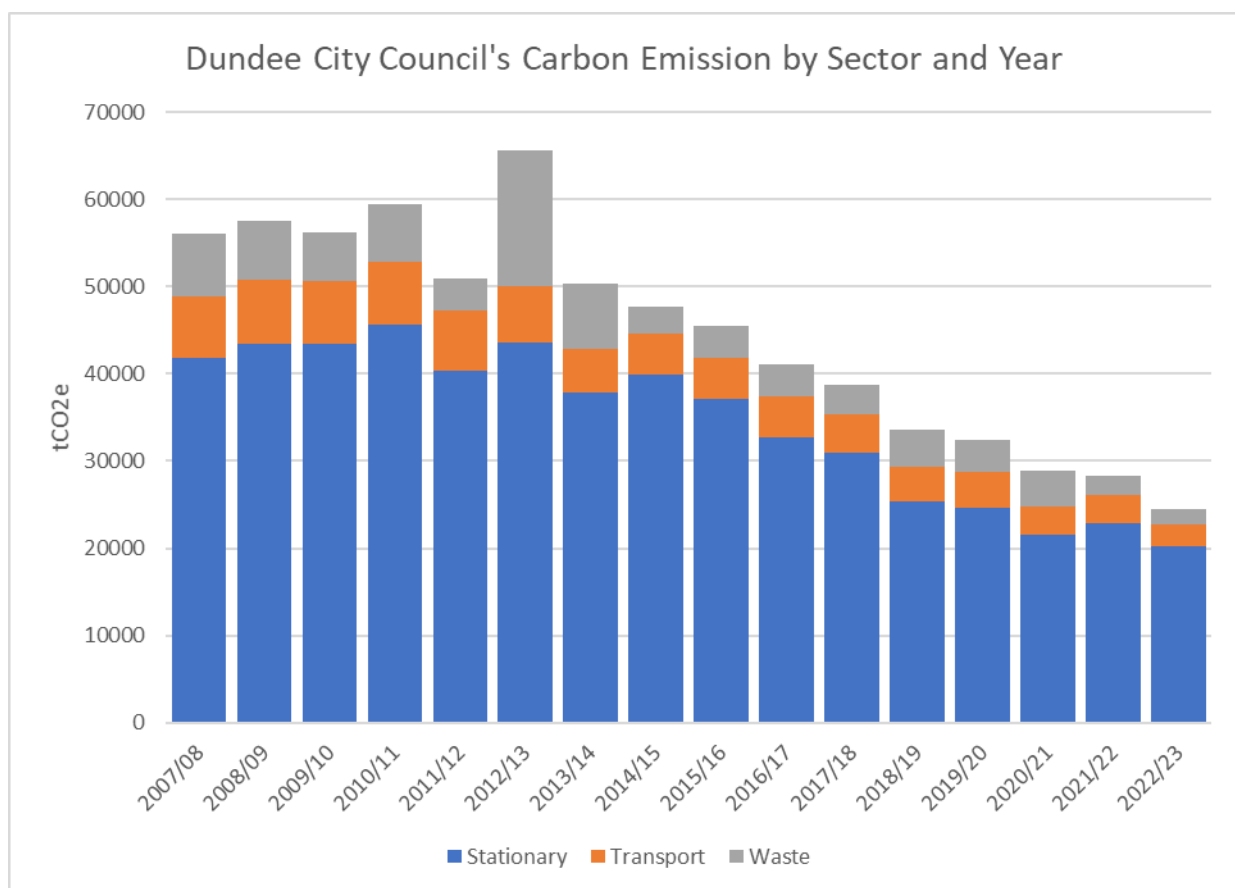


Figure 4: DCC Carbon Footprint by Sub-sector: 2008/09 to 2022/2023

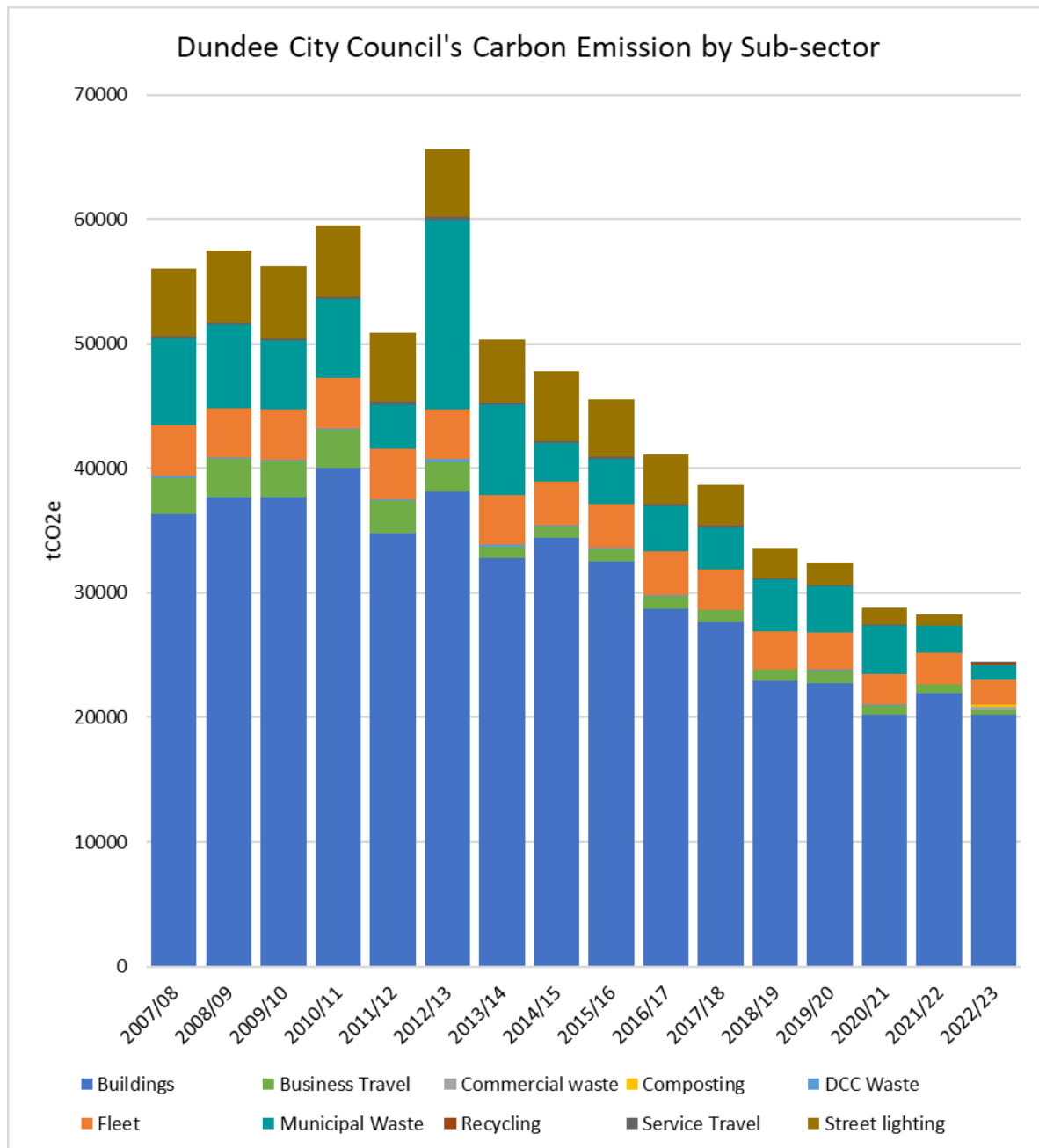


Figure 5: DCC Energy in Buildings Carbon Footprint: 2007/2008 - 2021/2022

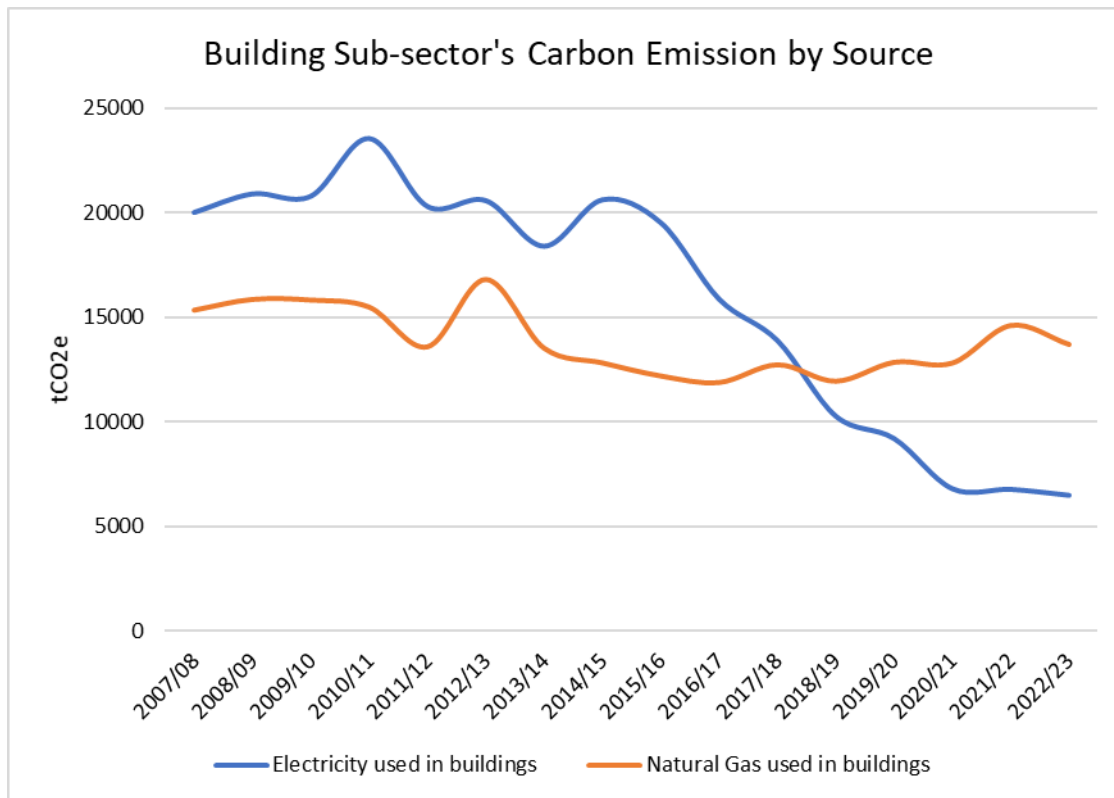
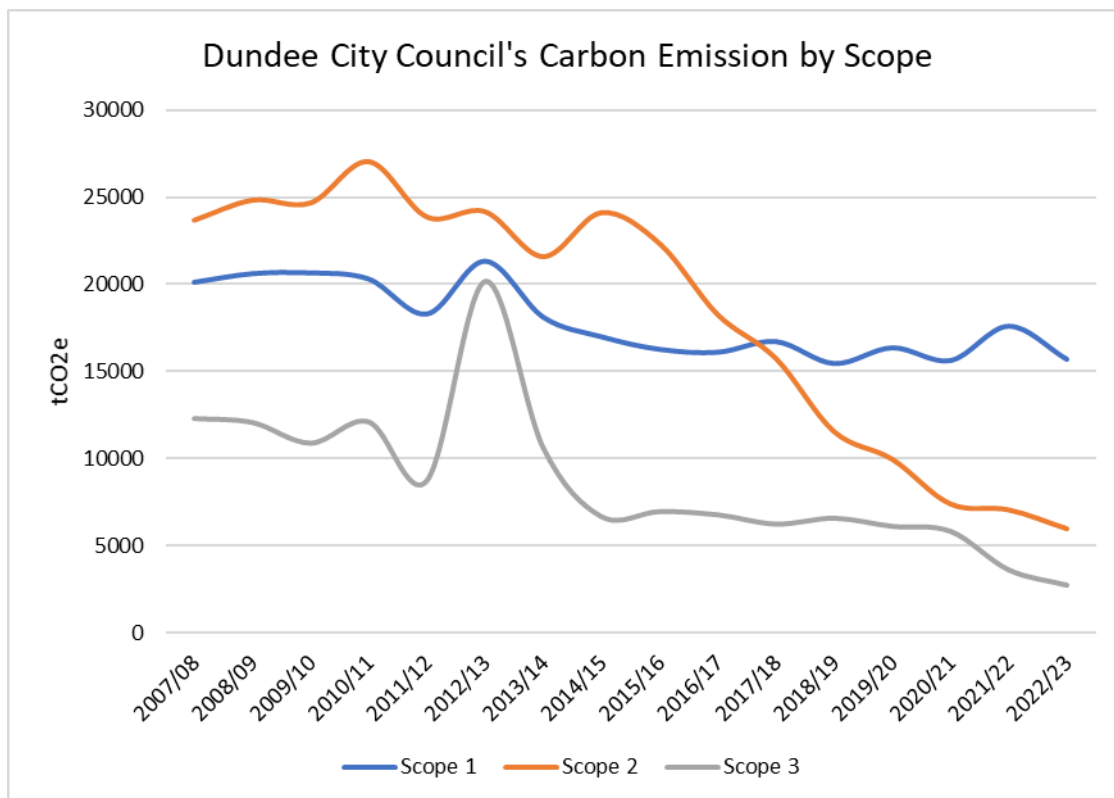


Figure 6: DCC Carbon Footprint by Scope



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 Type	Emission source	Scope	Consumption Data	Units	Emission Factor	Units	Emissions (tCO ₂ e)
Fuels	Natural gas	Scope 1	74,943,020	kWh	0.18254	kg CO ₂ e/kWh	13680
Electricity	Electricity: UK	Scope 2	30,837,581	kWh	0.19338	kg CO ₂ e/kWh	5963
Electricity	Transmission and distribution - Electricity: UK	Scope 3	30,837,581	kWh	0.01769	kg CO ₂ e/kWh	545
Renewables	Renewable Elec Purchase Direct Supply	Scope 2	3,716,265	kWh	0.00000	kg CO ₂ e/kWh	0.000
Fuels	Diesel (average biofuel blend)	Scope 1	768,068	litres	2.55784	kg CO ₂ e/litres	1964
Fuels	Petrol (average biofuel blend)	Scope 1	5,069	litres	2.16185	kg CO ₂ e/litres	10.9
Fuels	Gas oil	Scope 1	15,286	litres	2.75857	kg CO ₂ e/litres	42.1
Transport - public	Regular taxi	Scope 3	262,316	passenger.km	0.14876	kg CO ₂ e/passenger.km	39
Transport - public	Local bus (not London)	Scope 3	89,240	passenger.km	0.10778	kg CO ₂ e/passenger.km	9.6
Transport - public	Coach	Scope 3	372,651	passenger.km	0.02733	kg CO ₂ e/passenger.km	10.1

Emission Type	Emission source	Scope	Consumption Data	Units	Emission Factor	Units	Emissions (tCO ₂ e)
Transport - public	Regular taxi	Scope 3	25,317	passenger.km	0.14876	kg CO ₂ e/passenger.km	3.7
Transport - public	Local bus (not London)	Scope 3	121,521	passenger.km	0.10778	kg CO ₂ e/passenger.km	13
Transport - public	National rail	Scope 3	215,557	passenger.km	0.03549	kg CO ₂ e/passenger.km	7.6
Transport - public	Flights - Short-haul, to/from UK - Economy class	Scope 3	11,209	passenger.km	0.15102	kg CO ₂ e/passenger.km	1.6
Fuels	Diesel (average biofuel blend)	Scope 3	67,142	litres	2.55784	kg CO ₂ e/litres	171.7
Fuels	Petrol (average biofuel blend)	Scope 3	75,987	litres	2.16185	kg CO ₂ e/litres	164.2
Waste	Household/Municipal/Domestic waste - Combustion	Scope 3	29,050	tonnes	21.28019	kg CO ₂ e/tonnes	618.1
Waste	Household/Municipal/Domestic waste - Landfill	Scope 3	1,168	tonnes	446.20411	kg CO ₂ e/tonnes	521.1
Waste	Commercial and industrial waste - Combustion	Scope 3	6,827	tonnes	21.28019	kg CO ₂ e/tonnes	145.2
Waste	Commercial and industrial waste - Landfill	Scope 3	380	tonnes	467.00838	kg CO ₂ e/tonnes	177.4

Emission Type	Emission source	Scope	Consumption Data	Units	Emission Factor	Units	Emissions (tCO ₂ e)
Waste	Organic: mixed food and garden waste - Composting	Scope 3	12,157	tonnes	8.91058	kg CO ₂ e/tonnes	108.3
Waste	Glass - Recycled	Scope 3	2,167	tonnes	21.28019	kg CO ₂ e/tonnes	46.1
Waste	Paper and board: mixed - Recycled	Scope 3	4,505	tonnes	21.28019	kg CO ₂ e/tonnes	95.8
Waste	WEEE - mixed - Recycled	Scope 3	787	tonnes	21.28019	kg CO ₂ e/tonnes	16.7
Water	Water supply	Scope 3	197,038	cubic metres	0.10000	kg CO ₂ e/cubic metres	19.7
Water	Water treatment	Scope 3	197,038	cubic metres	0.19000	kg CO ₂ e/cubic metres	37.4

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		Comments
	Total consumed by the body (kWh)	Total exported (kWh)	Total consumed by the body (kWh)	Total exported (kWh)	
Solar PV	245,700				No figure provided for 22/23 period. This figure is based on the 21/22 period, with no significant change expected

					in the current reporting period.
Biomass			327,125		As above.

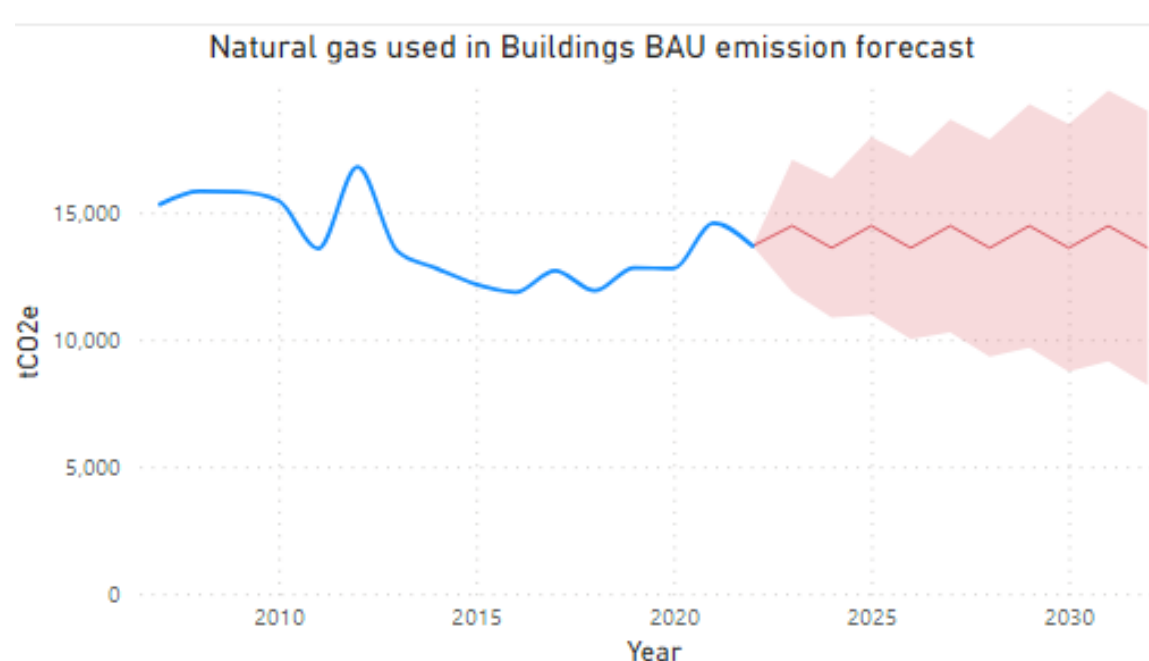
Targets

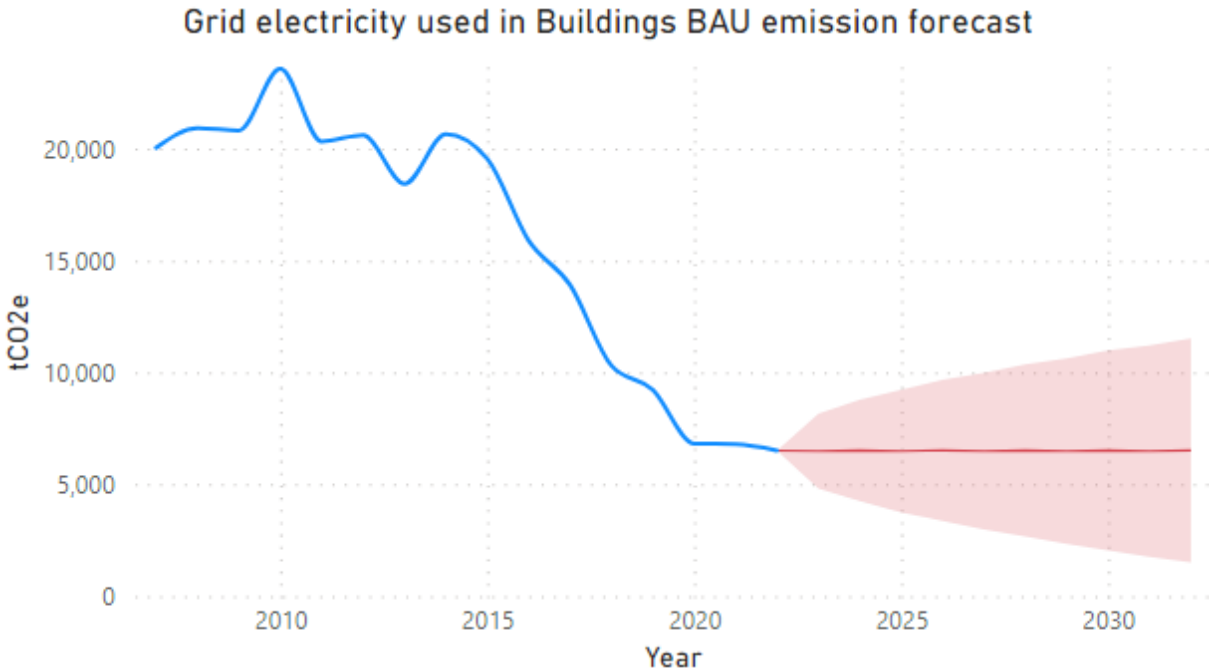
The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 requires public bodies to report targets on their operational/organisational emissions. These include reducing direct emissions, where possible, to 'absolute zero', and reducing indirect emissions, in 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 natural gas used for space and water heating in our building stock, presents a significant challenge in our ability to reach 'absolute zero' emissions from Scope 1 and could risk targets not being met.

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 tCO₂e. Under a BAU scenario (with continued reduction of electricity grid emission factor), it is expected that the Council can possibly achieve zero emissions from electricity use in Council buildings by 2030. However, the emission curve for electricity is likely to flatten as we use more electricity for EV charging and electrified heating systems, and current Council emissions savings projects are completed.

Figure 7: Gas and Electricity Use In Building Forecast for Up To 2032 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	2015/2016	32,163	tCO ₂ e	2021/2022	38% reduction in emission from buildings in 2022/23 compared to 2015/16 level. Between 2015/16 and 2022/23 there was an average of 3.1% annual reduction in emission from Buildings.	This target expired in 2021/2022. We are working on the Council's Net Zero Transition Plan which will set new emission reduction target for all sectors. The NZTP will be published in 2023/2024.

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.

The Council's new Net Zero Transition Plan will include carbon accounting to track the carbon emissions of each service with a view to creating a carbon budget allocating a specific amount of CO₂e per year per Council service. It will include targets, actions, estimated emission reduction, responsibility and cost and financing. Ultimately, the plan is to make carbon accounting a part of the financial budget process and spending plan of each Council service.

