

CLIMATE CHANGE : REDUCING GREENHOUSE GAS EMISSIONS – THE COMMUNITY APPROACH

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Many of Scotland's communities are responding to the global challenge of climate change by taking action within their own towns and cities to reduce Scotland's greenhouse gas emissions. This briefing looks at some of the ways in which Scotland's communities are moving towards sustainable living.



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BACKGROUND

Responding to climate change is a global responsibility. There are many ways in which action can be taken to mitigate, and adapt to, the impact of climate change: from taking individual responsibility for personal carbon usage, to high level strategic actions such as encouraging investment in new technology to reduce reliance on fossil fuels and, ultimately, legislative change.

On 28 March 2008, the Cabinet Secretary for Rural Affairs and the Environment (Richard Lochhead) delivered a [speech](#) (Scottish Government 2008a) at the Findhorn Foundation Conference on creative responses to peak oil and climate change. In that speech, the Cabinet Secretary stated:

“Our Greener Scotland objective focuses on managing and making the best use of our natural resources and environmental assets. It also means recognising that Scotland, like other developed countries across the world, is living beyond its environmental means. We need to move more to one planet, rather than three-planet, living”.

The Scottish Government has committed to reducing greenhouse gas emissions by 80% by 2050, a target that will be included in its forthcoming Climate Change Bill. The target should also be seen in the context of the commitment made by the EU to reduce its overall emissions to at least 20% below 1990 levels by 2020 (and up to 30% under a new global climate change agreement if other developed countries make comparable efforts) (Scottish Government 2008b).

The Government states that its overarching purpose is: “to focus Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.” To achieve this it has made a commitment to [five strategic objectives](#), the fifth of which is “Greener” with the stated aim: “to improve Scotland’s natural and built environment and the sustainable use and enjoyment of it” (Scottish Government 2008c). It has engaged with the climate change agenda by:

- raising public awareness through its [Go Greener](#) campaign (2008d) aimed at promoting energy saving messages through various media resources
- encouraging action at the individual level through its [10 greener pledges](#)
- providing financial assistance to community-led initiatives through its [Climate Challenge Fund](#)
- enshrining positive action in statute by legislating through its proposed Climate Change Bill.

WHY COMMUNITIES ARE INVOLVED

There are a number of ways in which Scotland’s communities can help tackle climate change. There are, for example, government-led initiatives in place that encourage sustainable development, both through new house building¹ and through “reshaping existing neighbourhoods” (Scottish Government 2008e) as set out in the [Scottish Sustainable Communities Initiative](#) (Scottish Government 2008f). But there is also a view that such top level actions will not be enough and that communities themselves should contribute independently to the emission reduction process.

¹ In 2005, newly-built homes accounted for about 1% of the housing stock in Scotland (Scottish Executive 2005).
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There is a plethora of such activity at the level of individual towns and cities. People with a common concern for the environment have engaged with the climate change agenda by getting together in small groups to discuss ways in which they can actively support their local community to reduce its energy use. Their reasons for doing so are diverse; some communities, like [Linlithgow Climate Challenge](#), aim “to promote awareness of climate change and support local solutions to reduce [Linlithgow’s] dependence on fossil fuels and [Linlithgow’s] greenhouse gas emissions”. Other groups have grown out of specific campaigns, the group in Portobello, Edinburgh, for example, developed out of a campaign against a large supermarket. [Portobello Energy Descent and Land Reform Group](#) (PEDAL) states:

“Rather than hoping that governments might act in time, we are working now to re-localise, and to help other communities do the same.”

Communities have developed carbon-reducing projects within a framework of action that includes government-led initiatives as well as initiatives developed by organisations dedicated to the mitigation of, and adaptation to, climate change. This briefing looks at the action being taken by these communities. It is not an exhaustive list of the various types of community bodies operating across the country; rather it looks at examples of projects that have chosen different ways to contribute to reducing Scotland’s greenhouse gas emissions.

ROUTES TO ESTABLISHING A COMMUNITY INITIATIVE

There is a variety of ways in which communities can establish emission reduction projects. These include setting up a Trust, becoming a charity or establishing a limited company or a not-for-profit organisation.

