

**ITEM No ...2.....**

**REPORT TO:** POLICY & RESOURCES COMMITTEE - 19 NOVEMBER 2018

**REPORT ON:** PUBLIC BODIES CLIMATE CHANGE DUTIES – ANNUAL REPORT 2017/18

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

**REPORT NO:** 332-2018

**1. PURPOSE OF REPORT**

1.1 To inform Committee of the work undertaken over the period April 2017 to March 2018 in support of the Council's duties under the Climate Change (Scotland) Act 2009.

**2. RECOMMENDATIONS**

2.1 It is recommended that Committee:

- a Notes the content of the 2017/18 Public Bodies Climate Change Duties Report.
- b To agree the 2017/18 Public Bodies Climate Change Duties (PBCCD).

**3. FINANCIAL IMPLICATIONS**

3.1 Any anticipated costs associated with the implementation of the PBCCD will be contained within existing capital and revenue budgets.

**4. BACKGROUND**

4.1 In 2009 the Scottish Parliament passed the Climate Change (Scotland) Act, Part 4 of which states that a public body must, in exercising its functions, act:

- in the way best calculated to contribute to the delivery of Scotland's climate change targets;
- in the way best calculated to help deliver any Scottish adaptation programme; and
- in a way that it considers most sustainable.

4.2 In November 2014, the Scottish Government announced its intentions to use powers in the Climate Change (Scotland) Act 2009 to introduce a Public Bodies Climate Change Duties (PBCCD) reporting requirement for all 150 'major players' reflecting the expectation that the public sector will lead by example in tackling climate change. This is the third annual reporting period for PBCCD

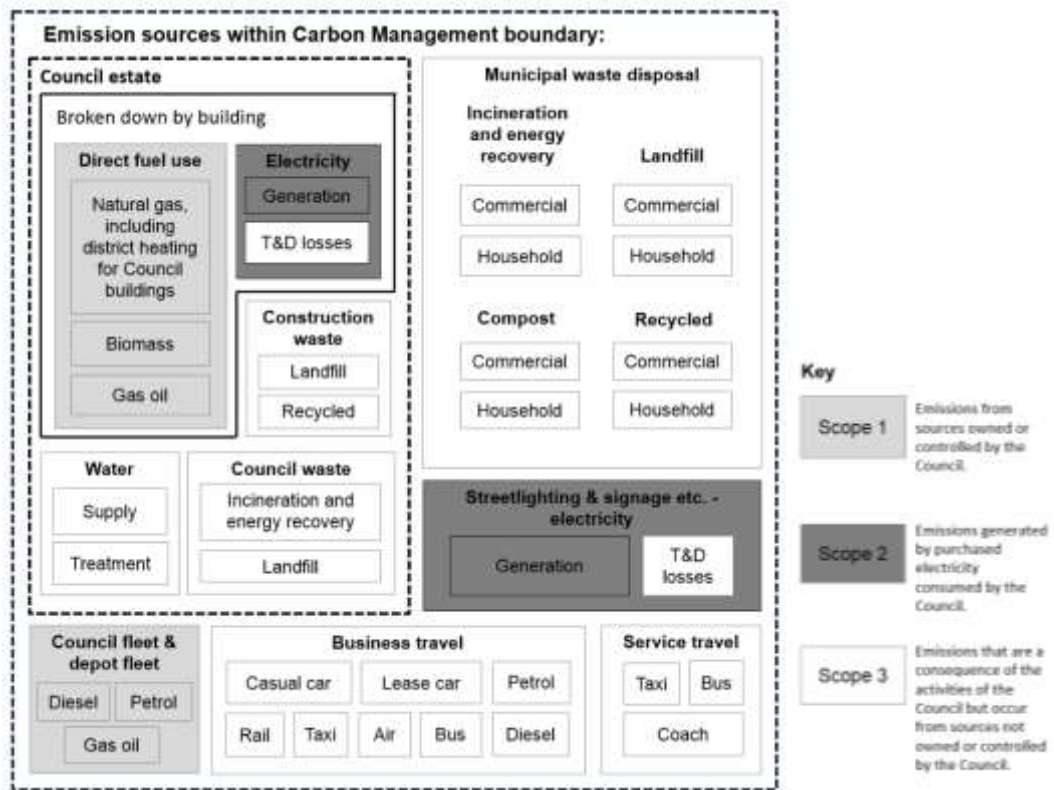
**5. THE 2017/18 PUBLIC BODIES CLIMATE CHANGE DUTIES REPORT**

5.1 The Council's PBCCD Report for 2017/18 is appended as appendix 1 and contains six sections:

- Part 1: Organisational Profile
- Part 2: Governance, Management & Strategy in relation to climate change
- Part 3: Corporate Emissions, Targets and Projects
- Part 4: Adaptation to the impacts of climate change
- Part 5: Procurement actions and achievements regarding climate change
- Part 6: Data Validation and sign-off Declaration

- 5.2 For the 2017/18 report, an additional 'Recommended Reporting' section is included which captures climate change activity not covered elsewhere in the report.
- 5.3 In order to improve performance on each of these sections the Council carried out a self-evaluation exercise against the 'Climate Change (Scotland) Act: Public Sector Duties' and subsequently identified the following key priorities and actions:
- clearly defining the Council's carbon management boundary;
  - the need to overhaul the Council's processes relating to carbon emissions and establish a system to store and manage consumption data; and
  - create a project register so that progress towards the Council's emissions reduction target can be better measured.
- 5.4 Additional support to assist the Council in progressing its priorities was procured from Carbon Forecast Ltd in 2016 and Carbon Change Ltd in May 2017. Progress on the priorities is outlined below.
- 5.5 **Carbon Management Boundary**
- 5.5.1. The boundary was fully re-scoped and extended in 2016 as shown in Figure 1. This shows emission sources by scope:
- Scope 1: Direct greenhouse gases (GHG) emissions are emissions from sources that are owned or controlled by the Council e.g. fossil fuels used in boilers.
  - Scope 2: Indirect GHG emissions from generation of grid electricity, heat or steam.
  - Scope 3: Other indirect emissions, such transport-related activities in vehicles not owned or controlled by the Council, electricity-related activities (e.g. transmission and distribution (T&D) losses), outsourced activities, waste disposal, etc.
- 5.5.2. It should be noted that defining the boundary at this point does not mean that it will not change over time as, over the target period 2007/08 to 2019/20, assets will be disposed of, new assets will be acquired and the functions of the organisation are likely to evolve. Therefore the boundary should be reassessed on an annual basis, along with the asset list, to make sure that the carbon management boundary is applied consistently to new sources.
- 5.5.3. From 2014/15 onwards, the Council has used Resource Efficient Scotland's Carbon Footprint Project Register tool (CFPR tool) to calculate its carbon footprint. This tool is publically available and uses the appropriate year's Defra carbon factors to convert from consumption units to tonnes of carbon dioxide equivalents (tCO<sub>2</sub>e are a way of expressing all GHG emissions in common units). The CFPR tool also allows organisations to overwrite the unit costs to enable the tool to more accurately reflect the costs of the organisation.
- 5.5.4. The Council's defined carbon management boundary is consistent with other organisations within the public sector and is an accurate representation of the controllable sources in the carbon footprint at this point in time.

Figure 1: DCC Carbon Management Boundary 2017/18



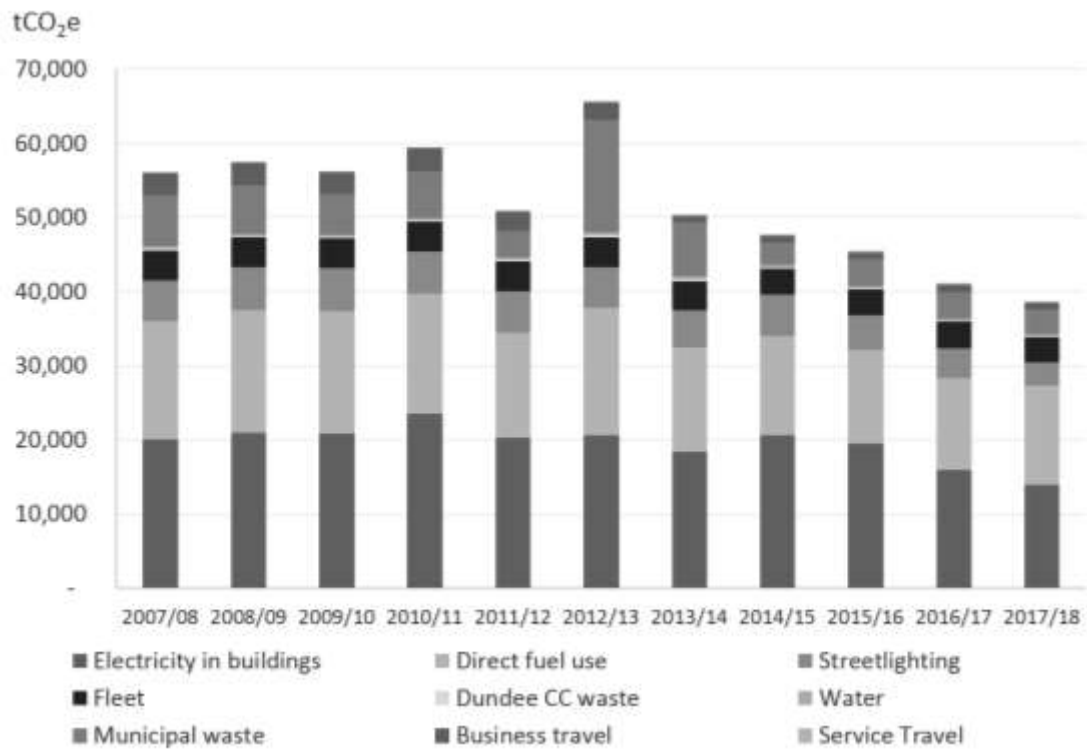
## 5.6 Carbon footprint data

- 5.6.1. In order to provide consistency, a decision was taken in 2015 to re-baseline the organisation back to 2007/08, rather than reset the baseline year. Where possible, actual data from the correct time period was used. Actual data was available back to 2007/08 for energy use in buildings and waste, which make up the majority of the Council's footprint. Some emissions sources were only available for a shorter time series and therefore earlier years were estimated using appropriate methodologies. The Council has produced an estimate of its carbon footprint for each year between 2007/08 and 2017/18, based on the carbon management boundary shown in figure 1 above. As with the baseline year, some minor emission sources have been estimated in earlier years.

## 5.7 Analysis of 2017/18 carbon footprint data

5.7.1. The progress of Dundee City Council's footprint is shown in Figure 2

Figure 2: DCC Carbon Footprint: 2007/08 to 2017/18



### Key points:

- Carbon footprint emissions in 2017/18 have dropped less significantly compared to the previous year with a 6% overall decrease recorded, which can be partly attributed to a reduction in the Grid Emission Factor<sup>1</sup>.
- Carbon emissions from energy use in buildings decreased by 4%. This decrease is despite increases in electricity (2%) and gas (7%) consumption.
- Degree days<sup>2</sup> for 2017/18 were 8% higher than the previous year confirming the 2017/18 was colder and therefore an increase in gas consumption would be expected, although it does not account for the full increase of 7%.
- The Council added two new properties to its estate - Baldragon Academy and Tayview Primary. In addition, the new Harris Academy was operating for the first full reporting year where it was only operational for a short period the year before. Craigiebarns Primary was also converted from electric to gas heating. These four properties accounted for an additional 3.3 million KWh of gas in the year. That was offset by approximately 1.8 million KWh for buildings that were closed.
- The electricity increase of 2% can be accounted for by the new buildings (approx. 1 million KWh) and the increase in degree days which has an impact where electric heating is used (often used as supplementary heating).

<sup>1</sup> A measurement of CO<sub>2</sub> emissions intensity per unit of electricity generation in the grid system (tCO<sub>2</sub>/MWh).

