



Midlothian Council

Corporate Climate Change Strategy

Author	Planning Policy and Environment
Owner	Corporate Management Team
Date	26 February 2014
Version	1

Foreward

Recent flooding in England exemplifies the kind of extreme weather-related events likely to become more common in the UK as our climate changes. Midlothian has not been immune to such events, the Met Office reporting in 2012 that a total of 42.8ml of rain fell between 6pm on Friday, July 6th and 3pm the following day, the average monthly rainfall for the whole of July being 56.7ml. Motorists were rescued from their vehicles as roads were flooded by up to a foot of water, and in Lasswade a car floated down the River North Esk, having been parked in a car park next to the river just minutes earlier. This heavy rain is thought to have been a major contributing factor in subsequent road subsidence in the area, including the A6106 at Lugton Brae the following month. The cost to Midlothian Council of re-instating that road alone is expected to be around £2 million. The costs to communities, businesses and insurance companies from such events can be just as severe.

In terms of its own estate and operation, Midlothian Council has made significant strides in reducing the greenhouse gases which are driving climate change, and is seeking to improve its response in that area by drawing up a Carbon Management Plan. In terms of our wider service delivery we have taken, and are taking, forward a number of climate change-related actions, not least the waste treatment facilities at Millerhill, which are expected to result in significant greenhouse gas reductions.

This Corporate Climate Change Strategy sets out the Council's vision and objectives for adaptation to and mitigation against the causes of climate change, in terms of our estate, operation, wider services, communities and businesses.

The Scottish Parliament Finance Committee's 'Report on Preventative Spending' states that the evidence demonstrates the impact preventative spending could have in major areas of policy such as climate change. The impacts of failing to tackle climate change will fall hardest on the poorest and least able to respond, ranging from higher energy bills, to increased risk and incidences of flooding in low-lying parts of the county.

It is essential that climate change becomes a key consideration for the Council in terms of both strategic direction and day to day activity.

Kenneth Lawrie

Chief Executive

March 2014

1. Midlothian and climate change

The risks of climate change to Midlothian

Climate change is happening now. Past emissions of greenhouse gases, such as carbon dioxide (CO₂), which contribute to global warming, are already affecting Midlothian's climate.

Data compiled by Adaptation Scotland from the latest UK climate projections (UKCP09 User Interface) indicates the following (Figure 1) changes in daily mean, minimum and maximum temperatures (°C) and daily mean precipitation for 'Eastern Scotland' by the 2080s relative to 1961-1990. These show three emissions scenarios and five different probability levels.

Figure 1: Changes in temperature and precipitation for 'Eastern Scotland' by the 2080s

Eastern Scotland - 2080s		Low Emissions					Medium Emissions					High Emissions				
		10%	33%	50%	67%	90%	10%	33%	50%	67%	90%	10%	33%	50%	67%	90%
Mean Temperature (°C)	Annual	1.4	2.0	2.4	2.8	3.6	1.7	2.4	2.8	3.3	4.2	2.1	2.9	3.4	3.9	5.1
	Winter (DJF)	1.0	1.7	2.1	2.5	3.3	1.0	1.8	2.2	2.7	3.7	1.3	2.1	2.6	3.1	4.2
	Spring (MAM)	1.1	1.7	2.1	2.5	3.4	1.1	1.9	2.4	2.9	4.0	1.4	2.3	2.9	3.5	4.8
	Summer (JJA)	1.2	2.1	2.7	3.2	4.5	1.8	2.9	3.5	4.2	5.7	2.2	3.5	4.3	5.1	7.0
	Autumn (SON)	1.1	1.9	2.3	2.7	3.7	1.5	2.4	2.9	3.5	4.6	1.9	3.0	3.6	4.2	5.6
Daily Maximum Temperature (°C)	Annual	1.4	2.0	2.4	2.8	3.6	1.7	2.4	2.8	3.3	4.2	2.1	2.9	3.4	3.9	5.1
	Winter (DJF)	1.2	2.1	2.6	3.1	4.2	1.1	2.2	2.8	3.4	4.8	1.5	2.6	3.3	4.0	5.5
	Spring (MAM)	0.4	1.3	1.9	2.4	3.7	0.1	1.3	2.0	2.7	4.2	0.2	1.5	2.3	3.1	5.0
	Summer (JJA)	1.1	2.6	3.4	4.3	6.1	1.7	3.5	4.5	5.6	7.8	2.0	4.3	5.6	7.0	10.0
	Autumn (SON)	0.9	1.8	2.3	2.9	4.1	1.3	2.3	2.9	3.6	5.0	1.7	2.8	3.5	4.3	6.1
Daily Minimum Temperature (°C)	Annual	0.8	1.7	2.2	2.8	4.0	1.0	2.1	2.8	3.4	4.9	1.2	2.6	3.3	4.1	5.9
	Winter (DJF)	0.8	1.9	2.4	3.0	4.1	0.7	1.9	2.6	3.2	4.6	1.0	2.3	3.0	3.8	5.3
	Spring (MAM)	0.5	1.4	1.8	2.3	3.5	0.4	1.4	2.0	2.7	4.1	0.5	1.8	2.5	3.3	5.0
	Summer (JJA)	1.2	2.3	2.9	3.5	4.9	1.7	3.0	3.7	4.5	6.3	2.3	3.8	4.6	5.6	7.7
	Autumn (SON)	0.7	1.6	2.1	2.7	3.9	1.1	2.1	2.7	3.4	5.0	1.4	2.5	3.3	4.1	5.9
Mean Precipitation (%)	Annual	-5	-2	0	2	6	-6	-2	0	2	6	-8	-2	0	3	9
	Winter (DJF)	2	8	11	15	22	1	8	12	16	25	6	14	19	24	36
	Spring (MAM)	-4	0	3	5	10	-4	0	3	5	10	-2	2	4	6	10
	Summer (JJA)	-27	-17	-12	-7	3	-33	-22	-17	-11	0	-40	-27	-21	-14	-1
	Autumn (SON)	-6	1	5	9	19	-4	4	9	14	25	-9	3	10	18	34

