

Appendix 1 – Required Reporting (corporate emissions)

1. Organisational profile

Name of the organisation: Aberdeen City Council

Type of organisation: Local Authority

Number of FTE staff in the organisation: 7035

Alternative metrics used by the organisation: none stated

Alternative metrics used by the organisation none stated: none stated

Overall budget of the organisation: £442,262,000

Report year 2015/16

Organisational context - As a Local Authority, Aberdeen City Council has a strong role to play in:

- Reducing emissions from our own estate and a wide range of services including buildings, transport, land use and waste.
- Driving and influencing emission reduction across the city.
- Managing risk and building resilience to a changing climate.

2. Governance, Management & Strategy

2a/b How is climate change governed in the organisation? How is climate change action managed and embedded in the organisation?

The Council's Planning and Environmental Policy Team, in Planning & Sustainable Development, has a specific remit for climate change and plays a role in coordinating mitigation and adaptation measures and embedding climate change into council policies and strategies.

The team coordinated the Carbon Management Plan, until work ceased on this activity to concentrate on wider emissions in the form of a Sustainable Energy Action Plan (SEAP). Powering Aberdeen: Aberdeen's SEAP, approved in May 2016 by Full Council, contains information on baseline emissions for the entire city, reduction targets and details actions setting out how the reductions will be achieved. In April 2016 new resources have been allocated to focus on the collation of emissions data for reporting purposes through the recruitment of an Emissions Accountant.

However, responsibility for actions related to climate change is spread across relevant council services, as indicated in the diagram.

Land and Property Assets oversee building conditions and undertake surveys, working closely with the Energy Management Unit and Building Services/Maintenance to bring buildings up to standard and perform better in relation to energy efficiency. This work is done on an ongoing basis.

The Energy Management Team is responsible for overseeing collation of the data behind the 'Carbon Reduction Commitment' and report on this externally on an annual basis.

The internal waste and recycling management responsibilities are spread among various service areas as set out in internal plan and policy:

- Trade Waste Team, sitting in Public Infrastructure and Environment, responsible for the collection of waste and recycling containers from most corporate buildings
- Facilities, sitting within Properties and Assets, is responsible for the implementation and provision of the waste and recycling services from main office buildings

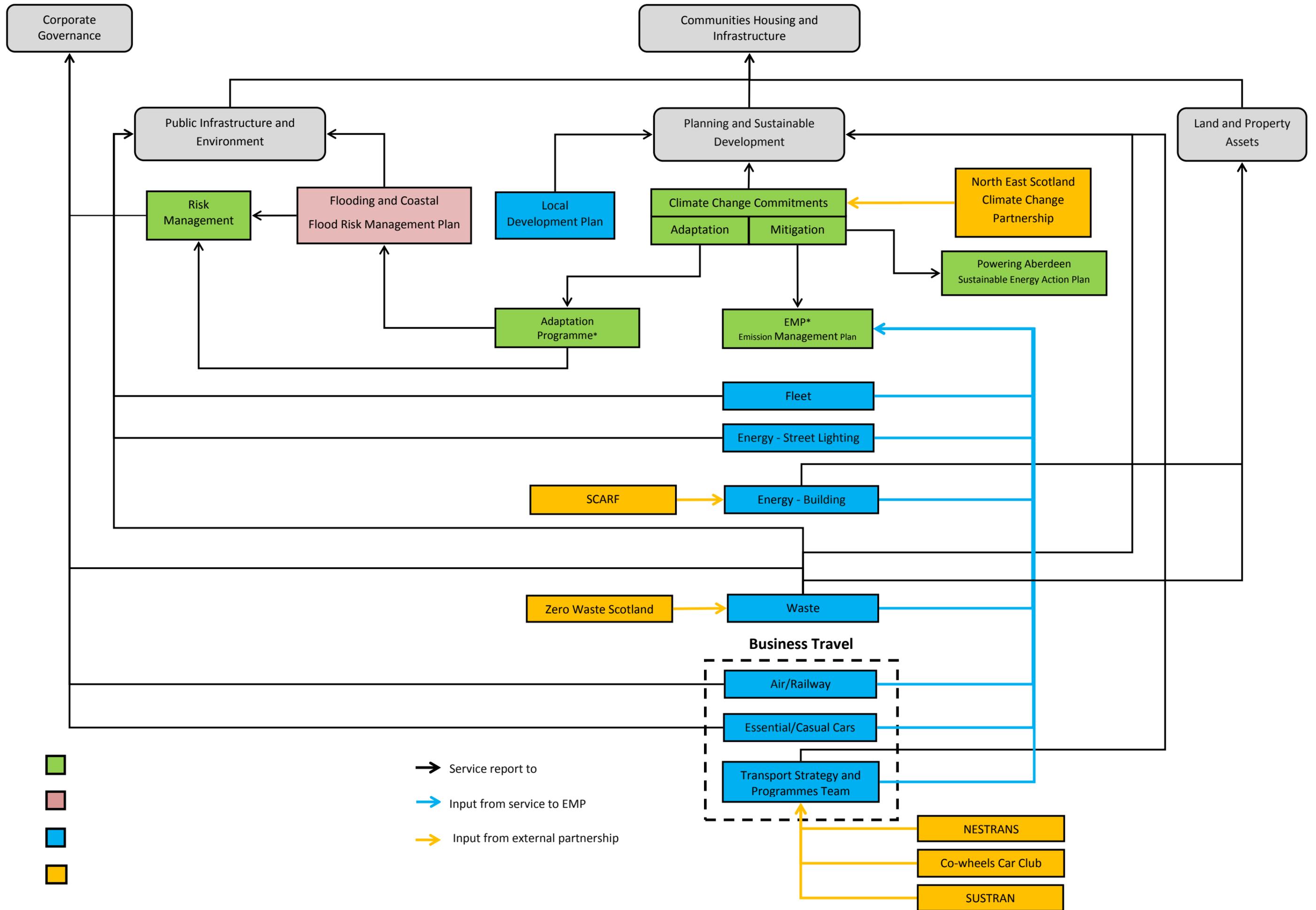
- Help Desk-IT and Transformation Team, sitting within Corporate Governance, is responsible of the collection/liaison with external companies of recyclable and ready for reuse of Electronic and Electric Equipment
- members of Sustainable Development Team have been responsible for the development and reporting of the Internal waste minimisation policy.

The Local Development Plan Team is responsible for providing the strategic direction for city development, including incorporation of sustainability principles. They also oversee development of supplementary guidance. The Local Development Plan is reviewed on a five yearly cycle and is reported to the Communities, Housing and Infrastructure Committee.

All Council plans, policies and strategies undergo Strategic Environmental Assessment to assess their environmental impact, this includes addressing climate change.

Activities to develop a Flood Risk Management Plan are done in partnership, to meet the Flood Risk Management (Scotland) Act 2009.

Work is ongoing to further embed sustainability across organisation decision making, processes and training.



2c Does the organisation have specific climate change mitigation and adaptation objectives in its corporate plan or similar document?

Details of specific plans, strategies and relevant objectives:

5 year Business Plan 2013/2014 - 2017/2018 (Page 44)

Wording objective:

- "We will design and construct all new infrastructure to be energy efficient by
- Maximizing the use of low carbon technology and materials. We will use recycled materials where possible.
- We will increase energy efficiency and introduce carbon reduction measures in our processes and our housing and non-housing assets to reduce our carbon footprint, save money and to bring people out of fuel poverty
- To provide and promote a sustainable transport system which reduces our carbon emissions
- We will manage waste effectively and in line with UK and European legislative requirements by maximising recycling and reducing waste to landfill, thereby reducing our costs and carbon footprint
- We will provide a clean, safe and attractive streetscape and promote bio-diversity and nature conservation.
- We will encourage wider access to green space in our streets, parks and countryside."