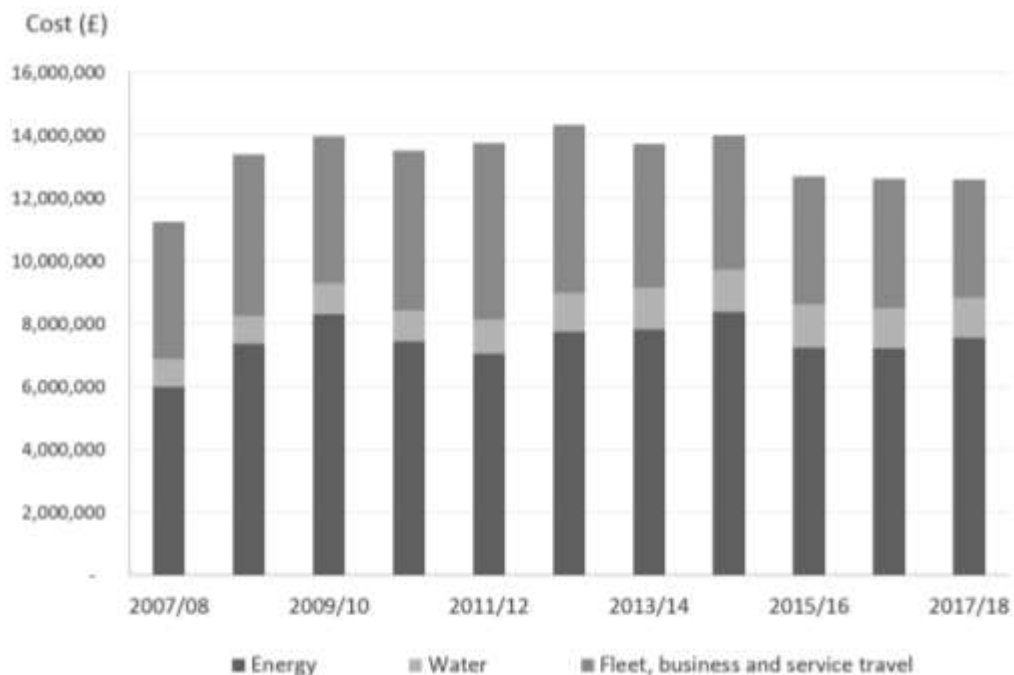
<sup>2</sup> A measurement designed to quantify the demand for energy needed to heat a building.

- Less municipal waste disposal to landfill and a 50% reduction in its emissions factor has resulted in a decrease in the waste carbon footprint. There has however been an increase in commercial incineration (with reductions in commercial waste to landfill) as well as large increases in its Grid Emission Factors this year leading to an increase in commercial carbon footprint.
- Casual and lease travel have increased slightly, but other business travel has reduced. The differences are not significant.
- The fleet carbon footprint has reduced, predominantly due to consumption decreases, and allied to an increase in use of electric vehicles.
- Consumption and the emissions factor of water reduced slightly.
- From the baseline year of 2007/08, the overall footprint has reduced by 31%.

## 5.8 Analysis of 2017/18 carbon footprint costs

5.8.1. The progress of Dundee City Council's footprint costs is shown in Figure 3.

Figure 3: DCC Costs: 2007/08 to 2017/18



- Energy and water costs have risen slightly in 2017/18.
- There has been an overall decrease in the consumption of fuel with the transition to electric vehicles and less mileage covered. This is despite the cost of fuel increasing over the period.

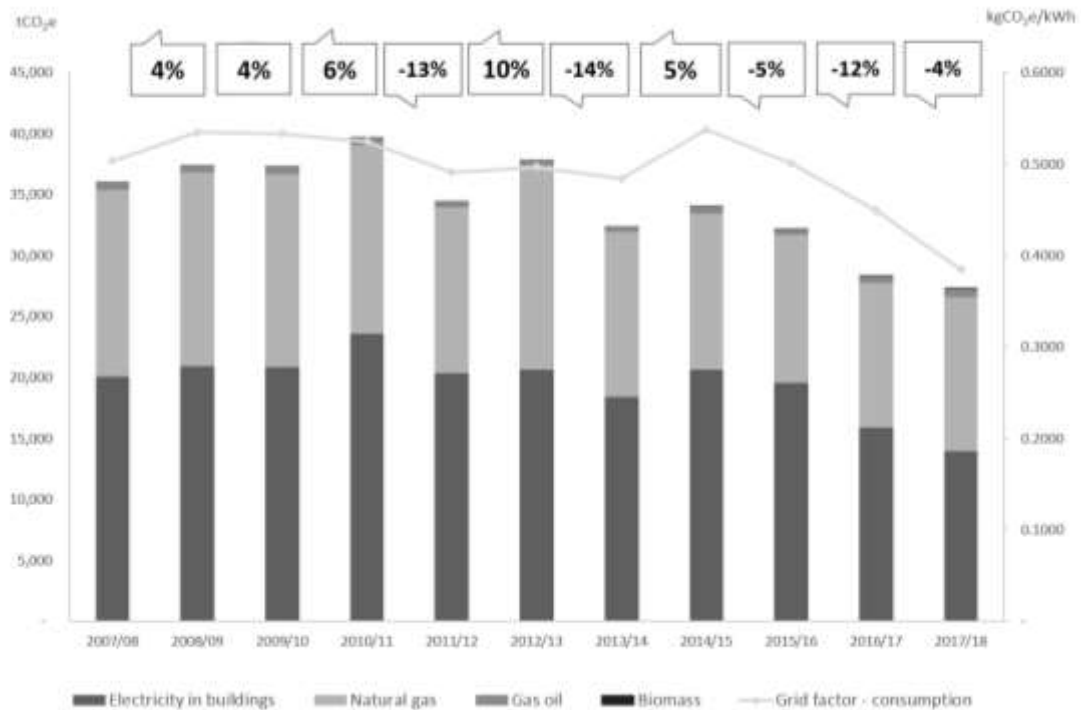
## 5.9 Targets

5.9.1. The Council's Carbon Management Plan target is to reduce energy use in buildings (measured in CO<sub>2</sub>e) by 5% per annum. A 4% reduction was achieved in 2017/18.

5.9.2. It should be noted that it is possible to meet the Carbon Management Plan target but still increase energy consumption, or vice versa. This is because the grid electricity factor is not fixed, but varies year on year as the mix of generation capacity in the grid

varies. While it is anticipated that as renewable capacity increases, overall grid carbon intensity will come down, it cannot be guaranteed. There is an average variation of around +/- 10% currently in the grid factor. However, for the past three years, there has been a significant reduction in the emission factor for grid electricity as shown in Figure 4.

Figure 4: DCC Carbon Footprint Target Monitoring: 2007/08 to 2017/18

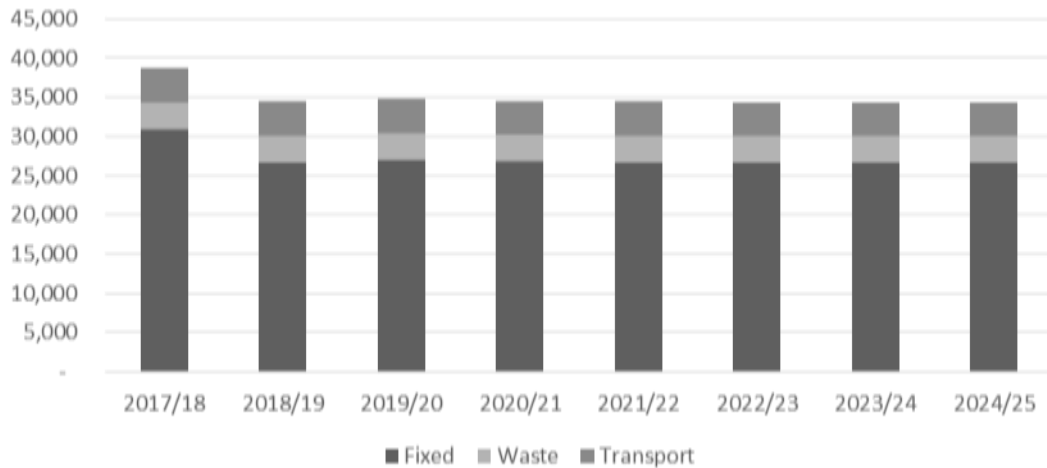


5.9.3. The Council's existing carbon management target will continue until 2019/20 at which time a full redraft of the Council's Carbon Management Plan will take place. A new target will be set that captures a wider range of the Council's carbon emissions as presented in Figure 1.

#### 5.10 Business as Usual Forecast

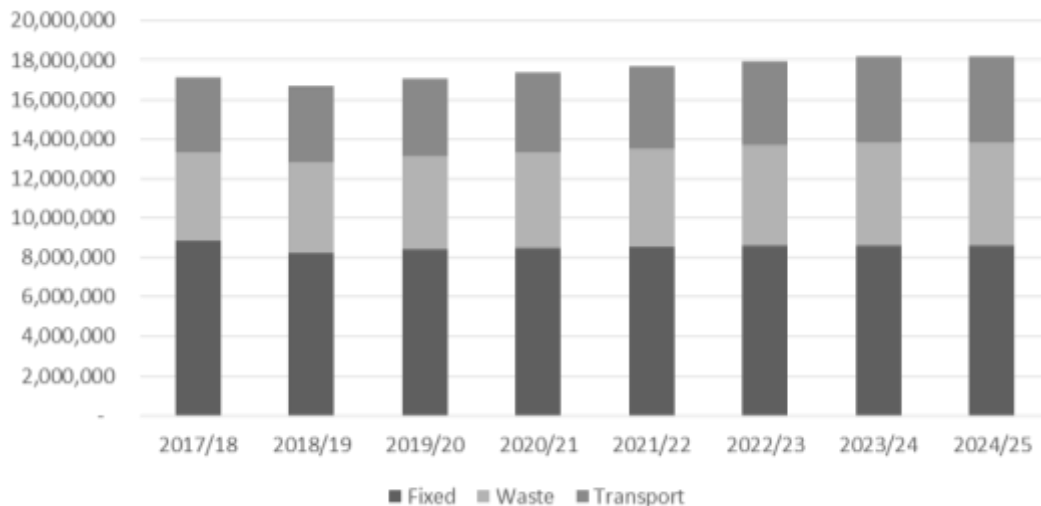
5.10.1. The Council developed a detailed Business As Usual (BAU) forecast in 2017 to better understand what policies and interventions it should take in order to meet its carbon reduction targets. The forecast was created inputting detail on key future building changes (including new buildings, removal of buildings and movement of staff). In total around 30 estate changes between 2017/18 and 2019/20 were mapped.

5.10.2. Figure 5a shows that, in the absence of projects, emissions were still predicted to fall. However, this was purely due to the grid electricity factor reducing significantly in 2017/18. The actual consumption of grid electricity and natural gas was predicted to increase in 2017/18 and again in 2018/19, before coming down again in 2019/20. This is due partly to overlaps in the estate as buildings are opened before the previous building was closed. Therefore, a key measure of success for the carbon management process in 2017/18 was to keep energy consumption static compared to 2016/17 through the implementation of carbon reduction projects. An actual reduction of 4% was achieved.

Figure 5a: Business as Usual carbon footprints - split by source (tCO<sub>2</sub>e)

- 5.10.3. Over time the BAU forecasts show the carbon footprint levelling off and the costs rising due to rising fuel costs (figure 5b). This is in the absence of carbon saving projects, where the only changes will be due to opening/closing of buildings, weather patterns and emission factors.

Figure 5b: Business as Usual carbon footprints - split by source (cost £)



## 5.11 Carbon Reduction Project Register

- 5.11.1. As part of the 2016 re-scoping exercise, a preliminary Carbon Footprint Project Register was prepared. This register continues to be refined annually by identifying and including existing and proposed Council projects that will help the Council better measure and manage progress of carbon reduction interventions. Council officers identified a list of 314 carbon saving projects covering all emissions sources. Twenty four of these projects have been fully scoped with capital costs and savings identified. If these projects are commissioned in the year specified and deliver the identified savings, the future carbon and financial savings are as shown in Figures 6a and 6b.

