

**DEPARTMENT FOR BUSINESS
ENTERPRISE & REGULATORY REFORM**

**ADDRESSING CLIMATE CHANGE AND
FUEL POVERTY - ENERGY
MEASURES INFORMATION FOR
LOCAL GOVERNMENT**

Energy Measures Report

September 2007

IN ASSOCIATION WITH:

DEPARTMENT FOR ENVIRONMENT FOOD
AND RURAL AFFAIRS
COMMUNITIES AND LOCAL
GOVERNMENT

DEPARTMENT FOR TRANSPORT

WELSH ASSEMBLY GOVERNMENT

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User guide

This report is intended to be of use to councillors, senior managers and officers in local authorities. You may find it useful to read the whole of the report. You may however prefer to select those modules that are most relevant to you, beginning with module 1. This provides the international and national policy context for climate change and energy and gives an overview of the role of local authorities in England (see module 1a) and Wales (see module 1b) in addressing these issues. This user guide is intended to help you locate the information that you are looking for.

Councillors, the executive and senior managers

This report is accompanied by a summary that will provide you with a brief overview of the content of the report. This may well be all the information you need. For more detailed information on the areas of local government activity covered by this report, please refer to the 'route-map' for your authority type.

Officers

The report is structured into a series of modules. The module(s) of most interest to you can be located using the 'route-map'. There is also a summary of the report which you may find useful when discussing the report with senior managers or councillors.

Is your authority an English unitary authority or London Borough council?

If so, click [here](#) for your route map.

Is your authority an English county council?

If so, click [here](#) for your route map.

Is your authority an English district council?

If so, click [here](#) for your route map.

Is your authority an English parish or town council?

If so, click [here](#) for your route map.

Is your authority a Welsh county or county borough council?

If so, click [here](#) for your route map.

Is your authority a Welsh town or community council?

If so, click [here](#) for your route map.

Route-map for English unitary authorities and London borough councils

Are you interested in understanding more about the role of local authorities in climate change mitigation and fuel poverty alleviation?

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Do you want to know more about key sources of advice and help?

If so: [Click here to read module 2](#) This module summarises some of the main sources of further advice on the topics covered in this report.

Are you interested in understanding the elements of a good practice strategic approach?

If so: [Click here to read module 4](#) This module covers the key elements of developing a strategy and action plan, partnerships, monitoring effectiveness and securing resources.

Are you interested in how the local authority can be a community leader on the issues of climate change and fuel poverty alleviation?

If so: [Click here to read module 5](#) This module considers use of the power of well being, the importance of community strategies and partnerships, and work at the regional level. It explores how local government can set the standard for tackling carbon emissions and how it can work to raise awareness and inspire action in the wider community.

Do you want more information about tackling carbon dioxide emissions from the local authority's own estate and operations?

If so: [Click here to read module 6](#) This module looks at the process of implementing carbon management within the local authority and at the issue of resource efficiency. It then considers actions that can be taken in a number of local authority functional areas before concluding with consideration of finance and procurement.

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If so: [Click here to read module 7](#) This module looks at the roles of officers working in environmental protection, trading standards, environmental health, waste, and street cleaning and street scene maintenance.

Are you interested in the role of the planning system in tackling climate change?

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This module considers the role of transport planning and infrastructure, travel plans, fleet management and public transport. It also considers links between air quality management and tackling transport sector carbon emissions.

Are you interested in addressing climate change through the education system?

If so:

[Click here to read module 11](#)

This module looks at ways of reducing carbon emissions in school buildings and through school travel plans. It also considers the role of the school and its teaching in developing awareness of climate change.

Would you like to know how social care professionals can contribute to the alleviation of fuel poverty?

If so:

[Click here to read module 12](#)

This module identifies how social care professionals are well placed to identify people suffering from fuel poverty, and explains how they can participate in fuel poverty referral networks.

Are you interested in the links between economic development and regeneration and climate change mitigation and fuel poverty alleviation?

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This module looks at housing regeneration and also at support for the development of low carbon businesses within the local economy.

Would you like to know more about energy advice?

If so:

[Click here to read module 14](#)

This module looks at how you can develop an energy advice strategy and action plan.

Are you concerned to ensure that climate change mitigation and adaptation work occurs in a co-ordinated way?

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[Click here to read module 15](#)

This module highlights the importance of a co-ordinated approach to mitigation and adaptation, and highlights a few areas where particular care should be taken to ensure that policies that benefit one of these objectives are not detrimental to the other.

Route-map for English county councils

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Route-map for English district councils

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Route-map for Welsh county and county borough councils

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English unitary / London Borough	English county council	English district council	English parish / town council
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Module 1a: The role of local authorities in England

Summary

This report is published by the Secretary of State in compliance with section 3(1)(a) of the Climate Change and Sustainable Energy Act 2006 ('CCSEA'). It sets out measures that could help local authorities tackle climate change and fuel poverty. The measures are those which would or might in the opinion of the Secretary of State have any of the following effects:

- improving efficiency in the use of electricity, heat, gas fuel and other descriptions of sources of energy;
- increasing the amount of electricity generated, or heat produced by microgeneration or otherwise by plant which relies wholly or mainly on low-emissions sources or technologies
- reducing emissions of greenhouse gases
- reducing the number of households in which one or more persons are living in fuel poverty.

In relation to England, the following are local authorities for the purposes of section 3 of the CCSEA:

- a county council
- a district council
- a London borough council
- the Common Council of the City of London in their capacity as a local authority
- the Council of the Isles of Scilly
- a parish council

In this report, a reference to a local authority, is a reference to one of the authorities mentioned above, unless the context otherwise requires. In exercising any of their functions, every local authority must have regard to this report. Whether a local authority has complied with this requirement will ultimately be a matter for the courts to determine.

The Government does not expect local authorities to have to incur additional costs in having regard to this report. The report itself does not therefore impose any unfunded new burdens.

Structure of this report

The main body of the report is set out in thematic modules. This module outlines international and national action to tackle climate change and fuel poverty and summarises the responsibilities that local authorities already have in this area. It then outlines the range of actions that local authorities can take to meet their statutory requirements and the opportunities to show leadership through making important local contributions to tackling the global challenge of climate change.

The overwhelming majority of scientific opinion supports the view that emissions of greenhouse gases (such as carbon dioxide) from human activities (such as the production and use of energy) are

changing the earth's climate and that likely future changes present a serious threat to human society and the natural environment.

In October 2006, the Stern Review of the economics of climate change was published. This assessed the evidence on the impacts of climate change and on the economic costs. The Review concluded that there is still time to avoid the worst impacts of climate change, if action is taken now and in concert with other countries. A key conclusion was that in the long term the cost of inaction would be far higher than the cost of tackling climate change now. Best value authorities must make arrangements to secure continuous improvement in the way in which their functions are exercised, having regard to a combination of economy, efficiency and effectiveness. Taking a preventative and strategic approach to the threats and effects of climate change now should help local authorities meet this overarching duty in the longer term.

The Government's view is therefore that taking urgent action to mitigate the effects of climate change is the only strategy consistent with long-term economic growth and global stability.

Alongside this, the Government remains committed to tackling fuel poverty and minimising the risk of UK households suffering from the associated detrimental health, social and financial effects. Government efforts to remove households from fuel poverty are having a positive impact but there remains much work to be done, in particular following fuel price increases.

Local authorities are uniquely placed to act on climate change mitigation and to alleviate fuel poverty. They can take action on their own estates and housing stock but can also play a key role in motivating the wider community to take action, based on their understanding of local priorities, risks and opportunities.

All parts of the UK will be impacted by climate change and all areas have the potential to benefit from action to tackle it. Improving the quality of housing will help to bring warmer, healthier homes to those people living in fuel poverty. Increasing energy efficiency can save money for individuals and businesses, benefit the fuel poor and reduce emissions of greenhouse gases.

Local authorities already have a number of responsibilities to incorporate climate change and energy policy considerations into the way in which they carry out their powers and functions.

The publication of the Local Government White Paper 2006 signalled a shift in the role of local authorities. Tackling climate change is now recognised as one of the key areas in which local authorities can take on a community leadership role. The new performance framework, detailed in the White Paper will have an appropriate focus on climate change, with the 2007 Comprehensive Spending Review making decisions on national outcomes, indicators and any national targets.

Action on climate change and energy security is an international and national priority

The international science community has reached a consensus on the need to tackle emissions of carbon dioxide and other greenhouse gases so that we avoid the most serious impacts of climate change.

For further information on the science of climate change see the policy makers' summary from the Intergovernmental Panel on Climate Change: www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf

The impacts of climate change in the UK will affect all aspects of our lives and has clear implications for the well being of local communities. The UK Climate Impacts Programme projects that we could have wetter winters, warmer and drier summers and more frequent extreme weather events such as storms and flash flooding. The damage to property and infrastructure from flooding and excessive heat could put a strain on the economy. Changing weather patterns may affect our ability to grow the crops we are used to and may have an impact on the price of basic foodstuffs. Human health will be affected: fewer

people may suffer from cold as winters become milder, but more will be affected by heat in the summer and a range of pests and diseases may become more prevalent.

For further information on the impact of climate change in the UK please refer to the UK Climate Impacts Programme:

www.ukcip.org.uk/climate_impacts/location.asp.

The UK Climate Impacts Programme provides a regional breakdown of potential climate change impacts, which can be accessed here: www.ukcip.org.uk/climate%5Fimpacts/location.asp.

The UK is committed to taking a leadership role as part of wider international efforts to tackle climate change. Under the Kyoto Protocol, an international treaty agreed in 1997, the UK is required to reduce emissions of greenhouse gases by 12.5% below base year levels over the period 2008-12, as part of an overall EU commitment to reduce emissions by 8%. The UK is one of the few countries likely to exceed its Kyoto Protocol commitment. Latest estimates show that total UK greenhouse gas emissions in 2006 had fallen 15% below 1990 levels. The UK is working with other nations to establish an international framework to tackle climate change from 2012 onwards (once the first Kyoto Protocol commitment period comes to an end.)

At the 2007 Spring European Council, EU heads agreed to a common European strategy for energy security and tackling climate change. The agreement commits the EU to a binding target of reducing greenhouse gas emissions by 20% from 1990 levels by 2020 and by 30% in the context of international action. The European Council agreement also sets a target for 20% of the EU's energy to be from renewables by 2020. The target covers the energy to be used in heat and transport, as well as electricity.

The UK is committed to reducing emissions further and in March 2007 published a draft Climate Change Bill. This will put in place statutory national carbon dioxide emissions reduction targets of 26-32% lower than 1990 levels by 2020, and 60% lower by 2050, with a series of 5 year 'carbon budgets' setting out the path to the achievement of this target.

The Energy White Paper published in May 2007 sets out the Government's domestic and international strategy to address the twin challenges of climate change and ensuring secure, clean and affordable energy supplies. If the measures outlined in the White Paper achieve the upper end of the range of savings it would put the UK on track to achieve by 2020 real progress towards our 2050 goal of a 60% cut in carbon dioxide emissions.

The Energy White Paper also sets out the challenges for UK energy security. The UK faces increasing reliance on imports of oil and gas in a world where energy demand is rising and energy is becoming more politicised; and a requirement for substantial, and timely, private sector investment over the next two decades in gas infrastructure, power stations and electricity networks.

Many of the measures to tackle climate change set out in the Energy White Paper will also bring benefits to the UK's security of energy supplies. For example, our efforts to save energy in business, households and the public sector will reduce the need for energy imports by reducing overall demand.

We also need to move towards cleaner energy supplies of heat and electricity

The Energy White Paper noted that while saving energy is often the most cost effective way to reduce emissions, if the UK is to meet its energy policy goals, we also need to move towards cleaner energy supplies of heat and electricity.

In the short and medium term, a combination of new and existing technologies are opening up new possibilities for carbon reduction by producing and using heat and electricity at a local level; that is distributed or decentralised energy. This includes microgeneration, district heating schemes, combined heat and power, and biomass fuelled heating at community and industry scale. The White Paper sets

out a package of existing and additional measures to boost distributed energy. This includes implementation of the Microgeneration Strategy, 'Our Energy Challenge: Power from the people' published in March 2006, which aims to make microgeneration a realistic energy generation source, and taking forward the measures set out in the Review of Distributed Generation, published alongside the White Paper.

Microgeneration refers to the small scale production of heat and/or electricity from a low carbon source. The suite of technologies caught by this definition includes solar, micro-wind, micro-hydro, heat pumps, biomass micro combined heat and power (micro CHP) and small-scale fuel cells. These technologies potentially have much to offer in helping us to achieve our objectives of tackling climate change, ensuring reliable energy supplies and tackling fuel poverty. Local authorities are starting to look at microgeneration technologies as possible measures that could help to tackle fuel poverty, particularly for those households not connected to the grid network. While the costs of installing microgeneration technologies can be relatively high, users of these technologies can enjoy much reduced running costs. Furthermore, the installation of microgeneration technologies in a community setting, including social enterprises, is also important in terms of reducing carbon emissions and engaging the public in tackling climate change.

Eradicating fuel poverty is a key goal for UK energy policy

A household in fuel poverty is defined as any low income household that has to spend more than 10% of its income to maintain an adequate heating regime. Cold and damp homes pose serious health risks, especially to vulnerable individuals such as the elderly, families with children and people with disabilities and long term illnesses. In addition, people living in fuel poverty are at increased risk of many social and mental health problems. This results in an unacceptably poor quality of life for them, and an increased strain on the health and social care sector. Insufficient aid will also exacerbate a widening gap in the equitable distribution of energy efficiency measures throughout the housing stock.

The Warm Homes and Energy Conservation Act 2000 set a statutory obligation on Government to tackle fuel poverty. The UK's fuel poverty strategy, published in 2001, set out how fuel poverty was to be tackled and committed Government to two targets. Firstly it set an interim target to eradicate fuel poverty, as far as reasonably practicable, in vulnerable households in England by 2010 and secondly an ultimate target for all households in England by 2016.

Government and energy supplier programmes have improved the situation for many households, but rising fuel prices have cancelled out some of the progress made. In 2004 the number of vulnerable households in England in fuel poverty was 1 million, down from 4 million in 1996. The impact of rising fuel prices is likely to mean that the number of vulnerable households in fuel poverty in 2007 stands at around 2 million.

Levels of fuel poverty vary from local area to local area. The Centre for Sustainable Energy provides an indicator predicting levels of fuel poverty by local authority area. This can be accessed here:
www.cse.org.uk/cgi-bin/projects.cgi?featured&&1018.

Thriving communities need warm and healthy homes; local identification of households in fuel poverty and signposting to relevant assistance is vital if national targets are to be met. Similarly, national policy measures such as the Warm Front grant scheme offer significant opportunities to increase investment in energy efficiency in fuel poor households.

For further information on fuel poverty policy in England, please refer to the BERR website:
www.berr.gov.uk/energy/fuel-poverty/strategy/index.html and the fuel poverty advisory group:
www.berr.gov.uk/energy/fuel-poverty/fpag/index.html.

Further information on the Government's policies for achieving its climate change targets and its wider energy policy goals are set out in the 2006 Climate Change Programme and the 2007 Energy White Paper: www.defra.gov.uk/environment/climatechange/uk/ukccp/pdf/ukccp06-all.pdf and www.berr.gov.uk/files/file39387.pdf.

National policies both require and support action from local authorities to tackle climate change and fuel poverty

National and international action to tackle climate change also has the potential to have a significant impact on local communities and businesses. For example:

- ❑ Government targets and policy measures, such as its aim for all new homes to be zero carbon by 2016 will drive a significant increase in investment in energy efficiency and low carbon technologies and this could have local economic benefits through the creation of new industries and related supply chains.
- ❑ The need for changes in the way we generate and use energy will need appropriate local infrastructure, for example to support new technologies such as renewable energy or carbon capture and storage. It may also present new opportunities for local communities and individuals to generate and use their own energy.
- ❑ Controlling energy use and greenhouse gas emissions will become increasingly important to local economies as policy measures seek to ensure that the cost of these emissions reflect their impact on the environment.

Local authorities already have responsibilities to act on climate change and energy

Community leadership

The Climate Change Programme 2006 announced a package of measures to support local authorities to take action to tackle climate change. Importantly, the new performance framework, as detailed in the Local Government White Paper 2006, will include an appropriate focus on climate change, with the Comprehensive Spending Review making decisions on national outcomes, indicators and any national targets.

Own estate and operations

The 2007 Energy White Paper confirmed that the Government will implement a mandatory UK cap and trade scheme: the Carbon Reduction Commitment (CRC). The CRC will target emissions from energy use only by organisations whose mandatory half-hourly metered electricity consumption is greater than 6,000MWh per year. This would generally capture organisations with annual electricity bills above £500,000, which is expected to include larger local authorities. The earliest date for introduction of the scheme will be January 2010.

The Climate Change Levy already has an impact on the cost of energy for local authorities. Introduced in April 2001, the levy has increased the cost of all fossil fuels. This increases the financial attractiveness of energy efficiency investments and renewable and low carbon electricity and heat supply options.

The EU Directive on the Energy Performance of Buildings has implications for all building owners, including local authorities. The most noteworthy of these is the requirement to produce an energy performance certificate for every building and for this certificate to be displayed in the case of public buildings. Certification for non-domestic buildings will be rolled out from April 2008.

Planning

The Planning White Paper 2007 sets out a wide ranging package of reform of the planning system. As part of this, the White Paper confirmed that climate change is at the centre of what Government expects from good planning. It also included a commitment to legislate to set out clearly the role of local planning authorities in tackling energy efficiency and climate change.

A number of planning policy statements (including PPS1 on sustainable development, PPS22 on renewable energy, and the draft PPS on climate change) help to define the key role of local planning in helping shape places with lower carbon emissions and resilience to expected climate change impacts.

These national planning policy statements should be taken into account by regional planning bodies in the preparation of regional spatial strategies, and by local planning authorities in the preparation of local development documents. They may also be material to decisions on individual planning applications.

Also, building control officers are responsible for ensuring that new buildings and major refurbishments meet the energy efficiency requirements of Part L of the building regulations.

Housing

In July 2007 the Government published Building a Greener Future: Policy Statement. This confirms the Government's intention for all new homes to be zero carbon by 2016 with major progressive tightening of the carbon performance standards in building regulations in 2010 and 2013. Local authorities have a responsibility to enforce the building regulations. Local authorities will have a key role to play in helping to deliver zero carbon new homes by 2016 by bringing together developers and other organisations such as energy companies.

Local authorities also have responsibilities and duties relating to the existing housing stock. They must seek to ensure that their own housing meets Decent Homes standards. They also have a duty to implement the Housing Health and Safety Rating System (HHSRS) and ensure that action is taken when category 1 hazards, including those related to cold and damp housing, are identified. They should also build upon the existing strategies and targets already developed by energy conservation authorities (local authorities with housing responsibilities) in response to the Home Energy Conservation Act 1995 (HECA).

Transport

Most local transport authorities have prepared a 5 year Local Transport Plan (LTP) under the Transport Act 2000, and are now leading the implementation of these plans. The implementation of LTPs should take account of national climate change objectives and have regard to the climate change impacts of transport. The Government is keen for local authorities to take action to tackle climate change within this framework.

For further information on the policy and legal framework for local government action in all the areas mentioned above, please contact Practical help: Tel: 0870 241 2089, email: practicalhelp@est.org.uk.

There are many opportunities for further action

Local authorities have a wide range of opportunities for action both in response to existing duties and also in their community leadership role. Many of these are linked to the way existing functions are carried out. Others may involve new initiatives that can be supported by use of the well-being power.

The Local Government Act 2000 introduced a power to promote 'well-being'. This discretionary power enables a local authority to do anything it considers likely to promote or improve the economic, social or environmental well-being of its area, provided that such action is not expressly forbidden elsewhere in legislation.

The financial framework

The Local Government Act 2003 provided a new power for best value authorities to charge for discretionary services and enables new trading powers to be conferred on such authorities. A Trading Order made in 2004 provided a power to trade to those local authorities which had been categorised on the basis of their performance as 'excellent', 'good' or 'fair'. A further Amendment Order in 2006 provided a power to trade to those authorities whose performance had been categorised as '4 stars', '3 stars', '2 stars' and '1 star'. The power to trade is only exercisable through a company. In addition there are conditions laid down in the Trading Order requiring the prior preparation and approval of a business

case and the recovery of any costs incurred by the authority in anything it supplies to a company through which the trading power is exercised. The trading power may be exercised in conjunction with an activity or service whose primary purpose is to achieve the promotion of well-being. This may permit authorities to use these powers to promote activities which are aimed at mitigating climate change and alleviating fuel poverty.

The 2003 Act also introduced the prudential capital finance system for local government. Local authorities are now free to borrow for capital investment without Government consent, provided they can afford to service the debt out of their own resources. That enables them to pay for capital projects in addition to those specifically supported by the Government. The system particularly encourages authorities to explore self-funding schemes, which will generate savings covering all or most of the borrowing costs. Such schemes could include those designed to increase energy efficiency in the council's own estate and operations.

The Climate Change and Sustainable Energy Act 2006 also empowers parish councils in England and community councils in Wales to encourage or promote energy-saving measures. It includes a power for parish councils and community councils to provide information, advice and assistance, including financial assistance. Any expenditure using this power is to be treated as if incurred under section 137 of the Local Government Act 1972 and will count towards the limits placed on expenditure by that Act.

A summary of the main opportunities is given below. Further details can be found in other modules within this report.

Not all areas are relevant for all tiers of local government. The colour coding next to the headings below indicates relevance as follows:

- = Unitary authorities
- = County councils
- = District councils
- = Parish councils

Community leadership

Through the Sustainable Community Strategy, the Local Area Agreement and the Local Strategic Partnership, local authorities can work with other public and private agencies, voluntary groups and the wider community to help cut overall emissions from their area and develop an integrated response to climate change mitigation and adaptation. Local authorities can directly engage with and educate communities about climate change and facilitate local action. They can also explore use of fiscal incentives to deliver behavioural change.

Community planning



This can include supporting and challenging communities to act on reducing carbon dioxide emissions, adapting to the impacts of climate change and building climate change actions into local strategic plans. Community, including neighbourhood and parish, plans can also formalise a local commitment to tackling fuel poverty. Setting targets and publicising achievements can help to motivate staff and the community.

Schools and education



Interest in the environment can be encouraged from a very early age and local authorities can work with education providers in their area to ensure that children and young people are engaged with the issues. It is important that energy use in school buildings is managed efficiently and options for renewable energy and energy efficient refurbishment are explored, especially as school buildings are prominent buildings in their local communities. The government is currently investing in a major capital programme for schools which presents a major opportunity to significantly reduce energy demand and carbon dioxide emissions through energy efficiency measures and renewable / low carbon energy

technologies. School communities (parents, teachers, governors) can be targeted to promote climate change education, energy efficiency refurbishment and renewable energy installation schemes.

Transport in the community



Local authorities can work to ensure that all communities have good access to public transport links and to promote the greater use of existing public transport. Local authorities can also facilitate less reliance on private cars through the promotion of walking and cycling routes. A variety of mechanisms are available, including green travel planning for schools and businesses, encouraging car sharing schemes, offering free parking to car clubs, and setting up walking bus schemes for primary schools.

Own estate and operations

Local authorities are large employers and major consumers of energy and other resources. Through better management of transport, waste, buildings, the public realm and parks, local authorities can cut emissions and save money. They can also consider how their estate can be better adapted to the changing climate. Local authorities are in a good position to use their purchasing power to contribute towards the development of a low carbon economy, by including energy and materials efficiency as a key element in procurement decision-making.

Civic and amenity buildings



Local authorities can make best use of resources and at the same time contribute to reducing carbon dioxide emissions by implementing good practice energy management for each of the buildings and facilities they own / lease. This can include procurement of energy and energy using equipment, and implementing energy efficient working practices.

Council housing



In addition to reaching the Decent Homes Standard, there is further work that can be done to reduce carbon emissions from council-owned homes and also to reduce the risk of families in them suffering from fuel poverty. This includes greater levels of energy efficiency, use of renewable and low carbon energy generation technologies, and provision of energy advice to tenants.

Waste



Aiming to reduce waste is a key element of a local authority's approach to efficient resource management. Options for recycling and the potential for generating energy from waste can be explored. Where waste goes to landfill, schemes for collecting and using the landfill gas can make a significant contribution in reducing emissions of methane which has a global warming potential 21 times that of carbon dioxide over a 100 year time horizon.

Transport



As operators of (large) fleets of vehicles, local authorities can ensure that measures are taken to minimise the carbon dioxide emissions of their transport activities. This may involve ensuring that fuel efficiency is a key consideration when procuring council vehicles, encouraging the adoption of energy efficient driving practices by staff when using council vehicles, as well as encouraging and incentivising alternatives to single occupancy car use, including car sharing, public transport use, and walking and cycling.

Public land



Through thoughtful management of open spaces, local authorities can also reduce energy and other resource requirements for maintenance and indirectly contribute to energy conservation by providing local leisure facilities and attractive spaces for walking and cycling to encourage people to use sustainable modes of transport for short journeys.

Local authorities can take part in the Carbon Trust's Partnership for Renewables and demonstrate leadership to local residents by working with the private sector on renewable energy projects on public land.

Finance and procurement



Local authorities can use prudential borrowing to fund investments in energy efficiency that lead to reductions in operating costs. A focus on lifetime costs rather than simply on capital cost will facilitate optimal investment decisions.

Local government wields significant purchasing power, and inclusion of sustainability criteria in procurement decisions can have a positive impact not only on the authority's own emissions and costs but also on the extent to which sustainable options for goods and services are offered to the market.

Service delivery

Many local authority services have a direct and crucial role to play in reducing carbon dioxide emissions and tackling fuel poverty, particularly services related to housing, other buildings and transport. There are also a number of other service areas that can play a role, as a small part of their existing work, in meeting climate change and fuel poverty aims.

Planning

Planning policy



Planning has an important role to play in helping shape places with lower carbon emissions and which are resilient to the climate change that is now accepted as inevitable. The Government has consulted on a draft Planning Policy Statement on Climate Change with a view to publishing the final PPS and supporting practice guide later this year.

Housing

Social housing



Local authorities can play several roles in the improvement of social housing. Tackling council-owned housing is discussed under 'own estate' above. For other social housing, councils have a dual role: enforcement of the thermal comfort elements of the HHSRS, and partnership working with social landlords to encourage achievement of Decent Homes standards, progress beyond these minimum standards in existing homes and deployment of best practice for new developments.

Private sector housing



Local authorities can play an important role in tackling the causes of climate change by encouraging improvements in energy efficiency and increased use of renewable and low carbon technologies in private sector housing.

Action to reduce or prevent fuel poverty can include working in partnership with national schemes to improve the energy efficiency of housing, educating vulnerable residents and communities and promoting opportunities for the use of renewable energy and combined heat and power.

Local authorities can also raise awareness of climate change issues in local communities and can develop schemes to improve energy efficiency for all private householders. Partnership working with a wide range of local and national stakeholders can be very useful in this area.

Building control



The building control system plays an important role in delivering more sustainable buildings through a number of its requirements including those in Part L, which sets standards for conserving fuel and power and minimising heat loss. The Government is committed to increasing the standards in Part L by 25% in 2010, 44% in 2013 and then moving to zero carbon in 2016.

Transport

Transport planning



Transport planning can encourage greater use of public transport and facilitate less reliance on private cars through promoting walking and cycling routes and through exploring methods for delivering behavioural change (for example use of parking charges).

Passenger transport

●(not London)●

Local authorities can help to ensure that carbon dioxide emissions from passenger transport are minimised through ensuring that individual vehicle and overall energy use is a consideration in the procurement of passenger transport services.

Local transport issues



Councils can work to ensure that all communities have good access to public transport links and to promote the greater use of existing public transport. They can also facilitate less reliance on private cars through the promotion of walking and cycling. Such changes will result in local environmental improvements as well as contributing to climate change mitigation.

Reducing congestion



Through bus priority measures, pedestrianisation, local road pricing and other schemes, local authorities can encourage the use of public transport. Local authorities can also pay regard to the carbon dioxide impact of other traffic calming policies. Good traffic management will also help reduce carbon dioxide emissions through keeping traffic flowing.

Environment

Environmental health



The work of these officers on HHSRS enforcement can be enhanced by co-ordination with overall council activity on fuel poverty, particularly in cases where need is identified but a category 1 hazard is not present, or where enforcement action is thought potentially ineffective or inappropriate.

Waste collection



Local authorities can ensure that the reduction of energy use is a primary factor in their waste collection strategy. A major factor in reducing energy use from waste collection will be to minimise the level of waste. This will reduce both the level of waste transportation and the levels of greenhouse gas emissions resulting from landfill. Encouraging energy efficient recycling, composting and the reduced use of packaging is also part of meeting this objective. Local authorities can also seek to minimise the energy use of waste collection vehicles and other facilities.

Waste disposal/recovery



Local authorities can reduce the environmental impact of waste disposal/recovery. Preventing waste at source by working with communities and businesses may be combined with stimulating and utilising markets for recyclates. Where waste is incinerated, options for generating energy from waste can be considered.

Social care



Officers working in social care are in an ideal position to assist in identifying vulnerable individuals suffering from fuel poverty and referring them on to local and national sources of help. Ensuring affordable warmth for these people can have knock-on benefits in improving the individual's ability to tackle other problems they are facing.

Economic development and regeneration



The delivery of carbon emissions reductions and fuel poverty alleviation offers opportunities for local business development. Local authorities can support the development of these businesses and can also work with them to encourage local workers to develop new skills.

When dealing with regeneration, local authorities can have a large influence over the extent to which energy use is given priority in projects and schemes. Local authorities can ensure that energy efficiency and renewable or low carbon energy criteria are included in funding programmes.

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 1b: The role of local authorities in Wales

Summary

This report is published by the Secretary of State in compliance with section 3(1)(a) of the Climate Change and Sustainable Energy Act 2006 ('CCSEA'). It sets out measures that could help local authorities tackle climate change and fuel poverty. The measures are those which would or might in the opinion of the Secretary of State have any of the following effects:

- improving efficiency in the use of electricity, heat, gas fuel and other descriptions of sources of energy;
- increasing the amount of electricity generated, or heat produced by microgeneration or otherwise by plant which relies wholly or mainly on low-emissions sources or technologies
- reducing emissions of greenhouse gases
- reducing the number of households in which one or more persons are living in fuel poverty.

The following are local authorities for the purposes of section 3 of the CCSEA:

- a county council
- a district council
- a London borough council
- the Common Council of the City of London in their capacity as a local authority
- the Council of the Isles of Scilly
- a parish council

In this report, a reference to a local authority, is a reference to one of the authorities mentioned above, unless the context otherwise requires. In exercising any of their functions, every local authority must have regard to this report. Whether a local authority has complied with this requirement will ultimately be a matter for the courts to determine.

The Government does not expect local authorities to have to incur additional costs in having regard to this report. The report itself does not therefore impose any unfunded new burdens.

Structure of this report

The main body of the report is set out in thematic modules. This module outlines international and national action to tackle climate change and fuel poverty and summarises the responsibilities that local authorities already have in this area. It then outlines the range of actions that local authorities can take to meet their statutory requirements and the opportunities to show leadership through making important local contributions to tackling the global challenge of climate change.

The overwhelming majority of scientific opinion supports the view that emissions of greenhouse gases (such as carbon dioxide) from human activities (such as the production and use of energy) are changing the earth's climate and that likely future changes present a serious threat to human society and the natural environment.

In October 2006, the Stern Review of the economics of climate change was published. This assessed the evidence on the impacts of climate change and on the economic costs. The Review concluded that there is still time to avoid the worst impacts of climate change, if action is taken now and in concert with other countries. A key conclusion was that in the long term the cost of inaction would be far higher than the cost of tackling climate change now. Best value authorities must make arrangements to secure continuous improvement in the way in which their functions are exercised, having regard to a combination of economy, efficiency and effectiveness. Taking a preventative and strategic approach to the threats and effects of climate change now should help local authorities meet this overarching duty in the longer term.

The UK Government's and the Welsh Assembly Government's view is therefore that taking urgent action to mitigate the effects of climate change is the only strategy consistent with long-term economic growth and global stability.

Alongside this, the UK Government and the Welsh Assembly Government remain committed to tackling fuel poverty and minimising the risk of UK households suffering from the associated detrimental health, social and financial effects. Government efforts to remove households from fuel poverty are having a positive impact but there remains much work to be done, particularly following fuel price increases.

Local authorities are uniquely placed to act on climate change mitigation and alleviate fuel poverty. They can take action on their own estates and housing stock but can also play a key role in motivating the wider community to take action, based on their understanding of local priorities, risks and opportunities.

All parts of the UK will be impacted by climate change and all areas have the potential to benefit from action to tackle it. Improving the quality of housing will help to bring warmer, healthier homes to those people living in fuel poverty. Increasing energy efficiency can save money for individuals and businesses, benefit the fuel poor and reduce emissions of greenhouse gases.

Local authorities already have a number of responsibilities to incorporate climate change and energy policy considerations into the way in which they carry out their powers and functions.

Action on climate change and energy security is an international and national priority

The international science community has reached a consensus on the need to tackle emissions of carbon dioxide and other greenhouse gases so that we avoid further negative impacts of climate change.

For further information on the science of climate change see the policy makers summary from the Intergovernmental Panel on Climate Change: www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf

The impacts of climate change in the UK will affect all aspects of our lives and has clear implications for the well being of local communities. The UK Climate Impacts Programme projects that we could have wetter winters, warmer and drier summers and more frequent extreme weather events such as storms and flash flooding. The damage to property and infrastructure from flooding and excessive heat could put a strain on the economy. Changing weather patterns may affect our ability to grow the crops we are used to and may have an impact on the price of basic foodstuffs. Human health will be affected: fewer people may suffer from cold as winters become milder, but more will be affected by heat in the summer and a range of pests and diseases may become more prevalent.

For further information on the impact of climate change in the UK please refer to the UK Climate Impacts Programme:
www.ukcip.org.uk/climate_impacts/location.asp.

The UK Climate Impacts Programme provides a regional breakdown of potential climate change impacts, which can be accessed here: www.ukcip.org.uk/climate%5Fimpacts/location.asp.

The UK is committed to taking a leadership role as part of wider international efforts to tackle climate change. Under the Kyoto Protocol, an international treaty agreed in 1997, the UK is required to reduce emissions of greenhouse gases by 12.5% below base year levels over the period 2008-12, as part of an overall EU commitment to reduce emissions by 8%. The UK is one of the few countries likely to exceed its Kyoto Protocol commitment. Latest estimates show that total UK greenhouse gas emissions in 2006 had fallen 15% below 1990 levels. The UK is working with other nations to establish an international framework to tackle climate change from 2012 onwards (once the first Kyoto Protocol commitment period comes to an end.)

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The Energy White Paper also sets out the challenges for UK energy security. The UK faces increasing reliance on imports of oil and gas in a world where energy demand is rising and energy is becoming more politicised; and a requirement for substantial, and timely, private sector investment over the next two decades in gas infrastructure, power stations and electricity networks.

Many of the measures to tackle climate change set out in the Energy White Paper will also bring benefits to the UK's security of energy supplies. For example, our efforts to save energy in business, households and the public sector will reduce the need for energy imports by reducing overall demand.

The Environment Strategy for Wales is the Assembly Government's long term strategy for the environment of Wales, setting the strategic direction for the next 20 years and places addressing climate change at the centre of priorities. The strategy can be found here:

<http://new.wales.gov.uk/topics/environmentcountryside/epg/Envstratforwales/?lang=en>

We also need to move towards cleaner energy supplies of heat and electricity

The Energy White Paper noted that while saving energy is often the most cost effective way to reduce emissions, if the UK is to meet its energy policy goals, we also need to move towards cleaner energy supplies of heat and electricity.

In the short and medium term, a combination of new and existing technologies are opening up new possibilities for carbon reduction by producing and using heat and electricity at a local level; that is distributed or decentralised energy. This includes microgeneration, district heating schemes, combined heat and power, and biomass fuelled heating at community and industry scale. The White Paper sets out a package of existing and additional measures to boost distributed energy. This includes implementation of the Microgeneration Strategy, 'Our Energy Challenge: Power from the people'

published in March 2006, which aims to make microgeneration a realistic energy generation source, and taking forward the measures set out in the Review of Distributed Generation, published alongside the White Paper.

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Eradicating fuel poverty is a key goal for UK energy policy

A household in fuel poverty is defined as any low income household that has to spend more than 10% of its income to maintain an adequate heating regime. Cold and damp homes pose serious health risks, especially to vulnerable individuals such as the elderly, families with children and people with disabilities and long term illnesses. In addition, people living in fuel poverty are at increased risk of many social and mental health problems. This results in an unacceptably poor quality of life for them, and an increased strain on the health and social care sector. Insufficient aid will also exacerbate a widening gap in the equitable distribution of energy efficiency measures throughout the housing stock.

The Warm Homes and Energy Conservation Act 2000 set a statutory obligation on Government to tackle fuel poverty. A Fuel Poverty Commitment for Wales, published in March 2003, set out formal proposals to meet the requirements of the Act and to ensure that as far as reasonably practical no household in Wales should live in fuel poverty beyond 2018. The Commitment includes three targets. Firstly, it sets an interim target to eradicate fuel poverty in vulnerable households as far as is practicable by 2010; secondly a target of ending fuel poverty in non-vulnerable households in social housing by 2012; and finally that, as far as reasonably practicable, no household in Wales should be living in fuel poverty beyond 2018.

The Fuel Poverty Commitment for Wales gives priority to households who are deemed to be vulnerable to the effects of living in cold, damp homes. Households that are particularly likely to be fuel poor are those living in private rented accommodation, single person households, households in which the oldest person is over pension age and economically inactive households. In 2004, 134,000 households were estimated to be fuel poor in Wales.

The Home Energy Efficiency Scheme (HEES) is the Assembly's main mechanism for tackling fuel poverty, and offers insulation and heating measures to households on qualifying benefits. 75,000 homes have received energy efficiency measures and £74m has been spent since the scheme came under the control of the Assembly in June 2000. HEES allocates funding to social housing via an annual bidding process. This is in recognition of the need for local authorities to invest in energy efficiency measures to improve their stock and meet the requirements of the Welsh Housing Quality Standard.

Analysis of the Living in Wales survey shows that the total number of households in Wales in fuel poverty in 2004 was 130,000, which represented 11% of all Welsh households.

Thriving communities need warm and healthy homes; local identification of households in fuel poverty and signposting to relevant assistance is vital if national targets are to be met. Similarly, national policy measures such as the Home Energy Efficiency Scheme offer significant opportunities to increase investment in energy efficiency in fuel poor households.

For further information on fuel poverty policy in Wales, please refer to the Welsh Assembly Government's website:

<http://new.wales.gov.uk/topics/housingandcommunity/housing/energyandfuel/?lang=en>.

