

Fife Environmental Partnership
**Climate Change
Strategy 2014 - 2020**

Tackling Climate Change



Introduction

Climate Change is going to have a dramatic impact on our future.

The effects of a changing climate are already beginning to be seen in Fife, with increasingly frequent severe weather events requiring responses from the Council, the emergency services and our Community Planning Partners.

These events are having increased consequences for both the human and natural environments. Action needs to be taken to help us adapt to the impacts of climate change.

Fife's first Climate Change Strategy 2014-2020 identifies key areas that we need to address to meet the challenges and take advantage of opportunities associated with climate change. It sets out six outcomes that we will work towards over the next six years.



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Foreword



Fife Environmental Partnership Chair
Katherine Leys, Operations Manager, Scottish Natural Heritage

Fife Partnership is committed to making Fife a great place to live, work and visit.

One of the biggest challenges it has to deal with in order to deliver this commitment is the impact of climate change. This could affect our communities for generations. We need to act now to reduce the contribution that Fife makes to greenhouse gasses and to adapt to the impacts that climate change brings.

As outlined in Fife's Community Plan 2011 to 2020 *"The challenge of reducing our production of carbon dioxide and other greenhouse gases¹ will require changes to the way we work and live, improvements in technology, and the generation, use and export of renewable energy."*

¹ 'Carbon dioxide equivalent' (CO₂e) is the technical term for carbon dioxide plus the other greenhouse gases. Throughout this document we will use the term 'carbon' to cover these gases. (Appendix 1, Glossary)

Reducing our contribution to climate change isn't just about challenges. There are opportunities to become national and international leaders in the development of renewable technology and generation of renewable energy, and in developing an education and training sector that provides the knowledge and skills that the transition to a low carbon economy requires. There are opportunities to make our communities more resilient, and to reduce the waste of resources without compromising our quality of life.

This strategy aims to achieve 6 medium term outcomes:

Reducing Carbon Emissions

- More efficient use of resources (energy, waste and water)
- More energy is from low carbon supplies
- Encourage more sustainable transport and travel including reducing the need to travel
- Ecosystems are used sustainably and strengthened

Adapting to Climate Change

- Places are adapting to cope with Climate Change (including land use, coastlines, buildings and infrastructure)
- People are adapting to cope with Climate Change

Fife Environmental Partnership is committed to working together to deliver this strategy. We would also encourage businesses, community groups and individuals to do what they can to adopt the **key commitments** in this strategy and work together to contribute to a Low Carbon Future for Fife.

Fife Environmental Partnership Strategy

Climate Change Strategy 2014 - 2020

1.1 What is Climate Change?

Climate change is evidenced by increases in global average air and ocean temperatures, widespread melting of snow and ice and a rising global average sea level. Most of the increase in global average temperatures since the mid 20th century is extremely likely to be due to the observed increase in greenhouse gas concentrations from human influence, which have increased by 70% between 1970 and 2004.

The increasing likelihood and severity of extreme weather events are expected to have adverse effects on natural and human systems. In responding to climate change, we will need to take into account measures both for adaptation (how to live with change) and mitigation (to minimise further impacts).

Climate change will affect all aspects of life, increasing risks to food security, water availability, infrastructure and human health. If emissions are reduced early and rapidly, the extent of climate change will be mitigated. If greenhouse gas emissions continue unabated, the implications grow more severe, posing even greater risk to life on Earth. In view of the threat and risks of inaction, it is essential that public bodies put climate change strategies in place and act sustainably to address climate change in Scotland.

1.2 Introduction

This document sets out a number of key elements that the Fife Partnership has identified as contributing to or influencing human made climate change. It commits Fife's community planning partners to meeting a number of targets that aim to reduce our impact on climate change, and sets out the principles that will be adopted in pursuit of the targets. The next stage will be the development of detailed strategies and plans that will

enable the community planning partners to turn the aspirations of this document into reality.

1.3 Strategic Context

A whole raft of EU, UK and Scottish legislation and guidance has been produced in recent years. The Climate Change (Scotland) Act 2009 is arguably the key piece of climate change legislation relating to Fife and the Fife Partnership. It sets mandatory targets to reduce Scottish greenhouse gas emissions by 42% by 2020 and by 80% by 2050. It also requires Scottish Ministers to lay before Parliament, and subsequently report on, programmes for climate change adaptation.