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=48634&SID=13437>

Alternative Energy Strategy for Council Owned Buildings (Section 1, page 3)

Wording objective: "Reduce Aberdeen City Council's annual energy consumption and associated carbon emissions in line with the Council's Carbon Management Plan 2010-2015."

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42070&SID=904>

Aberdeen - A Smarter City 2012-2017

This is the administration's policy statement. The first 4 objectives come under the Smarter Environment (Natural Resources) theme (page 4) and the last objective come under the Smarter Mobility (Transport and ICT) theme (page 5).

Wording objective:

- "We will design and construct all new infrastructures to be energy efficient by maximising the use of low carbon technology and materials. We will use recycled materials where appropriate.
- We will increase energy efficiency and introduce carbon reduction measures in our processes and our housing and non-housing assets to reduce our carbon footprint, save money and to bring people out of fuel poverty.
- We will manage waste effectively and in line with UK and European legislative requirements by maximizing recycling and reducing waste to landfill, thereby reducing our costs and carbon footprint.
- We will provide a clean, safe and attractive streetscape and promote bio-diversity and nature conservation. We will encourage wider access to green space in our streets, parks and countryside."
- "We will provide and promote a sustainable transport system, including cycling, which reduces our carbon emissions."

Link: www.aberdeencity.gov.uk/web/files/CouncilHousing/LHSAppendix2.pdf

City Centre Masterplan and delivery programme - Executive Summary June 2015 (Page 9)

Wording objective: "Technologically advanced and environmentally responsible. Providing the capacity, quality and reliability of infrastructure required by businesses and residents and utilising resources responsibly."

Link: www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=65366&SID=26695

Aberdeen City and Shire Strategic Development Plan March 2014 (Page 6)

Wording objective: "The main aims of the plan are to:

- provide a strong framework for investment decisions which help to grow and diversify the regional economy, supported by promoting the need to use resources more efficiently and effectively; and
- Take on the urgent challenges of sustainable development and climate change.

To support these main aims, the plan also aims to:

- Protect and improve our valued assets and resources, including the built and natural environment and our cultural heritage;
- help create sustainable mixed communities, and the associated infrastructure, which meet the highest standards of urban and rural design and cater for the needs of the whole population; and
- Make the most efficient use of the transport network, reducing the need for people to travel and making sure that walking, cycling and public transport are attractive choices."

Link: <http://www.aberdeencityandshire-sdpa.gov.uk/nmsruntime/saveasdialog.asp?IID=1111&SID=90>

Community Planning and Single Outcome Agreement 2013 (currently under review) (Page 4)

Wording objective: "Aberdeen 2022 – being the city we love to live in: a socially, economically and environmentally sustainable and great city."

Works toward the refreshed Single Outcome Agreement can be noted in the "Aberdeen City - Strategic Assessment 2016" (<http://communityplanningaberdeen.org.uk/wp-content/uploads/2016/05/Aberdeen-CPP-Strategic-Assessment-2016.pdf>)

Link: <http://www.gov.scot/Resource/0043/00435518.pdf>

Aberdeen City Region Hydrogen Strategy and Action Plan 2015-2025 (Part 2, page 16)

Wording objective: "To reinforce our place, now and in the future as the energy city by further enhancing the region's economic competitiveness, maximising the capacity and value of renewable energy and giving greater energy security by being at the forefront of a hydrogen economy."

Link: http://archive.northsearegion.eu/files/repository/20150918111637_AberdeenHydrogenStrategy_March2015.pdf

Air Quality Action Plan 2011 (Page 2)

Wording objective: "It is necessary to improve air quality in Aberdeen to protect the health of the City's inhabitants."

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=56878&SID=5034>

Local Transport Strategy 2016-2021 (Page 5)

Wording objective:

"To contribute to Aberdeen's carbon emissions targets and develop climate resilient infrastructure.

- Maintain transportation assets, including roads, footways, street lighting and structures, and ensure that policies and procedures relating to flooding, winter maintenance and contingency planning lead to minimal disruption to the travelling public.
- Promote the use of sustainable transport through land use planning policies; supporting and facilitating the expansion of Travel Plans, car sharing, Car Clubs and Low Emission Vehicles; improving and increasing information and awareness; and ensuring that the environmental impacts of transport are minimised.
- Improve and add to transport infrastructure and services by implementing a range of projects and schemes to improve transport conditions and the travelling environment for all users, adopting a hierarchical approach, with the needs of pedestrians and cyclists considered first and private vehicular traffic last."

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=68616&sID=2866>

Sustainable Urban Mobility Plan - Stage 1: Project Plan (Page 1)

Wording objective: "...reduces air and noise pollution, greenhouse gas emissions and energy consumption; improves the efficiency and cost-effectiveness of the transportation of people and goods"

Link: <http://www.aberdeencity.gov.uk/sump/>

<http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=49222&sID=21944>

Aberdeen Waste Strategy 2014-2025 (Page 7-8)

Wording objective: "The ACWS has been designed to ensure Aberdeen works towards meeting national and international legislative targets:

Target 1: Waste growth will be eliminated by 2015.

Target 2: We will work towards the targets set in the Scottish Government's Zero Waste Plan 2010 (...)

Target 3: Introduce an organic waste collection for all households by 2016.

Target 4: Develop facilities within the Aberdeen area to recover our resources. (...)

Target 5: No more than 5% of household waste should be landfilled by 2025."

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42832&sID=11561>

Aberdeen Open Space Strategy 2011-2016 (Page 10)

Wording objective:

- "Recognise the economic, environmental and social value of open spaces (...)
- Maximise opportunities to mitigate and adapt to climate change and further biodiversity (...)"

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42832&sID=11561>

Shaping Aberdeen - Strategic Infrastructure Plan (Page 12)

Wording objective: "Key goals and growth sectors."

Link: <http://www.aberdeencity.gov.uk/shapingaberdeen/>

[Aberdeen City Regional Deal - Powering Tomorrow's World...](#) (Page 6)

Wording objective: "Theme 7 - Actively promote our offer and the transition to a low carbon economy."

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=63430&SID=26262>

[Aberdeen Local Housing Strategy 2012-2017](#) (Page 10)

Wording objective: "Increase energy efficiency and introduce carbon reduction measures in our processes and our housing and non-housing assets to reduce our carbon footprint, save money and to bring people out of fuel poverty."

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=56242&SID=21737>

[Powering Aberdeen - Aberdeen's Sustainable Energy Action Plan](#) (Page 11)

Wording objective: Objectives:

- Leadership and behaviour change (...)
- Energy Efficiency (...)
- Resources Efficiency (...)
- Increase the share of alternative technologies (...)
- Low emission society

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=71150&SID=25580>

[Local Development Plan 2012](#) (Page 3)

Wording objective: "We will have acted confidently and taken the courageous decisions necessary to further develop a robust and resilient economy and to lead the way towards development being sustainable, including dealing with climate change and creating a more inclusive society."

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42278&SID=9484>

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

Powering Aberdeen, the city's Sustainable Energy Action Plan was approved in May 2016 and will ensure works towards emissions reductions.

(<http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=71150&SID=25580>)

The climate change adaptation plan that can guide decision making processes over the long term and build city resilience were and are still under development.

As highlighted within section 2c, there is a cross over with many strategies.