3db How will the body publish, or otherwise make available, its 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 Council's new Net Zero Transition Plan will include an updated emissions inventory, carbon accounting process 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. Along with the Net Zero Transition Plan we are also continuing reporting through PBCCD annually.

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 an 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 ₂ e)	Comments
Electricity		
Natural gas		
Other heating fuels		
Waste		
Water and sewerage		
Travel		
Fleet transport		
Other (please specify in comments)	686	Non-Domestic Energy Efficiency (NDEE) framework project delivered across 19 Council buildings

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 ₂ e)	Increase or Decrease in Emissions	Comments
Other (please specify in comments)		Increase	From this year electricity used by the council's EV fleet has been accounted under 'Buildings' sub-sector. This will increase the emission from buildings.
Other (please specify in comments)		Decrease	From this year electricity used by the council's Street Lighting sub sector is accounted under renewables due to the fact that the council purchases renewable electricity from EDF using Scottish Procurement Framework. This means the emission from Street Lighting is zero and it will remain the same.
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 ₂ e)	Comments
		Unknown

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 (tco2e)	Increase or Decrease In Emissions	Comments

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 ₂ e)	Comments
	31,634	This is the total emission savings since 2007/2008. There is not enough data available to separate the emission reduction from the projects and external factors such as grid emission factor reduction.

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 13.6% in the past year; and
- the carbon footprint has reduced by 56.4% since the baseline year of 2007/2008.

Stationary Sector

- Total emissions from Stationary sector decreased by 11.3% compared to the previous year.
- Energy consumption in buildings in 2022/23 decreased by 3% compared with the previous year. There was an increase in electricity consumption (5%) but the natural gas consumption fell by 6%.
- Streetlighting electricity consumption reduced by 2.3% compared to the previous year. The Council has completed LED streetlamp replacement therefore the electricity consumption figure is likely to remain flat in coming years. From this year the Council is reporting zero emission from streetlighting because the electricity purchased for streetlight is green electricity.
- Similar to previous year an estimated 245,700 kWh of electricity was generated from the Council's solar PV systems.

Transport Sector:

- There was a decrease of 24% in emissions from Transport sector compared to the previous year.

- Among Transport sector emissions, Service Travel and Business Travel decreased by 5% and 46% respectively. The drop in Business Travel suggests that staff are continuing to meet online and are travelling less. There was a decrease of 20% in fleet emissions (direct fuel use by ICE fleet).

Waste Sector:

- There was a 22% decrease in emissions from waste compared to the previous year.
- There are three main reasons for the continued 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 2022 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).

Emissions by Scope:

- Scope 1 (direct emissions) decreased by 11% compared to previous year due to the decrease in consumption of natural gas in buildings.
- Scope 2 emissions (grid electricity emissions) decreased by 15.4% compared to previous year and has been falling steadily since 2014/15 mainly due to the continued reduction in grid emission factor and purchase of green/renewable energy for streetlighting. This year although the overall grid electricity consumption (building + street light + EV charging) increased by 4.1% the emission still decreased because of grid emission factor reduction and purchase of renewable energy. Significant savings are also made through the Council's LED streetlighting programme and the Council's Non-Domestic Energy Efficiency (NDEE) project (eg 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 8% in the emission factor in the last decade which has largely contributed in our total emissions reduction.
- Scope 3 emissions (indirect emissions) decreased by 23.7% 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 and 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 and 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.dundee.gov.uk/sites/default/files/publications/consultative_draft_secap_-_risk_vulnerability_assessment.pdf
- The resultant actions were 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').
- A refresh of the RVA is planned for the 2023/2024 period.

- 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 (Aug 2013) which informed the design of the now complete "Dundee" and "Broughty Ferry" Coastal Flood Protection Schemes and will be used to inform the design of any further coastal flood risk and erosion management projects.
- The Tayside Integrated Catchment Study is completed up to the Optioneering Stage and has identified high level preferred options to reduce flood risk and provide resilience to flooding when considering future climate change predictions. There is now a good understanding of the sewer system within Dundee and its interaction with watercourses running through the city. However, some further investigation/survey/flow monitoring work is required during the development of the outline/detailed design of these preferred options to provide further confirmation of the configuration of some specific sewer and watercourse connections. The further investigation/survey/flow monitoring work and the preferred options identified in the Optioneering Stage of the study will be delivered by Dundee City Council and Scottish Water under a partnership working arrangement, subject to the allocation of funding. Outputs from the Study will also be used to inform the Surface Water Management Plan for Dundee.
- The **Downfield and Dundee, Monifieth and Sidlaws Flood Protection Study** (2019) commissioned by Dundee City Council and Angus Council 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 have gone through a national prioritisation exercise. A national funding review is currently underway to consider proposals for funding proposed Cycle 2 Flood Protection Schemes and there is currently uncertainty as to whether a proposed Flood Protection Scheme to reduce flood risk along the Dighty watercourse can be taken forward during Cycle 2 or during future funding Cycles.
- Dundee City Council are continuing to work in partnership with Scottish Water and other partners such as SEPA and NatureScot, to develop and implement Surface Water Drainage Strategies for areas within the Dundee City Council boundary to reduce flood risk and provide resilience to climate change whilst also enabling development of brownfield sites and incorporating other multiple benefits. Examples of locations where strategies are being developed include the St Mary's area of Dundee for which proposals are fairly advanced, and the Douglas area of Dundee where as well as the drainage strategy development, surface water drainage improvement measures have been incorporated into the regeneration of the now complete Douglas Community Park. The Surface Water Drainage Strategy work will, where possible, 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, and contribute towards the Scottish Government "net zero emissions" target. The strategy work 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. As locations for drainage strategies similar to that being developed in St Marys and Douglas continue to be identified across the city, Dundee City Council and Scottish Water are to enter into a formal partnership agreement. Further details of the drainage strategy partnership working can be found in the 25 January 2021 City Development Committee Report Number 32-2021 available at .

https://www.dundee.gov.uk/minutes/report?rep_id=32-2021.

- In partnership with other responsible authorities, the Council provided input to the preparation of 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 Cycle 2 **Tay Estuary and Montrose Basin Local Flood Risk Management Plan** is to be published in 2023 and will include actions to be delivered during the 2022-2028 to reduce flood risk within the Dundee City Council boundary.
- 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; and
 - 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

Training

- 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** 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.
- Building on the results of the Benchmarking Assessment, the internal Adaptation Working Group will continue to engage staff in embedding adaptation across teams and departments and within Service Plans, Local Development Plans and Council Plans.
- 15 Council Officers received training on “Becoming Climate Resilient” in March 2023, delivered by Sniffer. Services covered were: Green Space, Health and Social Care, Corporate Risk, Infrastructure, Climate Change, Sustainable Transport and Planning.

Delivering adaptation action

- **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. The Flood Risk Management Cycle 2 Tay Estuary and Montrose Basin Local Flood Risk Management Plan is due to be published in the 23/24 period. 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.
- The **Tayside Integrated Catchment Study** is completed up to the Optioneering Stage and has identified high level preferred options to reduce flood risk and provide resilience to flooding when considering future climate change predictions. There is now a good understanding of the sewer system within Dundee and its interaction with watercourses running through the city. However, some further investigation/survey/flow monitoring work is required during the development of the outline/detailed design of these preferred options to provide further confirmation of the configuration of some **specific** sewer and watercourse connections. The preferred options identified in the Optioneering Stage of the study will be delivered by Dundee City Council and Scottish Water under a partnership working arrangement, subject to the allocation of funding. Outputs from the Study will also be used to inform the Surface Water Management Plan for Dundee.
- 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** have 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.
- Dundee City Council are continuing to work in partnership with Scottish Water and other partners such as SEPA and NatureScot, to develop and implement Surface Water Drainage Strategies for areas within the Dundee City Council boundary to reduce flood risk and provide resilience to climate change whilst also enabling development of brownfield sites and incorporating other multiple benefits. Examples of locations where strategies are being developed include the St Mary's area of Dundee for which proposals are fairly advanced, and the Douglas area of Dundee where as well as the drainage strategy development, surface water drainage improvement measures have been incorporated into the regeneration of the now complete Douglas Community Park. The Surface Water Drainage Strategy work will where possible 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, and contribute towards the Scottish Government "net zero emissions" target. The strategy work 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. As locations for drainage strategies similar to that being developed in St Marys and Douglas continue to be identified across the city, Dundee City Council and Scottish Water are to enter into a formal partnership agreement. Further details of the drainage strategy partnership working can be found in the 25 January 2021 City Development Committee Report Number 32-2021 available at https://www.dundee.gov.uk/minutes/report?rep_id=32-2021.

Greenspace/Biodiversity/Green Infrastructure:

- Dundee City 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. **Dundee City Council reports on their Biodiversity Duty every three years as outlined in the Wildlife and Natural Environment (Scotland) Act 2011 to Scottish Government, (the latest report is due to be agreed at the November 2023 Climate, Environment and Biodiversity Committee). Annual progress is also reported to Committee on the Action Plan.**
- Over twenty 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 2023/24, by submitting a Management Plan and hosting a site visit by an external assessor
- The Scottish Government allocates an amount of Nature Restoration Funding directly to each Local Authority every year. Last year Dundee was awarded 86K, this funding was used to:
 - create new biodiversity grasslands and plant orchard trees within Baxter Park;
 - restore historic lades and sluice gate at Trottick Ponds Local Nature Reserve;
 - create new wildflower areas within housing spaces in Stobswell;
 - purchase cut and lift machinery for the maintenance of biodiversity grasslands;

- complete a second phase of pond restoration in Den O Mains; and
- install 100 amphibian ladders in roadside gullypot drains in two amphibian hotspots in the east of the city.
- 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 secured an additional £265K from the competitive element of the Scottish Government's Nature Restoration Funding in 22/23. This enabled the planting of 12.5 ha of native, climate resilient woodland across three sites in the city in early 2023. The aims of this project were:
 - to create bigger, better and more connected woodland in Dundee;
 - increase the amount of carbon storage and sequestration in the city; and
 - to increase woodland diversity and resilience to climate change.
- Other projects for biodiversity funded by Dundee City Council in 2022/2023 were:
 - investment in new weed control methods to support the reduced use of herbicides;
 - a social media and radio campaign highlighting biodiversity and naturalised grassland areas in parks;
 - planting a range of spring and summer flowering bulbs in greenspaces across the city; and
 - two new pocket parks with rain gardens.
- Nature- based solutions-Dundee City Council are continuing to work 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. An additional City-Wide SUDS project has started that will look at the existing green network in the city and where opportunities to enhance this overlap with ongoing drainage issues and active travel routes. This project will suggest and explore the feasibility of a range of nature-based solutions with multiple outcomes that could be applied across the city.
- 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. This is critical in addressing social vulnerability to climate change, ensuring that transport is not an isolating barrier for those wishing to reach healthcare, employment opportunities and social activities whilst reducing road transport emissions and the city's carbon footprint. **Activities on the 22/23 reporting period include:**
 - Clean Streets Project – Saw the installation of 26 pop up chargers across the city to support the transition to electric vehicles. Saw 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.
 - An Electric Vehicle Infrastructure Blueprint was developed for the city that planned out what infrastructure was required up to 2045. This allowed the city to engage with SSE and charge point operators to plan the long-term energy requirements across the city.

- 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.
- Dundee 4th EV Charging Hub – Working in partnership with Dundee City Council Urban Foresight were key advisors in making this new hub as accessible and sustainable as possible.

4d) Where applicable, what progress has the body made in delivering the Scottish Climate Change Programme(a) (“the Programme”)?

(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 Cycle 1 and Cycle 2 Local Flood Risk Management Plans 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.	<ul style="list-style-type: none"> 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 23/24 and is currently being prepared. Subject to the national flood risk funding review and being prioritised favourably at a national level, Cycle 2 Flood Protection Schemes are likely to be developed for the Dighty watercourse and an extension to the existing Dundee Coastal Flood Protection Scheme to protect Dundee Airport. The Tayside Integrated Catchment Study is completed up to the Optioneering Stage and has identified high level preferred options to reduce flood risk and provide resilience to flooding when considering future climate change predictions. There is now a good understanding of the sewer system within Dundee and its interaction with watercourses running through the city. However, some further investigation/survey/flow monitoring work is required during the development of the outline/detailed design of these preferred options to provide further confirmation of the configuration of some specific sewer and watercourse connections. The further investigation/survey/flow monitoring work and preferred options identified in the Optioneering Stage of the study will be delivered by Dundee City Council and Scottish Water under a partnership working arrangement, subject to the allocation of funding. Outputs from the Study will also be used to inform the Surface Water Management Plan for Dundee. The Dundee City Council and Scottish Water partnership working has also developed a GIS based dataset containing

			various existing and new datasets to inform the drainage strategy development work which includes existing drainage assets/infrastructure and flood record data.
[N2] Support and healthy and diverse natural environment with capacity to adapt	Natural Environment	<p>[N2-2] The Scottish Planning Policy includes green networks, green space, street trees and other vegetation, green roofs, wetlands and other water features, and coastal habitats in helping Scotland to mitigate and adapt to climate change.</p> <p>[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.</p>	<ul style="list-style-type: none"> The 2019 Local Development Plan (LDP) and NPF4 make up the development plan for Dundee. The LDP 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 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. This will take into account NPF4 national planning policies. As part of this process, we are carrying out initial scoping of issues facing Dundee through the gathering of appropriate evidence and seeking the views of key agencies, children and young people, and the public at large. A GIS audit of existing services is underway to facilitate the implementation of the 20-minute neighbourhood concept. 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 fulfil 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.
		<p>[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.</p>	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	Natural Environment		<p>N/A</p> <p>Dundee City Council is not listed as a responsible authority for this objective</p>

services that the natural environment provides			
<p>[B1]</p> <p>Understand the effects of climate change and their impacts on buildings and infrastructure networks</p>	Buildings and infrastructure networks	<p>[B1-13]</p> <p>Flood Risk Management Plans - The Flood Risk Management (Scotland) Act 2009 requires the development of Flood Risk Management Strategies (FRMS) and Local Flood Risk Management Plans (LFRMP).</p>	<ul style="list-style-type: none"> • 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 2023/24 and is currently being prepared. Subject to the national flood risk funding review and being prioritised favourably at a national level, Cycle 2 Flood Protection Schemes are to be developed for the Dighty watercourse and an extension to the existing Dundee Coastal Flood Protection Scheme to protect Dundee Airport. • The Tayside Integrated Catchment Study is completed up to the Optioneering Stage and has identified high level preferred options to reduce flood risk and provide resilience to flooding when considering future climate change predictions. There is now a good understanding of the sewer system within Dundee and its interaction with watercourses running through the city. However, some further investigation/survey/flow monitoring work is required during the development of the outline/detailed design of these preferred options to provide further confirmation of the configuration of some specific sewer and watercourse connections. The further investigation/survey/flow monitoring work and the preferred options identified in the Optioneering Stage of the study will be delivered by Dundee City Council and Scottish Water under a partnership working arrangement, subject to the allocation of funding. Outputs from the Study will also be used to inform the Surface Water Management Plan for Dundee.
<p>[B2]</p> <p>Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure</p>	Building and infrastructure networks		<p>N/A</p> <p>Dundee City Council is not listed as a responsible authority for this objective</p>

Objective Reference	Theme	Policy/ Proposal reference	Delivery progress made
<p>[B3]</p> <p>Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided</p>	Buildings and infrastructure networks	<p>[B3-3]</p> <p>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.</p>	<p>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.</p>
		<p>[B3-6]</p> <p>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.</p> <p>[B3-7]</p> <p>The Energy Efficiency Standard for Social Housing sets a minimum standard for energy efficiency in social housing. All social housing will be expected to meet the standard by 2020.</p>	<p>The Housing Department continues to maximise the impact of the Home Energy Efficiency Programme Scotland – Area Based Schemes (HEEPS:ABS now more commonly referred to as EES:ABS- Energy Efficient Scotland: Area Based Schemes)) funding by combining it with its own capital budget to externally insulate (EWI) mixed tenure blocks of flats in Council estates with high levels of fuel poverty that are either solid wall or non-traditional construction. This has resulted in more than £50m total investment in EWI in the city since the inception of the EWI Programme in 2013 with more than 5,000 residents in Dundee seeing their properties thermally upgraded.</p> <p>This process has become increasingly difficult in recent years for several reasons including higher standards, loss of ECO funding and higher labour and materials costs. In addition, the Council has reconfigured several internal processes relating to contract management and this has introduced further delays. However, plans and funding are now in place to resume installation of EWI in autumn, 2023.</p> <p>This standard, now being referred to as the 2020 EESSH milestone, has been superseded by EESSH2. EESSH2 itself is currently under review by the Scottish Government in order to better align it with its Net Zero agenda. It is likely that the revised standard for social housing will introduce new metrics and targets for landlords to meet to demonstrate that homes are as energy efficient as possible and that zero direct emissions heating is being installed. Meantime, DCC will continue to upgrade properties – see below.</p>

Objective Reference	Theme	Policy/ Proposal reference	Delivery progress made
		<p>[B3-8]</p> <p>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.</p>	<p>The Housing Service is committed to improving the energy efficiency and performance of properties to benefit tenants. In 2022/23 the service delivered the following projects/installations:</p> <p>37 new boilers were installed, 2 properties were connected to district-heating and 13 electric to gas properties completed.</p> <p>122 properties had new windows installed.</p> <p>Stock total is 12557 (not including HMO/ Homeless accommodation).</p> <p>The Housing Service also aims to drive forward change and improvement and is currently updating its Asset Management Strategy and producing an Energy Efficiency/Net Zero Strategy that will sit alongside it.</p> <p>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 a just transition and that the fuel poor are prioritised in projects and programmes. The outcomes 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.</p> <p>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.</p> <p>The Housing Department also has a new-build social rented housing programme, constructing properties itself or in partnership with local Housing Associations. The programme also includes the purchase of new build 'Off the Shelf' Properties from Developers. The Council has set itself a challenging target of 200 social rented house completions per annum within the Local Housing Strategy and Council Plan.</p>

			<p>Increases in completions are expected in 2023/24 being close to or exceeding the target though difficulties with supply chains and price inflation may yet have an impact. However, we have 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 2022/2023.</p> <p>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. This sets out plans that will mean direct emission heating systems (DEH), such as those run on fossil fuel, will no longer be installed in any homes and non-domestic buildings warranted from April 2024. Individual gas boilers will 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 heat pump/gas boilers and continuing to maximise the benefits being directly gained by tenants through solar photo voltaic panels. We will be installing 24 hybrid boilers in our Blackness Road New Build project planned to start on site in the final quarter of 2023. 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. Early design discussion and plans are currently taking place for development of a site in Balcairn Place which will look to make best use of innovative technology to meet the Greener Standard. In financial year 2022/23 there were 101 social rent new build completions.</p> <p>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.</p>
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Objective Reference	Theme	Policy/Proposal reference	Delivery Progress Made
<p>[S1]</p> <p>Understand the effects of climate change and their impacts on people, homes and communities</p>	Society		<p>N/A</p> <p>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.</p>
<p>[S2]</p> <p>Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events</p>	Society		<p>N/A</p> <p>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.</p>
<p>[S3]</p> <p>Support of our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate</p>	Society		<p>N/A</p> <p>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.</p>

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 asserts the commitment and planning necessary for the transition to a low carbon future. The Plan is monitored and governed by the Dundee Climate Leadership Group. 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. A refresh of the Climate Risk and Vulnerability Assessment for the City is planned early 2024 to identify the next set of priority actions.
- 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 Refresh the Risk and Vulnerability Assessment and Actions in the Dundee Climate Action Plan with the Dundee Climate Leadership Group.
- 2 Develop workforce resilience plans for each Council Service.
- 3 Implement organisational Climate Resilience plans via the Net Zero Transition Planning process.
- 4 Continue to participate in Adaptation Scotland's Benchmarking Working Group
- 5 Work with partners across the region to develop a Tayside Adapts approach to Climate Resilience Planning.

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.

- The **Tayside Procurement Consortium (TPC)** is a collaborative procurement team created by Dundee City, Angus and Perth and Kinross Councils, to manage collaborative procurement activity on behalf of the three Tayside Councils.
- 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; and
 - deliver a variety of sustainable outcomes.

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

- **Electric Vehicle Charging Points** - a TPC collaborative framework is available allowing the City Council and others to increase of the number of charge points in the Tayside area allowing wider use of electric vehicles and positively contributing to our climate change commitment.
- **Education and Office Furniture** – a collaborative framework is available allowing the Council to purchase furniture from a sustainable supply chain that positively contributes to our climate change commitment. In order to provide assurances that wood and wood-based products originate from sustainably managed forests, it is a requirement of this framework that all timber used in manufacture comes from a sustainable source and must have Chain of Custody tracking documents to meet the requirements of UK and EU timber regulations. Suppliers, whether manufacturers or resellers of furniture, are members of the Furniture Industry Sustainability Programme (FISP) which demonstrates their sustainable and corporate social responsibility credentials. Other environmental components of the framework which contribute towards our stated outcomes are:
 - promotion of furniture Take-Back schemes by suppliers, to encourage reuse or remanufacture;
 - use of re-cycled content in final product;
 - reuse of packaging materials for original purpose;
 - reduction of waste materials;
 - innovation for delivery planning and logistics such as use of vehicle trackers and on-site furniture assembly;
 - suppliers are ISO14001 accredited; and
 - operating robust transport using Euro V and V1 compliant vehicles.
- **Street Lighting** - Bulk Renewal of Luminaries - a collaborative framework is available allowing the City Council with includes opportunity to secure the following benefits:

- Reduced expenditure on energy costs;
- Reductions in carbon emissions due to the higher energy efficiency of LED luminaires;
- Replacing traditional lamps with LED lanterns will result in operational efficiencies through reduction in travel and material costs as LED lanterns have a 12 year warranty lifespan;
- Suppliers are required to dispose of all waste equipment in accordance with the WEEE regulations.

- **Janitorial products**

- suppliers adopt plastic-packaging recycling initiatives;
- products have dilution control measures, which reduce the amount of waste chemical, and also reduce the outer packaging;
- suppliers reduce the amount of packaging associated with its products; and
- suppliers stream waste into waste skips which are used to separate different grades of recycling waste in order to facilitate a more complete recycling process.

- **Audio Visual Equipment**

- reduced packaging initiatives;
- life extension initiatives;
- WEEE Directive compliance;
- minimisation of transportation – use of sea/land freight rather than air; and
- recycle 100% of waste materials and packaging.

- Dundee became Scotland's first **Fairtrade City** in 2004 and updated its 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;
- tendering procedures for caterers at the annual Food Festival run by the Council have been strengthened to ensure they provide fair trade products, and we have given a free stall at the Festival to Dundee Fairtrade Forum to promote fair trade products;
- 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; and
- further information: <http://www.dundee.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.

- The Council have procured the CO₂A software to calculate the carbon emissions of spending related to bigger suppliers. Results and actions will be developed later in the year.
- Sustainable outcomes are included in TPC specifications. 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; and
 - all TPC officers have been fully trained in the '**Marrakech Sustainable Public Procurement Training**' sessions and embed sustainable procurement practices within all TPC procurement activity through reviewing the need to specification, ITT and evaluation, supplier selection and contract management.

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.

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:	Barbara Whiting
Role in the organisation:	Sustainability and Climate Change Manager
Date:	

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	2021	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	642.13	ktCO ₂ e
	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	203.41	ktCO ₂ e
	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	212.55	ktCO ₂ e
	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	184.06	ktCO ₂ e
	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	4.35	ktCO ₂ e

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 (%)	1171.94	2005	40% reduction in GHG emissions	2030	45.2%	2020
Overall Reduction Target	Climate Emergency Declaration	Other (please specify in comments)	1171.94	2005	Net Zero emissions	2045	45.2%	2020
Overall Reduction Target	C40 Cities: Race to Net Zero	Please select from drop down box	1171.94	2005	Net Zero emissions	2045	45.2%	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.

