Energy Saving Trust | Practical help for Local Authorities

CLIMATE CHANGE: WHAT YOUR COUNCIL CAN DO
Briefing note

Introduction

Climate change is a global issue which is already affecting most local communities. Councils need to take action both to reduce emissions that they themselves cause as well as those produced by their communities, to limit the effects of climate change. Councils should also be taking action to prepare for the impact of climate change. This briefing note focuses on the former issue, but signposts readers to further information on the latter.

"Each local authority has a vital role in leading community responses to the challenges of climate change. Strategies developed now could pay huge dividends in the future. Your local authority may already be doing a great deal, but if we are to meet the longer term challenges, then we will need to achieve more.[1]"

What is climate change?

Climate change is caused by human interference with the 'greenhouse effect'. The 'greenhouse effect' is the natural process by which certain gases trap heat inside the Earth's atmosphere. An increase in the amount of these gases, caused by human activity, is leading to an increase in global temperature and to global climate change. The temperature of the Earth is controlled by a delicate balance between the amount of energy coming in from the Sun and the amount being radiated back into space. Energy from the Sun is at a shorter wavelength than the energy being radiated back from the Earth, because the Earth is not as hot as the Sun. Certain gases, such as carbon dioxide (CO_2) and water vapour will let in short wave energy, but will trap some of the long wave energy radiated and reflected from the Earth inside the atmosphere.

Information

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Funding

What causes climate change?

There are several greenhouse gases that are responsible for human-induced climate change, however CO_2 has been the primary focus of concern. About 63% of the warming effect of greenhouse gas increases over the last 200 years has been due to carbon dioxide, whilst 24% has been due to methane[2]. The remainder is down to a mix of various other gases, the most potent of which are covered by the Kyoto Protocol. The six greenhouse gases addressed by the protocol are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulphur Hexafluoride (SF_6).

The global warming potential of each gas is measured against that of CO_2. For example, methane's global warming potential is 21 times that of the same unit of CO_2. The prime source of CO_2 is the burning of fossil fuels such as oil, gas and coal, while methane is generally produced as a by-product of the decomposition of organic matter, for instance in landfill sites, and to a lesser extent through agricultural activities.

[1] 'Community leadership and climate change, guidance for local authorities'. Published in June 2001 by the Improvement and Development Agency, Defra, the Society of Local Authority Chief Executives and the Local Government Association. Similar guidance for Scottish local authorities was published by the Scottish Executive in 2001.

[2] Climate Change: The UK Programme. Published in February 2001 by Defra.

What are the likely effects of climate change?
According to the International Panel on Climate Change (IPCC), "global average temperature has increased over the 20th century by about 0.6°C". Model projections, based on a range of emission scenarios and climate sensitivities, suggest an increase in global mean surface temperature of between about 1°C and 3.5°C by 2100. According to Defra, the rate at which the climate is changing will affect the world in extreme and unpredictable ways. Climate change brings with it huge costs to the economy, environment and society, including:

- Temperature increases, drought and flooding will affect people's health and way of life, and cause the irreversible loss of many species of plants and animals;
- Rising sea levels threaten the existence of some small island states and puts millions of people at risk; and
- In the UK, rising seas threaten our coastal communities and environment, and higher temperatures, increased and more intense rainfall will bring droughts and flooding[3].

What have been the responses so far?
At the international level, the United Nations Framework Convention on Climate Change (FCCC), which has been ratified by over 180 states, was agreed at the Earth Summit in Rio de Janeiro in 1992. Under the Convention, all the developed countries agreed to aim to return their greenhouse gas emissions to 1990 levels by 2000. The UK was one of only two countries to do so. The 1997 Kyoto Protocol to the FCCC set a more binding global target of a decrease in emissions of greenhouse gases of 5.2% over the period 2008-2012, based on emissions in 1990. This target only applies to 38 developed states.