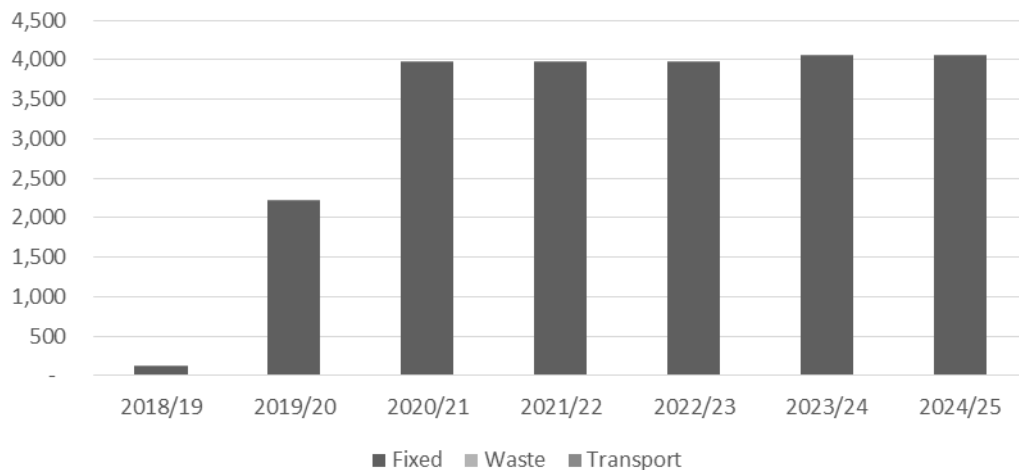
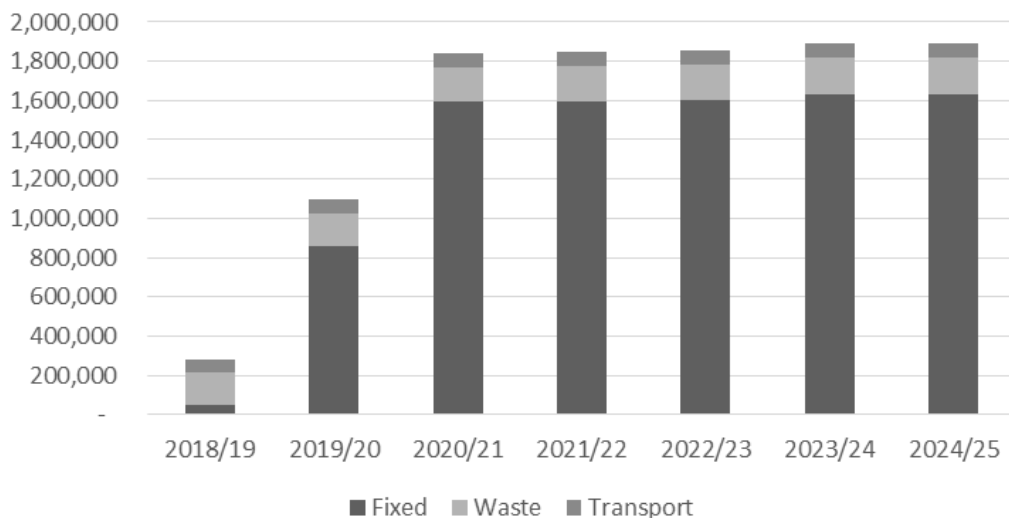
Figure 6a: Projects Carbon Savings - split by source (tCO<sub>2</sub>e)

Figure 6b: Projects Carbon Savings - split by source (cost £)



5.11.2. It can be seen that projects with stationary source savings (electricity and gas) represent the bulk of savings. These predominantly comprise the Non-Domestic Energy Efficiency basket of projects and Street lighting LED programme, both of which will have a significant positive impact on carbon savings over the next few years.

## 6. PROPOSALS FOR A COUNCIL CARBON BUDGET

6.1 The Council's Carbon Management Plan is due to be reviewed and updated in 2019 and a new carbon reduction target set. In order to meet a new target, actions will require to be identified from across Council Services. The Carbon Footprinting and Project Register Tool is a useful start, combined with actions identified during the partnership Sustainable Energy and Climate Action Plan process.

6.2 To ensure Council Services are taking action to reduce their carbon footprint, and ensure the Project Register is detailed and robust, it is proposed to develop and trial the concept of a Carbon Budget for the Council. This process would allocate an allowance of tonnes of Carbon Dioxide Equivalent (tCO<sub>2</sub>e) emissions for the next financial year. Council Services would then be required to keep within this allowance over the financial year allowing the Council to better manage how it works towards meeting its emission reduction targets. This is very much at a conceptual stage and it is recognised there



may be resource implications for Services if a decision is taken to roll-out carbon budgeting across the Council on completion of the trial.

- 6.3 Carbon budgeting will provide Elected Members with a clearer link in demonstrating the costs and savings being made through carbon saving initiatives. Rethinking how the Council maintains its service delivery whilst lowering its emissions is an opportunity for positive change and innovation that can also reduce costs.

## **7. PROJECT HIGHLIGHTS IN 2017/18**

- 7.1 The following projects highlight major contribution to the Public Bodies Climate Change duties in 2017/18

- Flood protection works completed from Dundee Airport to City Quay.
- District Heating Strategy approved.
- Low Carbon Electric Charging hubs for electric vehicles completed at Lochee and Princes Street.
- Street lighting LED programme started.
- External Wall Insulation programme continued for Council Housing
- £2.3m investment completed in Non Domestic Energy Efficiency projects with DCC operational buildings.

Further details of each project are contained in Appendix 1.

## **8. POLICY IMPLICATIONS**

- 8.1 This report has been subject to an assessment of any impacts on Equality & Diversity, Fairness & Poverty, Environment and Corporate Risk. A copy of the Impact Assessment is available on the Council's website at:  
[www.dundee.gov.uk/ia](http://www.dundee.gov.uk/ia).

## **9. CONSULTATIONS**

- 9.1 The Council's Management Team have been consulted in the preparation of this report.

## **10. CONSULTATIONS**

- 10.1 None.

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FW/BH

8 November 2018



# APPENDIX 1: DCC 'PUBLIC BODIES CLIMATE CHANGE DUTIES' REPORT 2017/18

## PUBLIC BODIES CLIMATE CHANGE DUTIES – 2017/18 ANNUAL REPORT

### 1 PROFILE OF REPORTING BODY

#### 1a) Name of reporting body

Dundee City Council

#### 1b) Type of body

Local Authority

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

6,115

#### 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	148,710	<a href="#">NRS, 2017 Mid-Year Estimate</a>
Other (specify in comments)			

#### 1e) Overall budget of the body

*Specify approximate £/annum for the report year.*

£342,509,000

#### 1f) Report year

*Specify the report year*

2017/18 (financial year)

#### 1g) Organisational context

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

Dundee City Council has an important role to play in reducing emissions from its own estate and from the services it provides; influencing emission reduction across the city; managing risk and building resilience to a changing climate. Functions include:

*Land Use Planning* - Regulation of planning applications and development; forward planning policies which should support climate change mitigation and adaptation goals.

*Economic development and low carbon economy* – Support to develop business opportunities in the low carbon, offshore wind, oil and gas, and decommissioning sectors. Strategic targeting and support for key business developments in terms of locations, property developments and support for skills planning and low carbon training.

*Infrastructure / major capital projects* - Investment decisions for new buildings should be carbon/ climate proofed to deliver greatest efficiency and act as demonstration projects.

*Housing Strategy* – tackling fuel poverty; development and delivery of energy efficiency investment programmes; providing home energy advice service.

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

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

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

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

*Land and Open Space* - Land use strategy and development of green networks; habitat management and biodiversity opportunities; trees and woodland management.

*Emergency Planning and Resilience* – planning for and responding to severe weather events.

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

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

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

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

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

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

## **2 GOVERNANCE, MANAGEMENT AND STRATEGY**

### **Governance and management**

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

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

The Council's Sustainable Dundee Working Group was formed at the inaugural meeting on the 8th March 2018, organised 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 Management Team.

Proposals can be agreed at the working group level. Decisions concerning projects with significant financial or strategic considerations will be taken to the Council Management Team.

## APPENDIX 1: DCC ‘PUBLIC BODIES CLIMATE CHANGE DUTIES’ REPORT 2017/18

Officers from the following Services participate in the working group. These are shown under the Covenant of Mayors for Climate and Energy “Sustainable Energy and Climate Action Plan” topics; one of the major projects the group will take forward in partnership with the wider Dundee community.

Energy Efficiency	District Heating	Renewables	Sustainable Transport	Resource Efficiency	Resilience & Adaptation	Governance/ Strategy/policy
<ul style="list-style-type: none"> <li>▪ Domestic</li> <li>▪ Non-Domestic</li> <li>▪ Street Lighting</li> </ul>	<ul style="list-style-type: none"> <li>▪ Design and Property</li> <li>▪ Housing</li> <li>▪ Planning</li> </ul>	<ul style="list-style-type: none"> <li>▪ Business Dev.</li> <li>▪ Planning</li> <li>▪ Housing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sustainable Transport</li> <li>▪ Fleet</li> <li>▪ Air Quality</li> </ul>	<ul style="list-style-type: none"> <li>▪ Municipal Waste</li> <li>▪ Internal Resources</li> <li>▪ Circular Economy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Flooding</li> <li>▪ Environment/ Biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>▪ SD/CC</li> <li>▪ Finance</li> <li>▪ Procurement</li> <li>▪ Funding</li> </ul>

The Working Group meets every two months to discuss Energy, Transport and Waste issues. Wider sustainability issues (e.g. policy, procurement, biodiversity) are considered when required and annual reports are provided on Adaptation and Air Quality. Performance is reported via the Council's Covalent database.

### 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, departmental 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 2017/18, the Council was structured as five Strategic Service Areas with main roles in climate change activity categorised as follows:

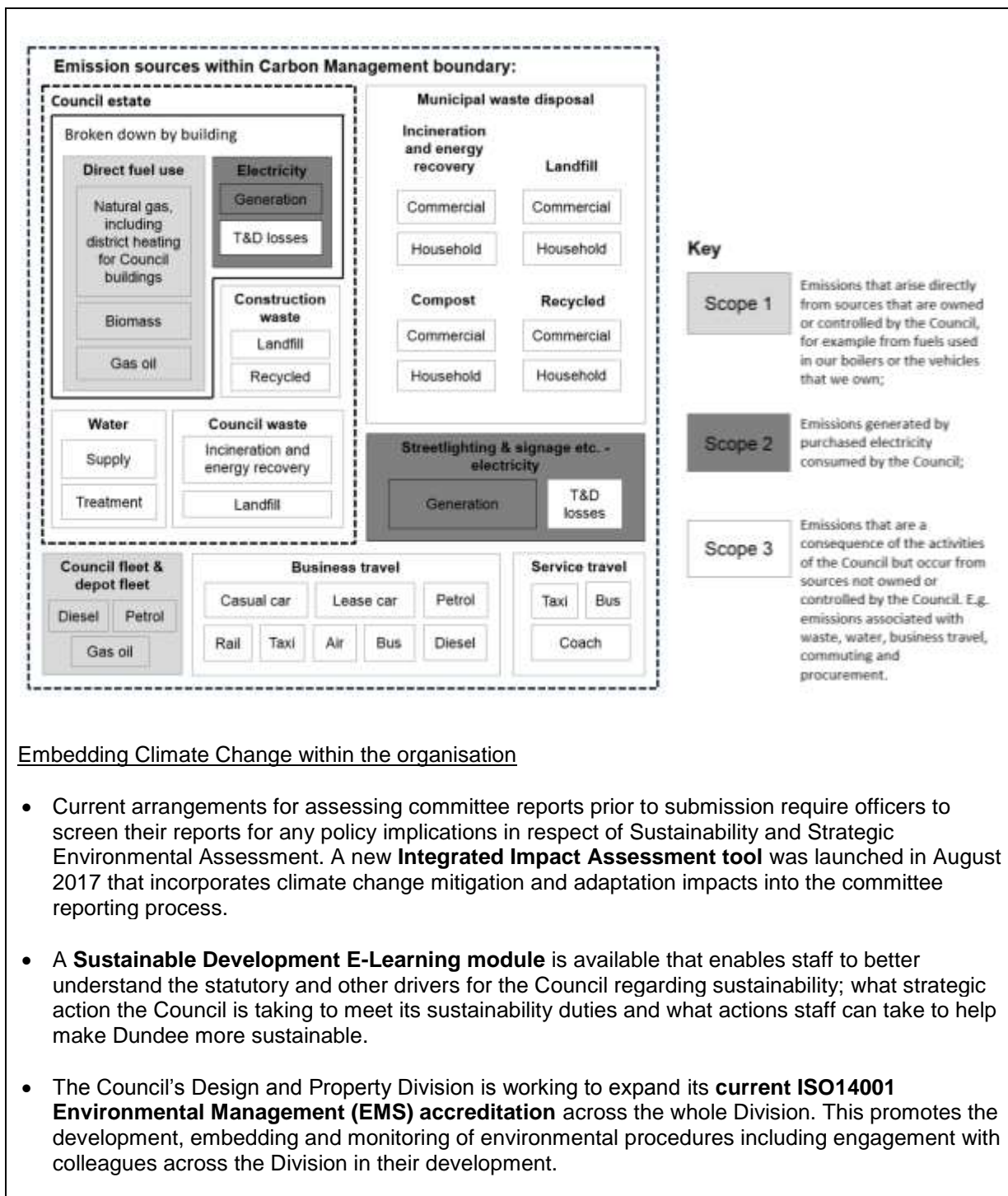
- City Development (sustainable development/climate change strategy, monitoring/reporting, strategic environmental assessment, adaptation, behaviour change, asset management, energy management, flooding and coastal, land use planning, transport planning, street lighting, fleet);
- Corporate Services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