Dundee City Councils Net Zero Transition Plan 2024-2030 sets an organisational target of Net Zero by 2038. This delivery plan includes organisational as well as service specific actions across the themes of emissions reduction, circular economy, climate resilience and just transition as well as a new carbon accounting process with a view to developing carbon budgets for each service.

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
Capacity Building	Dundee Climate Fund	Skills/capacity building	Lead	Council Services: Communities, S&CC, wider community	Green Participatory Budgeting allowing community groups to apply for funding for climate change related projects. over 4000 votes, 29 applications with 12 projects awarded funding totalling £350k in first year.
Partnership Working	Sustainable Dundee Network	Partnership working of climate change/ sustainability	Lead	+20 orgs inc. Dundee Partnership	<p>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.</p> <p>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.</p>
Partnership Working	Bioregioning Tayside	Partnership working of climate change/ sustainability	Partner	30+ Tayside organisations and businesses.	Feeding Tayside Through the Climate Crisis – event to discuss food security, local food production and supply, sustainable food production. Attended by 100 people. Clear actions.

Key Action Type	Description	Action	Org. role	Partners	Outputs
Partnership Working	Dundee Climate Leadership Group	Partnership working: net-zero	Lead	13 organisations across sectors in Dundee	<p>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. Its operating principles are to work within the objectives of Dundee Climate Action Plan and strategic vision of Dundee Partnership (Community Planning Partnership).</p> <p>DCLG has established sub-groups on Energy Systems, Climate Resilience and Just Transition.</p>
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. In November 2021, 15 schools and 800 pupils took part in an online conference led by the Sustainability and Climate Change Team.
Partnership Working	Michelin Scotland Innovation Park – Future Skills Academy	Partnership working of climate change/sustainability/Just transition	Partner	Michelin Scotland Innovation Park, Dundee and Angus College, DCC	Just Transition: Future Skills Academy opening Autumn 2023 to provide the skills needed for the low carbon transition jobs of the future.
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

Key Action Type	Description	Action	Org. role	Partners	Outputs
Communications	Earth Hour 2023	Behaviour change	Lead	Sustainable Dundee Network	<ul style="list-style-type: none"> • launch of Staff Active Travel Plan; • feeding Tayside Through the Climate Crisis event – producers, suppliers, retail outlets and activists come together to explore how they can all better link up and tackle the climate crisis through promoting local food, reducing food poverty and food waste; and • a social media campaign.
Communications	Scottish Climate Week 2022	Awareness Raising and Behaviour change	Lead	Sustainable Dundee Network	<ul style="list-style-type: none"> • launch of Dundee Climate Fund; • Sustainable Dundee Website; • launch of Sustainable Dundee Goals map; • launch of LAEP; and • launch of Get Go smart travel app.
Communications	Drive Dundee Electric	Behaviour change	Lead	Scottish Government, Office for Low Emission Vehicles	<p>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.</p> <p>https://drivedundeeelectric.co.uk</p>

Key Action Type	Description	Action	Org. role	Partners	Outputs
Communications	Waste Education and Awareness programme	Behaviour change	Lead	Schools, Zero Waste Scotland	<p>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.</p> <p>Supporting Zero Waste Scotland's Food waste reduction pilot project in schools and small businesses in Dundee.</p> <p>Schools Waste Awareness programme commenced Autumn 2019.</p>
Partnership Working	Baldovie Community Reuse Hub	Skills/capacity building	Lead	Tayside Re-users, Transform, Dundee Social Enterprise Network.	<p>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.</p> <p>https://www.dundee.gov.uk/service-area/neighbourhood-services/environment/community-re-use-hub</p>
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	<p>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.</p> <p>Dundee City Council is developing its first statutory Local Heat and Energy Efficiency Strategy. The Council is working collaboratively with SSEN/SGN and Scottish Water with the assistance of Arup and Advanced Infrastructure Technology Limited to help create an integrated, digital Local Area Energy Plan</p>

Key Action Type	Description	Action	Org. role	Partners	Outputs
					<p>(LAEP) and Local Heat and Energy Efficiency Strategy (LHEES).</p> <p>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 eg electricity to electric vehicles and charging infrastructure.</p> <p>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.</p> <p>Both of these strategies take a data driven, evidence-based approach that sets out to identify the most</p>

Key Action Type	Description	Action	Org. role	Partners	Outputs
					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	<p>Port of Dundee is now the premier offshore wind marshalling site in Scotland playing a vital role in supporting the net-zero transition of the economy by encompassing traditional oil and gas capability to support low carbon sectors including offshore wind and wave and tidal.</p> <p>Forth Ports Ltd has invested over £40m to improve facilities at the port to ensure they are capable of meeting the demanding requirements of both existing and emerging markets.</p> <p>Port of Dundee Infrastructure Masterplan includes:</p> <ul style="list-style-type: none"> • New Decommissioning and Renewables Quayside; • Fully SEPA Licenced Caledon East Quay with Water Management Systems for Decommissioning use; • Upgraded quay that enables High Loads and RoRo; and • 140,000 sqm High Loading Land Space. <p>Fabrication, de-commissioning and re-commissioning facilities are available at Port of Dundee.</p> <p>Current and future offshore wind farm projects around Dundee Port are:</p> <ul style="list-style-type: none"> • NnG Offshore; • Inch Cape Offshore; • Moray West Offshore; • East Cost England – Sofia, Dogger Bank Zones and Hornsea Zones; and • Scotwind.

Key Action Type	Description	Action	Org. role	Partners	Outputs
					<p>The capacity of these 17 new sites amounts to just under 25GW with 60% of this capacity being for floating offshore wind projects. This huge additional capacity to the Scottish market puts Scotland at the forefront of the emerging floating wind market.</p> <p>Forth and Tay Offshore Cluster</p> <p>Dundee City Council is a steering group member of the Forth & Tay Offshore Cluster. The Cluster's mission is to accelerate and further the growth of the offshore energy sector on the east coast of Scotland through a series of activities designed to support innovation, collaboration, investment in skills, and market awareness amongst relevant businesses.</p> <p>It will also work to attract inward investment from leading developers and suppliers and to make Forth and Tay the location of choice for supply chain investments.</p> <p>Forth & Tay Offshore is supported by developers and public organisations including Angus, Dundee, East Lothian, Fife, Scottish Borders Councils, as well as EDF Renewables, SSE Renewables and Red Rock Power, and Scottish Enterprise and Forth Ports.</p> <p>https://www.forthandtayoffshore.co.uk/</p>



Committee Report Number: 289-2023

Document Title: Public Bodies Climate Change Duties Report 2022/23

Document Type: Other

Description: The Climate Change (Scotland) Act 2009 places duties on public bodies relating to climate change. Further to the Act, the Scottish Government introduced an Order requiring all 180 Public Bodies who appear on the Major Player list to report annually to Scottish Ministers on their compliance with the climate change duties. The Public Sector Climate Change Duties- Annual Report 2022/2023 informs Committee of the work undertaken over this time period in support of the Council's duties under the Act.

Intended Outcome: The Public Bodies Climate Change Duties Report provides a solid basis for tracking Council action on climate change and driving continuous improvement. The national reporting platform introduces standard methodology to improve data consistency. Reports and analysis are publicly available, increasing accountability and transparency, and making it easier for the public and other parties to understand an organisation's climate performance. This in turn is helping improve leadership and engagement, while raising awareness of the impact of climate change with senior management, ensuring climate change objectives are integrated in corporate business plans and action embedded across all departments.

Period Covered: 1 April 2022 to 31 March 2023

Monitoring: Actions and initiatives within the annual report are monitored on a project by project basis. The Council's climate change activity from April 2023 to March 2024 will be compiled in summer 2024 and reported to Scottish Government by 30 November 2024.

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Integrated Impact Assessment

Equality, Diversity and Human Rights

Impacts & Implications

Age: No Impact

Disability: No Impact

Gender Reassignment: No Impact

Marriage & Civil Partnership: No Impact

Pregnancy & Maternity: No Impact

Race / Ethnicity: No Impact

Religion or Belief: No Impact

Sex: No Impact

Sexual Orientation: No Impact

Are any Human Rights not covered by the Equalities questions above impacted by this report?

No

Fairness & Poverty

Geographic Impacts & Implications

Strathmartine: Positive

Lochee: Positive

Coldside: Positive

Maryfield: Positive

North East: Positive

East End: Positive

The Ferry: Positive

West End: Positive

Positive Implications:

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel. It is therefore expected that positive impacts are likely across all geographical areas of the city.

Household Group Impacts and Implications

Looked After Children & Care Leavers: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Carers: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Lone Parent Families: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Single Female Households with Children: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Greater number of children and/or young children: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Pensioners - single / couple: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Unskilled workers or unemployed: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Serious & enduring mental health problems: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Homeless: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Drug and/or alcohol problems: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Offenders & Ex-offenders: No Impact**Household Group Impacts and Implications****Socio Economic Disadvantage Impacts & Implications****Employment Status: Positive**

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Education & Skills: No Impact**Income: Positive**

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Caring Responsibilities (including Childcare): Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Affordability and accessibility of services: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Fuel Poverty: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Socio Economic Disadvantage Impacts & Implications

Cost of Living / Poverty Premium: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Connectivity / Internet Access: No Impact

Income / Benefit Advice / Income Maximisation: No Impact

Employment Opportunities: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Education: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Health: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Life Expectancy: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Mental Health: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Overweight / Obesity: No Impact

Child Health: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Neighbourhood Satisfaction: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Transport: Positive

Actions and initiatives highlighted in the annual report are targeted towards Dundee's transition to a low carbon future through decarbonising heat; reducing the cost of energy to address fuel poverty; providing long term energy security and creating more resilient communities. These climate change strategies help to underpin those designed for fairness and poverty, whether through improved housing, air quality or active travel.

Environment

Climate Change Impacts

Mitigating Greenhouse Gases: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Adapting to the effects of climate change: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Resource Use Impacts

Energy efficiency & consumption: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Prevention, reduction, re-use, recovery or recycling of waste: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Sustainable Procurement: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Transport Impacts

Accessible transport provision: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Sustainable modes of transport: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Natural Environment Impacts

Air, land & water quality: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Biodiversity: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Open & green spaces: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Built Environment Impacts

Built Heritage: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Housing: Positive

Content within the annual report highlights strategies in place for climate change mitigation and adaptation, energy efficiency, development planning, transport and travel, procurement, waste management, air quality and biodiversity. Positive actions to deliver these strategies are also presented.

Is the proposal subject to a Strategic Environmental Assessment (SEA)?

No further action is required as it does not qualify as a Plan, Programme or Strategy as defined by the Environment Assessment (Scotland) Act 2005.

Corporate Risk

Corporate Risk Impacts

Political Reputational Risk: No Impact

Economic/Financial Sustainability / Security & Equipment: No Impact

Social Impact / Safety of Staff & Clients: No Impact

Technological / Business or Service Interruption: No Impact

Environmental: No Impact

Legal / Statutory Obligations: Positive

The risk implications associated with the subject matter of this report are "business as normal" risks and any increase to the level of risk to the Council is minimal. This is due either to the risk being inherently low or as a result of the risk being transferred in full or in part to another party on a fair and equitable basis. The subject matter is routine and has happened many times before without significant impact.

Organisational / Staffing & Competence: No Impact

Corporate Risk Implications & Mitigation:

The risk implications associated with the subject matter of this report are "business as normal" risks and any increase to the level of risk to the Council is minimal. This is due either to the risk being inherently low or as a result of the risk being transferred in full or in part to another party on a fair and equitable basis. The subject matter is routine and has happened many times before without significant impact.

REPORT TO: CLIMATE, ENVIRONMENT & BIODIVERSITY COMMITTEE –
20 NOVEMBER 2023

REPORT ON: DUNDEE CITY COUNCIL NET ZERO TRANSITION PLAN

REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

REPORT NO: 210-2023

1 PURPOSE OF REPORT

- 1.1 This report seeks Committee approval for Dundee City Councils Net Zero Transition Plan 2024-2030 (attached separately).

2 RECOMMENDATION

- 2.1 It is recommended that the Committee:
- a approve the Net Zero Transition Plan targets and actions; and
 - b approve the Carbon Accounting process proposed in the plan; and
 - c note that the that the Council Leadership Team will monitor implementation of the Plan by each Service.

3 FINANCIAL IMPLICATIONS

- 3.1 The successful delivery of the Net Zero Transition Plan will depend on appropriate levels of funding and support from the UK and Scottish Governments. It is stressed that actions within the plan represent a mix of committed and desired interventions across Council Services. Many of the actions within the Plan already have funding committed, whilst others will require feasibility studies or business cases in the first instance to determine their viability and funding subsequently secured to enable delivery. Potential sources of funding will continue to be explored through existing avenues as well any innovative approaches to ensuring projects can be delivered.

4 BACKGROUND

- 4.1 Dundee City Council declared a Climate Emergency in June 2019, aligning with the Scottish Government's target of reaching Net Zero greenhouse gas emissions by 2045 or sooner. A partnership city-wide Climate Action Plan was published in December 2019, a culmination of co-design work with public, private and community organisations.
- 4.2 In March 2021, the Dundee Climate Leadership Group was established to provide active leadership on Dundee's net-zero challenge, leveraging expertise from across the city with shared commitment to drive progress of the Dundee Climate Action Plan and recommend innovative solutions that support a just transition to a net-zero future. The Council continues to lead the way in Dundee's net-zero challenge but recognises that it requires its own organisational plan to set out how the Council will achieve its net zero target.
- 4.3 One of the main drivers for the plan is the Scottish Governments new reporting requirements:
- a In order to comply with our mandatory Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020, our annual reports must now include:
 - the body's target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland

achieving its emissions reduction targets; where applicable, targets for reducing indirect (Scope 3) emissions of greenhouse gases;

- how the body will align its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets;
- how the body will publish, or otherwise make available, its progress to achieving its emissions reduction targets; and
- where applicable, what contribution the body has made to helping deliver Scotland's Climate Change Adaptation Programme.

4.4 The plan focuses on four key themes: Emissions Reduction, Circular Economy, Climate Adaptation/Resilience and Just Transition and sets out a pathway to reducing our organisational emissions to net zero by 2038, designed in collaboration with Service Management Teams for 7 Council Services, led by the Sustainability and Climate Change Team.

4.5 The rationale for the 2038 net zero target is based on the Scottish Government's Heat in Buildings Strategy which sets targets for all buildings, including a target to make public sector non-domestic buildings net zero direct emissions by 2038 and a goal for most buildings to achieve a good level of energy efficiency, where technically and legally feasible, by 2030.

4.6 The Scottish Government also plans to introduce regulations in 2025 to reduce greenhouse gas emissions from heat in non-domestic buildings in line with the legally binding target to achieve net zero greenhouse gas emissions by 2045.

4.7 The direct emissions (heating) from the buildings sub-sector accounted for 54% of total Dundee City Council emissions in 2020. By achieving net zero direct emissions from buildings means Dundee City Council will have reduced 54% of emissions by 2038 from its 2020 level.

4.8 Electricity use in the building subsector accounted for 25% of total emissions. We assume that there will be a continued reduction in grid electricity emissions factor which will reduce our electricity emissions continuously, even in the Business-as-Usual scenario.

5 POLICY IMPLICATIONS

5.1 This report has been subject to an Integrated Impact Assessment to identify impacts on Equality & Diversity, Fairness & Poverty, Environment and Corporate Risk. An impact, positive or negative, on one or more of these issues was identified. An appropriate senior manager has checked and agreed with this assessment. A copy of the Integrated Impact Assessment showing the impacts and accompanying benefits of/mitigating factors for them is included as an Appendix to this report.

6 CONSULTATIONS

6.1 The Council Leadership Team were consulted in the preparation of this report.

7 BACKGROUND PAPERS

7.1 None.

Gregor Hamilton
Head of Planning and Economic Development

Author: Naomi Clarke

Robin Presswood
Executive Director of City Development

Dundee City Council
Dundee House
Dundee

GH/BW/NC/KM

25 October 2023

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INTEGRATED IMPACT ASSESSMENT

Committee Report Number: 210-2023

Document Title: Net Zero Transition Plan 2023-2027

Document Type: Strategy

Description: outlines emissions reduction and action for Dundee City Council by each of the Council's 7 service areas as well as actions relating to climate adaptation, circular economy and just transition.

Intended Outcome: to help the Council reach a target of net zero by 2038 in order to tackle the climate emergency.

Period Covered: 04/09/2023 to 06/09/2027

Monitoring: actions will be logged on Pentana. The Sustainability and Climate Change team will gather data and progress updates annually from key officers in each Service area

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Director Responsible: Robin Presswood, Executive Director City Development, City Development

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EQUALITY, DIVERSITY AND HUMAN RIGHTS**Impacts & Implications****Age: No Impact****Disability: No Impact****Gender Reassignment: No Impact****Marriage & Civil Partnership: No Impact****Pregnancy & Maternity: No Impact****Race / Ethnicity: No Impact****Religion or Belief: No Impact****Sex: No Impact****Sexual Orientation: No Impact****Are any Human Rights not covered by the Equalities questions above impacted by this report? No**

FAIRNESS & POVERTY**Geographic Impacts & Implications**

Strathmartine:	Positive
Lochee:	Positive
Coldside:	Positive
Maryfield:	Positive
North East:	Positive
East End:	Positive
The Ferry:	Positive
West End:	Positive
Positive Implications:	There are actions in this plan that relate to tackling fuel poverty across the City through energy efficiency and low carbon energy. There are also actions relating to the Just transition to ensure climate change is tackled fairly, not disadvantaging any groups.

Household Group Impacts and Implications

Looked After Children & Care Leavers: No Impact

Carers: No Impact

HOUSEHOLD GROUP IMPACTS AND IMPLICATIONS

Lone Parent Families: No Impact

Single Female Households with Children: No Impact

Greater number of children and/or young children: No Impact

Pensioners - single / couple: No Impact

Unskilled workers or unemployed: Positive

There are actions in the plan that address green skills and employment

Serious & enduring mental health problems: No Impact

Homeless: No Impact

Drug and/or alcohol problems: No Impact

Offenders & Ex-offenders: No Impact

SOCIO ECONOMIC DISADVANTAGE IMPACTS & IMPLICATIONS

Employment Status: Positive

With a focus on green skills and jobs, more people could potentially be taken out of unemployment

Education & Skills: Positive

Working with schools and universities to tackle climate change will positively impact education and skills in the green sector

Income: No Impact

Caring Responsibilities (including Childcare): No Impact

Affordability and accessibility of services: No Impact

Fuel Poverty: Positive

There are actions in the plan that impact fuel poverty through energy efficiency improvements of domestic buildings, Local heat and energy efficiency strategies and introducing low carbon heating across the city in the longer term.

Cost of Living / Poverty Premium: Positive

If household energy bills can be reduced through delivery of LHEES projects, this will help reduce the cost of living

Connectivity / Internet Access: No Impact

Income / Benefit Advice / Income Maximisation: No Impact

Employment Opportunities: Positive

Increasing low carbon technology in the city will increase employment opportunities in these areas as we transition away from fossil fuels

Education: Positive

Increasing awareness and education around climate mitigation and resilience.

Health: Positive

There are actions in the plan relating to increasing green space in quantity and quality as well as improving active travel access and infrastructure.

Life Expectancy: Positive

Cleaner air, more green space and more active travel opportunities could contribute to increased life expectancy in the City.

Mental Health: Positive

More access to high quality green space is proven to improve mental health of those that access it. The plan has a number of actions relating to this.

Overweight / Obesity: Positive

Active travel actions in the plan may help to tackle obesity by making it easier for people to walk and cycle round the city.

Child Health: Positive

Safer active travel, clean air and enhanced green spaces may encourage more activity in children, improving health.

Neighbourhood Satisfaction: Positive

Liveable neighbourhoods, more access to green space, facilities and active travel options will all increase communities' satisfaction with their surroundings.,

Transport: Positive

Improving sustainable transport is covered by several actions in the plan.

ENVIRONMENT

Climate Change Impacts

Mitigating Greenhouse Gases: Positive

There are many actions in the plan that will help reduce organisational emissions across energy use, transport use and waste.

Adapting to the effects of climate change: Positive

One of the 4 themes of the plan is Climate Resilience, including associated actions to improve resilience.

RESOURCE USE IMPACTS

Energy efficiency & consumption: Positive

There are several direct actions to reduce energy use and improve efficiency e.g. retrofitting LHEES, etc.

Prevention, reduction, re-use, recovery or recycling of waste: Positive

Circular economy is one of the main four themes of the plan, seeking to reduce waste in the first place.

Sustainable Procurement: Positive

Linking to circular economy, there are actions in the plan to understand and influence the sustainability of suppliers.

TRANSPORT IMPACTS

Accessible transport provision: Positive

Accessible active travel is addressed in the transport section of the plan.

Sustainable modes of transport: Positive

Increasing active travel is at the top of the transport hierarchy.

NATURAL ENVIRONMENT IMPACTS

Air, land & water quality: Positive

Actions relating to improving air quality, and the quality of green and blue space and Biodiversity: Positive

Specific actions relating the enhancing biodiversity in the plan Open & green spaces: Positive

Improving quantity and quality of green spaces is included in the plan.

BUILT ENVIRONMENT IMPACTS

Built Heritage: Positive

Protecting the built environment from climate change is included in the plan Housing: Positive

Protecting housing from climate change and improving the fabric to increase energy efficiency are included in the plan

Is the proposal subject to a
Strategic Environmental
Assessment (SEA)?

No further action is required as it does not qualify as a Plan, Programme or Strategy as defined by the Environment Assessment (Scotland) Act 2005.

CORPORATE RISK IMPACTS

Political Reputational Risk: Positive

Improving resilience to climate change reduced corporate risk of damage or disruption to business due to climatic events.

Economic/Financial Sustainability / Security & Equipment: Positive

Potential to improve financial sustainability in the future due to reducing impacts of climate change and increasing resilience of business, people, nature and infrastructure to climate change already locked in.

Social Impact / Safety of Staff & Clients: Positive

Increasing resilience to storms, flooding, heatwaves Technological / Business or Service Interruption: Positive

Increasing resilience to potential disruption from intense storms and flooding predicted from climate change

Environmental: Positive

Positive impacts across the whole environment - improved air quality, pollution reduction, waste reduction, emissions reduction, improved biodiversity, enhanced nature, reduced flooding.

Legal / Statutory Obligations: Positive

In order to comply with our mandatory Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020, our annual reports must now include:

- the body's target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets;
- where applicable, targets for reducing indirect (Scope 3) emissions of greenhouse gases;
- how the body will align its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets; i€ How the body will publish, or otherwise make available, its progress to achieving its emissions reduction targets; and
- where applicable, what contribution the body has made to helping deliver Scotland's Climate Change Adaptation Programme.

Organisational / Staffing & Competence: Positive

Climate literacy training will be provided/delivered.

Corporate Risk Implications & Mitigation:

The risk implications associated with the subject matter of this report are "business as normal" risks and any increase to the level of risk to the Council is minimal. This is due either to the risk being inherently low or as a result of the risk being transferred in full or in part to another party on a fair and equitable basis. The subject matter is routine and has happened many times before without significant impact.