Some communities, like Dunbar, Biggar and Portobello, have joined an organisation called the [Transition Network](#), set up in 2007 and whose stated role is to “accelerate change through inspiring, encouraging, supporting, networking and training communities as they consider and then implement their version of the [transition] model.” (Brangwyn and Hopkins 2008). The network encourages communities to adopt the Transition Model. It does not provide a prescriptive list of action; each project develops its own initiatives that it anticipates will lead to emission reduction. Some initiatives, like [Sustaining Dunbar](#), have set-up separate sub-groups each concentrating on a particular area – energy, enterprise, food, resource use and transport. In [Portobello](#) the community is seeking funding for developing an overarching ‘energy descent action plan’ to help it set up a range of energy-reduction projects. The [Carbon Neutral Biggar](#) initiative aims to: “reduce Biggar’s carbon footprint” and for Biggar “to be more self sufficient” and has established projects focussing on energy saving and renewable energy, food, travel and waste and recycling.

Other communities have taken different approaches. For example, a group in [Glasgow](#) has joined the [Carbon Rationing Action Groups](#) (CRAG), a network of local grassroots groups dedicated to reducing their carbon footprints. The aims of this network include: “to build up solidarity between a growing community of carbon conscious people and to share practical lower-carbon-living knowledge and experience”.

Stirling aims “to become the UK’s first carbon neutral city” (Scottish Government 2008g) through its [Going Carbon Neutral Stirling](#) project funded by the Big Lottery Fund and the Scottish Government and administered by Keep Scotland Beautiful. The initiative has an overarching programme that aims to support local communities in the Stirling area to significantly reduce their carbon footprint. The project hopes to change behaviour by engaging the community in individual actions that lead gradually to district-level changes. The project states that its aim is:

“to create and implement a compelling, collectively owned, successful, district scale, model of meaningful carbon reduction activity encompassing the dynamic of national and local businesses, and geographic communities and communities of interest, that can be used as a blueprint for other UK cities and districts”.

These groups are relatively new compared to the [Findhorn Foundation](#) which has developed an holistic approach to sustainable living over many years. The Community was founded in 1962 and it set up its Ecovillage project in the late 1980s. The Community has been described by the Cabinet Secretary (2008a) as a “renowned exemplar of sustainable practice” which claims “to have the lowest ecological footprint of any community in the UK”.

In his speech (2008a) at Findhorn, the Cabinet Secretary stated:

“We are under no illusions about the level, breadth and depth of action that is required. (...). The Scottish Government is showing leadership but we understand that we will only be successful if we work together and secure a participation from all including the public sector, business, communities and individuals.”

EXAMPLES OF PROJECTS

Below are examples of the type of projects communities are developing. All examples have been sourced from the information contained in the websites of initiatives in Biggar, the [Blane Valley](#), Dunbar, [Haddington](#), Portobello and Stirling.

Advice

Some initiatives offer general advice on their websites covering a range of different areas, for example, Going Carbon Neutral Stirling provides advice on saving emissions from electricity, food, heating, recreation, education, hygiene, commuting and aviation. Carbon Neutral Biggar provides advice on energy saving at home, in the office and through transport use.

Blane Valley is aiming to raise community awareness by arranging events to encourage the local community to become involved. These include a public meeting with a presenter from Stop Climate Chaos and an “energy awareness day”.

Energy-saving

Energy-saving projects such as building hot water solar panels and encouraging people to insulate their lofts and walls have been developed by the initiative in Biggar. In Haddington, the initiative is also involved in an energy-saving project to insulate people’s homes. Blane Valley is starting work on installing solar water heating panels on as many houses in Strathblane as possible.

Biggar is discussing the possibility of owning its own wind turbine within one of the various wind parks planned for the periphery of the town.

Food

Reducing food miles, encouraging people to grow their own food and investigating community-owned facilities are just a few of the initiatives aimed at altering people’s food choices. A number of projects are looking at establishing fruit trees. Portobello is planning a community orchard which it hopes to complete by January 2009. Dunbar is putting together a map of local fruit trees and is planning a calendar to identify when local food will become available.