Responsibility for climate change activity is led by the City Development Service. An internal Sustainable Dundee Working Group meets every 8 weeks to embed carbon management across Services and assist with the communication, facilitation and promotion of initiatives.

#### Carbon Emissions

- The Council's **carbon footprint boundary** was re-scoped in 2016 by officers from a range of Council services (shown below). Data for each emission source within the defined boundary is collated annually and calculated, identifying scope 1, scope 2 and scope 3 emissions. The data is presented to Council Management Team and Committee as part of the Council's statutory 'Public Bodies Climate Change Duties' report.
- To better understand what policies and interventions the Council should take in order to meet its energy and carbon reduction targets a **Business as Usual forecast** was prepared by the Energy Management Team which assesses the Council's future estate plans and relevant unit cost projections.
- 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 was further developed during 2017 and updated in 2018 by identifying and including existing and proposed Council projects that will help the Council better measure and manage progress of carbon reduction interventions.

Dundee City Council Carbon Footprint Boundary established 2016/17 unchanged for 2017/18:



Embedding Climate Change within the organisation

- 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. A new **Integrated Impact Assessment tool** was launched in August 2017 that incorporates climate change mitigation and adaptation impacts into the committee reporting process.
- A **Sustainable Development E-Learning module** is available that enables staff to better understand the statutory and other drivers for the Council regarding sustainability; what strategic action the Council is taking to meet its sustainability duties and what actions staff can take to help make Dundee more sustainable.
- The Council's Design and Property Division is working to expand its **current ISO14001 Environmental Management (EMS) accreditation** across the whole Division. This promotes the development, embedding and monitoring of environmental procedures including engagement with colleagues across the Division in their development.

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

See Strategic Service Areas above.

## APPENDIX 1: DCC 'PUBLIC BODIES CLIMATE CHANGE DUTIES' REPORT 2017/18

### 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
5% CO <sub>2</sub> reduction target from Council properties (per annum to 2020).	Energy Management Policy (2012-2020) – p.1 <a href="http://www.dundeecity.gov.uk/reports/reports/470-2012.pdf">http://www.dundeecity.gov.uk/reports/reports/470-2012.pdf</a>
Building Strong and Empowered Communities: Improve housing quality, choice and affordability. Increase District Heating Systems and Maximise External Wall insulation programme	City Plan (2017 – 2026) p. 43-44 <a href="https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf">https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf</a>
	Council Plan 2017-2022 p.42 <a href="https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf">https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf</a>
Building Strong and Empowered Communities: Improve access to healthy green and open spaces	City Plan (2017 – 2026) p. 43-44 <a href="https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf">https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf</a>
	Council Plan 2017-2022 p.42 <a href="https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf">https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf</a>
Building Strong and Empowered Communities: Improve transport connections to communities.	City Plan (2017 – 2026) p.43-44 <a href="https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf">https://www.dundeecity.gov.uk/sites/default/files/publications/cityplan.pdf</a>
	Council Plan 2017-2022 p.42 <a href="https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf">https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf</a>
Strong and Safe Communities: Recycling waste to meet Scotland's Zero Waste ambitions.	Council Plan 2017-2022 p.40-41 <a href="https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf">https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf</a>
Fair Work and Enterprise: Publish a Strategic Energy & Climate Change Action Plan: Deliver sustained reductions in CO <sub>2</sub> emissions and increased use of renewables in energy production and consumption.	Council Plan 2017-2022 p.34 <a href="https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf">https://www.dundeecity.gov.uk/sites/default/files/publications/councilplan1722.pdf</a>

#### 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.

In March 2018 the Lord Provost, Cllr Ian Borthwick, and Leader of the Council, Cllr John Alexander signed Dundee City up to the Covenant of Mayors for Climate and Energy; committing the Council to lead the development of a 'Sustainable Energy and Climate Action Plan' within two years and reducing the cities carbon emissions by 40% by 2030. In August 2018 a stakeholder engagement event took place 'Dundee 2030: Envisioning a Low Carbon Future' with public, private and community organisations from across the city to formulate actions to help the city reduce emission and adapt to climate change. These actions are currently being brought together into a coherent plan. The plan will undergo Strategic Environment Assessment before being launched in Spring 2019.

The Council's first Carbon Management Plan was adopted in 2009 with the Energy Management Policy and target revised in 2012. The Carbon Footprint Projects Register will act as an interim action plan until a full redraft of the Carbon Management Plan takes place in 2019/20.

**APPENDIX 1: DCC 'PUBLIC BODIES CLIMATE CHANGE DUTIES' REPORT 2017/18**

**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.*

<b>Topic Area</b>	<b>Name of document</b>	<b>Time period covered</b>	<b>Comments</b>
Adaptation	Dundee Coastal Study Stage 2	2013-	Identifies a framework within which local flood alleviation and coastal erosion defence schemes are developed at different locations along Dundee's 16.9km of coastal frontage. <a href="http://www.dundeecity.gov.uk/reports/reports/256-2013.pdf">http://www.dundeecity.gov.uk/reports/reports/256-2013.pdf</a>
	Tay Estuary and Montrose Basin Local Flood Risk Management Plan	2016-2022	In partnership with other responsible authorities, the plan has been developed to detail the actions adopted to reduce the impact of flooding in the Tay Estuary and Montrose Basin (TEAMB) local plan district (LPD) as required by the Flood Risk Management (Scotland) Act. <a href="http://www.angus.gov.uk/sites/angus-cms/files/2017-07/Tay_Estuary_and_Montrose_Basin_Local_Flood_Risk_Management_Plan.pdf">http://www.angus.gov.uk/sites/angus-cms/files/2017-07/Tay_Estuary_and_Montrose_Basin_Local_Flood_Risk_Management_Plan.pdf</a>
Energy efficiency	Energy Management Policy	2012-2020	The adoption of the Energy Policy demonstrates the City Council's commitment to the principles of responsible energy and water management in its operational buildings. The City Council will aim to improve its energy and water efficiency and reduce its energy and water consumption in line with the targets set out in this policy. <a href="http://www.dundeecity.gov.uk/reports/reports/470-2012.pdf">http://www.dundeecity.gov.uk/reports/reports/470-2012.pdf</a>
	Local Housing Strategy (LHS)	2013-2018	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. <a href="http://www.dundeecity.gov.uk/sites/default/files/publications/LHS%202013%20-%202018%20Final.pdf">http://www.dundeecity.gov.uk/sites/default/files/publications/LHS%202013%20-%202018%20Final.pdf</a>
Renewable energy/ Sustainable/ Renewable heat -	Invest in Dundee – Energy Dundee	2018-	The energy sector is an important part of the future for Dundee and the broader local economy encompassing: offshore wind, oil & gas, decommissioning (driven by the proximity of the Scottish Offshore Wind projects) and emerging and growing areas such as hydrogen, electric vehicle and a general market demand to lower energy costs and become more sustainable. Scottish Government identified Dundee Port in the National Renewables Infrastructure Plan (NRIP) as the most suitable port location on the East Coast of Scotland and recognised the major investment to support offshore construction and O&M activity made by both the public and private sector in the city.



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			<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&amp;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.  <a href="http://www.investindundee.co.uk">www.investindundee.co.uk</a> <a href="http://www.energydundee.com">www.energydundee.com</a></p>
	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.  <a href="https://www.dundee.gov.uk/reports/reports/166-2018.pdf">https://www.dundee.gov.uk/reports/reports/166-2018.pdf</a></p>
	Local Development Plan	2014-2019	<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"> <li>- Policy 29: Low and Zero Carbon Technology in New Development</li> <li>- Policy 30: Biomass Energy Generating Plant</li> <li>- Policy 31: Wind Turbines</li> </ul> <p>These policies are to be reviewed as part of the new LDP2 in line with Scottish planning policy.  <a href="http://www.dundee.gov.uk/localdevplan">http://www.dundee.gov.uk/localdevplan</a></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.  <a href="http://www.tayplan-sdpa.gov.uk">http://www.tayplan-sdpa.gov.uk</a></p>
	Local Development Plan	2014-2019	<p>In considering the delivery of the TAYplan vision there are several cross-cutting issues relating to climate change resilience that have informed the preparation of the Dundee Local Development Plan:</p> <ul style="list-style-type: none"> <li>- Recognising that new developments will have to contribute positively to mitigating the causes of climate change and put in place adaptation measures to future proof places.</li> </ul>

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			<ul style="list-style-type: none"> <li>- Recognising the need to ensure that climate change resilience is built into the natural and built environment.</li> <li>- Recognising the need to ensure that high resource efficiency and low/zero carbon energy generation technologies are incorporated within development to reduce carbon emissions and energy consumption to meet Scottish Government standards.</li> </ul> <p><a href="http://www.dundee.gov.uk/localdevplan">http://www.dundee.gov.uk/localdevplan</a></p>
	Proposed Local Development Plan 2	2019-2029	<p>The Proposed 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 and supporting heat networks in the City. It should be noted that the content of the Proposed Plan is subject to consultation and examination and therefore may change.</p> <p><a href="http://www.dundee.gov.uk/localdevplan2">http://www.dundee.gov.uk/localdevplan2</a></p>
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><a href="http://www.tactran.gov.uk/documents/RTSRefresh-FinalReport.pdf">http://www.tactran.gov.uk/documents/RTSRefresh-FinalReport.pdf</a></p>
Cycling	Dundee Cycling Strategy	2016-	<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>
Business travel	Staff Travel Policy	2011-	<p>This policy will 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><a href="http://www.dundee.gov.uk/reports/reports/413-2011.pdf">http://www.dundee.gov.uk/reports/reports/413-2011.pdf</a></p>