As part of the protocol the EU has committed to an 8% cut in greenhouse gas emissions over the period 2008-2012, which is split in various ways between the member states. For example, Germany has committed to a 21% reduction, while Portugal has been allowed a 27% increase.

The UK target under the Kyoto Protocol is a 12.5% decrease based on 1990 levels. However, the UK has also set its own domestic target of a 20% decrease in CO_2 emissions on 1990 levels by 2010. In addition, an aspirational target of a 60% decrease by 2050 was announced in the 2003 Energy White Paper.

The UK response
Numerous government policies have been introduced to tackle climate change and many of these impact on local authorities; some of the key ones are listed below. Many of these stem from the UK Climate Change Strategy (published in November 2000) and the Energy White Paper (published in February 2003).

HECA

Preceding both these documents is the Home Energy Conservation Act 1995 (HECA), one of the main climate change-related policies that impacts on local authorities. HECA focuses local authorities' attention on improving the energy efficiency of all homes. It places a duty on UK energy conservation authorities (local authorities with housing responsibilities) to draw up strategies to improve domestic energy efficiency in all housing – both public and private sector – and to report on progress made in implementing them. In addition to reducing fuel poverty and combating climate change, increased energy efficiency in housing saves the consumer money, can help create jobs and has important health benefits. By running local energy efficiency schemes, many local authorities have achieved a great deal under HECA to improve the quality of life for their residents.

For further information on the Home Energy Conservation Act and local authority actions under this, please see the series of briefings available on the Practical help website (under 'Housing').

The Climate Change Levy

The Climate Change Levy is a tax on the non-domestic use of fuel and is designed to curb energy use by increasing the cost of energy bills - for example, electricity bills increased by 8-

[3] Ibid reference 2.

10% on average after the introduction of the Levy. The levy applies to industry, commerce and the public sector and for more information you can contact Practical help.

The Energy Efficiency Commitment

The Energy Efficiency Commitment is a statutory obligation that came into force in April 2002. The Commitment applies to all energy suppliers with 15,000 or more domestic customers. The Department of Environment, Food and Rural Affairs (Defra) estimates that the Commitment will lead to an investment of £500 million in energy efficiency measures over the next 3 years and a reduction in carbon emissions of approximately 0.4 million tonnes a year.

Local authorities can seek to influence how and where these large sums are spent so as to benefit their tenants and the householders in their area. Energy Efficiency Commitment money could also play a contributory role towards delivering HECA targets and a range of objectives set out in council and partnership strategies, such as affordable warmth and environmental strategies. Working in partnership can minimise administration for energy suppliers whilst allowing housing associations and local authorities to influence proposed efficiency measures to best promote their tenants' interests.

Fuel Poverty Strategy

In the UK Fuel Poverty Strategy published in November 2001, the Government states its commitment to end the blight of fuel poverty for vulnerable households by 2010. Fuel poverty in other households will be tackled once progress is made in the priority groups, with the Energy White Paper setting a target of eliminating fuel poverty in all households by 2016-18. The strategy sets overall targets for the UK, with separate targets for each of the UK devolved nations. The Government expects to spend £1.5 billion a year to remove the effects of fuel poverty and a large proportion of this will be spent on providing a variety of energy efficiency measures, such as cavity wall insulation, condensing boilers and loft insulation through national grant schemes (Warm Front in England, Warm Deal in Scotland, HEES in Wales and Warm Homes in Northern Ireland). For more information contact Practical help.

The emphasis on providing affordable warmth will sometimes coincide with the aim of reducing greenhouse gas emissions, but this will not always be the case. For example, if a measure such as gas central heating is installed, it will allow a person to heat their home to an acceptable standard at an affordable price. However that person will now be using more fuel than they would have done had they been left living in a home that was not being heated to a decent standard.

Housing Quality standards

Linked to this Fuel Poverty strategy are the various nations' housing quality standards. In England, the Government has set a target to deliver decent homes to all social sector tenants by 2010, and to reduce the number of social tenants living in non-decent homes by one third by April 2004, with most of the reduction taking place in deprived areas.