Climate change impacts for Midlothian and Midlothian Council

The likely direct impacts for Midlothian are summarised in Figure 2 below. This is an initial assessment based on a standard list of risks from climate change.

Figure 2: Likely example direct impacts of climate change on Midlothian and Midlothian Council

Main climate change categories	Specific climate changes and impacts	Example direct impacts
Winter temperatures	Declining number of days requiring heating.	Reducing heating requirements in buildings.
	Increasing number of days requiring cooling.	Increasing need for cooling systems in existing buildings and incorporation of measures to provide cooling in new buildings.
	Increasing frequency of very warm summers and very warm days.	Increasing need for cooling systems in existing buildings and incorporation of measures to provide cooling in new buildings. Risks to vulnerable people from heat stress.
	Warmer winters/ less snow and frosts.	Pests no longer killed over winter. Alien species.
	Lengthening of the growing season.	Increasing requirements to manage green spaces, verges, etc. over longer period. Changes to crops and biodiversity.
Precipitation	Drier summers.	Pressure on water resources.
	Wetter autumns/ winters with less snow.	Increased risk of flooding. Reduced requirement for snow clearing of roads.

	Increasing frequency of extreme rainfall events.	<p>Increased risk of flash floods.</p> <p>Increased risk of water penetration of buildings and other structures.</p> <p>Crop damage.</p>
	Increasing frequency of very dry summers.	<p>Increased risk of droughts and water shortages.</p> <p>Increasing demand for irrigation of vegetation.</p> <p>Increased risk of long-term damage to some tree species.</p>
Cloud cover	Reduction in summer and autumn cloud and an increase in radiation.	<p>Increased risk of harmful solar radiation causing skin cancers.</p> <p>Increasing need for shading in buildings and open spaces.</p>
Humidity	Increases in specific humidity throughout the year.	<p>Increased heat stress to vulnerable adults and children, animals and livestock.</p> <p>Increase in damp in poorly ventilated buildings.</p>
Soil moisture	Decreases in summer soil moisture.	<p>Increasing demand for irrigation of vegetation.</p> <p>Increased risk of long-term damage to some trees species.</p>
Wind/ storms	Increasing frequency of deep depressions and hence high winds/storms in winter.	Potential damage to buildings and other infrastructure.

2 Our commitments and key drivers of climate change action

Our existing commitments

There are two main policy responses open to the Council in respect of climate change: action to deal with its causes ('mitigation'), mainly efforts to reduce the amount of greenhouse gases being emitted; and reducing vulnerability to the impacts of a changing climate ('adaptation') through improved 'resilience'.

As an early and public signatory to Scotland's Climate Change Declaration, Midlothian Council is committed to responding on both fronts by:

1. Working with the Scottish and UK Governments to contribute to delivery of their climate change programmes, including to reduce greenhouse gases and to adapt to the impacts of a changing climate;
2. Producing and publicly declaring a plan, with targets and time-scales, to achieve a significant reduction in greenhouse gases from its operations, including: energy use and sourcing, travel and transportation, waste production and disposal, estate management, procurement of goods and services, and improved staff awareness;
3. Ensuring that greenhouse gas reduction and climate change adaptation measures are incorporated into its new and existing strategies, plans and programmes, in line with sustainable development principles;
4. Encouraging and working with others in the local community to take action to adapt to the impacts of climate change, to reduce their own greenhouse gas emissions and to make public their commitment to action;
5. Publishing an annual statement on the monitoring and progress of its climate change response, detailing targets set, actions taken, outcomes achieved and further actions required;
6. Collaborating with other organisations to promote good practice on climate change mitigation and adaptation.

This corporate strategy provides high-level direction for action under the above commitments.

In terms of '2' above, the Council is looking to finalise its Carbon Management Plan.

In terms of '3', consideration of climatic factors in our main strategies, plans and programmes is ensured through our compliance with the Environmental Assessment (Scotland) Act 2005. Our Sustainability Action Plan 2012/13 and a subsequent

Internal Audit Management Plan introduced online and other resources in this regard, as well as improved guidance to accompany our corporate reports template.