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

Topic area	Name of document	Link	Comments
Adaptation	See responses within section 4.		The Adaptation Plan and risk assessment are currently under development.
Business travel			This is incorporated within the travel plan, under four policy areas as opposed to a specific policy.
Staff Travel	Council Travel Plan 2001	Available on the corporate intranet	Surveys have been conducted every 2 years since 2008. The travel plan has not recently been refreshed due to resource constraints.
Energy efficiency	Aberdeen Local Housing Strategy 2012-2017	http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=56242&SID=21737	Outlines housing strategic approach to fuel poverty, energy efficiency and climate change.
Fleet transport	Fleet Asset Management Plan 2013	Available on the corporate intranet	Emissions reduction/alternative fuels.
ICT	ICT Asset Management Plan 2013	Available on the corporate intranet	Encourages more efficient use of greener resource which generates a competitive economy.
Renewable energy	Alternative Energy Strategy for Council Owned Buildings	http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42070&SID=904	Reduce energy consumption and associated carbon emissions/enable low/zero carbon technologies
Sustainable/renewable heat	Alternative Energy Strategy for Council Owned Buildings	http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42070&SID=904	Reduce energy consumption and associated carbon emissions/enable low/zero carbon technologies
Waste management	Internal Waste Minimisation Plan 2013	Available on the corporate intranet	
Water and sewerage	N/A	N/A	N/A
Land Use	Aberdeen Local Development Plan 2012	http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42278&SID=9484	The Local Development Plan is currently under review and the more updated one should be adopted by the end of 2016.
Open Space Audit & Strategy	Aberdeen Open Space Strategy 2011-2016	http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42832&SID=11561	The Open Space Strategy is currently under review and the more updated one should be published in 2017.
Nature Conservation Strategy	Nature Conservation Strategy	www.aberdeencity.gov.uk/web/files/Natural_Heritage/Nature_Strategy_Dec2015_extended.pdf	The Nature Conservation Strategy is currently under review and the more updated one should be published between 2016 and 2017.
Transport Strategy	Local Transport Strategy 2016-2021	http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=68616&SID=2866	

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

It's important to state that the Council does not have an over-arching sustainability strategy, therefore the priorities indicated have been provided from the view of officers within the Planning and Environmental Policy team. These are not listed in order of priority and many other areas are equally important but have not been included.

- Development/Implementation of Powering Aberdeen, our city's Sustainable Energy Action Plan. This covers many areas such as transport, waste, energy, construction and planning etc.
- Ongoing development of an Adaptation Plan.
- Review of the Community Planning and Single Outcome Agreement arrangements.
- Sustainable Procurement activities aligning to the requirements of the "The Procurement Reform (Scotland) Act 2014", "Community Benefits" and "Scottish Government sustainability tools including the Flexible Framework Assessment Tool".
- Review of policies and progression of an environmental management system.

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

The CCAT Tool has been used in March 2015 in preparation of the pilot reporting year 2014/2015 of the Public Bodies Climate Change Reporting Duties.

This provided an assessment of Council progress with action on climate change, giving recommendations to improve performance.

CCAT gave an assessment score for 5 topic areas, for the Council. These are:

- Governance 36%
- Emissions 27%
- Adaptation 36%
- Behaviour 20%
- Procurement 19%
- Overall result 29%.

The CCAT Tool will be used after the submission of the first mandatory Public Bodies Climate Change report for year 2015/2016 in November/December 2016. As suggested within the CCAT guidance document, this would allow the tool to be used as a performance improvement programme, help to evaluate the up-to-date information and create a focus on action plan for the forthcoming year.

This will also allow the responsible officer for the workshop to have more time to organize it and broader the invitation to officers from sections/departments of the Council that have not managed to participate previously (i.e. Finance, Corporate Governance, Human Resources, Service Delivery, Senior Management Team).

2h Supporting information and best practice

Seeking approval of the Climate Change Risk Assessment Process in the next reporting period (2016/2017). This includes ongoing work to integrate climate change in the corporate risk register. This would ensure climate change is included in strategic risk reviews with information reported regularly to corporate management. Regular reviews of the climate risks will be incorporated into the climate change risk assessment process this includes current and future climate risk.

3. Corporate Emissions, Targets and Project Data

3a Corporate emissions baseline (tCO₂e)

Year	Total (tCO ₂ e)	Comments
2014/15 Baseline	44,993	The Baseline differs from the one presented at the Climate Change Report 14/15 (34,052.2 tCO ₂ e). Updates: - added Grid Electricity (transmissions and losses) for Estate/Assets/Buildings - added Grid Electricity (generation) and Grid Electricity (transmissions and losses) for street lighting as available - added Water - Treatment (95% of Water – Supply) Emission factors used Defra/DECC 2014.
2015/2016 Year 1	4,6371	Change in the building estate boundaries removing ALEO's (Sport Aberdeen, Aberdeen Performing Arts, Bon Accord Care) and removing householders/domestic properties as multi-storeys, housing estate. Fleet information available for year 1 and not available for baseline 2014/2015.

3b Breakdown of emission sources

The emission factors are published annually by the UK Government DEFRA and are updated automatically on the on line reporting system.

Emission source	Consumption data	Units	Emission factor	Units	Emissions (tCO ₂ e)	Comments
Grid Electricity (generation)	30,580,255	kWh	0.46219	kg CO ₂ e/kWh	14,133.9	Council Estate/Assets/Buildings
Grid Electricity (transmission and distribution loss)	30,580,255	kWh	0.03816	kg CO ₂ e/kWh	1,166.9	Council Estate/Assets/Buildings
Grid Electricity (generation)	16,287,917	kWh	0.46219	Kg CO ₂ e/kWh	7,528.1	Street lighting
Grid Electricity (transmission and distribution loss)	16,287,917	kWh	0.03816	Kg CO ₂ e/kWh	621.5	Street lighting
Natural Gas	90,680,897	kWh	0.18445	Kg CO ₂ e/kWh	16,726.1	Council Estate/Assets/Buildings
Gas oil	5,602,904	kWh	0.27101	Kg CO ₂ e/kWh	1,518.4	Council Estate/Assets/Buildings
Diesel (average biofuel blend)	1,429,525	Litres	2.58390	Kg CO ₂ e/litre	3,693.7	Information is available from fuel card usage
Petrol (average biofuel blend)	37,016	Litres	2.19440	Kg CO ₂ e/litre	81.2	Information is available from fuel card usage
Short-haul flights (Economy Class)	233,670	passenger km	0.16634	Kg CO ₂ e/passenger km	38.9	The information is reported by the Travel Team but includes only the agency travel booking. Other booking are managed through credit card and available only on a paper copy basis. Procedures/processes to capture information from credit card system will need to be improved and updated to allow the easy retrieval of data in an appropriate format.
Short-haul flights (Business Class)	317	passenger km	0.24954	Kg CO ₂ e/passenger km	0.1	
Long-haul flights (Economy Class)	336,986	passenger km	0.15175	Kg CO ₂ e/passenger km	51.1	
Long-haul flights (Business Class)	67,388	passenger km	0.44010	Kg CO ₂ e/passenger km	29.7	
Domestic flight (average passenger)	N/A	Passenger km	0.29795	Kg CO ₂ e/km	N/A	The information was normally reported by the Travel Team. From 2015/2016 the Travel Team is using mainly the credit card system and the information are available only on a paper copy basis. Procedures/processes to capture information from credit card system will need to be improved and updated to allow the easy retrieval of data in an appropriate format.
Rail (National rail)	N/A	passenger km	0.045506	Kg CO ₂ e/passenger km	N/A	The information provided is not accurate. Procedures/processes to capture information from external contractor and credit card system will need to be improved and updated to allow the easy retrieval of data in an appropriate format.