Dundee City Council

Net Zero Transition Plan 2024-2030



sustainable DUNDEE

Dundee City Council
www.dundee.gov.uk CHANGING
FOR THE FUTURE



Foreword

Since declaring a climate emergency and publishing the city-wide Climate Action Plan in 2019, there have been many unprecedented global challenges that have only magnified the urgency of the climate crisis we face. Recognising this, the new City Plan (2022-2032) and Council Plan (2022-2027) identify tackling climate change and reaching net zero carbon emissions by 2045 **or sooner** as one of its three strategic priorities.

This Net Zero Transition Plan builds on this ambition, committing Dundee City Council to being a net zero organisation by 2038 and will allow Dundee City Council to effectively and decisively lead this transition to a low carbon and climate resilient City.

The plan is an opportunity for Dundee City Council to establish itself as a greener, fairer organisation and provide a clear signal to investors and partners that the Council is open for investments and partnership in low and zero carbon projects, technologies, research and development, and innovative businesses.

The plan will enable the Council to capture and redistribute the benefits of low-carbon investments and energy transition fairly at local level through local, community-led and place-based approaches. The plan recognises the opportunity to be more energy secure through local renewable generation and be more resilient by upgrading our green spaces and critical local infrastructure against the adverse climate.

The plan is also aimed at inviting our suppliers and contractors to join us in the transition to greener, cleaner and fairer Dundee by setting their own emissions reduction targets and net zero plans. High levels of engagement will ensure everyone is empowered to participate in developing and implementing these solutions as well as to reap these benefits. In co-designing solutions, our community will benefit from access to biodiverse green spaces, improved health and well-being, clean air, affordable food and energy and protection from future climate impacts.



A handwritten signature in black ink, appearing to read 'J Alexander'.

Cllr John Alexander
Leader of Dundee City Council



A handwritten signature in black ink, appearing to read 'Greg Colgan'.

Greg Colgan
Chief Executive Dundee City Council



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Introduction

Dundee City Council is committed to becoming a net zero organisation by 2038.

The Council is responding to the pace and scale of the transition required to tackle climate change and meet its statutory targets by developing its own Net Zero Transition Plan. This Plan outlines the Council's organisational approach and emissions reduction programmes to achieve our goal of net zero by 2038.

As global temperatures rise due to increased greenhouse gas emissions, the impacts from our changing climate will be experienced in Dundee, with potential for increased flooding, storms, and extreme heat in the city. The United Kingdom is a signatory of the Paris Agreement, which has set an international goal to limit global warming to well below 2 °C, preferably to 1.5 °C, compared to preindustrial levels.

The Climate Change Act 2008 sets a target of reducing greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050 in the UK. In Scotland the Climate Change (Scotland) Act 2009 and its subsequent amendment, the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, has set net-zero emissions by 2045 with an interim target of a 75% reduction in emissions by 2030, relative to 1990 levels.

There is therefore a statutory duty for the Scottish public sector to align and support the Scottish Government's target of net zero by 2045 or sooner.

The Heat in Buildings Strategy sets targets for all buildings. This includes a target to make public sector non-domestic buildings net zero direct emissions by 2038 and a goal for the large majority of buildings to achieve a good level of energy efficiency, where technically and legally feasible, by 2030.

The Scottish Government also plans to introduce regulations in 2025 to reduce greenhouse gas emissions from heat in non-domestic buildings in line with the legally binding target to achieve net zero greenhouse gas emissions by 2045.

The direct emissions (heating) from the buildings sub-sector accounted for 54% of total Dundee City Council emissions in 2020. By achieving net zero direct emissions from buildings means Dundee City Council will have reduced 54% of emissions by 2038 from its 2020 level.

Electricity use in the building subsector accounted for 25% of total emissions. We assume that there will be a continued reduction in grid electricity emissions factor which will reduce our electricity emissions continuously, even in the BAU scenario.

We are confident that our target of 2038 is an achievable ambition, however all actions are dependent on the continued support from the Scottish and UK Governments.

Aim

Our Net Zero Transition Plan will:

- Set out a clear roadmap for our transition to become a net zero organisation with a set of corporate actions across Net Zero emissions, Circular Economy, Climate Resilience and Just Transition;
- Implement a carbon accounting process that will embed delivery across all our Services;
- Ensure our activities and infrastructure are resilient to a changing climate;
- Engage and involve our staff, customers and the public in our journey to become a net zero organisation; and
- Act as a local leader and support the city of Dundee and Scotland in ambitions for a net zero society.

What is net zero?

Put simply, net zero refers to the balance between the amount of greenhouse gas produced and the amount removed from the atmosphere. We reach net zero when emissions are ideally less than 10% with the residual emissions being removed from the atmosphere by carbon offsetting.



Climate Policy Context

Dundee City Council led on a city-wide Climate Action Plan and has signed various pledges and declarations, demonstrating its commitment to Net Zero.

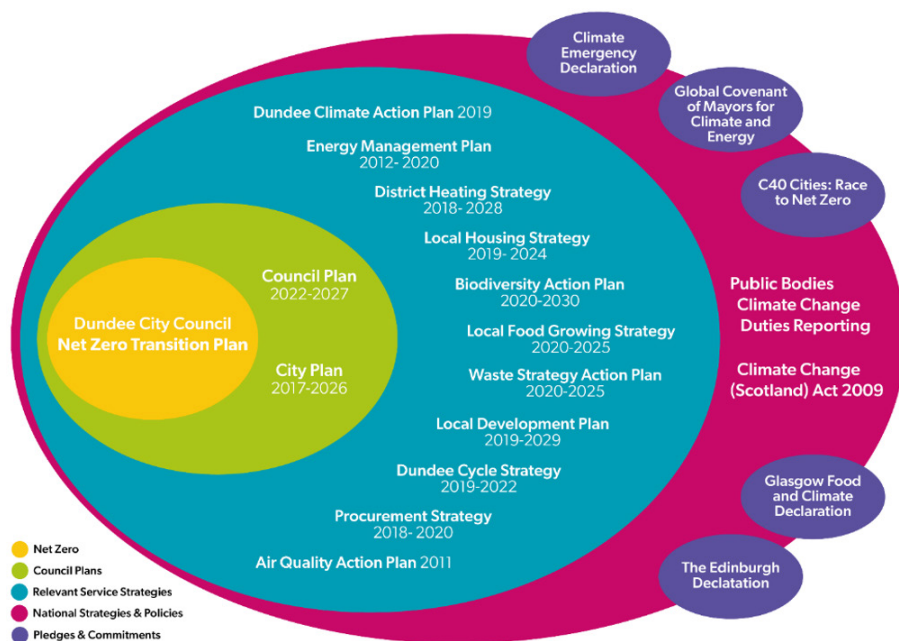


Figure 1: Dundee's plans, strategies and commitments in relation to the Net Zero Transition Plan.

Climate Change Act

In order to comply with our mandatory Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020, our annual reports must now include:

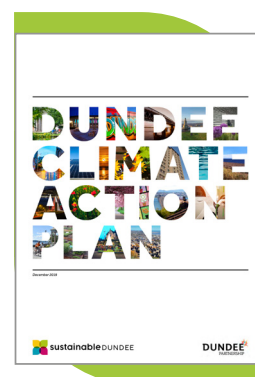
- The body's target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets;
- Where applicable, targets for reducing indirect (Scope 3) emissions of greenhouse gases;
- How the body will align its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets;
- How the body will publish, or otherwise make available, its progress to achieving its emissions reduction targets; and
- Where applicable, what contribution the body has made to helping deliver Scotland's Climate Change Adaptation Programme.

Climate Emergency Declaration

In June 2019 Dundee City Council declared a Climate Emergency recognising the serious and accelerating environmental, social and economic challenges faced by climate change and aligning our targets with the Scottish Governments targets of net zero by 2045 or sooner.

Dundee Climate Action Plan

The city-wide Dundee Climate Action plan, launched in December 2019, was informed by our Baseline emissions Inventory, Risk and Vulnerability Assessment, Strategic Environmental Assessment and public consultation, resulted in 64 actions across the themes of Energy, Transport, Waste and Climate Resilience codesigned with public, private and community organisations across the city.



Pledges and Declarations

In August 2021, Dundee City Council signed the C40 Cities: Race to Net Zero Pledge; The Edinburgh Declaration and the Glasgow Food and Climate Declaration.

Our **Race to Net Zero Pledge** publicly highlights the message that the city of Dundee recognises the global climate emergency and will reduce the cities emissions to net zero by 2045 at the latest. This will be led by partnership working to deliver the Dundee Climate Action Plan.

By signing the **Edinburgh Declaration**, Dundee City Council is committed to halting biodiversity loss and acknowledges it as a powerful driver of climate change and the Climate Emergency. It will continue to fulfil its biodiversity duty under the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2011 and work on actions set out within Dundee's Biodiversity Action Plan 2020-2030 and Dundee's Climate Action Plan.

Signing the **Glasgow Food and Climate Declaration** commits Dundee City Council 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;
- Reducing greenhouse gas emissions from urban and regional food systems;
- Calling on national governments to establish supportive and enabling policy frameworks and multi-level and multi-actor governance mechanisms.

In March 2018, Dundee City Council signed up to the **Global Covenant of Mayors for Climate and Energy**, requiring us to commit to 40% reduction in city wide carbon emissions by 2030 and produce a Climate Action and Adaptation Plan.

Our Emissions

This plan sets out how we will achieve our organisational goal of net zero emissions by 2038 by reducing emissions across these sectors: -

- Stationary Energy – Buildings and streetlighting
- Transport – Fleet, business and service travel
- Waste – Dundee City Council waste (all waste produced by the Council internally and not waste collected as part of domestic or commercial services provided by regulation)

Carbon accounting will also commence for the Council and each of its Services to help identify emissions reduction targets annually. This will help us to work towards setting a carbon budget, which sets a fixed amount of carbon that each Service is allowed to emit over a set period.

Since 2011, Dundee City Council has been required under the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Act to report its progress in emissions reduction from its own operations with around 50% of emissions reduction achieved since the reporting began.

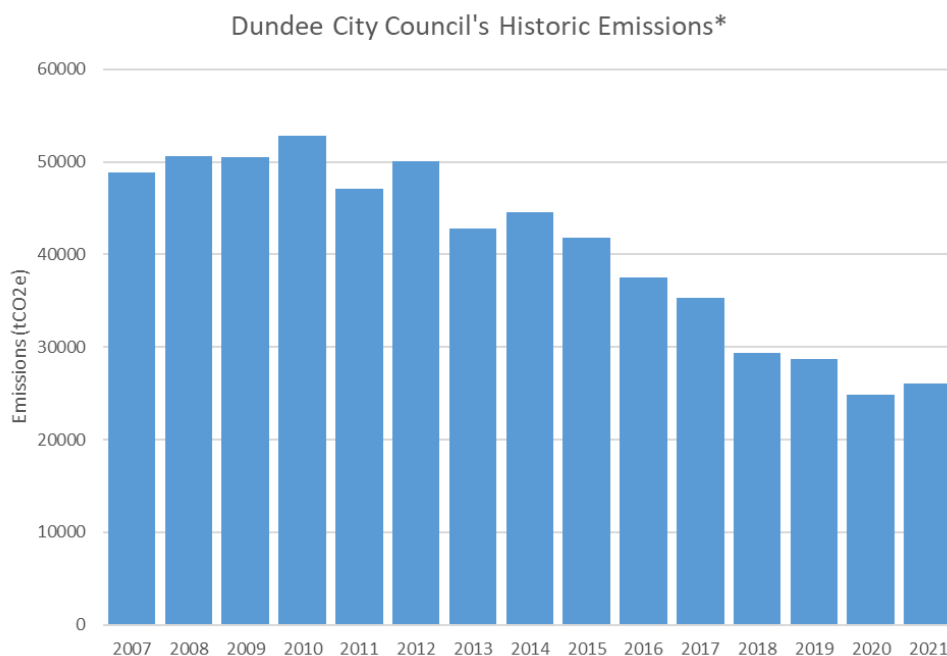


Figure 2: Dundee City Council's Historic Emissions

Figure 2 includes the emissions from the Dundee City Council (buildings, other stationary, fleet, business travel and Dundee City Council waste) and excludes municipal waste.

Figure 3 shows that the emissions are divided into the following three main sectors and five sub-sectors;

1. Stationary

- i. Buildings
- ii. Other Stationary

2. Transport

- i. Fleet
- ii. Business Travel

3. Waste

- i. Dundee City Council Waste

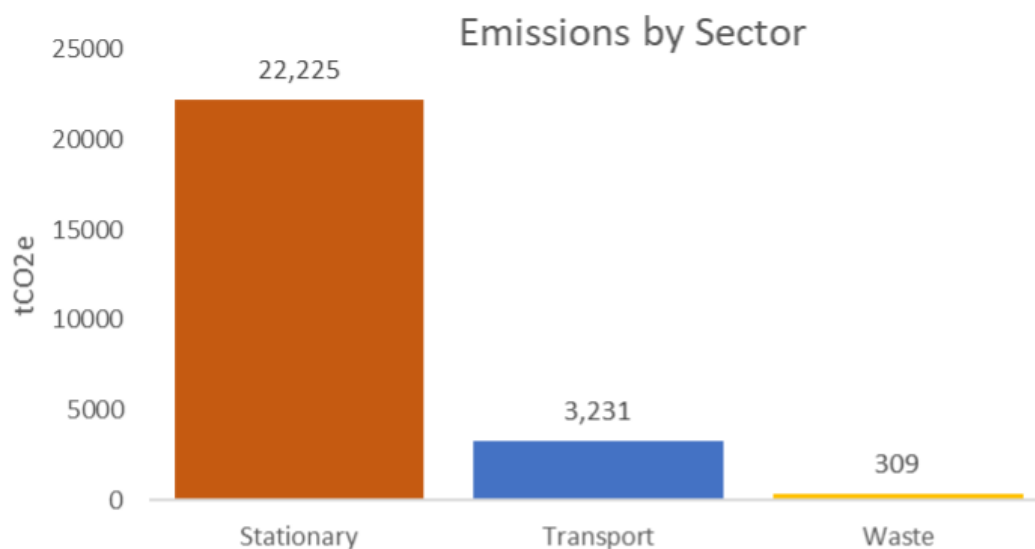


Figure 3: Emissions by Sector

Buildings

The Buildings sub-sector accounted for 79% of total emissions. The emissions from the building subsector mainly comes from the schools, sports and leisure facilities, offices, libraries, sheltered housing, museums and galleries, and community complexes. In terms of activity the natural gas use (Scope 1 emissions) for space and water heating and electricity use (Scope 2 emissions) for lighting and appliances contribute to building sub-sector's emissions.



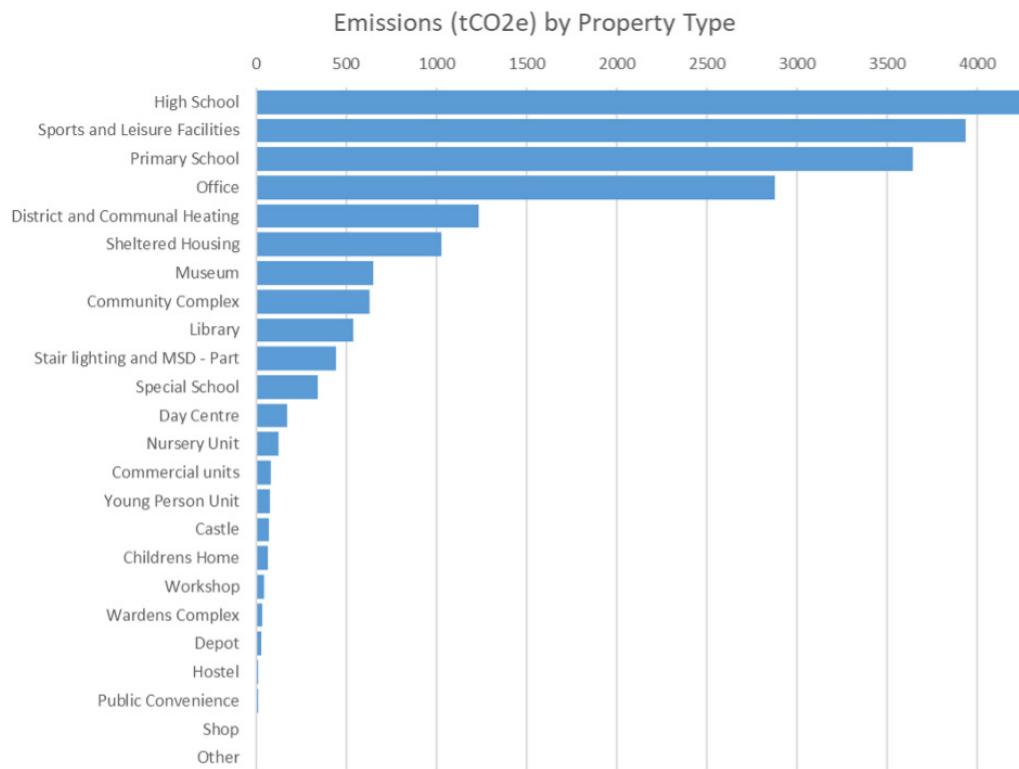


Figure 4: Emissions by Property Type

Buildings With A High Carbon Footprint

- High schools have the highest accumulated emissions footprint mainly because some of them are multi-purpose buildings and have gym, sports and swimming facilities which are used by public.
- The size (floor area) of high schools contributes to their higher emissions. This is seen when we compare the energy consumption with floor area. Although schools have the highest emissions footprint collectively, the median heat intensity of high schools was 135.83 kWh/m²/year which is one of the lowest heat intensities compared to other Council buildings. This suggests that although high schools have a high carbon footprint, the buildings themselves may not necessarily be inefficient, compared to other Council buildings.
- Like the schools, Council offices have collectively large carbon footprints, but they sit in middle in terms of efficiency with median heat intensity of 171.63 kWh/m²/year.

Buildings With High Carbon Footprint, High Heat Intensity And High Energy Bill Relative To Size

- The Council buildings with highest heat intensity (heat demand per meter square per year) are Children's Homes and Sheltered Housing (Residential Homes for Elderly people), Day Centres and Sports and Leisure Facilities suggesting that these buildings require more energy to heat per meter square of floor area than other Council buildings.
- On average this group of buildings' heat intensity was 282 kWh/m²/year while the median heat intensity for all Council buildings was 161 kWh/m²/year. These buildings are also among the buildings with highest emissions footprint meaning they contribute to a large proportion of Council emissions.
- The same group of buildings also have the highest energy cost per meter square per year (£/m²) which suggests that these buildings also have high energy bills. This data suggests that these buildings are likely to be less efficient and need to be prioritised for any energy efficiency and/or decarbonisation plans.

Other Stationary

Other sub-sector accounted for 7% of total emissions. Emissions from Other Stationary sector comes primarily from streetlighting, and Council owned EV charging points. Among Other Stationary sub-sector, Streetlighting accounted for 5% of total emissions. Small amounts of emissions come from cemetery, gardens, CCTV monitors, Air Quality Monitors etc. In terms of activity, grid electricity (Scope 2 emissions) is used for streetlighting and EV charging; natural gas (Scope 1 emissions) is used for certain appliances contributing to 'Other Stationary' sub sector's emissions.

Fleet

The fleet sub-sector accounted for 10% of total emissions. Fuel use by Council owned ICE vehicles is reported as fleet emissions and in terms of activity is classed as Scope 1 emissions. The Council owns various fleet such as vans, refuse trucks, mini-buses, cars,



construction plants and various machineries which contribute to the fleet emissions.

Business Travel

Business Travel accounted for 3% of total emissions. Mileage and fuel cost claimed by Council staff for work-related travel are referred to as Business Travel. These are indirect emissions that come from Council employee business travel when they use different modes of public transport such as bus, taxi, train and air travel. Business travel is classed as Scope 3 emissions.

Waste

Waste accounted for 1% of total emissions. Emissions from waste generated by the Council is separated from emissions from total waste collected as part of domestic or commercial services provided by regulation using the proportion of number of employees working for the Council in Dundee City. Waste is classed as Scope 3 emissions.

Emissions by Scope

Greenhouse gas emissions are classed as into three Scopes; **Scope 1, Scope 2 and Scope 3**, and reported separately to delineate direct and indirect emissions sources and improve transparency. Defining Scopes of emissions also helps the Council to relate the climate actions with different types of climate policies. For example, Scope 1 or direct emissions are primarily related to the Council's own policies and actions, Scope 2 emissions are largely dependent on national policies and external factors such as decarbonisation of national electricity grid and Scope 3 emissions are largely dependent on the market, Council's suppliers, contractors, employee behaviour etc.

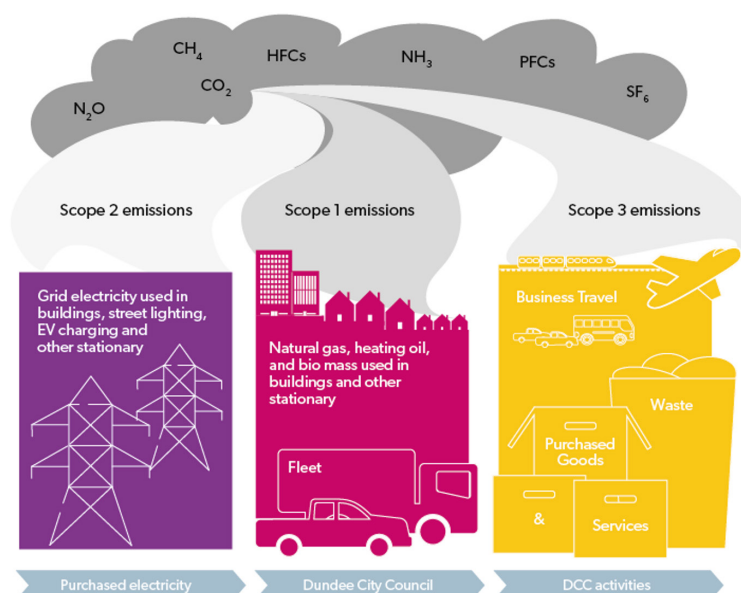


Figure 5: Illustration Of Scope 1, Scope 2 And Scope 3 Emissions Accounted In This Report.

Scope 1 Emissions

Emissions from sources owned or controlled by Dundee City Council are reported as Scope 1 emissions and include the following activities:

- Direct fuel use (natural gas, heating oil and biomass used for heat) in Council buildings
- Direct fuel use (natural gas, heating oil and biomass) in 'Other Stationary' sector
- Direct fuel use (diesel, petrol and gas oil) in Dundee City Council fleet

There is a small proportion of biomass and heating oil used in buildings, this is incorporated in natural gas use in buildings.

Scope 2 Emissions

Emissions from the generation of purchased electricity that is consumed in the Council's owned, or controlled buildings or operations are reported as Scope 2 emissions. They include the following activities:

- Electricity used in Council buildings
- Electricity used in streetlighting and any other stationary Council assets that are not accounted under buildings

Scope 3 Emissions

Scope 3 emissions are often referred to as supply-chain emissions or procurement emissions. Any other indirect emissions that is not accounted in Scope 1 and Scope 2 emissions are reported as Scope 3 emissions. It is usually an optional exercise as normally the Council's Scope 3 emissions would be someone else's Scope 1 emissions. For example, if a Council staff member travels by taxi owned by company A, for business purposes it is Scope 3 emissions for Dundee City Council but for company A the emissions from that travel is Scope 1 emissions.

Dundee City Council is a CDP 'A' List city and takes pride in climate leadership. For transparency and to encourage our suppliers and contractors to take climate actions, we will be reporting more on Scope 3 emissions in the future. In this reporting, based on the availability of data we have reported on the following Scope 3 emissions:

- Grid Electricity Transmission and Distribution Losses
- Staff Business Travel
- Waste

Less than 1% of emissions come from water use and water treatment. This activity is incorporated in electricity use in buildings.

