### **Corporate Policy and Strategy Committee**

### 10.00am, Tuesday, 2 October 2018

### **Public Bodies Climate Change Duties Report 2017/18**

Item number 7.4

Report number

**Executive/routine** Executive

Wards All

**Council Commitments** C18 - Improve Edinburgh's air quality and reduce carbon

emissions.

### **Executive Summary**

This report seeks Committee's approval for submission to the Scottish Government of the Council's required annual report for 2017/18 on compliance with the Climate Change (Scotland) Act 2009 Public Bodies Climate Change Duties.

The overall reduction in carbon emissions since 2005/06 is 22%. In order to achieve the 42% target by 2020-21, (equivalent to emitting 112,000 tonnes of carbon in 2020/21), there needs to be a total emissions reduction of 7% of  $tCO_2$  every year for the next three years.

In recognition of this significant challenge, full Council on 28 June 2018 agreed to the current independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh. This audit will inform Council governance structures in relation to mitigation and adaptation and help us take a whole Council approach to dealing with the consequences of climate change to our buildings, operations, service delivery, customers and staff.



### Report

### **Public Bodies Climate Change Duties Report 2017/18**

#### 1. Recommendations

- 1.1 To approve submission to the Scottish Government of the Public Bodies Climate Change Duties Report 2017/18, outlined in appendix one to this report; and
- 1.2 To note that the governance arrangements for climate change will be considered as part of the current independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh.

### 2. Background

2.1 The City of Edinburgh Council is a 'Major Player' under the terms of the Climate Change (Scotland) Act 2009 and has a legislative duty to submit an annual report on what it is doing to meet the statutory Public Bodies Climate Change Duties (PBCCD). This report must be submitted to Scottish Government by 30 November each year and will cover the most recently completed financial year.

### 3. Summary of progress

- Overall, the Council's pattern of energy consumption and waste output between 2016-17 and 2017-18 was:
  - 3.1.1 A 2% reduction in the tonnage of municipal waste sent to landfill this is a positive result.
  - 3.1.2 Consumption of grid electricity has remained relatively stable. Following adjustment for errors in reporting of unmetered electricity in last year's submission, there has been a 2% reduction overall in electricity use across the Council. This is predominantly due to a reduction in electricity consumption for streetlighting. Electricity consumption across Council buildings is stable. Whilst there are a number of initiatives to reduce electricity consumption across the estate, there are other factors that have led to the static position on electricity in buildings. These include an increase in floor area, a greater dependence on electrically powered services in new build properties, an increase in electricity being used as a primary source of heat through systems such as heat pumps and the severe winter in 2017/18 and resultant increase in demand for heat in electrically heated buildings.

- 3.1.3 Consumption of natural gas has increased by just under 6%, largely due to the severity of weather during 2017/18 resulting in increased consumption for space heating in buildings. As with electricity, there are a number of active measures underway to reduce gas consumption across Council buildings.
- 3.2 When these consumption and waste figures are converted to show the amount of carbon dioxide (CO2) emitted, a different pattern emerges:
  - 3.2.1 An 8% increase in emissions from municipal waste
  - 3.2.2 A decrease of 7% in emissions from gas and grid electricity
- 3.3 The differences in patterns between consumption/waste and CO2 emissions reflected above at 3.1 and 3.2 results from the way that CO2 emissions are calculated. This is determined at UK Government level, and is subject to change from year to year, which masks trends in emissions and progress towards target levels of reduction.
- 3.4 Another key challenge to effective monitoring and emissions is the wide range and quality of data which are needed to support the calculations.
- 3.5 The overall reduction in carbon emissions since 2005/06 is 22%. In order to achieve the 42% target by 2020-21, (equivalent to emitting 112,000 tonnes of carbon in 2020/21), there needs to be a total emissions reduction of 7% of tCO<sub>2</sub> every year over the next three years.
- 3.6 In recognition of this significant challenge, full Council on 28 June 2018 agreed to the current independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh. This audit will inform Council governance structures in relation to mitigation and adaptation and help us take a whole Council approach to dealing with the consequences of climate change to our buildings, operations, service delivery, customers and staff.

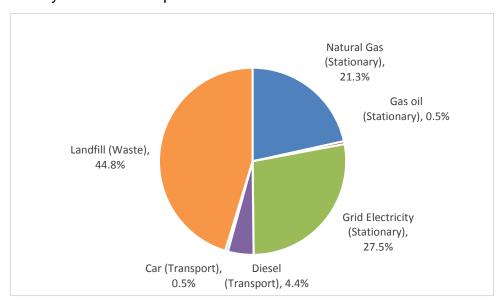
### 4. Main Report

- 4.1 The Public Bodies Climate Change Duties Report has seven sections.
  - Part 1: Organisational Profile
  - Part 2: Governance, Management and 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 by a senior person responsible for climate change
  - Part 7: Reporting on Wider Influence
- 4.2 The first six parts apply to the Council's own carbon emissions reduction, climate change adaptation and sustainable procurement activities. Part seven, which public bodies are recommended but not required to complete, offers the opportunity to

- describe our city-wide activities relating to mitigation, adaptation, climate change partnership working, capacity building, sustainable food, biodiversity and resource use.
- 4.3 The Council received feedback from the Scottish Government recommending that the Council tracks and monitors progress of climate change activity underway following the Council restructure. At full Council on 28 June 2018, it was agreed that the governance arrangements for climate change will be considered as part of the current independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh.
- 4.4 Integrated Joint Boards (IJBs) are now required to complete a climate change report under the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Order 2015. This is the second year that the IJB will report. The IJB reports that carbon emissions are generated and reported as part of the Council and NHS activity through which the Health and Social Care Partnership delivers its services.

#### PBCCD report content highlights

- 4.5 Part three of the report covers the Council's own carbon emissions. The Council's carbon emissions were 151,305 tonnes in 2017/18, an 8% increase on the 139,405 tonnes emitted in 2016/17. This 8% increase is a somewhat deceptive measure of progress as it can be attributed to a change in the way the UK Government calculates CO2 emissions from landfill waste. This alone increased the emission factor by 40% from last year. The actual tonnage of municipal waste to landfill decreased by 2% from 117,843 tonnes in 16/17 to 115,200 tonnes in 17/18.
- 4.6 It is important to note that the change in the UK Government's emission factor will affect all public bodies in their carbon emissions reporting.
- 4.7 Stationary emissions (as outlined in the below graph) make up 49.5% of the Council's carbon emissions footprint. Emissions from landfill waste make up 44.8% followed by 5% from transport and less than 1% for water.