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Fleet transport	Plant/Vehicle Asset Management Plan		Internal document, unpublished.
ICT	Corporate Asset Management Strategy	2011-2015	Guides the acquisition, use and disposal of the Council's assets to make the most of their service delivery potential and manage the related risks and costs over their entire life. The six key areas of asset ownership (Buildings and Property; Roads Infrastructure; Council Housing; Open Space; Vehicle Fleet and ICT) recognise the need to minimise their impact on the environment and reduce carbon emissions.
	Digital Strategy	2016-2020	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. <a href="https://www.dundee.gov.uk/sites/default/files/publications/2017%20Digital%20Strategy.pdf">https://www.dundee.gov.uk/sites/default/files/publications/2017%20Digital%20Strategy.pdf</a>
Waste management	Internal Waste Management Strategy	2014-	Adopted in 2014 to ensure the Council becomes more resource efficient, compliant with new legislation, lessen our impact on the environment and ensure that the Council leads by example. Site Waste Management Plans have also been made mandatory on all Engineering Construction and Demolition Projects.
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. <a href="http://www.angus.gov.uk/sites/angus-cms/files/2017-07/Tay_Estuary_and_Montrose_Basin_Local_Flood_Risk_Management_Plan.pdf">http://www.angus.gov.uk/sites/angus-cms/files/2017-07/Tay_Estuary_and_Montrose_Basin_Local_Flood_Risk_Management_Plan.pdf</a>
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 <sub>10</sub> and NO <sub>2</sub> . 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. <a href="http://www.dundee.gov.uk/environment/airquality">http://www.dundee.gov.uk/environment/airquality</a>

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) Co-ordinate the preparation of a city-wide ‘**Sustainable Energy & Climate Action Plan**’ (SECAP) which will provide the leadership, commitment and planning necessary for the transition to a low carbon future. The strategy will align with the Scottish Government’s new ‘Climate Change Plan’ and ‘Scottish Energy Strategy’ and the Cleaner Air for Scotland Strategy. It will have a shared vision and objectives with the Tay Cities Deal of supporting sustainable economic growth, reducing social inequality, and enabling entrepreneurship and innovation.
- 2) Develop a Council **District Heating Strategy** to set 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.
- 3) Through a new Sustainable Development Working Group, further develop the **Carbon Reduction Projects Register** to better measure and manage progress of carbon reduction projects. This will include identifying and collating existing carbon reduction projects across the Council’s carbon footprint boundary and new carbon reduction projects to assist with carbon forecasting.
- 4) Develop a new **Carbon Management Plan** for the Council based on the latest carbon management data provided by the Carbon Footprinting and Project Register Tool and the carbon reduction actions identified during the SECAP process.
- 5) Work towards implementing **Carbon Budget** Accounting across all Services that will enable the organisation to better meet its commitments of the new Carbon Management Plan.

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.*

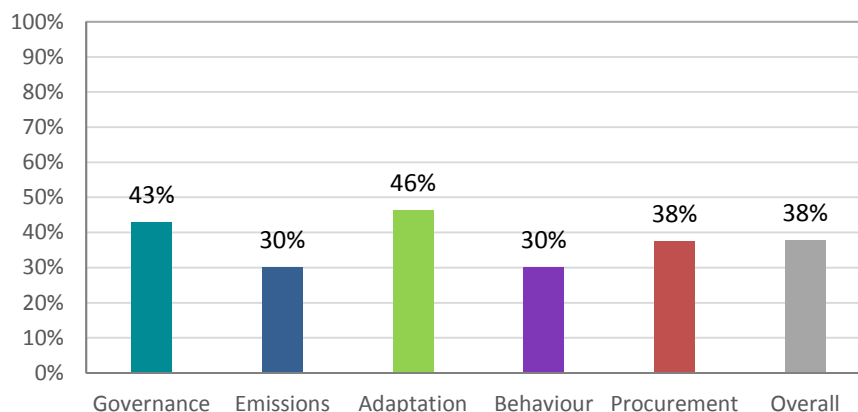
*This refers to the tool developed by Resource Efficient Scotland for the purposes of self-assessing an organisation’s capability / performance in relation to climate change.*

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 below:

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%
<b>Overall</b>	<b>46</b>	<b>122</b>	<b>38%</b>	<b>38%</b>

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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 powers of both the Climate Change Board and the Climate Action Group and an updated timetable for meetings that considers the timing of activities that require input or sign-off. This action is now complete with the development of a new 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. This group will report directly to the Council Management Team twice yearly, and 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 to be progressed.

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 taking action. This is ongoing and has seen significant progress with new Sustainable Dundee campaign being launched including a new logo, webpages, a Sustainable Dundee twitter account, a Low Carbon Story published for promotional and educational purposes detailing the carbon saving projects completed and planned by Dundee City Council. This is a standing item on the agenda of SDWG meetings.

The CCAT will be rerun in Spring 2019, allowing us to assess improvements in performance against the 6 criteria.

**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.*

Dundee City Council, in partnership with Angus Council and Perth & Kinross Council, submitted a Strategic Outline Case for the Tay Cities Deal in Spring 2017. The proposal aims to foster regional collaboration and expertise through the development of a regional Energy Services Company, attracting investment to build innovative district heating schemes in Dundee, Forfar and Perth using renewables or low carbon technologies.

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### 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	Comments
Baseline carbon footprint	2007/08	Financial (April to March)	20,029	23,664	12,472	56,165	tCO <sub>2</sub> e	The boundary of the carbon footprint been set and applied consistently across the 10 year dataset. All consumption data has been converted using the appropriate DEFRA Conversion Factor (DCF) for the time period.  6% reduction in tCO <sub>2</sub> e achieved between 2016/17 and 2017/18.
Year 1 carbon footprint	2008/09	Financial (April to March)	20,520	24,815	12,247	57,582	tCO <sub>2</sub> e	
Year 2 carbon footprint	2009/10	Financial (April to March)	20,551	24,662	11,077	56,290	tCO <sub>2</sub> e	
Year 3 carbon footprint	2010/11	Financial (April to March)	20,208	27,032	12,284	59,524	tCO <sub>2</sub> e	
Year 4 carbon footprint	2011/12	Financial (April to March)	18,197	23,857	8,939	50,993	tCO <sub>2</sub> e	
Year 5 carbon footprint	2012/13	Financial (April to March)	21,215	24,159	20,320	65,693	tCO <sub>2</sub> e	
Year 6 carbon footprint	2013/14	Financial (April to March)	17,991	21,579	10,815	50,385	tCO <sub>2</sub> e	
Year 7 carbon footprint	2014/15	Financial (April to March)	16,845	24,097	6,819	47,761	tCO <sub>2</sub> e	
Year 8 carbon footprint	2015/16	Financial (April to March)	16,144	22,321	7,090	45,555	tCO <sub>2</sub> e	
Year 9 carbon footprint	2016/17	Financial (April to March)	15,980	18,244	6,908	41,131	tCO <sub>2</sub> e	
<b>Year 10 carbon footprint</b>	<b>2017/18</b>	<b>Financial (April to March)</b>	<b>16,592</b>	<b>15,735</b>	<b>6,371</b>	<b>38,698</b>	<b>tCO<sub>2</sub>e</b>	

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### 3b) Breakdown of emission sources

Complete the following table with the breakdown of emission sources from the body's most recent carbon footprint (greenhouse gas inventory); this should correspond to the last entry in the table in 3(a) above. Use the comments column to explain what is included within each category of emission source entered in the first column. If, for any such category of emission source, it is not possible to 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 Source	Scope	Consumption Data	Units	Emission Factor	Units	Emissions (tCO <sub>2</sub> e)	Comments
Natural Gas	Scope 1	69,007,235	kWh	0.1842	kg CO <sub>2</sub> e/kWh	12,708.65	Natural gas use in Council buildings
Gas oil	Scope 1	2,388,508	kWh	0.2759	kg CO <sub>2</sub> e/kWh	658.93	Gas oil use in Council buildings
Biomass	Scope 1	230,095	kWh	0.127	kg CO <sub>2</sub> e/kWh	2.92	Heat contract output data available for biomass. Assume 85% efficiency to estimate input value. Decrease due to issues with the boiler leading to extended periods of inoperability.
Diesel	Scope 1	997,177	Litres	2.600	kg CO <sub>2</sub> e/litre	2592.82	Fleet. Assuming 6.0% for additional fuel not included and contingency.
Petrol	Scope 1	22,171	Litres	2.200	kg CO <sub>2</sub> e/litre	48.74	Fleet. Assuming 6.0% for additional fuel not included and contingency.
Gas oil (red diesel)	Scope 1	2,112,908	kWh	0.276	kg CO <sub>2</sub> e/kWh	583.16	Fleet. Converted from litres to kWh using conversion factor of 10.7 kWh per litre in order to use gas oil emission factor.
Grid Electricity (generation)	Scope 2	36,175,212	kWh	0.35156	kg CO <sub>2</sub> e/kWh	12,717.75	Grid electricity used in Council buildings
Grid Electricity (transmission & distribution losses)	Scope 3	36,175,212	kWh	0.03287	kg CO <sub>2</sub> e/kWh	1,189.08	Grid electricity used in Council buildings
Grid Electricity (generation)	Scope 2	8,573,378	kWh	0.35156	kg CO <sub>2</sub> e/kWh	3,014.06	Grid electricity used in street lighting and other sources (car parks, signage etc.)
Grid Electricity (transmission & distribution losses)	Scope 3	8,573,378	kWh	0.03287	kg CO <sub>2</sub> e/kWh	281.81	Grid electricity used in street lighting and other sources (car parks, signage etc.)



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Water use	Scope 3	342,997	m3	0.344	kg CO <sub>2</sub> e/m3	117.99	Actual data
Water treatment	Scope 3	325,847	m3	0.708	kg CO <sub>2</sub> e/m3	230.70	Estimated at 95% of water use total for same year.
Waste disposal – landfill - commercial	Scope 3	1,606	tonnes	100	kg CO <sub>2</sub> e/tonne	160.72	Includes DCC waste within commercial collection (estimated at 12.88% of commercial waste)
Waste disposal - incineration - commercial	Scope 3	8427	tonnes	22	kg CO <sub>2</sub> e/tonne	183.37	Includes DCC waste within commercial collection (estimated at 12.88% of commercial waste)
Waste disposal - composting - commercial	Scope 3	2,214	tonnes	6	kg CO <sub>2</sub> e/tonne	13.28	Commercial waste
Waste disposal - recycling - commercial	Scope 3	1,157	tonnes	22	kg CO <sub>2</sub> e/tonne	25.18	Commercial waste
Waste disposal - landfill - municipal	Scope 3	3,479	tonnes	589	kg CO <sub>2</sub> e/tonne	2,048.80	Household waste
Waste disposal - incineration - municipal	Scope 3	28,923	tonnes	22	kg CO <sub>2</sub> e/tonne	629.36	Household waste
Waste disposal - composting - municipal	Scope 3	9,506	tonnes	6	kg CO <sub>2</sub> e/tonne	57.04	Household waste
Waste disposal - recycling - municipal	Scope 3	12,948	tonnes	22	kg CO <sub>2</sub> e/tonne	281.75	Household waste
Business travel - private car	Scope 3	1,714,534	km	0.179	kg CO <sub>2</sub> e/km	312.77	No information available about car size or fuel so unknown size/unknown fuel factor used
Business travel - lease car	Scope 3	525,626	km	0.179	kg CO <sub>2</sub> e/km	95.88	Lease data – last year lease and casual not separated
Business travel - taxi	Scope 3	21,844	passenger km	0.156	kg CO <sub>2</sub> e/passenger km	3.41	From transport expenditure against cost centre codes with assumptions about % expenditure