Further information on the Government's policies for achieving its climate change targets and its wider energy policy goals are set out in the 2006 Climate Change Programme and the 2007 Energy White Paper: www.defra.gov.uk/environment/climatechange/uk/ukccp/pdf/ukccp06-all.pdf and www.berr.gov.uk/files/file39387.pdf.

National policies both require and support action from local authorities to tackle climate change and fuel poverty

National and international action to tackle climate change also has the potential to have a significant impact on local communities and businesses. For example:

- ❑ Government targets and policy measures, such as its aim for all new homes to be zero carbon by 2016, will drive a significant increase in investment in energy efficiency and low carbon technologies and this could have local economic benefits through the creation of new industries and related supply chains.
- ❑ The need for changes in the way we generate and use energy will need appropriate local infrastructure, for example to support new technologies such as renewable energy or carbon capture and storage. It may also present new opportunities for local communities and individuals to generate and use their own energy.
- ❑ Controlling energy use and greenhouse gas emissions will become increasingly important to local economies as policy measures seek to ensure that the cost of these emissions reflect their impact on the environment.

Local authorities already have responsibilities to act on climate change and energy

Community leadership

Strong local leadership is going to be vital to national efforts to tackle climate change and fuel poverty. All sections of the community are going to have to contribute, through increased energy efficiency and increasing the use of renewable and low carbon technologies. A local authority is in an excellent position to encourage such action. Equally, a local authority is in an ideal position to bring together organisations and facilitate the tackling of fuel poverty.

Own estate and operations

The 2007 Energy White Paper confirmed that the UK Government will implement a mandatory UK cap and trade scheme: the Carbon Reduction Commitment (CRC). The CRC will target emissions from energy use only by organisations whose mandatory half-hourly metered electricity consumption is greater than 6,000MWh per year. This would generally capture organisations with annual electricity bills above £500,000, which is expected to include larger local authorities. The earliest date for introduction of the scheme will be January 2010.

The Climate Change Levy already has an impact on the cost of energy for local authorities. Introduced in April 2001, the Levy has increased the cost of all fossil fuels. This increases the financial attractiveness of energy efficiency investments and renewable and low carbon electricity and heat supply options.

The EU Directive on the Energy Performance of Buildings has implications for all building owners, including local authorities. The most noteworthy of these is the requirement to produce an energy

performance certificate for every building and for this certificate to be displayed in the case of public buildings. Certification for non-domestic buildings will be rolled out from April 2008.

Planning

Planning Policy Wales (PPW) sets out the Welsh Assembly Government's planning policies. It provides the strategic policy framework for sustainable development delivered through the planning system by local planning authorities in Wales. It contains comprehensive national policy on a range of topics, including energy and infrastructure. PPW is supplemented by a series of Technical Advice Notes (TANS) containing more detailed technical guidance.

Published in 2005, TAN 8 Planning for Renewable Energy, contains advice on the planning implications of a wide range of renewable technologies, from onshore wind and hydro-power to solar thermal and voltaic systems.

TAN 8 also outlines how the Assembly Government's renewable energy targets for 800MW of additional installed capacity from onshore wind and 200MW from offshore wind power and other renewable technologies will be met.

Recognising that onshore wind power offers the greatest potential, seven Strategic Search Areas (SSAs) suitable for large scale (over 25MW) onshore wind projects have been identified in Wales. The TAN allows local planning authorities (LPAs) to make minor adjustments to the boundaries of the SSAs, when translating them into their local development plans. Outside SSAs smaller, domestic or community windfarms under 5MW may be appropriate. Windfarms up to 25MW may be appropriate on urban/industrial brownfield sites. TAN 8 is available on the Welsh Assembly's website at <http://new.wales.gov.uk/about/departments/depc/epcpublications/PlanPubs/TAN/TAN8?lang=en>.

The Welsh Assembly Government issued a consultation document in December 2006, comprising a draft Ministerial Interim Planning Policy Statement on Climate Change and draft Climate Change Compendium, outlining the role of the planning system in tackling climate change. It proposed amendments to national policy – to PPW – to strengthen it, and introduced a requirement for LPAs to include a policy in their local development plans to secure reductions in carbon dioxide emissions. Publication of the final Ministerial Interim Planning Policy Statement and accompanying technical compendium is scheduled for early 2008.

It is also intended to bring forward secondary legislation by next Spring (2008) as follows:

- ❑ To amend the Town and Country Planning (General Permitted Development) Order 1995 to facilitate those householders who wish to install micro-generation equipment on their properties; and
- ❑ To introduce a new requirement for Design Statements to be submitted with planning applications, so ensuring that the sustainability implications of the proposed development are considered from the outset. Detailed guidance and training for LPAs will accompany their introduction.

LPAs in Wales should also take account of the Welsh Assembly Government's proposals for moving towards zero carbon buildings (see below).

Housing

The Welsh Assembly has recently announced an aspirational zero carbon target for all new buildings by 2011 and in the meantime requires the BREEAM 'Excellent' standard or equivalent for all new buildings that it funds or that are built on land disposed of by the Assembly Government.

The Welsh Housing Quality Standard sets standards for and is applicable to all social housing. The Welsh Assembly Government expects all social landlords in Wales to adopt the Standard and to devise realistic programmes for bringing all their properties up to it by the end of 2012.

Local authorities have a duty to implement the Housing Health and Safety Rating System and ensure that action is taken when category 1 hazards, including those related to cold and damp housing, are identified. They should also build upon the existing strategies and targets already developed by energy conservation authorities (local authorities with housing responsibilities) in response to the Home Energy Conservation Act 1995 (HECA).

Development quality requirements (DQR) are the published design standards for all housing, built or refurbished, by registered social landlords (RSL) in Wales when using a social housing grant (SHG) provided by the social housing regulator, the Welsh Assembly Government.

Transport

The Transport (Wales) Act 2006 requires the Welsh Assembly Government to produce a Wales Transport Strategy. Towards this aim, the Welsh Assembly Government is currently preparing the Wales Transport Strategy that will set out the role of transport in delivering the wider policy agenda through integrating transport with spatial planning, economic development, education, health, social services, environment and tourism. The Wales Transport Strategy is not merely about planning transport in the traditional sense, but also seeks to influence policy decisions in other areas through consideration of the transport impacts. Following the Wales Transport Strategy, the Welsh Assembly Government will produce National Transport Plans setting out in more detail how it will be delivered and will expect Regional Transport Plans to work towards delivering the same outcomes.

Further information on the draft Wales Transport Strategy can be found here:

<http://wales.gov.uk/consultations/closed/busandeconclocons/con-bus-transstrategy/?lang=en>.

For further information on the policy and legal framework for local government action in all the areas mentioned above, please contact Practical help: Tel: 0870 241 2089, email: practicalhelp@est.org.uk.

There are many opportunities for further action

Local authorities have a wide range of opportunities for action both in response to existing duties and also in their community leadership role. Many of these are linked to the way existing functions are carried out. Others may involve new initiatives that can be supported by use of the well-being power.

The Local Government Act 2000 introduced a power to promote 'well-being'. This discretionary power enables a local authority to do anything it considers likely to promote or improve the economic, social or environmental well-being of its area, provided that such action is not expressly forbidden elsewhere in legislation.

The financial framework

The Local Government Act 2003 introduced a power to trade in the provision of goods and services, for local authorities in England with a CPA rating of 1 star or above (previously for those with a rating of 'fair' or above). The power is available to all local authorities in Wales without qualification. It also enabled all local authorities to charge for discretionary services. There are limitations on these powers to trade and charge: trading activity (but not charging) must be carried out through a company and a local authority cannot charge for, or trade in, services that it is required to provide to the person in question. These powers, when combined with the well-being power, can be used to enable a range of climate change mitigation and fuel poverty alleviation activities.

The 2003 Act also introduced the ability for local authorities to use prudential borrowing. This can be very useful in supporting plans to increase energy efficiency in the council's own estate and operations.

The Climate Change and Sustainable Energy Act 2006 also empowers parish councils in England and community councils in Wales to encourage or promote energy-saving measures. It includes a power for parish councils and community councils to provide information, advice and assistance, including financial assistance. Any expenditure using this power is to be treated as if incurred under section 137 of the Local Government Act 1972 and will count towards the limits placed on expenditure by that Act.

A summary of some of the main opportunities is given below. Further details can be found in other modules within this report.

Not all areas are relevant for all tiers of local government. The colour coding next to the headings below indicates relevance as follows:

● = Unitary authorities

● = Town and community councils

Community leadership

Through the Community Strategy, local authorities can work with other public and private agencies, voluntary groups and the wider community to help cut overall emissions from their area and develop an integrated response to climate change adaptation. Local authorities can directly engage with and educate communities about climate change and facilitate local action. They can also explore use of fiscal incentives to deliver behavioural change.

Community planning

● This can include supporting and challenging communities to act on reducing carbon dioxide emissions, adapting to the impacts of climate change and building climate change actions into local strategic plans. Community plans can also formalise a local commitment to tackling fuel poverty.

Schools and education

● Interest in the environment can be encouraged from a very early age and local authorities can work with education providers in their area to ensure that children and young people are engaged with the issues. It is important that energy use in school buildings is managed efficiently and options for renewable energy and energy efficient refurbishment are explored, especially as school buildings are prominent buildings in their local communities. The government is currently investing in a major capital programme for schools which presents a major opportunity to significantly reduce energy demand and carbon dioxide emissions through energy efficiency measures and renewable / low carbon energy technologies. School communities (parents, teachers, governors) can be targeted to promote climate change education, energy efficiency refurbishment and renewable energy installation schemes.

Transport in the community

● Local authorities can work to ensure that all communities have good access to public transport links and to promote the greater use of existing public transport. Local authorities can also facilitate less reliance on private cars through the promotion of walking and cycling routes. A variety of mechanisms are available, including green travel planning for schools and businesses, encouraging car sharing schemes, offering free parking to car clubs, and setting up walking bus schemes for primary schools.

Own estate and operations

Local authorities are large employers and major consumers of energy and other resources. Through better management of transport, waste and buildings, local authorities can cut emissions and save money. They can also consider how their estate can be better adapted to the changing climate. Local authorities are in a good position to use their purchasing power to contribute towards the development of a low carbon economy, by including energy and materials efficiency as a key element in procurement decision-making.

Civic and amenity buildings

●● Local authorities can make best use of resources and at the same time contribute to reducing carbon dioxide emissions by implementing good practice energy management for each of the buildings and facilities they own / lease. This can include procurement of energy and energy using equipment, and implementing energy efficient working practices.

Council housing

●

In addition to complying with the Welsh Housing Quality Standard there is further work that can be done to reduce carbon emissions from these homes and also to reduce the risk of families in them suffering from fuel poverty. This includes greater levels of energy efficiency, use of renewable and low carbon energy generation technologies, and provision of energy advice to tenants.

Waste



Aiming to reduce waste is a key element of a local authority's approach to efficient resource management. Options for recycling and the potential for generating energy from waste can be explored. Where waste goes to landfill, schemes for collecting and using the landfill gas can make a significant contribution in reducing emissions of methane which has a global warming potential 21 times that of carbon dioxide over a 100 year time horizon.

Transport



As operators of (large) fleets of vehicles, local authorities can ensure that measures are taken to minimise the carbon dioxide emissions of their transport activities. This may involve ensuring that fuel efficiency is a key consideration when procuring council vehicles, encouraging energy efficient driving practices, as well as incentivising car sharing policies among staff and promoting walking and cycling together with the public transport where possible

Finance and procurement



Local authorities can use prudential borrowing to fund investments in energy efficiency that lead to reductions in operating costs. A focus on lifetime costs rather than simply on capital cost will facilitate optimal investment decisions.

Local government wields significant purchasing power, and inclusion of sustainability criteria in procurement decisions can have a positive impact not only on the authority's own emissions and costs but also on the extent to which sustainable options for goods and services are offered to the market.

Extensive advice and guidance, including on the Sustainable Procurement Assessment Framework and the Sustainable Risk Assessment Framework, for local authorities in Wales is available through the Value Wales Procurement Route Planner, which can be found at www.buy4wales.co.uk.

Service delivery

Many local authority services have a direct and crucial role to play in reducing carbon dioxide emissions and tackling fuel poverty, for example services related to housing, other buildings and transport. There are also a number of other service areas that can play a role, as a small part of their existing work, in meeting climate change and fuel poverty aims.

Planning

Planning policy



Planners can work with developers to ensure that all developments minimise their impact on climate change and promote the sustainable functioning of communities. This includes working with developers to encourage the use of renewable and low carbon energy technologies and energy efficiency in new developments that exceeds Building Regulations requirements.

Development control



The planning consent process offers the opportunity for local authority officers to educate developers on the benefits of sustainable energy measures, and to encourage investment beyond the minimum requirements. Planners also have a role to play in ensuring that new and refurbished infrastructure is resilient to a changing climate.

Building control



In addition to enforcing building regulations, there is also the opportunity for officers to encourage greater energy efficiency than is required by the minimum standard by offering information and advice to interested parties.

Housing

Social housing



Local authorities can play several roles in the improvement of social housing. Tackling council-owned housing has been discussed under 'own estate' above. For other social housing councils can work in partnership with social landlords to encourage progress beyond minimum standards in existing homes and deployment of best practice for new developments.

Private sector housing



Local authorities can play an important role in tackling the causes of climate change by encouraging improvements in energy efficiency and increased use of renewable and low carbon technologies in private sector housing.

Action to reduce or prevent fuel poverty can include working in partnership with national schemes to improve the energy efficiency of housing, educating vulnerable residents and communities and promoting opportunities for the use of renewable energy and combined heat and power.

Local authorities can also raise awareness of climate change issues in local communities and can develop schemes to improve energy efficiency for all private householders. Partnership working with a wide range of local and national stakeholders can be very useful in this area.

Transport

Transport planning



Transport planning can encourage greater use of public transport and facilitate less reliance on private cars through promoting walking and cycling routes and through exploring the use of fiscal incentives to deliver behavioural change.

Passenger transport



Local authorities can help to ensure that carbon dioxide emissions from passenger transport are minimised through ensuring that individual vehicle and overall energy use is a consideration in the procurement of passenger transport services.

Local transport issues



Councils can work to ensure that all communities have good access to public transport links and to promote the greater use of existing public transport. They can also facilitate less reliance on private cars through the promotion of walking and cycling. Such changes will result in local environmental improvements as well as contributing to climate change mitigation.

Reducing congestion



Through bus priority measures, pedestrianisation, local road pricing and other schemes, local authorities can encourage the use of public transport. Local authorities can also pay regard to the carbon dioxide impact of other traffic calming policies, for example, by ensuring that by-pass schemes do not encourage out of town developments that may harm the vitality of town centres and promote a

greater level of car dependency. Good traffic management will also help reduce carbon dioxide emissions through keeping traffic flowing.

Environment

Environmental health



The work of these officers on HHSRS enforcement can be enhanced by co-ordination with overall council activity on fuel poverty, particularly in cases where need is identified but a category 1 hazard is not present, or where enforcement action is thought potentially ineffective or inappropriate.

Waste collection



Local authorities can ensure that the reduction of energy use is a primary factor in their waste collection strategy. A major factor in reducing energy use from waste collection will be to minimise the level of waste. This will reduce both the level of waste transportation and the levels greenhouse gas emissions resulting from landfill. Encouraging energy efficient recycling, composting and the reduced use of packaging is also part of meeting this objective. Local authorities can also seek to minimise the energy use of waste collection vehicles and other facilities.

Waste disposal/recovery



Local authorities can reduce the environmental impact of waste disposal/recovery. Preventing waste at source by working with communities and businesses may be combined with stimulating and utilising markets for recyclates. Where waste is incinerated, options for generating energy from waste can be considered.

Social care



Officers working in social care are in an ideal position to assist in identifying vulnerable individuals suffering from fuel poverty and referring them on to local and national sources of help. Ensuring affordable warmth for these people can have knock-on benefits in improving the individual's ability to tackle other problems they are facing.

Economic development and regeneration



The delivery of carbon emissions reductions and fuel poverty alleviation offers opportunities for local business development. Local authorities can support the development of these businesses and can also work with them to encourage local workers to develop new skills.

When dealing with regeneration, local authorities can have a large influence over the extent to which energy use is given priority in projects and schemes. Local authorities can ensure that energy efficiency and renewable or low carbon energy criteria are included in funding programmes.

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 2: Key sources of advice and support

Summary

There are various sources of advice and support that local authorities can access when thinking about how they could contribute to tackling climate change and fuel poverty. The major sources of this advice are described briefly here. In each module of this report, relevant sources of additional information are referred to as appropriate.

Key sources

The Energy Saving Trust

The Energy Saving Trust's (www.energysavingtrust.org.uk/housingbuildings/localauthorities/) remit covers sustainable energy in housing and transport, and its Practical help service (0870 241 2089, practicalhelp@est.org.uk) is a dedicated service for local authorities and housing associations that offers a range of information on sustainable energy. The Energy Saving Trust also manages the Housing Energy Efficiency Best Practice Programme, the national network of Energy Efficiency Advice Centres and the Community Action for Energy (CAfE) programme.

Carbon Trust

The Carbon Trust works to support carbon emissions reduction in the commercial and public sectors. Its Local Authority Carbon Management Programme (www.carbontrust.co.uk/carbon/la/) provides guidance and technical support for local authorities that are committed to reducing carbon dioxide emissions from their own estate and operations. The Carbon Trust also offers a Design Advice service for larger new build and refurbishment projects.

The Nottingham Declaration and Action Pack

The Nottingham Declaration online action pack has been developed by a number of leading agencies in environmental issues and local government as a resource that is intended to help local authorities structure a strategic approach to tackling climate change: www.nottinghamdeclaration.org.

The Local Government Climate Change Commission

The LGA recently convened a Local Government Climate Change Commission, which is investigating the role of local authorities in tackling climate change and is producing some useful resources (<http://campaigns.lga.gov.uk/climatechange/home/>).

Improvement and Development Agency

The Improvement and Development Agency (IDeA) supports the development of good practice within local authorities. Its Beacon Councils scheme in England has covered a number of themes of relevance for this topic area. In particular, the Beacon Councils Fuel Poverty Toolkit (www.nea.org.uk/Working_with.../Local_authorities/Affordable_warmth_beacon_toolkit) and the Beacon Councils Sustainable Energy Toolkit and Benchmark for local authorities (available on CD from Emma Buxbaum at IDeA: emma.buxbaum@idea.gov.uk) are intended to help local authorities structure strategic and practical approaches to tackling climate change and fuel poverty. Although produced for local authorities in England, these contain information that will be relevant to and helpful for local authorities in Wales.

Welsh Local Government Association

The Welsh Declaration on Climate Change and Energy Efficiency was signed by local authorities in Wales and the Welsh Local Government Association has produced guidance on six action areas on climate change. Action not Words is available on the Welsh Local Government Association website here: www.wlga.gov.uk/content.php?nID=367;pID=1040;lID=1.

The Welsh Local Government Association has also recently published A Sustainable Development Framework for Welsh Local Government, which contains useful guidance on putting sustainable development into practice.

Warm Front

There are a number of sources of advice to tackle fuel poverty, many of which are highlighted above. However for direct help in funding and fitting measures in private sector homes (privately owned and privately rented), the Warm Front Scheme is a national initiative in England and would be of most help. The scheme is managed by eaga, and queries are best sent to: networking@eaga.com. Assistance to co-ordinate funding and advice can also be obtained through Warm Zones; queries of this nature should be sent to: enquiries@warmzones.co.uk.

Home Energy Efficiency Scheme (HEES) Wales

The Home Energy Efficiency Scheme in Wales installs energy efficiency measures direct in your own housing stock and homes which are privately owned and privately rented. Heating, insulation and security measures are available to qualifying households. The scheme is managed by eaga, and queries are best sent to: enquiries.wales@eaga.com.

Energy Efficiency Commitment (EEC)

Under the Energy Efficiency Commitment (to be renamed the Carbon Emissions Reduction Target or CERT) electricity and gas suppliers are required to achieve targets for the promotion of improvements in domestic energy efficiency. At least 50% of energy savings must be focussed on a priority group of low-income consumers in receipt of certain benefits and tax credits/pension credit.

Using the resources

These key sources and the others referred to throughout this report should provide useful information for local authorities. Each source will be managed by an organisation with its own perspective on good practice and priorities for action. These sources should not be seen as providing all the answers but rather as contributors to an authority's own internal thinking and development processes.

Table of resources

Resource	Summary	Link
The Energy Saving Trust	Provides advice and support on sustainable energy in housing and transport	www.energysavingtrust.org.uk/housingandbuildings
The Carbon Trust	Energy efficiency advice commercial and public sector organisations	www.carbontrust.co.uk
The Nottingham Declaration and Action Pack	Online resource to help local authorities develop a strategic approach to climate change	www.nottinghamdeclaration.org.uk
The Local Government Climate Change Commission	Produces useful resources aimed at local authorities	http://campaigns.lga.gov.uk/climatechange/home/
Improvement and Development Agency	Home to the Beacon Councils Scheme	www.idea.gov.uk
Warm Front and HEES	National funding schemes for the private rented and private owned housing sectors	www.eaga.com

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 3: Ideas for action

Summary

This energy measures report sets out measures that local authorities can take to improve energy efficiency, increase the levels of microgeneration, reduce greenhouse gas emissions and reduce the number of people living in fuel poverty.

In exercising council functions, local authority officers and members are to have regard to this report. However it is recognised that local authority approaches are best tailored to local circumstances through a local authority's individual decision-making processes. This report sets out a series of modules with options and a user guide to help individual council officers and members navigate through the menu of options. This introductory module also offers some suggestions for action. It does not provide an exhaustive list but offers potential options as a stimulus for fresh thinking.

Getting the structure right

Structures need to be in place to support action on climate change and fuel poverty within all local authorities. The Beacon Councils Sustainable Energy Toolkit (produced for authorities in England) considers this issue, and defines six steps that need to be taken:

- ☐ Take a lead in promoting sustainable energy;
- ☐ Translate your vision into action;
- ☐ Get clear corporate support for action;
- ☐ Get the information you need;
- ☐ Get the finances right; and
- ☐ Work in partnership for the benefit of all.

The toolkit offers advice and case study information in all these areas and, although produced for local authorities in England, will have relevant information for local authorities in Wales. It can be obtained from Emma Buxbaum at IDEa: emma.buxbaum@idea.gov.uk.

The Nottingham Declaration Action Pack also offers advice on a stepwise process to successful implementation of climate change mitigation and adaptation: www.energysavingtrust.org.uk/housingbuildings/localauthorities/NottinghamDeclaration/online_action_pack/.

Initial ideas for action

The paragraphs below offer a selection of ideas for action for authorities in different situations. They are intended simply as an introduction and to illustrate that there are options for every type of authority.

For small authorities with very limited resources

Forming partnerships

You may wish to form partnerships with other authorities in your area to pool resources in developing and implementing climate change and fuel poverty policies. A good example of this is the way in which High Peak Borough Council works in partnership with Nottinghamshire County Council on various strategic partnerships regarding climate change and sustainable energy. A case study detailing their

partnership working on climate change mitigation can be accessed here:
<http://beacons.idea.gov.uk/idk/aio/973319>.

Partnership working is discussed in modules 4 and 14.

Fuel poverty referral network

You may wish to work together with other local authorities and public and private sector partners to invest time in setting up a fuel poverty referral network. One example of this is the Home Health scheme operated by Cornwall Sustainable Energy Partnership. This fuel poverty referral network involves a partnership between local authorities, the Primary Care Trust, housing associations and community groups. An Energy Saving Trust case study on the scheme can be accessed here:
www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case13.pdf.

Fuel poverty referral networks are discussed in modules 8 and 12.

For large authorities with resources allocated to climate change and fuel poverty

Grant funding for householders

A possible option is to set up a climate change fund to offer partial grants to householders who invest in sustainable energy technologies. Kirklees Metropolitan Council and Calderdale Metropolitan Borough Council worked in partnership to deliver the Simply Solar scheme. Under the scheme, grants were issued to householders to reduce the costs of purchasing and installing solar water heating systems. An Energy Saving Trust case study on the project is available here:
www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case4.pdf.

Schemes for householders are included in module 9.

Installing low carbon measures on council-owned buildings

If you have resources allocated to climate change you can consider the installation of renewable and low carbon technologies and energy efficiency measures on council buildings. These schemes can act as exemplar projects that educate the wider communities on the benefits of low carbon building technology.

Caerphilly County Borough Council implemented a large fund of £800,000 (£300,000 from Salix and £500,000 from Caerphilly) and has thus far achieved annual savings of 876 tonnes of carbon dioxide. Caerphilly has had particular success in the leisure sector; they have upgraded four sports halls with new lights and sensors. This has enabled them to reduce running costs by a half and their electrical load by 40%. A full case study is available here: www.salixfinance.co.uk/cscaerphilly.html

Councils' own estate and operations is covered in module 6.

Working with schools to reduce carbon dioxide emissions

You may wish to investigate options for working with local schools to implement energy efficiency improvements and renewable and low carbon technologies. Seaton Primary School in Devon has installed a wind turbine, photovoltaic cells and solar panels in its buildings and grounds. The initiative came as part of a drive by Devon County Council to move all of the county's schools towards best practice in energy efficiency. Further information can be found on the Devon County Council website:
www.devon.gov.uk/contrast/capstrat-energyreport.pdf.

Action in schools is covered in module 11.

For rural authorities

Promoting climate change mitigation and tackling fuel poverty in local communities

Daventry District Council have run a village energy days initiative to promote energy efficiency in villages around Daventry, Northamptonshire. Further information can be found here:
www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%207.pdf.

Community engagement is covered in module 5.

Sustainable rural transport

Rural local authorities can also consider options for promoting sustainable forms of transport for rural communities. Cornwall County Council operates a demand responsive transport service in the north of the county and a branded service in the west of the county. Visit the IDeA website for more information: www.idea.gov.uk/idk/core/page.do?pagelId=81101

Transport initiatives are detailed in module 10.

Considering options for biomass and promoting biomass supply chains

You may wish to consider options for promoting the use of biomass heating or biomass combined heat and power (CHP) in a number of situations and can also take steps to promote the formation of a local supply chain for biomass fuel.

Worcestershire County Council's wood fuel project is one example of a local authority taking the lead in promoting the local supply and use of biomass fuel. A full case study of the project can be accessed here:

www.energysavingtrust.org.uk/uploads/documents/housingbuildings/la_use%20of_renewables_worcestershire_cs.pdf.

Powys County Council instigated a project to use biomass to fuel a community heating network. A full case study of the Llanwddyn rural biomass community heating scheme can be accessed here:

www.energysavingtrust.org.uk/housingbuildings/casestudies/index.cfm?mode=view&casecat=123&case_id=316.

The promotion of low carbon supply chains is discussed in module 13.

For urban authorities

Reducing traffic in urban centres

An example of best practice in reducing traffic in city centres is provided by Nottingham City Council. Visit the IDeA website for more information about activities in Nottingham:

www.idea.gov.uk/idk/core/page.do?pagelId=81115

Traffic reduction is covered in module 10.

Working with schools to develop school travel plans

Local authorities can work with schools in urban areas to devise school travel plans that facilitate the use of walking, cycling and public transport, and promote less dependency on the car for school transport. One example of a local authority working with schools to facilitate sustainable travel options is the London Borough of Southwark. Their Safer Routes to Schools Programme has been active for five years. Four to eight schools per year benefit from engineering measures designed to make children's journeys to school safer and to promote safe and responsible travel. Further information about the programme can be found here:

www.southwark.gov.uk/YourServices/transport/SaferRoutesSchool.html.

School travel plans are covered in module 11 and further information can also be found in module 10.

Area based fuel poverty programmes

Local authorities in urban areas may wish to consider area based intensive fuel poverty programmes. One example of this type of project is the Newcastle Warm Zones project. Warm Zones Limited, Newcastle City Council, Your Homes Newcastle, ScottishPower and National Grid Transco Affordable Warmth are working in partnership to make homes across Newcastle affordably warm and energy efficient. Further information can be found here: www.warmzones.co.uk/newcastle.html.

Measures to tackle fuel poverty are covered in modules 8 and 11.

For authorities with little experience of tackling climate change and fuel poverty

Reducing carbon dioxide emissions from the council's own estate

A possible first step to take is to ensure that the council's own estate and operations are as energy efficient as possible. For example, the Mendip Partnership for Energy conducts energy audits of public buildings, whether owned by Mendip Borough Council, the county council, the primary care trust or the police. The partnership suggests ways to make savings and examines ways organisations can work together to save even more energy.

This sort of action can be introduced in authorities with little corporate commitment to tackling climate change because financial arguments can be made to support the required investments. Finance from energy cost savings may then be made available to support other actions.

More information on this topic is contained in module 6.

Training frontline staff to make them aware of sources of further information

Training staff in energy awareness can have a positive effect on council energy use as people adopt more energy efficient behaviours. Alongside this, frontline staff can be given information so that they are able to refer their clients to sources of energy information and advice about energy use.

This topic is covered in detail in module 14.

For authorities with a track record looking for something new

Promoting climate change mitigation through economic development and regeneration

Through their remit for economic development and regeneration, local authorities may wish to incorporate measures that will reduce the carbon dioxide impacts of developments and promote sustainable lifestyles. A major regeneration enterprise, situated at the former Corus steelworks site in Ebbw Vale, is intended to be a sustainable development exemplar. For further information on the Ebbw Vale development, visit the redevelopment website at www.blaenau-gwent.gov.uk/theworks/index.htm.

Module 13 covers economic development and regeneration.

Engaging with private landlords to improve energy efficiency in housing

Local authorities can also engage with private landlords to improve levels of energy efficiency in housing. As an example of this, in 2002, Cardiff City Council launched its Landlord Accreditation Plus scheme to the private rented sector. The aim of the scheme was to encourage and support landlords to bring their housing stock above minimum legal levels. Download the case study here: www.energysavingtrust.org.uk/download.cfm?p=2&pid=683.

Addressing carbon emissions and fuel poverty in private rented housing is covered in module 9.

Establishing an Energy Services Company (ESCo)

A complex but more comprehensive approach that local authorities may wish to adopt is to set up an Energy Services Company (ESCo). ESCOs ideally involve linking the supply of energy with energy efficiency measures. This can take many forms, ranging from an affinity deal, where a housing provider partners with a utility, to the setting up of a separate company (partly) owned by the housing provider that offers fuel, energy efficiency measures and, in some cases, district heating to tenants.

The development of Energy Service Companies is covered in module 9.

Advanced planning policies for mitigating climate change

Local authorities looking to implement advanced policies to promote the mitigation of climate change may wish to use the planning system to move towards the goal of reduced or even zero carbon development. Ashford Borough Council's Local Development Framework has perhaps moved the

furthest along the path to carbon neutral development. More information on Ashford's policy can be found here:

www.energysavingtrust.org.uk/housingbuildings/localauthorities/information/nonest/index.cfm?ty=1&ext_id=1334.

The role of the planning system is covered in module 8.

Table of case studies

Case studies	Local authority	Type	Summary	Link
County				
Partnership between Nottingham County Council and High Peak Borough Council	Nottingham County Council and High Peak Borough Council	County, district	Case study on how both councils work together	http://beacons.idea.gov.uk/idk/aio/973319
Energy Efficiency & Sustainability in Schools	Devon County Council	County	Best practice in energy efficiency in Devon's schools	www.devon.gov.uk/contrast/capstrat-energyreport.pdf
Local authorities' use of renewables in buildings and facilities	Worcestershire County Council	County	Worcestershire's Wood Fuel Project	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/la_use%20of_renewables_worcestershire_cs.pdf
Village Energy Days	Northamptonshire County Council	County	Information on village energy days held in Daventry and Northamptonshire	www.energysavingtrust.org.uk/uploads/documents/caf/caf%20case%20study%207.pdf
Corlink bus service	Cornwall County Council	County	Development of a demand responsive bus service	www.idea.gov.uk/idk/core/page.do?pageld=81101
Unitary				
Biomass community heating	Powys County Council	Unitary, Rural	A case study demonstrating the potential of biomass as an energy source for community heating in a rural setting	www.energysavingtrust.org.uk/housingbuildings/casestudies/index.cfm?mode=view&casecat=123&case_id=316
Landlord Accreditation Plus	Cardiff City Council	Unitary, urban	A case study covering a landlord accreditation scheme.	www.energysavingtrust.org.uk/download.cfm?p=2&pid=683
The Nottingham Clear Zone	Nottingham City Council	Unitary, urban	Information on how Nottingham City Council reduce traffic in the city centre	www.idea.gov.uk/idk/core/page.do?pageld=81115
Caerphilly's low carbon programme	Caerphilly Borough Council	Unitary	Through Salix funding, Caerphilly has cut its carbon emissions	www.salixfinance.co.uk/cscaerphilly.html
The Works – redevelopment of Blaenau-Gwent	Blaenau-Gwent County Borough Council	Unitary	Detail on redevelopment of this previous steelworks	www.blaenau-gwent.gov.uk/theworks/index.htm
Simply Solar scheme	Kirklees Metropolitan and Calderdale Metropolitan Borough Councils	Metropolitan, urban, Metropolitan, rural	Case study on a joint renewables initiative	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case4.pdf
London Borough				

Safer Routes to School	London Borough of Southwark	London Borough, urban	School travel plans	www.southwark.gov.uk/YourServices/transport/SaferRoutesSchool.html
District				
Newcastle Warm Zone	Newcastle City Council		Information on the Warm Zone initiative in Newcastle	www.warmzones.co.uk/newcastle.html
Other				
Home Health	Various West Cornwall Council	Mixed	Case study on a fuel poverty referral network	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case13.pdf
Parish and Town Councils	Various	Mixed	Case studies covering issues from adaptation to community transport and renewables	http://www.defra.gov.uk/environment/climatechange/uk/publicsector/localauth/index.htm

Table of resources

	Summary	Link
Resources		
The Beacon Councils Sustainable Energy Toolkit	It sets out practical ways to deliver real and positive change	Please contact Emma Buxbaum at IDEa: emma.buxbaum@idea.gov.uk .
The Nottingham Declaration Action Pack	It guides local authorities through five stages for addressing both mitigation and adaptation	www.energysavingtrust.org.uk/housingbuildings/localauthorities/NottinghamDeclaration/online_action_pack/
Ways to Tackle Climate Change	It is a practical guide aimed at identifying practical action for Parish and Town Councils	http://www.defra.gov.uk/environment/climatechange/uk/publicsector/localauth/index.htm

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 4: A good practice strategic approach

Summary

Taking a strategic approach to climate change mitigation and fuel poverty alleviation can help ensure that all appropriate actions are considered, that progress can be reported and that potential partners can see the value of proposed actions. This report is focused on climate change mitigation, but any strategic approach should also include adaptation to impacts of climate change.

This module sets out the key stages involved in a strategic approach, and offers examples of approaches to consider. The ideal depth and breadth of a strategy and action plan will to some extent depend on the resources available to an authority but the key steps of the process can be of use to all.

Effective action will include the development of appropriate partnerships. These can increase the resources available for initiatives, provide a greater range of expertise and offer routes to reach and persuade the right people to take action. This report offers suggestions of the types of partnership that may be of use, and also considers some of the main elements of successful partnerships.

Monitoring the effectiveness of actions is something that can often be neglected, particularly when resources are constrained. However, it is an essential part of an effective approach and this module concludes with a discussion of the benefits of monitoring and the approaches that are available.

Developing and implementing a strategy and action plan

This section of the report outlines some of the main benefits of a strategic approach and some of its key stages. It does not go into detail of how to apply the approach, as there are a number of existing sources of guidance in this area to which you can refer.

Key sources of further information on taking a strategic approach are:

The Nottingham Declaration Action Pack offers advice on climate change mitigation and adaptation: www.energysavingtrust.org.uk/housingbuildings/localauthorities/NottinghamDeclaration/online_action_pack/.

The Sustainable Energy Beacon Councils Toolkit, which was produced for English authorities but contains information applicable in both England and Wales, is available on CD from: Emma Buxbaum at IDeA. Please contact Emma on emma.buxbaum@idea.gov.uk.

The Fuel Poverty Beacon Councils Toolkit: www.nea.org.uk/downloads/publications/beacon_toolkit.pdf.

Information on the activities of the beacon councils can also be found on the IDeA website here: <http://beacons.idea.gov.uk/idk/core/page.do?pagelD=5098995>.

The Welsh Declaration on Climate Change and Energy Efficiency was signed by local authorities in Wales and the Welsh Local Government Association has produced guidance on six action areas on climate change. Action not Words is available on the Welsh Local Government Association website here: www.wlga.gov.uk/content.php?nID=367;pID=1040;IID=1.

Value Wales has published a Procurement Route Planner (PRP) which is a free of charge open resource available to view at www.buy4wales.co.uk. The PRP provides a definitive guide for users,

whether new to procurement or a seasoned expert, promoting a consistent best practice approach, embedding best practice from Value Wales, OGC and other sources.

The Energy Saving Trust's toolkit Energy Efficiency the Guide covers the steps needed for developing and implementing a housing energy strategy. The version of the guide for England is available here: www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide/england/ and the version for Wales is available here: www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide/wales/.

In addition, the Energy Saving Trust's Practical help service has a briefing note on developing a climate change strategy, which is available here: www.energysavingtrust.org.uk/uploads/documents/housingbuildings/climate_change_bn1.pdf and a briefing note on sustainable energy strategies, which is available here: www.energysavingtrust.org.uk/download.cfm?p=2&pid=471.

The Carbon Trust's Local Authority Carbon Management Programme follows a strategic approach to tackling carbon emissions from a local authority's own estate and activities. More information on the approach can be found here: www.carbontrust.co.uk/carbon/la/.

Taking a strategic approach includes prioritising areas for action. The Local Government Association's Local Government Climate Change Commission funded research into council action to curb climate change. This included some initial suggestions for how work could be prioritised. This research, and other papers from the Commission, can be found here: <http://campaigns.lga.gov.uk/climatechange/home/>.

The Commission for Architecture and the Built Environment (CABE) is to provide good practice guidance for local authorities on how to manage the public realm and green spaces to tackle climate change. This will be available here: www.cabe.org.uk.

Benefits of a strategic approach

Having an agreed strategy and action plan, whether for climate change mitigation and adaptation, fuel poverty alleviation or any other priority topic, helps to ensure that:

- Corporate support is sought and gained for a whole package of actions;
- Resources targeting the problem are spent in the most cost-effective way possible;
- The most appropriate partners are involved in the delivery of the action plan; and
- The impact of actions is monitored, and programmes are reviewed and amended as appropriate, based on their actual results.

Inclusion of climate change and fuel poverty objectives in strategic plans such as Sustainable Community Strategies (England) and Community Strategies (Wales) is one way of co-ordinating action with the achievement of other local priorities.