Amongst other things, a decent home is one that 'provides a reasonable degree of thermal comfort'. The method of testing whether the thermal comfort criterion had been met changed from requiring the household to be free from 'fuel poverty' to the home having effective insulation and efficient heating in February 2002.

In Wales, a Housing Quality Standard has been developed to provide a common target standard for the physical condition of all housing in Wales. The National Assembly for Wales's vision is that "all households in Wales … shall have the opportunity to live in good quality homes that are (amongst other things), adequately heated, fuel efficient and well insulated".

Meanwhile, in Scotland, an Index of Housing Quality is in the process of being developed that will require a house, amongst other things, to be energy efficient.

The Renewables Obligation

The Renewables Obligation is a requirement on all electricity suppliers in England and Wales to generate an increasing percentage of the electricity they sell from renewable sources. The

intermediate target is 5% of electricity generated from renewable sources by 2005. The final target is 10% by 2010. The Obligation is the main means by which the UK Government intends to meet its concrete renewable energy generation target and is likely to be an important contributor to the 'ambition', announced in the Energy White Paper, of a 20% share of electricity generation by the renewables sector by 2020.

The devolved nations' responses

All the devolved nations have a stated aim to contribute to the overall UK greenhouse gas emissions target. In particular:

- The Climate Change Levy applies to the whole of the UK;
- Northern Ireland has the Northern Ireland Electricity Customer Levy in place of the EEC;
- The affordable warmth programmes set up in each country in the UK differ slightly from each other, both in the amounts of grant available and who is eligible to receive them. There are also different targets for the reduction and elimination of fuel poverty in certain groups within society, although the emphasis on energy efficiency measures is high in all the schemes. For more information contact Practical help;
- The Renewables Obligation Scotland works in the same way as that for England and Wales, but uses a target of 40% of electricity generated from renewables by 2020; and
- At the time of writing, Northern Ireland was consulting on introducing a Renewables Obligation with targets of 15% renewable generation by 2010 and 35% by 2020.

The role of local authorities; opportunities for action

Local authorities have numerous opportunities for taking action to reduce greenhouse gas emissions. The following sections outline some of the main areas; further ideas can be obtained from the case studies accompanying this briefing note as well as from other Practical help briefings and case studies.

The best way to coordinate and promote all Council activity is to establish a corporate (i.e. cross-departmental) climate change strategy with an action plan.

<u>Overarching council duties</u>

- Does the Council's Best Value programme require each review to assess sustainability?
- Does the Community Strategy reflect people's concerns about climate change?
- Does the Local Strategic Partnership consider climate change issues?
- Does the council support regeneration and renewal initiatives that contribute to sustainable development?
- Is the Council drawing in funding and investment into your area to tackle climate change? The Practical help website has a funding database with details of different funding sources that can help councils reduce their carbon emissions.

<u>Council buildings</u>

The most obvious place for most Councils to start to take action to reduce greenhouse gas emissions is in their own buildings. For example:

- Is the Council investing in activities or measures in council buildings that will help reduce energy use, such as the introduction of energy benchmarking and monitoring? (Please note that under Best Value performance indicator 180 it is a requirement for councils in England and Wales to report annually on the energy used in their own buildings, including street lighting).
- Is the Council using on-site renewable energy generation, promoted where possible through the asset management plan and capital strategy of your local authority?
- Is more energy efficient behaviour by council staff being encouraged through campaigns and promotional activities? For example, Newcastle City Council Energy Centre is targeting staff who leave their computer monitors on when they are away from their desks for prolonged periods of time. Yellow 'energy violation tickets' are left where computers monitors are switched on, reminding people that this is a waste of energy.

The Carbon Trust provides information (through the Action Energy programme) and support for local authorities' own buildings as well as a Local Authority Carbon Management programme.