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							against different modes, therefore data should be treated as an estimate.
Business travel - bus	Scope 3	320,422	passenger km	0.123	kg CO <sub>2</sub> e/ passenger km	39.28	From transport expenditure against cost centre codes with assumptions about % expenditure against different modes, therefore data should be treated as an estimate.
Business travel - rail	Scope 3	700,428	passenger km	0.047	kg CO <sub>2</sub> e/ passenger km	32.77	From transport expenditure against cost centre codes with assumptions about % expenditure against different modes, therefore data should be treated as an estimate.
Business travel - air	Scope 3	34,138	passenger km	0.267	kg CO <sub>2</sub> e/ passenger km	9.13	From transport expenditure against cost centre codes with assumptions about % expenditure against different modes, therefore data should be treated as an estimate.
Business travel - diesel	Scope 3	97,068	litres	2.600	kg CO <sub>2</sub> e/litre	252.39	Assumed to be separate from fleet petrol and therefore assigned to Scope 3.
Business travel - petrol	Scope 3	99,390	litres	2.200	kg CO <sub>2</sub> e/litre	218.49	Assumed to be separate from fleet diesel and therefore assigned to Scope 3.
Service travel - taxi	Scope 3	311,239	passenger km	0.156	kg CO <sub>2</sub> e/ passenger km	48.61	From transport expenditure against cost centre codes with assumptions about % expenditure against different modes, therefore data should be treated as an estimate.
Service travel - bus	Scope 3	291,090	passenger km	0.123	kg CO <sub>2</sub> e/ passenger km	35.68	From transport expenditure against cost centre codes with assumptions about % expenditure against different modes, therefore data should be treated as an estimate.
Service travel - coach	Scope 3	401,601	passenger km	0.256	kg CO <sub>2</sub> e/ passenger km	103.41	From transport expenditure against cost centre codes with assumptions about % expenditure against different modes, therefore data should be treated as an estimate. Average van EF used as this is for coach km rather than passenger km and also for consistency with previous years.
					<b>Total</b>	<b>38,698</b>	

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**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	35,979	5379			
Solar Thermal					
Wind					
Hydro					
Wave					
Tidal					
Biogas CHP					
Landfill Gas CHP					
Biomass			270,000		Biomass is supplied through a heat supply contract – input figure is estimated using a figure of 85% boiler efficiency. All heat is consumed by DCC.
Biogas					
Air Source Heat Pump					
Ground Source Heat Pump					
Water Source Heat Pump					

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

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### Targets

#### 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	Progress against target	Year used as baseline	Baseline figure	Units of baseline	Target completion year	Comments
Carbon Management Plan target	Annual %	5	Annual % reduction	Energy use in buildings	27,773	2015/16	32,163	tCO <sub>2</sub> e	2019/20	This target is based on energy use in buildings (electricity, natural gas, gas oil and biomass); although the carbon footprint boundary has been widened to include other sources, for consistency, reporting against this target will continue until 2019/20.

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### 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 <sub>2</sub> e)	Comments
Electricity	83	Energy Efficiency Measures in the DCA.
Natural Gas	24	
Other heating fuels	0	
Waste	0	Waste Awareness Projects starting next year, later than planned.
Water and sewerage	0	
Business Travel	0	
Fleet transport	17	EV purchase and reduction in CO <sub>2</sub> limits for cars.
Other 1 (specify in comments)	-	
<b>Total</b>	<b>124</b>	

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

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

Project name	Funding source	Expected First full year of CO <sub>2</sub> e savings	Estimated or actual savings	Capital cost (£)	Operational cost (£/annum)	Project lifetime (years)	Primary fuel/emission source saved	Estimated carbon savings per year (tCO <sub>2</sub> e/annum)	Estimated costs savings (£/annum)	Behaviour Change aspects	Comments
NDEE Basket 1 - Elec	CEEF	2019/20	Estimated	831,932	5,860	10	Grid Electricity (generation)	468	1523, 340	No	First full year capture due to postponement of projects – started just after end of reporting period.
NDEE Basket 1 - Gas	CEEF	2019/20	Estimated	682,513	4,354	10	Natural Gas	269	1523, 525	No	First full year capture due to postponement of projects – started just after end of reporting period.
NDEE Basket 1 – Solar PV	CEEF	2019/20	Estimated	161,000	-	14	Solar PV		11,734	No	First full year capture due to postponement of projects – started just after end of reporting period.
Street lighting	CEEF	2019/20	Estimated	1,920,000	-	10	Grid Electricity (generation)	1,361	508,307	No	First full year capture due to postponement of projects – started just after end of reporting period.
Waste	ZWS/ DCC	2018/19	Estimated	780,000	-	10	Grid Electricity (generation)	31	114,173	Yes	Change in waste collection services to be in line with household charter, plus awareness raising to increase recycling and correct use of bins.
Fleet	Transport Scotland/ Air Quality Funds	2018/19	Estimated	n/a	n/a	10	Grid Electricity	2.3% reduction overall		Yes	Raising awareness of EV's and changing fleet to EV vehicles.

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### 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 <sub>2</sub> e)	Increase or decrease in emissions	Comments
Estate change	1,153	Increase	New Baldragon Academy, Tayview and Harris Academy (which had first full year of operation)
Service provision			
Staff Numbers			
Other (specify in comments)	2,433	Decrease	The reduction in the grid emissions factor between 2016/17 and 2017/18 has had the impact of reducing the carbon footprint of DCC by around 2,433 tCO <sub>2</sub> e despite higher consumption of gas and electricity.
<b>Total</b>	1,280	<b>Decrease</b>	

### 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 <sub>2</sub> e)	Comments
Electricity	0	
Natural gas	0	
Other heating fuels	0	
Waste	0	
Water and sewerage	0	
Business Travel	0	
Fleet Transport	2	
Other 1 (specify in comments)		
<b>Total</b>	2	Many projects implemented around April 2018, which means first full year of savings not captured in the tool for 18/19 period. Most savings realised in the 19/20 period.

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**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.*

<b>Emissions source</b>	<b>Total estimated annual emissions (tCO<sub>2</sub>e)</b>	<b>Increase or decrease in emissions</b>	<b>Comments</b>
Estate changes	Not Yet Available	Increase	Coldside Primary School and Hilltown community centre, figures not known.
Service provision			
Staff numbers			
Other (specify in comments)	Difficult to quantify	Decrease	The impact of the decreasing grid factor in 2018/19 will have a significant impact on the overall footprint.
<b>Total</b>	Difficult to quantify	Decrease	The net effect will be a reduction in emissions but there is likely to be an increase in consumption of electricity and natural gas.

**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”).*

<b>Total savings</b>	<b>Total estimated emissions savings (tCO<sub>2</sub>e)</b>	<b>Comments</b>
Total project savings since baseline year	8,772	This is the total reduction since the baseline year of 2007/08 for energy use in buildings. However, it is not certain that all of this is due to carbon reduction projects or alternatively that this figure does not also include some increases from estate changes, therefore underestimating the savings from energy efficiency projects.

**3k) Supporting information and best practice**

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

The 5% annual emissions reduction target from energy use in buildings was narrowly missed in the 2017/18 reporting period (4.8% reduction achieved). There was an increase in electricity consumption of 2%, natural gas consumption was up 7% and gas oil consumption was up 19%. This is despite the fact that the grid emission factor reduced by 14%. This was due to four new schools in operation during that period (although 2 schools were closed) and also that this was a much colder winter than previous years, explaining the significant increase in natural gas consumption.



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).*

- An Adaptation Strategy will be developed for Dundee following the 5 steps outlined in the SECAP process
  1. Prepare ground for adaptation (identifying human, technical and financial resources)
  2. Assess risks and vulnerabilities (identify policy sector e.g. health, energy, transport and assess climate risks and vulnerabilities relating to these).
  3. Identifying and assessing adaptation options
  4. Selecting adaptation options
  5. Implementing
  6. Monitoring and evaluatingNew guidance from Adaptation Scotland, available later in 2018, on how to assess and strategically integrate adaptation consideration across organisations will also be applied during this process.
- In partnership with the Scottish Cities Alliance and Jacobs, a '**Low Carbon and Climate Change Adaptation Opportunity Assessment**' was published in February 2015 which provides a high level indicative assessment of the economic risks of potential adaptation impacts at the city level.
- With support from Resource Efficient Scotland a **Climate Change Assessment Tool** workshop was held on August 2015. Part of the assessment covers a self-evaluation of the Council's adaptation performance, with five questions centred on Adaptation Scotland's 5 Steps to managing climate risks. Key priority areas and actions for improvement were identified which are outlined for future action in 4g below.
- Detailed analysis of long term climate trends were used to prepare the **Dundee Coastal Study Stage 2** (Aug 2013) as part of ongoing coastal flood risk management. The Study identifies a framework within which local Flood Protection Schemes/Works and coastal erosion defence schemes are developed at different locations along Dundee's 16.9km of coastal frontage. As part of the development of the programme, an Options Workshop was held to consider the types of coastal defences in each of the nine geographical management sections. The study identifies that there is a risk of coastal flooding within Central Dundee, Broughty Ferry, Riverside Drive and Dundee Airport.
- The **Tayside Integrated Catchment Study** is well underway and a Model has been developed. This models the sewer system and it's interaction with watercourses within Dundee and Tayside. The next stage of the Study is to prioritise the numerous flood risk areas identified throughout Dundee to be taken through to the optioneering stage. The optioneering stage will consider alternative solutions and costs and will be followed by outline design of the selected option and confirmation of the necessary funding. Thereafter, and subject to the availability of funding, detailed design will be taken forward by the appropriate authority or jointly depending on the solution proposed. Outputs will also be used to prepare a Surface Water Management Plan for Dundee.
- In partnership with other responsible authorities, the Council has prepared a **plan to reduce flood risk** within Dundee City as required by the Flood Risk Management (Scotland) Act.
- 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 are received and clearly assigns roles and responsibilities within the organisation for mitigating these events.

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

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

- The Council's **Generic Emergency and Business continuity Plans** are wide enough in scope to apply to risks associated with:
  - Disruption to energy, transport, water and ICT infrastructure and delivery networks;
  - Rising sea levels for coastal communities
  - Impacts on health and well-being of individuals and communities
- **Service Risk Registers** may include 'climate-related' risks but are more likely to be referenced as severe weather impacts.
- The Council has prepared and operates a **Flood Emergency Plan** that is updated annually. The plan identifies known areas of flooding and measures to be taken when Flood Alerts are received and clearly assigns roles and responsibilities within the organisation for mitigating 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

- The Council has committed to developing an **Adaptation Strategy** as part of the SECAP process. The Council has also undertaken training on a new **Climate Just** tool which allows social vulnerability in the face of climate change to be assessed so that appropriate adaptation actions can be tailored to people as well as places.
- The Council joined Adaptation Scotland's '**Adaptation Learning Exchange**' (ALE) in May 2015 to help officers better understand and manage climate-related impacts. The programme ran from June to December and consisted of three one-day workshops and support to help build the business case for a planned approach, using the "Five Steps to Managing your Climate Risks" guidance.
- As part of the ALE programme, an **Adaptation briefing paper** was prepared for the Council's Climate Change Board in June 2015 providing info on the policy context, terminology, data projections, potential impacts on services and resources available to help the organisation.
- A briefing meeting on adaptation was held with the Council's new Elected Member champion for climate change in August 2015 and, in partnership with Adaptation Scotland, a **lunchtime briefing** was held in November 2015 for elected members and senior officers on the topic of '*Resilient communities: impacts and opportunities from a changing climate*'. The session provided information on understanding climate change terminology, trends and projections; the impacts and risks of extreme weather on our communities and services and managing climate risks and taking local action.

- Two **climate change adaptation workshops** were held in 2013 in partnership with Adaptation Scotland to raise awareness and train TAYplan colleagues on adaptation, as well as identify where policy changes could be made to promote greater integration of climate change adaptation measures.