Target

The plan sets a target for Net Zero Dundee City Council by 2038. The following figure shows the pathways to reaching net zero by 2038. We assume that we will reduce 90% of our emissions by 2038 from 2020 level and will offset the remaining 10% emissions.

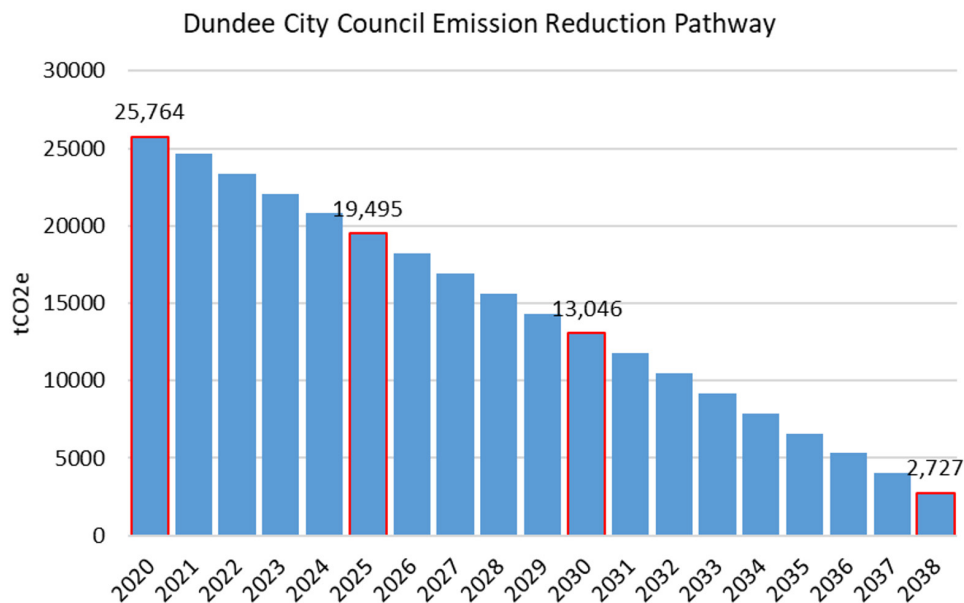


Figure 6: Dundee City Council Emissions Reduction Pathway

Based on the historic trend (see PBCCD report, figure 2) the Council can be fairly confident in an average of 5% emissions reduction per year to reach the target of 90% emissions reduction by 2038 from the 2020 level. We recognise that the decarbonisation of heat in our buildings will play major role in our success of meeting the 2038 target, therefore we are developing a 'Heat decarbonisation plan for Dundee City Council owned non-domestic buildings' to supplement this plan. The heat decarbonisation plan will identify a costed heat decarbonisation pathway for the Council owned non-domestic buildings.

Rationale for Setting a 2038 Target

Local and organisational climate targets are set to align our activities with the global climate ambition, to comply with the Scottish and UK climate change targets and regulations and more importantly to set a pathway that can lead to a desired goal.

The Climate Change Act 2008 sets a target of reducing greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050 in the UK. In Scotland the Climate Change (Scotland) Act 2009 and its subsequent amendment, the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, has set net-zero emissions by 2045 with an interim target of a 75% reduction in emissions by 2030, relative to 1990 levels.

There is therefore a statutory duty for the Scottish public sector to align and support the Scottish Government's target of net zero by 2045 or sooner.

The Heat in Buildings Strategy sets targets for all buildings. This includes a target to make public sector non-domestic buildings net zero direct emissions by 2038 and a goal for the large majority of buildings to achieve a good level of energy efficiency, where technically and legally feasible, by 2030.

The Scottish Government also plans to introduce regulations in 2025 to reduce greenhouse gas emissions from heat in non-domestic buildings in line with the legally binding target to achieve net zero greenhouse gas emissions by 2045.

The direct emissions (heating) from the buildings sub-sector accounted for 54% of total Dundee City Council emissions in 2020. By achieving net zero direct emissions from buildings means Dundee City Council will have reduced 54% of emissions by 2038 from its 2020 level.

Electricity use in the building subsector accounted for 25% of total emissions. We assume that there will be a continued reduction in grid electricity emissions factor which will reduce our electricity emissions continuously, even in the BAU scenario.

2038 is an achievable, science-based target which is aligned with the Paris Agreement and the Scottish Government target, however all actions are dependent on continued support and funding from the Scottish and UK Governments.

Interim Target

An interim target is set for 50% emissions reduction by 2030 from the 2020 level. The plan will be reviewed every two years.



Our Approach

Methodology

The Plan follows the key principle of the Greenhouse Gas Protocol Corporate Reporting Standard and the Scottish Government's Public Sector Leadership on the Global Climate Emergency Guidance. Figure 7 shows the methodology framework applied to develop the Net Zero Transition Plan.

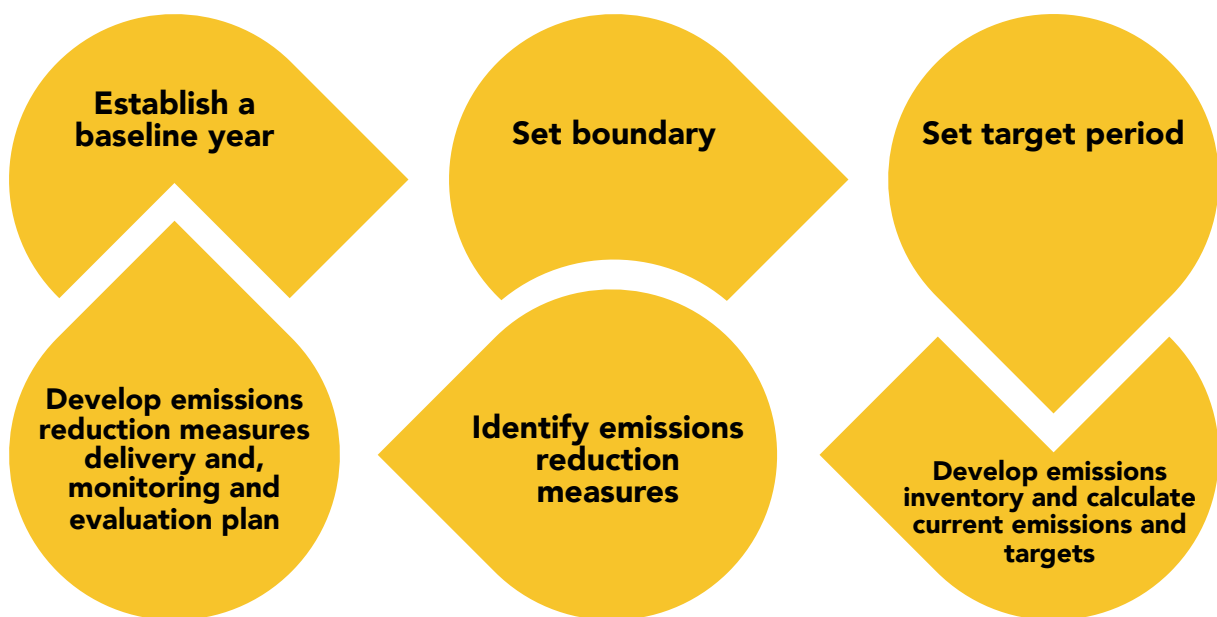


Figure 7: NZTP Methodology Framework

Baseline Year

The baseline year is used as a basis for setting and tracking progress towards a Greenhouse gas target and the year 2020/2021 is chosen as a baseline year for this purpose.

From the comparison of these two years of the COVID19 pandemic, and considering the Council's formal adoption of hybrid working practices, we can see that our emissions have fluctuated but haven't significantly exceeded past trends. Therefore, we are confident that **2020/21** represents our normal year and will be taken as the baseline year for our calculations.

Organisational Boundary

It is difficult to establish an organisational boundary of a local authority for greenhouse gas emissions if we are going to account for all of the Scope 1, Scope 2 and Scope 3 emissions, due to its wider influence on emissions. Therefore, as a first step the plan accounts for the greenhouse gas emissions from **operations over which the Council has control**. This includes all our Scope 1 and 2 emissions and some of our Scope 3 emissions. The plan does not account for greenhouse gas emissions from operations in which the Council owns an interest but has no control.

On this basis, the Council's operational boundary can be defined as the activities and operations of services operating in the Council's physical boundary. It is important to note that the Council does not have the full authority to introduce and implement all operating policies at the operation of two of its services - Dundee Health and Social Care Partnership and Leisure and Culture Dundee. In such case, the plan only accounts for emissions from a source over which the Council has direct operational control.

Operational Boundary

After setting an organisational boundary we are able to determine our operational boundary, which refers to the Council's operations and activities that are responsible for emissions and which emissions have been accounted for in the plan.

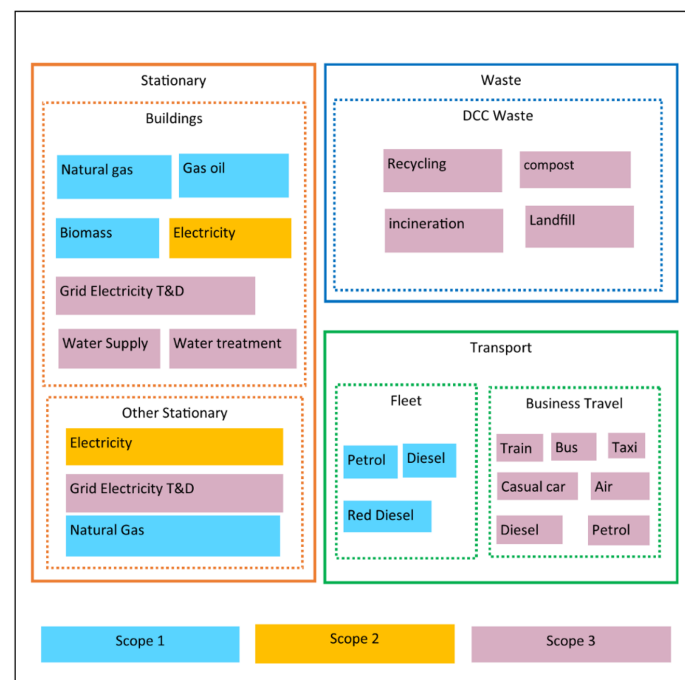


Figure 8: Operational Boundary

Service Workshops

Workshops were held with each Service Management Team to inform the Net Zero Transition Plan, providing the initial steps in co-designing actions. They took the form of brief presentations, audit and discussion of Service contribution to Climate Vision, Awareness and Training, Performance Management and Improvement, Actions, Partnership Working/Stakeholder Engagement, Governance and Accountability. They provided valuable insight into the challenges faced by each Service to contribute to the Net Zero target, as well as innovative solutions and collaborative opportunities to overcoming these. The Sustainability and Climate Change team collated and refined the actions to produce a draft high-level sectoral list of Net Zero Transition Plan (NZTP) actions and more detailed service level actions for the carbon accounting.

Exclusions/Limitations

Housing

- In this carbon accounting, only emissions sources over which the Council has direct operational control has been accounted.
- The Council owned social housing sector has not been accounted, because the tenants have direct control over the operation of those dwellings. We recognise that the Council ultimately has the responsibility to make sure that the Council owned social housing are as carbon neutral as reasonably possible.
- Currently the Council is working towards decarbonising, improving fabric and thermal efficiency and tackling fuel poverty in the Council's social housing stock through various programmes such the Home Energy Efficiency Programme : Area Based Schemes (HEEPS:ABS) and the Energy Efficiency Standard for Social Housing (EESH2). The aim is to look in detail and present a separate plan for decarbonisation of the Council's social housing stock following completion of the review of EESH2 next year, which will inform the requirements for the sector.

Procurement

- Supply chain / procurement emissions and construction emissions have not been accounted in this report due to the lack of data. It is acknowledged that the supply chain emissions can account for the biggest proportion of the Council's emissions and the Council has a responsibility to remove and or reduce its supply chain emissions as far as reasonably possible.
- An action has been set for the Council to collect data on its supply chain and construction activities, identify emissions reduction action plans and include those emissions and emissions reduction actions when the current NZTP is reviewed.
- Fugitive emissions such as the equipment leaks from joints, seals, packing, and gaskets; methane emissions from venting; hydrofluorocarbon (HFC) emissions during the use of refrigeration and air conditioning equipment; and methane leakages from gas transport have not been accounted in this report. It is our intention to capture such emissions in the next accounting.

Mitigation Actions We Will Take

Mitigation means reducing the climate change by either reducing the sources of greenhouse gas emissions or by enhancing the greenhouse gas sinks. These actions are subject to availability of funding and support from the Scottish and UK Governments. Appropriate teams will identify funding opportunities as they become available.

Reducing Emissions Sources

We have identified the following activities as sources of Council emissions:

1. Heat in Buildings: Direct fuel use (natural gas, heating oil and biomass used for heat) in Council buildings
2. Direct fuel use (natural gas, heating oil and biomass) in 'Other Stationary' sector
3. Direct fuel use (diesel, petrol and gas oil) in Council fleet
4. Electricity used in Dundee City Council buildings
5. Electricity used in Other Stationary - streetlighting, EV charging and any other stationary Council assets that is not accounted under buildings
6. Staff Business Travel
7. Waste

The above seven sources are categorised as 'Activities' and a separate emissions reduction pathway and target is set for each Activity, to reach net zero.

One more source of emissions is accounted in this report.

1. Grid Electricity Transmission and Distribution Losses

This source is accounted and included in activities 'electricity used in buildings and electricity used in other stationary', however, a separate pathway or emissions reduction target is not set for this because this is not under the control of the Council.

Enhancing the Greenhouse Gas Sinks / Offsetting

This plan acknowledges that not all emissions sources can be reduced or removed completely, therefore a certain amount of Council emissions must be compensated by enhancing the greenhouse gas sinks that accumulate and store these emissions. Examples of greenhouse gas sinks are forests, wetlands, rivers, sea, peatlands etc. By enhancing the greenhouse gas sinks we can remove the emissions from atmosphere and lock-in carbon in different forms such as in forest in the form of timber. The process of enhancing greenhouse gas sink is referred to as offsetting in this plan.

In this plan an emissions reduction target and an offsetting target for each Activity is set below.

Due to lack of data and resource, full offsetting plans and pathways have not been developed in this plan. A full offsetting plan identifying the offsetting opportunities (greenhouse gas sinks) in or near Dundee, commercial and regulatory issues etc will be developed in the next plan.

Stationary

The mitigation plan for the stationary sector has been divided into the following activities:

1. Heat in Buildings
2. Electricity in Buildings
3. Natural Gas in Other Stationary
4. Electricity in Other Stationary

Heat in Buildings

Heat in building generally refers to the natural gas used for space and water heating in the Council buildings. This is the Scope 1 (direct) emissions and the biggest single emissions source for the Council accounting for 54% of total emissions. There is a small proportion of gas oil and biomass used for heating some Council buildings which is merged in this activity. Apart from direct fuel use, the communal heating systems accounting for 4.6% of total emissions (see figure 4, emissions by property type) are also accounted in this activity. As most of the communal combined heat and power (CHP) plants are new, we expect them to run until around 2038, therefore we assume that the ~5% emissions from communal and district heating will remain in 2038 and will have to be compensated by carbon offsetting or insetting.

Target	Net Zero Direct emissions(Heating) by 2038
Current natural gas (heating) emissions	13,893 tCO ₂ e
Emissions reduction target	95 % reduction by 2038 from 2020 level
Yearly reduction required	-5.3%

Heat in Buildings – Organisational Actions

Action	Heat in Buildings	Responsible
OH1	Develop a fully costed heat decarbonisation plan considering the retrofit, heating systems, renewables, management and storage opportunities for the Council owned and operated non-domestic buildings.	Energy Management, City Development
OH2	Continue to improve the fabric and thermal energy efficiency of the Council buildings through energy efficiency retrofit.	
OH3	Replace existing natural gas, coal and oil heating systems with low or zero carbon heating system (heat pumps, solar thermal and hybrid or combined systems).	
OH4	Continue to connect the Council buildings to existing or new heat networks.	
OH5	Install smart and flexible heating systems combining energy storage (battery and thermal storage) and on-site renewables	
OH6	Continue to identify and implement appropriate smart thermal control, energy management and behaviour change in the buildings.	
OH7	Consider the outputs of the Local Heat and Energy Efficiency Strategy (LHEES) and Local Area Energy plan (LAEP) to identify and pinpoint the Council buildings suitable for connecting to larger (city-wide) heat networks.	
OH8	Establish the local leadership for the management of heating systems in multi-purpose, multi-occupancy and PPP buildings.	

Electricity in Buildings



Electricity in building refers to the use of grid electricity in Council buildings. This is Scope 2 (indirect) emissions and the second biggest source of emissions, accounting for 25.2% of the total emissions. The increased renewable electricity UK generation, primarily from wind, is resulting in an average annual decrease of ~7% in the electricity grid emissions factor in the last decade and we can assume this trend will continue in future. Considering the grid decarbonisation trend and the actions below, we assume that the Council will reduce emissions from electricity in buildings by 95% by 2038 from 2020 level.

Target	Net Zero Direct emissions(Heating) by 2038
Current electricity emissions	6,534 tCO ₂ e
Emissions reduction target	95 % reduction by 2038 from 2020 level
Yearly linear reduction required	-5.3%

Electricity in Buildings - Actions

Action	Electricity in Buildings	Responsible
OE1	Advance the energy intensive appliances' energy efficiency in the Council buildings through energy efficiency upgrades, maintenance and replacement where applicable.	Energy Management, City Development
OE2	Extend appropriate smart lighting and appliance control, energy management and behaviour change in the buildings.	
OE3	Establish the local leadership for the management of appliances and lighting in multi-purpose, multi-occupancy and PPP buildings.	
OE4	Install on-site renewables (solar PV) and energy storage (batteries and thermal storage) in the buildings where feasible.	
OE5	Continue to replace existing inefficient appliances and products with higher energy rating appliances and products where possible.	

Other Stationary Sector Decarbonisation Pathways

Other Stationary Sector - Natural Gas

Around 1% of the total Council emissions comes from natural gas used in 'Other Stationary' sector. The activities include certain appliances that can't be classed as or related to buildings, occasional water pumps, odd plants, cemetery etc. This activity is classed as Scope 1 (direct) emissions.

Target	Net Zero Other Stationary Direct (Natural Gas) emissions by 2038
Current emissions	137 tCO ₂ e
Emissions reduction target	95 % reduction by 2038 from 2020 level
Yearly reduction required	-5.3%

Other Stationary Sector - Electricity

The electricity emissions from 'Other Stationary' sector accounts for 6.7% of total Council emissions. This activity is classed as Scope 2 emissions and comes primarily from Streetlighting and EV charging. The Council has almost completed the Streetlighting upgrading with the latest available technology and there is virtually no emissions reduction possible from further projects. On the other hand we assume that the emissions from EV charging will grow in the coming years. We also consider that there will be a continued decrease in grid electricity emissions factor in future. Based on these three assumptions we can predict that although some of our EV charging related emissions increase and existing streetlighting emissions will be compensated by decrease in grid emissions factor, there will still be around 78% emissions remaining by 2038 which needs to be offset.

Target	Net Zero Other Stationary (Electricity) emissions by 2038
Current emissions	1,729 tCO ₂ e
Emissions reduction target	22% reduction by 2038 from 2020 level
Yearly reduction required	-1.2%

Other Stationary Sector – Actions

Action	Other Stationary Sector	Responsible
OS1	Continue to install smart and flexible systems combining energy storage and onsite renewables in car parks and EV charging hubs.	Energy Management, City Development
OS2	Replace existing natural gas, coal and oil system with low or zero carbon system where possible.	
OS3	Continue to identify and implement appropriate smart control, energy management and behaviour change.	
OS4	Continue to upgrade lighting with more efficient lighting system, where appropriate.	

Transport



The mitigation plan for Transport sector has been divided into the following activities

1. Fleet
2. Business Travel

Fleet Decarbonisation Pathways

Fuel use by Council owned ICE vehicles is reported as fleet emissions and in terms of activity is classed as Scope 1 emissions. Fuel use by the Council fleet is the third largest source of emissions accounting for 10% of the total Council emissions. The Council has made a significant progress in its aim to have all small vans and cars EV. Currently 73% of cars (80 out of 109 cars), and 14% of vans (72 out of 494 vans) are EV. Based on the fleet decarbonisation plans we have set a target to remove 95% of emissions from fleet. This target is, dependant on the electric HGVs and construction plant costs reducing to competitive levels.

Target	Net Zero direct (fleet) emissions by 2038
Current total emissions	2,489 tCO ₂ e
Emissions reduction target	22% reduction by 2038 from 2020 level
Yearly reduction required	-5.3%

Business Travel Emissions Reduction Pathway

Mileage and fuel costs claimed by Council staff for work-related travel are referred to as Business Travel. This activity is classed as Scope 3 (indirect) emissions and accounted for 2.9% of total Council emissions. Decarbonisation of this activity is largely dependent on external factors such as public EV ownership, decarbonisation of public transport, employee behaviour change, incentives etc. The Sustainable Transport and Roads team at the Council forecast that the public EV ownership will be 43% in 2030, 72% in 2035, 91% in 2040 and 100% in 2045. Public EV ownership should correlate to the same emissions reductions from employees' vehicles used for business use therefore we have set a target of 80% emissions reduction by 2038 from this activity.

Target	Net Zero business travel emissions by 2038
Current emissions(tCO ₂ e)	674
Emissions reduction target	80% reduction by 2038 from 2020 level
Yearly reduction required	-4.4%

Actions: Transport Sector

Action	Other Stationary Sector	Responsible
OT1	Continue to replace existing ICE cars and vans, diesel refuse trucks and minibuses with low emissions vehicles.	Fleet Manager, City Development
OT2	Expand EV infrastructures to support the increasing numbers of EV fleet.	
OT3	Expand active travel infrastructure throughout the City.	Senior Manager – Transportation, City Development
OT4	Incentivise the use of public transport.	
OT5	Domestic flights for business travel only when no other options possible.	

Waste Emissions Reduction Pathway

Although waste currently accounts for around 1% of total Dundee City Council emissions, decreasing waste can have a significant wider influence in reducing procurement and supply chain emissions, construction emissions and embedding a circular economy. We aim to reduce 70% of emissions from this activity. But due to lack of data the confidence on this target is low. We have acknowledged this factor and aim to improve the waste data and reset the target in future.

Target	Net Zero Waste emissions by 2038
Current waste emissions(tCO ₂ e)	309
Emissions reduction target	70% reduction by 2038 from 2020 level
Yearly linear reduction required	-3.9%

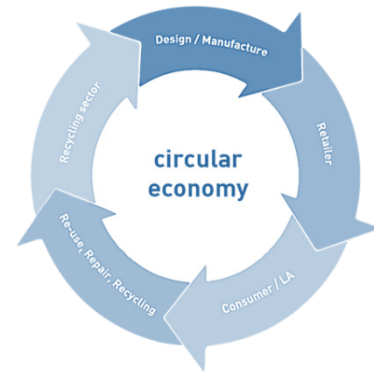
Actions: Waste

Action	Waste	Responsible
OW1	Identify further opportunities for reducing the generation of waste in Council facilities/buildings/premises.	Waste team, Neighbourhood Services
OW2	Extend waste awareness campaigns across schools, businesses, universities and communities.	
OW3	Identify baseline data for Council waste production.	
OW4	Reduce food waste in food provision services in partnership with Tayside Contracts.	
OW5	Ensure full recycling facilities are available in all Council buildings.	



Procurement/Circular Economy

Our current linear economic model (take, make and dispose) is inherently unsustainable, leading to price volatility, reduced access to finite raw materials and rising waste disposal costs. In Scotland, 80% carbon footprint comes from goods and services we consume. This includes the heat and energy required to grow, make, process, transport and provide them.