- 4.8 Note that the data required for this return are complex and come from a wide range of sources. For example, validation of data for unmetered electricity (including street lighting and stair lighting) has shown that the figure provided for 2016-17 was an underestimate and so the apparent increase from 6 to 8 million kWh is likely to be largely a result of more comprehensive data for 2017-18. Work will be undertaken to improve data collection across sources, thereby enabling more effective monitoring of changes.
- 4.9 Key points relating to the footprint include:
  - 4.9.1 The combined carbon footprint associated with gas and grid electricity consumption has decreased by 7% since 2016/17. This figure includes Edinburgh Leisure run properties. As stated in 3.1 consumption of electricity has decreased in real terms by 2% when last year's data errors are taken into account while consumption of gas has increased by 6%. Added to this is the change in the emission factor for electricity, which reduced by 14% for grid electricity. The increase in gas consumption was due to the severity of the weather in 2017-18 in comparison to 2016-17. We would have seen a net reduction in electricity consumption had it not been for the underestimate described in 4.8.
  - 4.9.2 This was the first full year of the Edinburgh Community Solar Cooperative solar panels being operational on Council and Edinburgh Leisure buildings and energy generation through combined heat and power (CHP). The amount of renewable electricity generated during the year was over 0.9 million kWh, 13% of which was exported.
  - 4.9.3 As noted above, the amount of waste sent to landfill has reduced by 2% between 2016/17 and 2017/18. However, as noted in 3.5, the emission factor used for waste has increased significantly between the 2016/17 and 2017/18 reporting year (421 kg CO2e/tonne up to 589 kg CO2e/tonne). This translates to a 40% increase in carbon emissions from landfill waste even though the amount of waste sent to landfill has reduced by 2%.
  - 4.9.4 The Council's transport footprint has decreased by 3% since 2016/17. This is equivalent to 280 tonnes of carbon emissions. This reduction comes from reduced consumption of diesel by council fleet vehicles and a reduction in staff car mileage by approximately 200,000 miles. Car transport makes up 1% of the Council's carbon footprint.
  - 4.9.5 The carbon footprint associated with water is 575 tonnes, which is less than 1% of the Council's total carbon footprint.
- 4.10 The overall reduction in carbon emissions since 2005/06 is 22%. In order to achieve the 42% target (equivalent to emitting 112,000 tonnes of carbon in 2020/21) there needs to be a total emissions reduction of 7% of tCO<sub>2</sub> every year over the next three years. To achieve this there needs to be a concerted effort to enable the carbon savings achieved through implemented projects to be identified, tracked and

- managed on an ongoing basis. Note that further changes to the way that carbon emissions are calculated will have an impact on the level of change achieved and that this is outwith the control of all public bodies.
- 4.11 Questions 3e to 3j of Appendix 1 relate to carbon reduction projects. The processes in place to capture information on carbon use needs to be comprehensively reviewed and consolidated. This will be addressed as part of the audit of sustainability, noted above.
- 4.12 The projects that populate this section have been provided by Property and Facilities Management and Edinburgh Leisure. Active energy management of the Council's operational estate is a key focus across Property and Facilities Management. There are several large-scale projects underway, across new constructions and existing buildings, to improve sustainability, energy efficiency and reduce associated energy spend.
- 4.13 For the past three years, Property and Facilities Management have been engaged in a Knowledge Transfer Partnership with Edinburgh Napier University to implement a mid to long term energy strategy for operational buildings. This project ended in August 2018 and, moving forward, the outputs will inform the strategic direction of energy management. To help build on success achieved to date, and create a sound platform from which to deliver continued energy improvements, Property and Facilities Management are working towards ISO50001 accreditation; an Energy Management System focussed on delivering best practice across energy management.
- 4.14 Part 4 of the PBCCD Report covers the Council's climate change adaptation activity. The return shows that climate change adaptation is embedded in a range of Council operations and services and city- wide work is progressing well, with the approval of the Edinburgh Adapts Climate Change Action Plan (2016 2020) in August 2016 and the first report on progress submitted to Committee in October 2017. A city-wide steering group is now well established to drive this work forward and is currently chaired by the Royal Botanic Garden Edinburgh.
- 4.15 Part 5 of the PBCCD Report covers the Council's sustainable procurement activity. The Council's Commercial and Procurement Services Division continues to evidence that sustainability is firmly embedded in procurement policies and contract activity. The submission last year was highlighted as good practice to be shared with other organisations. Current specification work indicates that sustainability activity within this Service continues to strengthen year on year.

#### 5. Measures of Success

5.1 The City of Edinburgh Council submits a Public Bodies Climate Change Duties Report on the financial year 2017/18 to the Scottish Government by 30 November 2018.

5.2 Following the audit of sustainability, the Council establishes a governance structure to ensure that the reporting requirements as outlined in the Climate Change (Scotland) Act 2009 are embedded into the day to day service delivery of the Council, and that routine monitoring of progress is possible.

### 6. Financial Impact

6.1 The activities captured in this report are covered with existing budgets. There has been no additional financial impact of preparation of this year's report.

### 7. Risk, policy, compliance and governance impact

- 7.1 Submission of the required annual report will assist in supporting the Coalition's Commitment 18 to reduce carbon emissions, the Council's Energy Policy, Carbon Management Plan, Sustainable Energy Action Plan, Resilient Edinburgh Adaptation Framework and Sustainable Procurement Policy.
- 7.2 Submission of the required annual report will be evidence of compliance with the Climate Change (Scotland) Act 2009.

### 8. Equalities impact

8.1 There are no equalities impacts associated with the content of this report.

### 9. Sustainability impact

9.1 The impacts of this report in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties have been considered. In summary, the proposals in this report will help achieve a sustainable Edinburgh because they improve governance of Council action to reduce carbon emissions, to increase the city's resilience to climate change impacts and to improve social justice, economic wellbeing and environmental good stewardship.

### 10. Consultation and engagement

- 10.1 Consultation has taken place with Commercial and Procurement Services, Planning, Flood Prevention, Corporate Property, Environment, Resilience Unit and Edinburgh Leisure.
- 10.2 Public and stakeholder engagement to develop the City Vision showed that there was broad support for Edinburgh becoming carbon neutral

### 11. Background reading/external references

Public Bodies Climate Change Report 2016/17

#### **Andrew Kerr**

**Chief Executive** 

Contact: Eleanor Cunningham, Lead Policy and Insight Officer

E-mail: eleanor.cunningham@edinburgh.gov.uk | Tel: 0131 553 8220

### 12. Appendices

12.1 Public Bodies Climate Change Report 2017-18 to the Scottish Government

#### **TABLE OF CONTENTS**

### Required

**PART 1: PROFILE OF REPORTING BODY** 

PART 2: GOVERNANCE, MANAGEMENT AND STRATEGY

PART 3: EMISSIONS, TARGETS AND PROJECTS

**PART 4: ADAPTATION** 

**PART 5: PROCUREMENT** 

**PART 6: VALIDATION AND DECLARATION** 

**Recommended Reporting: Reporting on Wider Influence** 

RECOMMENDED - WIDER INFLUENCE

**OTHER NOTABLE REPORTABLE ACTIVITY** 

### **PART 1: PROFILE OF REPORTING BODY**

### 1(a) Name of reporting body

City of Edinburgh Council

### 1(b) Type of body

Local Government

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

14683

### 1(d) Metrics used by the body

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

Metric	Unit	Value	Comments
Population size served	population		NRS for 17/18 reporting https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2017

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

Specify approximate £/annum for the report year

Specify approximate Evaluation the report year.							
Budget	Budget Comments						
968000000	This is net of fees and charges for services provided.						

1(f) Report year						
Specify the report year.						
Report Year	Report Year Comments					
Financial (April to March)						

### 1(g) Context

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

The Council has a property portfolio comprising of approximately 590 buildings (this excludes investment building i.e. those owned by the Council and operated as shops, pubs etc as these premises are not used for the discharge of public duties).

As a local authority, the City of Edinburgh Council is responsible for providing a range of public services, including education, social care, roads and transport, economic development, housing and planning, environmental protection, waste management, cultural and leisure services.

As a public body, IJBs are required to prepare reports on compliance with climate change duties. Discussions have taken place between the City of Edinburgh Council, the Edinburgh IJB and NHS Lothian to ensure double accounting of emissions has not occurred.