In terms of '4', our annual participation in WWF's 'Earth Hour' is an example.

In terms of '5', the Council submits an annual statement to CoSLA in respect of our climate change response.

Other key drivers of climate change action

- The Council is required to discharge its Best Value duties in a way which contributes to the achievement of sustainable development. Official Best Value guidance states that the effectiveness of the "strategy in response to climate change" is one of the areas where the contribution should be demonstrated. This is explained further in the Council's Sustainable Development Framework No.1.
- The Climate Change (Scotland) Act 2009 requires a public body's functions to be exercised "in a way that it considers is most sustainable", and in the way best calculated to contribute to delivering the Act's emissions reduction targets and any statutory programme for adapting to a changing climate. The Act creates the statutory framework for greenhouse gas emissions reductions in Scotland by setting an interim 42 per cent reduction target for 2020, with the power for this to be varied based on expert advice, and an 80 per cent reduction target for 2050. To help ensure the delivery of these targets, this part of the Act also requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. The Scottish Climate Change Adaptation Programme is due for publication later this year.
- Reducing greenhouse gas emissions for which Midlothian is responsible and adapting to the impacts of a changing climate are long and medium term outcomes in the current Single Midlothian Plan, with tackling issues relating to climate change a 2014/15 priority. The level of adaptation to a changing climate is being recommended to the Community Planning Partnership Board as a key indicator for tracking performance. This strategy is a commitment in the Planning and Development Service Plan 2013/14 and anticipated Communities and Economy Service Plan 2014/15.
- The Council's 'Healthy Working Lives Statement of Intent in Relation to the Environment' refers to inclusion of climatic factors within the Healthy Working Lives Action Plan.

- Energy costs are rising as is the demand for efficiency savings in local government.
- The Scottish Parliament Finance Committee 'Report on Preventative Spending' (2010) states that the evidence demonstrates the impact preventative spending could have in "major areas of policy such as the early years, climate change and health and social care". The impacts of failing to tackle climate change will fall hardest on the poorest and least able to respond, ranging from higher energy bills, to increased risk and incidences of flooding in low-lying parts of the county.

3 Vision, objectives and approach

Our vision

Our vision is that:

By 2016/17, greenhouse gas emissions and the impacts of, and risks from, a changing climate are integral to decisions about our estate, operation and service delivery; and in our work with our partners, communities and businesses.

Our objectives

To realise and sustain the above vision, our objectives are:

- Objective 1. To continue to better understand the impacts of, and risks from, a changing climate;
- Objective 2. To develop a 'One Council' approach to climate change, mainstreaming carbon reduction and resilience to a changing climate into the organisational 'DNA';
- Objective 3. To provide climate change leadership to our partners, communities and businesses.
- Objective 4. To ensure that the Council continues to lead by example on the climate change agenda.
- Objective 5. To monitor and publicly report our climate change progress.

Our approach

Midlothian Council has a key role in leading action on climate change. Long-term changes in the behaviours of individuals, communities, businesses and the public sector are required. The Council will follow the 'Enable, Engage, Exemplify, Encourage' approach to driving change set out in the UK Government's 2005 sustainable development strategy, 'Securing the Future':

4 Governance, action planning, monitoring, reporting and review

Governance

Political leadership and responsibility for Council climate change action lies with its Cabinet. The Cabinet Spokesperson for Communities and Economy is the climate change lead within the Cabinet.

Corporate Management Team is responsible for this Corporate Climate Change Strategy and associated action planning and performance monitoring.

The Director Education, Communities and Economy is the climate change lead within the Council's Corporate Management Team.

The lead service within the Council is Communities and Economy within the Education, Communities and Economy directorate.

The Climate Change & Sustainable Development Group of officers, drawn from across all services, drives the Council's approach to contributing to the achievement of sustainable development, including in respect of climate change. The group is chaired by Communities and Economy's Planning Policy & Environment Manager, and led by that team's Senior Planning Policy & Sustainability Officer. The Council's Sustainable Development Framework No.1 sets out the organisation's principal arrangements for contributing to the achievement of sustainable development, including development of an annual 'Sustainability Action Plan' overseen by the group, for subsequent approval by Corporate Management Team. Carbon Management Plan, procurement and property strategy interests are also represented on the group.

The Climate Change & Sustainable Development Group reports to the Council's Corporate Management Team; and where relevant to the Council's Cabinet and the Midlothian Community Planning Sustainable Growth thematic group. The thematic group reports to the Community Planning Working Group and Board in turn.

Action planning, monitoring, reporting and review

The Sustainability Action Plan will now be recast as a 'Corporate Climate Change and Sustainable Development Action Plan', recognising the increased importance attached to climate change as a result of this strategy. The arrangements set out in the Sustainable Development Framework No.1 (including self-assessment, monitoring and reporting) will continue to apply in delivering on this strategy. This strategy will be reviewed by 2016/17, and reported to Corporate Management Team and Cabinet.