Key stages

Different guides will vary in the detail of their recommendations about a strategic approach but the key elements will be similar. These will include:

- Gaining corporate support for the general principle of taking action to tackle the problem;
- Developing a vision and strategic objectives;
- Assessing the current situation to provide a baseline for future evaluation;
- Identifying priority areas for action;
- Building partnerships;
- Developing and agreeing an action plan;
- Securing finance;
- Implementing actions; and
- Monitoring and reviewing progress.

The table at the end of this module contains details of case studies and other local authority strategies that you may wish to refer to. Note that there are also case studies available within the Sustainable Energy and Fuel Poverty Beacon toolkits referred to above.

The publications mentioned in 'key sources' above contain further information on all of the elements of a strategic approach. The remainder of this module focuses on three areas where a need for additional guidance has been identified: partnerships, monitoring effectiveness and securing resources.

Partnerships

The most effective way for local authorities to tackle both climate change and fuel poverty is in partnership with a range of other organisations. In England, by increasing the scope and flexibility of Local Area Agreements (LAAs), the Government will enhance the capacity of local authorities to work effectively with local partners to tackle major, cross-cutting problems like climate change. Where appropriate, climate change targets will be included in LAAs, and so partnership working may increase in importance.

In Wales, as Local Service Boards are established and the wider Spatial Plan Area Groups continue to develop, partnership working will also increase in importance. Some of the emerging local service boards which can bring together many local partners including local authorities, local health boards, NHS trusts, the police and emergency services and the third sector, are identifying tackling climate change as one of their local priorities for action.

Benefits of partnership working can include:

- ❑ Increased human resource, for identifying synergies, ideas and expertise, and also for doing the work that needs to be done;
- ❑ Access to different funding streams; and
- ❑ Effective routes to communicate with the people you are trying to reach.

Many of the ideas for action and case studies referred to throughout this report will include details of effective partnerships. You may also find it useful to look at the work of long-standing partnerships such as the Cornwall Sustainable Energy Partnership www.csep.co.uk/ or the range of partnership activities of authorities like High Peak Borough Council: <http://beacons.idea.gov.uk/idx/aio/973319>.

The 2007 booklet, 'Ways to Tackle Climate Change', published for parish and town councils, provides advice and includes case studies on working with partners. This can be found on the Defra website: <http://www.defra.gov.uk/environment/climatechange/uk/publicsector/localauth/index.htm>

The remainder of this section simply summarises the key elements of effective partnership working and details some of the benefits of the more common partnerships formed in the areas of climate change mitigation and fuel poverty alleviation.

Strategic and project partnerships

Partnerships can be formed simply to deliver a specific project. This type of partnership has value if it enables the achievement of project aims that would otherwise be impossible or increases the cost-effectiveness of delivery. These partnerships may be relatively short-lived and may require little set-up effort.

Strategic partnerships tend to last longer if effective but also take more effort to establish. However, they usually provide support for implementation of a wide range of individual actions and therefore provide greater support for the achievement of long term goals.

Developing and maintaining effective partnerships

Step 1: Determining the most appropriate partners and governance arrangements

The key question here is what you would like to achieve from the partnership. For example, if you are looking for funding for a project, you will be looking for partners who can supply that funding; if on the other hand you are looking to secure corporate commitment to your aims, you will need individuals within your authority who agree with those aims and who have sufficient authority to contribute to building that corporate commitment.

It is worth considering whether there are existing partnerships that will be effective for the work you are doing. For example, in England existing Local Strategic Partnerships (LSP) should be willing to include a cross-cutting issue such as climate change within their day to day activities. A benefit of including the issues within the work of existing LSPs is that it would help to mainstream climate change and fuel poverty into local social and economic priorities.

Effective partnerships need clear governance arrangements to ensure that all partners are aware of the expectation of them and others in participating in the partnership.

Step 2: Aligning objectives

Partnerships will only be successful if they help all partners to achieve their objectives. You need to consider potential partners' objectives and what the partnership will contribute to these before beginning the process of forming a partnership with them. There are a number of points for you to consider, the main ones being:

- What can you offer to your potential partners, and how do you explain your aims in language that they will respond to; and
- What can they offer to you, and is it worth the effort you will have to put in to building the partnership?

Step 3: Communication and feedback

Communication is vital to successful partnership working. If partners can be involved at the earliest stages of developing the strategy or project with which they are to be involved, they are more likely to be committed to its success. If they are regularly consulted on developments and kept up to date with progress their enthusiasm is more likely to be maintained.

Internal partnerships

An often overlooked but very valuable source of partners is other people within your own authority. The modules of this report give some idea of the range of functions within an authority that have an interest in climate change mitigation and/or fuel poverty alleviation.

Partnerships with other local authorities

Many of the successful initiatives to increase energy efficiency or the use of renewable and low carbon technologies have stemmed from partnerships between different local authorities, both within one tier of local government and across tiers. The additional staff resource that results from such partnerships can be crucial to successful development of funding proposals, and also to the management of project delivery. Also, partnerships may share the costs of activities such as training sessions and information campaigns.

Partnerships with other local authorities can also be a simple way for less experienced officers to learn from their peers. There are a number of established fora where officers from different local authorities meet to share experiences. These include NEA's fuel poverty fora:

www.nea.org.uk/Events/Fuel_Poverty_Forums and regional Home Energy Conservation Association fora: www.hecafora.com/regions_home.php.

Partnerships with other public and private sector stakeholders

The health service, fire and police services

Many local energy initiatives need engagement with individual householders if they are to be successful. If messages are given to them by already trusted intermediaries, these messages are more

likely to be heeded. Also, it is often more effective to communicate with individuals on a face to face basis but this is very time, and therefore cost, intensive.

Professionals working in the health, fire and police services routinely have face to face contact with individuals. They are usually trusted by these people and also come into contact with some of the most vulnerable and hardest to reach individuals. Their help can be invaluable, particularly with schemes that aim to tackle fuel poverty.

More information on local authority and health sector partnerships to tackle fuel poverty can be found on the Warmer Houses Healthy Homes' website: www.warmerhealthyhomes.org.uk/.

Regional bodies

Local authorities regularly work together at a county and regional level in England and across Wales. This can be very effective for use in tackling climate change and fuel poverty. For example, the Cornwall Sustainable Energy Partnership was mentioned earlier: there are many other regional and sub-regional partnerships that focus on sustainable energy and climate change issues, and it would be worth engagement with the one that is local to you, if you do not already have this.

In England regional housing strategies and the allocation of the region's housing funding are important for schemes to improve energy efficiency; the Regional Spatial Strategy sets the framework for the planning system in tackling climate change, and regional economic development and regeneration strategies and funding can be important for the development of sustainable communities and low carbon businesses. Therefore local authorities can usefully engage with the regional policy making and funding processes.

By setting the framework for development, the regional planning system has a role in climate change mitigation and adaptation. In addition, regeneration strategies and funding can be important for the development of sustainable communities and low carbon businesses. Therefore local authorities should continue to make use of opportunities to engage with the regional policy making and funding processes.

The Government recently published a review of sub national economic development and regeneration in England that recognises the importance of alignment of local and regional activity to promote economic development. The Government believes that there should be a single integrated strategy for each region that brings together the regional spatial and economic strategies. This will be developed by the Regional Development Agency (RDA) in consultation with a range of stakeholders. As a first step in the development of this strategy, local authorities will draw up proposals setting out a vision for the development of their area. The RDA will need to reach agreement on the draft regional strategy before it is submitted to independent examination. Local authorities will also have a stronger role in the scrutiny of RDA performance and, from about 2010, as individual councils gain greater responsibilities in shaping the priorities in their wider region, Regional Assemblies will cease to exist in their current form. The Government will consult on the new arrangements by the end of 2007.

The Wales Spatial Plan, People Places Future, sets out a strategic framework to guide future development and policy interventions, whether or not these relate to formal land use planning control. These are implemented through Spatial Plan Area Groups led by Welsh Ministers in which local authorities play a key role along with partners from the other sectors.

Civil society

Cynnal Cymru is an independent not-for-profit company led by a Board of Directors and membership of Cynnal Cymru is open to all in Welsh society. Its objectives are to:

- Promote sustainable development;
- Be a catalyst for change towards sustainable development in all sectors of Welsh society; and
- Act as a forum within Wales for the development, canvassing, exchange and dissemination of views, information and policies on sustainable development.

More information is available at: www.cynnalcymru.org/ and local information to support sustainable choices is available at www.sustainwales.com/home/en/.

Commercial partners

Commercial partners have a role to play in all sustainable energy and fuel poverty action. At the simplest level, they are often able to supply funding for an initiative, whether this be through privately funded national energy efficiency schemes such as the energy suppliers' Energy Efficiency Commitment (soon to become Carbon Emissions Reduction target) or public schemes such as Warm Front/Home Energy Efficiency Scheme that are delivered by commercial companies, or through offers of bulk discounts on energy efficiency and renewable and low carbon technologies for local authority managed schemes. Information on energy supplier activity related to the Energy Efficiency Commitment can be found on Ofgem's website:

www.ofgem.gov.uk/Sustainability/Environmnt/EnergyEff/Pages/EnergyEff.aspx.

Note that some of the larger nationally active commercial organisations are more likely to want to partner in larger – and therefore more cost-effective – schemes. Therefore smaller local authorities may want to consider joining forces with other authorities in their area before partnering with these organisations.

Manufacturers and installers of sustainable energy technologies are often very willing to work with local authorities as local authority support for increasing energy efficiency and the use of microgeneration is good for their business. Many of the organisations most active in the field are members of the Energy Efficiency Partnership for Homes: www.eeph.org.uk/.

Local businesses may be willing to help raise awareness about the benefits of energy efficient behaviour – at work and at home – amongst their employees or even in the community, where they might help vulnerable or fuel poor households. Larger businesses in the local area may be interested in working with the local authority on climate change or fuel poverty related activities as part of their Corporate Social Responsibility activity. More information on this can be found at: www.csr.gov.uk.

Note also that smaller businesses working on energy or environmental issues may be able to provide expertise, not only via contract work for an authority but also as a partner. For example in England this may be through the Local Strategic Partnership's Enterprise Board.

Voluntary and community groups

Voluntary and community groups may already be active in the climate change or fuel poverty arenas and, if so, are likely to be interested in working with a local authority on local initiatives. Such groups can provide expertise, trusted intermediaries and communication routes between the local authority and their members. Many such groups are involved in climate change activity supported by the Government's Climate Challenge Fund for England. More details of the projects currently underway can be found here: www.climatechallenge.gov.uk/whats_being_done/projects.aspx.

The Every Action Counts initiative is working with over 30 national voluntary and community organisations who in turn support local community organisations which may operate in your area. Useful information, materials and support is available from this website: www.everyactioncounts.org.uk. It also hosts the third sector declaration on climate change which many individual voluntary and community organisations have already signed. Others in your area may also wish to sign-up if offered the opportunity.

International partnerships

Local authorities can work with one another across national boundaries. This can be a good way to learn from successes in other countries, and also to access European funding to support project work. The activities of the International Council for Local Environmental Initiatives (www.iclei.org/) and the Energie-Cités network (www.energie-cites.eu/) may be of interest here.

More information on partnerships is contained in module 5: community leadership.

Monitoring effectiveness

Any good practice action plan will include monitoring as a key element and should form part of initial governance arrangements. It is important to know how effective actions are in practice so that programmes are as effective – and cost-effective – as possible. Present and future funders of actions will also be keen to see that monitoring and review are being undertaken as part of the project management process.

Note also that monitoring effectiveness can also be a key element of building and maintaining corporate support. Providing evidence of achievement to relevant scrutiny committees can help ensure that they push for additional action in the area.

Exactly what you want to measure, in how much detail, and how often will vary greatly with the details of the work that you are doing. However, here are some of the key principles that apply to all monitoring activity:

- ❑ The baseline should be known before the project commences;
- ❑ Data Protection Act issues need to be dealt with at the outset;
- ❑ The level of data collected needs to be sufficient to provide a robust estimate of success, but not so detailed that the resources for its collection are hard to find;
- ❑ Wherever possible, existing sources of data should be used to reduce the cost of data collection;
- ❑ It is better to estimate effectiveness using the best available data than to avoid monitoring because perfect data are not available – any concerns about the quality of the data can be recorded as part of the evaluation;
- ❑ Any other factors that affect the values being measured need to be taken into account (for example, fuel use will be lower in a mild winter whether or not energy efficiency in a home has increased);
- ❑ When recording cost data, include the value of the time that people have put into the project;
- ❑ Record failures as well as successes – they are equally valuable sources of information;
- ❑ Wherever possible, share your data and lessons with others so that they can build on your efforts; and
- ❑ With data sharing in mind, record information in as transparent and transferable a way as possible, so that maximum use can be made of the information gathered, by yourself and by others.

Considering other impacts

When monitoring the effectiveness of actions, you may need to consider impacts other than simple reductions in carbon emissions or numbers of families living in fuel poverty. You may want to ensure that your project is reaching residents equitably – either across different wards in your authority, or across different ages or ethnic groups. Your partners may have other aims that they would like to see the project meet, and these will need to be reported alongside your main aims for the work.

Tools and data

There are many sources of data and evaluation tools that may be of use to you. Here are listed just a few of the main ones that you may wish to consider.

Setting the baseline

- ❑ BERR energy consumption statistics: www.dti.gov.uk/energy/statistics/regional/index.html;
- ❑ Defra emissions data: www.defra.gov.uk/environment/statistics/globalatmos/galocalghg.htm;
- ❑ The Fuel Poverty Indicator, for England: www.cse.org.uk/cgi-bin/projects.cgi?featured&&1018;
- ❑ The Home Energy Efficiency Database (HEED): www.energysavingtrust.co.uk/heedonline; and
- ❑ Sustainable Development Indicators – Wales: <http://wales.gov.uk/topics/sustainabledevelopment/?lang=en>.

Methods of measuring and recording progress

Environmental Management Systems (ISO 14001 or EMAS): some local authorities use an Environmental Management Systems (EMS) to systematically measure, monitor and manage their environmental impacts and identify progress against objectives and targets. A formal EMS, externally certified to national or international standards, provides organisations with a very effective management

tool which can be used to help underpin environmental reporting and provide assurance to regulators, customers and stakeholders that the data they produce is reliable and has been independently checked. A stepwise approach to EMS has recently been introduced that makes the implementation process much simpler and can also be used to help audit suppliers.

Leicester City Council, one of the sustainable energy beacon authorities, has adopted EMAS. More information on this can be found in the Sustainable Energy Beacons Toolkit, available from Emma Buxbaum at IDeA (emma.buxbaum@idea.gov.uk)

Other resources include:

- ❑ You can find out more about ISO 14001 at: www.bsi-global.com/en/Assessment-and-certification-services/management-systems/Standards-and-Schemes/ISO-14001/;
- ❑ Information about EMAS is available at: www.emas.org.uk/ and from the European Commission at: www.ec.europa.eu/environment/emas/index_en.htm;
- ❑ EMAS can be consulted at: www.emas.org.uk/emas_register/mainframe.htm;
- ❑ More information about the EMAS stepwise scheme can be found at: www.iema.net/acorn; and
- ❑ There is also a support network for local authorities who want to share best practice and make faster progress on adopting an EMS approach. See www.sustainable-development.gov.uk/advice/local/leadingbyexample.htm#EMS.

Eco-footprinting: Stockholm Environment Institute's REAP programme website offers data on the eco-footprint of all local authorities: www.sei.se/reap/local.php and WWF has produced a guide on eco-footprinting for local authorities: www.wwf.org.uk/filelibrary/pdf/ecologicalfootprints.pdf.

Securing resources

Securing funding and people for new initiatives is often one of the most difficult aspects of tackling climate change and fuel poverty within local authorities. Securing officer time can be the most difficult, and often relies on first securing corporate commitment. Partnership working can also be very helpful in this respect.

There are many sources of funding available to help reduce carbon emissions and tackle fuel poverty. Examples of these are included throughout this report as appropriate. However, here we list a few of the main sources of further information.

For investing in sustainable energy for a local authority's own estate and operations

A main source of advice for this is the Carbon Trust: www.carbontrust.co.uk/carbon/la/.

There is a publicly funded loan fund available to local authorities to use for carbon emissions reduction investments, operated by Salix Finance: www.salixfinance.co.uk/home.html.

Local authorities can also apply to the Government's Low Carbon Buildings Programme for part funding of renewable energy investments. See www.lowcarbonbuildingsphase2.org.uk for guidance notes and application forms.

For the wider community

The Energy Saving Trust maintains a funding database that contains information on a number of different grants available for sustainable energy work: www.energysavingtrust.org.uk/housingbuildings/funding/database/.

For more information on energy supplier funding under the Energy Efficiency Commitment, contact details are available on the Ofgem website: www.ofgem.gov.uk/Sustainability/Environmnt/EnergyEff/Documents1/EEC%20Supplier%20contact%20details.pdf.

For information on the Government's Warm Front (in England) and HEES (in Wales) fuel poverty programmes see eaga's website: www.eaga.com/government_contracts/government_contracts.htm.

The Low Carbon Buildings Programme (phase one) is also open to homeowners and businesses. Further details are available here: www.lowcarbonbuildings.org.uk.

Table of case studies

Case Studies	Local authority	Type	Summary	Link
County				
Cornwall Sustainable Energy Partnership	Cornwall County Council	County, rural	Information on the long standing regional partnership to promote sustainable energy	www.csep.co.uk/
Unitary				
Leicester City Council's Use of the EMAS framework	Leicester City Council		Information on how Leicester City Council uses the EMAS framework to monitor progress	http://www.leicester.gov.uk/index.asp?pgid=1201
District				
High Peak Borough Council Partnership Working Case Study	High Peak Borough Council	Borough, urban	A case study looking at the range of partnership working activities involving High Peak Borough Council	http://beacons.idea.gov.uk/idk/aio/973319
Other				
Information on the activities of the beacon councils on the IDeA website	N/A	N/A		http://beacons.idea.gov.uk/idk/core/page.do?pageId=5098995

Table of resources

Resources	Summary	Link
Developing and implementing a strategy and action plan		
The Nottingham Declaration Online Action Pack	Advice and support on development, implementation and monitoring of a climate change strategy	www.energysavingtrust.org.uk/housingbuildings/localauthorities/NottinghamDeclaration/online_action_pack/
The Sustainable Energy Beacon Councils Toolkit	A toolkit setting out practical ways to deliver real and positive change linked to sustainable energy	Please contact Emma on emma.buxbaum@idea.gov.uk
The Fuel Poverty Beacon Councils Toolkit	Fuel poverty toolkit form NEA	www.nea.org.uk/downloads/publications/beacon_toolkit.pdf
Action Not Words	The Welsh Local Government Association guidance on six action areas on climate change	www.wlga.gov.uk/content.php?nID=367;pID=1040;IID=1
Procurement Route Planner (PRP)	A definitive guide for users, promoting a consistent best practice approach	www.buy4wales.co.uk
The Energy Saving Trust's	Covers the steps needed for	www.energysavingtrust.org.uk/housingbuildings/local

toolkit, Energy Efficiency the Guide	developing and implementing a housing energy strategy (tailored to each nation in the UK)	authorities/theguide/
Developing a climate change strategy	A briefing note to help with the development of a climate change strategy	www.energysavingtrust.org.uk/uploads/documents/usingbuildings/climate_change_bn1.pdf
Sustainable energy strategies	A briefing note on sustainable energy strategies	www.energysavingtrust.org.uk/download.cfm?p=2&pid=471
Local Authority Carbon Management programme (LACM)	Information on the Carbon Trust programme that follows a strategic approach to tackling carbon emissions from a local authority's own estate and activities	www.carbontrust.co.uk/carbon/la/
Research Into Council Action To Curb Climate Change	LGA's Climate Change Commission's web resource includes this research, and other papers	http://campaigns.lga.gov.uk/climatechange/home/
The Commission for Architecture and the Built Environment (CABE)	Soon to published good practice guidance on tackling climate change	www.cabe.org.uk
Ways to Tackle Climate Change	It is a practical guide aimed at identifying practical action for Parish and Town Councils	http://www.defra.gov.uk/environment/climatechange/uk/publicsector/localauth/index.htm
Partnerships with other local authorities, regional bodies and other stakeholders		
NEA Fuel Poverty Forum	Online fuel poverty forum	www.nea.org.uk/Events/Fuel_Poverty_Forums
HECA Fora	Online forum from HECA	www.hecafora.com/regions_home.php
The Warmer Healthy Homes website	Information on local authority and health sector partnerships to tackle fuel poverty	www.warmerhealthyhomes.org.uk/
Cynnal Cymru	A not-for-profit company for sustainable development	www.cynnalcymru.org/
Sustain Wales	A website with local information to support sustainable choices	www.sustainwales.com/home/en/
Ofgem website on the Energy Efficiency Commitment	Information on energy supplier activity related to the Energy Efficiency Commitment	www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/Pages/EnergyEff.aspx
Website of the Energy Efficiency Partnership for Homes	Includes information on a number of organisations active in the field of energy efficiency and renewable energy	www.eeph.org.uk/
Corporate social responsibility website	Government's website on CSR	www.csr.gov.uk
Climate Challenge Fund website	Details of projects currently underway	www.climatechallenge.gov.uk/whats_being_done/projects.aspx
Every Action Counts	Online resource to help community and voluntary groups improve their environments	www.everyactioncounts.org.uk
International Council for Local Environmental Initiatives	Local government's for sustainability website	www.iclei.org/
Energie-Cités network	Association of European local authorities promoting local sustainable energy policy	www.energie-cites.eu/
Monitoring effectiveness		
BERR energy consumption statistics	Energy consumption statistics according to region	www.dti.gov.uk/energy/statistics/regional/index.html ;
Defra emissions data	Report on carbon dioxide emissions for local authority areas	www.defra.gov.uk/environment/statistics/globalatmos/globalghg.htm

The Fuel Poverty Indicator	Tool to help local authorities predict incidences of fuel poverty	www.cse.org.uk/cgi-bin/projects.cgi?featured&&1018
The Home Energy Efficiency Database (HEED):	Data on the uptake of energy measures	www.energysavingtrust.co.uk/heedonline
Sustainable Development Indicators – Wales	Information about the Welsh Sustainable Development Indicators	http://wales.gov.uk/topics/sustainabledevelopment/?lang=en
EMAS (Eco-Management and Audit Scheme)	Framework within which to record progress on environmental performance	www.emas.org.uk/ and www.ec.europa.eu/environment/emas/index_en.htm
ISO 14001 Environment	Information on the ISO 14001 EMS system	www.bsi-global.com/en/Assessment-and-certification-services/management-systems/Standards-and-Schemes/ISO-14001/
EMS Stepwise scheme	More information on the stepwise scheme	www.iema.net/acorn
Sustainable development website	Government website on an advice and support section for local authorities	www.sustainable-development.gov.uk/advice/local/leadingbyexample.htm#EMS
Stockholm Environment Institute's REAP programme website	Data on the eco-footprint of all local authorities	www.sei.se/reap/local.php
WWF guide on Eco-footprinting for local authorities	Guidance for local authorities on eco-footprinting	www.wwf.org.uk/filelibrary/pdf/ecologicalfootprints.pdf
Securing resources		
Carbon Trust	Advice on energy efficiency for own estates and operations	www.carbontrust.co.uk/carbon/la/
Salix finance	Publicly funded loan fund specifically for local authorities to use for carbon emissions reduction investments,	www.salixfinance.co.uk/home.html
Low Carbon Buildings Programme – phase 2	Information about phase 2 of the Government's Low Carbon Buildings Programme offering funding for renewables	www.lowcarbonbuildingsphase2.org.uk
Energy Saving Trust funding database	A database of funds available to local authorities for energy efficiency and renewable energy measures	www.energysavingtrust.org.uk/housingbuildings/funding/database/
Energy Efficiency Commitment	Further information on supplier funding	www.ofgem.gov.uk/Sustainability/Environmnt/EnergyEff/Documents1/EEC%20Supplier%20contact%20details.pdf
Warm Front (England) and HEES (Wales) funding programmes	Further information on these fuel poverty programmes	www.eaga.com/government_contracts/government_contracts.htm
The Low Carbon Buildings Programme	Details of the primary funding source for renewable energy	www.lowcarbonbuildings.org.uk

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 5: Community leadership

Summary

Strong local leadership is going to be vital to national efforts to tackle climate change and fuel poverty. All sections of the community are going to have to contribute, through increased energy efficiency and increasing the use of renewable and low carbon technologies. A local authority is in an excellent position to encourage such action. Equally, a local authority is in an ideal position to bring together organisations and facilitate the tackling of fuel poverty.

Leading a local area to reduce carbon emissions and remove fuel poverty can deliver many local benefits beyond the obvious ones of avoiding potential climate change impacts and improving quality of life for households taken out of fuel poverty. It has the potential to impact on areas such as health and community cohesion. It also demonstrates that the local authority is willing to act on issues that many are concerned about, and can create the potential for increased pride in the local area. Lower fuel costs that result from increased efficiency can provide increased disposable income, some of which may well be spent in the local economy. Developing a market for low carbon goods and services can offer opportunities for local businesses to develop in areas that will have national and international markets.

The ways in which climate change and fuel poverty aims can be integrated into the developing community leadership structures are discussed in this module, together with ideas for engagement with a range of local and regional stakeholders. Ideas for raising awareness and motivating action in the wider community, through education and in travel are all discussed here.

Well-being

The Local Government Act 2000 introduced a power to promote 'well-being'. This discretionary power enables a local authority to do anything it considers likely to promote or improve the economic, social or environmental well-being of its area (except raising money), provided that such action is not expressly forbidden elsewhere in legislation. This can help local authorities take a lead on climate change mitigation and fuel poverty alleviation activity as these are both issues that contribute directly to the well being of people in the local area.

A number of case studies on the use of the power of well-being to support sustainable energy activities can be found here: www.impetusconsult.co.uk/PEET_CS.pdf.

FenESS- Fenland Energy Services Scheme

Fenland District Council successfully used the power of wellbeing to set up an energy services scheme.

The scheme provides a bespoke service to registered social landlords (RSL) and private householders to transfer their energy supply to a known supplier.

Tenants and private householders can also access free energy efficiency advice for their home. Revenue generated from the scheme is re-invested in other sustainable energy projects such as alleviating fuel poverty.

The Climate Change and Sustainable Energy Act 2006 also empowers parish councils in England and community councils in Wales to encourage or promote energy-saving measures. It includes a power for parish councils and community councils to provide information, advice and assistance, including financial assistance subject to section 137 (of the Local Government Act 1972) limits on spending.

Community strategies and partnerships

The purpose of the community strategy (sustainable community strategy in England) is to fulfil the statutory duty placed on local authorities by section 4 of the Local Government Act 2000 to set out how they propose to promote and improve the economic, social and environmental well-being of their areas. Including climate change and fuel poverty objectives within these helps to ensure that there is an appropriate focus on them in local authority activity. Community planning is the process by which the community strategy is developed. Local authorities convene this process, and its success depends on strong engagement with citizens, communities and all the partners who contribute to delivery of the strategy.

The community strategy should provide a long-term strategy for the whole of a local area and its people. This should provide a vision and future direction for the area, based on a set of ambitions and values, discussed and negotiated with local citizens, communities and their leaders.

The process of community engagement and consultation that is a key part of the development of the strategies provides an ideal opportunity for raising awareness of the issues in the wider community.

Communities are willing to engage with climate change as an issue, as evidenced by those localities that are aiming to become carbon neutral. These range from urban boroughs such as Woking to rural villages such as Ashton Hayes. For information on the latter, see: www.goingcarbonneutral.co.uk.

Climate change and fuel poverty may or may not be in an area's existing community strategy. The following steps suggest actions that can be taken for each of these situations.

Community strategies

If the community strategy does not yet include climate change and/or fuel poverty there are two steps that you can take.

Step 1: Link climate change and fuel poverty actions to existing community strategy priorities

The community strategy may focus on issues such as local air quality, improving the health of the local community or economic regeneration. In many cases, actions to reduce carbon emissions and/or tackle fuel poverty will have positive impacts in these priority areas. It is worth considering how actions do contribute to community strategy aims, as demonstrating these benefits can help secure the support and involvement of the partnerships involved in the delivery of the community strategy.

Step 2: Working to ensure that climate change and fuel poverty objectives are included in revisions to the strategy

A community strategy should set out a 10-15 year vision. It should be reviewed regularly, seeking the participation of local communities, third sector organisations, businesses and certain partners set out in the Local Government and Public Involvement in Health Act 2007¹. These partners include Primary Care Trusts, Environment Agency, Highways Agency and Natural England among others. In order to meet long-term outcomes, a Community Strategy Action Plan should set out shorter term priorities for action; this may be in the form of improvement targets in the Local Area Agreement. It may be a good idea to work with key partners to introduce the idea of climate change and/or fuel poverty objectives into the revision process at the earliest possible stage. The groups being consulted on the content of the strategy may not propose such objectives themselves but may be ready to support them if they are suggested by the local authority.

It will be important to be clear about the benefits of the aims, to the local community as a whole and also to the partners who will be responsible for delivery. Here again, making links to existing community strategy objectives will be helpful. Measures in the Local Government and Public Involvement in Health Bill (expected in November 2007) will also require English local authorities to

¹ Royal Assent for the LGPIH Bill is anticipated in the autumn of 2007.

have regard to their sustainable community strategies in the preparation of and revisions to Local Area Agreements.

Local partnerships

Many partnerships at the local level have evolved around the development and delivery of community strategies. Local authority action to tackle climate change and fuel poverty will be more effective if it makes best use of, and builds upon, these partnerships.

Step 1: Including action within the work of existing partnership groups

In England, the work of Local Strategic Partnerships tends to be organised around the four key themes of existing Local Area Agreements: children and young people; healthier communities and older people; safer and stronger communities, and economic development and environment. Structures will vary between different localities and how climate change and fuel poverty actions are incorporated will depend on the exact structure and on the actions being proposed.

In Wales, structures will vary between different localities, with different approaches emerging to the development of Local Service Boards. How climate change and fuel poverty actions are incorporated will depend on the exact structure and on the actions being proposed.

However, below are listed a few examples of the sorts of actions that can be linked to each of the four key blocks.

Children and young people

- ❑ Tackling fuel poverty in families; and
- ❑ Working with schools to install low carbon technologies and use these as a focus for building climate and sustainable energy awareness in young people.

Healthier communities and older people

- ❑ Action to promote non motorised transport modes; and
- ❑ Tackling fuel poverty amongst older people.

Safer and stronger communities

- ❑ Using the theme of climate change as a focus around which diverse communities can work together.

Economic development and environment

- ❑ Intermediate labour market activities that include energy efficiency works; and
- ❑ Support for increased business resource efficiency.

Step 2: Do local partners have the resources needed to deliver on climate change and fuel poverty?

Some areas may already have a focus on climate change and/or fuel poverty. Whether or not this is the case, it may be worth reviewing whether the existing arrangements are fully capable of addressing these issues.

- ❑ Is there sufficient expertise within the existing partnership members?
- ❑ Are existing members sufficiently convinced of the benefits of action in these areas?
- ❑ Does the partnership have sufficient administrative support to take on additional activity?

Understanding the present situation will help in developing a plan of action for the incorporation of new aims for the partnership.

Step 3: Accessing expertise

An event may be a good focal point for identifying and harnessing this expertise. For example, the Mid Bedfordshire Local Strategic Partnership organised a climate change conference, linked to the council's signing of the Nottingham Declaration:

<http://community.midbeds.gov.uk/council/corporate/lsp/climate/default.asp>.

More information on partnership working is included in module 4. Further information on local strategic partnerships and community planning can be found in the following resources:

- ❑ The Sustainable Energy Beacon Councils Toolkit produced for English local authorities includes a section on community leadership and this refers to a number of case studies. The toolkit is available on CD from: Emma Buxbaum at IDeA. Please contact Emma on emma.buxbaum@idea.gov.uk;
- ❑ The IDeA website includes information and case studies on Local Strategic Partnerships, here: www.idea.gov.uk/idk/core/page.do?pagelId=316976;
- ❑ Evaluations of local strategic partnerships and community strategies have been carried out on behalf of Communities and Local Government. The reports are available here: <http://www.communities.gov.uk/localgovernment/localregion%20al/localcommunity/>
- ❑ The Energy Saving Trust's Practical help service has a briefing note on the inclusion of sustainable energy in the community planning process: www.energysavingtrust.org.uk/uploads/documents/housingbuildings/Sustainable%20energy%20in%20community%20planning.pdf;
- ❑ Information about the inclusion of sustainable energy in Broxtowe's community strategy can be found here: www.energysavingtrust.org.uk/uploads/documents/housingbuildings/se_in_community_planning_broxtowe_cs.pdf;
- ❑ A description of how Fife successfully incorporated fuel poverty and energy efficiency in its community strategy can be accessed here: www.energysavingtrust.org.uk/uploads/documents/housingbuildings/community_planning_fife_cs.pdf; and
- ❑ In Wales, details about Local Service Boards (LSBs) and Agreements, including information on a number of climate change projects being taken forward by LSB development areas is available at: <http://new.wales.gov.uk/about/strategy/makingtheconnections/?lang=en>

Links to the local government performance framework

The performance framework and the structures of local partnership working are changing in both England and Wales.

In England, the new performance framework detailed in the Local Government White Paper 2006 will include an appropriate focus on climate change, with the Comprehensive Spending Review making decisions on national outcomes, indicators and any national targets. Local authorities and their partners will determine, in negotiation with their Regional Government Office, the local improvement targets relating to the national indicators that they wish to include in their Local Area Agreements. They will be required to have regard to these targets in the exercise of their functions. The Comprehensive Area Assessment² will highlight any risks to delivery against all national indicators and areas will need to consider these risks when revising service plans, sustainable community strategies and Local Area Agreements.

Once these new frameworks have been fully determined, it will be possible to evaluate how best action on climate change and fuel poverty can promote the achievement of the aims contained within them.

The performance measurement framework for local authorities in Wales only contains performance indicators that relate to the functions and services provided by local government. Those performance indicators that are set nationally fall into two distinct categories: a small set of statutory national strategic indicators; and a larger set of non-statutory core set performance indicators. The performance measurement framework has been developed through extensive partnership working between the Welsh Assembly Government, local authorities in Wales and other stakeholders, and is subject to an annual consultation.

The Local Government Association's Climate Change Commission is examining local authorities' future role in tackling climate change. The resources produced by the Commission examine, in particular, how local government can show community leadership on delivering action to tackle climate change

² See www.audit-commission.gov.uk for developments relating to the CAA

and fuel poverty. Information on the Commission and its work can be found here: <http://campaigns.lga.gov.uk/climatechange/home/>.

Engagement with local and regional stakeholders

Working at a sub-regional and regional level can have benefits in terms of sharing resources and also improving consistency of messages delivered to the wider community.

Local authorities, with their understanding of local circumstances, can work together and with partners at regional and sub-regional levels to ensure that strategies and action programmes have maximum effect.

The Government recently published a review of sub national economic development and regeneration in England recognises the importance of alignment between local and regional levels. The Government believes that there should be a single integrated strategy for each region that brings together the regional spatial and economic strategies. The Government will bring forward proposals to give the Regional Development Agencies (RDAs) the executive responsibility for developing the integrated regional strategy, working closely with local authorities and other partners. Regional Assemblies in their current form and function will not continue. Instead, local authorities in the regions will be responsible for agreeing the regional strategy with the RDAs. The Government will consult further later this year on how to implement these reforms.

In Wales, a key area of involvement for local authorities is the Spatial Plan Area Groups. These are a key forum in which local authorities and other partners can work together to shape the future of their area. The main contacts for these groups are the Wales Spatial Plan Area Co-ordinators, whose details are available on the Welsh Assembly Government's website: <http://new.wales.gov.uk/about/strategy/spatial/?lang=en>.

There are a range of other potentially useful partnerships at a regional and sub regional level. These include county and regional sustainable energy partnerships, the Energy Saving Trust's Sustainable Energy Networks and Home Energy Conservation Association (HECA) fora.

Sustainable Energy Networks will be rolled out across England and Wales later in 2007/08, and will build on the work of existing Energy Saving Trust supported advice services. For information on these Networks please contact Practical help: 0870 241 2089 or practicalhelp@est.org.uk.

Information about regional HECA fora can be found here: www.hecafora.com/regions_home.php.

The Cornwall Sustainable Energy Partnership is well established and effective. It has a website detailing its activities, available here: www.csep.co.uk/.

Setting the standard

An effective way for a local authority to encourage action in the wider community is for it to demonstrate its own commitment and willingness to act.

Step 1: Demonstrate corporate commitment

All local authorities in Wales have signed the Welsh Declaration on Climate Change, to indicate their commitment to tackling the issue. In England, over 260 councils have signed the Nottingham Declaration on Climate Change. For further information see: www.energysavingtrust.org.uk/housingbuildings/localauthorities/NottinghamDeclaration/.

Step 2: Take action in the council's own estate and operations

It is important to 'walk the talk' and to ensure appropriate use of energy efficiency and renewable and low carbon energy technologies in the local authority's own estate and operations. This will lend credibility to calls for similar action in the wider community.

More information on this is contained in module 6.

Step 3: Develop and implement supporting policies

Encouraging people to take action will only be effective if local policies support this action. Local land-use planning and transport policies will be particularly important.

Modules 7 and 9 look at these in more detail.

It is also important to demonstrate a joined-up, coherent approach to tackling fuel poverty and addressing climate change, recognising the synergies between the two policy areas.

Step 4: Offer exemplars

Good examples of what can be achieved using energy efficiency and renewable and low carbon energy technologies can inspire action. Council buildings can be used as very visible exemplars, as can schools and community buildings. The council can encourage low carbon housing developments within its area. Further information on the powers and resources available to local authorities is included in modules 5, 8 and 10.

Awareness and action in the wider community

Local authorities can be a trusted source of information for the wider community. They can also work with community groups to facilitate action.

Step 1: Messages in regular council communications

It is not necessary to create bespoke communications materials. Perhaps the easiest way to increase awareness of climate change and fuel poverty issues is to include information in existing council communications. For example, articles on council energy saving initiatives can be included in council newsletters, accompanied by hints and tips on how to save energy in the home together with contact details for the local Energy Efficiency Advice Centre.

Step 2: A local focus for national programmes

Local delivery of national schemes can both increase the cost effectiveness of the scheme and also ensure that a locality receives its fair share of the funding on offer. Local authorities can work with energy suppliers and Warm Front or HEES. The Government's Community Energy Efficiency Fund (CEEF) is providing financial support in England to projects to improve the effectiveness and co-ordination of Warm Front and Energy Efficiency Commitment delivery through an area based approach. This funding is supporting projects during 2007-08 and aims to learn from the projects.

Step 3: Support the work of existing voluntary and community groups

There may be voluntary and community groups in the area that are already active on climate change and/or fuel poverty issues. Local authorities can support the activities of these groups, for example by offering venues for events or publicising initiatives. For more information see:

www.everyactioncounts.org.uk.