### PART 2: GOVERNANCE, MANAGEMENT AND STRATEGY

### 2(a) 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 has agreed that the governance arrangements for climate change will be considered as part of the current independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh.

Currently Corporate Policy and Strategy committee oversees corporate reporting on Climate Change and also all organisational policies relating to this subject. Transport and Environment Committee has decision making powers in regard to climate change.

At an operational level the Strategy and Insight Team in the Chief Executive's Division leads on the corporate response to Government on carbon mitigation, climate change adaptation and sustainability initiatives including development of strategies and action plans; The Director for Place leads on wider services relating to housing, energy and water management, waste services, transport, planning, and parks. The Director of Resources is responsible for procurement, asset management and ICT.

Note that a new governance structure chart will be developed pending the outcome of the independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh.

### 2(b) 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 (JPEG, PNG, PDF, DOC)

At an operational level the Strategy and Insight Team in the Chief Executive's Division leads on the corporate response to Government on carbon mitigation, climate change adaptation and sustainability initiatives including development of strategies and action plans. The Director for Place leads on wider services relating to housing, energy and water management, waste services, transport, planning, and parks. The Director of Resources is responsible for procurement, asset management and ICT.

The independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh is underway, and this will include consideration of the governance arrangements for climate change and sustainability.

2(c) 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.							
Objective	Doc Name						
Council Commitments related to a better environment and transport systems that work for all: 17. Guarantee 10% of the transport budget on improving cycling in the city 18. Improve Edinburgh's air quality and reduce carbon emissions. Explore the implementation of low emission zones 19. Keep the city moving by reducing congestion, improving public transport to rural west Edinburgh and managing roadworks to avoid unnecessary disruption to the public 25. Increase recycling to 60% from 46% during the lifetime of the administration	City of Edinburgh Commitments						
Vision: Edinburgh in 2020 will be a low carbon, resource efficient city, delivering a resilient local economy and vibrant flourishing communities in a rich natural setting Objectives for 2020:  • Edinburgh will maintain a good quality of life for all its citizens while consuming minimum resources  • Edinburgh will be a leading knowledge, demonstration and development centre for sustainable development  • Edinburgh will have a new trademark – the "Sustainable City" – attracting visitors, industry and investors  • Edinburgh will have created significant new employment opportunities in low carbon and green technologies  • Edinburgh will have preserved and enhanced its biodiversity, landscape and coastal environments	Sustainable Edinburgh 2020 strategic framework						
One of the 5 strategic aims is "a resilient city" and the two relevant outcomes are: - our built and natural environment is protected and enhanced - Edinburgh is a low carbon, connected city with transport and infrastructure that is fit for the future	Programme for the Capital: The City of Edinburgh Council Business Plan 2017-22						
Strategic Priority: reducing greenhouse gas emissions by 42% by 2020	Edinburgh Partnership Community Plan 2015-18 Sustainable Edinburgh 2020						

### 2(d) 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.

Resilient Edinburgh Climate Change Adaptation Framework 2015-2020; adopted October 2014 <a href="http://www.edinburgh.gov.uk/downloads/download/1256/resilient\_edinburgh">http://www.edinburgh.gov.uk/downloads/download/1256/resilient\_edinburgh</a>

Edinburgh Adapts Climate Change Adaptation Action Plan 2016-2020; adopted August 2016 <a href="http://www.edinburgh.gov.uk/downloads/file/8506/edinburgh\_adapts\_climate\_change\_action\_plan\_2016-2020">http://www.edinburgh.gov.uk/downloads/file/8506/edinburgh\_adapts\_climate\_change\_action\_plan\_2016-2020</a>

Edinburgh Adapts Our Vision 2016-2050

http://www.edinburgh.gov.uk/downloads/file/8507/edinburgh\_adapts\_our\_vision\_2016-2050

Sustainable Edinburgh Action Plan (SEAP); adopted February 2015;

http://www.edinburgh.gov.uk/info/20220/economic\_development/544/sustainable\_economy/2

[Second] Carbon Management Plan 2015/16-2020/21; adopted September 2015;

http://www.edinburgh.gov.uk/directory\_record/683821/carbon\_management\_plan\_20152016\_-\_20202021

### 2(e) 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.

T	Name of decomposit	Time	0
Topic area	Name of document Link	Time period covered	Comments
Adaptation	Resilient Edinburgh Climate Change Adaptation Framework	2014 - 2020 2016 - 2020	
	Edinburgh Adapts Our Vision 2016-2050  Edinburgh Adapts Climate Change Action Plan 2016-2020	2016 - 2020	
Business travel			
Staff Travel	Active Travel Action Plan	2016 - 2020	As an employer, we have: introduced a bike to work scheme; established an allowance for cycling on Council business; invested over £60k in active travel facilities such as showers,

			lockers and cycle parking in Council buildings; and supported a number of cycle initiatives including bike breakfasts. We will encourage our partners to undertake similar measures and work to increase uptake of the CFE awards among local businesses.  Cycle Friendly Schools and the STARS programme: This is a national award scheme run by Cycling Scotland that recognises the wide range of work schools do to promote and encourage cycling and to make their schools cycle friendly. Schools are encouraged to apply when they become part of the I-bike scheme and we now have over 40 schools subscribed.
Energy efficiency	Energy Policy	2013 - 2020	
Fleet transport			
Information and communication technology			
Renewable energy			
Sustainable/renewable heat	Sustainable Energy Action Plan	2015 - 2020	
Waste management	Waste and Recycling Strategy	2010 - 2025	
	Waste Prevention Strategy	Adopted 2005	
	Resource Use Policy	Adopted 2000	
Water and sewerage	Management Policy Water	Adopted 2006	
Land Use	Corporate Asset Strategy	2015-19	
	Interim Community Asset Transfer Policy	Published 2015	
Other (state topic area covered in comments)	Local Development Plan	Published 2016	The section on caring for the environment has a section on flood prevention
	Edinburgh Design Guidance		The Design Guidance supports the Local Development Plan

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

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

Take forward the findings of the Prof Andy Kerr review to ensure we have a joined-up strategy and governance to ensure the Council is ambitiously reducing its carbon emissions.

Ensure the Governance across the council is fit for purpose in delivering this new approach.

Ensure the Edinburgh City Centre Transformation programme, Low Emission Zone(s) and approach to active travel continue to progress.

Ensure a structured process is in place to capture the carbon impact of project activity carried out by service areas and that these are recorded and monitored.

Continue to implement the citywide climate change adaptation action plan, co-produced to implement the Resilient Edinburgh framework.

#### 2(g) 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 key findings and resultant action taken.

No. Note though the independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh.

#### 2(h) 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.

Edinburgh Adapts Action Plan was approved in 2016. A city wide steering group was set up to develop the action plan and to progress and monitor actions. The group is currently chaired by the Royal Botanic Garden Edinburgh.

### PART 3: EMISSIONS, TARGETS AND PROJECTS

#### 3a Emissions from start of the year which the body uses as a baseline (for its carbon footprint) to the end of the report year

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 body on emissions which are not from its estate and operations.