Emission source	Consumption data	Units	Emission factor	Units	Emissions (tCO ₂ e)	Comments
Average Car – Unknown Fuel	1,801,746	Km	0.18635	Kg CO ₂ e/km	335.8	Gray Fleet – Essential and Casual Cars
Car – Petrol (average)	44,030	Km	0.19126	Kg CO ₂ e/km	8.4	Co-wheels Cars
Car – Diesel (average)	16,649	Km	0.18232	Kg CO ₂ e/ km	3.0	Co-wheels Cars
Car – Hybrid (medium)	4,575	Km	0.11770	Kg CO ₂ e/ km	0.5	Co-wheels Cars
Grid Electricity (Generation)	3,945	kWh	0.46219	kg CO ₂ e/kWh	1.8	Co-wheels Cars – 24,721 kilometres
Grid Electricity (Transmission and distribution loss)	3,945	kWh	0.03816	kg CO ₂ e/kWh	0.2	Co-wheels Cars – 24,721 kilometres
Organic Food & Drink Composting	325	tonnes	6.0000	Kg CO ₂ e/tonne	2.0	Part of information is provided in volume by Aberdeen City Council trade waste team (ZWS tool *Est - 75% fill). Part of information is provided in weight by the external contractor that collects from 3Rs Schools premises.
Refuse Commercial & Industrial to Landfill	2,086	tonnes	93.0000	kg CO ₂ e/tonne	194.0	Part of information is provided in volume by Aberdeen City Council trade waste team (ZWS tool *Est - 75% fill). Part of information is provided in weight by the external contractor that collects from 3Rs Schools premises.
Mixed recycling	513	tonnes	21.0000	kg CO ₂ e/tonne	10.8	Part of information is provided in volume by Aberdeen City Council trade waste team (ZWS tool *Est - 95% fill). Part of information is provided in weight by the external contractor that collects from 3Rs Schools premises.
Glass	47	tonnes	21.0000	kg CO ₂ e/tonne	1.0	Information are provided by Aberdeen City Council trade waste Team (ZWS tool *Est - 95% fill)
Paper/Cardboard	232	tonnes	21.0000	kg CO ₂ e/tonne	4.9	Information provided (weight) by the external company that collect confidential paper from the Council offices.
WEEE (Mixed) Recycling	18	tonnes	21.0000	Kg CO ₂ e/tonne	0.4	Information provided in weight by external contractor and who pass the data to the IT help desk.
Water - Supply	214,801	m ³	0.34400	Kg CO ₂ e/m ³	73.9	
Water - Treatment	204061	m ³	0.70800	Kg CO ₂ e/m ³	144.5	95% of Water Supply
Biomass (Wood Chips)	1,129,480	kWh	0.0132	Kg CO ₂ e/kWh	14.9	89,480 kWh from garden waste used to feed a boiler at Duthie Park Depot and 1,040,000 kWh from woodchips to feed a boiler at Winter Garden - Duthie Park
				Total	46,385.7	

3c Generation, consumption and export of renewable energy

Technology	Renewable Electricity		Renewable Heat		Comments
	Total consumed by the organisation (kWh)	Total exported (kWh)	Total consumed by the organisation (kWh)	Total exported (kWh)	
Biomass			1,129,480		89,480 kWh from garden waste used to feed a boiler at Duthie Park Depot 1,040,000 kWh from woodchips to feed a boiler at Winter Garden - Duthie Park
Solar PV	956,489				Renewable Energy from Solar Panel used by the building through a "Rent a Roof" Scheme

3d Organisation targets for emission reduction

Target	%	Baseline	Amount	Unit	Target completion year	Comments
Reuse, recycle and compost corporate waste.	65%	2011/12	23,589	tonnes	2018	Internal Waste Minimisation Policy (2013). Estimated - not weighted data for most waste streams.
Reduce waste to landfill from corporate buildings.	28%	2011/12	7,771	tonnes	2018	Internal Waste Minimisation Policy (2013)
Reduction in energy consumption	2% year on year	Previous year		tCO2e		Ongoing. Carbon Reduction Commitment boundaries are different than the Climate Change Report ones.

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

No project implemented = "0"

No information available = "Unknown"

Emission source not included in the carbon footprint "N/A"

Emissions Sources	Total estimated annual carbon saving (tCO ₂ e)	Comments
Electricity	1,554	Building: - Renewable Energy from Solar Panel used by buildings through a "Rent a Roof" Scheme (479tCO ₂ e) Street lighting: - On going replacement of high output with lower energy LED units as per maintenance and new lantern programme. (1075tCO ₂ e)
Natural Gas	193	Biomass used to feed 2 x boilers: - Garden waste used to feed a boiler at Duthie Park Depot (15.3 tCO ₂ e) - Woodchips to feed a boiler at Winter Garden - Duthie Park (178 tCO ₂ e) Implementation of energy efficiency measures on buildings on an on-going basis through maintenance and upgrade programme. It is not possible to indicate the tCO ₂ e saved from this project.
Other heating fuels		Unknown
Waste		Unknown
Water and sewerage		Unknown
Business Travel	3	Increased usage of Electric and Hybrids vehicles available to employees. Assumption: Average efficiency of electric cars = 6.4 km/kWh
Fleet transport		Unknown
Total	1,750	

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

- **Project Name:** On going replacement of high output with lower energy LED units as per maintenance and new lantern programme
Funding Sources: Aberdeen City Council
Primary fuel/emission source saved: Grid Electricity
- **Project Name:** On-going implementation of energy efficiency measures on buildings through maintenance and upgrade programme.
Funding Sources: Aberdeen City Council
Primary fuel/emission source saved: Grid Electricity/Natural Gas
- **Project Name:** Introduction of 2 two hydrogen diesel hybrid vans to the Council fleet plus two fuel cell range extended vans.
Funding Sources: HyTrEc – Interreg IVB funding (European)
Primary fuel/emission source saved: Diesel/Petrol
Comments: Vans are still using a temporary hydrogen supply therefore not fully utilised yet. Once the second H2 refuelling station is operational (Q4 2016) the vehicles will be fully tested.
- **Project Name:** Expansion of Co-Wheels car club network with more vehicles available, more low carbon vehicles available to staff.
Funding Sources: Aberdeen City Council, Transport Scotland, Co-wheels Car Club
Primary fuel/emission source saved: Diesel/Petrol
Comments: Additional 9 vehicles added during the reporting year 2015/2016 (38 vehicles) compare to 2014/2015 (29 vehicles). Additional 119 employees signed in the Co-wheels Car Club during reporting year 2015/2016 (588 employees) compare to 2014/2015 (469 employees).
- **Project Name:** Expansion of electric vehicles charging points available within the city.
Funding Sources: Transport Scotland, Energy Saving Trust Scotland, Office for Low Emission Vehicles
Primary fuel/emission source saved: Diesel/Petrol
Comments: Increased charging points for electric vehicles from 58 in 2014/2015 to 62 in 2015/2016 with additional 4 charging points.

Details of the data requested for project is set out below:

- | | | |
|-----------------------------------|---|---|
| • Project name | • Operational cost (£/annum) | • Estimated costs savings (£/annum) |
| • Funding source | • Project lifetime (years) | • Savings figures are estimated or actual |
| • First full year of CO2e savings | • Primary fuel/emission source saved | • Behaviour Change |
| • Capital cost (£) | • Estimated carbon savings per year (tCO2e/annum) | • Comments |

3g Estimated decrease or increase in emissions from other sources in the report year.

During 2015/2016 the Council Assets/Estate has increased with added 4 buildings with a total additional surface of 2,825 m².

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

Emissions Sources	Comments
Electricity	Implementation of energy efficiency measures on buildings on an on-going basis through maintenance and upgrade programme. On-going replacement of high output with lower energy LED units as per maintenance and new lantern programme.
Natural Gas	Implementation of energy efficiency measures on buildings on an on-going basis through maintenance and upgrade programme.
Other heating fuels	Unknown
Waste	Unknown
Water and sewerage	Unknown
Business Travel	<ul style="list-style-type: none">- Expansion of Co-Wheels car club network with more vehicles available, more low carbon vehicles available to staff.- Expansion of electric vehicles charging points available within the city when funding comes available.- Expansion of hydrogen diesel hybrid vans to the Council fleet.
Fleet transport	Unknown

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

During 2016/2017 the Council Assets/Estate is anticipated to increase with an additional surface of 14,404 m².