Step 4: Develop and implement a climate change or fuel poverty communication initiative

In partnership with other local organisations, local authorities can implement new and innovative climate change communication initiatives. The Government's climate challenge initiative (www.climatechallenge.gov.uk/) offers lots of information on how to do this, and also details of a wide range of schemes that are already up and running. Equally, local authorities could work to generate referrals to fuel poverty programmes or for energy efficiency measures.

Step 5: Become actively involved in community energy projects

Community Action for Energy (www.energysavingtrust.org.uk/cafe/welcome/) is a network of people who share a common interest in community energy projects and ideas. Membership of the network is free and allows members to keep up to date with news on community-based energy initiatives, and hear about funding opportunities and training sessions.

Energy advice will form a key part of community engagement in this area. Please see module 14 for more on this.

The table below offers links to information about a number of community energy initiatives that may be of interest.

Table of case studies

Case study	Local authority	Type	Summary	Link
Unitary Authorities				
Dyfi Eco Valley Partnership	Powys and Gwynedd county councils	Unitary, Wales	Creation of a community body to enable residents to install low carbon technologies	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%208.pdf
Sustainable energy in community planning	Fife Council		Incorporating fuel poverty into their community strategy	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/community_planning_fife_cs.pdf
Community heating	Powys County Council	Unitary, Wales	Development of a biomass community heating network in Llanwddyn	www.energysavingtrust.org.uk/housingbuildings/casestudies/index.cfm?mode=view&casecat=123&case_id=316
District Councils				
Community planning and sustainable energy strategy	Broxtowe Borough Council	District, urban	Case study on inclusion of sustainable energy in their community plan	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/se_in_community_planning_broxtowe_cs.pdf
Energy Days	Daventry District	District, rural	Initiative to promote energy efficiency via events in villages around Daventry, Northamptonshire	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%207.pdf
Energy efficiency bingo game	Harrogate Borough Council	District, rural	Using bingo to raise energy efficiency awareness amongst older residents	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%2019.pdf
Energy advice to community groups	High Peak Borough Council	District, rural	Provision of energy advice to community groups to improve energy efficiency within the domestic sector	www.beacons.idea.gov.uk/idk/aio/1199300
Fenland FenESS energy services scheme	Fenland District Council	District, rural	Energy services scheme for landlords and private households	www.impetusconsult.co.uk/PEET_CS.pdf
Mid Bedfordshire Local Strategic Partnership	Mid Bedfordshire District Council	District, rural	Information about a climate change conference, linked to the council's signing of the Nottingham Declaration	http://community.midbeds.gov.uk/council/corporate/lsp/climate/default.asp
Other				
Baywind Renewable Energy Cooperative	Cumbria		Formation of the first UK co-operative to own wind turbines	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%2020.pdf
Community energy	Teignbridge,	Mix of	A scheme to promote energy	www.energysavingtrust.org.uk/uploa

efficiency scheme	Plymouth and Devon	district, city and county councils. Rural and urban	efficiency improvements in local schools, households and businesses	ds/documents/cafe/cafe%20case%20study%2010.pdf
Power Factory	Rhondda valley		Equal partnership between the local community and an energy supplier to build a wind turbine farm	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%2016.pdf

Table of resources

Resources	Summary	Link
Well-being		
Case studies on the use of the power of well being to support sustainable energy activities		www.impetusconsult.co.uk/PEET_CS.pdf
Community strategies and partnerships		
Going Carbon Neutral	Website on the work on Ashton Hayes	www.goingcarbonneutral.co.uk
Sustainable Energy Toolkit	Sustainable Energy Beacons Toolkit	The toolkit is available on CD from: Emma Buxbaum at IDeA. Please contact Emma on emma.buxbaum@idea.gov.uk
Local Strategic Partnership	Information on LSPs	www.idea.gov.uk/idk/core/page.do?pagelid=316976
National evaluation of Local Strategic Partnerships & community Strategies	Report on the effectiveness of LSPs	http://www.communities.gov.uk/localgovernment/localregional/localcommunity/
Sustainable energy in community planning	Briefing note from the Energy Saving Trust	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/Sustainable%20energy%20in%20community%20planning.pdf
Local Service Boards and Agreements - Wales	Information about Local Service Boards	http://new.wales.gov.uk/about/strategy/makingtheconnections/LocalServiceBoards/?lang=en
Strengthening local action on climate change	LGA report on the future role of local authorities on climate change	campaigns.lga.gov.uk/climatechange/home/
Engagement with regional stakeholders		
Wales Spatial Plan Area Co-ordinators	Contact details for the Area Co-ordinators for the Wales Spatial Plan	http://new.wales.gov.uk/about/strategy/spatial/?lang=en
HECA Fora	Information on regional HECA Fora	www.hecafora.com/regions_home.php
Sustainable Energy Networks	Partnerships covering sustainable energy	For information on these Networks please contact Practical help: 0870 241 2089 or practicalhelp@est.org.uk
Cornwall Sustainable Energy Partnership	Information about the Cornwall Sustainable Energy	www.csep.co.uk/

	Partnership	
Nottingham Declaration	Information on the Nottingham Declaration	www.nottinghamdeclaration.org.uk
Awareness and action in the wider community		
Every Action Counts	Information on voluntary and community groups taking action on climate change	www.everyactioncounts.org.uk
Community Action for Energy	Network and information on community energy projects	www.energysavingtrust.org.uk/cafe/welcome
Climate change communication initiatives	Details of projects for communicating the challenges of tackling climate change	www.climatechallenge.gov.uk/

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 6: Own estate and operations

Summary

The energy consumption of local authorities is estimated to be at least 26 billion kWh per year. This results in annual emissions of more than 6.9 million tonnes of Carbon Dioxide (MtCO₂) and corresponds to energy expenditure in the order of £750 million per year. However, there are some common areas of excessive energy consumption where savings can be made, such as lighting, heating, ventilation, air conditioning and office equipment.

Energy management within local authorities will contribute directly to climate change mitigation, lead to cost savings for the local authority, and form a key part of the local authority's community leadership role in this area.

Local authorities also have opportunities to influence practices in undertakings in which they have a part interest, e.g. a joint venture with a private sector company, and, as discussed in this module, services that are contracted out.

This module sets out a clear process that local authorities can follow (based on the steps from the Carbon Trust's Local Authority Carbon Management Programme) to reduce carbon emissions from their own estate and operations (including transport). It then goes on to provide information and case studies on key areas where there are opportunities for action.

Process

Through the Local Authority Carbon Management Programme (LACM), the Carbon Trust provides councils with technical and change management support and guidance to help them realise carbon emissions savings. The primary focus of the work is to reduce emissions under the control of the local authority such as buildings, vehicle fleets, street lighting and landfill sites:

www.carbontrust.co.uk/carbon/la/.

The Carbon Trust's Local Authority Carbon Management programme works on the basis of a five step process:

- ❑ Step one: Mobilise the organisation – build the team and determine the scope.
- ❑ Step two: Set the baseline, forecast and targets – set the baseline for the programme and its goals.
- ❑ Step three: Identify and quantify options – identify the risks and opportunities presented by climate change.
- ❑ Step four: Finalise a strategy and implementation plan – design a cost effective strategy to cut emissions and save money.
- ❑ Step five: Implement the plan – with budgets, targets and success metrics.

The LACM is available to a defined number of local authorities each year (each phase is launched at the beginning of May). To date 141 authorities have participated, with 45 of these in this year's phase. To participate a local authority must demonstrate corporate commitment to the process and a willingness to work in partnership with the Carbon Trust to achieve change. In addition, the programme offers a number of resources to assist authorities that wish to follow the process without participating in the programme.

Step 1: Mobilise the organisation

Tackling climate change within a local authority's own estate and operations will have an impact on all departments. Therefore, to be successful, the ideal plan of action will have buy-in from senior representatives of all departments. This is best achieved by demonstrating the long term financial and other benefits to the local authority and illustrating how the actions will help to meet corporate objectives.

Step 2: Set the baseline, forecast and targets

In order to set targets and assess progress against them, it is important to establish the authority's current level of energy use and carbon emissions. This can be done by collecting information on fuel bills for the authority's own estate. It is also helpful to incorporate any projections of future energy use based on business as usual. For example procuring a new office building will have an impact on future energy use.

At this stage it is helpful to set out some broad targets and objectives. For example Aberdeen City Council agreed a new and achievable target to reduce carbon emissions by 10% by 2010 and by 15% by 2015 (compared with the 2002/3 baseline). This contrasts with an expected increase in emissions of 1.5% by 2015, if no interventions were made.

Step 3: Identify and quantify options

Once the targets have been agreed, the next step is to identify areas where action could be taken (both through energy efficiency and renewable and low carbon technologies) and to quantify the savings that these actions would achieve. It is then possible to prioritise the actions. See the text box on Aberdeen City Council for examples of areas for action.

Step 4: Finalise strategy and implementation plan

After the actions have been identified and prioritised, they can be built up into a strategy and action plan. This can include information on how they will be resourced financially, outlines the most appropriate individuals responsible, and establishes a process for both regularly reviewing the plan and reporting on delivery against targets. It also ensures carbon management achieves the necessary senior level buy-in.

Identification and prioritisation of practical opportunities to cut emissions – Aberdeen City Council

In the short-term, the Carbon Trust advised three key areas for priority carbon emission reduction activity. These were:

1. Implementation of energy and water efficiency measures in corporate buildings;
2. Integrating energy efficiency into the Council's procurement process; and
3. Developing the potential of the existing energy service company Aberdeen Heat and Power to supply energy to council buildings and functions.

Other longer-term priorities included:

- ❑ Replacing street lamps with energy-efficient lighting;
- ❑ Increasing the proportion of 'green' electricity for street-lighting and buildings by reviewing suppliers;
- ❑ Reviewing the integration of energy efficiency within the maintenance programme;
- ❑ Developing a revised travel plan for staff e.g. a car-share database; and
- ❑ Developing a procurement policy for replacing the fleet with lower carbon emission vehicles.

Step 5: Implement the plan

Once adopted, the plan can be implemented and the actions carried out. As with all action plans it is important to measure and record progress. The following resources can help with this:

- ❑ Environmental Management Systems (such as EMAS): some local authorities have found this a useful framework within which to record their progress. This tool is explained further at: www.emas.org.uk/. Leicester City Council, one of the sustainable energy beacon authorities, uses this framework. More information on this can be found in the Sustainable Energy Beacons Toolkit. Information on how to order a copy is available from: www.idea.gov.uk/idk/core/page.do?pageId=5747988; and
- ❑ Eco-footprinting: Stockholm Environment Institute's REAP programme website offers data on the eco-footprint of all local authorities: www.sei.se/reap/local.php and WWF has produced a guide on eco-footprinting for local authorities: www.wwf.org.uk/filelibrary/pdf/ecologicalfootprints.pdf.

Clearly, all monitoring and assessment work will be most useful if it can feed-in to the new local government performance frameworks being introduced in England and Wales. The Comprehensive

Spending Review will make decisions on national outcomes, indicators and any national targets. The performance measurement framework in Wales already includes indicators on energy efficiency and carbon emissions.

Within the process outlined above there are a number of areas where there are opportunities for action. These are highlighted below.

Resource efficiency

Increased resource efficiency is a key component of the efficient and cost effective delivery of any organisation's functions, and therefore has obvious benefits to local authorities. Improving the efficiency of the resources that a local authority uses can also have an impact on tackling climate change.

Key elements of resource efficiency are increased energy and water efficiency, and reductions in waste.

In England advice about improving resource efficiency is provided at a regional level through the Regional Development Agencies (RDAs). The majority of the RDAs (North West, North East, West Midlands, East Midlands, East of England, London and the South East) provide this service through Business Link. Further information can be obtained through the English RDA website:

www.englandsrdas.com/home.aspx and the Defra website:

www.defra.gov.uk/Environment/waste/brew/.

In Wales, advice and support on reducing and recycling waste is provided through the Assembly Government's Public Sector Waste Minimisation Campaign:

http://new.wales.gov.uk/topics/environmentcountryside/epq/waste_recycling/pub_sect_waste_minimisation?lang=en. This includes the provision of guidance, resources, training and some grant support for new recycling infrastructure. On-site support is provided through Envirowise. For more information, visit the Envirowise website: www.envirowise.gov.uk/wales.

For key information about how to minimise the authority's waste, refer to Envirowise services:

www.envirowise.gov.uk/shred.

Civic and amenity buildings

Local authorities can make best use of resources and at the same time contribute to reducing carbon dioxide emissions by implementing good practice energy management for each of the buildings and facilities they own and/or lease.

There are three key areas of influence:

- ❑ Energy use of the buildings;
- ❑ Energy efficiency of the equipment in the buildings; and
- ❑ Staff behaviour.

Energy is one of the largest controllable costs in most organisations, because there is usually considerable scope for reducing consumption in buildings. An initial step would be to conduct a walk around survey to identify bad practice, inefficient equipment and poor energy habits. The Carbon Trust provides a publication that can assist with this, called Assessing the Energy Use, which can be downloaded here: www.carbontrust.co.uk/publications/publicationdetail?productid=CTL003.

The following document from the Carbon Trust demonstrates the best energy saving opportunities available in many local authority buildings, covering heating, catering, lighting, ventilation and air conditioning, office equipment, building fabric, combined heat and power (CHP), renewable energy, water usage and people solutions:

www.carbontrust.co.uk/publications/publicationdetail?productid=CTV028.

The Carbon Trust also has a number of publications covering energy efficient improvements that can be made to the fabric of the building, for example Building Fabric Fact Sheet, which can be downloaded here: www.carbontrust.co.uk/Publications/publicationdetail.htm?productid=GIL122&metaNoCache=1.

One method of influencing staff behaviour would be to hold an energy day event. The Energy Day Toolkit provides resources such as poster and newsletter templates, presentations and videos to help local authorities host an event for staff. This can be obtained here: www.energysavingtrust.org.uk/housingbuildings/calculators/energyday/.

The Wales Audit Office recently reported on the standard of energy and water management in Welsh local authorities. Its report, which includes recommendations and references to good practice, is available here: www.wao.gov.uk/assets/energy_and_water_management_English_final.pdf.

Once energy efficiency measures have been considered and implemented where feasible, local authorities can consider using renewable and low carbon technologies on their civic and amenity buildings. Examples of this include:

- Powys County Council who installed solar photovoltaic cells on their county hall: www.energysavingtrust.org.uk/uploads/documents/housingbuildings/PV16S.pdf;
- Fermanagh District Council's use of solar hot water on Enniskillen Town Hall: www.energysavingtrust.org.uk/uploads/documents/housingbuildings/la_use_of_renewables_eniskillen_cs.pdf; and
- Worcestershire County Council's wood-fired boiler, which supplies heat to the council's offices: www.energysavingtrust.org.uk/uploads/documents/housingbuildings/la_use%20of_renewables_worcestershire_cs.pdf.

From 6 April 2008 public sector occupiers of larger buildings will need to have a Display Energy Certificate (DEC) in a prominent place clearly visible to the public. A DEC shows the energy performance of a building based on actual energy consumption as recorded annually over periods up to the last three years, and needs to be updated each year. By working to make buildings as energy efficient as possible and through using renewable and low carbon technologies, local authorities can demonstrate their commitment to tackling climate change: the DEC can be used to demonstrate energy use reductions resulting from energy efficiency and renewable and low carbon programmes. Further information can be found here: www.communities.gov.uk/index.asp?id=1504737.

Council housing

Councils are improving the energy efficiency of their housing in order to deliver the Decent Homes Standard in England and the Welsh Housing Quality Standard in Wales. In addition, there is further work that can be done (including the use of renewable and low carbon technologies) to reduce carbon emissions from these homes and also to reduce the risk of families in them suffering from fuel poverty.

Council housing is covered in depth in module 9.

Transport

Fleet management and staff travel

As operators of (large) fleets of vehicles, local authorities can ensure that measures are taken to minimise the carbon dioxide emissions of their transport activities. This may involve ensuring that fuel efficiency is a key consideration when procuring council vehicles, both for the council's own use and as part of contracted services, encouraging the adoption of energy efficiency driving practices and encouraging alternatives to single occupancy car use amongst staff, including car sharing, public transport use, and walking and cycling.

For information on fleet management and staff travel plans, please refer to module 10.

Street lighting

Street lighting accounts for about one per cent of all non-domestic energy use and the energy used is expected to increase by 0.7 TWh by 2020. Having more energy efficient street lights and traffic signals and using renewable or low carbon sources of electricity to power them, can be an important part of any council's strategy to increase efficiency and reduce emissions. For example Nottingham City Council uses 100 per cent green electricity for street lighting: www.nottinghamcity.gov.uk/sitemap/the_facts. A zero emissions factor can only be applied to green electricity if your authority has entered into a renewables source contract with an energy supplier that has acquired Climate Change Levy exemption Certificates (LECs) for the electricity supplied to the local authority as a non-domestic electricity consumer.

By instigating a programme of works to replace old lights with more efficient models, coupled with technologies such as remote monitoring, local authorities can tackle both running costs and carbon dioxide emissions. For example Bristol City Council found that energy costs for street lighting are rising due to the Council's focus on community safety and crime. One of the key actions from the LACM programme of work was to use new technology that would enable lights to be brightest at peak times and dimmed during off-peak hours.

The Energy Saving Trust's case study on Shropshire County Council's climate change strategy details carbon dioxide emissions from street lighting together with the reductions that have been made through the climate change strategy. This document can be found here:

www.est.org.uk/uploads/documents/housingbuildings/Cliimate_change_strategy_shropshire_cs.pdf

Resources

The Manual for Streets provides guidance for practitioners involved in the planning, design, provision and approval of new residential streets, and modifications to existing ones. Section 10 provides information about street lighting: www.dft.gov.uk/pgr/sustainable/manforstreets/.

The Street Lighting – Invest to Save guidance from the Institute of Lighting Engineers makes suggestions which will keep the street lighting lit whilst helping to reduce costs:

www.ile.org.uk/uploads/File/Street%20Lighting%20-%20Invest%20to%20Save%20_ILE_.pdf.

Public land

Local authorities can take part in the Carbon Trust's Partnership for Renewables to demonstrate leadership to local residents by working with the private sector on renewable energy projects on public land. Further information about this can be found here:

www.carbontrust.co.uk/enterprises/enterprises/pfr.htm.

Through thoughtful management of open spaces, local authorities can also reduce energy and other resource requirements for maintenance and indirectly contribute to energy conservation by providing local leisure facilities and attractive spaces for walking and cycling to encourage people to choose sustainable travel options for short journeys.

Appropriate signage explaining energy conservation, low carbon energy generation and climate change adaptation measures in public spaces can contribute to wider behaviour change by educating the public on how climate change can impact globally and local actions that can be taken to mitigate and adapt to it.

Land disposal

Local authorities are given powers under the Local Government Act 1972 to dispose of land in any manner they wish. The only constraint is that a disposal must be for the best consideration reasonably obtainable (except in the case of short tenancies), unless the Secretary of State or the Welsh Assembly Government consents to the disposal. Under the General Disposal Consent 2003, local authorities and certain other public bodies are exempted from seeking specific consent where the undervalue is less

than £2m, and the disposal will promote the social, economic or environmental well-being of the area. Further information about this can be found here: www.communities.gov.uk/index.asp?id=1144327.

In England, it is Government policy that local authorities and other public bodies should dispose of surplus land wherever possible, within the context of a strategic approach to the management of local public assets. It is recognised that there may be circumstances where an authority considers it appropriate to dispose of land at an undervalue, for instance in order to transfer leasehold or freehold ownership to a community organisation. Further information and case studies on this are set out in *Making Assets Work: the report of the Quirk Review of community management and ownership*, which the Government has committed to implementing in full (<http://www.communities.gov.uk/index.asp?id=1510515>).

In Wales, local authorities may dispose of any land at any price without consent if that would improve local social, economic or environmental wellbeing and if the undervalue is less than £2 million.

An example of a local authority working within the requirements of best consideration and linking it to tackling climate change was in the acquisition of land for the Beddington Zero (BedZed) development. Sutton Council had written into their Unitary Development Plan that they wanted to develop a low carbon eco-village. With help from Sutton Council, Bio Regional, Peabody Trust and Bill Dunster Architects (the project team), a site owned by Sutton Council was identified.

The project team produced designs that highlighted the development's low carbon design and carbon savings from travel plans which focused on reduced car dependency (the site relies on car sharing). Sutton Council commissioned independent consultants to carry out a financial audit of the savings the low carbon design would achieve. The savings were valued at 10% of the land cost which could then be taken off the sale price of the land. The project team could show that their development was more beneficial to the council as it saved them £200,000 (through things such as lower transport costs); therefore the land for BedZed was sold for £1.8million i.e. 10% below the market value of £2million.

Finance

Local authorities can use prudential borrowing to fund investments in energy efficiency and low carbon technologies that lead to reductions in operating costs. A focus on lifetime costs rather than simply on capital cost will facilitate optimal investment decisions.

The Local Government Association (LGA) has produced a guidance document on prudential borrowing. Funding Innovation: Local Authority Use Of Prudential Borrowing can be downloaded here:

www.lga.gov.uk/Documents/Publication/FCA234_pru_borrow_Layout%201.pdf.

Interest-free loans are another option that local authorities can use to finance energy efficiency measures. Salix is an independent, publicly funded company that provides interest-free match funding to the public sector to invest in energy efficiency measures and technologies that will reduce carbon emissions.

The funding is fed into a ring-fenced revolving loan fund to be spent on proven energy saving and renewable projects with a payback of less than five years. The energy savings are returned to the fund until the original project investment is repaid. This can then be re-invested in other cost effective projects with the authority free to keep additional savings to spend on frontline services. For more information, refer to the Salix website: www.salixfinance.co.uk/laprogramme.html

Caerphilly County Borough Council

Caerphilly implemented a large fund of £800,000 (£300,000 from Salix and £500,000 from Caerphilly). Thus far, they have achieved annual savings of 876 tCO₂.

Caerphilly has had particular success in the leisure sector; they have upgraded four sports halls with new lights and sensors. This has enabled them to reduce running costs by half and their electrical load by 40%. John Poyner, Leisure Centre Manager, also claims that the upgrades have also provided a better environment, "The sports hall now looks far more appealing to customers and certainly enhances their use and enjoyment of the facilities."

Download the full case study: www.salixfinance.co.uk/cscaerphilly.html

For information about other sources of funding open to local authorities, including details about the Government's Low Carbon Buildings Programme for investments in renewable and low carbon technologies, visit the Energy Saving Trust's funding database:
www.energysavingtrust.org.uk/housingbuildings/funding/database/.

Procurement

Local government wields significant purchasing power. Councils in England spent £65 billion in 2005/06 on capital projects and buying-in goods and services. There is a compelling case for the inclusion of sustainability criteria in procurement decisions, which can have a great impact not only on the authority's own emissions and costs but also on the extent to which sustainable options for goods and services are offered to the market.

All 22 local authorities in Wales are signed up to the commitments of the Welsh Assembly Government's Opening Doors charter which includes a commitment to the principles of the Value Wales Sustainable Procurement programme. These principles include implementing a Sustainable Procurement Assessment Framework (SPAF). This enables organisations to benchmark their sustainable procurement performance and create action plans for improvement, and undertake a training programme called Making it Happen which provides practical tools to enable organisations to procure more sustainably. The training programme includes a Sustainability Risk Assessment template (SRA) which ensures that procurers think about the impacts of purchasing decisions. Further information on all of the above is available via Value Wales Procurement Route Planner which can be found at: www.buy4wales.co.uk.

Commissioned by the LGA and Communities and Local Government, a Local Authority Group has been leading the preparation of a Sustainable Procurement Action Plan for local government. This Plan will be launched later this year and follows Central Government's own action plan, which was published in March 2007 and can be downloaded here: www.sustainable-development.gov.uk/publications/pdf/SustainableProcurementActionPlan.pdf.

In May 2008 the Government will be publishing guidance on the use of energy efficiency and energy savings as possible assessment criteria in public tendering. Further information can be found here: www.defra.gov.uk/environment/climatechange/uk/energy/energyservices/.

Sustainable procurement principles can be incorporated into procurement in a variety of ways, including:

- ❑ Day to day goods and services – such as office materials and equipment, cleaning services, catering services;
- ❑ Buildings – both materials for the refurbishment of existing buildings and the procurement of new buildings; and
- ❑ Contracted out services – such as public transport providers, waste collectors and leisure facilities operators.

Resources

Information on efficient and sustainable procurement for council's own products

Value Wales works with the public sector in Wales to make the best use of its resources. An overarching objective of Value Wales is to use innovative thinking and procurement processes to drive integration of the principles of sustainable development into spending decisions. Extensive advice and guidance is available from Value Wales via the National Procurement Website www.buy4wales.co.uk.

The Regional Centres of Excellence (RCEs) have put in place a procurement programme for goods and services. As a part of this, a How To Be Successful In Energy Procurement guide was published in April 2007. Among other things, this guide examines in some detail the main procurement options available to local authorities. This can be downloaded here: www.rcoe.gov.uk/rce/aio/32444.

Green Street helps housing associations and local authorities improve the environmental performance of their housing stock, including information on procurement:
www.greenstreet.org.uk/index.php?ct=19&filters=f1.

Buying Green - A Handbook On Environmental Public Procurement is a step-by-step guide to help develop a strategic approach to sustainable procurement. It is peppered with useful facts, legislative context and plenty of case studies:
http://ec.europa.eu/internal_market/publicprocurement/docs/keydocs/gpphandbook_en.pdf

The Consortium of Local Authorities in Wales supports the professional and technical interests of property management in local government in Wales. It has a section on energy management:
www.claw.gov.uk/index.php?id=88&L=0.

Information on how to encourage sustainable behaviour amongst council's subcontractors and suppliers

In 2003 the IDeA produced a comprehensive guide, Sustainability and Local Government Procurement. This guide complements the National Procurement Strategy for Local Government (2003-2006), which contained a number of milestones for local authorities relating to sustainable procurement. For example, the Strategy encouraged every council to establish a corporate procurement strategy aligned to the community strategy and realise community benefits from procurement.

The IDeA guide includes details of Kirklees Metropolitan Borough Council, which makes it a requirement of Council contracts or specifications that, when working for the Council, contractors and suppliers maintain environmental standards equivalent to the Council's own standards. It also includes details of Belfast City Council's Environmental Supplier Questionnaire which they use to find out the environmental credentials of suppliers. Furthermore it includes guidance on selecting suppliers and evaluating tenders: www.idea.gov.uk/idk/aio/1701515.

Councils may wish to consider whether subcontractors and suppliers use sustainable transport modes in their activities, such as low-emission vehicles or locally sourced materials. Information on sustainable travel is available from the Department for Transport: www.dft.gov.uk/pgr/sustainable.

Table of case studies

Case studies	Local authority	Type	Summary	Link
County				
Identification and prioritisation of practical opportunities to cut emissions	Aberdeen City Council	County	Case study on Aberdeen's carbon reduction strategy	Soon to be available on the Carbon Trust website
Shropshire's corporate climate change strategy	Shropshire County Council	County	Case study on Shropshire's climate change strategy	www.est.org.uk/uploads/documents/housingbuildings/Climate_change_strategy_shropshire_cs.pdf
Local authorities use of renewables in buildings and facilities	Worcestershire County Council	County	Installation of a wood fired boiler for the council's offices	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/la_use%20of_renewables_worcestershire_cs.pdf
Unitary				
Green electricity for Nottingham's street lights	Nottingham City Council	Unitary, urban	Details about Nottingham's procurement of 100 per cent green electricity for all street lighting	www.nottinghamcity.gov.uk/sitemap/the_facts
Campaign for Take Off	Powys County Council	Unitary	Installation of solar panels on council buildings	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/PV16S.pdf
Carbon savings made at Caerphilly	Caerphilly Borough Council	Unitary	Case study on Caerphilly's carbon savings across	www.salixfinance.co.uk/cscaerphilly.html

			council buildings with the help of Salix funding	
District				
Local authorities use of renewable energy in buildings and facilities	Fermanagh District Council	District	Use of solar hot water on Enniskillen Town	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/la_use_of_renewables_eniskillen_cs.pdf

Table of resources

Resources	Summary	Link
Process		
Carbon Trust's Local Authority Carbon Management Programme	Detail on carbon management support from the Carbon Trust	www.carbontrust.co.uk/carbon/la/
Eco-Management and Audit Scheme	Information on the EMAS scheme	www.emas.org.uk
Sustainable Energy Toolkit	A benchmark and toolkit created by the sustainable energy Beacon Councils	www.idea.gov.uk/idk/core/page.do?pagelId=5747988
Stockholm Environment Institute's REAP programme	Website tool that offers data on the eco-footprint of all local authorities	www.sei.se/reap/local.php
Ecological Footprints	WWF toolkit for local authorities on calculating the council's ecological footprint	www.wwf.org.uk/filelibrary/pdf/ecologicalfootprints.pdf
Resource efficiency		
English Regional Development Agencies	Information on regional resource efficiency	www.englandsrdas.com/home.aspx
Defra's BREW programme	Information on regional resource efficiency	www.defra.gov.uk/Environment/waste/brew/
Assembly Government's Public Sector Waste Minimisation Campaign	A campaign to encourage sustainable use of resources and cost savings	http://new.wales.gov.uk/topics/environmentcount/ryside/epq/waste_recycling/pub_sect_waste_minimisation?lang=en
Envirowise	Information about reducing waste within a local authority	www.envirowise.gov.uk/shred and www.envirowise.gov.uk/wales
Civic and amenity buildings		
Assessing the Energy Use	Carbon Trust publication on how to conduct an energy survey	www.carbontrust.co.uk/publications/publicationdetail?productid=CTL003
Local Authorities Sector Overview	Carbon Trust publication on energy saving opportunities	www.carbontrust.co.uk/publications/publicationdetail?productid=CTV028
Building Fabric Fact Sheet	Fact sheet about energy efficient improvements to a building's fabric	www.carbontrust.co.uk/Publications/publicationdetail.htm?productid=GIL122&metaNoCache=1
Energy Day Toolkit	Information and material to hold an energy awareness day	www.energysavingtrust.org.uk/housingbuildings/calculators/energyday/
Wales Audit Office report on energy and water management	A report on the standard of energy and water management in Welsh local authorities, which includes recommendations and references to good practice.	www.wao.gov.uk/assets/energy_and_water_management_English_final.pdf
The management of energy and water in Welsh local government	Report on energy and water standards in local authorities and recommendations for improvement	www.wao.gov.uk/assets/energy_and_water_management_English_final.pdf
Display Energy Certificates (DEC)	Information on display energy certificates	www.communities.gov.uk/index.asp?id=1504737
Transport		
Manual for Streets	Guidance from the Department for Transport on provision of street lighting	www.dft.gov.uk/pgr/sustainable/manforstreets/

Street Lighting – Invest to Save	Guidance from the Institute of Lighting Engineers	www.ile.org.uk/uploads/File/Street%20Lighting%20-%20Invest%20to%20Save%20_ILE_.pdf
Public land		
Partnership for Renewables	A subsidiary of the Carbon Trust that works on developing and managing onsite renewable projects	www.carbontrust.co.uk/enterprises/enterprises/pfr.htm
Disposal of land for less than best consideration	Information on best consideration and disposing of land under value	www.communities.gov.uk/index.asp?id=1144327
Finance		
Funding Innovation: local authority use of prudential borrowing	LGA guidance to local authorities on prudential borrowing	www.lga.gov.uk/Documents/Publication/FCA234_pru_borrow_Layout%201.pdf
The Salix Fund	Information for local authorities on Salix funding	www.salixfinance.co.uk/laprogramme.html
Funding sources for local authorities	Database of funds open to local authorities	www.energysavingtrust.org.uk/housingbuildings/funding/database/
Procurement		
Action in the UK – energy services	Information on EU Directive on Energy End Use Efficiency and Energy Services	www.defra.gov.uk/environment/climatechange/uk/energy/energyservices/
How To Be Successful In Energy Procurement	Regional Centres of Excellence publication on energy procurement	www.rcoe.gov.uk/rce/aio/32444
Green Streets	Advice from Green Streets on procurement	www.greenstreet.org.uk/index.php?ct=19&filters=f1
Buying Green	European Commission's hand book on sustainable procurement	http://ec.europa.eu/internal_market/publicprocurement/docs/keydocs/gpphandbook_en.pdf
Value Wales	Guidance from the Welsh Assembly Government on procurement	www.buy4wales.co.uk/buy4wales.aspx
The Consortium of Local Authorities Wales	Information for local authorities on property management	www.claw.gov.uk/index.php?id=88&L=0
Sustainability and Local Government Procurement	Handbook from IDeA on procurement	www.idea.gov.uk/idk/aio/1701515
The UK Government Sustainable Procurement Action Plan	Government's own sustainable procurement action plan	www.sustainable-development.gov.uk/publications/pdf/SustainableProcurementActionPlan.pdf
Sustainable travel advice	Information and resources about sustainable travel	www.dft.gov.uk/pgr/sustainable

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 7: Environment

Summary

Local authorities have a far reaching role in the environment and can take significant steps towards mitigating climate change and alleviating fuel poverty through their functions in this area. They have the opportunity to encourage behavioural change through policies and enforcement action, and by taking a community leadership role that clearly promotes actions that reduce carbon dioxide emissions.

By ensuring policies and enforcement action support the climate change agenda, local authorities can also achieve significant benefits for themselves and their communities. These include financial savings, improved air quality, reduced traffic congestion and enhanced community liveability.

This module covers how environmental protection, trading standards, environmental health and waste services can contribute to the climate change agenda.

Environmental protection

Regulating permitted processes

The Pollution Prevention and Control function within local authorities can contribute to climate change mitigation through its role in ensuring businesses comply with the emissions conditions of their permits. Under the Pollution Prevention and Control Regulations 2000, industrial installations are divided into three categories: A1 and A2 – which could pollute land, air and water (A2 to a lesser extent than A1) and B – where the main risk is air pollution. Local authorities are responsible for the regulation of Part A2 and Part B sites (the Environment Agency regulate Part A1 sites). The 2000 regulations require, among other things, that conditions for Part A installations should ensure that energy is used efficiently and all the statutory guidance notes to which local authorities must have regard to for A2 installations contain advice on this. (The guidance notes can be found at: www.defra.gov.uk/environment/ppc/index.htm.)

Local air quality

Local authorities monitor local air pollution and, where necessary, implement plans to improve air quality. While this doesn't currently include the monitoring of carbon emissions, policies and activities to reduce air pollution can contribute to the reduction of carbon dioxide emissions and vice versa. In addition, there is increasing evidence that air pollution, particularly ozone pollution, is strongly influenced by climate change. Information on trends in air quality in Wales is available at: www.welshairquality.co.uk/index.php.

LACORS has produced a Climate Change Toolkit that details many of the activities Air Quality Officers can be involved in that can impact on carbon dioxide emissions: www.lacors.gov.uk/lacors/NewsArticleDetails.aspx?id=16596&authCode.

Delivering cleaner air – London Borough of Greenwich

The London Borough of Greenwich's Beacon Council Developing Cleaner Air application focuses on the regeneration of the Greenwich Peninsula and tackling high levels of pollution in the A102M Blackwall Tunnel southern approach.

The Council worked with businesses in the area, such as the Post Office sorting office, to reduce pollution levels from vehicles. New developments were also considered and the Council used funding from developers to help finance monitoring of emission levels.

In February 2004, an agreement for a new development was drawn-up using a Section 106 agreement to create a Low Emissions Zone. The negotiations on the legal agreement encompassed all directorates of the Council and involved close liaison, particularly between Environmental Health and Trading Standards, Strategic Planning and Legal Services.

The current Beacon Council round 8 includes the topic Delivering Cleaner Air. Case studies and resources on improving air quality are available on the Improvement and Development Agency website: <http://beacons.idea.gov.uk/idk/core/page.do?pagelId=6074405>. The next round – round 9 – includes the theme Tackling Climate Change, which requires local authorities to demonstrate that they can make a link to Air Quality.

Transport

Actions that tackle climate change by encouraging public transport use, cycling and walking, or through schemes such as park and ride, park and share schemes, and Freight Quality Partnerships (FQP), are also likely to help improve local air quality. There is an opportunity for Air Quality Officers and those working on transport and climate change to work together in developing such initiatives and building corporate support for them. Where road traffic has been identified as the main emission source responsible for exceedences of pollutant objectives, local authorities are encouraged to integrate their Action Plan into their Local Transport Plan.

The LACORS Climate Change Toolkit for regulatory services includes a number of travel initiatives that local authorities can undertake as part of tackling air quality and case studies: www.lacors.gov.uk/lacors/NewsArticleDetails.aspx?id=16596&authCode.

See module 10 for further information on transport.

Trading standards

Minimising packaging

Minimising packaging will help to reduce energy consumption in packaging manufacture and disposal, resulting in turn in fewer greenhouse gas emissions.

Trading Standards Officers are responsible for enforcing the Packaging (Essential Requirements) Regulations 2003 (as amended) which set out the requirements that all items of packaging must meet before being placed on the UK market. The essential requirements are, in summary:

- ❑ Packing volume and weight must be the minimum amount to maintain necessary levels of safety, hygiene and acceptance for the packed product and for the consumer;
- ❑ Noxious or hazardous substances in packaging must be minimised in emissions, ash or leachate from incineration or landfill; and
- ❑ Packaging must be manufactured so as to permit reuse or recovery in accordance with specific requirements.

Northamptonshire County Council – use of trading standards

Stationery retailer Office World has been fined by magistrates in Northamptonshire for using too much packaging for products sold via its website.

The company pleaded guilty to one offence at the court, but two other excessive packaging offences were also taken into account by the magistrates. Office World was fined £2,000 with £550 costs.

Trading standards officers in Northamptonshire carried out test purchases from the company in November 2003 and twice in January 2004. The officers found that the products ordered filled only a small part of the packaging used.

One of the items filled only 7% of the packaging used, while on the other two occasions the product filled only 19% and 29% of the packaging in each case.

Northamptonshire County Council brought the case to the magistrates court under the Packaging (Essential Requirements) Regulations 2003. The regulations require that companies use the minimum amount of packaging – both in terms of weight and volume – to allow the necessary levels of safety, hygiene and product quality. Under the regulations, companies can be fined up to £5,000 for each offence.

Trading Standards Officers can investigate complaints of non-compliant packaging, as well as offering guidance to producers of packaging on proving compliance, through which local authorities can help reduce the volume of packaging produced.

The local authority also has a role to play in encouraging householders to recycle packaging, providing appropriate recycling facilities, and may also choose to encourage the reporting of examples of excess packaging to producers and trading standards. For example, Hampshire County Council is

encouraging householders to take action against excess packaging by reporting incidents to Trading Standards. For further information, see the Excess Packaging chapter of LACORS Climate Change Toolkit: www.lacors.gov.uk/lacors/upload/14516.pdf.

Misleading claims

Trading Standards Officers can also help consumers select the most sustainable, least environmentally damaging products and services, by enforcing regulations covering misleading claims by manufacturers and suppliers. Promotion by local authorities of their willingness to do this can help encourage consumers to report misleading claims. In addition, liaison with businesses is important to ensure that companies understand the regulations and do not mislead consumers on how 'green' their products are.