Reference Year	Year	Scope1	Scope2	Scope3	Total	Units	Comments
Baseline carbon footprint	2005/06				192911	tCO2e	This baseline was chosen following Carbon Trust Standard accreditation.
Year 1 carbon footprint	2006/07				0	tCO2e	
Year 2 carbon footprint	2007/08				0	tCO2e	
Year 3 carbon footprint	2008/09				0	tCO2e	
Year 4 carbon footprint	2009/10				0	tCO2e	
Year 5 carbon footprint	2010/11				171568	tCO2e	
Year 6 carbon footprint	2011/12				163744	tCO2e	
Year 7 carbon footprint	2012/13				165454	tCO2e	
Year 8 carbon footprint	2013/14	35794.00	56859.00	40077.00	132730	tCO2e	First year of using the RES Carbon Footprinting Tool and Project (CFPR)Tool
Year 9 carbon footprint	2014/15	40624.00	64158.00	39283.00	144065	tCO2e	Used the CFPR tool
Year 10 carbon footprint	2015/16	40285.00	50972.46	58611.46	149869	tCO2e	Used the CFPR tool
Year 11 carbon footprint	2016/17	39405.00	44587.00	55413.00	139405	tCO2e	Used the CFPR tool
Year 12 carbon footprint	2017/18	40067.00	38054.00	73221.00	151342	tCO2e	Used the CFPR tool

#### 3b Breakdown of emission sources

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

Total	Comments - reason for difference between Q3a & 3b.	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO2e)	Comments
151343.5		Grid Electricity (generation)	Scope 2	108245281	kWh	0.35156	kg CO2e/kWh	38054.7	Council buildings including Edinburgh Leisure
		Grid Electricity (transmission & Description distribution losses)	Scope 3	108245281	kWh	0.03287	kg CO2e/kWh	3558.0	Council buildings including Edinburgh Leisure
		Natural Gas	Scope 1	175343910	kWh	0.184163989077374	kg CO2e/kWh	32292.0	Council buildings including Edinburgh Leisure
		Gas Oil	Scope 1	2745270.53	kWh	0.275876374117495	kg CO2e/kWh	757.4	Council buildings including Edinburgh Leisure
		LPG	Scope 1	1420159	kWh	0.214509723	kg CO2e/kWh	304.6	Council buildings including Edinburgh Leisure

Diesel (average biofuel blend)	Scope 1	2563173	litres	2.60016271124822	kg CO2e/litre	6664.7	This is Council Fleet vehicles and Edinburgh Leisure vehicles
Petrol (average biofuel blend)	Scope 1	22164	litres	2.19835360740471	kg CO2e/litre	48.7	This is Council Fleet vehicles
Average Car - Unknown Fuel	Scope 3	3758650	km	0.18242	kg CO2e/km	685.7	This reflects travel by staff using their own vehicles
Refuse Municipal to Landfill	Scope 3	115200	tonnes	588.906257787832	kg CO2e/tonne	67842.0	All Council collected waste & sent to landfill - includes household waste & waste from council buildings
Taxi (black cab)	Scope 3	1244391	passenger km	0.21337	kg CO2e/passenger km	265.5	These are not Council owned vehicles
Taxi (regular)	Scope 3	1892826.73	passenger km	0.15617	kg CO2e/passenger km	295.6	These are not Council owned vehicles
Water - Supply	Scope 3	588625	m3	0.344	kg CO2e/m3	202.5	Council buildings including Edinburgh Leisure
Water - Treatment	Scope 3	525576.3	m3	0.708	kg CO2e/m3	372.1	Council buildings including Edinburgh Leisure

### 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.

	Renewable Elect	tricity	Renewable Heat		
Technology	Total consumed by the organisation (kWh)		Total consumed by the organisation (kWh)	Total exported (kWh)	Comments
Solar PV	1063987	126192			kWh reflects energy generated onsite, used onsite and exported to the grid
Solar thermal			54736	0	kWh reflects energy generated onsite and subsequently used onsite

### **3d Targets**

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

Name of Target	Type of Target	Target		Boundary/scope of Target	Progress against target	Year used as baseline			Target completion year	Comments
Corporate	percentage		tCO2e reduction	Other (please specify in comments)	22	2005/06	192911	tCO2e		Original baseline not calculated using RES carbon foot printing and project tool. Scope of target: buildings, travel, infrastructure and waste

3e Estimated total annual carbon savings from all projects implemented by the body in the report year			
Total	Emissions Source	Total estimated annual carbon savings (tCO2e)	Comments
1524.00	Electricity	688	
	Natural gas	172	
	Other heating fuels		
	Waste		
	Water and sewerage		
	Business Travel		
	Fleet transport	664	emissions source diesel
	Other (specify in comments)		

3f Detail the	f Detail the top 10 carbon reduction projects to be carried out by the body in the report year										
Provide detail	Provide details of the 10 projects which are estimated to achieve the highest carbon savings during report year.										
Project name	_	First full year of CO2e savings	Are these savings figures estimated or actual?	V -7	cost	lifetime		carbon savings	costs savings	Behaviour Change	Comments
8PJ: Vehicle Telematics	Spend to Save	2018/19	Estimated	1150898.92			Diesel (average biofuel blend)		274784		To be installed in all council vehicles with a view to reducing the

								fuel used, increasing vehicle utilisation and improving operational efficiency.
EL1819_50 - Pool management	2018/19	Actual	71441	17860	Grid Electricity	158.73	74593	Edinburgh Leisure pool management estate wide ESOS
40PJ: BEMS, Lighting upgrade and CHP installation	2018/19	Estimated	324038		Grid Electricity	129	46355	Leith Academy
23PJ: RE:FIT	2018/19	Estimated	736508		Grid Electricity	97	45131	Balerno High School
62PJ: BEMS and Heating Upgrade	2018/19	Estimated	76266		Grid Electricity	76	5918	Trinity Academy
EL1819_47 - Heating alteration	2018/19	Actual	71003	11834	Natural Gas	72	21242	Edinburgh Leisure AHU optimisation estate wide ESOS
EL1819_42 - LED Lighting	2018/19	Actual	76916	22570	Grid Electricity	69	47351	Edinburgh Leisure estate wide ESOS

EL1819_44 - AMR	2018/19	Actual	53127	10625	Grid Electricity	67	34574	Edinburgh Leisure AMR/MM&T Estate wide
EL1819_49 - Heating alteration	2018/19	Actual	17619	8809	Natural Gas	67	17632	Edinburgh Leisure BMS optimisation estate wide
EL1819_40 - AMR	2018/19	Actual	38000	7721	Grid Electricity	63	30237	Royal Commonwealth Pool Automated Meter Reading System

### 3g Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere 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 the amount and direction.