3j Total carbon reduction project savings since baseline year

Total project savings since the baseline year: **1,750 tCO₂e** (as per table 3e) with baseline year updated version Climate Change Report 2014/2015.

4 Adaptation

4a Organisation assessment of current and future climate-related risks

Aberdeen carried out an LCLIP (2014) to assess the vulnerability of services to weather over a 5 year period.

An assessment of flood risk has been carried out under work on the North East Local Flood Risk Management Plan (NELFRMP) and this has mapped areas potentially vulnerable to flood risk. The NELFRMP forms part of the statutory obligations placed on Aberdeen City Council as part of the Flood Risk Management Act 2009. The plan contains the statutory duties that ACC will be required to undertake during Cycle 1 of the Flood Risk Management Plan 2016- 2022. The Plan has been produced in partnership with SEPA, Moray Council, Aberdeenshire Council and Scottish Water and it will be reviewed every 6 years, with an interim report at 3 years. The key elements from the NELFRMP are: 4 Flood Studies, 1 Natural River Management Study, 1 Flood Alleviation Scheme Design, 4 Surface Water Management Plans.

ACC has worked with SEPA and other bodies on the Flood Risk Strategy for the North East Local Plan District

<http://apps.sepa.org.uk/FRMStrategies/norh-east.html>

Aberdeen Local Development Plan has carried out a Strategic Flood Risk Assessment

<http://committees.aberdeencity.gov.uk/ecSDDisplay.aspx?NAME=SD933&ID=933&RPID=0&sch=doc&cat=13290&path=13290>

An Integrated Catchment Study has been developed working with Scottish Water, to inform flood risk management.

A Strategic Flood Risk Assessment has been undertaken for the Proposed Local Development Plan. This is to satisfy the requirements placed on local authorities under the Flood Risk Management (Scotland) Act 2009, requiring local authorities to exercise their flood risk related functions with a view to reducing overall flood risk and promoting sustainable flood risk management. The Assessment looks at a number of potential sources of flood risk which may be relevant for development in Aberdeen.

<http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=54158&SID=24188>

A Business Continuity Policy is in place and Business Continuity Plans are in place for “critical” public facing aspects of Services in support of the Civil Contingencies Act 2004.

The Council is developing a corporate level risk assessment in line with the “5 Steps to Managing Your Climate Risks”, assessing climate risks to Council services and work is taking place to embed climate change in the corporate risk assessment process, the corporate risk procedure has been under review in this period.

The Council is a participant in the Adaptation Scotland, Risk Task Group and is working with the group to share information and improve approaches to identifying and documenting climate risks.

4b Arrangements in place to manage climate-related risks

Aberdeen was selected by Adaptation Scotland to support in the development of a partnership project in 2016 to develop a city wide approach to climate resilience. Initial project planning and information gathering took place in this period in preparation for the project development in 2016/17.

Adaptation is embedded in many other corporate policies and strategies including:

The proposed **Aberdeen Local Development Plan**, includes policy on coastal planning, trees and woodland; flooding, drainage and water quality; open space and green infrastructure; urban greenspace; greenspace network.

Link: <http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=62530&SID=26036>

Aberdeen City and Shire Strategic Development Plan (2014) (p28) – Has an objective “To be a city region which takes the lead in reducing the amount of carbon dioxide released into the air, adapts to the effects of climate change and limits the amount of non-renewable resources it uses.”

Link: <http://www.aberdeencityandshire-sdpa.gov.uk/nmsruntime/saveasdialog.asp?IID=1111&SID=149>

Adaptation is embedded into the **Council Business Case** templates to ensure climate change is considered in new projects and proposals.

Nature Conservation Strategy 2010 – 2015, considers the future impacts of climate change and highlights the links between biodiversity and climate change. Specifically, the strategy recognises that biodiversity loss and climate change are interlinked and that both threaten the availability of the natural resources. The strategy covers the period 2010-2015 and is now currently an interim strategy while work takes place on updating it. This aims to be in place in 2017

Link: http://www.aberdeencity.gov.uk/web/files/Natural_Heritage/Nature_Strategy_Dec2015_extended.pdf

The **Open Space Strategy 2011-2016**, contains a key objective and series of actions to, “Maximise opportunities to mitigate and adapt to climate change and further biodiversity.” This is through encouraging SUDS, protecting open spaces for the role they play in flood management, planting native and wildlife friendly species.

Link: http://www.aberdeencity.gov.uk/planning_environment/planning/local_development_plan/pla_open_space_audit.asp

The **Local Transport Strategy** includes an objective “To contribute to Aberdeen’s carbon emissions targets and develop climate resilient infrastructure. It mentions use soft engineering techniques and practices to provide soft landscaping and more natural habitats that assist with water conveyance and storage, thereby reducing flooding risk.”

Link: http://www.aberdeencity.gov.uk/planning_environment/planning/transport/pla_transportstrategy.asp

The **Council Buildings Performance Policy** was approved in 2016. This sets out the requirements for domestic and non domestic buildings in both new build and refurbishment scenarios.

Link: <http://councilcommittees.acc.gov.uk/documents/s53169/CHI-15-25%20Buildings%20Performance%20Policy.pdf> (available in the intranet)

4c Action taken to adapt to climate change

Building capacity

- Adaptation workshops were held at the Council Communities, Housing and Infrastructure staff conference in January 2016. This was a three day event open to staff from planning, assets, housing, environmental services and environmental health. The Adaptation Scotland, Adaptation Game was used in another staff workshop to inform aspiring Council managers about adaptation and the need for resilience.
- Aberdeen was selected for support from Adaptation Scotland for the development of a partnership project to establish a strategic approach to adaptation for the city. Project planning has taken place and an outline Business case produced for the project.
- A briefing paper on climate adaptation has been produced for Senior Managers and a briefing paper on Climate Change Reporting was presented to Senior Management, this included information on adaptation.
- The Council co-ordinated several editions of NE Climate a newsletter outlining mitigation and adaptation actions taking place in the north east of Scotland. This publication is produced by the North East Scotland Climate Change Partnership. The Council remained chair and secretariat of the partnership this reporting period and in summer 2015 the Council hosted a student project to map climate mitigation and adaptation projects in the region.
- Aberdeen is working in partnership with the Scottish Environment Protection Agency (SEPA), Scottish Water and the North East Local Plan District to develop the North East Local Flood Risk Management Plan, to meet the Flood Risk Management (Scotland) Act 2009.
- Information on adaptation was included in a sustainability newsletter for New Managers and is used as part of the new managers induction process.
- Ongoing discussions have taken place with the Performance and Risk team as part of work to assess climate risks for the Council and embed this in the Strategic Risk Register. The corporate risk process has been under review in this reporting period.
- In March 2016 an application was submitted in as partner in an EU blue/ green infrastructure project.
- During Aberdeen's Climate Week in March 2016 and in the run up to Earth Hour an event was held at Hazlehead the city climate change park to explain the impact of climate change on the work of the Council Environmental Services team. A programme for the 2 events featured information on building resilience to climate change.