Environmental health

Tackling a category one hazard can involve requiring owners/landlords to undertake work to reduce excess cold, damp and/or mould in a property. Work can include improved heating systems and/or insulation measures. Tackling excess cold can contribute to tackling climate change and reducing fuel poverty.

In some cases, a category one hazard may not be present but the need for assistance is clearly there. Environmental Health Officers can refer people to further help on improving the energy efficiency of their home or access help for people vulnerable to fuel poverty.

See module 12, social care, for information on offering help to people vulnerable to fuel poverty. For further information on energy efficiency improvements, see module 9.

Waste management

Waste minimisation

In May 2007 the Government published the Waste Strategy for England 2007: www.defra.gov.uk/environment/waste/strategy/. The strategy makes an explicit link between waste management and climate change mitigation: the overall impact of the measures in the strategy is expected to be an annual net reduction in global greenhouse gas emissions from waste management of at least 9.3 million tonnes carbon dioxide equivalent per year compared to 2006.

In June 2002 the Welsh Assembly Government published Wise About Waste, the National Waste Strategy for Wales. Reduction in greenhouse gas emissions was identified as one of the main environmental outcomes of the strategy; a reduction of up to 450,000 tonnes per annum of greenhouse gas emissions will be achieved through meeting the targets set for the recycling of municipal waste. The effective management of bio-wastes is also given a high priority.

The strategy aims to give local authorities further tools to help them work with their communities to provide convenient collection and recycling services for their residents and local businesses, and to plan and invest in new infrastructure to divert waste from landfill.

The Waste Strategy for England sets the following targets:

- ❑ For recycling and composting of household waste – at least 40% by 2010, 45% by 2015 and 50% by 2020; and
- ❑ For recovery of municipal waste – 53% by 2010, 67% by 2015 and 75% by 2020.

Current individual local authority recycling targets will be replaced. Proposals for a new indicator include emphasising waste prevention as well as recycling, setting a minimum recycling service level across the country and giving incentives for joint working. In the longer term, an indicator measuring the climate change impact of a local authority's waste management operations is to be developed.

As part of their local leadership role, local authorities are asked to help local businesses reduce and recycle their waste. The Government is supporting this through funding for pilot initiatives by local authorities, preparation of guidance and dissemination of good practice.

Government will be launching a Zero Waste Places initiative in the autumn inviting a number of cities, towns or villages to become exemplars of good practice on all aspects of waste.

The National Waste Strategy for Wales includes the following targets:

- ❑ For recycling and composting of municipal waste – at least 40% by 2010;
- ❑ For the reduction of household waste – by 2009/10 waste arisings per household should be no greater than those for 1997/98; by 2020 waste arisings per person should be less than 300kg per annum; and
- ❑ For the reduction of waste by public bodies (including from local authorities) – by 2010 to achieve a reduction in waste produced equivalent to at least 10% of the 1998 arisings figure.

Guidance, resources, training and some grant funding are available to local authorities to manage their wastes more sustainably through the Assembly Government's Public Sector Waste Minimisation Campaign:

http://new.wales.gov.uk/topics/environmentcountryside/epq/waste_recycling/pub_sect_waste_minimisation?lang=en.

Energy from waste

As part of the government's support for the development of waste infrastructure, a range of technologies that produce energy from waste that cannot be prevented, re-used or recycled will be supported through the Private Finance Initiative in England. There is support in Wales for energy from waste facilities under the Assembly Government's Regional Capital Access Fund for municipal waste.

Budget 2007 announced that Enhanced Capital Allowances would be made available for good quality Combined Heat and Power (CHP) schemes so that they would have the necessary equipment to use secondary recovered fuel (from waste). The banding of the Renewable Obligations support scheme spelt out in the consultation paper on the Renewables Obligation published in May 2007, proposes greater levels of support for anaerobic digestion, gasification and pyrolysis.

Local authorities can explore options for generating energy from waste as part of their waste strategy. This can include anaerobic digestion of source-separated food wastes. Energy from waste can, under the right circumstances, reduce the amount of climate change gases emitted from waste when compared with landfill, as well as produce more energy for the same amount of carbon dioxide emitted than fossil fuels. Ensuring that the siting of energy from waste facilities maximises the opportunity for connection to district heating networks is a key element of minimising carbon dioxide emissions per unit of useful energy produced. Environment officers may also be able to play a part in allaying public fears about emissions from energy from waste facilities.

A good example of waste to energy CHP is Sheffield's district heating scheme:

www.greenenergy.co.uk/ab_facts.asp.

Transportation of waste

Reducing the amount of transportation associated with waste collection and management, and the carbon dioxide emissions associated with it, can also contribute to climate change mitigation.

Local authorities can consider:

- ❑ Ensuring the most efficient collection routes;
- ❑ The proximity of waste management sites to waste collection points;
- ❑ Fuel use and emissions of the vehicles (including the use of bio-fuels); and
- ❑ If using contractors, ensuring they take climate change objectives seriously.

For more information on good practice in local authority operations, please refer to module 6.

Resources

- ❑ Envirowise provides waste reduction support to businesses (and the public sector in Wales), emphasising the additional benefits from waste minimisation and recycling activities: www.envirowise.gov.uk/;
- ❑ WRAP offers toolkits and best practice advice on waste collection services: www.wrap.org.uk/local_authorities/toolkits_good_practice/index.html;
- ❑ WRAP operates ROTATE, a free service that provides hands-on advice to local authorities in England on collection services and communications: www.wrap.org.uk/local_authorities/rotate/index.html;
- ❑ The Beacon Council Scheme round seven included Waste and Recycling, which focused on developing and delivering sustainable waste outcomes: <http://www.beacons.idea.gov.uk/idk/core/page.do?pagelId=5148237>. The Beacon Council resources include an overview of waste minimisation activity www.beacons.idea.gov.uk/idk/core/page.do?pagelId=6462889;
- ❑ Recycle now gives advice on encouraging and educating people to recycle in England: www.recyclenow.com/). Further support is also available from Defra: www.defra.gov.uk/environment/waste/localauth/encourage.htm; and
- ❑ Waste Awareness Wales gives advice on encouraging and educating people to reduce and recycle their waste in Wales: www.wasteawarenesswales.org.uk.

Street cleaning and street scene maintenance

Local authorities can also contribute to climate change objectives through providing high quality streets for pedestrians and non-motorised modes of transport, and providing strong public transport links. Open spaces, parks and general improvements in the liveability of streets are likely to encourage people to travel in more sustainable ways.

Work conducted by Sustrans into Liveable Neighbourhoods:

www.sustrans.org.uk/default.asp?sID=1090834683408, includes Streets for Living in Swindon: <http://193.113.179.211/streetsforliving>.

Research published by Sustrans suggested that promoting walking and cycling can be positive for businesses and shops: www.sustrans.org.uk/default.asp?sID=1140781068625. Social improvements, such as reduced crime, can also result from these activities.

Table of case studies

Case studies	Local authority	Type	Summary	Link
County				
Office World fined for using excess packaging	Northamptonshire County Council	County	An example of a local authority using Trading Standards	www.letsrecycle.com/materials/plastics/news.jsp?story=3726
Unitary				
Delivering cleaner air	London Borough of Greenwich	London borough, urban	Information about how Greenwich are tackling air quality	www.greenwich.gov.uk/Greenwich/YourEnvironment/Pollution/AirQuality/
Streets for Living	Swindon Borough Council	Unitary, urban	Details on Swindon's street improvement project	http://193.113.179.211/streetsforliving
District				
Waste to energy CHP	Sheffield City Council	District, urban	Information about Sheffield's waste to energy scheme	www.greenenergy.co.uk/ab_facts.asp

Table of resources

Resources	Summary	Link
Environmental protection		
A2 installation statutory guidance notes	Statutory guidance surrounding the Pollution Prevention and Control regulatory regime	www.defra.gov.uk/environment/ppc/index.htm
Air quality in Wales	Information on trends in air quality in Wales	www.welshairquality.co.uk/index.php
Local air quality		
LACORS Climate Change Toolkit	Details many of the activities Air Quality Officers can be involved in that can impact on carbon dioxide emissions	www.lacors.gov.uk/lacors/NewsArticleDetails.aspx?id=16596&authCode
Beacons Sustainable Energy Toolkit	Case studies and resources on improving air quality	http://beacons.idea.gov.uk/idk/core/page.do?pageld=6074405
Transport		
LACORS Climate Change Toolkit	Includes a number of travel initiatives that local authorities can undertake as part of tackling air quality and case studies	www.lacors.gov.uk/lacors/NewsArticleDetails.aspx?id=16596&authCode
Trading standards		
LACORS Climate Change Toolkit	Excess Packaging chapter from the LACORS climate change toolkit	www.lacors.gov.uk/lacors/upload/14516.pdf
Waste management		
Waste Strategy for England 2007	The Government's Waste Strategy for England	www.defra.gov.uk/environment/waste/strategy/
Assembly Government's Public Sector Waste Minimisation Campaign	Guidance, resources, training and some grant funding	http://new.wales.gov.uk/topics/environmentcountryside/epq/waste_recycling/pub_sect_waste_minimisation?lang=en
Beacon scheme on waste and recycling	Access to case studies on waste reduction strategies from Beacon Councils	www.beacons.idea.gov.uk/idk/core/page.do?pageld=5148237
Beacon Council waste minimisation activity	Overview of the waste minimisation activities of Beacon Councils	www.beacons.idea.gov.uk/idk/core/page.do?pageld=6462889
Envirowise	Waste reduction support for businesses	www.envirowise.gov.uk/
Recycle Now	Advice on how to encourage recycling	www.recyclenow.com
Wrap toolkits and good practice	Variety of toolkits and good practice examples for local authorities	www.wrap.org.uk/local_authorities/toolkits_good_practice/index.html
ROTATE	Free advisory service for local authorities in waste collection	www.wrap.org.uk/local_authorities/rotate/index.html
Support from Defra on local authority waste management	An evaluation of the effectiveness of a range of incentive schemes encouraging householders to reduce, recycle and compost their waste	www.defra.gov.uk/environment/waste/localauth/encourage.htm
Waste Awareness Wales	Advice on encouraging and educating people to reduce and recycle	www.wasteawarenesswales.org.uk
Street cleaning and street scene maintenance		
Benefits of walking and cycling for business	Research from Sustrans on the positive impact of walking and cycling on businesses	www.sustrans.org.uk/default.asp?sID=1140781068625
Sustrans Liveable Neighbourhoods research	Information about projects which combine urban design, community involvement and sustainable transport planning	www.sustrans.org.uk/default.asp?sID=1090834683408

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 8: Planning

Summary

The planning system helps define local authorities' place shaping role and is centred on sustainable development. As such, it offers one of the largest opportunities for local authorities to influence energy use and hence carbon dioxide emissions arising from new developments. National planning policy in England and Wales has an increasing focus on climate change mitigation and adaptation and this has a direct influence on expectations for local planning policy and practice.

The new Planning Policy Statement (PPS) on climate change, due to be published later this year, will set out how planning, in providing for the new homes, jobs and infrastructure needed by communities, should help shape places with lower carbon emissions and resilience to the effects of climate change now accepted as inevitable. The PPS will be supported by a practice guide. In Wales, local authorities are expected to take account of the Ministerial Planning Policy Statement on Climate Change (currently in draft form).

The planning system can be used to help minimise the carbon footprint of new developments. The design and location of new developments, including accessibility to public transport to permit sustainable transport options, are also important elements of low carbon developments.

Spatial planning also has an important role in shaping sustainable communities that are resilient to the consequences of climate change that are now accepted as inevitable.

Local authorities can substantially influence carbon emissions through their spatial planning role by producing development plan documents which make a full contribution to delivering the Government's climate change and energy policies and, in doing so, contribute to global sustainability. A key role can also be played by local authorities in helping shape regional spatial strategies which are ambitious in addressing climate change.

In addition to implementing planning policies, local authority development control officers can encourage and educate developers to progress beyond minimum standards and towards a zero carbon standard, which will shortly be required for homes in England and potentially for all buildings in Wales. For existing buildings, local authorities can require or encourage use of sustainable energy options whenever refurbishment, conversion or extension work requires approval. Both development control and building control officers have a role to play here. In the domestic sector, this can in turn improve the energy efficiency of the housing stock, reducing levels of fuel poverty.

Planning is one area where parish, town and community councils have a key role to play. Their views must be taken into account and if they do not agree with a proposal, a decision on it must be taken by the local planning authority executive rather than an individual planner. The extent of influence that these councils can have will very much depend on their relationship with the local authority and its planners.

This module considers the role of planning in climate change mitigation. Links between this and adaptation are discussed in module 15.

Planning policy

Incorporating climate change mitigation aims into local planning policy can be undertaken in a four-step process. The basics of each of these steps are outlined below, together with sources of further information and case studies as appropriate.

Step 1: Understanding the national planning policy context for climate change mitigation

England

The national framework for planning is defined in a series of Planning Policy Statements (PPS). Several of these are relevant or applicable to climate change and need to be considered when developing local planning policies to tackle climate change:

- PPS 1: Delivering Sustainable Development sets out the overarching planning policies on the delivery of sustainable development through the planning system;
- The PPS1 supplement on climate change, on which there was a consultation earlier in 2007, will set out how planning, in providing for the new homes, jobs and infrastructure needed by communities, should help shape places with lower carbon emissions and which are resilient to climate change. The final PPS on climate change and a full draft of a supporting practice guide is due to be published later in 2007 (see below for more details);
- PPS 22: Renewable Energy defines how the planning system is to encourage the development of renewable energy resources. The supporting practice guide provides help for practitioners to secure effective delivery on the ground;
- PPS 25: Development And Flood Risk sets out Government policy on development and flood risk;
- Other PPS/PPGs are also relevant or applicable to climate change including, PPS 3: Housing, PPS 6: Planning For Town Centres, PPS 7: Sustainable Development in Rural Areas, PPS 9: Biodiversity And Geological Conservation, PPS 10: Planning For Sustainable Waste Management; PPS 11: Regional Spatial Strategies, PPS 12 Local Development Frameworks³, PPG 13: Transport, PPG 20: Coastal Planning, and PPS 23: Planning and Pollution Control.

These planning policy statements can be found on the Communities and Local Government website at: <http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/>

The Government's Planning Portal also has an area devoted to resources for local government: www.planningportal.gov.uk/england/government/en/.

The Energy Saving Trust's Practical help service has a short briefing note on planning and building control in relation to housing: www.energysavingtrust.org.uk/download.cfm?p=2&pid=482.

These national planning policy statements should be reflected in the Regional Spatial Strategy, and it is this that will set the framework for Local Development Documents and Local Transport Plans⁴. Local authorities must take the contents of national planning policy statements into account in preparing their development plans. The guidance may also be relevant to decisions on individual planning applications and appeals.

The Regional Spatial Strategies for each of the English regions can be accessed through the planning portal at: www.planningportal.gov.uk/england/professionals/en/1020432878443.html.

The emerging context – The Planning White Paper 2007, Draft Planning Policy Statement (PPS): Planning and Climate Change and Building a Greener Future

³ The 2007 Planning White Paper proposed changes to the plan-making system will result in PPS12 being replaced with a new Planning System Statement 2 for the preparation of Local Development Frameworks.

⁴ Regional Spatial Strategies will be affected by the Government's review of sub-national economic development and regeneration. More information on this is contained in modules 4 and 5.

In May 2007 the Government published the 2007 Planning White Paper: Planning for a Sustainable Future. It sets out detailed proposals for reform of the planning system, proposing reforms on how to take decisions on nationally significant infrastructure projects - including energy, waste, waste-water and transport – responding to the challenges of economic globalisation and climate change. The White Paper makes clear that local planning authorities have a crucial role to play in tackling climate change, and includes a commitment to legislate to set out clearly the role of local planning authorities in tackling energy efficiency and climate change. In particular, the White Paper makes clear that Government wants to see up-to-date development plans to help secure progress against the UK's emissions targets – both through direct influence on energy use and emissions and through bringing together and encouraging action by others. It also underlines the important role of regional and local planning in actively planning for, and supporting, renewable and low-carbon energy supplies. The White Paper is available at: <http://www.communities.gov.uk/publications/planningandbuilding/planningsustainablefuture>

In December 2006, the Government published a package of measures including consultations on a draft PPS: Planning and Climate Change, a document entitled Building a Greener Future, and the final version of the Code for Sustainable Homes. This package proposed a clear framework and timetable for moving towards zero carbon development, including setting out a timetable for all new homes to be zero carbon by 2016.

The consultations on the draft PPS and Building a Greener Future closed on 8 March 2007. The response to the proposals in these two documents was largely positive, and this is reflected in the report of consultation responses on Building a Greener Future and the draft PPS which was published on 6 June 2007 and 23 July 2007 respectively which are available at <http://www.communities.gov.uk/publications/planningandbuilding/futuretowardszerocarbon> and <http://www.communities.gov.uk/publications/planningandbuilding/climate-report>

On 23 July 2007, the Government published its final policy statement on Building a Greener Future alongside the Housing Green Paper. This confirmed the Government's intention for all new homes to be zero carbon by 2016 with an ambitious timetable for progressively tightening the carbon performance standards in building regulations - by 25% in 2010 and by 44% in 2013 - up to the zero carbon target in 2016. A consultation paper on the future of the Code for Sustainable Homes, addressing how it might become mandatory to rate against it, was also published.

The final policy statement on Building a Greener Future also signals what Government expects of the planning system in supporting this ambitious national timetable. In particular it sets out some of the Government's conclusions so far on opportunities for local flexibility and innovation in the context of delivering the Government's twin ambitions of increasing housing supply and raising environmental standards, including the target of zero carbon new homes by 2016. Specifically, Building a Greener Future sets out the direction of travel in relation to requiring higher levels of environmental performance for local development and site specific opportunities, and securing renewable and low-carbon energy supply in new development. The final PPS, to be published later in 2007, will set out the final position and will be supported by practical guidance.

Building a Greener Future states that local authorities should take a proactive, strategic role in identifying local opportunities to promote decentralised and renewable or low carbon energy systems, consistent with ensuring a competitive market and affordable energy. Specifically, Building a Greener Future expects local authorities to have a strategy for securing decentralised and renewable or low-carbon energy in new development. It also confirms that where there are specific sites or development opportunities, local authorities should specify the proportion of renewable or low carbon energy, taking account of feasibility, viability and deliverability. It also provides that local authorities can expect new developments to connect up with existing schemes where feasible and viable, or be developed with connection in mind where there is a clear strategy to develop new schemes. However, they need to demonstrate this through the planning system. Policies also must not prevent owners and occupiers benefiting from the competitive energy market.

Given the ambition of the national timetable, the Government considers that local authorities should not set separate building standards from the Code for Sustainable Homes or set ad hoc timetables through the planning system to reach zero carbon emissions. There may be specific opportunities and local

circumstances where authorities and developers can go further and faster. Any such higher standards for homes need to be set using the Code for Sustainable Homes rather than any other criteria. It may be that a local authority could focus on the carbon standards in the Code or the whole Code. These approaches on energy and building standards need to be properly introduced and tested through the planning system rather than on an ad hoc basis when individual applications are dealt with.

Building a Greener Future is available on the Communities and Local Government website here:

<http://www.communities.gov.uk/publications/planningandbuilding/building-a-greener>

Wales

The Wales Spatial Plan (WSP) was published in 2004. It sets out the opportunities and challenges faced nationally and provides the policy framework for strategic development at the sub regional level in Wales through six identified spatial areas. It contains specific national actions relating to climate change and further work is underway in each of the Spatial Plan Areas to ensure that both mitigation and adaptation measures are factored into strategic and land use planning at the earliest opportunity. To find out what is happening in each spatial area, the main contacts are the Wales Spatial Plan Area Managers, whose details are available on the Welsh Assembly Government's website:

<http://new.wales.gov.uk/about/strategy/spatial/?lang=en>.

The Wales Spatial Plan is available here: <http://wales.gov.uk/about/strategy/spatial/?lang=en>.

National planning policy in Wales is set out in Planning Policy Wales (2002) which is supplemented by Technical Advice Notes. Planning policy is updated by Ministerial Interim Planning Policy Statements (MIPPS).

Planning Policy Wales is available here:

<http://new.wales.gov.uk/about/departments/depc/epcpublications/PlanPubs/plpolwal/?lang=en>.

TAN 8, which covers renewable energy technologies, can be found here:

<http://new.wales.gov.uk/about/departments/depc/epcpublications/PlanPubs/TAN/TAN8?lang=en>.

Local authorities in Wales are expected to take account of the draft MIPPS on Climate Change. This requires local authorities to include climate change mitigation and adaptation in their Local Development Plans.

The final version of the MIPPS will be supported by a climate change compendium, due to be published in 2007, which will provide practical information about the detailed policies and other tools that can be used to implement climate change planning policy.

More information on draft MIPPS on climate change and the climate change compendium is included in a 2006 written cabinet statement, available here:

<http://wales.gov.uk/about/cabinet/cabinetstatements/cabinetstatements2006/1049386/?lang=en>.

The UK government's proposals for moving towards zero carbon housing developments (see above) also currently apply in Wales. However the Welsh Assembly Government aspires to all new buildings constructed in Wales from 2011 onwards being zero carbon, and is now exploring the feasibility of translating this aspiration into a commitment, including looking at devolution of the building regulations.

In the meantime, BREEAM 'Excellent' has been introduced as a condition of all Welsh Assembly Government funding and land disposals for new buildings, and longer term arrangements are also being reviewed so that the zero carbon aspiration can be integrated from 2011 for new buildings over which the Assembly Government has influence.

Whilst it is recognised that the definition of zero carbon remains the subject of debate, the Welsh Assembly Government is using the Code for Sustainable Homes and the UK Government policy statement, Building a Greener Future (July 2007) as a working framework.

The next steps have a strong focus on policy in England. However, due to the changing policy in Wales, it will be of interest to Welsh authorities.

Step 2: Incorporating climate change mitigation into local planning policies

Helping to mitigate, and adapt to, climate change is at the centre of what Government expects from good planning. One important part of this is in relation to energy supply. The Government expects all planning authorities to make full use of the positive approach to renewables set out in Planning Policy Statement (PPS) 22: Renewable Energy. This means that regional spatial strategies and local development documents should contain policies designed to promote and encourage the development of renewable energy resources. PPS 22 also makes clear that renewable energy developments should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic and social impacts can be addressed satisfactorily. The draft PPS on Climate Change built on and re-enforced this positive approach to renewables.

The Government expects local authorities to take a proactive, strategic role in identifying local opportunities to promote and secure decentralised and renewable or low carbon energy systems to supply new development, (see the section on Building a Greener Future above). Local planning will have a key role in delivering this objective and this will involve a process of familiarisation with the technical options involved (see also module 14: Energy advice).

Sustainability appraisal will be important in shaping appropriate spatial strategies. Sustainability appraisal is required in revising Regional Spatial Strategies and preparing new Local Development Documents (Development Plan Documents and Supplementary Planning Documents). This incorporates requirements of the Strategic Environmental Assessment Directive⁵, and includes consideration of the effects of implementing such plans on certain issues such as air and climatic factors. Guidance has been produced to assist authorities with this⁶.

The Town and Country Planning Association (TCPA) is very active in the area of climate change mitigation and adaptation and has produced a number of useful publications including Sustainable Energy by Design and Climate Change Adaptation by Design. Further information on these is available here: www.tcpa.org.uk/publications.asp.

The Energy Saving Trust has produced information on the feasibility of various renewable energy options, which is available here:

www.energysavingtrust.org.uk/uploads/documents/housingbuildings/CE190%20-%2010%20per%20cent%20guide.pdf.

Regional guidance may also be useful, for example *Adapting to Climate Change: A Case Study Companion to the Checklist for Development*, recently published by the Three Regions Climate Change Group (represented by London, South East and East of England government offices), available at: www.london.gov.uk/climatechangepartnership/docs/adapting-climate-change-case-study-ver2.pdf.

Further information on the different renewable and low carbon technologies and their viability in a range of development situations is offered in the Energy Saving Trust and TCPA sources referred to above. There are also a range of sources of technical information listed under 'Step 3' below.

Policies set out in a development plan document are examined by an independent inspector, to ensure that they are sound. This examination process considers the deliverability of the plan and its policies as part of the broader tests of soundness.

⁵ Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment".

⁶ Office of the Deputy Prime Minister, Scottish Executive, Welsh Assembly Government and the Department of the Environment in Northern Ireland (2005) *A Practical Guide to the Strategic Environmental Assessment Directive*, ODPM, London.

See also SEA and Climate Change Guidance produced by Environment Agency et al at: www.environment-agency.gov.uk/commondata/acrobat/seaccjune07_1797458.pdf

Local planning documents should also aim to reduce the need to travel, especially by private car, by influencing the location of different types of development relative to transport provision (and vice versa) and fostering forms of development which encourage walking, cycling and public transport use. The TCPA guidance on Sustainable Energy by Design, mentioned above, will also be of help here too.

The practice guidance that will be produced to support the PPS on Climate Change will be a helpful source on the process of policy development

Also, when considering how to incorporate climate change mitigation into local development planning policy, it may be helpful to review existing good practice in policy making and the processes through which it was developed.

Round eight of the Beacon Councils programme includes the theme of Promoting Sustainable Communities Through the Planning Process. Woking Borough Council is one of the Beacon authorities under this theme and has a reputation for taking the lead in incorporating sustainable energy into local plans. Initial information about various elements of Woking's work can be found here: www.beacons.idea.gov.uk/idk/aio/6090952.

In response to the requirements of PPS 22, many local authorities are developing and implementing planning policies that require a percentage of the energy in new developments to come from on-site renewables, where it is viable. This type of policy originated in the London Borough of Merton and the general approach of looking for on-site renewables, which varies across local authorities, is often referred to as 'the Merton Rule'.

Step 3: Ensuring that policies are deliverable in practice

A high level of technical knowledge is required by development control planners to implement climate mitigation planning policies successfully. Development control planners and others in local authorities who can contribute their skills need to have the appropriate technical knowledge to evaluate planning applications fairly and rigorously. It may well be worth investing in some initial training for the relevant officers when new local planning policies are introduced. Providing information to developers on the potential ways to comply with new policies in development plan documents can be provided through supplementary planning guidance (SPG) and will assist in their smooth implementation.

There are an increasing number of resources available for planners and developers relating to low carbon developments such as the Code for Sustainable Homes. In England, these are often produced at a regional level and therefore it may be worth contacting the RDA and Government Office to check whether there are resources for the region. A couple of examples of these types of resource are the London Renewables Toolkit for Planners and Developers:

www.london.gov.uk/mayor/environment/energy/docs/renewables_toolkit.pdf and the South East England Development Agency's Sustainability Checklist for developments in the South East: <http://southeast.sustainability-checklist.co.uk/>.

The TCPA guidance referred to in 'Step 2' above may also be helpful.

Further examples, together with a range of other resources, can be found at: www.planningrenewables.org.uk/.

Step 4: Maintaining an ongoing dialogue between planning policy and development control

Both planning policy officers and development control officers have key roles to play in ensuring that developments meet planning policy requirements. They may identify a need for additional guidance, either to help them or to pass on to the developers with whom they work. Maintaining a dialogue between planning policy officers and development control officers is essential to the successful delivery of the objectives set out in the local development plan.

Development control

Enforcing planning policy through the development control process where relevant is a vital stage in using the planning system to tackle climate change. The steps below offer a way to maximise chances of effective implementation.

Step 1: Familiarity

It is important to ensure that all development control officers in England and Wales fully understand the detail and implications of new planning policies. They will be best able to enforce policies rigorously and also offer assistance to developers tackling new policies if they are confident in their own knowledge of the area.

Providing initial technical training in the means of complying with policies, together with resources to support the evaluation of planning applications, can greatly increase the contribution that the development control process can make. Examples of the sorts of resources that are available are given in 'Step 3' of the planning policy section, above.

Step 2: Early engagement with developers

The introduction of new policies can meet with resistance from developers who are unsure of the technical and financial implications of compliance. Engaging with developers during pre-application discussions can help to allay any concerns they have, as can pointing them to resources that will help them to comply and can identify whether the approach sought will be viable. Explaining the benefits of the new policies to the developers – for example, gaining an early understanding of ways to progress towards low and zero carbon development – can also be useful.

The Energy Saving Trust's Practical help service has a case study on the introduction of the 'Merton rule' in Merton, and this includes information on the process of engaging with developers in the first development subject to the new policy. This case study is available here:

www.energysavingtrust.org.uk/uploads/documents/housingbuildings/epbc_merton_cs.pdf.

Step 3: Assessing planning applications

When assessing planning applications, it is useful to consider the point at which the new policy should be considered. For a policy promoting the use of renewable energy, the following process may be useful:

- ❑ Assess the feasibility of incorporating decentralised renewable or low carbon technologies;
- ❑ Determine whether the proposals meet other planning considerations; and
- ❑ Where there are issues, be prepared to offer alternative solutions that deliver compliance with the climate change mitigation requirements of planning policies.

In Wales, a consultation will be issued in the autumn of 2007 on the content of statutory Design Statements, which will be required by legislation in 2008 and will include content related to climate change. Technical Advice Note 8: Renewable Energy suggests that energy statements be submitted with certain planning applications.

For more information on including sustainable energy policies within the development control process, refer to the Energy Saving Trust's Scottish Planners Pack. Although developed for use in Scotland, the information about process is relevant to planning in all parts of the UK. The pack is available here:

www.energysavingtrust.org.uk/housingbuildings/calculators/plannersupportpack/.

It may also be useful to look at details of specific developments that have incorporated sustainable energy. Two examples are Caerphilly County Borough Council's development at Bryn Road Estate, details of which can be found on page 12 of the following document:

www.caerphilly.gov.uk/pdf/communityPlanning/living-environment-strategy.pdf and the Greenwich Millennium Village: www.greenwich-village.co.uk/index_main.htm.

Step 4: Feedback to policy planners

Development control officers are in the best position to judge when the implementation of new policies is proving problematic. Discussions with planning policy officers can be useful and may result in the development of additional guidance such as Supplementary Planning Guidance.

Building control

Building control officers, together with private sector approved inspectors, are responsible for ensuring that building works are in compliance with the technical requirements of the building regulations.

Building regulations play an important part in delivering more sustainable buildings through a number of its requirements including those in Part L, which sets out standards for conserving fuel and power and minimising heat loss. The April 2006 improvements in the energy efficiency standards set out in Part L will make a major contribution to the UK's commitment to combat climate change by delivering increased standards of up to 27% for new buildings. As explained earlier in this module, the Government is also committed to increasing the standards in Part L by a further 25% in 2010; 44% in 2013 and then moving to zero carbon in 2016. The Welsh Assembly Government aspires to zero carbon for all new buildings from 2011 and is considering the feasibility of devolving the Building Regulations.

The new Code for Sustainable Homes launched in April 2006 has been developed as a voluntary tool to assist and encourage developers in England with moving ahead of regulations on carbon emissions and also on other aspects of sustainability. It signals the future direction of travel for building regulations for the market as a whole. However, from its launch the Government has required that all new homes that it or its agencies fund should meet the Code at Level 3.

The Welsh Assembly Government is considering whether to adopt the Code but in the meantime is using the Code for Sustainable Homes and the UK Government policy statement, Building a Greener Future (July 2007) as a working framework for defining zero carbon.

Wherever possible development control and building control officers should work closely together so that building control officers can identify early in the planning process where there may be difficulties with a particular design meeting building regulations requirements. This would also mean that during construction, building control officers would be more likely to be aware of where sustainability related planning conditions were not being met and could refer issues back to their development control colleagues for action.

Table of case studies

Case studies	Local authority	Type	Summary	Link
Unitary authorities				
Caerphilly County Borough Council's development at Bryn Road Estate	Caerphilly	Unitary Authority	See paragraph 3.3.1 on page 12 for details of reducing prices in the sale of land to negotiate renewable energy and efficiency measures in developments	www.caerphilly.gov.uk/pdf/communityPlanning/living-environment-strategy.pdf
London Boroughs				
Energy in Planning and Building Control Merton's Renewable Energy Planning Condition	Merton	London Borough, urban	Details of the Merton Rule	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/epbc_merton_cs.pdf
Greenwich Millennium Village	Greenwich	London Borough,	Information about a mixed-use development	www.greenwich-village.co.uk/index_main.htm

		urban	with high efficiency levels	
District councils				
Incorporating Sustainable Energy into Local Plans in Woking	Woking Borough Council	District, urban	Information about sustainable developments in and around Woking town centre	www.beacons.idea.gov.uk/idk/aio/6090952 .

Table of resources

Resources	Summary	Link
Planning policy		
Planning Policy Statements	Policy documents	www.communities.gov.uk/index.asp?id=1143803 .
Planning Portal	Web resource	www.planningportal.gov.uk/england/government/en/
Energy in planning and building control	Energy Saving Trust briefing note	www.energysavingtrust.org.uk/download.cfm?p=2&pid=482
Regional Spatial Strategies for each of the English regions	Policy document	www.planningportal.gov.uk/england/professionals/en/1020432878443.html
Planning White Paper 2007	Policy document	http://www.communities.gov.uk/publications/planningandbuilding/planningsustainablefuture
Building a Greener Future	Policy document	http://www.communities.gov.uk/publications/planningandbuilding/building-a-greener
Draft PPS on climate change: report of consultation responses	Policy document	http://www.communities.gov.uk/publications/planningandbuilding/climate-report
Wales Spatial Plan and Wales Area Coordinators	Web resource	http://wales.gov.uk/about/strategy/spatial/?lang=en
Draft MIPPS on Climate Change and Climate Change Compendium	Written Cabinet statement (Wales)	http://wales.gov.uk/about/cabinet/cabinetstatements/cabinetstatements2006/1049386/?lang=en
Planning Policy Wales	Policy document	http://new.wales.gov.uk/about/departments/depc/epcpublications/PlanPubs/plpolwal/?lang=en
Technical Advice Note (TAN) 8 - Wales	Policy document	http://new.wales.gov.uk/about/departments/depc/epcpublications/PlanPubs/TAN/TAN8/?lang=en
Meeting the 10 per cent target for renewable energy in housing – a guide for developers and planners	Energy Saving Trust information on the feasibility of various renewable energy options	www.energysavingtrust.org.uk/uploads/documents/ho usingbuildings/CE190%20-%2010%20per%20cent%20guide.pdf
London Renewables Toolkit for Planners	Toolkit for integrating renewable technologies	www.london.gov.uk/mayor/environment/energy/docs/renewables_toolkit.pdf
SEEDA's Sustainability Checklist	Checklist for sustainability measures	http://southeast.sustainability-checklist.co.uk/
Planning Renewables	A range of resources and examples on planning and renewable energy	www.planningrenewables.org.uk/
TCPA publications	A variety of publications for planners regarding sustainable energy and climate change	www.tcpa.org.uk/publications.asp
Energy Saving Trust Scottish Planners Support Pack	Resource for integrating renewable technology and energy efficiency requirements into planning policies	www.energysavingtrust.org.uk/housingbuildings/calculators/plannersupportpack/

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 9: Housing

Summary

In 2004, energy use in housing accounted for around 27% of UK carbon dioxide emissions.⁷ At the same time, in England, approximately 4.4 million homes lacked effective insulation or efficient heating required to meet the thermal comfort criterion of the Decent Homes Standard.⁸ Partly as a result of this, approximately two million households in the UK were in fuel poverty, with one and a half million of those in the vulnerable category.⁹

There are therefore very good reasons for taking action to improve the energy efficiency of the housing stock and to encourage greater investment in the use of renewable and low carbon technologies for the provision of heat and electricity in the home.

Local authorities, along with other social landlords, have a duty to ensure that any housing stock they own meets the Decent Homes or Welsh Housing Quality Standard. In England and Wales local authorities also enforce the Housing Health and Safety Rating System, which includes removing hazards associated with cold and damp homes.

However, effectively tackling climate change and eradicating fuel poverty requires more than meeting these basic standards. This module provides information about how local authorities can work to improve both social and private sector housing through energy efficiency and renewable and low carbon measures, as well as through changing behaviour and offering assistance.

Some types of housing are easier to tackle than others. The module covers ideas for addressing relatively easy targets such as cavity walled homes in urban areas and also suggestions for considering the use of renewable and low carbon technologies and other less traditional options for hard to treat homes such as those with solid walls and/or no access to mains gas.

A strategic approach

Taking a strategic approach to reduce the carbon intensity of the existing housing stock will help improve the energy efficiency of properties in the most cost effective way. This should build upon the existing strategies and targets already developed by energy conservation authorities (local authorities with housing responsibilities) in response to the Home Energy Conservation Act 1995 (HECA).

Local authorities may wish to design and monitor housing energy activities within the framework of a housing energy strategy. The Energy Saving Trust has a guide to the production of such a strategy, which can be found here: www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide/.

The EU Energy Performance of Buildings Directive requires the introduction of Energy Performance Certificates (EPCs). For social housing, bringing the production of EPCs into repair and improvement programmes could help to reduce the overall costs of the production of the certificates. For more information about EPCs, refer to Energy Performance Certificates: A Summary, a document from the Energy Saving Trust that can be downloaded here: www.energysavingtrust.org.uk/download.cfm?p=0&pid=1028.

⁷ Defra statistics: www.defra.gov.uk/environment/statistics/globalatmos/kf/gakf07.htm.

⁸ English House Condition Survey 2005: Annual Report <http://www.communities.gov.uk/publications/housing/englishhousesurveyannual>.

⁹ 4th Annual UK Fuel Poverty Progress Report: www.berr.gov.uk/files/file29688.pdf.

A strategic approach to tackling fuel poverty is also important. Fuel poverty is ideally approached by:

- Identifying those at risk of being in fuel poverty;
- Addressing the issues that cause it including:
 - Householders' income levels
 - The energy efficiency of the property
 - Hard to treat homes
 - Householders' awareness and understanding of energy efficiency
 - Allocation policies in social housing that ensure matching of vulnerable households with appropriately sized energy efficient homes
 - Access to best value energy tariffs; and
- Monitoring the level of fuel poverty in the housing stock.

Guidance on delivering affordable warmth can be found in the following documents:

- For England, Delivering Affordable Warmth:
www.energysavingtrust.org.uk/download.cfm?p=2&pid=1015.
- For Wales, Delivering Affordable Warmth:
www.energysavingtrust.org.uk/download.cfm?p=2&pid=605.

Housing standards

There are a number of different housing standards in England and Wales. The Energy Saving Trust has produced two publications (one for Wales and one for England) that provide details on the following housing standards:

- Building Regulations;
- Decent Homes and the Housing Health and Safety Rating System;
- EcoHomes and EcoHomes XB;
- Code for Sustainable Homes;
- Best Practice standards;
- The Welsh Housing Quality Standard;
- Development Quality Requirements;
- National strategic measures; and
- Implications of the Welsh duty to incorporate sustainable development into all policies.