The circular economy offers an alternative model based on responsible production where businesses which supply products and services get the maximum life and value from the natural resources used to make them through design, recovery and regeneration. The goal of a circular economy is to design out waste.

Local Authorities have a key role to play in enabling the transition to a Circular Economy both internally and externally with their responsibility in delivering public services across sectors; in particular:

- Responsibility for the needs of residents, visitors and businesses
- Local employment
- Investment and access to funding streams
- Procurement
- Embedding local strategy and policy levers
- Existing local stakeholder networks
- Climate emergency declarations, net zero agenda
- Influence over consumers

Procurement is one of the biggest areas we can influence this transition; by asking different questions, suppliers can be encouraged to redesign their products and closed loop value chains can arise. In turn, this can result in efficiency and cost savings for the Council as well as a reduction in our indirect (Scope 3) emissions associated with our purchasing of goods and services.

How does Circular Economy link to Carbon and Net Zero?

The Circularity Gap Report 2021 states that a business-as-usual approach will result in **65 billion tonnes** of GHG emissions in 2030, leading towards a **3°C** rise in global temperature; globally, we are using **100 billion tonnes** of materials/year. However, by doubling global circularity from 9% to 17% there is potential to reduce global emissions by **32%** by 2032 and help ensure we steer well **below a 2°C** temperature rise.

The bulk of most organisation's carbon emissions are in their supply chain. Currently, these emissions relating to procurement are currently not captured or reported, however under the new PBCCD reporting guidelines, this is now a requirement. We therefore must try to estimate our Scope 3 emissions related to purchasing.

This carbon accounting exercise will involve scrutinising processes, holdings and supply chains to work out where they are being most wasteful with carbon, then taking action to reduce this carbon. This should lead to significant reductions in carbon pollution from businesses activities, and potentially significant cash savings.

Circular Strategies

There are nine recognised strategies to help develop and integrate the circular economy:



A carbon accounting exercise will help to identify opportunities to embed these strategies across services and realise the benefits of doing so.

Opportunities of a Circular Approach

The benefits of a circular approach are far reaching, creating fair, sustainable employment, reducing waste and enhancing communities. Specific benefits of embedding circular principles across services include:

- Reuse existing assets - saving costs on disposal
- Reduced cost through equipment re-use and sharing
- Lower building operating costs by considering long term management at the design stage
- Reduced costs around rationalisation of building assets
- Reduced costs through life extension of materials and products
- Alleviate potential raw material supply risks
- Innovation - new products, technologies and services; business opportunities
- Creates new jobs
- Environmental benefits - reduced waste and pollution

Circular Procurement Actions We Will Take

Action	Circular Procurement	Responsible
OP1	Map procurement activities through a carbon accounting exercise to identify Scope 3 emissions and carbon hotspots in key spend areas.	Procurement Team, Corporate Services
OP2	Establish a Corporate Procurement Strategy Group (CPSG) that will lead on work on Scope 3 emissions in line with the Net Zero Transition Plan.	
OP3	Implement policies to ensure sustainable materials and design in construction i.e., a whole life costing approach.	
OP4	Develop tender process to include net zero criteria for companies bidding.	
OP5	<p>Deliver the Council's Community Wealth Building Action Plan to "use public procurement to shape the market around improved sustainability and low carbon"</p> <ul style="list-style-type: none"> • Provide the Procurement team training in Sustainable Procurement policy and practice. • Explore opportunity to incorporate an environmental weighting into Council contracts at scale alongside support for generative zero or low carbon suppliers in the city. 	

Carbon Accounting by Service

The Council will begin a process of carbon accounting for each service over the next two years with the aim of working towards setting an annual target for reducing our carbon emissions for each service in order to reach the Net Zero target by 2038. This **carbon budget** will work as a governance system to drive effective implementation of actions to deliver the Council's targets in the Net Zero Transition Plan.

Carbon Accounting Summary

By recommending emissions reduction actions for each Service and measuring the carbon emissions annually, we will gain a better understanding of how the pathway to Net Zero will progress.

When in place, Dundee City Council's Carbon Budget will restrict the total amount of greenhouse gases that can be emitted by the Council and its Services annually from an agreed date. The carbon budget will be disaggregated by the Council's seven Services and by the emissions sources and activities.

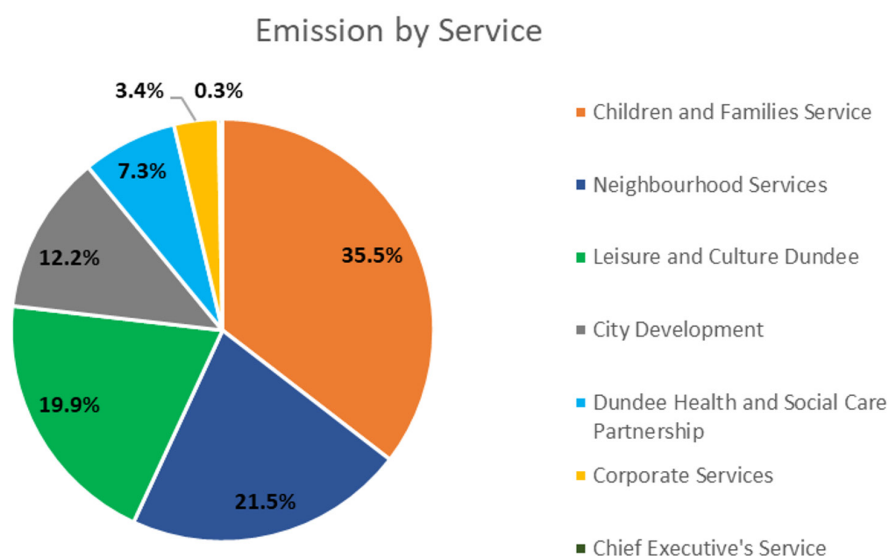


Figure 9: Percentage Of Emissions by DCC Service

To begin this process, each Service is provided with the baseline accounting of the amount of CO₂e each Sector, Sub-sector and Activity under their operational control is attributed. A pathway of emissions reduction is suggested for each Service by each emissions source. Then a list of actions to reduce emissions to remain under the allocated annual carbon budget is recommended.

The Scope of the Council Carbon Accounting includes:

1. Annual reviews to track progress and adjust figures as carbon accounting evolves.
2. After a set period, align the Council's annual carbon budget with its annual financial budget.
3. Provide a governance structure to the organisational climate actions.
4. Allocate a fair responsibility to Council Services based on their contribution to the organisation's total emissions and their operational power and influence.
5. Encourage Services to align their financial spending to their own carbon budget.

It is worth noting that although we can calculate the total emissions by source of emissions for each Service and provide the pathways and required action for reaching net zero by each source, in this carbon account, we have not been able to calculate the emissions saving from each of the proposed actions.

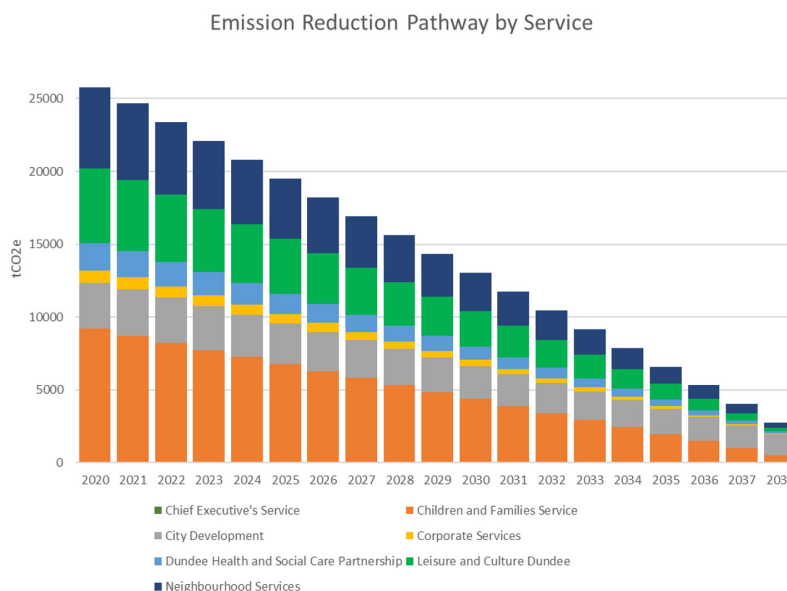


Figure 10: Proposed annual carbon budget by Dundee City Council Services

For recommended actions for each Service, please see Appendix A.

Building Our Climate Resilience

Adapting to climate change will be necessary regardless of how much we manage to cut our carbon emissions. This is because historic emissions have already changed our climate and will continue to do so in the decades to come. The increased temperatures, rainfall and number of intense storms that will be experienced in Dundee will impact service delivery, buildings, infrastructure, communities and the natural environment. Embedding climate resilience strategies across the organisation will reduce risks and vulnerability to these unavoidable impacts as well as provide many benefits, including business continuity, improved health and wellbeing, enhancing biodiversity and protecting our natural environment, cleaner air, food security and many new employment opportunities.

As well as the desire to avoid the excessive costs of the impacts of climate change on our organisation, the local economy, our communities and our environment, the Council has a commitment under the EU Covenant of Mayors for Climate and Energy to develop an action plan that encompasses adaptation and a statutory duty under the Climate Change (Scotland) Act to deliver and report on our adaptation programme.



Image: Broughty Ferry Flood Protection Scheme and Active Travel Scheme

Climate Risk and Vulnerability Assessment (CRVA)

To estimate how this changing climate would impact the Council and wider city a Risk and Vulnerability Assessment was carried out in 2018 that involved a series of sector specific workshops in a multi-agency approach with public, private and community organisations that focussed on the impacts on 10 policy sectors shown below.



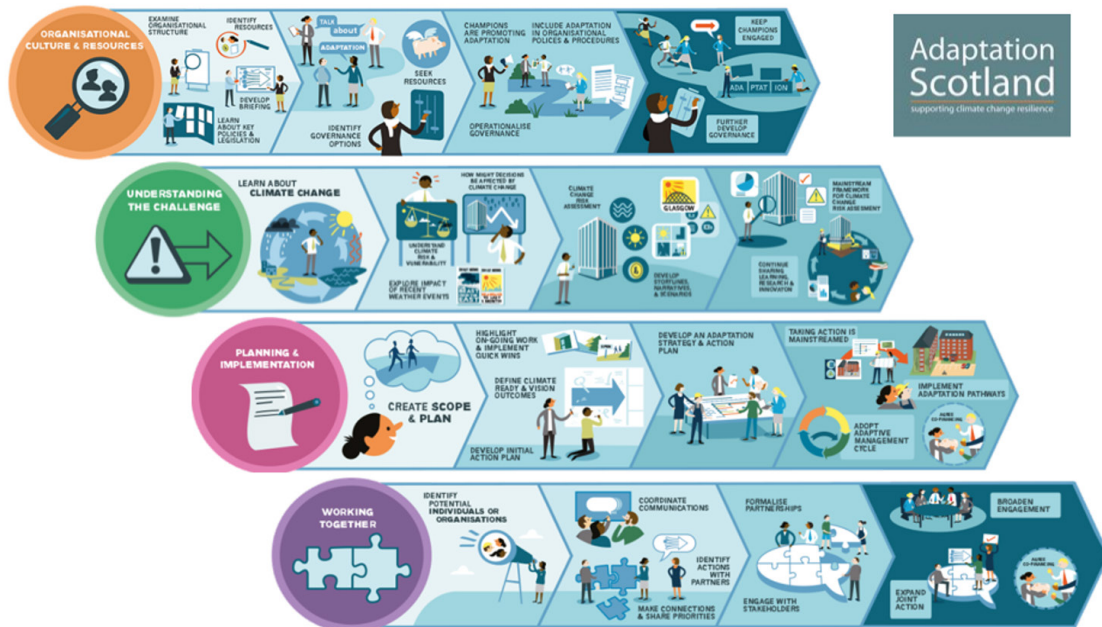
The output from this 2018 CRVA was captured and translated into the Dundee Climate Action Plan and with 21 actions including the Biodiversity Action Plan, Food Growing Strategy, Green infrastructure Projects, fabric improvements in buildings and local health and well-being as well as food security.

Embedding Climate Resilience Across Our Organisation

With the organisational focus of this Plan, there is an opportunity to embed climate resilience of people, land, infrastructure, and buildings across all our Services. To achieve this, we will refresh the Climate Risk and Vulnerability Assessment to reflect:

- our increased understanding of risk since the COVID-19 epidemic;
- the increased urgency of the climate emergency;
- the broader expertise we now have access to through our expanded networks and partnership working as well as new tools that are available.

To refresh the Climate Risk and Vulnerability Assessment we will utilise support offered by Adaptation Scotland, a programme funded by the Scottish Government offering research, tools and resources. The Adaptation Capability Framework, (diagram below) will be used as a guide to increase our adaptation response.



The Framework describes several tasks to develop these capabilities over four stages from starting to mature to help guide public bodies in embedding adaptation across services. We have conducted a Benchmarking exercise with internal officers to understand where we are on the Framework and identified several steps to help us progress through the capabilities



Nature-Based Solutions

Nature-based solutions (NBS) will be at the heart of our adaptation response, encompassing actions to protect, sustainably manage, or restore natural ecosystems, through planting and landscaping.

The Broughty Ferry Dune Restoration is a prime example of an NBS, where natural measures to improve flooding also enhances biodiversity.

In March 2023, a Natural Capital Baseline Assessment of Dundee was carried out as a starting point to future adaptation planning. This provided a full account of the ecosystem services and biodiversity in the city's green space, helping to identify opportunities for carbon storage and sequestration, soil erosion prevention, flood risk reduction, important areas for pollinators, important biodiversity habitats and potential connectivity.

This will inform "Liveable Neighbourhoods" in Planning, where areas are co-designed with communities to be more people-centred and more 'liveable'; safe, healthy, inclusive, attractive places with clean air, quality green spaces that are easy to get to without a car and community focussed.



Resilience Actions We Will Take

Action	Resilience	Responsible
R1	Identify a lead from each Service Area to form a Climate Resilience Working Group and provide the necessary training to allow them to apply adaptation in their service.	Sustainability and Climate Change Team,
R2	Undertake a follow up Natural Capital Baseline Assessment in March 2026 to monitor the impact of interventions on ecosystem services in Dundee.	City Development
R3	Update the Climate Risk and Vulnerability Assessment, identify priorities for action and refresh the adaptation plan.	
R4	Apply Adaptation Scotland's Workplace Toolkit across All Service Areas.	
R5	Work with regional partners to develop Tayside Adapts – a regional approach to adaptation.	

Just Transition

The effects of climate change disproportionately affect vulnerable groups in society and can exacerbate economic and other social inequalities. As a public sector organisation, we have a responsibility to ensure that our Net Zero Transition Plan reflects how we will take account of its implications for people, including employees and the wider community.

This plan endeavours to be fully inclusive and benefit the most vulnerable by anticipating, assessing and addressing the social risks of the transition; identifying and enabling the social opportunities of the transition; and ensuring meaningful dialogue and participation in net zero planning.

Climate Change will have a greater impact on the more vulnerable members of society as shown on Dundee's flooding vulnerability map below.

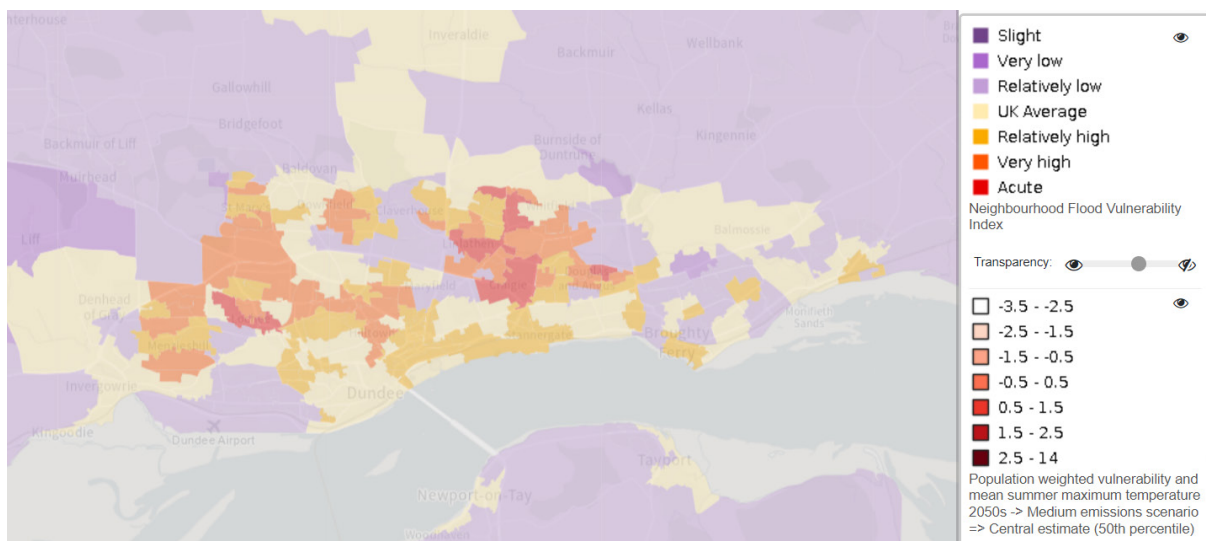


Figure 11: Dundee's Flood Vulnerability Map, taken from www.climatejust.org.uk.

The neighbourhoods with high flood vulnerability, map quite tightly onto Dundee's SIMD (Scottish Index for Multiple Deprivation) areas and most of Dundee will be affected similar or worse to the UK average. These households tend to be less prepared and without the necessary resources to fix damage caused or deal with large weather events. There are also issues around physical and mental health, plus contamination, infection, and other hazards such as mould if dampness is not addressed.

In addition, many of the jobs and skills that exist today will be redundant in the future as technologies change, for example, increased renewables, electric vehicles and digitisation of services. It is therefore vital to ensure that the current and future workforce have access to green skills training.

The current cost-of-living crisis has been exacerbated by rising energy costs; a just energy sector transition will provide a fairer energy system for all. Low carbon renewable energy production and/or export must benefit local communities.

A Just Transition, where we build economic, health and wellbeing resilience amongst the entire population must be at the core of the Net Zero Transition Plan.

Just Transition Actions We Will Take

Action	Just Transition	Responsible
JT1	Explore how participatory budgeting could align with community wealth building.	Procurement, Corporate Services Communities, Neighbourhood Services
JT2	Monitoring the impact of just transition in support of socio-economic gaps.	Chief Executive Services
JT3	Delivery of City Plan and Council Plan recognise just transition.	Chief Executive Services
JT4	Fairness Leadership Panel – unite Just Transition and Fairness Agenda.	Chief Executive Services
JT5	Identify opportunities e.g., MSIP, for future employability skills and retraining the workforce.	Economic Development, City Development
JT6	Consider accessibility of climate related options e.g. adapted bikes.	Sustainability and Climate Change team, City Development

Engaging Our Staff, Communities and Partners

This Net Zero Transition Plan is aimed at Council staff and our organisational ability to influence the wider community.

Research by the Climate Change Committee estimates that more than 60% of emissions reductions will need to come from societal change in order to meet the Net Zero challenge. The latest results from the Scottish Household Survey show that 68% of adults in Scotland now agree that climate change is an immediate and urgent problem, up from 46% in 2013. However, this concern is not matched by an increase in people acting on climate change. The challenge is to normalise behaviour that reduces climate change.

The Council will commit to its local outreach and engagement efforts to support local projects and develop local behavioural change campaigns to engage communities and organisations to participate on the cities path to net zero.

Our Staff

Through climate literacy training and associated workshops, climate change and sustainability will become embedded throughout the organisation so that every employee incorporates sustainable practices into their day-to-day. New staff will have sustainability embedded within their job descriptions from the beginning. The integration of green and sustainable skills within job descriptions will be critical moving forward to ensure that the new workforce is equipped to help move the organisation towards a net zero future, and ensure it remains there.



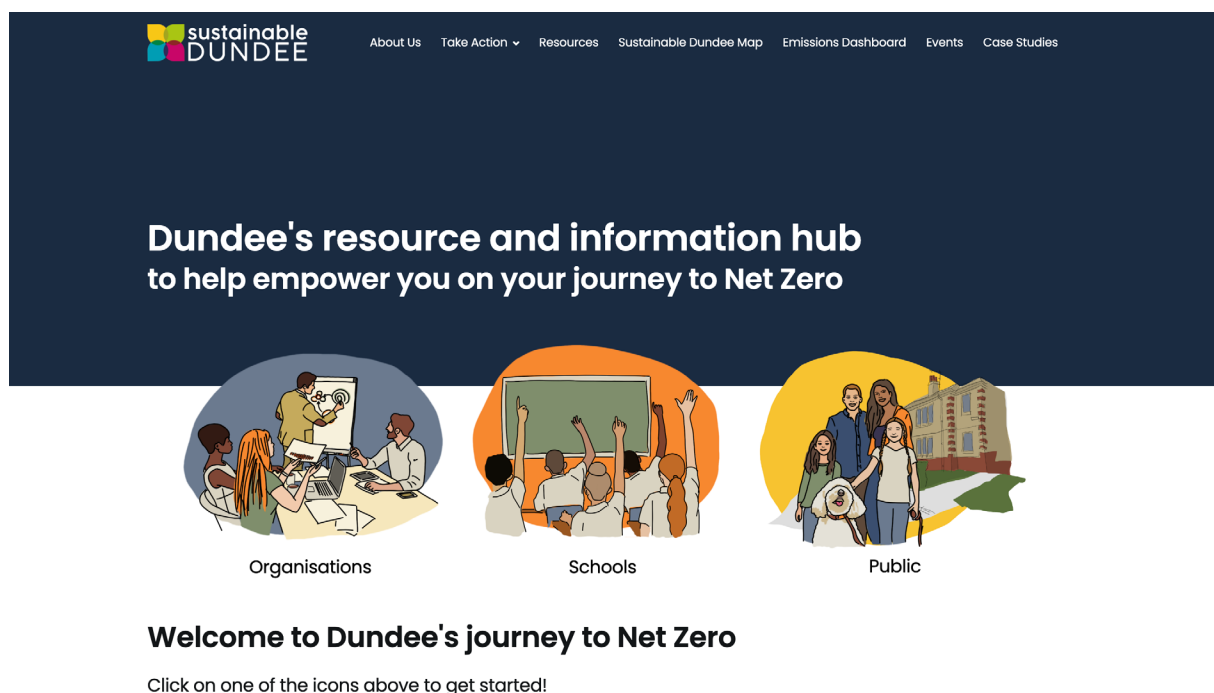
Tracking and Celebrating Progress

A new Carbon Dashboard tool will be developed to share the Council's carbon accounts on the intranet page. The new dashboard will be linked to the Power BI data used to calculate the Council's carbon emissions and will allow staff to see the Council's progress made for reaching net zero. This tool will help to make the carbon data easily accessible to all, so that services can monitor their progress and work towards their reduction targets. It will also link to the actions laid out in this plan, to make them easily accessible.

Climate Literacy

To deliver these objectives, it is essential that Council staff understand the challenge we face from climate change and what we can do about it. To this end, mandatory Climate Literacy Training was developed on the eLearning website. The mandatory eLearning was launched alongside COP26, where managers Grade 13 and above had the opportunity to partake in a bespoke Keep Scotland Beautiful Carbon Literacy training. Approximately 50% of senior managers completed this training and are now carbon certified. For those unable to participate or new to the Council, the eLearning platform will form the basis of their Climate Literacy training going forward. The Council aims to have a carbon literate workforce where all employees have completed their carbon literacy training and feels empowered to act.