Housing

Energy used in housing is responsible for almost a third of the emissions of carbon dioxide and there is great scope for cost effective improvements which have the additional benefit of reducing fuel poverty and thus improving people's quality of life.

The first task for any Council should be to ensure that energy efficiency and renewable energy options in its own housing stock are maximised, for example by accessing Energy Efficiency Commitment and Community Energy grants for refurbishment programmes. Government grants such as the Solar PV Grants programme and Clear Skies (England and Wales) or the Community and Household Renewables Initiative (Scotland) can part fund renewable energy measures in dwellings.

However, most emissions come from housing in the private sector and Councils can make a big impact here too. For example:

- Is the Council working in partnership with an advice provider (such as the Energy Efficiency Advice Centres) to ensure that householders are aware of the potential for saving energy in their own homes? For example, East Riding of Yorkshire is using its CitizenLink network of video link access points to help offer energy advice. This means that householders can get advice or help easily and can talk to someone face to face.
- Is the Council making sure that its householders are making use of available grants to help with this, such as Warm Front (in England), Warm Deal (Scotland), HEES (Wales) and Warm Homes (Northern Ireland) and the Energy Efficiency Commitment. For example, Luton Borough Council is helping to achieve this through a multi-agency referral scheme which provides households at risk of or experiencing fuel poverty with a wide range of targeted and coordinated assistance, including advice about the grants they are eligible for.
- Is the Council gathering more information on housing conditions in the local area to enable effective targeting of resources? (Further suggestions are available from the Practical help HECA briefing series).
- Are there other local projects that householders can tap into? Many local authorities have set up effective projects themselves.

Councils can also work in partnership with housing associations to ensure that energy efficiency in this sector is maximised.

Transport

- Is the Council promoting sustainable travel plans, increases in public transport and a reduction in traffic levels?
- Has the Council produced a travel plan covering employees' commute to work?
- Is the Council paying more money to employees with bigger cars? In such cases, the car allowance system could be amended to abolish such upper rates, as Calderdale Metropolitan Borough Council has done, and the money released can be used to invest in pool vehicles or other initiatives. Alternatively, employees with clean fuel vehicles could receive an upper rate.
- Is the Council promoting improvements in local air quality through an Air Quality Management Plan that recognise the additional benefit of reducing greenhouse gases.
- Is the Council minimising the impact of its vehicle fleet through measures such as conversion to cleaner fuels? For example, Glasgow City Council has been improving its fleet since 1999 and it now includes 167 LPG vehicles, 9 electric scooters and 76 large vehicles fitted with exhaust particulate traps and (further details available from a Practical help case study).
- For further details on action that councils should be taking on transport, please refer to the Practical help briefing notes on Green Procurement in Transport and on Air Quality.

Planning

- Has the Council created a Development Plan that bring together policies reducing the need to travel or identifying sites for new renewable energy and combined heat and power plants?
- Has the Council issued supplementary planning guidance to encourage renewable energy and/or energy efficient developments? For example, Newark and Sherwood has issued supplementary planning guidance on wind energy, while the London Borough of Merton requires all new commercial developments over a certain size to generate at least 10% of their energy requirements from renewable sources. (Case studies on both these councils are available on the Practical help website.)

Waste

- Has the Council created a waste strategy to reduce landfill emissions in line with EU and UK statutory targets?

Green procurement

- Is the Council buying 'green' electricity (i.e. generated from renewable sources) for its own properties? Green electricity is exempt from the Climate Change Levy, so some councils have found that they can switch from conventional to green supplies and actually save money. (Please see the Practical help case study under Climate Change Levy on the London Borough of Lewisham.)
- Has the Council developed a green procurement policy to ensure that energy efficiency products are chosen over non-energy efficient ones. For example, the London Borough of Lewisham has developed an environmentally responsible green procurement policy to help it meet its wider social, economic and environmental targets. (Please see the separate Practical help briefing note and case studies on Green Procurement.)