The England publication can be downloaded here:

www.energysavingtrust.org.uk/download.cfm?p=2&pid=464.

The Wales publication can be downloaded here:

www.energysavingtrust.org.uk/download.cfm?p=2&pid=490.

Homes developed since April 2007 by English Partnerships or with support from the Government's housing growth programmes, have to be built to achieve level 3 of the Code for Sustainable Homes and for new developments funded by the Housing Corporation's April 2008 funding cycle, the same applies (until which time the EcoHomes 'very good' standard will continue to apply).

In Wales EcoHomes 'Excellent' has been introduced as a condition of all Welsh Assembly Government funding and land disposals for new housing and longer term arrangements are also being reviewed so that the Assembly Government's zero carbon aspiration can be integrated from 2011 for new buildings over which the Assembly Government has influence.

Local authorities may wish to consider specifying higher levels of energy efficiency than this, and the guidance on the Code offers information on how this can be achieved:

www.planningportal.gov.uk/uploads/code_for_sustainable_homes_techguide.pdf.

The Energy Saving Trust has a briefing note on the Code which can be accessed here:

www.energysavingtrust.org.uk/download.cfm?p=2&pid=1047.

English Partnerships has produced a cost review of reaching level three of the Code which can be viewed here: www.housingcorp.gov.uk/upload/pdf/code_for_sustainable_homes_050407.pdf.

Existing social housing

Working with social landlords

Progress beyond the requirements of the Decent Homes Standard or the Welsh Housing Quality Standard in social housing can be made by working in partnership with other local authorities, housing associations and other social landlords in the area.

Reducing the carbon intensity of the stock

It is important to highlight that energy efficiency measures can often result in greater carbon savings per pound spent than renewable and low carbon technologies. Therefore these measures should be incorporated first. However, in some cases, for example where there is demand for centrally provided heat as well as electricity, the use of combined heat and power or renewable fuel can also produce greater savings.

Alongside energy efficiency improvements, local authorities may wish to consider the use of renewable and low carbon technologies such as solar water heating and combined heat and power (CHP) or renewable fuel boilers linked to district heating systems. Bear in mind that a successful CHP scheme may depend on joining up different heat loads i.e. using the same scheme to serve housing and municipal buildings.

For hard to treat properties such as those that are off the gas network, which often have high energy bills as well as high carbon dioxide emissions, integrating renewable and low carbon technologies into programmes of work can be helpful. Examples of local authorities using renewable and low carbon technologies in existing housing can be found in the Energy Saving Trust publication Integrating Renewable Energy into Existing Housing – Case Studies: www.energysavingtrust.org.uk/download.cfm?p=1&pid=763.

The following are steps that local authorities and partners can take to reduce carbon emissions from existing stock.

Step 1: Assess the current levels of energy efficiency in the housing stock and the potential to use low carbon technologies

By carrying out energy audits or a stock survey, it is possible to discover what improvements need to be made and therefore be able to make the best use of resources by concentrating on the least expensive improvements that will achieve the biggest savings (both in terms of reduced carbon emissions and reduced expenditure on fuel).

To help do this, Energy Efficiency the Guide has a chapter on housing stock assessment which can be accessed here: www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide/england/hsassessment/

Different renewable technologies lend themselves to different types of buildings and sites. They also have different characteristics in terms of initial cost, maintenance issues, running costs, and carbon dioxide emissions. The Energy Saving Trust has guidance available on a range of renewable and other low carbon technologies for existing housing www.energysavingtrust.org.uk/download.cfm?p=1&pid=652 and on how to integrate renewable and low carbon technologies into existing homes www.energysavingtrust.org.uk/download.cfm?p=1&pid=763.

Further information on district heating and CHP can be found in Energy Efficiency the Guide, which can be accessed here: www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide.

Step 2: Set targets for improving social housing stock

Aims, objectives and targets may be focused on:

- Dwellings – concerned with technical improvements to housing stock e.g. minimum and average Standard Assessment Procedure (SAP) ratings targets;
- Tenants – concerned with improving the availability and affordability of comfort for tenants e.g. the number of households taken out of fuel poverty; and/or
- How energy is supplied to dwellings e.g. proportion of energy from low carbon sources or number of households supplied through an energy services company.

A best practice strategy will combine all approaches.

The Energy Audit Company, with funding from Eaga Partnership Charitable Trust, has developed guidance for social landlords that suggests how SAP targets can be set if the aim is to avoid fuel poverty. This can be found here:

www.eaga.com/downloads/eagapct/april2007energyauditcompany_settingsaptargets.pdf.

Step 3: Develop an action plan to meet the targets

There are various approaches local authorities can take to installing energy efficiency and low carbon measures and tackling fuel poverty.

As an initial step, energy efficiency and low carbon technologies can be considered routinely when carrying out works, replacing or installing controlled services or appliances. Much of the cost of improving the energy efficiency of a dwelling is associated with transporting labour and materials to the site. By considering energy efficiency in cyclical repair and maintenance programmes or alongside comprehensive refurbishment projects, it is possible to capitalise on the fact that staff or contractors are visiting a dwelling by arranging for them to install energy efficiency measures at the same time. Where major refurbishment of an entire block or estate is being undertaken, the installation of district heating and combined heat and power (CHP) can be considered.

A next step is to consider specific energy efficiency and low carbon investment programmes. The effectiveness of the investment programmes can be maximised by tackling the least energy efficient properties first, which will have been identified through energy audits or a stock survey. The survey results and the action plan can be developed into a new, or incorporated into the delivery of any existing, affordable warmth strategy or action plan.

A more complex but more comprehensive approach that local authorities could consider is the setting up of an Energy Services Company (ESCo). ESCOs ideally involve linking the supply of energy with energy efficiency measures. This can take many forms, ranging from an affinity deal, where a housing provider partners with a utility, to the setting up of a separate company (partly) owned by the housing provider or the local authority that offers fuel, energy efficiency measures and in some cases district heating to tenants.

Detailed information on energy services can be found in the Energy Services Directory. This Energy Saving Trust publication includes advice on the different approaches to take when developing an energy services scheme. The directory can be accessed here:

www.energysavingtrust.org.uk/download.cfm?p=2&pid=994.

Managing renewable and low carbon energy systems

The use of an ESCo can be part of the management of renewable and low carbon energy systems. In some cases, local authorities may be installing individual renewable and low carbon systems on single dwellings. In others it may be a case of installing larger systems that are shared between a number of homes. In this latter case it will be necessary to consider how the system will be managed. This is likely to centre on the use of an ESCo. This may be set up as a not-for-profit organisation that uses any surplus funds generated to improve the energy efficiency of the housing stock.

When considering the management it is important to consider whether the system will be set up so that the energy is primarily used for the housing, with the excess exported to the grid, or whether the energy is primarily exported to the grid.

If generating electricity from renewables sources as it is defined in the Electricity Act 1989, local authorities may consider applying for accreditation of the generating station with the Office of Gas and Electricity Markets (Ofgem) to obtain renewable energy certificates (ROCs). Where the generating station being operated is 50kW or less, an agent may be appointed to act on the local authority's behalf.

Further information on the process of accrediting renewable energy installations and claiming ROCs can be found here:

www.dti.gov.uk/files/file39882.pdf.

Affinity deal

'CHILLout' is an affinity based energy services scheme, launched in February 2002, aimed at encouraging owner-occupiers to invest in energy efficiency measures through the provision of generous grants. Funding is offered by an energy supplier under its Energy Efficiency Commitment (EEC) obligation and the scheme is operated by an established consortium of local authorities.

'CHILLout' aims to promote the installation of energy efficiency improvements to householders throughout Northamptonshire by way of a single point of enquiry. Its energy services package offers:

- ☐ Cavity wall insulation;
- ☐ Loft insulation;
- ☐ Hot water tank jackets;
- ☐ Energy efficiency advice;
- ☐ Signposting to grants and discount schemes;
- ☐ Discounted condensing boilers under the Boiler Magic scheme; and
- ☐ Discounted solar thermal and photovoltaic systems under the Solar Plan scheme.

ROCs have a positive value and electricity companies purchase them from generators as they need to present ROCs to Ofgem in order to fulfil their renewables obligations. Where local authorities generate renewables electricity, they can then sell the ROCs, which are issued to them by Ofgem, to electricity suppliers. This would help local authorities reclaim some of their initial investment.

Tenant consultation

It is worth consulting tenants on the action plan as it is being developed. In particular, tenants and other key stakeholders may be unfamiliar with the technologies to be used and therefore have reservations about them. Early consultation with the people concerned can help to alleviate any worries and build support for a scheme. This may include, for example, establishing contact with tenants in other areas where renewable and low carbon technologies have been successfully introduced.

Local employment

When implementing the scheme, local authorities could consider encouraging local tradespeople to bid for the work. If they are successful, this can have the added benefit of boosting the local economy.

It is also important to consider the maintenance requirements of any schemes and build this into any ongoing maintenance plans. Issues of availability of skilled people for carrying out the maintenance should be solved by using local tradespeople for the implementation.

Step 4: Regularly assess progress against targets and review the action plan

The effectiveness of a strategy or work plan will be maximised if it is reviewed regularly. Progress against key indicators and current and future resource availability will inform decisions on whether targets need to be adjusted or work re-prioritised.

This periodic review is also useful as part of a process of maintaining corporate support for activities. Results of the review can be fed into reports to cabinet or partners' senior management teams, and can also be used as evidence of effectiveness when looking for additional funding.

Tenants' energy-use behaviour

Much energy is wasted because people have bad habits or misunderstandings about the best way to use equipment. As a landlord, local authorities can have a large influence over tenants' behaviour by providing energy efficiency advice. Local authorities may wish to develop a home energy advice programme as part of the authority's overall housing energy strategy.

Furthermore, once new technologies have been installed in peoples' homes, whether they are renewable and low carbon systems, district heating or energy efficiency measures such as heating system controls and low energy lighting, people's attitudes and behaviours should and will be affected. Therefore energy advice provision is particularly important at this point. Further information can be found in Seeing the Light: the Impact of Microgeneration on the Way we Use Energy, a report produced on behalf of the Sustainable Consumption Roundtable, which can be downloaded here: www.sd-commission.org.uk/publications.php?id=239.

More information about advice provision can be found in module 14.

Existing private sector housing

There are five key roles that local authorities can play to encourage the take up of energy efficiency and renewable and low carbon technologies in existing private sector housing

Planning

Local authorities can encourage the uptake of low carbon technologies in existing properties via local planning policies. See module 8 for more information.

Education

Local authorities can encourage action by providing information about these technologies either through training projects, developing exemplar projects or leading by example and utilising these technologies within their own stock. See modules 6 and 11 for examples of local authorities utilising low carbon technologies on their own stock.

Offering funding

There is a range of funding available for energy efficiency and renewable and low carbon technologies but, to increase uptake, local authorities could consider offering top-up funding or setting up bulk purchase schemes. For example, Southend-on-Sea Borough Council provides grants through its Housing Assistance Budget. See the section below for information on funding sources available.

Facilitation

Local authorities can help by providing access to existing infrastructure in existing combined heat and power and district heating schemes in social housing, public institutions etc. to re-developers of existing housing.

Active partner

Local authorities can work with developers and other partners to set up an Energy Services Company (ESCo). As an active partner, local authorities can have an input into how the income into the company is spent and encourage the company to consider the full range of energy efficiency measures.

Taking action

There are a number of actions local authorities can consider which would help improve the energy efficiency of private sector stock and increase the uptake of energy efficiency measures. Outlined below is a step by step approach that a local authority could consider.

Step 1: Identify levels of fuel poverty and energy inefficient properties

In order to determine where to target any resources or schemes, local authorities can carry out analysis of all housing stock in their area. This could highlight any key areas of deprivation or particularly poor housing stock, as well as providing information about what measures can be taken. Data on the energy efficiency of dwellings in an area can be accessed through the Homes Energy Efficiency Database (HEED). More information can be found here: www.energysavingtrust.co.uk/heedonline.

Another tool is the Centre for Sustainable Energy's Fuel Poverty Indicator covering England: www.cse.org.uk/cgi-bin/projects.cgi?featured&&1018.

Once properties that require attention have been identified, local authorities can use the Fuel Prophet tool from ACE to help choose which energy efficiency measure could be installed. Please see the Fuel Prophet website here: www.ukace.org/research/fuelprophet.

Step 2: Identify key stakeholders and partners

To influence activity in private housing, the most impact will be achieved if local authorities work in partnership. Partner organisations to consider include:

- ❑ Energy Suppliers;
- ❑ Technology manufacturers and installers;
- ❑ Energy Efficiency Advice Centres / Energy Saving Trust Advice Centres;
- ❑ Primary Care Trusts / Local Health Boards;
- ❑ Doctor surgeries;
- ❑ Voluntary groups;
- ❑ Community organisations;
- ❑ Local and national charities;
- ❑ Citizens Advice Bureaux;
- ❑ National Energy Action; and
- ❑ Other housing providers.

Step 3: Set up schemes and projects

There is a large range of schemes and projects that local authorities could consider. Some examples are given below.

Work in partnership with energy suppliers to run projects to implement energy efficiency and low carbon measures funded by the Energy Efficiency Commitment (EEC). Energy suppliers have worked with a number of local authorities to develop very creative and innovative schemes and activities. It is important to bear in mind that local authorities will have to negotiate with energy suppliers to set up an EEC scheme.

Landlord Accreditation Plus

In 2002, Cardiff City Council launched its Landlord Accreditation Plus scheme to the private rented sector.

The 1998 Welsh House Condition Survey revealed that 9.1% of housing stock was unfit for habitation. However, in the private rented sector 16% was unfit.

To tackle the level of unfit private sector homes, Cardiff City Council worked in partnership with:

- ❑ University accommodation officers;
- ❑ Landlords forum;
- ❑ Association of letting and managing agents
- ❑ South Wales Police, and
- ❑ South Wales Fire Service

The aim of the scheme was to encourage and support landlords to bring their housing stock above minimum legal levels. Landlords are offered grant aid to complete improvements which included provision of:

- ❑ Loft insulation;
- ❑ Permanent space heating;
- ❑ Window and door locks;
- ❑ Fire alarms, and
- ❑ Fire extinguishers.

Set up a fuel poverty referral network. Use local charities, voluntary groups and doctor surgeries etc. to help identify those who are in fuel poverty and set up a system for referring them to a national or local scheme that will be able to offer suggestions on improving the energy efficiency of the property.

Many authorities have tried this approach, and information on their schemes can be found on the Warmer Houses Healthy Homes website: www.warmerhealthyhomes.org.uk/.

By adding support to local schemes and mailings etc, local authorities will add weight and increase the impact of the project as people will see it comes from a trusted source.

The private rented sector is a particularly difficult element of private sector housing to target. Projects that local authorities can carry out to improve energy efficiency in this sector include setting up a landlord accreditation scheme into which energy efficiency requirements can be integrated. Further case studies on landlord accreditation schemes can be found here:

www.energysavingtrust.org.uk/housingbuildings/publications/index.cfm?mode=search&keyword=private

Reports and publications specific to the private rented sector are available from the Energy Efficiency Partnership for Homes' Private Rented Sector sub-group. These documents can be accessed here: www.eeph.org.uk/sector/swg.cfm?group_id=109.

Furthermore, educating landlords about the Landlords Energy Saving Allowance (LESA) and Energy Performance Certificates (EPC) can encourage the take up of energy efficiency measures. The Energy Saving Trust's Private Rented Sector Guide provides further information on LESA and EPCs. The guide also highlights successful private landlord schemes such as Burnley Borough Council, Cardiff City Council, and Coventry City Council. The guide is available here: www.energysavingtrust.org.uk/download.cfm?p=2&pid=687.

New build housing

The UK Government has set a new housing target for 2016 of 240,000 additional homes a year to meet the growing demand for housing and address affordability issues¹⁰. This means that around a third of the housing stock in 2050 will be built between now and then¹¹. It is important to ensure that this new housing stock is as energy efficient as possible.

In July 2007 the UK Government published Building a Greener Future: Policy Statement. This confirms the Government's intention for all new homes to be zero carbon by 2016 with major progressive tightening of the energy efficiency requirements of the building regulations in 2010 and 2013.

The Welsh Assembly Government aspires to all new buildings constructed in Wales from 2011 onwards being zero carbon, and is now exploring the feasibility of translating this aspiration into a commitment. Whilst it is recognised that the definition of zero carbon remains the subject of debate, the Assembly Government is using the Code for Sustainable Homes and policy statement 'Building a Greener Future' as a working framework.

Opportunities for action

As a local authority there are a number of key areas where it is possible to affect the energy efficiency of any new housing stock that is built in the area, as well as encouraging the use of renewable and low carbon technologies.

Leading by example

The use of energy efficiency measures and renewable and low carbon technologies on local authority buildings can increase familiarity with the technology and hence confidence in it, and can also contribute to the development of a local market.

Local authorities can also encourage private developers and social housing providers to develop exemplar projects in their local area. Examples of this include:

- BedZed – Beddington Zero Energy Development: www.energysavingtrust.org.uk/download.cfm?p=1&pid=338;
- The Hockerton Housing Project: www.energysavingtrust.org.uk/download.cfm?p=1&pid=215; and
- Thamesmead Ecopark - Gallions Housing Association: www.energysavingtrust.org.uk/download.cfm?p=1&pid=262.

¹⁰ Housing Green Paper 2007: www.communities.gov.uk/pub/967/HomesforthefuturemoreaffordablemoresustainableHousingGreenPaper_id1511967.pdf

¹¹ Building A Greener Future: Towards Zero Carbon Development: <http://www.communities.gov.uk/publications/planningandbuilding/building-a-greener>

Planning

Planning authorities should engage constructively and imaginatively with developers to encourage the delivery of sustainable buildings. Where there are particular local opportunities that justify it, it is proposed that local authorities should be able to stipulate high standards of efficiency such as level four or five of the Code for Sustainable Homes. See module 8 for more information.

Linked to planning is the role that local authorities can play with regards to the layout, design and location of new developments, for example the use of principles such as passive solar gain, and the proximity to public transport amenities. See modules 8 and 10 for more information on this.

Funding

There is a range of funding available for renewable and low carbon technologies but to increase uptake of renewable and low carbon technologies local authorities could consider offering top-up funding, or set up bulk purchase schemes to reduce costs. For example, Southend-on-Sea Borough Council provides grants through its Housing Assistance Budget. See the section below for information on funding sources available.

Facilitation

Local authorities can help by providing access to existing infrastructure in existing combine heat and power and district heating schemes in social housing, public institutions etc. to developers of new build housing.

Active partner

Local authorities can work with developers and other partners to set up an Energy Services Company (ESCo). As an active partner, local authorities can have an input into how the income into the company is spent (e.g. on energy efficiency measures) and encourage the company to consider the full range of renewable and low carbon technologies.

Further advice

The key to using renewable and low carbon technologies in new build stock is to ensure it is fully integrated into the design process. Guidance on how to integrate renewable and low carbon technologies can be found in Energy Efficiency the Guide, here:

www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide/.

The Energy Saving Trust has a range of best practice publications on renewable and low carbon technologies for new build developments. Click here to go to the publications database:

www.energysavingtrust.org.uk/housingbuildings/publications.

In addition, the London Renewables toolkit Integrating Renewable Energy into New Developments includes useful information on various renewable and low carbon technologies. Please note that this document was produced in 2004. This document can be found here:

www.london.gov.uk/mayor/environment/energy/docs/renewables_toolkit.pdf.

Sources of funding

There are a range of funding sources that can be used for both energy efficiency and renewable and low carbon technologies in housing stock. These can be broken down into a local authority's own funds and other national / regional and local funds. For a searchable database of funding available to local authorities, please refer to the Energy Saving Trust's website:

www.energysavingtrust.org.uk/housingbuildings/funding/database/.

Local authority funds

In England there are number of central government funds that local authorities can access to finance housing renewal programmes, such as the single regeneration housing pot, neighbourhood renewal

fund and public service agreements. Other revenue raising streams include capital receipts and private finance initiatives.

More information is available in the funding chapter from Energy Efficiency the Guide. For England this is available at: www.energysavingtrust.org.uk/download.cfm?p=2&pid=640 and for Wales at: www.energysavingtrust.org.uk/download.cfm?p=2&pid=643.

National / regional and local funds

Funds include: Energy Efficiency Commitment, Low Carbon Buildings Programme, Warm Front / Home Energy Efficiency Scheme (HEES), green tariffs and enhanced capital allowances. More detail on these and other funds can be found on the Practical help funding database which can be found here: www.energysavingtrust.org.uk/housingbuildings/funding/database.

Table of case studies

Scheme	Local authority	Type	Summary	Link
First steps				
Better Behaving Boilers	Oldham Metropolitan Borough Council	District, urban	Replacing inefficient boilers	www.oldham.gov.uk/energy_efficiency_advice_centre.pdf
Energy Efficiency Commitment - Chillout	Daventry District Council	District, rural	Promotion of energy efficiency measures	www.chillout.uk.com/
Newark and Sherwood cavity wall insulation scheme	Newark and Sherwood District Council	District, rural	Replacement of cavity wall insulation for a limited number of private housing	www.newark-sherwooddc.gov.uk/ppimageupload/Image34380.PDF
Leicester City Council's 'hot lofts' project	Leicester City Council	District, urban	Uses thermal imagery to identify homes for free loft and cavity wall insulation.	www.leicester.gov.uk/your-council--services/housing/living-in-leicester--and-home-advice/energy-efficiency
Next Steps				
Doncaster's Affordable Warmth Strategy	Doncaster Metropolitan Borough Council	District, urban	Training a network of volunteers across the district who can act as a frontline for the dissemination of information, promote the delivery and uptake of services.	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/affordable_warmth_doncaster_cs.pdf
Daventry Area Safer Housing	Daventry District Council	District, urban	Involves training a network of volunteers across the district who act as a frontline for the dissemination of information, promote the delivery and uptake of services.	www.energysavingtrust.org.uk/housingbuildings/funding/innovative/examples/index.cfm?ty=1&ext_id=1272
Home Health	West Cornwall	District, rural	A fuel poverty referral network in West Cornwall that involves a partnership between local authorities, the primary care trust, housing associations and community groups.	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case13.pdf
Advanced steps				
Shropshire's	Shropshire County	County	Example of a climate	www.energysavingtrust.org.uk/

corporate climate change strategy	Council		change strategy	uploads/documents/housingbuildings/Cliimate_change_strategy_shropshire_cs.pdf
Nottingham Ecohome	Nottingham City Council	Unitary, urban	Case study about transforming the energy performance of an ordinary Victorian semi-detached house	www.eas.local.gov.uk/CaseStudy.asp?id=SX9452-A781EBA5&cat=1595
Rejuvenation of community heating scheme in Manchester	Manchester City Council	Unitary, urban	Refurbishment of district heating.	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/GPCS801.pdf
Kirklees and Calderdale solar hot water scheme	Kirklees Metropolitan Borough Council and Calderdale Metropolitan Borough Council	Unitary, urban	Setting up a successful scheme to promote solar water heating to householders	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case4.pdf
GLEEN	Multiple London boroughs	London Borough, urban	Scottish Power manages the community energy club. Revenue generated is reinvested into other energy efficiency schemes	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/Greater_London_Energy_Efficiency_Network.pdf
Barnsley district biomass heating from local tree waste scheme	Barnsley District Council	District, urban	Biomass scheme	www.ashdenawards.org/technical_summary06_UK_barnsley_biomass
BedZed – Beddington Zero Energy Development	N/A	N/A	Technical briefing on the development of BedZed	www.energysavingtrust.org.uk/download.cfm?p=1&pid=338
The Hockerton Housing Project	N/A	N/A	Technical briefing on the development of the Hockerton Housing Project	www.energysavingtrust.org.uk/download.cfm?p=1&pid=215
Thamesmead Ecopark - Gallions Housing Association	N/A	N/A	Technical briefing on the development of Thamesmead Ecopark	www.energysavingtrust.org.uk/download.cfm?p=1&pid=262

Table of resources

Resources	Summary	Link
A strategic approach		
The Energy Saving Trust's Energy Efficiency the Guide	Includes information on the production of a housing energy strategy	www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide/
The Energy Saving Trust's Energy Efficiency the Guide	Chapter on performing a housing stock assessment	England: www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide/england/hsassessment/ and Wales: www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide/wales/hsassessment/
Energy Saving Trust briefing note: Energy Performance Certificates: a Summary	A summary of the legislation behind Energy Performance Certificates	www.energysavingtrust.org.uk/download.cfm?p=0&pid=1028
Energy Saving Trust briefing notes: Delivering affordable warmth	Information about tackling fuel poverty	For England: www.energysavingtrust.org.uk/download.cfm?p=2&pid=1015 For Wales: www.energysavingtrust.org.uk/download.cfm?p=2&pid=605

Energy Saving Trust briefing notes on housing standards	Information about the different housing standards and how they can be used	Housing standards in England: www.energysavingtrust.org.uk/download.cfm?p=2&pid=464 Housing standards in Wales: www.energysavingtrust.org.uk/download.cfm?p=2&pid=490
Planning portal web pages	Includes further information and technical guidance on the Code for Sustainable Homes	www.planningportal.gov.uk
Energy Saving Trust briefing note on the Code for Sustainable Homes	A brief summary of the Code and how it applies to local authorities	www.energysavingtrust.org.uk/download.cfm?p=2&pid=1047
A cost review of the Code for Sustainable Homes	A cost review of reaching level 3 of the Code	www.housingcorp.gov.uk/upload/pdf/code_for_sustainable_homes_050407.pdf
Existing social housing		
Energy Saving Trust guidance on how to integrate renewable energy in to existing housing	Information about the technicalities of integrating renewable energy technologies onto existing properties	www.energysavingtrust.org.uk/download.cfm?p=1&pid=763
Energy Saving Trust best practice publications on renewable technologies for new build developments	Information about the technicalities of integrating renewable energy technologies into new build projects	www.energysavingtrust.org.uk/housingbuildings/publications
The Energy Saving Trust's Energy Efficiency the Guide	Further information on district heating and CHP	www.energysavingtrust.org.uk/housingbuildings/localauthorities/theguide
Setting Sap Targets For Affordability In Social Housing	Guidance for social landlords on how SAP targets can be set if the aim is to avoid fuel poverty	www.eaga.com/downloads/eagapct/april2007energyauditcompany_settingsaptargets.pdf
The Energy Saving Trust's Energy Services Directory	Includes advice on the different approaches to take when developing an energy services scheme	www.energysavingtrust.org.uk/download.cfm?p=2&pid=994
Microgeneration and the Renewables Obligation	Information on the process of accrediting renewable energy installations and claiming ROCs	www.dti.gov.uk/files/file39882.pdf
Seeing the Light: the Impact of Microgeneration on the Way we Use Energy	A report produced on behalf of the Sustainable Consumption Roundtable	www.sd-commission.org.uk/publications.php?id=239
The Energy Saving Trust's Homes Energy Efficiency Database (HEED)	Information on the energy efficiency performance of dwellings in every area of the UK	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/HEED%20summary%20note%202006.pdf
Centre for Sustainable Energy's Fuel Poverty Indicator:	A toolkit for predicting the incidence of fuel poverty in small areas across England	www.cse.org.uk/cgi-bin/projects.cgi?featured&&1018
The Association for the Conservation of Energy's Fuel Prophet Tool	Provides help in choosing which energy efficiency measures should be installed on properties in fuel poverty	www.ukace.org/research/fuelprophet
Warmer Healthy Homes website	Information on local authorities that have set up a fuel poverty referral network	www.warmerhealthyhomes.org.uk/
The Energy Saving Trust's Best Practice standards for new build housing	Technical advice and interactive tools on the Energy Saving Trust's Best Practice standards	www.energysavingtrust.org.uk/housingbuildings/professionals
Energy Saving Trust Guidance on Renewable Energy Technologies for Existing Housing	Technical information about integrating renewable technologies into existing housing	www.energysavingtrust.org.uk/download.cfm?p=1&pid=652
Energy Efficiency Partnership for Homes private rented sector guidance	Reports and publication specific to the private rented sector	www.eeph.org.uk/sector/swg.cfm?group_id=109

The Energy Saving Trust's Private Rented Sector Guide	Provides further information on LESA and EPCs	www.energysavingtrust.org.uk/download.cfm?p=2&pid=687
Private Rented Sector Guidance	A number of case studies from the Energy Saving Trust on landlord accreditation schemes	www.energysavingtrust.org.uk/housingbuildings/publications/index.cfm?mode=search&keyword=private
New build housing		
Energy Saving Trust Best Practice in housing publications	Technical information about energy efficiency in new build	www.energysavingtrust.org.uk/housingbuildings/publications
The London Renewables toolkit	Toolkit for Integrating renewable energy into new developments	www.london.gov.uk/mayor/environment/energy/docs/renewables_toolkit.pdf
Sources of funding		
Energy Efficiency the Guide - funding	Information about some of the key funds and sources of finance for housing renewable programmes	For England this is available at: www.energysavingtrust.org.uk/download.cfm?p=2&pid=640 and for Wales at: www.energysavingtrust.org.uk/download.cfm?p=2&pid=643
The Energy Saving Trust's funding database	Information on sources of funding available to local authorities for energy and renewable energy measures	www.energysavingtrust.org.uk/housingbuildings/funding/database

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 10: Transport

Summary

Tackling climate change is a priority for transport policy. A good transport system is central to a prosperous economy, better access and greater mobility, but it is necessary to balance the increasing demand for travel against the goals of protecting the environment and improving the quality of life for everyone, whether or not they are travelling. As people become more prosperous, they tend to travel more, and in ways that release more carbon dioxide. Carbon emissions from domestic transport have risen by 10% between 1990 and 2004.

Local and Regional Transport Plans are a key element of the response to climate change. There are also important areas of influence for all local authorities, whether or not they are responsible for the development of these plans, such as encouraging sustainable travel through the planning system, improving the infrastructure for all travel modes and working with schools and other partners to explain the benefits of low carbon travel in order to allow the public to make informed travel choices.

Measures to reduce carbon dioxide emissions from the transport sector will have a range of benefits beyond climate change mitigation, such as health benefits and improved air quality.

The Government recently published a draft Local Transport Bill (www.dft.gov.uk/localtransportbill). It contains proposals to support the Government's efforts to tackle congestion and improve public transport, by ensuring that local authorities have the appropriate powers to take local action to meet local transport needs. Where they choose to exercise these powers, local authorities could in many cases also contribute to climate change mitigation.

This module makes a number of suggestions, and whilst one size does not fit all, and local authorities should adopt appropriate measures to their needs and area, there is something to be said for a co-ordinated strategic approach to solutions to avoid overlap and unintended consequences.

Transport planning and infrastructure

England - Local Transport Plans

Most local transport authorities in England have prepared a 5 year Local Transport Plan (LTP) under the Transport Act 2000 and are now leading the implementation of these plans. The implementation of LTPs should take account of national climate change objectives and have regard to the climate change impacts of transport. The Government is keen for local authorities to take action to tackle climate change within this framework. Guidance on producing LTPs can be found on the Department for Transport's website: www.dft.gov.uk/pgr/regional/ltp/guidance/fltp/.

Local authorities in England also have an opportunity to influence Regional Assemblies when Regional Transport Strategies are prepared or amended to ensure climate change is adequately considered. The Department of Transport has issued guidance on the preparation of Regional Transport Strategies at www.dft.gov.uk/pgr/regional/strategy/regionalsspatialstrategiesqui3762.

Local authorities may also wish to consider joining, free of charge, the Local Transport Planning Network (www.ltpnetwork.gov.uk). This is a website designed for Local Transport Planners and deliverers and will provide the means of sharing good practice, carrying out process and performance related benchmarking and will enable the development of transport policy ideas on a national level.

Wales - Regional Transport Plans

The Transport (Wales) Act 2006 amends the Transport Act 2000, placing a statutory duty on the Welsh Assembly Government to develop and implement policies for the promotion and encouragement of safe, integrated, sustainable, efficient and economic transport facilities and services, to be published in a Wales Transport Strategy. This duty clarifies the Assembly Government's strategic role and will ensure a coherent approach to local and regional transport planning.

The Wales Transport Strategy will set out the common themes, outcomes and priorities that will be delivered at the national level by the National Transport Plans, and at the regional and local level by the Regional Transport Plans. Welsh local authorities, working in partnership with one of four Regional Transport Consortia, will produce the Regional Transport Plans, which replaces the requirement to prepare Local Transport Plans.

Regional Transport Plan Guidance has been developed by the Assembly Government to assist the Regional Transport Consortia develop their Regional Transport Plans. This sets out how the Regional Transport Consortia should take the themes, outcomes and priorities in the Wales Transport Strategy into account, although it provides the freedom for variation in regional delivery to reflect differing needs identified in the various spatial plan areas. This guidance can be downloaded here:
<http://wales.gov.uk/topics/transport/publications/?lang=en>.

The transport planning process for the preparation of the Regional Transport Plans will be largely similar to that of the Local Transport Plans, except for the need to take into account the themes, outcomes and priorities identified in the Wales Transport Strategy. Therefore the following information will be relevant to Welsh local authorities.

Public transport

There are three key ways that local transport authorities are able to influence the sustainability of public transport. For some local authorities, the mechanism for the provision of public transport will be the Passenger Transport Authority (PTA). For those covered by a PTA, the local authority can use their influence within the PTA to achieve the actions suggested below.

One is to specify, when contracting out the services, that any vehicles procured are energy efficient. Options include electric, hybrid or liquid petroleum gas (LPG) vehicles, or petrol or diesel vehicles that are as energy efficient as possible.

Another is to ensure that overall, public transport is efficient i.e. services link up together and are easy for the public to use. For example, ensuring that the timing of bus services coincides with the timing of train services, so that those wishing to use the train are able to travel to the station at convenient times. For example Southampton City Council (www.idea.gov.uk/idk/core/page.do?pagelId=81113) used the opportunity of a large new in-town development to link the train station to shops and the port via the 'little green bus'.

Traffic management measures can be applied by local authorities to improve bus reliability. This can contribute towards improving the attractiveness of public transport as a travel option, helping to encourage modal shift away from cars. Guidance on bus priority measures is given in:

- Traffic Advisory Leaflet 8/00, Bus priority in SCOOT®:
www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/buspriorityinscoot; and
- Bus priority: The way ahead:
www.dft.gov.uk/pgr/regional/buses/bpf/busprioritythewayahead12/.

A third role for local authorities is to encourage people in the community to use public transport services. One way of meeting this objective is through partnership working between staff managing the provision of public transport services and staff responsible for land use

Kent County Council

Kent County Council is working with a number of partners to improve Ramsgate station's forecourt area for people arriving by all forms of transport. The project is also being linked to bus service improvements and an upgrade to a cycle route for maximum impact. The aim is to help residents and tourists to access work and leisure by bus, bike and foot quickly and pleasantly from the station.

Visit the IDeA website for more information:
www.idea.gov.uk/idk/core/page.do?pagelId=81105.

planning. Ensuring new developments are built near existing public transport nodes, and/or that timetables and routes are adjusted as necessary. Another option is to promote the use of public transport through local schemes and initiatives.

Traveline provides up to date timetables for every bus, coach and train service for planning a journey using any or a combination of the three modes. It also includes travel planning options and, via 'traveline-txt' in Wales, the next four departure times from individual bus stops can be sent to a mobile phone. Further details can be found at: www.traveline.org.uk/index.htm or by calling 0871 200 22 33.

Network management and traffic management

Management of the movement of traffic on the road network through the use of traffic management schemes and techniques have an effect on air quality and vehicle emissions. The Traffic Management Act 2004 gives local traffic authorities new powers and a duty to keep roads clear and traffic moving.

Guidance can be found on the:

- ❑ Network Management Duty: www.dft.gov.uk/pgr/roads/tpm/tma2004/trafficmanagementact2004netw4143;
- ❑ Associated criteria for intervention: www.dft.gov.uk/consultations/closed/ktmcdgic/ktmguidancestatutoryinstrument;
- ❑ Local Transport Notes: www.dft.gov.uk/pgr/roads/tpm/ltnotes/;
- ❑ Traffic Advisory Leaflets: www.dft.gov.uk/pgr/roads/tpm/tal/; and
- ❑ Traffic Management and Air Quality Research Programme (TRAMAQ): www.dft.gov.uk/pgr/roads/network/research/tmairqualityresearch/trafficmanagementandairquali3927

Traffic management techniques can be applied to facilitate smooth traffic flows and reduce unnecessary stops and delays. A key mechanism for this is through the use of traffic signals including their co-ordinated operation using SCOOT® Urban Traffic Control. More information about SCOOT® is available at www.scoot-utc.com. In particular, the following leaflets provide advice on the effects that SCOOT® can have on the levels of vehicle emissions:

- ❑ Traffic Advisory Leaflet 7/99, The "SCOOT" urban traffic control system: www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/thescooturbantrafficcontrols4120?page=1#a1000; and
- ❑ Traffic Advisory Leaflet 9/00, SCOOT® estimates of emissions from vehicles: www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/scootestimatesofemissionsfro4116.

The Department for Transport (DfT) has published guidance on a wide range of traffic management topics. These include general guidance on signal operation to help give more efficient network operation. Traffic Advisory Leaflets can be viewed and downloaded from www.dft.gov.uk/pgr/roads/tpm/ and www.dft.gov.uk/pgr/roads/tss/.

Research shows that road pricing, as one part of a wider transport strategy, could cut congestion significantly through small changes in overall travel patterns. It is expected that any local authority interested in developing a scheme would do so as part of a package of measures, including significant investment in complementary transport measures. If an authority is considering implementing a road pricing scheme in its area, it should consider the likely effects of the scheme on the level of vehicle emissions which contribute to climate change or atmospheric pollution.

Parking

Parking policies need to be an integral part of a local authority's transport strategy and the second edition of DfT's Full Guidance on Local Transport Plans, published in December 2004, states that local authorities should have policies aimed at tackling congestion and changing travel behaviour, which could include restricting and/or charging for car parking. The Department for Transport and Welsh Assembly Government will be making regulations that will strengthen the powers of local authorities to enforce car parking infringements.

A good practice report by the Institution of Highways and Transportation gives guidance to local authorities about developing parking strategies: www.iht.org/publications/technical/parking.asp.

Local transport infrastructure

The electricity used to power local transport infrastructure, such as pay-and-display machines and lighting and electronic information signs in bus shelters, results in carbon emissions unless supplied entirely from renewable sources. By considering using renewable technologies (predominantly solar photovoltaics that are not connected to the national grid – i.e. are off-grid) as a power source, together with ensuring that the infrastructure is as energy efficient as possible, carbon dioxide emissions can be reduced.