Total	Emissions source	Total estimated annual emissions (tCO2e)	Increase or decrease in emissions	Comments
0.00	Estate changes			The Council's property database has been reviewed to improve data quality/accuracy. As noted above, there are 590 buildings, which appears to be an increase on last year, but this reflects better recording.  There has been an increase in the Council's floorspace over the year.
	Service provision			
	Staff numbers		Decrease	Staff numbers have reduced between 2016/17 reporting and 2017/18 reporting (15293 in 2016/17 to 14683 in 2017/18).
	Other (specify in comments)			

otal		Source	Saving	Comments
	0.00	Electricity		In January 2018 a three year contract was awarded to the Council for replacement of approximately 54,000 street lights with energy efficient lanterns. The project will also see the installation of a Central Management System that will allow lighting levels to be adjusted.  The Council's RE:FIT energy refit programme for the largest energy consuming Council properties will be completed in July 2018. Eight properties have been completed so far. Four CHP units have also been installed in Council schools. The installation of a Central Management System will allow lighting levels to be
				adjusted.
		Natural gas		Council and Edinburgh Leisure Building Energy Management (BEMs) and other efficiency measures
		Other heating fuels		
		Waste		The Millerhill anaerobic digestion facility currently reprocesses food waste and generates energy. The thermal treatment facility for residual waste will be operational from 2018/19, substantially reducing the Council's municipal waste to landfill. Enhanced recycling services are planned for high density housing areas from 2018-2021
		Water and sewerage		
		Business Travel		

Fleet transport	The Council continues to increase the number of electric vehicles within its fleet. There is a total of 25 electric vehicles in the Council fleet with a further 5 procured in 2017/18.
	The Council received funding via the Switched on Fleets programme 2017-18 and procured 8 fully electric vehicles across the Community Planning Partnership. A percentage of these vehicles will be added to the Council's fleet. The next round of funding will be 2018-19.
Other (specify in comments)	

### 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 direction.

Total	Emissions source	Total estimated annual emissions (tCO2e)	Increase or decrease in emissions	Comments
0.00	Estate changes		Increase	The Council's Asset Management Strategy is ongoing. New builds e.g. schools and improved data quality contribute to the increase in the number of Council buildings reported. The CO2e impact is not known.
	Service provision			Rationalisation of the estate is ongoing and this will have an impact on how services are delivered.
	Staff numbers		Decrease	15,293 in 2016-17 reducing by 4% to 14,683 for 2017-18
	Other (specify in comments)			

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

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

Total	Comments
	The organisation has not quantified this as ongoing project specific detail is not available for the years since the 2005/06 baseline year.

### 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.

As reported above, an independent audit of council activity on climate change and sustainability by the Edinburgh Centre for Carbon Innovation at the University of Edinburgh is underway. This is intended to help us to identify the most effective way forward for the Council to achieve substantial progress in relation to climate change and sustainability. This will include governance arrangements.

### **PART 4: ADAPTATION**

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

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

An initial risk assessment was done through completion of a Local Climate Impact Profile followed by verification through Council Committee reporting and meetings with Council departments and affected services. Web link: http://www.adaptationscotland.org.uk/11/96/0/Local-Climate-Impacts-Profile-project-findings.aspx

The Resilient Edinburgh Climate Change Adaptation Framework 2014-2020 takes a risk-based approach to assessing Edinburgh's vulnerability to weather-related risks and predicted climate change impacts; identifies city services and sectors that may be affected, and presents high level actions to address the most significant risks identified. A separate document contains the evidence base on which the Framework is built.

The Edinburgh Adapts Action Plan 2016-2020 was approved by Council Committee in August 2016, endorsed by the Edinburgh Sustainable Development Partnership in September 2016 and launched in December 2016. The high-level climate risks identified in the Resilient Edinburgh Framework will be addressed through implementation of the Action Plan.

Weblink: http://www.edinburgh.gov.uk/downloads/download/1256/edinburgh\_adapts.

The Council's resilience risk register (which include those risks related to climate change) is reviewed by the Council Resilience Group on a quarterly basis as part of the Resilience service's risk management procedure. This procedure is aligned with the Council's risk strategy.

#### 4(b) 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 climate-related risks identified in the Resilient Edinburgh Framework will be addressed through the delivery of the actions in the Edinburgh Adapts Action Plan. The Action Plan was developed in partnership with the Edinburgh Sustainable Development Partnership, Adaptation Scotland and key stakeholders across the city. It is being delivered by a Steering Group who provide governance and oversight.

The Council's Resilience Service drives and manages the Council's Resilience Management Programme and is the focus for the Council's resilience activities. The Council's Resilience Service is responsible for ensuring the Council complies with its statutory emergency planning and business continuity obligations as stipulated by the Civil Contingencies Act (2004) and other relevant legislation; this work is carried out in conjunction with designated Resilience Coordinators and Resilience Specialists from each Council service area / key function together with stakeholders, other responders and partner organisations.

The Edinburgh Local Development Plan (LDP) has specific measures dealing with climate change adaptation. It aims to promote development in sustainable locations and enhance the city's green network by encouraging land management practices which capture, store and retain carbon, and prevent and manage flood risk. This includes managing surface water drainage, treatment and flood risk through sustainable urban drainage, providing amenity and biodiversity benefits.

Edinburgh has Flood Prevention Schemes in place on the Braid Burn and Water of Leith. These schemes are designed for a 1 in 200-year event and include an allowance for climate change. Undeveloped areas of land fulfil an important flood function and should be allowed to flood to protect built-up areas from floodwater. These are shown on the Edinburgh Local Development Plan Proposals Map as areas of importance for flood management. There are also robust inspection regimes in place for watercourses, coastal defences and reservoirs. These inspections help inform and prioritise planned maintenance work.

In the event of flooding the Council provides an emergency response and there are always two members of staff on standby to co-ordinate activities. Action Packs have been prepared which detail where temporary defences should be deployed. Sandbags and pallet barriers are stored and are to be utilised in the event of flooding. A limited number of sandbags are stored at various fire stations and these are available to the public.

The Council is a signatory to the Central Scotland Green Network and is working in partnership with neighbouring authorities and other stakeholders to support a range of projects. Edinburgh's Local Biodiversity Action Plan for 2016-18 includes a number of climate related risks and actions. Work to promote green and blue infrastructure in planning guidance and monitor indicator species are examples of the types of actions underway to address climate related risks.

The Council's Parks and Greenspaces Strategy aims to conserve natural habitats and wildlife.

Climate change adaptation considerations are embedded into strategies for green and blue networks as well as into wider land use planning decisions through forest and woodland strategies, Local Development Plan and supplementary planning guidance.

#### 4(c) What action has the body 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.

The Edinburgh Adapts Climate Change Adaptation Action Plan contains over 100 actions that are being implemented by a wide range of organisations across the city. These include cross-cutting actions that can be incorporated into other strategies and plans to raise awareness of the need to adapt, build capacity to assess risk and implement action. The Action Plan has just completed its second year of implementation.

Externally, the Resilience Service represents the Council on the Multi-Agency Risk Group established by the Lothian and Borders Local Resilience Partnership, which feeds into the risk assessment processes of the East of Scotland Regional Resilience Partnership. The range of risks addressed by these partnerships includes extreme weather related emergencies. Internally, the Resilience Service chairs the Council Resilience Group that oversees the Council's Resilience Management Programme, which includes identifying and addressing risks through preparing and maintaining contingency measures to mitigate their effects. High-level risks are escalated within the Council, as appropriate.

The Edinburgh Local Development Plan aims to promote development in sustainable locations and enhance the city's green network by encouraging land management practices which capture, store and retain carbon, and prevent and manage flood risk. This includes managing surface water drainage, treatment and flood risk through sustainable urban drainage, providing amenity and biodiversity benefits. The Edinburgh Design Guidance raises awareness of climate change at the outset of the document and in the detailed chapters through promoting green infrastructure and sustainable building design. This document was reviewed in 2017 and includes more on climate change adaptation, SUDs and water.

The Council works in partnership with neighbouring local authorities, SEPA and Scottish Water and has prepared a Local Flood Risk Management Plan (LFRMP) for the Forth Estuary Catchment which will outline strategies and identify areas vulnerable to flooding from all sources and potential mitigation measures and actions. This plan was published in June 2016 and can be found at http://www.edinburgh.gov.uk/info/20045/flooding.