Leading the community

- Has the Council put in place adequate provisions to allow for education of the public and businesses in the local area on the problem of climate change, the associated issues and how they can be part of the solution? In addition to the Energy Efficiency Advice Centres (which offer advice and support to householders on energy issues), the Energy Saving Trust also has a network of SME Energy Advice Centres which local authorities can work in partnership with (call Practical help for further information). For example, Croydon Council has set up the Energy Pioneers scheme to encourage energy efficiency amongst SMEs. The programme offers SMEs ongoing support to improve energy efficiency and helps to publicise their efforts. An initial survey is provided through the Action Energy local advisor network with further help offered by the Energy Pioneers team. One of the original Pioneers, the Thomas Farley public House in Thornton Heath has saved £800 a year, equivalent to nearly 2 tonnes of carbon, by switching all of the 60W bulbs in the building to compact fluorescent lamps.

Creating a strategy and setting targets

Targets and action plans are most effectively incorporated into a climate change strategy. The Local Government Association, working with the Improvement and Development Agency and de Montfort University conducted a survey in November 2002 which found that only 7% of authorities had developed a climate change strategy, although half of the respondents said that a strategy was under consideration. 34% had set a target to reduce their own authority's emissions while 25% had set a community-wide emissions target. For example, Newark and Sherwood DC is aiming for a 20% reduction of the council's CO_2 emissions by 2010 from 1990 levels, while Shropshire County Council have already achieved a 20% reduction in CO_2 emissions and are committed to a further 20% reduction by 2010.

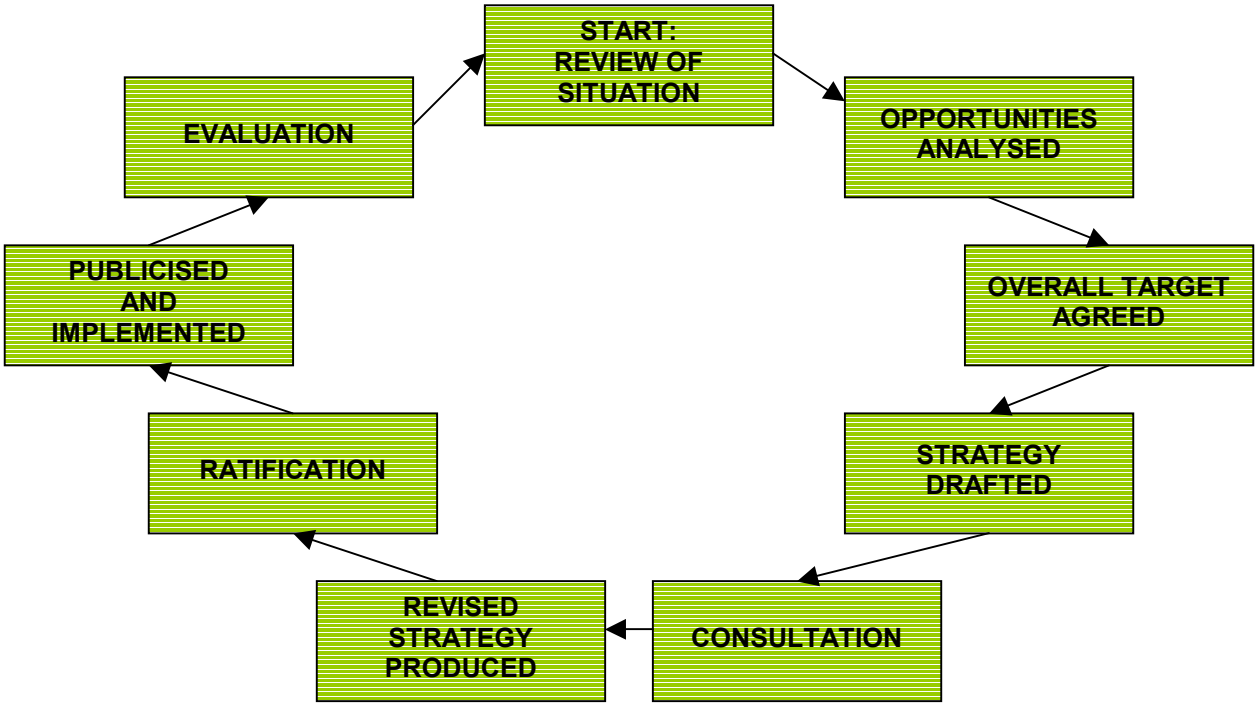
If developing a stand-alone climate change strategy is deemed too onerous, another option is to ensure that climate change is considered in all relevant statutory council strategies, such as:

- Community Planning;

- Housing; and
- Air Quality.

Linked to this, councils can choose to sign up to the Nottingham Declaration on Climate Change. Over 60 councils have already signed up to this voluntary scheme, which shows their commitment to action on climate change.

Steps towards producing a strategy:
As with the development of any new strategy, it is advised that the following steps are followed:



It should be noted that the setting of an overall target and the outlining of actions and smaller targets to achieve it is not necessarily a linear process and that some investigation of the potential emissions reductions may be necessary before an achievable target can be set.

Additional benefits
As well as helping to mitigate climate change, many of the actions that local authorities can take will have other benefits such as:

- Better housing resulting in social and health benefits;
- Lower fuel bills, helping people to tackle fuel poverty and achieve a better standard of living;
- Lower costs for businesses, making them more competitive;
- More efficient use of resources in public services;
- New employment and training opportunities locally;
- A better transport system, improving access for local residents and businesses;
- Improved local air quality; and
- Increased resilience to the effects of climate change, leading to greater protection and a better quality of life for people living and working in the local area[4].

Adapting to climate change
While councils should do everything possible to reduce their community's and their own contribution to climate change, it is also prudent for councils to begin to consider how to cope with the effects. The UK Climate Impacts Programme has published a new leaflet aimed at council chief executives outlining how taking action now could help protect major council

[4] Ibid reference 1.

assets from damage. Council services will be able to cope better with the expected changes in temperature and rainfall if action is taken now. (See Further information for details.)

Further information
Further information on any aspect covered by this briefing note, including access to complementary briefings and case studies and information on the Nottingham Declaration on Climate Change can be obtained by contacting Practical help. In particular:

- The UK's Climate Change Strategy can be downloaded from: **http://www.defra.gov.uk/environment/climatechange/cm4913/pdf/section1.pdf**
- 'Community leadership and climate change; guidance for local authorities' can be obtained from **http://www.defra.gov.uk/environment/climatechange/laguide/pdf/laguide.pdf**
- The equivalent document for Scotland can be obtained from **http://www.scotland.gov.uk/library3/environment/ccce-00.asp**
- 'Climate change and local communities; how prepared are you; An adaptation guide for local authorities in the UK' can be obtained from **http://www.ukcip.org.uk/pdfs/Local%20communities_climate%20change.pdf**

Practical help also offers a free enquiries service – the team will undertake to answer any query regarding sustainable energy or sustainable road transport within a maximum of 3 working days. They will take up to 2 hours to research and can help you research and produce a climate change strategy for your area.

Alternatively there are other local agencies (such as the Local Authority Support Programme, currently available to 45% of local authorities) and potential partners who can help you. For more information, contact Practical help.

Abbreviations used

CO_2	Carbon dioxide
HECA	Home Energy Conservation Act
SME	Small-medium sized enterprise

At the time of publication and to the best of our knowledge, the information contained in this briefing note/case study was correct.

Practical help cannot vouch for any of the organisations involved.

Practical help
T: 0870 241 2089, F: 0870 130 8831, E: info@practicalhelp.org.uk,
W: www.practicalhelp.org.uk