There are a number of examples of off-grid applications such as school traffic warning systems, parking pay-and-display machines and lighting for bus shelters, for example in Woking. Photovoltaic systems have also been used for pay-and-display machines in Milton Keynes and Ealing and for over 100 parking meters in Enfield. Other off-grid applications include street lighting, security lights, pumps/fountains and telephone kiosks. The savings from not having to provide grid connection help to offset the costs of the photovoltaic system.

Local transport infrastructure such as roads, train lines etc. are closely linked with land use planning. For example in England, Planning Policy Guidance 13 (Transport) highlights that care must be taken to avoid or minimise the environmental impact of any new transport infrastructure projects, or improvements to existing infrastructure, and that particular emphasis should be given to the need to explore a full range of alternative solutions to problems, including solutions other than road enhancement.

Furthermore it states that, where a new development is likely to have significant transport implications, a Transport Assessment (TA) should be prepared and submitted with a planning application for the development. In March 2007, guidance was produced to assist stakeholders in determining whether an assessment may be required and, if so, what the level and scope of that assessment should be. This can be downloaded here: www.dft.gov.uk/162259/165237/202657/guidanceontapdf.

The Manual for Streets provides guidance for practitioners involved in the planning, design, provision and approval of new residential streets, and modifications to existing ones. It aims to increase the quality of life through good design which creates more people-orientated streets: www.dft.gov.uk/pgr/sustainable/manforstreets/.

The Department for Transport consulted on Cycling Infrastructure Design on 13 August 2007, which aims to bring together current Government guidance and advice on providing and planning for cycle friendly infrastructure that is already publicly available into one document. It offers guidance only and is primarily intended for local authority practitioners and transport planners so that they can ensure that cyclists are fully provided for within an integrated transport system. It is due to be published in spring 2008. The consultation can be downloaded here: www.dft.gov.uk/consultations/open/infrastructuredesign/.

Walking and cycling

Local authorities can support, encourage and/or develop schemes and initiatives to encourage walking and cycling. Steps that an authority can take include:

- ❑ Improving the walking and cycling environment, for example making routes safer by using traffic calming measures, or reducing motorised traffic in congestion charging zones;
- ❑ Providing better facilities, for example cycle storage facilities and walking and cycling routes; and
- ❑ Influencing behaviour – including by providing the skills such as cycle training or by highlighting the additional benefits of walking and cycling such as health improvements, and timesaving. For example, in some cases cycling can be the quickest form of transport in London, and the cost of running a car per year is far more expensive than running a bike.

Nottingham City Council

The Nottingham Clear Zone provides a best practice example of managing a city centre to significantly reduce the impacts of traffic, and create a better environment for shopping, leisure and commercial activities. It is based on an “environmental zone” in the centre of the city aiming to remove all but essential traffic. It is integrated with the development of the Nottingham Express Transit tram system.

Visit the IDeA website for more information: www.idea.gov.uk/idk/core/page.do?pagelid=81115.

As an employer, local authorities can take advantage of a UK tax scheme to assist employees with purchase of bicycles and equipment. The aim of the Bike to Work Scheme is to get more people cycling to work on a regular basis. Detailed below are some web links about the scheme:

- ❑ HM Revenue and Customs www.hmrc.gov.uk/green-transport/travel-plans.htm;
- ❑ Department for Transport:
www.dft.gov.uk/pgr/sustainable/cycling/cycletoworkschemeimplementat5732; and
- ❑ A list of operators of the scheme can be found at:
www.bikeforall.net/content/cycle_to_work_scheme.php.

The Eddington Transport Study found that some of the best value for money transport schemes are small scale schemes, such as walking and cycling schemes. The report can be downloaded here: www.dft.gov.uk/162259/187604/206711/executivesummary.

Resources

Examples of the steps listed above can be found on the following website: www.dft.gov.uk/pgr/sustainable/walking/success/.

The documents Smarter Choices – Changing the Way We Travel (and the summary document Making Smarter Choices Work) and Smarter Choices: Wales illustrate a variety of initiatives to promote more sustainable travel patterns. They are available at: www.dft.gov.uk/pgr/sustainable/smarterchoices/ and <http://new.wales.gov.uk/topics/transport/IntegratedTransport/SmarterChoices/?lang=en> and embrace many of the supporting factors which influence travel choice such as public transport, cycling and walking information together with directly informing people about alternative modes of travel through personalised travel planning schemes.

For information about legislation and best practice examples for making highways and roads cleaner, safer and greener visit: www.cleanersafergreener.gov.uk/en/1/pslhighwaysandroads.html.

Links to examples of sustainable travel schemes including car sharing clubs etc. can be found on the following website: www.tfl.gov.uk/roadusers/sustainable-travel/default.aspx.

Links to examples of increasing cycling in the Cycling Demonstration Towns can be found on the following website: www.cyclingengland.co.uk/demotowns.php.

For information about cycle training see www.bikeability.org.uk/.

Walking and cycling can also form part of other travel plans, for example for schools or workplaces. Details and guidance related to travel plans can be found at: www.dft.gov.uk/pgr/sustainable/travelplans/.

Further information on personal impacts of travel choice can be found using Transport Direct www.transportdirect.info/.

Government has recently launched a campaign called Act on CO₂, which provides information about how to discover your carbon footprint. For more information visit: www.dft.gov.uk/actonco2 or <http://actonco2.direct.gov.uk/index.html>.

Travel plans

A travel plan is typically a package of practical measures to encourage the use of alternatives to single-occupancy car-use, and to reduce the need to travel. There are several types of travel plan covering, for example, schools, workplaces/businesses, and residential developments, all of which a local authority can be involved in, in some way.

Personal travel planning is a generic term covering a range of targeted marketing techniques aimed at encouraging people to switch some of their car trips to walking, cycling or public transport. The

Department for Transport is due to publish, in Autumn 2007, the results of research into personal travel planning. This will be followed by best practice guidance early in 2008. These documents will be available here: www.dft.gov.uk/pgr/sustainable/travelplans/ptp/.

When trying to change peoples' travel behaviour, the Sustainable Travel Demonstration Towns found the best results were achieved by using Individualised Travel Marketing (ITM). This is a process that uses personal dialogue with households to identify and meet their individual needs for support, and to motivate people to think about their day-to-day travel choices. Further information about ITM can be found here: www.sustrans.org.uk/default.asp?SID=1173361894031.

Local authority travel plan

As an employer, local authorities can have a travel plan for their own staff and fleet. A best practice travel plan will cover both travel to and from work and travel requirements during the working day. A plan should be tailored to a particular site and include a range of measures that will make a positive impact at that site, e.g. setting up a car sharing scheme; providing cycle facilities; negotiating improved bus services; offering attractive flexible-working practices; offering part subsidies, restricting and/or charging for car parking; or setting up video conferencing facilities to cut business travel. In many cases, these initiatives can be developed jointly with other local employers, increasing their usage and effectiveness. The idea is to make the alternatives more feasible and more attractive to employees. A well implemented travel plan can also result in other users accessing a site using more sustainable modes.

Using Geographical Information Systems (GIS) to form travel plans

North Yorkshire County Council uses GIS to encourage staff to think about taking up more sustainable transport options. The council mapped staff travel routes with the existing bus routes, which revealed large gaps in routes served by buses. The bus routes were rerouted to serve main areas where staff, who wanted to use the bus service, lived.

GIS is also helping companies tackle employee retention by examining the routes staff members take to get to work. Managed by the council, employee postcodes are coupled with other information (such as: are they full or part-time) to produce detailed information on transport options available. These travel maps are then used to help companies devise suitable travel plans that help employees get to work more efficiently.

Local authorities could provide tips for staff about how to reduce emissions by changing driving behaviour. Further information can be found here: www.dft.gov.uk/ActOnCO2/?q=tips_and_advice, here: www.energysavingtrust.org.uk/download.cfm?p=5&pid=93 and here: www.freightbestpractice.org.uk.

Alternatively local authorities could introduce a car-sharing scheme, provide incentives to use public transport (such as interest free season ticket loans) or cycles (such as lockers and showers).

Business travel plans

Local authorities can also have a role to play in encouraging others to produce travel plans. This can be done through the Local Transport Plan process and through partnership with major employers in their areas. Guidance for producing workplace travel plans can be found here: www.dft.gov.uk/pgr/sustainable/travelplans/work/.

Residential travel plans

Another role, already being carried out by forward-thinking developers and local authorities, is the development of packages of smarter choices to both reduce the traffic generated by new housing developments and increase the travel choices available to residents. These smarter choices are being set out in residential travel plans. Guidance for producing residential travel plans can be found here: www.dft.gov.uk/pgr/sustainable/travelplans/rpt/mrtpw.

School travel plans

It is a published objective of the Department for Transport and the Department for Children, Schools and Families that all schools in England should have an approved school travel plan before the end of the decade. The Departments therefore ask all local authorities to work with local schools to help them

develop and implement a school travel plan and they provide funding to enable local authorities to employ school travel advisers to work with schools to help achieve this. . As a result, over 14,000 schools now have travel plans. Encouraging walking to school is a key element of school travel plans and the Department for Transport has set up a walking bus and walking initiatives grant scheme, which can be found at: <http://www.dft.gov.uk/pgr/sustainable/schooltravel/grantsforwalkingbuses/> Further details on how to set up a walking bus at: <http://www.dft.gov.uk/pgr/sustainable/schooltravel/grantsforwalkingbuses/howtosetupawalkingbus>. If a school wishes to set up a walking bus it is best practice and common practice for the local authority to carry out a free risk assessment for the school.

A school travel plan is a package of measures tailored to the needs of an individual school and designed to reduce car dependency and improve safety for journeys to school. School travel plans are accepted as the key strategies for reducing car use for journeys to school and research has shown that 60 to 90 per cent of schools with a travel plan can be expected cut to car use to some extent. Good practice guidance on developing and implementing school travel plans can be found here: www.dft.gov.uk/pgr/sustainable/schooltravel/travelling/travellingtoschoolagoodpract5762.

Resources / case studies

Other key resources to help with the development travel plans include:

- ❑ Advice on techniques for influencing people's travel behaviour towards more sustainable options such as encouraging school, workplace and individualised travel planning can be found here: www.dft.gov.uk/pgr/sustainable/smarterchoices/.
- ❑ Department for transport guidance: www.dft.gov.uk/pgr/sustainable/travelplans/, provides information about workplace, residential and personal travel plans with publications to help people make travel plans. Guidance on travel plans for schools can be found here: www.dft.gov.uk/pgr/sustainable/schooltravel/.
- ❑ The Energy Saving Trust website: www.energysavingtrust.org.uk/fleet/organisations/traveladvice/, provides information for organisations to help create a travel plan.
- ❑ The National Business Travel Network provides a resource for information on sustainable travel for business (www.nbtn.org.uk). Information and guidance on travel planning for businesses can also be obtained from the Association of Commuter Transport (www.act-uk.com/) and Travelwise (www.travelwise.org.uk/) (soon to merge to form ACTTravelwise). ACT and Travelwise also provide advice on travel planning more widely, for example school and personal travel planning.
- ❑ The Department for Transport has produced a publication Making travel plans work – lessons from UK case studies: www.dft.gov.uk/pgr/sustainable/travelplans/work/publications/makingtravelplansworklessons5783?version=1. This contains a wealth of information on different council's transport plans and is a companion guide to the document Using the Planning Process to Secure Travel Plans. An update of this document is due to be published later in 2007: www.dft.gov.uk/pgr/sustainable/travelplans/work/publications/usingtheplanningprocesstosec5787.
- ❑ Unison has produced a publication (2002) which includes case studies on different local authority green travel schemes (from page 13 onwards): www.unison.org.uk/acrobat/B451.pdf.
- ❑ Cardiff City Council's car sharing plan for its staff and those of partner organisations in the public and private sectors: <http://carshare2cardiff.com>.
- ❑ The London Borough of Islington's green travel plan 2006-2008: www.islington.gov.uk/Transport/GreenTravel/default.asp.
- ❑ Staffordshire County Council's green travel plan: www.staffordshire.gov.uk/transport/greentravel/.
- ❑ Stafford Borough Council's green transport plan for staff and members: www.staffordbc.gov.uk/static/page5912.htm.
- ❑ West Oxfordshire District Council's green transport plan for staff: www.westoxon.gov.uk/environment/greentravel.cfm.
- ❑ A recent press release on Chiltern District Council adopting a green travel plan: www.chiltern.gov.uk/site/scripts/news_article.php?newsID=436.
- ❑ Hambleton District Council's green travel plan which includes bicycles for council staff: <http://www.hambleton.gov.uk/planning/sustainability/greentravel.htm>
- ❑ The Department for Transport's own Travel Plan for its staff: www.dft.gov.uk/pgr/sustainable/travelplans/dfttravelplan/.

- ❑ Crawley Borough Council used its Eco-Management and Audit (EMAS) process to set a range of targets and ensure action is taken to achieve them. This included a wide range of actions on greening transport for local authority operations: www.eas.local.gov.uk/CaseStudy.asp?id=SX9452-A781EBD8&cat=1595.
- ❑ Advice is available from the Association for Commuter Transport, which is the association for travel planning expertise: www.act-uk.com/.

Fleet management

Sustainable or green fleet management can help reduce overhead costs and improve efficiency and reduce the environmental impact of fleets. Information from the Energy Saving Trust on effective fleet management is available here:

www.est.org.uk/fleet/Informationcentre/Ourvirtualconsultant/q1_en_gt50.cfm.

The Energy Saving Trust also offers a free Green Fleet Review to any organisation with more than 50 vehicles. It usually takes 3-4 days but can be up to 20, and looks at how to run fleets efficiently as well as providing training and seminars. It focuses primarily on all aspects of business travel for the local authority and not on how staff travel to work. It covers all council vehicles apart from trucks. A free telephone consultation and advice service is available for smaller fleets.

www.energysavingtrust.org.uk/fleet/Efficientdriving/greenfleetreviews/.

The Green Fleet Review service does not currently cover Wales, but it may be extended later in the year. For updated information on this service, please contact the Energy Saving Trust's Practical help service on 0870 241 2089 or email practicalhelp@est.org.uk.

Wales Freight Strategy aims to deliver a modern, efficient freight transport system in ways that will support and balance economic, social and environmental objectives in line with the Wales Transport Strategy. It will assist Regional Transport Consortia in the development of their Regional Transport Plans. The draft Freight Strategy will consider the demand and need for freight transport in Wales and the roles of freight modes including road, rail, ports and shipping, air and pipelines. The strategy will also consider potential interventions to influence overall demand for each mode and their environmental sustainability. It will also consider measures to promote and make best use of each mode and to minimise any adverse impacts that may arise.

Freight Best Practice, Wales Programme, will offer Welsh road freight operators specific advice aimed at reducing carbon emissions and improving operational efficiency of their businesses. The programme will be launched at the end of September 2007.

Cornwall County Council

Cornwall County Council operates a demand responsive transport service in the north of the county and a branded service in the west of the county. They form a key element of an integrated approach to public transport involving conventional bus provision and more community centred transport.

Visit the IDeA website for more information:
www.idea.gov.uk/idk/core/page.do?pageId=81101

Community transport

Community transport is the term given to virtually all passenger transport schemes that lie outside the conventional commercial public transport network. The community transport sector plays a large part in the delivery of transport for people who are unable to access conventional public transport services for a variety of reasons including mobility difficulties, lack of public transport, cost etc.

Community transport services vary from area to area. Some are run by the local authority themselves, whereas others are run by non-profit making or charitable organisations and are supported by the local authority. Local authorities therefore can play a number of roles, which include:

- ❑ Running the services;
- ❑ Financing the services;
- ❑ Publicising the services to those who could benefit; and

- ❑ Overseeing all community transport services and schemes in the area to ensure that they are working together and as efficiently as possible.

Air quality

Reducing carbon dioxide emissions from transport has both synergies with and benefits for air quality. There is increasing evidence that air pollution may be strongly influenced by climate change. For example, medical evidence shows that many thousands of people die prematurely every year because of air pollution effects, primarily from high ozone and particulate concentrations, and this process can accelerate during extreme weather conditions linked to climate change. Furthermore, policies to improve air quality often have the added benefit of producing carbon dioxide savings and vice versa.

For example, transport policies designed to reduce air pollutants by encouraging the use of public transport, cycling and walking, will also lead to reduced carbon dioxide emissions. Equally, measures to increase energy efficiency and cut energy demand should also reduce the air pollutants that are produced during electricity generation.

From February 2008, Transport for London will be rolling out a Low Emission Zone scheme. The following website provides information about the Low Emission Zone in London which aims to improve air quality in London by deterring the most polluting vehicles from being driven in the area: www.tfl.gov.uk/roadusers/lez/default.aspx.

Councils outside London have also joined together to form a strategic group: the Low Emissions Strategies Forum. The forum meets regularly to share their knowledge and experiences in developing and deploying low emissions strategies in their areas. Further information about the Low Emissions Strategies Forum is available at: www.airquality.co.uk/archive/actionplan.php.

Note that whilst policies to reduce air pollution may also have positive impacts with respect to climate change mitigation, it is important that the objectives of programmes remain clear. For example, if a scheme is intended to reduce congestion, it may be difficult to maintain public support if it is developed to include specific carbon emissions reduction elements, unless the scheme aims are explicitly re-defined in consultation with stakeholder groups.

The UK Air Quality Strategy can be downloaded from: www.defra.gov.uk/environment/airquality/strategy/pdf/air-qualitystrategy-vol1.pdf.

Table of case studies

Case studies	Local Authority	Type	Summary	Link
County				
Ramsgate station interchange project	Kent County Council	County, urban	Case study on improving the forecourt of Ramsgate station	www.idea.gov.uk/idk/core/page.do?pageld=81105
Greening Our Journeys 2	Staffordshire County Council	County, rural	The council's travel plan	www.staffordshire.gov.uk/transport/greentravel/
Using Geographical Information Systems (GIS) to form travel plans	North Yorkshire County Council	County, rural	Case study on using GIS to devise travel plans	www.energysavingtrust.org.uk/uploads/documents/fleet/TPN013%20-%20Travel%20Plan%20News%2013.pdf
Corlink: semi flexible bus	Cornwall County Council	County, rural	A demand response bus service for the north and west of the county	www.idea.gov.uk/idk/core/page.do?pageld=81101
Unitary authorities				
The Nottingham Clear	Nottingham	Unitary,	Best practice case	www.idea.gov.uk/idk/core/page.do?pageld=81105

Zone	City Council	urban,	study on Nottingham's environment zone	eld=81115
Sustainable Development Transport Demonstration Towns	Peterborough, Worcester and Darlington	Unitary, urban; district, urban; unitary, urban	Details on a five year programme from the DfT	www.dft.gov.uk/pgr/sustainable/demonstrationtowns/sustainabletraveldemonstration5772
Slateford Green development	Edinburgh City Council	Unitary, urban	Case study on a brownfield site mix tenure residential development	www.scotland.gov.uk/Topics/SustainableDevelopment/CaseStudies/SlatefordGreen
The Little Green Bus	Southampton City Council	Unitary, urban	Case study on Southampton's city bus to link the train station, shops and ports	www.idea.gov.uk/idk/core/page.do?pageld=81113
London Boroughs				
Green Travel	Islington London Borough	London Borough, urban	The council's travel plan	www.islington.gov.uk/Transport/GreenTravel/default.asp
Low Emission Zone	Greater London Assembly	N/A	Information on the Mayor's plans for a low emission zone in London	www.tfl.gov.uk/roadusers/lez/default.aspx
District				
Travel plan	Crawley Borough Council	District, urban	How Crawley reduced its business mileage by 10 per cent	www.eas.local.gov.uk/CaseStudy.asp?id=5X9452-A781EBD8&cat=1595
Green transport strategy	Stafford Borough Council	District, rural	The council's travel plan	www.staffordbc.gov.uk/static/page5912.htm
Green Travel Plan	West Oxfordshire District Council	District, rural	The council's travel plan	www.westoxon.gov.uk/environment/greentravel.cfm
Green Travel Plan	Chiltern District Council	District, rural	The council's travel plan	www.chiltern.gov.uk/site/scripts/news_article.php?newsID=436
Green Travel Plan	Hambleton District Council	District, rural	The council's travel plan	www.hambleton.gov.uk/planning/sustainability/greentravel.htm
Other				
Department for Transport's own Travel Plan	N/A	N/A	The department's own travel plan	www.dft.gov.uk/pgr/sustainable/travelplans/dfttravelplan/
Making travel plans work – lessons from the UK case studies	N/A	N/A	Information on various travel plans from different local authorities	www.dft.gov.uk/pgr/sustainable/travelplans/work/publications/makingtravelplansworklessons5783?version=1
Bargaining for Better Green Travel	N/A	N/A	Includes case studies on local authority travel plans	www.unison.org.uk/acrobat/B451.pdf

Table of resources

	Summary	Link
Summary		
Draft Local Transport Bill	Policy document	www.dft.gov.uk/localtransportbill
England – Local Transport Plans		
Guidance on Full Local Transport Plans	Guidance from DfT on developing local travel plans	www.dft.gov.uk/pgr/regional/ltp/guidance/fltp/

Guidance on the Preparation of Regional Transport Strategies	Guidance from DfT on developing Regional Transport Strategies	www.dft.gov.uk/pgr/regional/strategy/regionalspatialstrategiesgui3762
Local Transport Planning Network	Online network for transport planners to share good practice	www.ltpnetwork.gov.uk
Wales – Regional Transport Plans		
Guidance on Regional Transport Plan	Guidance from the Welsh Assembly Government on developing a Regional Transport Plan	http://wales.gov.uk/topics/transport/publications/?lang=en
Public Transport		
Traffic Advisory Leaflet 8/00, Bus priority in SCOOT®	Information on the SCOOT traffic system	www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/buspriorityinscOOT
Bus priority: The way ahead	Information about managing bus routes and journeys	www.dft.gov.uk/pgr/regional/buses/bpf/busprioritythewayahead12/
Travel line	Information on bus timetables	www.traveline.org.uk/index.htm
Transport for London	Information on the Low Emissions Zone	www.tfl.gov.uk/roadusers/lez/default.aspx
The UK Air Quality Strategy	Policy document	www.defra.gov.uk/environment/airquality/strategy/pdf/air-qualitystrategy-vol1.pdf
Network management and traffic management		
Network Management Duty	Guidance from the Traffic Management Act 2004	www.dft.gov.uk/pgr/roads/tpm/tma2004/trafficmanagementact2004netw4143
Associated criteria for intervention	Guidance from the Traffic Management Act 2004	www.dft.gov.uk/consultations/closed/ktmcdgic/ktmguidancestatutoryinstrument
Local Transport Notes	Policy documents	www.dft.gov.uk/pgr/roads/tpm/ltnotes/
Traffic Advisory Leaflets	Findings from research on traffic management	www.dft.gov.uk/pgr/roads/tpm/tal/
Traffic Management and Air Quality Research Programme (TRAMAQ)	Further details on this programme	www.dft.gov.uk/pgr/roads/network/research/tmairqualityresearch/trafficmanagementandairquali3927
SCOOT urban traffic control	Information about controlling urban traffic	www.scoot-utc.com
Traffic Advisory Leaflet 7/99	Information on the SCOOT traffic system	www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/thescOOTurbantrafficcontrols4120?page=1#a1000
Traffic Advisory Leaflet 9/00	SCOOT estimates of emissions from vehicles	www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/scootestimatesofemissionsfro4116
Traffic Advisory Leaflets	Guidance and information documents	www.dft.gov.uk/pgr/roads/tpm/ and www.dft.gov.uk/pgr/roads/tss/
Parking		
Parking strategies and management	Guidance from the Institution of Highways and Transportation	www.iht.org/publications/technical/parking.asp
Local transport infrastructure		
Guidance on transport assessment	Guidance from DfT to help determine when a transport assessment is required	www.dft.gov.uk/162259/165237/202657/guidanceontapdf
Manual for Streets	DfT publication on street design	www.dft.gov.uk/pgr/sustainable/manforstreets/
Cycling Infrastructure Design consultation	Consultation document	www.dft.gov.uk/consultations/open/infrastructuredesign/
Walking and cycling		
A Fact Sheet for Employers setting up Green Travel Plans	Factsheet from HMRC	www.hmrc.gov.uk/green-transport/travel-plans.htm
Cycle to Work Scheme Implementation Guidance	Guidance on getting more staff to cycle to work	www.dft.gov.uk/pgr/sustainable/cycling/cycletoworkschemeimplementat5732
Bikeforall	Operators of the Bike to Work scheme	http://www.bikeforall.net/content/cycle_to_work_scheme.php
Encouraging walking and cycling	Success stories	www.dft.gov.uk/pgr/sustainable/walking/success/
Cleaner, safer, greener	Legislation and guidance documents	www.cleanersafergreener.gov.uk/en/1/pslhighwa

communities	about delivering cleaner, safer and greener communities	ysandroads.html
Sustainable travel	Examples on sustainable travel plans	www.tfl.gov.uk/roadusers/sustainable-travel/default.aspx
Cycling Demonstration Towns	Examples of towns with increased cycle rates	http://www.cyclingengland.co.uk/demotowns.php
Bikeability	Information on cycle training	www.bikeability.org.uk/
Personalised travel plans	Soon to be published guidance on how to make travel plans work	www.dft.gov.uk/pgr/sustainable/travelplans/ptp/
Travel Plans	General information on travel plans	www.dft.gov.uk/pgr/sustainable/travelplans/
Transport Direct	Information on the impacts of travel choices	www.transportdirect.info/
Act on CO ₂	How to calculate your carbon footprint	www.dft.gov.uk/actonco2 or http://actonco2.direct.gov.uk/index.html
Travel Plans		
The Individualised Travel Marketing process	Sustrans' study on changing travel behaviour	www.sustrans.org.uk/default.asp?sID=1173361894031
Local authority travel plan		
Act on CO ₂	Tips on better driving	www.dft.gov.uk/ActOnCO2/?q=tips_and_advice
Ten Tips for Safer, Greener, Stress-Free Driving	Tips for safer driving	www.energysavingtrust.org.uk/download.cfm?p=5&pid=93
Freight Best Practice	Travel plans for freight operations	www.freightbestpractice.org.uk
Business travel plans		
Workplace Travel Plans	Guidance on work travel plans	www.dft.gov.uk/pgr/sustainable/travelplans/work/
Residential travel plans		
Making Residential Travel Plans Work	Guidance on residential travel plans	www.dft.gov.uk/pgr/sustainable/travelplans/rpt/mrtpw
School travel plans		
Travelling to School- a Good Practice Guide	Guidance on school travel plans	www.dft.gov.uk/pgr/sustainable/schooltravel/travelling/travellingtoschoolagoodpract5762
Travel Plan resources		
Smarter Choices	Advice on influencing travel behaviour	www.dft.gov.uk/pgr/sustainable/smarterchoices/
Travel Planning	Advice from the Energy Saving Trust on travel planning	www.energysavingtrust.org.uk/fleet/organisations/traveladvice/
Using the Planning Process to Secure Travel Plans	Guidance from DfT	www.dft.gov.uk/pgr/sustainable/travelplans/work/publications/usingtheplanningprocesstosec5787
Association for Commuter Transport	Advice on travel plans	www.act-uk.com
Fleet Management		
Energy Saving Trust's Fleet Management	Information on the Energy Saving Trust's fleet management consultancy	www.est.org.uk/fleet/Informationcentre/Ourvirtualconsultant/q1_en_gt50.cfm
Green Fleet Review	Free green fleet reviews from the Energy Saving Trust	www.energysavingtrust.org.uk/fleet/Efficientdriving/greenfleetreviews/

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 11: Schools and education

Summary

Schools have an important role to play in mitigating the causes of climate change in a number of ways.

The government is currently investing in a major capital programme for schools. This presents a significant opportunity for local authorities to ensure that energy use and carbon dioxide emissions in school buildings are reduced through the adoption of energy efficiency measures and renewable / low carbon energy technologies.

Local authorities can work with school communities to ensure that energy use in school buildings is managed effectively. Local authorities can also work with schools in the development of school travel plans.

Schools have an equally important role to ensure that when energy efficient measures are in place these are brought to life within the teaching and learning plans for the school and incorporated within lessons and actions. This would help to encourage the children's active involvement in energy awareness.

This module outlines the major ways in which local authorities can take action to help reduce the climate change impact of school buildings and activities under the three key areas outlined above. It also looks briefly at the role of local authorities in addressing climate change through adult education.

School buildings

Opportunities to minimise carbon dioxide emissions from the use of school buildings arise both during major refurbishment / building programmes and also in the day to day management of the school.

New buildings and major refurbishment

All major school building projects must now undergo formal environmental assessment using the Building Research Establishment's environmental assessment method BREEAM Schools. Building regulations are also requiring improvements in the carbon efficiency of new and refurbished buildings. The Department for Children, Schools and Families (DCSF) is currently developing requirements to further reduce carbon emissions from school buildings. In addition to working within these requirements, local authorities can use various sources of funding available to ensure that further use of energy efficiency and renewable and low carbon energy generation technologies is achieved. However local authorities should check individual fund requirements to ensure that they can be used alongside any existing funds that are being used.

Funding in England

The government is investing substantial public funds to rebuild or significantly refurbish the majority of school buildings and transform the schools estate. This represents a major opportunity for local authorities to ensure that energy use in school buildings is significantly reduced through energy efficiency measures and renewable and low carbon energy technologies.

There are two major strategic funding programmes for refurbishing school buildings in England:

- ❑ Building Schools for the Future (BSF); and
- ❑ The Primary Capital Programme.

Additional funding for school capital investment projects comes in the form of Devolved Formula Capital, which involves money being given directly to schools.

Building Schools for the Future

Building Schools for the Future (BSF) is a strategic capital investment programme delivered by local authorities with Partnerships for Schools' help which, in conjunction with the Academies programme, represents a comprehensive rebuilding and modernisation of all secondary school buildings across England.

Funding is allocated to local authorities to allow an area-wide rationalisation and upgrade of their entire school estate, including special, voluntary-aided, faith, trust and community schools. High quality sustainable school design is specified as being one of the key aspects of the Building Schools for the Future programme.

For further information please see the BSF website at www.bsf.gov.uk or the Partnership for Schools website at www.partnershipsforschools.org.uk.

The Primary Capital Programme

The Primary Capital Programme aims to rebuild or refurbish at least half of all primary schools over the next 15 years. In October 2007, guidance will be issued to local authorities on the future of the programme and their responsibilities in implementing it.

23 regional pathfinders have been selected to lead the development of innovative approaches to planning, procurement and sustainability. These pathfinders will provide a rich source of experience for other local authorities to base their activity on. Further information on the Primary Capital Programme can be found here: www.teachernet.gov.uk/doc/9606/Primary%20Capital%20Programme%20-%20Final.pdf.

Devolved Formula Capital

Devolved Formula Capital (DFC) is an amount allocated each year to primary and secondary schools to be spent by them on their priorities in respect of buildings, information and communication technology and other capital needs. Spending the DFC is a matter for each individual school governing body: developing a good working relationship with these bodies will help local authorities to achieve improvements in schools.

Further information on Schools Devolved Formula Capital can be found here: www.teachers.gov.uk/management/resourcesfinanceandbuilding/FSP/nds/.

Carbon Neutral Schools

Under the Carbon Neutral Schools programme, additional funding of £110 million over the three years to 2010-11 will be provided to local authorities to invest in measures that directly reduce carbon emissions from new school buildings (i.e. energy efficiency and small-scale renewable energy systems on school sites). The additional funding will be allocated for new schools within BSF and the Academies programme. The Government is developing guidance on the range of energy efficiency and renewable energy methods that can be adopted to meet a target reduction. With currently available technologies, some degree of carbon offset will generally be required if schools are to become carbon neutral. The Government is exploring the potential for investing in measures to offset carbon emissions through regulated schemes and sees potential for developing an offset scheme that also provides opportunities for teaching and learning.

Devon County Council – Seaton Primary School

Seaton Primary School in Devon has installed a wind turbine, photo-voltaic cells and solar panels in its buildings and grounds. They supply electricity directly to the school and have helped reduce carbon dioxide emissions by about two tonnes a year. They also heat the school's outdoor swimming pool. The initiative came as part of a drive within Devon County Council to move all of the county's schools towards best practice in energy efficiency.

Further information can be found on the Devon County Council website: www.devon.gov.uk/contrast/capstrat-energyreport.pdf.

Funding in Wales

The primary source of funding for the renovation and building of school buildings in Wales is the School Buildings Improvement Grant. This funding encourages partnerships and collaborations between local authorities and the Assembly Government to provide new and refurbished school buildings. It promotes sustainability and security in new and significantly refurbished schools and requires the BREEAM Schools 'Excellent' standard for new schools. As part of the Schools Capital Project, Value Wales is exploring opportunities for collaboratively delivering new buildings to the required standard and sharing experience across authorities.

Welsh Assembly Government and local authorities have established a pilot programme to explore opportunities for improving school design, build and procurement. This will include consideration of standardised documentation, framework contracts, standardised design and funding options.

Design advice for new build and refurbishment

Resources and advice are available for school communities and local authorities from a number of sources:

- ❑ The Carbon Trust offers a Design Advice service that can be utilised by schools. The service includes a detailed printed guide and face-to-face consultancy:
www.carbontrust.co.uk/energy/assessyourorganisation/design_advice.htm. Design Advice helps to identify the carbon savings in new build and renovation projects, offering free or subsidised consultancy advice to help throughout the project stages.
- ❑ A leading source of information is the website www.teachernet.gov.uk/sustainableschools, which is designed to support schools on their journey to sustainability, introducing the principles of sustainable development and offering guidance on how to embed these principles into the heart of school life.

Case studies

- ❑ Design of Sustainable Schools – case studies that aim to provide schools and design teams with real-world examples of places that have embraced these challenges:
www.teachernet.gov.uk/doc/10675/SustainCS.pdf.
- ❑ Devon County Council supported a local school in the installation of 3 renewable energy technologies: a wind turbine, PV and solar panels to heat the swimming pool. Information is available here: www.eas.local.gov.uk/CaseStudy.asp?id= SX9452-A781EBB6&cat=1595.
- ❑ A project to install one of the UK's first wind turbines in a school - Nidderdale High School & Community College, near Harrogate - in a designated Area of Outstanding Natural Beauty, which has become the hub of activity in the dale. The turbine meets part of the school's energy needs and also provides an educational resource both for pupils and the wider community. A case study is available here:
www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%2023.pdf.
- ❑ A case study on how energy efficient sustainable construction and renewable technologies were incorporated into the development of Kingsmead School.
www.energysavingtrust.org.uk/uploads/documents/housingbuildings/renewables_kingsmead_cs.pdf.
- ❑ Further information is being gathered on the Solar4schools website: www.solar4schools.co.uk/.
- ❑ Case studies of schemes under the Government's Clear Skies programme include two examples of initiatives in schools: www.clear-skies.org/casestudies/CaseStudies.aspx.

Implementing energy management strategies and action plans

Ensuring that new and refurbished buildings are low carbon is only part of the picture. It is also important to work with individual schools to assist them in developing good practice energy management strategies and action plans and in ensuring that energy efficiency is incorporated within the teaching and learning strategies at the schools. The energy efficiency measures need to be seen as active teaching resources and pupils need to be made aware of them and understand the reasons for them and benefit from their functions.

Working with school governors and head teachers

The school governing body is responsible for deciding how to spend a school's budget to ensure that resources are allocated in line with agreed priorities and will deliver value for money. The school governing body also reviews progress to make sure that spending is delivering the right results and keeping within budget limits. Day-to-day decisions are generally delegated to the head teacher.

Local authorities can work with school governing bodies to ensure that their priorities are in line with local and regional priorities for the energy efficient management and refurbishment of schools. This may often involve ensuring that the governors are convinced of the need to tackle climate change and also understand the financial benefits to the school of improved energy management. Members of the Local Strategic Partnership may be able to help with this sort of activity.

The Governors' guide to sustainable schools offers practical guidance to governors to help them understand the benefits of sustainable schools. It is available here:

www.teachernet.gov.uk/sustainableschools/support/support.cfm?id=54.

Training for schools facilities staff

A school's facilities management staff are often key to the delivery and maintenance of an energy management action plan. A potential role for a local authority here is the provision of energy management training and/or information for these staff.

With the changes in the procurement process being brought about through the Building Schools for the Future strategic funding programme, maintenance of the school and facilities management will increasingly be carried out by contractors.

An example of this system in practice can be found at Cornwall County Council:

www.cornwall.gov.uk/index.cfm?articleid=8604. Under the Private Finance Initiative (PFI) contract the 'NewSchools' consortium will be responsible to the Council for maintaining the schools in their improved and refurbished condition for the remainder of the 25 year contract period. They will also be responsible for providing a comprehensive Facilities Management package.

Local authorities can use this procurement process to ensure that a strategic and long term vision for the efficient energy management of schools is built into facilities management contracts.

Rurality and sparsity

Rurality and low population density pose a challenge in some areas and, in the longer term, a key feature of effective education in many areas may be virtual learning environments. This is already the case in some Welsh medium schools for certain courses at 16+.

Further sources of support and information

There are a number of resources available to local authorities and schools to help them implement efficient energy management plans.

- ❑ The Carbon Trust has developed a guide Building Energy Efficiency In Schools – A Guide To A Whole School Approach which has been designed to provide a step by step approach to managing energy use in a school. This guide can be downloaded from the Carbon Trust website: www.thecarbontrust.co.uk/Publications/publicationdetail.htm?productid=GPG343&metaNoCache=1.
- ❑ The Carbon Trust also offers free site surveys and support. Further information on these services can be found on the Carbon Trust website: www.carbontrust.co.uk/energy/startsaving/schools.htm.
- ❑ The Sustainable Learning scheme helps schools to manage their energy and other resources and activities and can issue them with a national accreditation backed by government. www.create.org.uk/create/sustainable_learning.asp.
- ❑ The Government's teachernet website also hosts A Bursar's Guide to Sustainable School Operation, produced by DCSF: <http://publications.teachernet.gov.uk/default.aspx?PageFunction=productdetails&PageMode=publications&ProductId=DFES-00375-2007>. This booklet has straightforward ideas on how schools can

become more sustainable and save money ranging from thinking about lighting to changing the way schools purchase computers.

- ❑ Sustainable Schools Top Tips on reducing energy and water usage in schools is available here: <http://www.teachernet.gov.uk/sustainableschools/support/support.cfm?id=54>.
- ❑ Eco Schools provides a schools-based environmental management system and way to engage pupils in environmental improvements: www.eco-schoolswales.org.

School travel plans

Schools have an impact on the travel patterns of a great number of people in the local community. The Department for Transport and the Department for Children, Schools and Families therefore want all schools in England to have approved school travel plans before the end of the decade in order to reduce car use and increase walking, cycling and the use of public transport for school journeys. The Departments are providing funding to enable local authorities to employ school travel advisers to work with schools to help develop the plans.

School travel plans also bring other benefits for children and their parents, including positive health impacts and a reduction in traffic congestion at the beginning and end of the school day. In addition, they can encourage school staff to adopt more sustainable commuting habits.