Deliver adaptation action

- Aberdeen City Council currently provides self-help and delivers sand bags during times of flooding.
- A Property Level Flood Protection Grant Scheme has been developed. This introduces grant support for a property flood protection in relation to domestic properties. The scheme will reduce the number of properties vulnerable to internal flooding and will assist areas and communities at risk of flooding.
- A prioritised list of flood actions is being developed in partnership with SEPA and Scottish Water as part of requirements under the Flood Risk Management (Scotland) Act 2009.
- Work on the formal creation of a wetland area at Seaton Park started in March 2016. The park has suffered from flooding, creating problems with access in certain areas and pooling of water in other parts of the park. The Seaton Park Wetland Project will be an asset to the area and provide a natural solution to water management and improving management of flooded water in the park including during times of heavier rainfall.
- The project is helping to implement the Council's Nature Conservation Strategy and the Open Space Strategy. The wetland was inspired by the recent success of the East Tullos Burn Environment Improvements Project at St. Fitticks Park where flooding was alleviated with the inclusion of wetlands to manage water levels from the burn. The work also improved access and increased biodiversity and the aim is that these benefits will also be realised through the Seaton Wetland project.
http://www.aberdeencity.gov.uk/community_life_leisure/parks_open_spaces/seaton_parkwetlandproject.asp
- A Green Space Network identifies threats and opportunities in relation to the natural and built environment across Aberdeen. This strategic network connects various habitats and species, urban and rural green spaces to each other and the communities around them. The network aims to protect and enhance designated sites; to improve connectivity between habitats and open spaces; and to promote opportunities for access to the outdoors. It also takes into account climate change adaptation opportunities and flood risk or alleviation.
http://www.aberdeencity.gov.uk/planning_environment/planning/outdoor_access/pla_green_space_network.asp
- The city experienced 2 major flooding incidences in this reporting period and core path remediation has included adaptation measures to help future proof paths within the network.
- Grants were awarded by the Council to householders in the city who were affected by the flooding incidents in the city in December and January.
- The Leggart Terrace Sewer Diversion project was approved in February 2016 and will reduce the volume of water in the existing sewer which currently fails during severe rainfall and storms. This area has been affected by flooding several times in recent years. This adds to a number of flood prevention schemes already in place across the city including: Westburn Park Detention Pond – protects Fraser Place; Glashieburn Scheme – protects Lochside Drive; Stronsay Detention Pond – protects Fountainhall, Queens Cross and Mackie Place; and Jacks's Brae – prevents Jack's Brae and Denburn Car Park from flooding.

4d Progress in delivering policies and proposals in the Scottish Climate Change Adaptation Programme

Objective	Objective Ref	Theme	Policy/ Proposal reference	Delivery progress made	Comments
Understand the effects of climate change and their impacts on the natural environment.	N1	Natural Environment	N1-8	Development of the North East Local Flood Risk Management Plan (NELFRMP) for approval in 2016. The plan contains the statutory duties that the Council will be required to undertake during Cycle 1 of the Flood Risk Management Plan 2016-2022. This is to meet statutory requirements under the Flood Risk Management (Scotland) Act 2009.	The Plan has been produced in partnership with SEPA, Moray Council, Aberdeenshire Council and Scottish Water.
Understand the effects of climate change and their impacts on the natural environment.	N1	Natural Environment	N1-10	The Council worked with Scottish Water on the development of an Integrated Catchment Study surveying sewers and watercourses, measuring flows and rainfalls and building a computer model of the integrated catchment.	
Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment	N2-2	The Green Space Network and the Green Space Network (GSN) GIS Tool promotes, enhances and protects the environment identifies threats/ opportunities to the city natural and built environment. Focus on green infrastructure practices and enhancing the green space network. The development of green infrastructure including wetland areas in support of the Council Nature Conservation a Strategy and Open Space Strategy.	Green Space Network http://www.aberdeencity.gov.uk/planning_environment/planning/outdoor_access/pla_green_space_network.asp
Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment	N2-11	Supplementary Guidance (SG) for Trees and Woodlands, Buffer Strips Adjacent to Water Bodies and Open Spaces is under the current Aberdeen Local Development Plan. The Green Space Network and the Green Space Network (GSN) GIS Tool promotes, enhances and protects the environment identifies threats/ opportunities to the city natural and built environment. Officers comment on the development of city masterplans in relation to adaptation.	Trees and Woodlands SG - http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=31830&slD=14394 Open Space SG - http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=57288&slD=14394 Buffer strips SG - http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=31826&slD=14394 The Local Development Plan is currently under review and the more updated one should be adopted by the end of 2016.
Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment	N2-20	The Council assess and manage coasts through the development of the North East Local Flood Risk Management Plan (NELFRMP) for approval in 2016. The Aberdeen Local Development Plan includes "Policy NE7 Coastal Planning", that states development will not be permitted in areas at risk from coastal erosion and flooding.	Local Development Plan - http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=42278&slD=9484

Objective	Objective Ref	Theme	Policy/ Proposal reference	Delivery progress made	Comments
Sustain and enhance the benefits, goods and services that the natural environment provides.	N3	Natural Environment		N/A	
Understand the effects of climate change and their impacts on buildings and infrastructure networks.	B1	Buildings and infrastructure networks	B1-13	Under the EU Water Framework Directive the Council has prepared the North East River Basin Management Plan along with partners, addressing issues of water quantity and quality. The Council is a partner in the North East Area Advisory Group which developed the North East Area Management Plan.	http://www.sepa.org.uk/environment/water/river-basin-management-planning/
Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure.	B2	Buildings and infrastructure networks		N/A	
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided	B3	Buildings and infrastructure networks	B3-2	Supplementary Guidance on Drainage Impact Assessments sits under the Local Development Plan. The information was produced on behalf of the North East Scotland Flooding Advisory Group to assist developers and agents, development control officers and others involved in approving waste and surface water drainage facilities for new developments. It provides guidance on the new requirement for the preparation and submission of a Drainage Impact Assessment (DIA) for new developments and informs practitioners of the circumstances where pre-application meetings may be of benefit. It emphasises the need for SUDS. The proposed LDP includes Policy NE6 Flooding, Drainage and Water Quality. It mentions Council work to develop strategic-level Regional SuDS to provide sustainable flood risk management. Development of a Surface Water Management Plan.	SG Drainage Impact Assessments provides guidance for developers and regulators- http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=31828&SID=14394
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided	B3	Buildings and infrastructure networks	B3-3	Aberdeen Local Development Plan (LDP) (2012), includes policy NE1 Greenspace Networks and NE6 Flooding & Drainage. Supplementary guidance on open space in relation to city Open Space Audit and Strategy, drainage impact assessment, buffer strips, trees and woodlands. Work has taken place for the next LDP, a section on climate change was included in the Main Issues Report.	The Local Development Plan is currently under review and the more updated one should be adopted by the end of 2016.

Objective	Objective Ref	Theme	Policy/ Proposal reference	Delivery progress made	Comments
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided	B3	Buildings and infrastructure networks	B3-6	Promote the Aberdeen Affordable Warmth Scheme (aimed primarily at owner-occupiers who are paying 10% or more of their income on heating their homes) and the Victorian Tenement Project an energy efficiency project aimed at the hard to heat 12,000 flats in granite tenements built in Victorian or Edwardian times. The Keep Warm and Well Scheme is aimed at over 60s in the city.	http://www.aberdeencity.gov.uk/housing/council_tenants/home_energy_saving/hoa_HomeEnergySaving.asp
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided	B3	Buildings and infrastructure networks	B3-7	Aberdeen Local Housing Strategy 2012-17 includes measures to improve housing quality and to address fuel poverty. The Aberdeen Local Development Plan has SG on Low and Zero Carbon Buildings, a methodology for developers to demonstrate compliance with Aberdeen Local Development Plan policy R7, which requires all new buildings to install low and zero carbon generating technology. The Council has developed a Building Performance Standard Policy which sets out the sets out the requirements for domestic and non domestic buildings in both new build and refurbishment scenarios.	Low and Zero Carbon Buildings - http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?IID=55244&slID=14394
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided	B3	Buildings and infrastructure networks	B3-8	Aberdeen Local Housing Strategy 2012-17 includes measures to improve housing quality and to address fuel poverty.	
Understand the effects of climate change and their impacts on people, homes and communities.	S1	Society		N/A	
Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.	S2	Society		N/A	
Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate.	S3	Society		N/A	

4e Arrangements to review current and future climate risks

- Seeking approval of the Climate Change Risk Assessment Process in the next reporting period. This includes ongoing work to integrate climate change in the corporate risk register. This would ensure climate change is included in strategic risk reviews with information reported regularly to corporate management. Regular reviews of the climate risks will be incorporated into the climate change risk assessment process this includes current and future climate risk.
- Progress with the Nature Conservation Strategy is reviewed as part of Biodiversity Reporting Duties required every three years under the Wildlife and Natural Environment (Scotland) Act 2011. This was last reported in 2014.
- A review of current and future flood risks for the city will take place under the Flood Risk Management Act. The Flood Risk Management Plan will be reviewed at 6 yearly intervals.