Delivering adaptation action

- The **Tay Estuary and Montrose Basin Local Flood Risk Management Plan** was published on 22<sup>nd</sup> June 2016 in co-ordination with Angus, Aberdeenshire, PKC, Scottish Water and SEPA. The plan is to be reviewed and updated every 6 years after publication.
- The **Tayside Integrated Catchment Study Model** has been developed to assist with the above. It models the sewer system and its interaction with watercourses within Dundee and Tayside. The next stage of the Study is to prioritise the numerous flood risk areas identified throughout Dundee to be taken through to the optioneering stage. The optioneering stage will consider alternative solutions and costs and will be followed by outline design of the selected option and confirmation of the necessary funding. Thereafter, and subject to the availability of funding, detailed design will be taken forward by the appropriate authority or jointly depending on the solution proposed. Outputs will also be used to prepare a Surface Water Management Plan for Dundee.
- Following on from the Dundee Coastal Study Stage 2, one **Flood Protection Scheme** is completed and one is under preparation:
  - *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 has 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.* It is proposed to construct a new river wall and steps along with walkway and a combination of setback wall and gates that will provide flood protection. Design stage currently well underway. It is anticipated that these works will commence in Spring 2019 subject to the successful promotion of a Flood Protection Scheme. This Scheme will also include soft flood protection measures utilising the existing sand dunes along Broughty Ferry Esplanade from the car park to the Glass Pavilion and the installation of a gabion mattress or equivalent to protect the Grassy Beach area.
- Greenspace / Biodiversity / Green infrastructure:
  - **New management techniques for greenspaces** - The most eye-catching has been the establishment of annual flower mixes along verges adjacent to busy roads. These mixes are bold, attractive and beneficial to biodiversity. In house Landscape Designers take into account the challenges of the urban area and use a palette of plants which can withstand changes to the local environment, such as lack of water and vehicle emissions etc.
  - 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, five parks successfully attain a Green Flag award in 2017/18, by submitting a Management Plan and hosting a site visit by an external assessor.
  - Over 250 ha of Dundee is **woodland**, which performs an important environmental function storing carbon, sheltering the built environment from wind and filtering pollutants, as well as being appreciated by visitors and wildlife. In recent years, Dundee has benefitted from grant funding awarded by Forestry Commission Scotland, enabling the improvement and expansion of Dundee's wooded areas.

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- **Community Growing Projects** - a Community Allotment Officer was appointed in 2015 and capital funding made available to develop Growing Spaces in all areas of Community Regeneration. To date, seven community gardens have been established which enable local people to grow their own fruit and vegetables, positively impacting on their health and wellbeing, as well as reducing food miles / carbon footprint of fruit and vegetables.
- In partnership with NHS Tayside and Scottish Natural Heritage, the Council is developing a **Green Health Partnership** (GHP) over the next three years as part of the national Natural Health Service. The GHP aims to encourage an increase in social prescribing by linking health care professionals with local greenspace health initiatives, such as Branching Out and the Family Fresh Air Club run by the Dundee Countryside Rangers and Dundee Association for Mental Health's Greenbuds, as well as community growing spaces.
- A **Mobility Integration Living Laboratory project (MILL)** is being developed; a public-private-people partnership which will see Dundee become a real life test and experimentation environment for mobility solutions that integrate with the transport network. This will be 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.

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

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

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

Objective Reference	Theme	Policy/ Proposal reference	Delivery progress made
[N1] Understand the effects of climate change and their impacts on the natural environment	Natural Environment	[N1-8] Understand the risks associated with coastal flooding through development and implementation of local flood risk plans.	Dundee City Council has engaged in the development of the Local Flood Risk Management Plan through membership of the Tay Estuary and Montrose Basin (TEAMB) Local Plan District.
		[N1-10] Developing datasets to support flood risk, river and coastal management. A requirement of the Flood Risk Management (Scotland) Act is to develop a programme to integrate necessary data.	<p>Analysis of long term trends used to inform Dundee Coastal Study Stage 2 and as part of ongoing flood risk management.</p> <p>The Tayside Integrated Catchment Study is well underway and a Model has been developed. This models the sewer system and it’s interaction with watercourses within Dundee and Tayside. The next stage of the Study is to prioritise the numerous flood risk areas identified throughout Dundee to be taken through to the optioneering stage. The optioneering stage will consider alternative solutions and costs and will be followed by outline design of the selected option and confirmation of the necessary funding. Thereafter, and subject to the availability of funding, detailed design will be taken forward by the appropriate authority or jointly depending on the solution proposed. Outputs will also be used to prepare a Surface Water Management Plan for Dundee.</p> <p>Local Development Plan – Policy 41 recognises the implications of climate change and sea level rise and there is a presumption against development in areas vulnerable to coastal erosion, flood risk and rising sea levels.</p>

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<p>[N2] Support and healthy and diverse natural environment with capacity to adapt</p>	<p>Natural Environment</p>	<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>	<p>The Local Development Plan (LDP) contains policies on green networks, habitat enhancement. The LDP non-statutory planning guidance on the Dundee Green Network was published in 2016. Key development principles are outlined in relation to climate change adaptation and mitigation; improve quality of place; facilitate people to lead healthier lives; protect and enhance the city's green and blue assets.</p> <p>The City Council's Biodiversity Duty report was agreed in June 2017. Commitment made for production of Biodiversity Duty Action Plan in 2018.</p>
		<p>[N2-18] 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> <p>[N2-20] Assess and manage coasts, promoting adaptive coastal management that works with natural processes.</p>	<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.</p>

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Objective Reference	Theme	Policy/ Proposal reference	Delivery progress made
<p>[N3] Sustain and enhance the benefits, goods and services that the natural environment provides</p>	<p>Natural Environment</p>		<p>N/A Dundee City Council is not listed as a responsible authority for this objective</p>
<p>[B1] Understand the effects of climate change and their impacts on buildings and infrastructure networks</p>	<p>Buildings and infrastructure networks</p>	<p>[B1-13] 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>	<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. Local Development Plan Policy 41 recognises the implications of climate change and sea level rise and there is a presumption against development in areas vulnerable to coastal erosion, flood risk and rising sea levels.</p> <p>The Tayside Integrated Catchment Study is well underway and a Model has been developed. This models the sewer system and it's interaction with watercourses within Dundee and Tayside. The next stage of the Study is to prioritise the numerous flood risk areas identified throughout Dundee to be taken through to the optioneering stage. The optioneering stage will consider alternative solutions and costs and will be followed by outline design of the selected option and confirmation of the necessary funding. Thereafter, and subject to the availability of funding, detailed design will be taken forward by the appropriate authority or jointly depending on the solution proposed. Outputs will also be used to prepare a Surface Water Management Plan for Dundee.</p>
<p>[B2] Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure</p>	<p>Building and infrastructure networks</p>		<p>N/A Dundee City Council is not listed as a responsible authority for this objective</p>

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Objective Reference	Theme	Policy/ Proposal reference	Delivery progress made
<p>[B3] Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided</p>	<p>Buildings and infrastructure networks</p>	<p>[B3-3] Scottish Planning Policy (SPP) (Climate Change) identifies that short and long term impacts of climate change should be taken into account in all decisions throughout the planning system.</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] 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] 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>Council continues to maximise impact of the Home Energy Efficiency Programme Scotland – Area Based Schemes (HEEPS:ABS) funding by combining with its own capital budget and ECO funding from SSE to externally insulate mixed tenure blocks of flats in former Council estates that are either solid wall or non-traditional construction. Over 2,500 properties (split 50/50 between social and private) have been externally insulated since inception in areas such as Clepington Road, Byron Street, Maitland Street, Graham Street (Woodlands), Hospital Street and Hospital Park. These properties have been visibly transformed, resulting in reduced (fossil) fuel use and increased comfort and warmth for householders.</p> <p>Project areas have been identified, prioritised by most Fuel Poor first, and a process review undertaken in order to enable quick mobilisation in partnership with SSE and start on site should new funding become available. The 2017/18 HEEPS:ABS allocation was £1.345m (with a subsequent additional £75k allocated), with 800 properties to receive External Wall Insulation. A further 540 properties have been identified for 2018/19.</p> <p>Dundee Energy Efficiency Advice Project (DEEAP), which forms part of the Council's Advice Services, carries 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
		[B3-8] Improve Housing Quality by ensuring all houses meet the tolerable standard, and that all social housing meets the Scottish Housing Quality Standard (SHQS) by 2015.	By March 2018, the Council required only 78 abeyances for the energy efficiency component of SHQS out of a stock of 12750 properties. Measures carried out over the course of the year towards achievement of SHQS included installation of: <ul style="list-style-type: none"> <li>- New roofs (including loft insulation of 300mm) at 224 properties;</li> <li>- New, energy-efficient windows at 169 properties;</li> <li>- 637 new, energy-efficient gas heating systems;</li> </ul> External Wall insulation (EWI) at 612 tenanted properties and 178 owners - solid-wall and non-traditional properties both Council and private using a blend of HEEPS:ABS, ECO and Council's own capital funding.
[S1] Understand the effects of climate change and their impacts on people, homes and communities	Society		N/A Dundee City Council is not listed as a responsible authority for this objective, however its Flood Emergency Plan identifies known areas of flooding and measures to be taken when Flood Alerts are received and clearly assigns roles and responsibilities within the organisation for mitigating these events.
[S2] Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events	Society		N/A Dundee City Council is not listed as a responsible authority for this objective however, in partnership with other responsible authorities, the development and implementation of the Local Flood Risk Management Plan includes elements of awareness raising.
[S3] Support of our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate	Society		N/A Dundee City Council is not listed as a responsible authority for this objective however, the Council support health service and emergency responders within the duties of the Civil Contingencies (Scotland) Act 2005.

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### 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 is committed to developing a city-wide '**Sustainable Energy & Climate Action Plan**' (SECAP) which will provide the leadership, commitment and planning necessary for the transition to a low carbon future. Resilience and Adaptation has been identified as one of the plan's six strategic programme areas and to assist in plan preparation, a 'Climate Change Risk and Vulnerability Assessment' will be 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.
- Participation in Adaptation Scotland's '**Adaptation Learning Exchange**' continues to assist officers in climate change, risk & resilience and planning related fields to build their knowledge base and capacity to respond to adaptation at an organisational level and provide them with the support to communicate adaptation issues and present robust business cases for taking action.
- 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) Prepare a 'Climate Change Risk and Vulnerability Assessment' to determine the nature and extent of climate-related risks.
- 2) Via the Dundee Partnership, commence preparation of the city's Sustainable Energy and Climate Action Plan, including the 'Adaptation & Resilience' strategic programme.
- 3) Investigate opportunities for collaborative working on climate change adaptation with the city's universities and neighbouring Councils.
- 4) Develop a Biodiversity Duty Action Plan which incorporates adaptation and resilience, and considers the ecosystems service functions of Dundee's greenspaces.
- 5) Continue to participate in the 'Adaptation Learning Exchange'.

#### 4h) Supporting information and best practice

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

None.

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### 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 change 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.
- The TPC '**Sustainable Procurement Policy**' (<http://www.taysideprocurement.gov.uk/strategy>) was introduced to support the Council comply with its climate change duties and commits to buying more sustainably, which in turn can offer whole life cost efficiency, supports the commitment to Corporate Social Responsibility and can promote health improvements amongst stakeholders. Key sustainable procurement objectives addressed by the policy are:
  - Seek to reduce carbon emissions through developing improved specification.
  - Seek to contribute to climate change adaptation through procurement activity.
  - Embed sustainability at the heart of procurement activity and deliver a number of specific sustainable outcomes.
- Examples of where procurement policy has delivered on climate change aims in 2017/18 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
    - 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.
- Dundee became Scotland's first **Fairtrade City** in 2004 and updated it Fairtrade Policy in 2012. The Council continues to undertake activities in support of its policy:
  - Only fair trade tea and coffee is now provided by the City Chambers when providing hospitality for meetings and events;

## APPENDIX 1: DCC 'PUBLIC BODIES CLIMATE CHANGE DUTIES' REPORT 2017/18

- 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 Fair Trade Forum to promote fair trade products;
- The Council's Community Benefits Officer is working with Dundee Fair Trade 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;
- Fair trade footballs have been purchased by the Council and its leisure partner Leisure and Culture Dundee;
- 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.*

- Sustainable outcomes are included in TPC specifications. Examples of positive outcomes delivered in 2017/18 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 trialing of electric and hybrid vehicles.
  - The **IT peripherals framework** includes minimum specification for the latest energy efficiency, recyclable and environmental accredited products.
  - 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.
- The Council continues to use the innovative resource-redistribution tool **WARPit** – that makes it easy for staff to obtain unwanted resources within the council and beyond, reducing procurement spend and waste disposal costs, as well as minimising waste and reducing carbon emissions. By 31<sup>st</sup> March 2018, WARPit had helped the council divert almost 48 tonnes of waste, saved 112 tonnes of CO<sub>2</sub> and saved the Council its partners £221,000 in avoided procurement costs. Six school closures are planned for summer 2018 and significant CO<sub>2</sub> savings are expected from reusing surplus items from these schools via WARPit. These savings will be reflected in the 2018/19 annual report.
- The Council had previously made a silver pledge under **WWF's 'What Wood You Choose' campaign**, to improve our procurement of sustainability timber products for Council construction and maintenance/ repairs projects. The Council was awarded its Silver Pledge in August 2014 and continue to monitor all new Council timber procurement contracts, requiring timber suppliers to provide a copy of their relevant chain of custody certification at the start of construction as stated in section 236 of the Council's Bill of Quantity stipulating sustainable timber to be used on all contracts.