Various projects are encouraging people to grow their own fruit and vegetables and allotment provision is an important resource. In both Dunbar and Biggar action is being taken to either revamp current provision or seek new allotments. Biggar is preparing an information sheet for

residents setting out where local produce can be bought. Dunbar is looking into the possibility of opening a community bakery.

Transport

Dunbar is identifying gaps in existing public transport provision and then campaigning to fill them. It is also developing a map which highlights cycling and walking routes within the town and the initiative is working towards a signed network of paths.

Biggar is in discussion with South Lanarkshire Council about providing bicycle racks in the town centre and is also looking into the re-opening of Symington Railway Station to provide a train service to Glasgow. VIPRE has organised a transport survey in Biggar which plans to highlight the main gaps in provision.

Recycling

Biggar hopes to set up a group to recycle unwanted possessions to others in Peebleshire. The initiative has discussed improvements to the recycling service with the local council and has agreed to make use of a local contractor to start a new recycling service to remove organic and food waste from businesses.

In Haddington, the initiative is campaigning for the town to become plastic bag free and has received a grant from East Lothian Council for purchasing reusable 'Town Bags' and for further development of the campaign.

Social

Portobello is developing plans to buy and run a community-owned social space with the aim of regenerating the local economy. The initiative has secured funding of £10,000 for a feasibility study.

FUNDING FOR COMMUNITY-LED INITIATIVES

There are various funding mechanisms available to assist communities to develop their emission-reduction plans. There are a number of organisations that provide advice and financial assistance. Funding for community-led, energy-related projects in the Highlands and Islands, for example, is available from [Community Energy Scotland](#) and this independent charity is aiming to develop its support role to communities across Scotland by 2009.

The Government's [Climate Challenge Fund](#) also provides financial assistance to community groups. [The Climate Challenge Fund supporting alliance](#) co-ordinated by the Sustainable Development Commission Scotland, is a group of organisations offering to assist communities to develop carbon-reduction plans.

THE CLIMATE CHALLENGE FUND

The Climate Challenge Fund was announced on 3 June 2008 (Scottish Government 2008h) with an allocation of £18.8 million (subsequently increased to £27.4 million over three years (2008-11)). The Cabinet Secretary for Rural Affairs and the Environment (Richard Lochhead) stated that the aim of the fund was to "to help communities take local action to tackle the global threat of climate change" and that the fund will "empower communities to take action to reduce their carbon footprint".

Full details of the [criteria](#) for receiving grants are set out on the website. The first round of grants was announced on [17 September 2008](#) (2008i) when fourteen projects were awarded a total of

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£705,700. A second round of grants was announced on [4 November 2008](#) (2008j) when a further eighteen projects were awarded a total of £1,165,761. The grants panel is expected to meet three times annually.

The various projects funded include:

- combined heat and power schemes
- survey work in Fintry to reduce energy use
- feasibility studies on:
 - green electricity from sewage and other organic matter
 - building and maintaining ecologically and economically sustainable buildings
 - options for the generation of renewable energy for community buildings
- the demonstration of a sustainably-powered vehicle for rural community use
- increasing the provision of cycle training schools in Dumfries
- proposals to reduce commuting in Alyth by developing a green travel plan and investigating the feasibility of developing a partnership project with a number of large employers to create an outpost office where employees can hot desk in a local based, cost shared, office building
- the construction of an off-road all abilities path to allow children to walk or cycle to school in Strathdon
- providing affordable work and social spaces for local community groups, social enterprises and micro-businesses in the Loch Tay area
- maintaining community gardens, orchards and woodlands and establishing a community composting scheme in Toryglen
- reducing the carbon footprint at household level by changing behaviour, in partnership with primary schools in Linlithgow.

The breadth of projects supported by the Fund demonstrates the level of interest in communities to develop emission-reduction initiatives. Community action is, of course, not possible without the drive and determination of individuals. Moving towards sustainable living will require fundamental lifestyle changes on an individual level.