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

- The monitoring and evaluation of adaptation actions will be assessed as climate actions are developed.
- Biodiversity actions are monitored through implementation of the Aberdeen Nature Conservation Strategy.
- Open space actions are monitored through the implementation of the Aberdeen Open Space Strategy.
- Ongoing flood monitoring helps to assess the delivery and effectiveness of flood alleviation studies and schemes.
-

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

- Approval of the Council climate risk assessment and incorporating this into corporate risk process, in line with the 5 steps process.
- Engagement with key stakeholders and working with Adaptation Scotland to develop a strategic approach to climate adaptation for the city through the Aberdeen Adapts project.
- Completion of student project in 2016 collating back ground information on climate change across city partner organisations.
- Adoption of the Proposed Local Development Plan at the end of 2016. The proposed document includes a wider Natural Environment Supplementary Guidance covering natural heritage; trees and woodland; flooding, drainage and water quality; and open space and green infrastructure.
- Embed adaptation into policy and strategy under review, including the Open Space Strategy and Nature Conservation Strategy.

4h Supporting information and best practice

- Under Aberdeen's Nature Conservation Strategy, a wetland area is being created in a regeneration part of the city which includes improved paths and access, as well as improving biodiversity and interest in the park. The community was involved in its design and implementation of the [Seaton Park Wetland Project](http://www.aberdeencity.gov.uk/community_life_leisure/parks_open_spaces/seaton_parkwetlandproject.asp) so that they were part of the solution which addressed the continuing flooding issues.
http://www.aberdeencity.gov.uk/community_life_leisure/parks_open_spaces/seaton_parkwetlandproject.asp

- **3 city path projects** were developed in 2015/16. Work included a 160m path to link into the 3rd Don crossing, and another 2 in Seaton Park. There were 2 major flooding incidents in the city and one of the Seaton Park paths was underwater, so drainage work took place and the path was redesigned to take into account issues with flooding. Core path remediation has included adaptation measures to help future proof these paths. The measures primarily relate to drainage which has been designed to cope with higher rainfall events. Where possible the drainage features are open swales and ditches rather than pipes, which has previously been the most popular choice. This is to allow problems to be spotted and dealt with more easily. Paths are also constructed to a higher specification than they were previously, to prolong their lifespan.
- **Hazlehead Grove Nursery** was officially opened in July 2015. The nursery continues to develop into a working nursery and a facility for a community growing space / nursery project. The project has now successfully established itself as a place for growing plants and growing people and has taken steps to becoming a social enterprise growing and sharing project, with plant cultivation and other horticultural related activities for the benefit of the City's parks and open spaces. This work is part of a whole range of measures at the site to establish a Climate Change Park. Plans are underway for a 'Growing and Sharing' initiative, whereby people will have access to tuition in growing produce and the harvest will be shared with local communities.
- Work took place to develop a grant support for the provision of Property Level Flood Protection for domestic dwellings. By undertaking the **Property Level Protection Grant scheme** the Council will be meeting its obligations to the strategies laid out in the 2016-2021 Flood Risk Management Plan. The installation of flood guards will reduce the future risk of damage to properties at risk of flooding.

5 Procurement

5a Procurement policies contributing to compliance with climate change duties

Policy Statement

Aberdeen City and Aberdeenshire Councils are committed to securing meaningful environmental, social and economic value in procurement and to working with all sectors of the business community in order to achieve this. The Council aims to reflect The Scottish Government aspiration to: *“Establish a national legislative framework for sustainable public procurement that supports Scotland’s economic growth by delivering social and environmental benefits, supporting innovation and promoting public procurement processes and systems which are transparent, streamlined, standard, proportionate, fair and business-friendly”*.

The Council's Corporate Procurement Strategy 2012-2015 refers extensively to "Sustainable Procurement - (Environmental)" factors. A "Responsible Procurement Policy" supplements a toolkit detailing sustainability related themes to be considered in procurement decisions. The Council's emerging Procurement Strategy (to be fully embedded by 31st December 2016) will undergo extensive stakeholder engagement and reflect the Scottish Model of Procurement. In particular, Commercial and Procurement Services (C&PS) will engage fully with sustainability and community planning colleagues in the development phases of the strategy to ensure that sustainability considerations are compliant with and where possible exceed statutory requirements imposed by the Procurement Reform (Scotland) Act 2014. A "Sustainable Procurement/Community Benefits" Guidance Note has been developed to govern sustainable procurement activity. The guidance will evolve to reflect best practice, revised statutory guidance and regulations to follow.

The sustainable procurement duty has been distilled into the following table to guide procurers:

Improve (Wellbeing)	Promote	Facilitate (Involve)
Social	Innovation	SMEs
Economic	Equalities/reduce Inequality	3 rd Sector organisations
Environmental	Ethical trading and social justice	Supported Businesses
Health	Fair Work Practices/The Living Wage	Prompt Payment throughout the supply chain
Food poverty/fuel poverty/energy efficiency	Resource efficiency and the circular economy	Community engagement and community empowerment; community projects
Air quality/reduction of harmful emissions/reduction of waste and packaging	Education; employability and skills training	Collaboration and collaborative working

The Council is also conscious of guidance accompanying the Power to Advance Wellbeing i.e. *"...environmental factors such as the availability of clean air, clean water, clean streets, the quality of the built environment, the removal of objects considered hazardous to health, removal of disfiguring or offensive graffiti from buildings, protecting communities against the threat of climate change, freedom from a high risk of flooding, improving and promoting biodiversity and accessibility to nature."*

These overarching strategies and policies reinforce the Council's commitment to the Scottish Climate Change Declaration and provide practical guidance at all stages of the tender process i.e. identification of need, specification development, selection and award and contract management phases in order to meet or exceed targets set by the Council to reduce their carbon footprint and greenhouse gas emissions. More specific, sustainability policies include Sustainable Building Standards for Council Controlled Buildings, Sustainable Timber and Sustainable Printing policies. In addition, procurement activity is guided by the Hydrogen Strategy for the Aberdeen City Region 2015-2025 a detailed 10 year strategy (outlining the key actions required to ensure Aberdeen remains at the forefront of hydrogen technology).