Edinburgh Living Landscapes launched in November 2014. The initiative is led by the Council's Parks and Greenspace service in partnership with the Scottish Wildlife Trust, Royal Botanic Garden Edinburgh, Edinburgh and Lothian Greenspace Trust and Green Surge. It advocates the development of an ecosystem approach to the management of the Council's open space estate in order to realise the benefits to both biodiversity and public amenity. It aims to create resilient green networks to deliver a healthy, accessible and attractive environment.

As part of the Edinburgh Biodiversity Action Plan 2016-2018, partners have been asked to include actions to adapt to climate change within site management plans, conservation plans and species action plans as appropriate. This not only raised awareness but also involved risk assessment, adaptation measures and any carbon capture.

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

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

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

Objective	Objective reference		Policy / Proposal reference	Delivery progress made	Comments
Understand the effects of climate change and their impacts on the natural environment.	I	Natural Environment	N1-8	Potentially Vulnerable Areas have been highlighted and the risk assessed in relation to Flood Risk which has been reported in the Local Flood Risk Management Plan (LFRMP).  Scottish Water have recently completed the sewer integrated catchment study for Edinburgh, the results of this will be used to start preparing surface water management plans.	
				Scottish Government commissioned the Scottish Flood Defence and Asset Database. SEPA published flood maps to help understand areas potentially affected by flooding.  The Council maintains GIS records of existing assets in relation to culverted watercourses.	

Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment	N2-2	The Local Development Plan aims to enhance the city's green network by encouraging land management practices which capture, store and retain carbon and prevents and manages flood risk. Furthermore, through various policies, the LDP aims to protect, promote and enhance the wildlife, recreational landscape and access value of the green network.  The Council has also updated the Open Space Strategy and Edinburgh Design Guidance, both which contribute to promoting green infrastructure in planning.  Nearly 90 floral meadows have been identified across the city and were sown, a mixture of annual and perennial.  A total of 112 hectares of greenspace incorporate Living Landscape features (the Council manages 858 hectares of Standard Amenity Grass (SAThG)) which equates to 13% of our amenity grasslands).	The Edinburgh Design Guidance planning policy has been updated and includes guidance on green and blue infrastructure requirements in new developments. Climate change adaptation information has been promoted through internal training workshops.  As well as improving the visual and biodiversity amenity of these sites, these changes, specifically the less frequently cut relaxed grass areas, will slow rainwater runoff and help lock-up carbon in soils, reducing CO2 release. It will also mean a reduction in operational fuel consumption and associated pollutants.
				1000 trees were planted in 2017/18 500,000 flowering bulbs were planted in naturalised grass areas in 2017/18.	
			N2-7	The Council has continued to manage INNS (invasive non-native species) where they occur on their land.  The Edinburgh Biodiversity Action Plan 2016-2018 has a new section on invasive species which addresses habitat and genetic resilience as well as being 'Plant Smart' in terms of biosecurity and plant choice and source.	The Council will continue to work with partners such as the Water of Leith Conservation Trust to manage INNS along the Water of Leith and seek to work at a catchment scale level through the RBMP area partnerships.  The Natural Heritage Service continues to work with volunteers and Friends groups to carry out practical work on eradication of INNS.

			N2-11	The Local Development Plan identifies Local Nature Reserves and Local Nature Conservation Sites to protect biodiversity at the local level. The plan includes policies relating to a range of biodiversity designations. LDP and Council guidance also recognise the value and potential of biodiversity outwith designated areas and sets out key principles for enhancing habitat and ecosystems.	
			N2-20	The Flood Risk Management Strategy and Plan for the Forth Estuary have now been published which will aid in understanding the risks associated with coastal flooding.  City of Edinburgh Council officers continue to have input into the Forth Estuary Forum where such issues are discussed and action plans developed.  The Edinburgh Biodiversity Action Plan 2016-2018 will ensure that appropriate emphasis is placed on the Firth of Forth Special Protection Area when dealing with conservation projects.  The EBAP also incorporates the action to identify opportunities to ensure that biodiversity data is collected in advance of regional marine planning.	
Sustain and enhance the benefits, goods and services that the natural environment provides.	N3	Natural Environment		NA	NA

Understand the effects of climate change and their impacts on buildings and infrastructure networks.	B1	Buildings and infrastructure networks	B1-13	The Forth Estuary Flood Risk Management Strategy and the Forth Estuary Local Flood Risk Management Plan was published in June 2016.  The Council has published an "Assessment, inspection, clearance and repairs schedule" which can be found at http://www.edinburgh.gov.uk/info/20045/flooding.	The Assessment, inspection, clearance and repairs schedule will be revised annually (April)
			B1-19	The Council is working in partnership with Scottish Water, East and Midlothian Councils to evaluate flood risk and consultants have been commissioned to undertake an integrated catchment study. The sewer integrated catchment study is now complete for Edinburgh, results to be analysed.  The Council has published an "Assessment, inspection, clearance and repairs schedule" which can be found at http://www.edinburgh.gov.uk/info/20045/flooding.	Guidance states: An integrated approach to the drainage of surface water arising from impermeable surfaces such as roofs and roads that takes account of all aspects of the drainage systems and produces long-term and sustainable actions that will ensure they are resilient to the changing climate.  The Assessment, inspection, clearance and repairs schedule will be revised annually (April))
Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure.	B2	Buildings and infrastructure networks		NA	NA

	burgii C				
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.	B3	Buildings and infrastructure networks	B3-2	A flood map published by the Scottish Environment Protection Agency shows some areas on Edinburgh's waterfront potentially at medium to high risk of coastal flooding, taking into account climate change.  The Local Development Plan does not prevent development in such locations but will require all proposals to consider and address any potential risk of flooding through flood risk assessments and surface water management plans. The LDP also states that flood risk from water flowing over land during heavy rainfall should be avoided by the use of SUDs.  The Edinburgh Design Guidance gives advice and clear information in order to guide applicants towards a design process that fully incorporates sustainable flood risk management and SUDS from the outset.	
			B3-3	The Council published its first Open Space Strategy in 2010, informed by an Open Space Audit (2009) and accompanied by 12 Neighbourhood Open Space Action Plans. This has been updated with Open Space 2021 – a revised open space strategy for Edinburgh.  The new Strategy takes a coordinated approach to protecting and developing the city's network of open space, helping to deliver Edinburgh's contribution to the development of the Central Scotland Green Network.  The Strategy is aligned with the Local Development Plan and co-ordinates with related	
				strategies, including those for parks and gardens, allotments, play, sport facilities, active travel, climate change adaptation and biodiversity.	

B3-6	The Council was awarded £3.4m in HEEPS:ABS funding in 2017/18 to deliver free insulation to private homes across the city. The programme has targeted mixed tenure of areas with high levels of fuel poverty, containing suitable homes for solid wall insulation, and in areas in the bottom 25% of the Scottish Indices of Multiple Deprivation (SIMD).	
	The programme includes projects at Gilmerton, Oxgangs, Moredun, South Queensferry and Muirhouse. Nearly 900 homes will be warmer and easier to heat as a result of new insulation in as a result of the 2017/18 HEEPS:ABS programme.	
	The Council was awarded an additional £3.4m of HEEPS:ABS funding for 2018/19, which will help a further 900 homes across the city.	
B3-7	The Council is accelerating investment to ensure all Council homes meet and exceed the Scottish Government's Energy Efficiency Standard for Social Housing (EESSH) by 2020.	
	64% of Council homes currently pass EESSH. Where possible the Council will look to go beyond the minimum standard to ensure homes are of a similar efficiency standard as new homes, in line with future standards proposed by the Scottish Government. The estimated cost of bringing homes up to EESSH will be approximately £51 million.	