1.4 Public Duties

Of particular relevance to most partner organisations in Fife is the guidance on the duties placed on all public bodies under the Climate Change (Scotland) Act published on 4th February 2011. In exercising their functions, all public bodies must act:

- in the way best calculated to contribute to the delivery of the Act's (national) emissions targets;
- in the way best calculated to deliver any statutory adaptation programme; and
- in a way that it considers the most sustainable.

1.5 Community Plan & Single Outcome Agreement

Fife's Community Plan 2011-2020 is the overarching strategic plan for Fife and provides a framework for every other strategy and plan produced by partner organisations within the Fife Partnership. The Fife Partnership recognises the importance of tackling climate change as one of three high

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level outcomes identified in Fife's Community Plan 2011-2020, recently approved by Fife Partnership Board.

The Fife Partnership 2009-2012 Single Outcome Agreement (SOA) 'A Stronger Future for Fife' identifies areas for action to deliver a better quality of life for the people of Fife. The SOA sets out how the Fife Partnership will work towards improving outcomes for the local people in a way that reflects local circumstances and priorities, within the context of the Government's 15 National Outcomes. Action on climate change mitigation is an integral part of the Fife SOA, including action in relation to National Outcome 14: reducing the local and global environmental impact of our consumption and production.

This Climate Change Strategy comprises the Fife Partnership's response to the national and Fife-wide priority of tackling climate change and should be taken account of in all future planning and policy work undertaken by Fife's partners, including in the evolution of the partner strategies listed in Appendix 2. Taking cognisance of the two long term outcomes identified within the Community Plan 2011-2020:

- Reducing carbon emissions
- Adapting to climate change

Preparing for the impact of climate change will require investment in adaptation on the part of businesses, organisations and households, so that they can cope with the climate as it changes, and so that they may even be able to take advantage of new opportunities.

Partners and partnerships will have to work more closely together to achieve these outcomes - showing strong commitment and leadership. They will have to recognise and support the assets and aspirations of individuals and communities, while being open to doing things differently.

The following five sustainability principles, will underpin Fife Environmental Partnership's work.

Education and awareness

Work to raise awareness of environmental issues and promote education through conceptual, technical and social learning.

Community engagement

Encourage communities to have aspirations and vision and support them to achieve these. This will be done in ways that promote community resilience by offering targeted support, access to information and resources.

Promoting sustainable behaviours

Promote sustainable behaviours in its own work and in communities by publicising best practice and leading by example, providing appropriate infrastructure, through regulation and by using incentives, campaigns and supportive community engagement.

Reducing Environmental Inequalities

Aim to identify those individuals and communities that experience environmental inequalities and take positive action to reduce these for current and future generations.

Enforcement

Where appropriate take enforcement action in line with existing legislation where other interventions have not resolved a problem

Reducing Carbon Emissions (Long Term Outcome)

Through key partner consultation, Fife Environmental Partnership has developed six medium term outcomes which we aim to achieve over the next seven years, working closely with communities, organisations and other partnership groups.

1. More efficient use of resources (energy, waste and water)

We will –

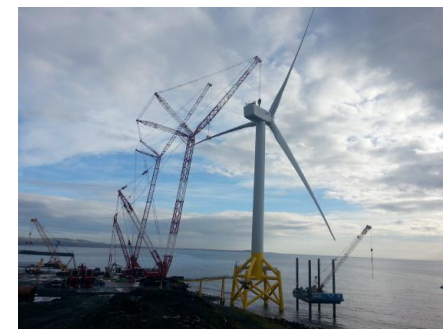
- Take a partnership approach to providing clear resource efficiency messages;
- Work with housing providers and householders to improve energy and water efficiency in new and existing buildings
- Develop a joint asset management strategy
- Work with businesses to promote the use of energy audits
- Work with local organisations to promote opportunities to encourage reuse
- Identify opportunities to look for potential sources of waste that can be used as a resource



2. More energy is from low carbon supplies

We will -

- Investigate opportunities for partnership working to deliver renewable energy
- Develop a heat map to identify opportunities for district heat in Fife
- Explore feasibility of alternative sources of renewable energy generation
- Identify potential sites for on shore wind developments
- Support the transition to a low carbon economy
- Identify opportunities for the creation of green jobs