To enable Dundee citizens to become climate literate, the Sustainable Dundee website (www.sustainabledundee.co.uk) has been developed. The website contains information for organisations, schools, the public and a community group funding finder. The website was designed to share information on what climate change is, how it will affect Dundee and what we can all do, including inspirational case studies from across the city.



sustainable DUNDEE

About Us Take Action Resources Sustainable Dundee Map Emissions Dashboard Events Case Studies

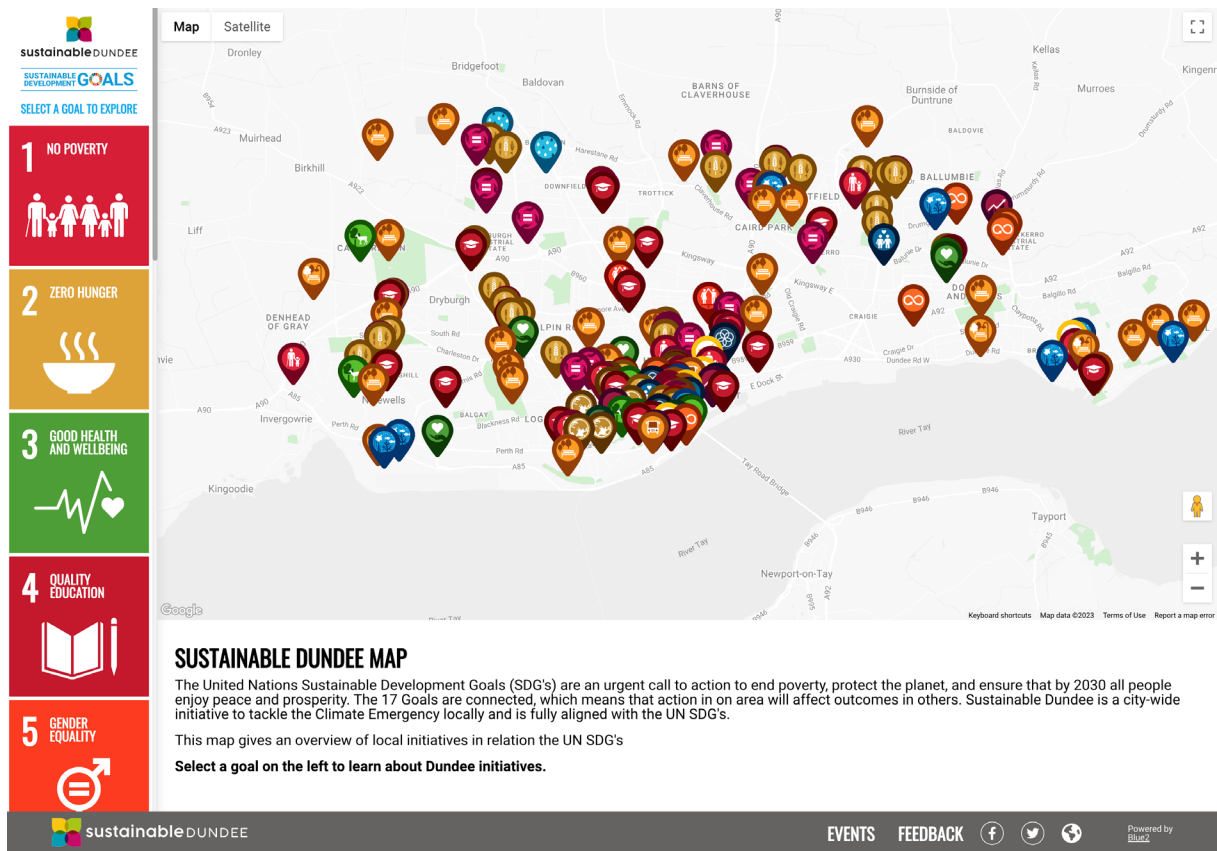
Dundee's resource and information hub
to help empower you on your journey to Net Zero

Organisations Schools Public

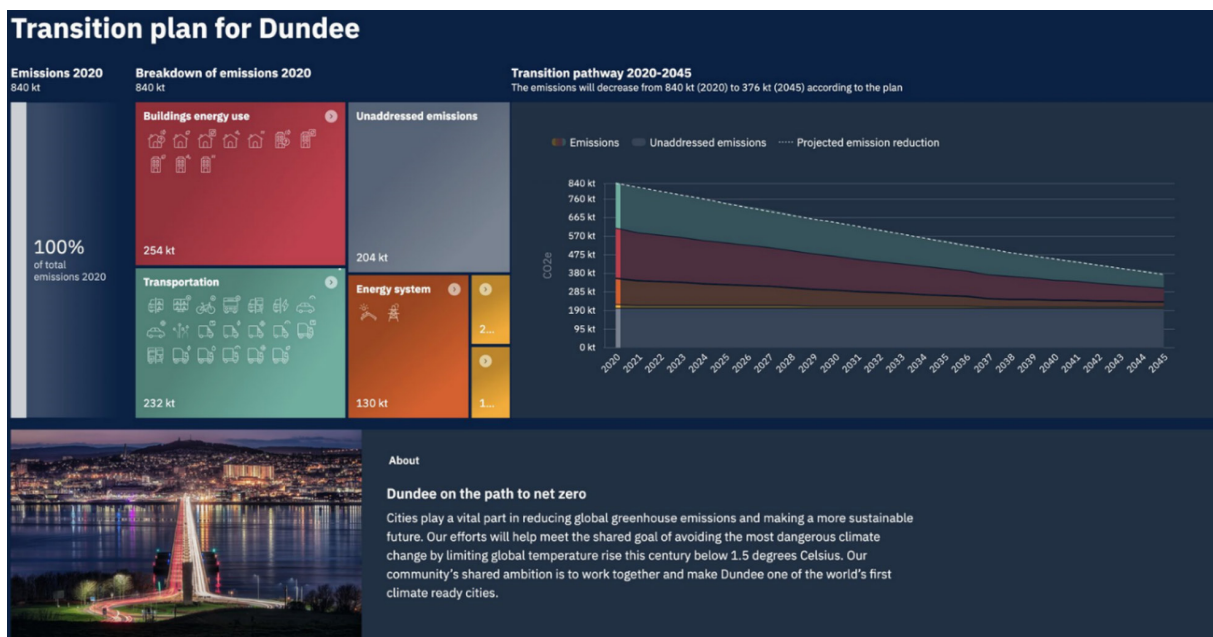
Welcome to Dundee's journey to Net Zero

Click on one of the icons above to get started!

An interactive Sustainable Dundee Goals map, linking the UN Sustainable Development Goals to Dundee based initiatives, is embedded within the website.



Our interactive Dundee emissions dashboard can also be accessed, demonstrating the emissions and pathway to Net Zero by 2045, the City-wide target.





Staff Travel

To reduce travel emissions an updated Staff Travel Plan has been developed to guide staff on sustainable travel behaviours. The hierarchy prioritises walking followed by cycling, public transport and then the use of electric vehicles.

By facilitating active travel within selected services, the Council will be working on long-term, sustainable practices, which will not only have a positive benefit on emissions but also staff health and well-being.



Schools

Schools act as role models. By engaging pupils in active environmental learning, recycling, circular economy, sustainable IT, energy efficiency, growing projects, and by prioritising active travel not just pupils, but also their parents will be empowered to participate and learn new skills and practices.

Eco-Schools refers to the whole school, pupil-led approach to Learning for Sustainability led by Keep Scotland Beautiful. Many schools in Dundee participate in Eco-Schools and although the vision is to engage all Dundee schools in the Eco-Schools programme, the main emphasis is supporting schools to adopt sustainability in their learning and practices.

A Dundee specific schools resource pack has been created to help schools access local support and information around climate change. Additionally, various activities will take place aligned with national and local events which involve schools to continuously engage those in climate action. For example, during COP26 four Dundee schools were actively involved in beach cleans and workshops to create Moby the Whale; unveiled at the COP26 Hub Fest. Moby the Whale now floats the heights of the Wellgate Shopping Centre as a permanent installation.



It is an aim of this Net Zero Transition Plan that Dundee Schools will become Net Zero Schools, through the adoption of sustainable practices, for example, renewable energy, retrofitting, sustainable food, eco-friendly cleaning practices, zero waste and circular economy.

Schools will also play a critical part in the Just Transition from the perspective of employment potential of future generations. Through changes in the curriculum schools will equip pupils with the skills to partake in the green economy and developing green technology.

Our Communities and Partners

Sustainable Dundee

Sustainable Dundee is the branding for Dundee's collaborative response to the Climate Emergency; encouraging low carbon living and enhancing nature to help the city achieve its target of net zero emissions before 2045.

The Dundee Climate Leadership Group will provide active leadership on Dundee's Net-Zero challenge, leveraging expertise from across the city to engage and inspire collective ownership and a shared commitment to tackling climate change.



The Sustainable Dundee Network was established following a successful programme of partnership events in Dundee for COP26. The group is a partnership of organisations from across the city and is chaired by the Dundee City Council's Sustainability and Climate Change Team. The purpose of the group is to coordinate and collaborate on public engagement, events and projects that build on the City's Climate Action Plan.

Both networks will continue to expand overtime to ensure city-wide partnership working.

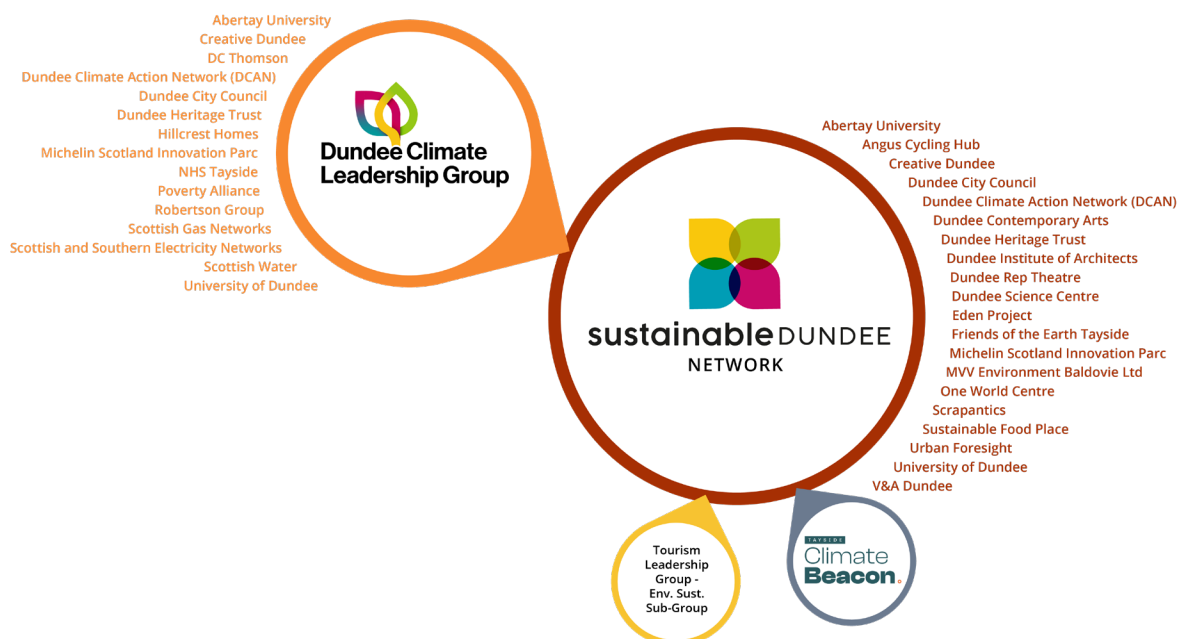


Figure 12: Dundee Partnership Diagram

Campaigns and Initiatives

The Council events will be held in the most sustainable way possible to lead by example. Events provide a key opportunity to engage visitors in sustainable practices, inspire change and provide opportunities to showcase best practice.

The Council will develop a Sustainable Events Policy which will include sustainable event practices for events of all sizes, which is to be adhered to by all events happening within the Council boundary. This will span across the following categories: energy, water, waste and cleansing, food and drink traders, production, travel, marketing and merchandise, local communities and economy, and work practices.

To continue raising awareness the Council will align city events with national and international events, such as COP26 and Scottish Climate Week as well as local campaigns such as the successful Take Pride in Your City campaign covering local environment quality, recycling, City Centre and Business and Communications. Awareness raising can take place across channels depending on size, such as social media, in-person, online or hybrid events. To increase engagement the Sustainable Dundee Network will support and collaborate. Internally, dedicated staff resources will be developed and shared.



Engagement Actions We Will Take

Action	Engagement	Responsible
E1	Communicate the Net Zero Transition Plan across Council and wider community.	Sustainability and Climate Change Team, City Development. Environment Team, Neighbourhood Services
E2	Maximise opportunities to use the Dundee Climate Fund in support of deliverables for the plan.	
E3	Develop a Sustainable Events Policy for the City.	
E4	Develop topical sustainability awareness campaigns across schools, businesses, universities and communities.	
E5	Facilitate participation in sustainability programmes and campaigns e.g. Take Pride in Your City, Eco-Schools, MSIP Skills Academy and Earth Hour Week.	
E6	Monitor uptake of mandatory climate literacy e-learning for staff, promote topical ad-hoc training courses from external partners to relevant staff.	
E7	Provide opportunities and tools for staff to engage in sustainable living so that all staff are equipped to signpost others.	
E8	Promote Staff Travel plan and integrate staff travel plan on intranet page to improve visibility and usage.	
E9	Develop Carbon Dashboard for intranet pages.	
E10	Continuously update and promote the Sustainable Dundee resources.	
E11	Update the Dundee City Council webpage to integrate Sustainability & Climate Change information on the homepage, linking to the Sustainable Dundee Website.	

Governance, Monitoring and Reporting

Governance

The Council will establish a Net Zero Transition Board to monitor and drive progress in implementing the plan. The Board will comprise senior officers, with other Council officers co-opted as and when required.

The Board will be supported by the Sustainability and Climate Change team, with regular progress reports and emissions dashboard being provided. The Board will in turn report to the Council Committee.

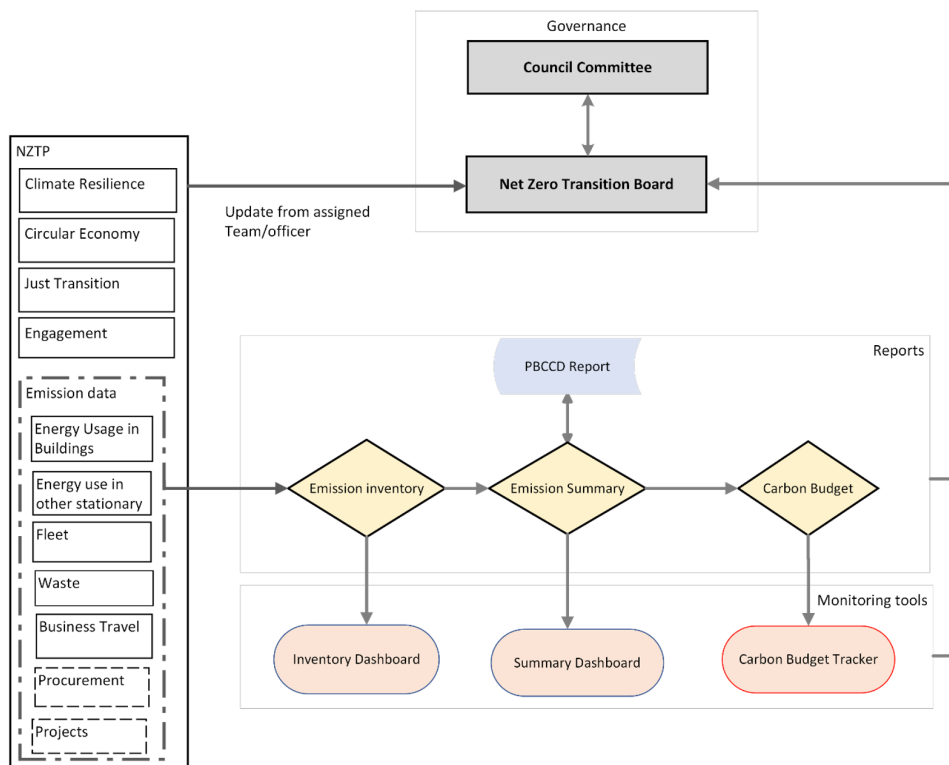


Figure 13: NZTP Governance, Monitoring and Reporting Framework

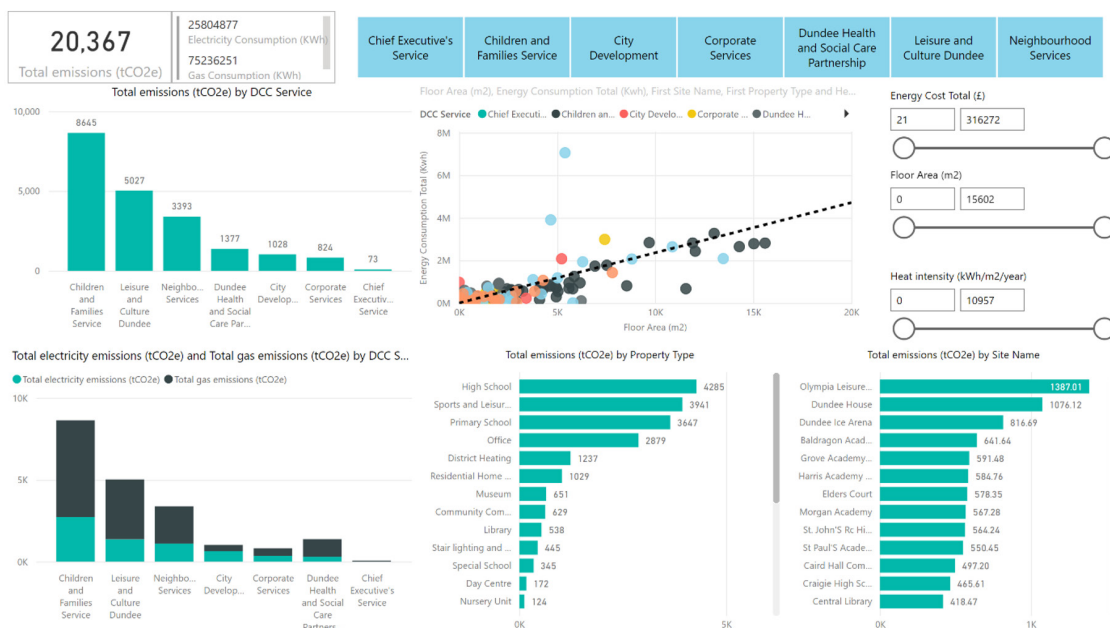
Monitoring and Reporting

PBI dashboard is used to help the effective governance of quantifiable climate actions. For example, relevant teams can instantly identify the office with highest heat intensity in a PBI integrated Web-GIS map and come up with an action to reduce heat demand. A Service Manager can track their progress in the Tracking Carbon Account dashboard. If a team is responsible for providing emissions data, they can also use PBI dashboard to give feedback, spot errors or anomalies.

Emissions Inventory

An emissions inventory is created based on the defined organisational and operational boundary. The inventory contains emissions data for the Council in its original form, as received from relevant team and/or service. The data is analysed using selected methodology; the final result is published in an online PBI dashboard, available internally only as this contains the most detailed, raw data.

Procurement and projects data are not included in the current/first emissions Inventory due to lack of data. Emissions Inventory will be evolving and changing as new data and reliable calculation methodologies become available in the future.



Emissions Summary

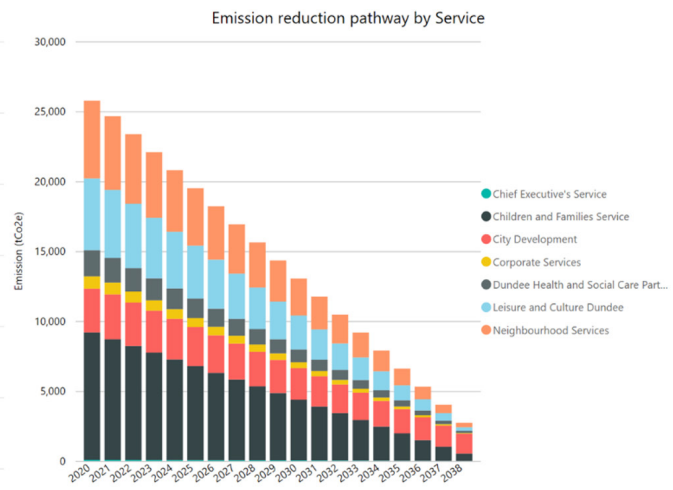
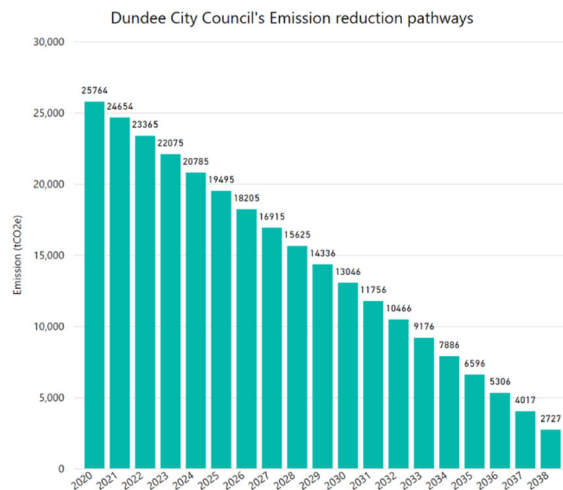
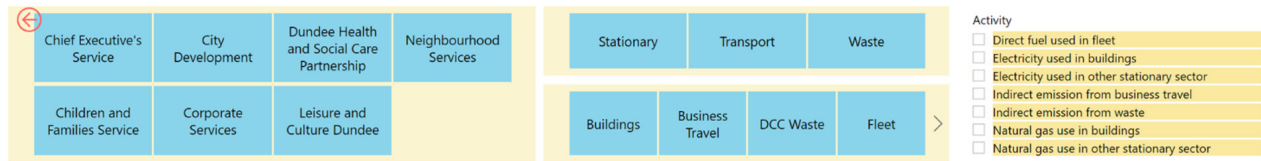
In the next stage the data from inventory is compared and adjusted to align with the statutory PBCCD report. At this stage necessary modelling and additional analysis is carried out to set a new target, adjust figures to accommodate new and/or expanded boundary, and explain trends. The final analysis is summarised in an emissions Summary, and a Summary Dashboard is published online using PBI.



Carbon Account Tracker

Carbon Accounting is the primary tool for governing the Council's organisational climate actions. Each action is assigned to a Service and team, which will be tracked by collecting quantitative (emissions) and qualitative data. Quantitative data will be used to produce an online tracking dashboard.

Based on the emissions Summary the annual carbon accounts will be calculated and published online using PBI. This dashboard is used to track progress of Dundee City Council as an organisation and the progress of each Council Service. It is also used to track progress in different Sectors, Sub-sectors and Activities.