			B3-8	The Council and other RSLs in the city complies with the Scottish Housing Quality Standard (SHQS).  Abeyances, mainly the result of a lack of door entry systems in mixed tenure blocks, will be progressed through a mixed tenure pilot project.	
				The Council has invested around £40 million in improving the energy efficiency of Council homes in the last five years.	
Understand the effects of climate change and their impacts on people, homes and communities.	S1	Society		NA	NA
Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.	S2	Society	S2-5	The Edinburgh Community Resilience Pilot Project was completed in June 2017. The community resilience groups that were established in two Community Council areas as part of this project continue to operate and enhance their resilience.  A second phase of the above project is currently being scoped and funding proposals developed, with the aim of extending community resilience to include and align: local communities, local businesses and Responder organisations. If project funding is successful, it is anticipated this project will commence in April 2019.  Information and advice regarding flooding, severe weather and business continuity is published on the Council web site.	

		The Council participates in the pmonitoring of a Community Risk Lothian and Borders area.	oreparation and Register for the	
Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate.	Society	NA NA	NA NA	

#### 4(e) 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).

Current and future climate risks are being assessed through the Edinburgh Adapts Climate Change Adaptation Action Plan 2016-2020.

In terms of the Council's internal resilience arrangements, risk assessments are monitored and reviewed on a quarterly basis through the Council Resilience Group. In terms of the Council's contribution to the Lothian and Borders Local Resilience Partnership, risk assessment is a continual process. Current assessments will be reviewed on an annual basis, as new information emerges or following any significant incident or exercise.

The Proposed Strategic Development Plan (SDP 2) is expected to replace the current Strategic Development Plan in 2018, five years after the first adopted SDP. A review of current and future climate risks will be addressed in future Local Development Plan (LDP) policies which will be written in the context of SDP 2. It is expected that an updated LDP will also be on a five year cycle.

A study to ascertain the impact of siltation on the Water of Leith Basin was completed in February 2017 and further siltation studies are being undertaken in 2018. The Niddrie Burn study to ascertain the effects of potential flooding has been initiated. Building on previous flood risk studies, the Flood Prevention Team will complete a Surface Water Management Plan in due course to assess current and future flooding risks for the city.

The Edinburgh Biodiversity Action Plan for 2016-18 incorporates climate change actions and will review current and future risks to biodiversity and greenspace.

#### 4(f) 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).

Monitoring and evaluation of the impacts of adaptation actions will be assessed through the Edinburgh Adapts Climate Change Adaptation Action Plan 2016-2020.

The Council will monitor the impact of the Local Development Plan policies on the physical and environmental characteristics of the area, including those related to climate change. This will be reported in a statutory Monitoring Statement which will inform the next Local Development Plan. The Second Local Development Plan, Main Issues Report, will be produced in November 2018. This will be supported by a monitoring report.

Biodiversity actions will be monitored through the Edinburgh Biodiversity Action Plan for 2016-2018. The latest annual report is available for 2017 at <a href="https://www.edinburgh.gov.uk/biodiversity">www.edinburgh.gov.uk/biodiversity</a>.

### 4(g) 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. Work in partnership through the Edinburgh Adapts Steering Group and wider partnership to continue to implement the Edinburgh Adapts Climate Change Adaptation Action Plan 2016-2020 and a Vision for a Climate Ready Edinburgh.
- 2. Work with partners to continue to raise awareness of the risks to Edinburgh's coast from climate change and investigate ways to adapt to these.
- 3. Work with the Edinburgh Biodiversity Partnership to deliver the climate change adaptation actions in both the Edinburgh Biodiversity Action Plan 2016-18 and the Edinburgh Adapts Action Plan. Work with the Edinburgh Biodiversity Partnership on the next iteration of the EBAP for 2019-2021.
- 4. The Edinburgh Community Resilience Pilot Project was completed in June 2017. A new project is currently being scoped and funded related to community resilience, to involve local communities, businesses and Responder agencies.
- 5. Respond to the findings of the external audit of sustainability activity across the council by the Edinburgh Centre for Carbon Innovation at Edinburgh University.

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

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

The Council worked with pilot areas within the city as part of the Edinburgh Community Resilience Project, seeking to enhance communities' abilities to respond to and recover from resilience incidents. Whilst the pilot has now been completed, the community resilience groups established as part of the pilot continue to operate and build resilience.

A new project is currently being scoped and funded related to community resilience, to involve local communities, businesses and Responder agencies.

The Council along with SEPA, other local authorities in the Forth Estuary and Scottish Water have developed a Local Flood Risk Management Plan. The Plan has identified flooding from rivers, coast and overland flow to prioritise work at the national level.

The Council is working with Scottish Water to scrutinise the sewer network and how it interacts with flooding from other sources. The Niddrie Burn River Restoration Project included construction of building platforms so future proofing development against flooding in the area.

### PART 5: PROCUREMENT

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

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

The Council has had a comprehensive Sustainable Procurement Policy in place since 2012. The sustainable procurement policy and objectives are addressed within every procurement plan, which is at the start of each procurement process. Thus, the policies build awareness and are discussed with stakeholders. There is also a mandatory sustainability risk assessment of procurement projects as part of the individual procurement plan which is a practical tool to ensure compliance with climate change duties (available on request).

The Sustainable Procurement Policy also informs the Council's terms and conditions of contract. For example, in schedule 8 section 1.1g a duty is placed on service providers to assist the Council on climate change.

The Commercial and Procurement team also use sustainability as selection and award criteria and seek to constantly evaluate processes that minimise the impact of the procurement for example in construction off-site fabrication, use of electric vehicles and use of local suppliers to reduce transport emissions are encouraged and scored accordingly.

The Policy has 4 main Outcomes

Outcome 1: the social and economic benefits from our procurement are maximised

Outcome 2: the environmental impacts are minimised and the environmental benefits maximised from our procurement

Outcome 3: Edinburgh has a more sustainable supply chain

Outcome 4: sustainable procurement is embedded within the Council

The following are some of the specific examples that sit under these outputs: - (please note this is just a selection):

- Minimise carbon based energy use
- minimise waste and consumption
- specify goods and materials made with a high content of recycled material and/or goods
- achieve a minimum sustainability performance of BREEAM 'Very Good' rating, and aspire to BREEAM 'Excellent' rating, when procuring new buildings and refurbishing old buildings. [BRE Environmental Assessment Methodology], where applicable.
- specify the most energy efficient goods, services and works
- ensure that vehicles we purchase, lease or hire have low emissions of greenhouse gases and air pollutants.
- procure timber and timber-based goods from verifiable sustainable sources that evidence clear chains of custody in line with the Council's Purchasing Policy for Sustainable Timber and Timber Products
- The use of Government Buying Standards
- The use of Community Benefits this is reinforced on the requirement in Contract Standing Orders to consider the inclusion of community benefits in all procurements over £50,000.