3. Encourage more sustainable transport and travel

We will –

- Work with SEStran Freight Quality Partnership in support of the Scottish Freight Action Plan (Sustainable Freight Transport System)
- Encourage improvements to the public transport network
- Further develop the core path network
- Encourage use of low carbon and electric vehicles
- Establish a network of electric charging points across Fife
- Support projects to encourage walking and cycling as a mode of transport
- Promote sustainable travel choices in local areas



4. Ecosystems are used sustainably and strengthened

We will –

- Ensure coastal ecosystems are protected and enhanced, and that their potential benefits are fully considered in regard to Climate Change Adaptation
- Ensure the provision of new woodlands are included in Development Plans
- Contribute to the development of the River Basin Management Planning as part of the Water Framework Directive
- Establish a 'stalled spaces' project on derelict land
- Creation of ponds and wetlands with local community groups
- Make use of the integrated Habitat Network tool to identify priority areas
- Support communities to manage habitats



Adapting to cope with Climate Change (Long Term Outcome)

5. Places are adapting to cope with climate change (including land use, coastlines, buildings and infrastructure)

We will –

- Create or enhance natural wetlands, flood attenuation areas, and other similar measures to assist in reducing flooding and to deal with surface water run off from new and existing developments
- Actively seek funding for the promotion of flood protection and coastal erosion studies and projects based on the priorities set out in the Local Flood Risk Management Plans and the Fife Shoreline Management Plan
- Encourage partners to sign up to the implementation of Fife's Shoreline Management Plan and work together to implement its policies
- Encourage trees in urban areas



- Adapt grounds maintenance regimes in regard to drainage and appropriate species planting
- Ensure sustainability building regulations are applied when building in high risk areas
- Ongoing review of land use allocations in the Local Plans / Local Development Plan in regard to potential climate change effects

6. People are adapting to cope with Climate Change

We will –

- Develop local, targeted campaigns to raise awareness of the potential impacts of climate change and the responsibilities of communities and individuals
- Work with vulnerable communities to provide guidance in regard to adapting to specific climate change issues
- Promote the use of small scale, low cost, and sustainable measures where appropriate



Measuring Our Progress

In order to measure progress in achieving Fife Environmental Partnership outcomes and in particular Fife Partnership's commitment to tackling climate change we will use a range of indicators:

National Outcome	Local Outcome	Indicator	Baseline	Target
14. We reduce the local and global environmental impact of our consumption and production.	Reducing carbon emissions (by reducing energy use, more sustainable transport and less waste)	CO2 emissions for Fife (000 tonnes)	3,658 (2008)	Reduce to 2,117 by 2020 (to reflect government target of 42% reduction from 2005 by 2020)
Adapting to climate change	Self assessment of preparedness for climate change	No self-assessment undertaken (2011)	Level 4 by 2013	

Outcome measures are listed below. These will be monitored on an ongoing basis and inform six monthly reports to the Fife Partnership Executive Group on the delivery of Fife's Community Plan and Single Outcome Agreement.

More detailed indicators, including baselines and targets, will be included in a partnership performance framework for monitoring and progress reporting by the outcome groups.

Medium Term Outcome 1 - More efficient use of resources (energy, waste and water)	
Indicator	Source
Fife Carbon Footprint – Industrial and Commercial (inc public sector)	Department of Energy and Climate Change (DECC)
Fife Carbon Footprint - Domestic	DECC
Carbon Footprint – Infrastructure (street lighting)	Fife Council
% of household waste recycled/composted	Scottish Environment Protection Agency (SEPA)

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Medium Term Outcome 2 - More energy is from low carbon supplies	
Indicator	Source
Large scale renewable energy in operation in Fife	Fife Council
% of renewable electricity generated in Fife	Fife Council

Medium Term Outcome 3 - Encourage more sustainable transport and travel	
Indicator	Source
Fife Carbon Footprint – Road Transport	DECC
% of pupils walking/cycling to school	Fife Council
Increase cycle use on key monitored routes	Fife Council

Medium Term Outcome 4 - Ecosystems are used sustainably and strengthened	
Indicator	Source
Fife Carbon Footprint – Land Use, Land Use Change, Forestry	DECC
Woodland cover as a % of land area	Forestry Commission