THE ROLE OF THE INDIVIDUAL

The Scottish Government has developed advice on how to make personal lifestyle changes and its 'Greener Pledges' is part of its drive to encourage people to live an environmentally-friendly lifestyle. In launching the 'Go Greener' campaign, the Minister for the Environment (Michael Russell), stated: "(...) the 'Go Greener' campaign will help us all make simple changes to the way we lead our lives" (Scottish Government 2008d). The pledges encourage actions that can be taken by the individual, for example:

- turn the tap off when brushing your teeth
- buy more seasonal and unpackaged food
- pay back the environmental impact of any flights taken and choose not to fly when there's a suitable alternative.

One of the pledges is "to organise an event or volunteer to help out in your local community", thus making the connection between personal and collective responsibility explicit.

In addition to government advice, other organisations have made suggestions for encouraging more sustainable ways of living. One such list sets out a series of general principles by which individuals can regulate their lifestyles. The list includes such maxims as

- Diversify and co-operate

- Do not draw down resources
- Shop locally.²

Such guidelines encourage action at the individual level and offer ways in which communities can collectively adopt a low carbon lifestyle.

In a recent press release, [Forward Scotland](#) (2008) argued that “top down” approaches from the government are not sufficient. It states that: “(w)e believe that culture change is required to meet the aspirations of communities. The key to unlocking this is the wealth of experience, enthusiasm and dogged determination of local people.” The number of community-led initiatives aimed at reducing their greenhouse gas emissions suggests that communities are demonstrating their ‘aspirations’ by embracing the opportunities presented to them.

However, there is a view that questions whether the encouragement and promotion of individual and small-scale actions is sufficient to change behavioural patterns. In his report, [Weathercocks & Signposts](#), Dr Tom Crompton, Change Strategist at WWF-UK states:

“(...) this report does not argue that private-sphere behavioural change is futile. Cumulatively it is important: but only if the danger of it leading to complacency can be avoided, and only in conjunction with ambitious government interventions.”

This view challenges the assumption that individual actions resulting in personal behavioural change will lead to a gradual step-change in behaviour culminating in radical lifestyle changes. Dr Crompton’s argument that individual action must be coupled with government intervention suggests that there is a need for enforceable legislation to require individuals to make the necessary lifestyle changes.

The Sustainable Development Commission Scotland argues that the policies aimed at sustainable development are essential to tackle climate change. In its review of sustainable development policy in Scotland (2007a), the Commission states:

“It is essential that sustainable development and climate change be worked on together, within the unified machinery of Government. Sustainable development is the only policy framework able to tackle the problem of climate change over the long term”.

The Government plans intervention at the legislative level through its proposed Climate Change Bill. There is, therefore, a debate about how individual action, collective action and government intervention can be joined up to develop a partnership approach that instigates the change at the macro-economic level required to reduce emissions by 80% by 2050.

THE FUTURE?

There is widespread recognition that tackling climate change is the responsibility of all sections of society, from individuals to international governmental organisations. Some of Scotland’s communities are rising to the challenge and are taking an active role in seeking to reduce the amount of resources that they use in an effort to abate Scotland’s greenhouse gas emissions.

The Government is encouraging community action through its Climate Challenge Fund and there are a number of organisations willing to help communities to develop plans to reduce their energy use. Forward Scotland emphasises the importance of people in the process of mitigating, and adapting to, the effects of climate change and small, community-led groups endeavouring to reduce the energy profile of their own towns and cities provide an example of the “dogged action” that Forward Scotland applauds.

² These principles are referred to in the presentation given to the Green Scotland Programme Board by Peter R Head where they are described as “the biomimicry principles set out by Janine Benyus” (Peter R Head 2008).

If these community-led initiatives are successful in helping to reduce Scotland's greenhouse gases, their success will be reflected in Scotland's emissions profile as the Government tracks progress towards its emissions reduction target; whether these initiatives will be successful in changing people's attitudes and shaping future government policy remains to be seen.

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