To give an example as to how these translate into procurement actions the Construction team operate WRAP targets for all Construction works. The targets and objectives set out in our contract identify:

- -Implementation of Site Waste Management Plans that not only meet any minimum regulatory requirements, but exceed these requirements by setting project-specific targets for waste reduction and recovery and measuring performance
- -Requirement to only purchase FSC approved timber

#### 5(b) 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 changes duties.

A number of contracts have been put in place whose sole objective is to comply with climate change:

#### 1. WARP IT

The procurement team initiated the Council joining Warp It (Waste Action Reuse Portal) an asset redistribution website which works in a similar way to Gumtree or Freecycle but for organisations rather than individuals. Warp It lets us give or loan assets to others, bringing unused items into use and liberating space.

WARP IT has allowed the Council, primarily schools, and charities to reuse and redistribute redundant items, which would otherwise be disposed of as landfill. As well as redistribution there is a container of tables and chairs and other resources being donated to a charity which is building schools in North Ghana.

To date (July 2018) since last report 16/17:

- 3670 items have been claimed by schools totalling £398,384 (new cost) an increase in items of 182%.
- 2777 items have been claimed by charities, £192,794(new cost) an increase in items of 22%.
- 358,021 KG/ 358 tonnes CO2 saved is equal to CO2 produced in the manufacturing and delivery of new items (measured by the WARP IT system), increase of 71%
- 103,340KG/103 tonnes of waste diverted from recycling and landfill (measured by the WARP IT system) increase of 87%

This website is being used to manage the implementation of a new primary school and 4 primary school extensions throughout 2018.

#### 2. Building Energy Management Systems Contract

Procurement Services supported Property and Facilities Management to establish a Building Energy Management System (BEMS) Upgrade Framework. The successful implementation and operation of a Building Energy Management System is essential to the management of building performance and energy efficiency. The Council has an extensive portfolio of BEMS including in all corporate offices, care homes, high schools and the majority of primary schools and a significant portion of the Council's energy use is controlled through its BEMS infrastructure.

Currently many systems are ageing and not functioning correctly with some systems now obsolete, making it difficult to maintain operational

performance and source replacement components. Upgrading the Council BEMS will improve the opportunity to deliver sustainability benefits through appropriate energy management across the Council estate, including reduced consumption and associated carbon reduction. Provision was made within the quality section of the upgrade framework to encourage contractors to considered improved energy performance.

### 5(c) Supporting information and best practice

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

Procurement Systems – Vendor module – Oracle

The buyers' pool process from start to finish is all done electronically, and we encourage new suppliers to provide an email address and to return forms by email rather than printing them off and posting them. With over 8000 active suppliers this process encourages the use of electronic submissions in a continued effort to reduce carbon emissions.

We try to be flexible regarding more expensive and / or off-contract purchases where the requisitioner is keen to purchase better quality items that should last longer, reducing the number of procurements.

We encourage our outlying locations (Lagganlia and Benmore) to procure goods and services locally, reducing the transport requirements to and from these outlying locations.

Our Finance and Procurement Systems Helpdesk, support the climate change duties by limiting the number of purchase orders that are sent in the mail by updating suppliers email addresses; only printing orders where there is no email address given for a supplier. Daily, the helpdesk will send updated email addresses from suppliers to the vendor team, thus reducing the number of printed orders.

Maintenance and Repair Vs Landfill

We support and encourage the maintenance and repair of our white goods wherever possible. Repairing rather than replacing when possible reduces the CO2 emissions as they are not sent to landfill. Our goods are being used for longer and don't have to be thrown away. This reduces the volume of raw materials and energy needed to make new products and reduces CO2 emissions.

### PART 6: VALIDATION AND DECLARATION

#### 6(a) Internal validation process

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

Internal audit review of CRC procedures; annual sign off of CRC annual report prior to submission to Environment Agency.

#### 6(b) Peer validation process

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

Senior business analyst review of data. Report considered by Corporate Policy and Strategy Committee.

### 6(c) External validation process

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

Validation of energy consumption data through CRC reporting.

#### 6(d) 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.

#### 6e - Declaration

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

Name	Role in the body	Date

### RECOMMENDED - WIDER INFLUENCE

### **Q1 Historic Emissions (Local Authorities only)**

Please indicate emission amounts and unit of measurement (e.g. tCO2e) and years. Please provide information on the following components using data from the links provided below. Please use (1) as the default unless targets and actions relate to (2).

- (1) UK local and regional CO2 emissions: **subset dataset** (emissions within the scope of influence of local authorities):
- (2) UK local and regional CO2 emissions: full dataset:

#### Select the default target dataset

Subset

Table 1a - Subset													
Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Units	Comments
Total Emissions	3332.37	3296.17	3262.92	2952.83	3071.95	2783.56	2961.45	2860.07	2410.14	2301.56		ktCO2	
Industry and Commercial	1438.91	1413.40	1414.49	1245.84	1309.66	1171.41	1270.17	1214.91	930.82	846.12		ktCO2	
Domestic	1182.44	1167.25	1167.93	1039.39	1105.93	972.58	1063.10	1024.32	854.10	820.77		ktCO2	
Transport total	711.02	715.52	680.50	667.59	656.37	639.58	628.19	620.83	625.22	634.67		ktCO2	
Per Capita	7.37	7.23	7.12	6.37	6.54	5.82	6.14	5.87	4.89	4.61		tCO2	
Waste												tCO2e	
LULUCF Net Emissions												ktCO2	
Other (specify in 'Comments')													

Table 1b - Full													
Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Units	Comments
Total Emissions	3449.80	3422.66	3381.95	3087.70	3196.72	2909.76	3075.95	2979.79	2531.62	2448.01	2332.50	ktCO2	
Industry and Commercial	1447.25	1423.86	1420.81	1258.10	1321.45	1183.59	1277.11	1224.85	940.65	870.06	788.37	ktCO2	
Domestic	1178.38	1163.02	1160.68	1041.10	1103.96	973.58	1059.35	1023.82	857.00	829.49	778.31	ktCO2	
Transport total	802.65	815.92	781.61	771.22	755.97	738.69	725.65	719.52	723.90	739.86	758.15	ktCO2	
Per Capita	7.63	7.51	7.38	6.67	6.80	6.09	6.37	6.11	5.14	4.91	4.60	tCO2	
Waste												tCO2e	
LULUCF Net Emissions	21.53	19.86	18.85	17.29	15.34	13.89	13.84	11.60	10.07	8.61	7.67	ktCO2	
Other (specify in 'Comments')													

Q2a – Targets Please detail your wider influence targets										
Sector Description  Type of Target value value year saving / End latest Year year measured  Target (units)  Target value year year measured										

Q2b) 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.

Q3) P	Q3) Policies and Actions to Reduce Emissions													
Sector	Start year for policy / action imple - mentatio n	policy / action will be fully	saving once fully imple -	Year measure d	in latest		Metric / indicators for monitorin g progress		implementatio n, has ISM or	give further	Investmen t (£)	g Costs		Comment s

ided in Table 3

	Q4) Partnership Working, Communication and Capacity Building. Please detail your Climate Change Partnership, Communication or Capacity Building Initiatives below.											
Key Action Type	Description	Action	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments			

### OTHER NOTABLE REPORTABLE ACTIVITY

Q5) Please detail key actions relating to Food and Drink, Biodiversity, Water, Procurement and Resource Use in the table below.				
Key Action Type	Key Action Description	Organisation's Project Role	Impacts	Comments

Q6) Please use the text box below to detail further climate change related activity that is not noted elsewhere within this reporting template	