5b Procurement activity contributing to compliance with Climate Change Duties

The following represents an illustrative sample of procurement activity delivering a reduction in CO2 emissions, increased energy efficiencies and meaningful sustainability criteria:

- **Managed Print Contract** (Aberdeen City/Aberdeenshire) – “Print Smart” power saving models are vastly superior to previous fleet models. The contract aspires to eliminate the use of small, inefficient desktop printers requiring regular replacement of peripherals. New contract leads to less archiving and scanning, duplex and mono are very strongly promoted in policy designed to reduce print volumes, eliminate waste, reduce resources and energy consumed. The contract embraces hybrid mail roll out (less road miles for deliveries/less paper) and ensures all used print cartridges recycled responsibly by the supplier.
- **Energy From Waste** (Aberdeen City, Aberdeenshire and Moray) Development of an ambitious project to fulfil the requirements of the Zero Waste Plan. The project will provide a long term solution for non-recyclable waste produced in the north east of Scotland. The project represents a viable solution for residual waste that provides local benefits – electricity and heat for local residents and using waste to reduce fuel poverty. Forecasts demonstrate the plant will deal with circa 150,000 tonnes of non-recyclable waste per annum with a facility combining waste reception, combustion chamber, steam turbine, air cooled condensers, gas treatment and welfare.
Modern combustion technology – a proven, tested concept using cutting-edge process control, offers flexibility and future proofing. The output from high temperature combustion is the production of steam used to provide electricity and heat. Forecasts show this will include around 10MW of electricity, and/or 20MW of heat as steam or hot water. The project has the potential to heat 10,000 homes that would otherwise rely on fossil fuel extraction.
- **Aberdeen Hydrogen Bus Project** – In the first year the fleet has travelled 25,000 miles carrying an average 36,700 passengers per month. The vehicles have replaced 10 diesel buses. Hydrogen buses only emit water vapour so reduce carbon emissions and air pollution.
- **Fuel Cell Vehicles/Electric Vehicles** – with car club partner “Co Wheels”, two hydrogen powered are available for use. This is in addition to continuing to expand the electric vehicle charge point network across the City.
- **Construction Procurements** – follow industry terms and conditions (NEC3, SBCC ICE etc) as well as Building Standards/Building Performance polices. Specifications incorporate sustainability, energy and environmental considerations to a challenging but proportionate and relevant

extent per project. There is a strong ethos that value for money can only be demonstrated by whole of life costing and the best price-quality ratio.

Frameworks

The Council works in close collaboration with Scotland Excel (the centre of procurement expertise for the local government sector in Scotland) in terms of the development and usage of national frameworks. <http://www.scotland-excel.org.uk/home/Howwehelp/Sustainable-procurement.aspx>

Sustainability criteria are aligned with the Scottish Sustainable Procurement Action Plan which encourages buyers to take a holistic view of the social, economic and environmental implications of product and service choices.

- **Building and Timber materials** - In accordance with UK Government Timber Procurement Policy all recommended suppliers have evidenced that only legal and sustainable timber will be supplied through the framework
- **Plumbing Materials & Electrical Materials** - as a minimum all products offered must meet the Government Buying Standards for energy efficiency ratings as defined by DEFRA
- **Heavy Vehicles & Light Vehicles** - the manufacturing process is heavily reliant on raw materials, particularly steel and oil based products. Suppliers must consider raw material usage in the design process. Suppliers have achieved carbon emission reductions, some supported by the Energy Saving Trust (installing energy efficient lighting etc). The majority of suppliers have a high percentage of their operational fleet meeting Euro V emissions standards and plan to upgrade older vehicles to the latest standard in their capital investment plans. The primary goal of the Euro VI emissions standards is to reduce harmful emissions from vehicles.
- **Tyres** - suppliers ensure that tyres are re-used or recycled where appropriate. Many accept truck tyres for retreading to extend their useful life. Where retreading is not possible, end of life tyres are utilised in a number of ways as it is not permissible under EU legislation to dispose of tyres to landfill. Initiatives include re-cycling as fuel for use in cement kilns to re-using as planters for community projects. Most suppliers have a high percentage of their fleet which meet with Euro V emissions standards or plans to upgrade older vehicles in the near future. Many suppliers have tracking and GPS systems to ensure that route planning minimises mileage
- **Road Maintenance Materials**- suppliers detailed opportunities to reduce environmental impact, including fleet reviews, raw material reviews and product recycling.
- **Roadstone** - suppliers demonstrated the initiatives to reduce the impact to the environment including; sustainable methods of recycling/disposing of products at the end of life and reducing vehicle emissions.
- **Frozen Foods** - fuel efficiency of vehicles and dual temperature vehicles to minimise the number of deliveries. Supplier committed to a 2% increase of sustainably sourced products in lifespan of the Framework e.g. Marine Stewardship Council products for fish, Red Tractor for meats and similar accreditations. The number of local / Scottish products will also be traced within the framework.
- **Groceries and Provisions** - utilising effective route planning, fuel efficiency of vehicles and dual temperature vehicles to minimise the number of deliveries. Suppliers committed to a 2% increase of sustainably source products throughout the lifespan of the Framework. e.g. Marine

Stewardship Council products for fish, Red Tractor for meats and similar accreditations. The number of local / Scottish products will also be traced within the framework

- **Recycle/Refuse Containers** - Waste container lots maximise recycling opportunities through bin refurbishment and take back schemes. Redundant bins can be treated reproduce new products. Suppliers demonstrated environmental credentials through investment in production efficiencies to reduce their emissions and increase use of recycled materials

Utilities (Procurement Scotland)

- **Electricity** - Promoting greener power: addresses emissions from energy use through a range of energy efficiency measures, renewable generation sources and encourages opportunities to sell back to the grid.
- **Natural Gas** - reduced management fees through flexible, sustainable procurement of natural gas.

5c Supporting information and best practice

In the reporting period, C&PS has developed a themed approach to community benefits intended to provide procurers and suppliers with a clear, compliant, ideas-driven framework to work consistently within. Guidance makes it explicitly clear that value secured under the sustainable procurement duty is a form of “community benefit”. Statutory requirements are not incompatible with socially responsible, ethical and sustainable good procurement practice.

As with all aspects of procurement, procurers are encouraged to look at community benefits/sustainable procurement from the bidder’s perspective.

Research bears out that:

- a themed approach is popular with suppliers
- corporate social responsibility can become “business as usual” and
- the greatest successes occur where the buyer’s expectations are clear and realistic and
- committed suppliers exceed those expectations.

Procurers are encouraged to be creative, encourage creativity in suppliers and adopt an ambitious and challenging approach within the confines of proportionality and relevancy.

C&PS guidance makes it clear that not all community benefits/sustainability considerations are best achieved through separate community benefit clauses. A “Statement of Requirements” also referred to as a “Specification” can often competently address environmental/energy efficiency measures.

Such measures can be specified to become an enforceable contractual condition e.g. if it is proportionate and relevant to require that a product is made of particular materials or manufactured to a particular eco or industry standard then procurers are encouraged to consider these aspects carefully.

A statement of requirements can (amongst other considerations) address:

- Environmental/emissions/climate performance levels
- Legislation or regulatory standards e.g. Health and Safety, Equalities, Climate Change (Scotland) Act 2009 etc
- Waste water standards and accreditations
- Production processes and methods at any stage of the life cycle of the supply or service.

The following table is central to C&PS guidance:

Improve (Wellbeing)	Promote	Facilitate (Involve)
Social	Innovation	SMEs
Economic	Equalities/reduce Inequality	3 rd Sector organisations
Environmental	Ethical trading and social justice	Supported Businesses
Health	Fair Work Practices/The Living Wage	Prompt Payment throughout the supply chain
Food poverty/fuel poverty/energy efficiency	Resource efficiency and the circular economy	Community engagement and community empowerment; community projects
Air quality/reduction of harmful emissions/reduction of waste and packaging	Education; employability and skills training	Collaboration and collaborative working

This innovative approach to sustainable procurement was recognised at the Scottish GO (Government Opportunity) Awards ceremony held in Glasgow (October 2015) The submission was also recognised National Go Awards held in Manchester (March 2016).

5 Validation

6a Internal validation process

The Emissions Accountant, within the Sustainable Development Team, collated the data to fill the Climate Change Report contacting and engaging with all different service areas (i.e. Internal waste, Energy Management...). The Emissions Accountant, on the best of her knowledge and with the support of the Team and SSN, audited the gathered information and ensured that the information provided to the Scottish Government are the more complete and accurate possible. The Emissions Accountant required the Head of Service of each competent Service to validate the information provided by the Service Area Officers. This will also allow in future years to fill the information gaps present in the current Report identifying data gathering areas for improvement.