Online Dashboards

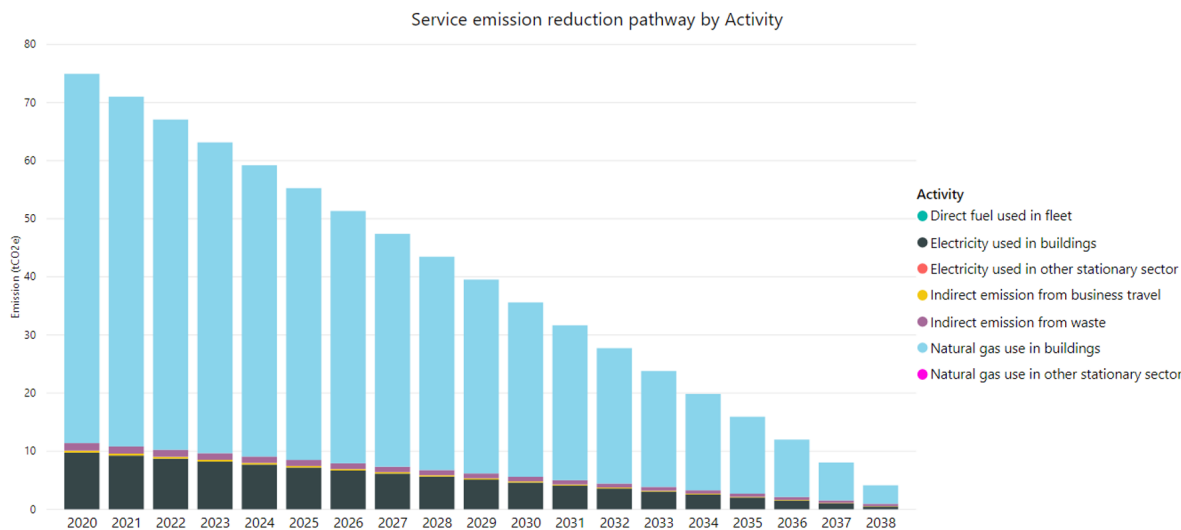
All three dashboards are published online internally. These interactive PBI dashboards can be used by relevant officers/managers for monitoring their progress, extracting emissions data and for decision-making. All dashboards are refreshed at least once a year.



Appendix A Net Zero Transition Plan Actions By Service

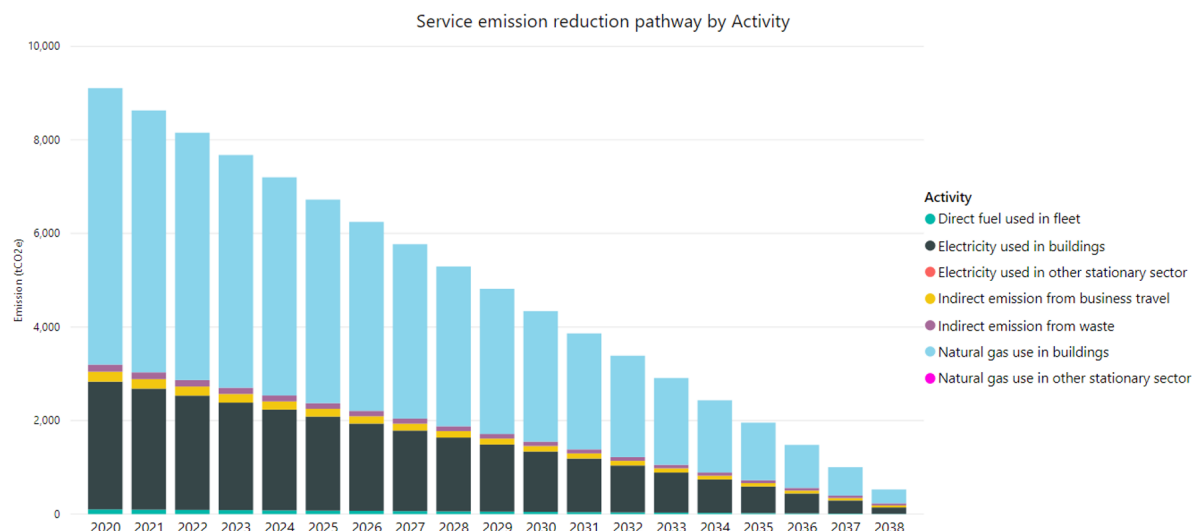
Chief Executive

These actions are subject to funding and resources. Appropriate teams will identify funding opportunities as they become available.



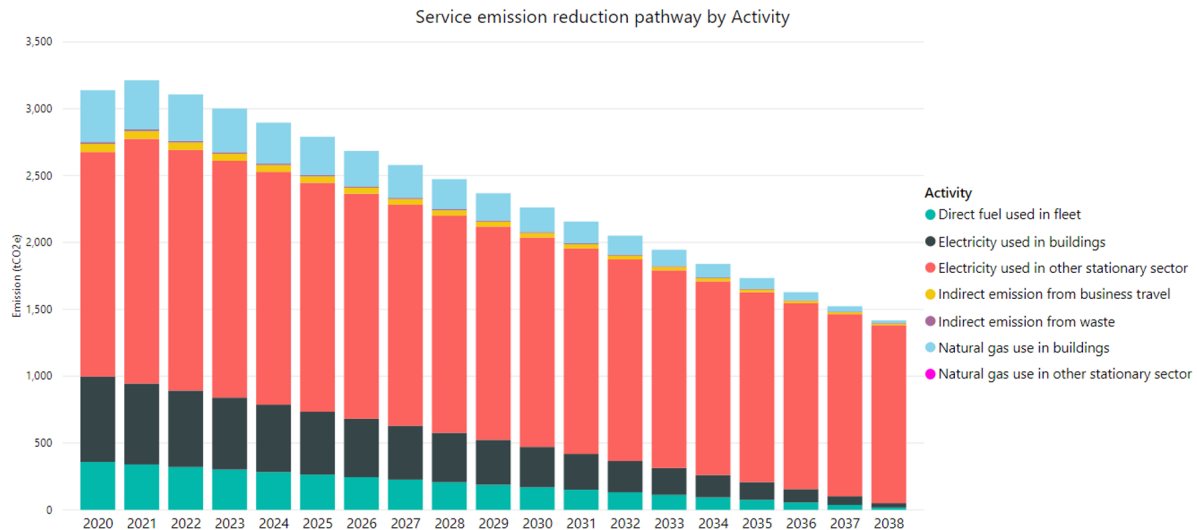
Action	Chief Executive
CE1	Communicate the Net Zero Transition Plan across the Council and wider community.
CE2	Reflect just transition in the next iteration of the Dundee Child Poverty and Fairness Action Plan.
CE3	Include Climate Change and just transition in Budget Consultation.
CE4	Support Fairtrade Forum to ensure the wider sustainability agenda and just transition are reflected.
CE5	Continued promotion of Council reuse hub and other initiatives such as the community wardrobes.
CE6	Integrate Net Zero Transition actions and progress into intranet permanently (For example, PBI Dashboard).

Children and Families Service



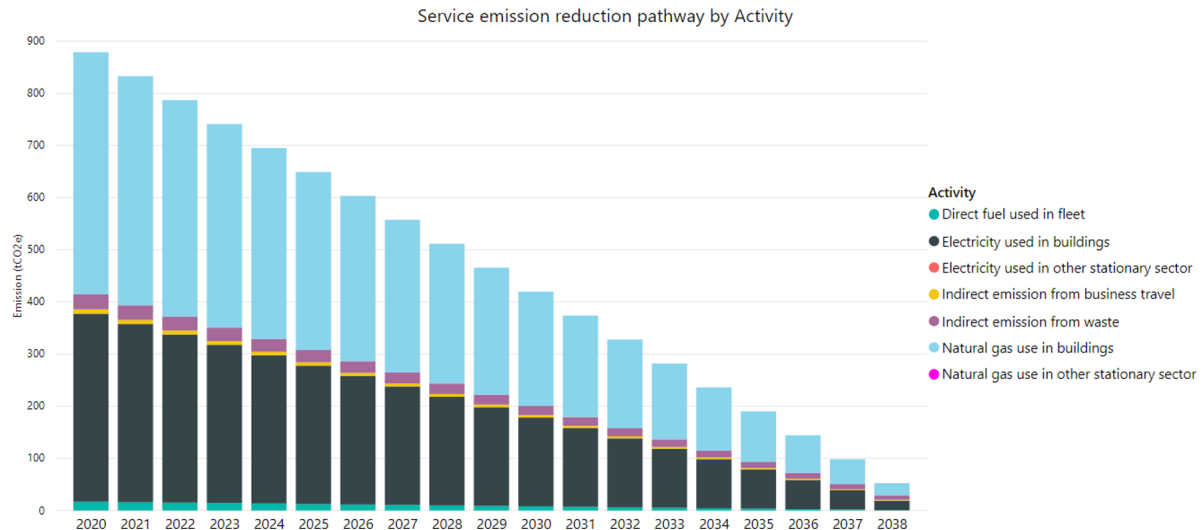
Action	Children & Families Service
CF1	Increase promotion of efficient energy use and heating control in school buildings in partnership with Leisure and Culture Dundee, building managers, Energy Management team and PPP contractors.
CF2	Identify potential reductions in teachers and staff travel by car.
CF3	Implement revised waste education strategy in schools across Dundee to promote waste awareness and positive recycling messages.
CF4	Identify and eliminate single use practices left over from COVID hygiene restrictions.
CF5	Ensure schools have access to sustainable procurement options and training to eliminate unsustainable purchasing practices.
CF6	Promote participation in sustainability programmes and campaigns e.g., Eco Schools, MSIP Skills Academy and Earth Hour week.
CF7	Identify further opportunities to enhance biodiversity and green space in schools including growing opportunities and other nature-based solutions.

City Development



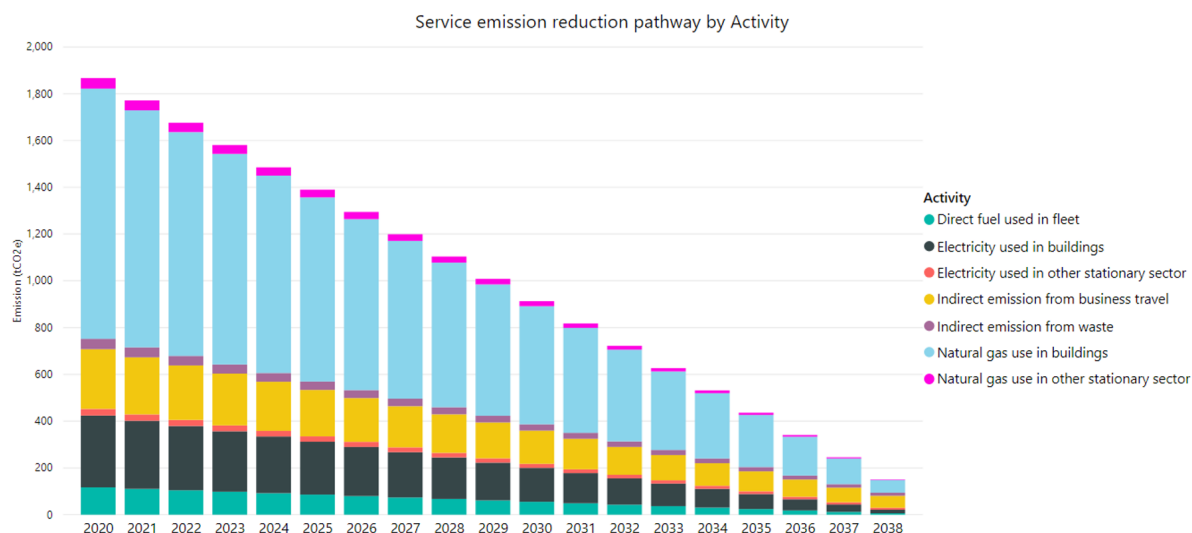
Action	City Development
CD1	Continue to promote efficient energy use and heating control in school buildings in partnership with Leisure and Culture Dundee, building managers, Energy Management team and PPP contractors.
CD2	Identify potential reductions in teachers and staff travel by car.
CD3	Identify schools' procurement purchasing activities for scope 3 emissions calculations.
CD4	Continue to facilitate participation in sustainability programmes and campaigns e.g., Eco Schools, MSIP Skills Academy and Earth Hour week.
CD5	Transition Dundee City Council's fleet of vehicles to zero emission by 2038.
CD6	Create a new Sustainable Transport Delivery Plan that focuses on interventions that reduce carbon emissions and improve sustainability.
CD7	Simplify staff bus travel - digitise ticketing system.
CD8	Develop a Climate Change Adaptation Plan using the 'Adaptation Capability Framework' developed by Adaptation Scotland
CD9	Consider climate hazards in Options Appraisal - embedding climate hazard criteria in our capital projects options appraisals.
CD10	Identify further opportunities for green and blue infrastructure across the city.
CD11	Establish officer Net Zero Transition Group.
CD12	Implement council carbon budget through a staged process beginning with carbon accounting, with a goal of aligning the council's financial budget with the carbon budget.
CD13	Maximise opportunities to use the Dundee Climate Fund in support of deliverables for the NZTP.
CD14	Ensure that the Local Housing Strategy and National Planning Framework 4 (NPF4) are considered in the development of the city's Local Heat and Energy Efficiency Strategy (LHEES) and Local Area Energy Plan (LAEP) and that the Local Development Plan takes into account the LHEES.
CD15	The Councils' Local Development Plan will incorporate measures to address climate change and biodiversity as required by National Planning Framework 4 (NPF4).

Corporate Services



Action	Corporate Services
CS1	Identify and implement appropriate corporate wide policies to support the Council's net zero target.
CS2	Develop targeted campaign to encourage employees to switch off appliances when not in use and investigate possibility of shutting down specific servers overnight.
CS3	Map procurement activities in key spend areas to identify Scope 3 emissions and identify carbon hotspots. Identify actions to reduce carbon footprint of supply chain.
CS4	Consider tender process to include net zero criteria for companies bidding in line with public procurement rules.
CS5	Reuse/refurbishment of IT equipment, including schools' devices.
CS6	Extend services of Fuel Well Dundee to provide information to households that are not eligible for fuel poverty benefits.
CS7	Investigate how more services can be digitised and unnecessary data removed to improve efficiency and reduce waste and carbon emissions.

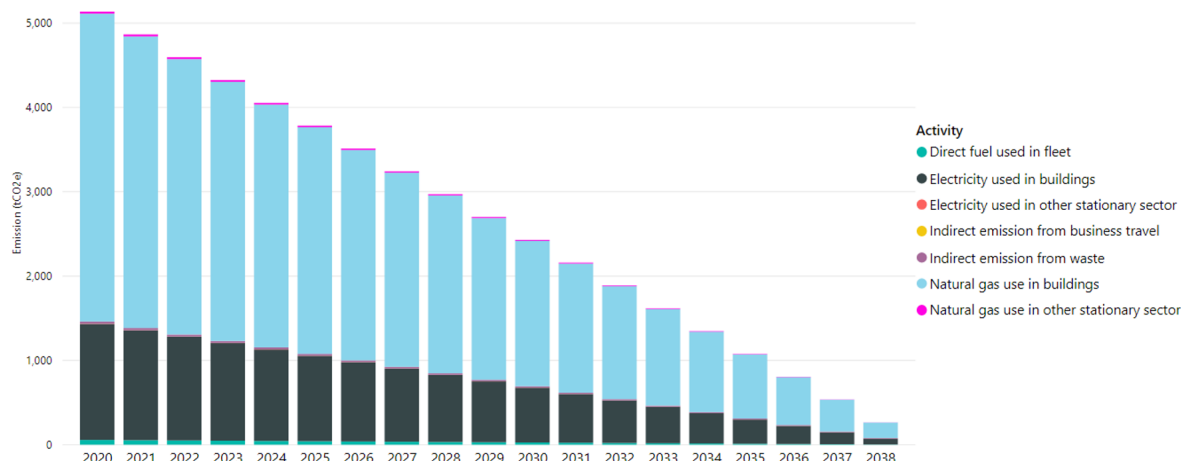
Dundee Health and Social Care Partnership



Action	Dundee Health & Social Care Partnership
HS1	Work with City Development to improve energy efficiency and reduce heat demand in buildings used by Dundee Health and Social Care Partnership.
HS2	Investigate further opportunities for staff to travel more sustainably including walking, cycling and using public transport.
HS3	Work with City Development to increase availability of EV infrastructure for staff usage.
HS4	Work with Tayside contracts and procurement and ZWS to identify food waste and single use item reduction opportunities during meal provision.
HS5	Investigate opportunities to reduce PPE waste at procurement stage.
HS6	Develop staff support for extreme weather events including preparation, response and recovery procedures.
HS7	Engage with communities to link sustainability and cost of living, promote Sustainable Dundee Website and map.

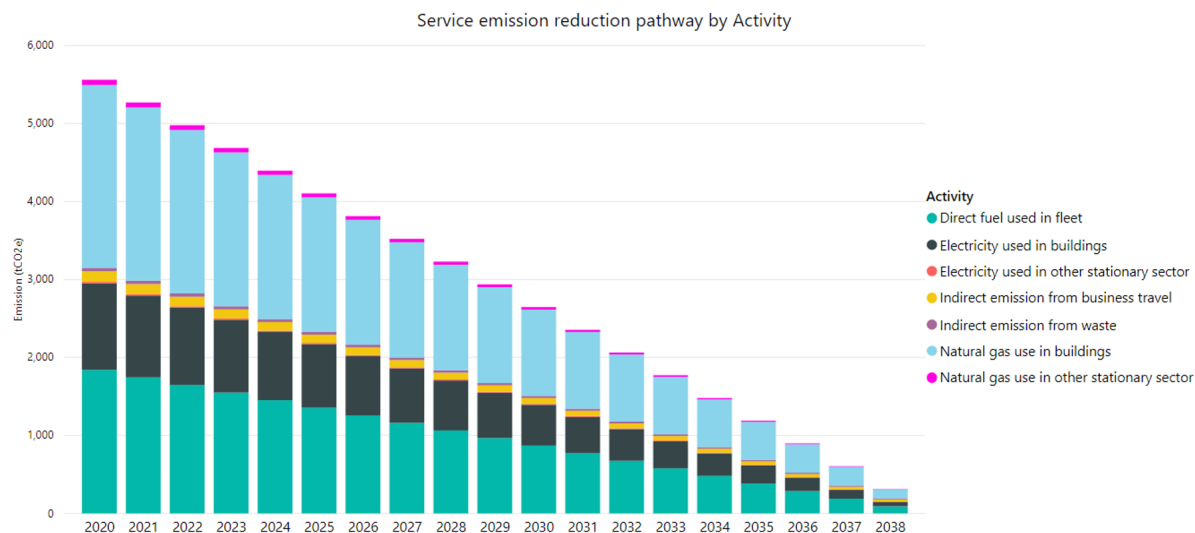
Leisure and Culture Dundee

Service emission reduction pathway by Activity



Action	Leisure & Culture Dundee
LC1	Work with City Development to identify and improve the energy efficiency measure in Sports and Leisure Facilities. Similarly work with City Development and Children and Families Services to identify and implement the energy efficiency measures in multi-purpose school buildings.
LC2	Work with relevant teams to reinstate water fountains in all facilities, ensure full recycling facilities are available in visitor centres.
LC3	Provide opportunities for sharing sports equipment and accessing second hand sports gear, clothes and books etc.
LC4	Identify further opportunities for Nature-Based Solutions on land at L&CD sites e.g., increase biodiversity, tree planting, SUDS etc.
LC5	Encourage and support maintenance, energy efficiency retrofit and protection for city buildings; and historic and cultural environments using guidance available from Historic Environment Scotland.
LC6	Consider accessibility in relation to sustainability e.g., walking and wheeling paths, secure bike parking facilities, EV charging points, etc. at libraries, museums, galleries, parks, and sports and leisure centres.
LC7	Develop skills around protecting cultural assets and built environment from the impacts of climate change.

Neighbourhood Services



Action	Neighbourhood Services
NS1	Investigate further opportunities to maximise existing District Heating Schemes and other low and zero carbon heating within housing stock.
NS2	Continue investment in housing stock to meet Energy Efficiency Standard for Social Housing (EESH2).
NS3	Consider the output from the Local Heat and Energy Efficiency Strategy (LHEES) in Local Housing Strategy.
NS4	Work with the Sustainability and Climate Change team and partners to develop with expand waste awareness campaigns across schools, businesses, universities and communities.
NS5	Increase recycling facilities for Council's offices and schools.
NS6	Develop a reliable and repeatable methodology to calculate baseline data for Council waste generation
NS7	Identify further opportunities for rationalization of fleet. Work with relevant team to transition from fossil fuel / ICE vehicle to EVs.
NS8	Introduce route optimisation software and in-cab devices to all of Dundee City Council's waste management fleet.
NS9	Implement policies to ensure sustainable materials and design in construction i.e., a whole life costing approach.
NS10	Identify further opportunities to increase tree cover and planting.
NS11	Support Community Food Networks, reduce stigma of accessing food.
NS12	Identify further opportunities for Nature-Based Solutions on Council land e.g., increase biodiversity, tree planting, SUDS etc.

Glossary

Adaptation	The adjustment in economic, social or natural systems in response to actual or expected climatic change, to limit harmful consequences and exploit beneficial opportunities.
BEI Baseline emissions Inventory	Identifies and quantifies the main sources of greenhouse gas emissions in a starting year.
Biodiversity	The variety plant and animal life on the planet and the surroundings they live in.
Carbon capture and storage	A process of capturing waste carbon dioxide usually from large point sources, such as a cement factory or biomass power plant, transporting it to a storage site, and depositing it where it will not enter the atmosphere, normally an underground geological formation. The aim is to prevent the release of large quantities of carbon dioxide into the atmosphere from heavy industry.
Carbon footprint	A measure of the carbon emissions produced as a result of an organisation's or service's activities.
Carbon intensity	The emissions per unit of electricity generated (often given in grams of CO ₂ per kWh).
Carbon neutral	Achieved when CO ₂ emissions are balanced by CO ₂ removals over a specified period.
Committee on Climate Change	An independent, statutory body established under the Climate Change Act 2008 to advise the UK Government and Devolved Administrations on emissions targets and report to Parliament on progress made in reducing greenhouse gas emissions and preparing for climate change.
CHP	Combined Heat and Power.
Circular economy	An alternative to a traditional linear economy (make, use, dispose) in which resources are kept in use for as long as possible, the maximum value is extracted from them whilst in use, then products and materials are recovered at the end of each service life.
Climate change	Any change in climate over time, whether due to natural variability or as a result of human activity.
Covenant of Mayors for Climate and Energy	An international alliance of cities and local governments with a shared commitment to accelerate ambitious, measurable climate and energy initiatives that lead to a low-emissions and climate resilient future, helping to meet and exceed the Paris Agreement objectives.

Adaptation	The adjustment in economic, social or natural systems in response to actual or expected climatic change, to limit harmful consequences and exploit beneficial opportunities.
CO₂ Carbon Dioxide	The most common greenhouse gas contributing to human made climate change.
CO₂e	Carbon Dioxide equivalent. A commonly used way of presenting total greenhouse gas emissions as an equivalent amount of CO ₂ . Most typically, the CO ₂ e emissions is obtained by multiplying the emissions of a greenhouse gas by its global warming potential (GWP) for a 100-year time horizon.
Decarbonisation	The reduction or removal of carbon dioxide from energy sources.
Ecosystem	A biological community of interacting organisms and their physical environment.
EfW	Energy from Waste.
Emissions factor	A measurement of CO ₂ emissions intensity per unit of electricity generation in the grid system.
EPC Energy Performance Certificate	Shows the current energy rating and potential energy rating of a property.
EV	Electric Vehicle.
Fossil fuel	Non-renewable energy sources formed from fossilised plants and animals over millions of years such as coals, oil and gas.
ghg	Greenhouse gas that enhances the greenhouse effect and thus climate change.
Heat island effect	Also referred to as the urban heat island effect, whereby the average temperature of an area is higher than nearby rural areas. It is mostly caused by the fact that the materials in urban areas, like concrete, absorb and retain much more heat energy from the sun and then takes much longer to dissipate.
IPCC	International Panel on Climate Change. A United Nations body which evaluates climate change science.
KWh Kilowatt Hour	A unit of energy equivalent to one kilowatt of power expended for one hour of time (1,000KWh = 1MWh). Commonly used in energy use billing.
Net Zero	The balance between the amount of greenhouse gas produced and the amount removed from the atmosphere. We reach net zero when the amount we add is no more than the amount taken away.