Medium Term Outcome 5 - Places are adapting to cope with CC (including land use, coastlines, buildings and infrastructure)	
Indicator	Source
Number of wetlands, flood attenuation areas, or similar measures created or enhanced	Fife Council
Number of properties in Potentially Vulnerable Areas with reduced flood risk	Fife Council
Progress with studies and works identified within the Shoreline Management Plan action plan	Fife Council
Progress on actions identified within the Local Flood Risk Management Plans in accordance with timelines set out	Fife Council

Medium Term Outcome 6 - People are adapting to cope with Climate Change	
Indicator	Source
Number of specific community engagements on climate change adaptation	Fife Council / SEPA / Scottish Flood Forum
Number of small scale, low cost, and sustainable measures implemented	Fife Council / Scottish Flood Forum

Appendix 1: Glossary

Word/ Phrase	Definition
Adaptation	In terms of climate change, is the action to plan, prepare and respond to the potential impacts of weather.
Carbon	Universal shorthand for Carbon Dioxide, or Carbon Dioxide equivalent greenhouse gases.
Carbon Dioxide (CO ₂)	Carbon dioxide is the most common greenhouse gas contributing to human made climate change.
Carbon dioxide equivalent (CO ₂ e)	In addition to Carbon Dioxide there are several other greenhouse gases. Because it is necessary to reduce all greenhouse gas emissions these are referred to collectively as Carbon Dioxide equivalent gases.
Carbon emissions	Release of CO ₂ e into the atmosphere.
Carbon Footprint	A measure of the carbon emissions produced as a result of an organisation's or service's activities.
Carbon neutral	When, through a transparent process of measuring emissions, reducing those emissions and offsetting any unavoidable emissions, net calculated emissions equal zero. (DECC)
Carbon offsetting	Offsetting aims to make it possible to compensate for unavoidable emissions by helping to fund projects that deliver equivalent emissions savings elsewhere.
Climate change	Cumulative changes in the Earth's temperature and weather due to increased levels of

Word/ Phrase	Definition
	greenhouse gases as a consequence of human activity.
Climate Change (Scotland) Act 2009	Legislation introduced by the Scottish Government to set a mandatory target of cutting carbon emissions by 42% by 2020 and 80% by 2050.
Climate Change Act 2008	Legislation passed by the UK Government in late 2008 to set a mandatory target of cutting carbon emissions by 80% by 2050.
DECC	The Department for Energy and Climate Change (www.decc.gov.uk) may take up some of DEFRA's responsibilities in future.
DEFRA	The Department for the Environment, Food and Rural Affairs provide the carbon emissions conversion factors used for calculating the carbon footprint.
Ecosystem	A system that includes all living organisms in an area as well as its physical environment functioning together as a unit.
Greenhouse Gases	Gases that enhance the greenhouse effect and hence climate change. The issue of concern is greenhouse gases emitted over and above natural levels as a consequence of human activity such as through burning fossil fuels. Greenhouse gases in general are often referred to as "Carbon Dioxide equivalent" in terms of their potential climate change impact.
Mitigation	The attempt to lessen future climate change and its social, economic and environmental consequences by reducing the greenhouse gas emissions we make.

Word/ Phrase	Definition
Scotland's Climate Change Declaration	A commitment made by all Scotland's 32 local authorities to mitigate their impact on climate change through reducing greenhouse gas emissions and to adapt to climate change impacts.

Appendix 2 Associated Plans & Strategies

The Fife Environmental Partnership Strategy focuses on joint outcomes where one or more partner is involved in their delivery. The strategy does not cover in detail the work that various partners carry out on an individual basis. The following list provides links to other related strategies and plans that contribute to the delivery of wider environmental outcomes:

- [Fife Community Plan 2011 -2020](#)
- [Fife Council Plan 2017](#)
- [Fife Health & Wellbeing Plan 2011-2014](#)
- [Fife's Greenspace Strategy 2010 – 2015](#)
- [2011 Fife Shoreline Management Plan](#)
- [Fife Local Biodiversity Action Plan](#)

Community Plan Outcome 2011-2020

- Sustaining and improving the environment

Long Term Outcomes

- Reducing carbon emissions
- Adapting to climate change

Medium Term Outcomes

- More efficient use of resources (energy, waste and water)
- More energy is from low carbon supplies
- Carbon emissions from travel and transport have reduced
- Ecosystems are used sustainably and strengthened
- Places are adapted to cope with climate change (including land use coastlines, buildings and infrastructure)
- People are adapting to cope with Climate Change

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Fife Coast and Countryside Trust
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