## APPENDIX 1: DCC 'PUBLIC BODIES CLIMATE CHANGE DUTIES' REPORT 2017/18

- Recent Civil Engineering projects include a requirement on the contractor to prepare a **Site Waste Management Plan** at tender stage and to monitor and maintain this during construction. This allows partners within the contract to develop a strategy for site waste at an early stage and ensure that this is implemented throughout the project. This information can be used at a senior level to help manage waste, for example the potential reuse of earthworks and demolition materials across Council projects.

### 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 Sustainability and Climate Change Officer. The report is then circulated internally for verification before being presented to Council Management Team for further comment before submitted to the Council's Policy and Resources Committee for approval.

#### 6b) Peer validation process

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

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

#### 6c) External validation process

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

No external validation undertaken. The Council will continue to work with both Sustainable Scotland Network 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.*

<b>Name:</b>	Bryan Harris
<b>Role in the organisation:</b>	Sustainability and Climate Change Manager
<b>Date:</b>	24 <sup>th</sup> September 2018

## **PART 2**

### **RECOMMENDED REPORTING: REPORTING ON WIDER INFLUENCE**

#### **Wider Impact and Influence on GHG Emissions**

##### **1a) Historic Emissions**

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

<b>Sector</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Units</b>
Industry and Commercial	445.52	446.39	436.02	415.67	369.92	377.09	344.17	358.92	348.07	281.01	289.19	255.01	kt CO <sub>2</sub>
Domestic	385.10	384.36	378.30	374.82	335.25	352.96	311.93	331.55	314.75	261.15	247.39	229.20	kt CO <sub>2</sub>
Transport total	230.08	229.42	234.54	227.52	219.66	216.00	211.87	209.70	205.01	206.32	205.47	208.75	kt CO <sub>2</sub>
Total Emissions	1060.72	1060.17	1048.87	1018.03	924.84	946.07	867.98	900.17	867.84	748.49	742.06	692.97	kt CO <sub>2</sub>
<i>Per Capita</i>	<i>7.38</i>	<i>7.39</i>	<i>7.29</i>	<i>7.05</i>	<i>6.37</i>	<i>6.47</i>	<i>5.89</i>	<i>6.09</i>	<i>5.85</i>	<i>5.05</i>	<i>5.00</i>	<i>4.67</i>	<i>t CO<sub>2</sub></i>

##### **2a) Targets**

Please detail your wider influence targets.

Table 2

<b>Sector</b>	<b>Description</b>	<b>Type of Target (units)</b>	<b>Target saving</b>	<b>Baseline year</b>	<b>Target / End Year</b>	<b>Baseline value</b>	<b>Latest Year Measured</b>	<b>Saving in latest year measured</b>	<b>Comments</b>
Energy and Climate Change	Covenant of Mayors (CoM) for Climate and Energy target.	Percentage Emissions (%)	40% reduction	2005	2030	1,097,693	2015	24% (834,655)	Dundee signed to CoM in March 2018.

## 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.

As signatory to the Covenant of Mayors for Climate and Energy, Dundee City Council, through a partnership approach is required to prepare a Sustainable Energy and Climate Action Plan (SECAP) that will provide a route map to demonstrate how Dundee will achieve an emissions reduction of at least 40% by 2030. It will cover six programme areas of energy efficiency, resource efficiency, renewables, district heating, sustainable transport, and adaptation, and include baseline data, projects at their appropriate scale, finance options and address future challenges.

Draft Objectives include:

1. Energy Efficiency - Reduce the consumption of energy, promote energy efficiency and increase the proportion of energy from low and zero carbon technologies.
2. District Heating - Increase the use of District Heating schemes on the city, create new heat networks and deliver affordable energy.
3. Renewables - Increase the percentage of renewables used for power and heat and deliver savings.
4. Sustainable Transport - Reduce the impact of transport and travel by promoting and deploying sustainable alternatives.
5. Waste & Resource Efficiency - Manage our waste sustainably by reducing, reusing and recovering waste to improve resource efficiency.
6. Resilience & Adaptation - Reduce the risks and vulnerability to a changing climate and build resilience to unavoidable impacts.

## 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 (public/ Private /3rd sector)	Outputs
Partnership Working	Sustainable Dundee	Partnership working of climate change/ sustainability	Lead	+20 orgs inc. Dundee Partnership	Communications and partnership banner to promote and take forward sustainability and climate change activity in Dundee. Tasked with developing the 'Sustainable Energy & Climate Action Plan' for city to reduce emission by 40% by 2030. SECAP Stakeholder Workshop held in August 2018. <a href="https://www.dundee.gov.uk/sustainable-dundee">https://www.dundee.gov.uk/sustainable-dundee</a>
Communications	Our Low Carbon Story	Awareness Raising	Lead	Dundee City Council depts.	Provides key examples of existing work, & future plans, which align to SECAP and strive to meet a number of ambitious aims. <a href="https://www.dundee.gov.uk/sites/default/files/publications/owcarbonstory.pdf">https://www.dundee.gov.uk/sites/default/files/publications/owcarbonstory.pdf</a>
Communications	Earth Hour 2018	Behaviour change	Lead	Leisure and Culture Dundee, University of Dundee, Abertay University, Dundee	The Council worked with a number of organisations across the city to put together an exciting, innovative and fun programme of Earth Hour events and activities. Our participation involved internal and external communications

				University Student's Association, Abertay University Students Association	via the corporate Intranet, Council web pages, social media such as Facebook and Twitter, local press and internal emails, all running adjacent to the coordination of a number of widely varying events and activities. <a href="https://www.youtube.com/watch?v=ZhBAhN3udNg">https://www.youtube.com/watch?v=ZhBAhN3udNg</a>
Communications	Drive Dundee Electric	Behaviour change	Lead	Scottish Government, Office for Low Emission Vehicles	Launched in June 2017 to encourage and support the uptake of EV's 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 EV owners. <a href="https://drivedundeeelectric.co.uk">https://drivedundeeelectric.co.uk</a>
Communications	Waste Education and Awareness programme	Behaviour change	Lead	Schools, Zero Waste Scotland	Relaunched into all Dundee schools in November 2015 offering a menu of activities and visits commenced in January 2016. There was an encouraging uptake, particularly for school assemblies to reinforce the 'Reduce, reuse, recycle' message.
Partnership Working	Baldovie Community Reuse Hub	Skills/capacity building	Lead	Tayside Re-users, Transform, Dundee Social Enterprise Network.	Joint partnership repair items that could be saved from the skip including unwanted furniture and other household items, thus reducing waste to thermal treatment or landfill. The Hub also offers opportunities for the unemployed to learn skills needed to repair, reuse and extend the life of products via training and employment programmes. <a href="https://www.dundee.gov.uk/service-area/neighbourhood-services/environment/community-re-use-hub">https://www.dundee.gov.uk/service-area/neighbourhood-services/environment/community-re-use-hub</a>
Partnership Working	JIVE 2 Hydrogen Fuel deployment	Partnership working of climate change/ sustainability	Participant	Scottish Cities Alliance, Scottish Government	To support the development of the energy sector in Dundee, Claverhouse East (41.11 hectares, approximately 4.8km from Dundee Port and city centre) has been identified as a potential site for Dundee's renewable energy park which will deliver the Scottish City Alliance's key priorities, for the creation of a hydrogen economy by creating a 'first of its kind' in Scotland, integrated energy park (combining heat, power and transportation) and with a focus on hydrogen fuel.  A hydrogen fuel production and distribution centre at Claverhouse has the potential to attract various associated businesses, including transportation companies such as local bus and fleet networks, who would establish their depots near to the fuel hub for convenience. Consequently, within the proposed site plan options, development opportunities for



					<p>associated businesses have been clustered around the hydrogen fuel production site.  <a href="https://www.investindundee.com/keysectors/energy">https://www.investindundee.com/keysectors/energy</a></p> <p>In conjunction with the above, the Alliance and Dundee are progressing a European collaborative project set to deploy 144 hydrogen fuel cell buses and 7 large hydrogen refuelling stations (MEHRLIN project) across Europe. Buses will be deployed in five European countries, with 12 being located in Dundee. Will allow for integrated energy generation, combining heat, power and transport solutions; utilising Hydrogen Fuel for grid balancing, energy storage and decarbonisation of the gas grid. The benefits include cleaner air, modal shift, reduced carbon emissions, attracting inward investment, job creation and skill diversification.  <a href="https://www.scottishcities.org.uk/media/blog/dundee-successful-in-european-hydrogen-bus-funding">https://www.scottishcities.org.uk/media/blog/dundee-successful-in-european-hydrogen-bus-funding</a></p>
Partnership Working	Local Heat and Energy Efficiency Strategies (LHEES) – pilot	Skills/capacity building	Participant	Scottish Government. Scottish Cities Alliance, Resource Efficiency Scotland, Atkins	<p>Piloting a ‘Local Heat and Energy Efficiency Strategies’ (LHEES) approach in the Lochee Community Planning Partnership area to support the delivery of heat decarbonisation and energy efficiency objectives of the Energy Efficient Scotland programme. The study focuses the step-by-step practicalities of developing a LHEES, the data and other requirements necessary to develop meaningful implementation plans, the technology solutions that are likely to be applicable in the area as well as an understanding of the challenges and lessons on how the wider development of LHEES can best be delivered.  <a href="https://www.gov.scot/Resource/0053/00532541.pdf">https://www.gov.scot/Resource/0053/00532541.pdf</a></p>
Partnership Working	Invest in Dundee - Energy Dundee	Skills/capacity building	Lead	Public, private and academic sectors in Dundee	<p>Dundee and Dundee Port provide the ideal location to create an Offshore Wind construction port and deliver Incoming logistics, preassembly and loadout. In addition to the number of jobs created over the construction years basing the subsequent Operations and Maintenance activity would provide high quality and secure jobs for Dundee and region for the following decades.</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&amp;D facilitates,</p>

					<p>competencies across the supply chain and world class centre of excellence.</p> <p>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&amp;M activity made by both the public and private sector in the city.</p> <p>The level of support and enthusiasm for the offshore sector includes the following investments:</p> <ul style="list-style-type: none"> <li>• Forth Ports have invested over £10m to create a new quayside with an industry-leading “heavy lift” capability, coupled with a significant onshore operational area. Further investment will be forthcoming to enable offshore wind marshalling to be supported at the port should a suitable project be awarded.</li> <li>• Dundee City Council has invested in access and trunk roads into the port and offsite land for supply chain development.</li> <li>• There is significant local community support for developing industries. We have two brilliant Universities and a College which can provide any support needed during both the construction and operational phases.</li> </ul> <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>Energy Training East: A division of Energy Dundee, is a partnership of universities, research institutions and colleges across Tayside, supported by Skills Development Scotland, creating a unique combination of training and R&amp;D expertise to support the energy sector. Jobs creation would include the following work areas; Civil/ Mechanical/Technical and Electrical Engineering, Planning, Environmental, Welding and a range of support services.</p> <p><a href="http://www.energydundee.com">http://www.energydundee.com</a></p>
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