Green travel options for pupils

In May 2007, the Government published the 'Home to School Travel and Transport Guidance'. This guidance, which local authorities are under a statutory duty to have regard to, sets out a new general duty placed on local authorities, by the Education and Inspections Act 2006, to promote the use of sustainable travel and transport.

There are four main elements to the duty:

- ❑ An assessment of the travel and transport needs of children and young people;
- ❑ An audit of the sustainable travel and transport infrastructure in the authority;
- ❑ A strategy to develop the sustainable travel and transport infrastructure within the authority so that the travel and transport needs of children and young people are better catered for; and
- ❑ The promotion of sustainable travel and transport modes on the journey to, from and between schools and other institutions.

The guidance covers local authority duties and powers relating to school travel arrangements for children and young people. Every local authority must publish its strategy by 31 August 2007. The Home to School Travel and Transport guidance can be accessed here:

<http://publications.teachernet.gov.uk/default.aspx?PageFunction=productdetails&PageMode=publications&ProductId=DFES-00373-2007&>.

Establishing a school travel plan

There are a number of sources of information and guidance for developing a school travel plan:

- ❑ Travelling To School – An Action Plan: www.teachernet.gov.uk/doc/5154/DfES-Travelling%20to%20School.pdf. This outlines the Government's proposals to help children and parents make sustainable travel choices, i.e. walking, cycling, and using public transport for their journeys to and from school.
- ❑ Guidance for local authorities from the Department for Transport on school travel plans including increasing bus use: www.dft.gov.uk/pgr/sustainable/schooltravel/localauthorities/.

Further information and support

There are a number of other government programmes and sources of guidance that can help local authorities to implement the four main elements of their duty listed above.

- ❑ The Government's Travelling to School initiative aims to develop a strategic approach to school travel issues promoting the use of walking, cycling and public transport and reducing car dependency for journeys to school. As part of the initiative, Regional School Travel Advisers are

responsible for working with schools and local education and transport authorities to produce strong and effective travel plans. Further information on the Travelling to School initiative can be found here: www.dft.gov.uk/pgr/sustainable/schooltravel/research/tsi/.

- ❑ A school travel advisers toolkit has been produced to help develop a strategic approach to school travel issues. It promotes the use of walking, cycling and public transport to reduce car dependency for journeys to school. The toolkit can be accessed from the teachernet website: www.teachernet.gov.uk/wholeschool/sd/managers/travel/STAtoolkit/.
- ❑ There is a sustainable schools Top Tips list for travel, available here: www.teachernet.gov.uk/sustainableschools/support/support.cfm?id=54.
- ❑ Safer Routes to School is a national scheme supported by local authorities and non-statutory organisations to encourage and enable young people to walk to school and use other sustainable transport methods, while at the same time promoting road safety, personal safety and environmental awareness. It also aims to reduce traffic congestion and pollution. The project involves everyone in the school community and focuses on their needs. Further information, including details of how local authorities and schools can get involved, can be found on the Sustrans website: www.saferoutestoschools.org.uk/.

School travel plans case studies

- ❑ Travelling to school – good practice: www.teachernet.gov.uk/doc/5172/DfT-good%20practice%20guide.pdf. Published in parallel with the Action Plan, this provides practical advice based on the many excellent school travel plans which already exist around the country.

The Hampshire Solar Challenge

Teams from primary schools across the region were tasked with designing and constructing model solar powered cars that are then entered in to a county-wide championship race. The project began in September 2001 and is still ongoing and successful.

The project is coordinated by a group of Local Agenda 21 (LA21) and Home Energy Conservation Act (HECA) Officers from Hampshire local authorities and is supported by The Environment Centre, Southampton. In 2005 the councils involved were Basingstoke and Deane, Test Valley, Eastleigh and Gosport and the Isle of Wight. The initiative represents an example of best practice in local authority officers working with external partners to promote the principles of sustainable development and demonstrate the benefits to the community.

Further information can be found here:

www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%2013.pdf.

Energy in the curriculum

Schools have a vital role to play in encouraging interest in the environment from a very early age. Schools can also fulfil an educational role in the wider community: school buildings are prominent buildings in local communities and school energy projects can provoke interest in energy issues; similarly sustainable travel projects directly engage pupils and parents in the issue of climate change mitigation.

Local authorities can encourage greater emphasis on energy by helping teachers access available resources and also ensuring that they can see how to use these within the curriculum. They can also help build partnerships between local schools and local commercial and voluntary sector organisations that may be willing to contribute to delivering education on climate change within the school.

Under both the current National Curriculum in England for science and the new science curriculum to be taught in schools in England from September 2008, pupils aged 11-14 are taught about renewable energy and the possible impact of human activity, such as the burning of fossil fuels, on the environment.

The current geography curriculum in England for 11-14 year olds requires pupils to be taught about resource planning and management issues, for example developing alternative energy sources. From September 2008, 'environmental interaction and sustainable development' will be one of the key concepts in the new geography curriculum for 11-14 year olds with a requirement to study climate change.

The new Welsh national curriculum (due in January 2008) also features opportunities to study climate change within geography and through science where studying energy is a key aspect, as well as through other subjects.

In May 2007, the Department for Children, Schools and Families (DCSF) and Defra sent a climate change pack to every secondary school in England. The online teacher guidance for the pack provides material to support the teaching of climate change in geography, science and citizenship. The pack is part of the wider DCSF Sustainable Schools programme which aims to embed sustainability in the curriculum, for example how schools operate (e.g. reducing energy usage) and in their work with the local community. For more information see: www.teachernet.gov.uk/sustainableschools.

A pack was also sent out to all Welsh secondary schools and further education colleges in July 2007 and further information will be sent out in the autumn term to continue to support teaching and learning about climate change.

There are a number of resources available to help schools incorporate climate change and sustainability in to their curriculum and to help promote sustainability in their activities in general:

- ❑ www.teachernet.gov.uk/sustainableschools also contains a comprehensive online directory of teaching resources.
- ❑ www.eco-schools.org.uk/ or www.eco-schoolswales.org. The Eco-Schools programme provides a simple framework to enable schools to analyse their operations and become more sustainable. Pupil involvement is a key part of the Eco-Schools programme, with pupils engaged in the whole process, including monitoring, action planning and decision-making.
- ❑ Through the Sustainable Learning Programme, the Government is committed to embedding sustainable development in schools, the curriculum and the community and is working with partners and other Government departments to provide the necessary tools for this to happen. Further information on the sustainable learning programme can be found here: [www.sustainablelearning.info/\(p2dzmsroz3hg3f55upbxbt55\)/index.aspx](http://www.sustainablelearning.info/(p2dzmsroz3hg3f55upbxbt55)/index.aspx).
- ❑ The CREATE programme offers a large number of teaching resources to schools on topics related to climate change and sustainable energy use. Further information can be found here: www.create.org.uk/create/about.asp.
- ❑ In addition to work being supported by DCSF, Defra has sponsored a number of projects aimed at raising awareness of climate change through the Climate Challenge Fund. Seventeen out of the eighty-three projects have schools as their main audience or have specifically targeted aspects of their project. See: www.climatechallenge.gov.uk.
- ❑ The Department for Business, Enterprise & Regulatory Reform (BERR) has developed programmes for renewable energy education for primary and secondary schools: www.berr.gov.uk/energy/sources/renewables/renewables-schools.
- ❑ The National Grid for Learning Wales has information for teachers on climate change, its causes and impacts: www.ngfl-cymru.org.uk/climatechange.

Case study

CREATE led a feasibility study, the Schools Community Carbon Challenge, to assess the increase in take-up of energy efficiency measures by using the local school as the catalyst to help raise carbon awareness amongst the wider community. More information is available here:

www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case25.pdf.

Adult education

Through the provision of adult learning courses, local authorities can help to ensure that the basic and more advanced skills necessary for the mitigation of climate change are met. This can range from ensuring that people in the community have basic knowledge about climate change and the efficient use of energy to providing courses for those wishing to work in the field of sustainable energy.

The National Institute of Adult Continuing Education (Niace) is currently investigating ways in which climate change can be incorporated into programmes for adult learning. Further information can be found on the Niace website: www.niace.org.uk/.

In Wales developments are underway to increase teaching and learning about climate change in this sector through the development of materials, training and resources, which are linked to Education for

Sustainable Development and Global Citizenship (ESDGC) of which climate change is a key theme:
www.esd-wales.org.uk/.

Waste management

Schools in Wales are part of the Assembly Government's Public Sector Waste Minimisation Campaign. This provides guidance, resources, training and some grant funding for waste reduction and recycling. This, together with the Eco-Schools initiative, not only ensures the more sustainable management of resources in Welsh schools, but also helps educate the adults of tomorrow on the importance of resource efficiency.

Table of case studies

Case study	Local authority	Type	Summary	Link
County Councils				
Devon County Council – Seaton Primary School	Devon County Council	County, rural	Project involving renewable energy in school buildings	www.devon.gov.uk/contrast/capstrat-energyreport.pdf
Cornwall County Council 'new schools' consortium	Cornwall County Council	County, rural	Details of PFI contract for refurbishment and maintenance of school buildings in Cornwall	www.cornwall.gov.uk/index.cfm?articleid=8604
Unitary Authorities				
Pembrokeshire County Council	Unitary	Unitary, rural	Integrating renewable energy into schools	www.pembrokeshire.gov.uk/content.asp?nav=647,660,666&parent_directory_id=646&id=6797&language
London Boroughs				
Safer routes to school initiative in Southwark	London Borough of Southwark	London Borough, urban	Details of projects undertaken in Southwark under the safer routes to school programme	www.southwark.gov.uk/YourServices/transport/SaferRoutesSchool.html
District Councils				
Enviroschool	Newcastle City Council	City, urban	Enviroschool programme	www.newcastle.gov.uk/core.nsf/a/enviroschools
Others				
Design of Sustainable Schools – Case Studies	N/A	N/A	Publication available from teachernet website providing case studies of sustainable school buildings	www.teachernet.gov.uk/doc/10675/SustainCS.pdf
Kingsmead School	N/A	N/A	Energy efficient design, sustainable construction materials and renewable energy in a school	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/renewables_kingsmead_cs.pdf
Nidderdale High School and Community College	N/A	N/A	Details of a school building utilising renewable energy	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%2023.pdf
Travelling to school – good practice	N/A	N/A	Practical advice based on the many school travel plans which already exist around the country.	www.teachernet.gov.uk/doc/5172/DfT-good%20practice%20guide.pdf

Table of resources

Resources	Summary	Link
New buildings and major refurbishment		
Building Schools for the Future Programme	Information on the Building Schools for the Future Programme	www.bsf.gov.uk , www.partnershipsforschools.org.uk
Primary Capital Programme	Information on the Primary Capital Programme	www.teachernet.gov.uk/_doc/9606/Primary%20Capital%20Programme%20-%20Final.pdf
Schools Devolved Formula Capital	Further information on the Schools Devolved Formula Capital	www.teachers.gov.uk/management/resources/financeandbuilding/FSP/nds/
The Carbon Trust's Design Advice service	A free design advice service available to schools	www.carbontrust.co.uk/energy/assessyourorganisation/design_advice.htm
Solar4schools website	A site that provides advice to schools regarding solar PV projects	www.solar4schools.co.uk/
Implementing energy management strategies and action plans		
Teachernet Sustainable Schools web resource	A leading source of information for all aspects of sustainability in schools	www.teachernet.gov.uk/sustainableschools
Building energy efficiency in schools	A step by step approach to managing energy use in schools	www.thecarbontrust.co.uk/Publications/publicationdetail.htm?productid=GG343&metaNoCache=1
Carbon Trust free site surveys and support	Information on these free services offered by the Carbon Trust	www.carbontrust.co.uk/energy/startsaving/schools.htm
Sustainable Learning Scheme	A scheme to help schools manage their energy and other resources	www.create.org.uk/create/sustainable_learning.asp
Teachernet publication 'A Bursar's guide to sustainable school operation'	Straightforward ideas on how schools can become more sustainable	http://publications.teachernet.gov.uk/default.aspx?PageFunction=productdetails&PageMode=publications&ProductId=DFES-00375-2007
Eco-Schools	A simple framework to enable schools to analyse its operations and become more sustainable. Pupil involvement is a key part of the Eco-Schools programme,	www.eco-schools.org.uk/ or www.eco-schoolswales.org
The Governors Guide to Sustainable Schools	Practical guidance to governors to help them understand the benefits of sustainable schools	www.teachernet.gov.uk/sustainableschools/support/support.cfm?id=54
Sustainable Schools Top Tips on Reducing Energy and Water Usage in Schools	Guidance on reducing energy and water usage in schools	www.teachernet.gov.uk/sustainableschools/support/support.cfm?id=54
School travel plans		
Home to School Travel and Transport Guidance	Government guidance setting out duty placed on Local Authorities to promote the use of sustainable travel and transport.	http://publications.teachernet.gov.uk/default.aspx?PageFunction=productdetails&PageMode=publications&ProductId=DFES-00373-2007&
Travelling To School – An Action Plan	Outlines the Government's proposals to help children and parents make sustainable travel choices,	www.teachernet.gov.uk/_doc/5154/DFES-Travelling%20to%20School.pdf
Department for Transport guidance on school travel plans	Various sources of information for Local Authorities from the DfT, including increasing bus use	www.dft.gov.uk/pgr/sustainable/schooltravel/localauthorities/
Information on the travelling to school initiative	Information to help Regional School Travel Advisors to produce strong and effective travel plans	www.dft.gov.uk/pgr/sustainable/schooltravel/research/tsi/
School Travel Advisers Toolkit	Information designed to help school travel advisers in implementing the Travelling to School initiative	www.teachernet.gov.uk/wholeschool/sd/managers/travel/STAtoolkit/
Safer Routes to School website	Information on the Sustrans website on this project to encourage and enable young people	www.saferoutestoschools.org.uk/

	to walk to school and use other sustainable transport methods	
Energy in the curriculum		
Teachernet resources for promoting sustainability through education initiatives	Contains a comprehensive online directory of teaching resources	www.teachernet.gov.uk/sustainable-schools
Sustainable Learning Programme	Details of Government programme to embed sustainable development in schools, the curriculum and the community	www.sustainablelearning.info/(p2dzm-sroz3hg3f55upxbt55)/index.aspx
The CREATE programme	Offers a large number of teaching resources to schools on topics related to climate change and sustainable energy use	www.create.org.uk/create/about.asp
CREATE feasibility study	Resources looking at the increase in take-up of energy efficiency measures by using the local school as the catalyst to help raise carbon awareness amongst the wider community	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case25.pdf
Climate Change Teacher Guidance Pack	Part of the sustainable schools programme	www.teachernet.gov.uk/sustainable-schools
The Department for Business, Enterprise & Regulatory Reform (BERR) resources for renewable energy education for schools	Information and teaching resources about eight key renewable energy sources	www.berr.gov.uk/energy/sources/renewables/renewables-schools
Adult education		
Website for the National Institute for Adult Continuing Education (NIACE)	Further information on initiatives for adult continuing education	www.niace.org.uk/

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 12: Social care

Summary

Social care professionals within a local authority can take a two-fold interest in improving energy efficiency. Firstly by becoming involved in the alleviation of fuel poverty and secondly by considering energy use in the authority's own estate and operations relating to social care.

Improved energy efficiency in the home can help alleviate fuel poverty and tackle the causes of climate change. Social care professionals can play a valuable role in achieving this as they are a trusted source of care and support to children, older people and other vulnerable adults.

Fuel poverty can have a detrimental effect on a person's physical and mental well-being. This includes:

- ❑ Increased accidents in the home due to loss of dexterity;
- ❑ More incidents of poor health, particularly respiratory-related illnesses;
- ❑ Poor nutrition, due to those affected having to make a choice between keeping warm and other essentials;
- ❑ Social isolation from a reluctance to invite people into their homes and/or need to economise on anything other than essentials; and
- ❑ Adverse affect on performance at school.

As well as achieving the alleviation of fuel poverty and helping to improve energy efficiency, the involvement of social care professionals can help them achieve their own objectives. For example, it can reduce social isolation and improve school attendance.

This module covers how energy awareness can play a part; some of the local authority schemes that currently exist and could be replicated by others; how fuel debt advice can be incorporated; and cases where additional assistance may be needed.

This module also considers aspects a local authority social care department can consider in its own estate and operations. Social care is an intrinsically high energy user and is responsible for a significant share of local authorities' non-housing estate energy use.

Energy awareness

Raising energy awareness is an essential part of reducing expenditure on energy. Individuals who are accessing social care services are often likely to have difficulty understanding and managing their own energy use. There are a number of ways energy advice can help them and the role of social care professionals is to understand the advice available and be able to refer people on to it as appropriate. See module 14 for further information on energy awareness.

Signposting and referral networks for fuel poverty schemes

Affordable warmth referral networks

Affordable warmth referral networks are a common way to reduce fuel poverty. Networks comprise key community workers within social, health and voluntary organisations that, as part of their jobs, interact with members of the community who are likely to be vulnerable to fuel poverty. Social care professionals form an important part of any affordable warmth referral network.

Each member of the network is trained on recognising the symptoms of fuel poverty and to refer people they think may be vulnerable to a central point e.g. an Energy Efficiency Advice Centre (EEAC). From here, the vulnerable person will be helped to access help e.g. grants or advice on energy efficiency and benefits checks.

In many cases, the referral network will be used to help vulnerable people access help on more than just energy efficiency. For example, the Luton Borough Council scheme integrates four elements: warmth (energy efficiency measures); benefits checks, social care needs and safety.

Some referral networks are aimed at particular tenures and groups, e.g. the London Borough of Islington's House Warming Islington scheme is targeted at people over 60 years of age in the owner-occupier sector, others are non-specific e.g. npower's Health Through Warmth scheme.

The following schemes may be of interest:

- ❑ npower Health Through Warmth: www.npower.com/Health_Through_Warmth/.
- ❑ Cornwall's Home Health project. See the Beacon Council Sustainable Energy Toolkit CD.
- ❑ Camden's Warmth for All: www.camden.gov.uk/ccm/navigation/community-and-living/warmth-for-all/.

Further information on fuel poverty

- ❑ The National Heart Forum's 'Fuel Poverty and Health' toolkit: www.heartforum.org.uk/Publications_NHFreports_FuelpovertyToolkit.aspx.
- ❑ Plymouth and South Devon Research and Development Support Unit Study - Central Heating: uncovering the impact on social relationships and household management. To contact the unit see www.pms.ac.uk/pms/research/rdsu.php.
- ❑ Research into the impacts of fuel poverty: www.eagagroup.com/charitable/reports.htm.
- ❑ Tackling fuel poverty requires a multi-pronged approach. In 2002, five local authorities were awarded Beacon status for their work on fuel poverty. Beacon Councils were: Luton Borough Council, Blyth Valley Borough Council, East Riding of Yorkshire Council, London Borough of Camden, and Newark and Sherwood District Council. Working with NEA, the five authorities produced a Beacon Council Toolkit to demonstrate best practice: www.nea.org.uk/downloads/publications/beacon_toolkit.pdf.
- ❑ Households containing someone on benefits in England may be eligible for grant assistance through the Government's Warm Front scheme, which can provide a package of energy efficiency and heating measures. More details about the scheme are available by calling 0800 316 6011, or through the website: www.warmfront.co.uk.
- ❑ In Wales, households can get help through the Home Energy Efficiency Scheme, which offers heating and insulation measures to qualifying households in the following groups: families with children under 16; people who are 60 or over; and those who are disabled or chronically sick. Householders who are over 80 can also access the scheme regardless of eligibility. People who are over 60 and own their own home can also access a partial grant. Further information is available from the scheme managers, eaga, by calling 0800 316 2815 or via their website at: www.heeswales.co.uk.

London Borough of Camden's Warmth for All

Warmth for All is aimed at older people, people on low incomes and people with disabilities.

Partners in the network include:

- ❑ The North West London EEAC;
- ❑ Citizens Advice Bureau;
- ❑ Welfare Rights;
- ❑ The Primary Care Trust;
- ❑ Libraries;
- ❑ GP surgeries; and
- ❑ Various voluntary organisations.

Vulnerable people are referred to the North West London EEAC and support provided includes:

- ❑ Grants for heating and insulation;
- ❑ Advice on appropriate energy supplier tariffs;
- ❑ Referrals for income maximisation; and
- ❑ Basic advice on how to reduce energy consumption.

The referral network is accompanied by a publicity campaign to increase awareness and increase take-up.

Fuel debt advice

Many people suffering from fuel poverty will need fuel debt advice. Many schemes include the option of a benefits health check (or income maximisation check). This service can be offered by a particular

department within the council or, as in the case of Camden's Warmth For All Partnership, through an external partner such as the Citizens Advice Bureau.

Additional assistance

There are a number of people suffering from fuel poverty who may be unable to cope with accessing help. Many schemes are unable to fund the high level one-on-one support that may be required.

Social care professionals are a trusted source of support and can help reduce this barrier by making referrals and handholding people through the process. If they are unable to offer handholding support themselves, they are often in a position to identify the requirement for extra support and include contact details for friends, neighbours and family who can help with telephone calls and talking to contractors undertaking the work.

Own estate and operations

Social care is an intrinsically high energy user and is responsible for a significant share of local authorities' non-housing estate energy use. Services are run on a 24/7 basis and because of care needs, buildings tend to be maintained at high room temperatures. The personal needs of service users place an emphasis on cleaning and washing and laundry services. It also provides meals on a large scale.

This means that maximising the efficiency of doing all this can make quite a difference. For more information on improving the energy efficiency of your own buildings, see module 6.

Social care has a large number of providers mostly in the private sector. It can be influential through its commissioning of services by encouraging best practice both through how it contracts but also in sharing best practice and offering help.

Social care has a strong domiciliary approach to service delivery through visiting people at home to assess and deliver services. Encouraging staff to use energy efficient approaches would make a contribution alongside the points about localising services more. Electronic communication and information provision will also help reduce the need for visits.

In addition, social care can consider travel emissions associated with operating social care. For example, attempting to reduce the amount of travel involved in foster care by aiming to place children within the local authority area. This also has additional benefits for the children.

Table of resources

Resources	Summary	Link
Affordable warmth referral networks		
nPower Health Through Warmth Project	Locally based partnerships that help vulnerable people whose health is adversely affected by cold, damp living conditions	www.npower.com/Health_Through_Warmth/
Camden's Warmth for All project	Referral network for people in Camden who cannot afford to heat their home to the level required for health and comfort	www.camden.gov.uk/ccm/navigation/community-and-living/warmth-for-all/
Cornwall's Home Health project	A funding package of local and national sources to enable all households living in Home Health zones to be eligible for free insulation regardless of income and tenure.	See the Beacon Sustainable Energy Toolkit CD
Further information on fuel poverty		

The National Heart Forum's Fuel Poverty and Health toolkit	Toolkit about working in partnership with strategic planners and health professionals to reduce fuel poverty	www.heartforum.org.uk/Publications_NHFreports_FuelpovertyToolkit.aspx
Central Heating: uncovering the impact on social relationships and household management	Research from the Plymouth and South Devon Research and Development Support Unit	www.pms.ac.uk/pms/research/rdsu.php
The Impacts of Fuel Poverty	Eaga partnership research into the impacts of fuel poverty	www.eagagroup.com/charitable/reports.htm
Best practice in working to Combat Fuel Poverty	Beacon Council's Toolkit to demonstrate best practice in working to combat fuel poverty	www.nea.org.uk/downloads/publications/beacon_toolkit.pdf
The Government's Warm Front scheme	Funding scheme to tackle fuel poverty	www.warmfront.co.uk
Home Energy Efficiency Scheme (HEES) - Wales	Funding scheme to tackle fuel poverty	www.heeswales.co.uk

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 13: Economic development and regeneration

Summary

Tackling climate change and fuel poverty will lead to a number of benefits in terms of economic development leading to:

- ❑ The creation of jobs, which will benefit the local and wider economy – evidence has shown that the manufacturing and installation industry associated with energy efficiency measures can have positive effects in terms of job creation;
- ❑ Lower fuel costs for residents, which in turn will provide increased disposable income, some of which may well be spent in the local or wider economy;
- ❑ Development of a market for low carbon goods and services, which in turn can offer opportunities for local businesses to develop in areas that will have national and international markets; and
- ❑ Provision of a more secure and lower cost supply of renewable fuel / energy for local businesses.

Furthermore, if left ignored, climate change will eventually damage economic growth (as highlighted by the Stern Review).

Local authorities play a key role in this as they are key delivery partners of regeneration schemes and new developments. Through good and positive planning they can facilitate and promote sustainable and inclusive patterns of urban and rural development by contributing to sustainable economic development.

This module contains suggestions about how local authorities can tackle climate change and fuel poverty through housing regeneration and new developments and can support the development of a local low-carbon economy.

Understanding the background

Although responsibility lies with different departments and organisations in England and Wales, all local authorities have a key role to play in helping to meet economic development and regeneration aims and objectives. Local authorities are central in shaping the places where people live and work, and supporting sustainable economic development that is vital for creating jobs and prosperity.

In England, responsibility for strategic leadership of economic development and economic regeneration lies with the Regional Development Agencies (RDAs). The recently published review of subnational economic development and regeneration in England sets out new powers and incentives for local authorities to strengthen their role in economic growth and neighbourhood renewal (see module 4).

In England, a key step in modernising the housing and regeneration delivery chain will be the creation of the new homes agency, the proposed new national housing and regeneration agency. It is proposed that this new agency will lead on housing and the regeneration of deprived communities. It will assume responsibility for the:

- ❑ Regeneration roles from English Partnerships;
- ❑ Affordable housing investment from the Housing Corporation; and
- ❑ Key housing and regeneration delivery roles from Communities and Local Government.

In Wales, the responsibility for economic development and regeneration lies with the Department for the Economy and Transport, through the delivery of the economic and transport agendas set out in One

Wales: A Vibrant Economy. The Wales Transport Strategy will be published later in 2007. In doing so, it works with partners across the Welsh Assembly Government and beyond.

Incorporating climate change and fuel poverty issues into housing regeneration

Housing regeneration presents an opportunity to tackle climate change and fuel poverty issues through both the provision of housing in new developments and the improvement of existing housing. Highlighted below are some steps that local authorities can take to incorporate climate change and fuel poverty issues into housing regeneration. For the latest news on regeneration for both England and Wales, visit: www.regen.net (please note that this involves a subscription).

A possible approach would be to incorporate all of the steps below, an approach that the London Borough of Barking and Dagenham has taken and outlined in its sustainable energy strategy, Delivering a Low Carbon Borough, which can be downloaded here: www.energysavingtrust.org.uk/housingbuildings/localauthorities/information/nonest/index.cfm?ty=1&ext_id=1224. For the key points, please see the case study text box.

London Borough of Barking and Dagenham sustainable energy strategy

Highlighted below are key excerpts from the London Borough of Barking and Dagenham sustainable energy strategy

Regeneration presents a low carbon opportunity

The substantial regeneration across the borough over the next twenty years presents a superb opportunity for Barking and Dagenham to provide leadership in building a low carbon future and to leap ahead in creating sustainable communities. The Council will:

- ☐ Incorporate low carbon principles so as to control a potential increase in the borough's carbon dioxide emissions.
- ☐ Set carbon targets for the borough's key regeneration sites.
- ☐ Use its planning powers and regeneration activity to ensure that there is at least one zero carbon large mixed-use development under construction in the borough by 2010.
- ☐ Work with the Mayor of London to establish an Energy Action Area (as outlined in the London Plan and Mayor's Energy Strategy) in Barking Town Centre that demonstrates best practice in both sustainable energy use and production.

Strategic planning for sustainable energy

The Council will:

- ☐ Incorporate low carbon objectives and policies into the Local Development Framework; and
- ☐ Ensure that low carbon developments are promoted and implemented through the delivery of its Regeneration Strategy

There are a number of economic benefits to local authorities in taking such an approach. Incorporating low carbon principles will ensure that in the future, energy bills are reduced, which in turn will increase the amount of money people have available to spend in the local economy. Furthermore, the local developers and construction industry will be well placed to prosper as building regulations tighten in the future.

By reducing the number of fuel poor households and therefore the health and social care issues associated with fuel poverty, the burden on the local authority is minimised. Also, individuals are more able to participate fully in the local economy.

Exemplar projects can increase the general attractiveness of the area to both people and businesses, which in turn will have positive benefits on the local economy.

New developments

Step 1: Low carbon principles

Local authorities can consider incorporating low carbon principles into new developments. These include:

- ❑ Building standards e.g. Code for Sustainable Homes and Best Practice standards. See module 9 for more information.
- ❑ Infrastructure - considering where new houses are built, the layout of estates and the proximity to public transport amenities. See modules 8 and 10 for more information on this.
- ❑ Renewable and low carbon technologies – the key to using these technologies is to ensure they are fully integrated into the design process. See module 9 for more information.
- ❑ District heating – this can help substantially increase the efficiency of local energy production, e.g. through the incorporation of combined heat and power.

Step 2: Fuel poverty

When providing new affordable housing local authorities can consider fuel poverty proofing it. By making sure it has very high levels of energy efficiency and, in appropriate cases, incorporating renewable and low carbon technologies, which will keep the fuel bills low (even if fuel prices rise), local authorities can ensure that anyone who moves into the property will be able to afford to heat it.

Homes developed by English Partnerships or with support from the Government's housing growth programmes, since April 2007, have to achieve level 3 of the Code for Sustainable Homes. For new developments funded by the Housing Corporation's April 2008 funding cycle (the next National Affordable Housing Programme), the same applies (until which time the EcoHomes 'very good' standard will continue to apply). There may be local circumstances, identified in Local Development Plan Documents, where it is possible to specify higher levels of energy efficiency than this. (See the Government's Building a Greener Future: Policy Statement for further information at <http://www.communities.gov.uk/publications/planningandbuilding/building-a-greener>

In Wales BREEAM 'Excellent' standard has been introduced as a condition of all Welsh Assembly Government funding and land disposals for new buildings. Longer term arrangements are also being reviewed so that the Assembly Government's zero carbon aspiration can be integrated from 2011 for new buildings over which the Assembly government has influence.

Step 3: Exemplar projects

Local authorities could choose one or two key new developments to develop as exemplar projects of sustainability.

The Housing Green Paper (for England), called for local authorities and developers to propose around five new eco-town schemes. Eco-towns will be exemplar 'green' developments of at least 5-20,000 homes and additional to existing plans. They will be designed to meet the highest standards of sustainability, including zero carbon technologies and good public transport, as well leading the way in design, facilities and services, jobs, health, and community involvement. For further information about the vision and criteria for eco-towns download the eco-towns Prospectus:

<http://www.communities.gov.uk/documents/housing/pdf/eco-towns>

The Carbon Challenge is another initiative in England, which is being run on behalf of Communities and Local Government. This aims to accelerate the house building industry's response to climate change by fast-tracking the creation of a number of zero and near zero carbon communities to equip the industry with the needed skills and technology. The key objective is to raise the environmental performance of new communities while still delivering quality and high standards of design. Further information can be found here: www.englishpartnerships.co.uk/carbonchallenge.htm.

Other examples of exemplar developments include:

- ❑ BedZed - Beddington Zero Energy Development: www.energysavingtrust.org.uk/download.cfm?p=1&pid=338;
- ❑ The Hockerton Housing Project: www.energysavingtrust.org.uk/download.cfm?p=1&pid=215; and

- ❑ Thamesmead Ecopark - Gallions Housing Association:
www.energysavingtrust.org.uk/download.cfm?p=1&pid=262.

Existing housing

Step 1: Fuel poverty

Regenerating areas of existing housing is an ideal time to improve the quality of the housing to reduce levels of fuel poverty. For more information about the measures that local authorities can take, see module 9.

The Warm Front programme uses Standard Assessment Procedure (SAP) rating 65 as a standard of energy efficiency that means the likelihood of fuel poverty is low.

Higher SAP ratings (66-78) are suggested in the guidance for social landlords developed by the Energy Audit Company, with funding from eaga Partnership Charitable Trust. This can be found here:

www.eaga.com/downloads/eagapct/april2007energyauditcompany_settingsaptargets.pdf.

Beacon Community Regeneration Partnership

Beacon Housing Estate in Falmouth, once a severely disadvantaged area of Cornwall, has been transformed through a programme of housing improvements. A Community Action for Energy case study provides an overview of the energy-related elements of a major community-wide regeneration project.

For more information visit:

www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%209.pdf

Step 2: Low carbon principles

Local authorities can consider incorporating low carbon principles into the regeneration of existing housing. These include:

- ❑ Building standards e.g. the Energy Saving Trust's Best Practice standards and EcoHomes XB. See module 9 for more information; and
- ❑ Renewable and low carbon technologies – for example solar hot water systems. Furthermore, large scale regeneration schemes offer good opportunities for incorporating combined heat and power district heating networks. See module 9 for more information.

Step 3: Exemplar projects

Local authorities could choose one or two key regeneration areas to develop as exemplar projects of sustainability. For an example of an exemplar regeneration project, refer to the text box on Ebbw Vale.

Financing regeneration

There are a large number of funding sources for regeneration projects, which are listed on the following websites:

- ❑ For England: www.planningresource.co.uk/resources/funding/byLocation/3914/england/.
- ❑ For Wales: www.planningresource.co.uk/resources/funding/byLocation/3913/wales/.

Value Wales works with the public sector in Wales to make the best use of its resources. An overarching objective of Value Wales is to use innovative thinking and procurement processes to drive the integration of the principles of sustainable development into spending decisions.

This includes working with small and medium enterprises (SMEs) to become efficient and competitive and capable of effectively competing for Welsh public sector business. Extensive advice and guidance is available from Value Wales via the National Procurement Website www.buy4wales.co.uk.

Ebbw Vale

The Valleys' key regeneration enterprise, situated at the former Corus steelworks site in Ebbw Vale, is set to become a shining example of sustainable development. The 220 acre site is being developed by Blaenau Gwent County Borough Council in a joint venture with the Welsh Assembly Government following the purchase of the site by the Council in 2005.

Proposals for developing a new community at the site include a learning campus, community hospital, wetlands area and primary schools. Housing and job opportunities will also be created through new Residential and Business Villages. Plans to extend the Ebbw Vale Railway with a new railway station are intended to go ahead at a later stage in the project.

Sustainable energy measures onsite will go far beyond current legislation. The project has put in place a 60% carbon reduction target from a 'business as usual' scenario, equivalent to the national target for 2050, and plans are to move towards carbon neutrality by the completion of the project. These targets will be achieved through use of energy conservation measures, efficient power and renewable energy. The hospital will be supplied by a biomass combined heat and power plant and a district heating scheme will supply the learning campus and primary schools, which are intended for early carbon neutrality. Local renewable power generation sources will be used wherever possible to support local businesses and provide 10-20% renewable electricity throughout the site.

For further information, visit the redevelopment website at www.blaenau-gwent.gov.uk/theworks/index.htm.

Supporting the development of local low-carbon businesses

Already mentioned above is the fact that if local authorities lead the drive to tackle climate change and reduce fuel poverty, this could lead to the development of a market for low carbon goods and services, which in turn will provide opportunities for local businesses to develop in areas that will have national and international markets.

Research has also shown that energy efficiency can have positive effects in terms of job creation for the following main reasons¹²:

- ❑ Manufacturing and installing energy efficiency measures is a labour intensive sector compared to energy supply and many sectors in which the government chooses to invest public sector funds.
- ❑ If the energy savings are cost effective, the result is that consumers divert expenditure from energy into the more labour intensive general consumption sector.
- ❑ Work in manufacturing and installing energy efficiency measures is accessible to people who suffer the highest rates of unemployment in the UK, given that it is manual labour and the work is dispersed around the country. Indeed, where programmes aim to assist the fuel poor, the work is concentrated in areas where unemployment tends to be highest. Improving energy efficiency in buildings makes a valuable contribution to urban renovation and creates local jobs that are accessible to those who have lost jobs in manufacturing.

For information and case studies on job creation, refer to the following publication:

www.energysavingtrust.org.uk/download.cfm?p=2&pid=457.

Procurement

Step 1

Procurement has an important role in securing value for money and driving forward the delivery of local services. There is much potential for procurement to realise environmental, as well as economic and social benefits for communities.

Acquiring goods and services from nearby locations can benefit the local economy. This can also contribute to reducing carbon emissions because travel and transport will be reduced.

However, local authorities must ensure they comply with the legal framework governing public procurement i.e. the EC Treaty, EU procurement directives, the UK statutory instruments that

¹² Association for the Conservation of Energy (2000) Energy efficiency and jobs: UK issues and case studies.

implement them and domestic legislation (for example the Best Value framework). This regulatory framework is designed to ensure that public procurement is fair, transparent and not used to discriminate by setting up barriers to free trade. It should be borne in mind that under EU law the requirement must be relevant to the subject matter of the contract, non-discriminatory and transparent.

Step 2

To tackle climate change through energy or water related issues, it would be helpful to engage the private sector to form wider partnerships particularly with companies that provide energy services in buildings or houses (sometimes known as ESCOs - Energy Service Companies) or a range of utilities (sometimes known as MUSCOs - Multi-utility service companies). This may help identify opportunities in a local area to develop renewable and low carbon heat and power solutions, both those that are commercial now and further opportunities for the future.

Cornwall Sustainable Energy Partnership

The Cornwall Sustainable Energy Partnership (CSEP) was created in November 2001 to form a partnership combining the expertise and knowledge of organisations within the public, private, health and community sectors. The strategic steering group includes strategic level representatives from local authorities in the area.

The strategic steering group oversees the work of the delivery and process groups, one of which is the Jobs and Industry Group. This group supports sustainable energy businesses by addressing the economic benefits intervention that sustainable energy can provide Cornwall.

The aims of the Jobs and Industry Group are to:

- ☐ Help create Cornwall as a centre for sustainable energy business;
- ☐ Develop Cornwall's leadership within the knowledge economy of renewable energy and energy efficiency;
- ☐ Ascertain what economic intervention can assist and support the renewable energy and energy efficiency technology sector in Cornwall;
- ☐ Assess suitable technologies for Cornwall's needs in the development of the current and emerging energy technology sector;
- ☐ Ensure strategic fit through Economic development, the [Local Area Agreement](#) etc.;
- ☐ Develop the renewable energy and energy efficiency technology sector in Cornwall to benefit the economy of Cornwall;
- ☐ To assist the development of the image of Cornwall as a 'clean and green' county; and
- ☐ To provide the support of the economic sector to maximise business opportunities which complement/support the demand created by projects developed by other CSEP Groups.

For more information, visit the CSEP website: www.csep.co.uk/page94g.html

Useful national contacts include the Combined Heat and Power Association (at www.chpa.co.uk) because many of their members provide heat and electricity on this kind of basis; or www.esta.org.uk/esta/web/site-home.asp for details of members of the Energy Services and Technology Association. Advice from the London Energy Partnership on how to make an Energy Services Company work is available from: www.lep.org.uk/uploads/lep_making_escos_work.pdf.

Further, detailed information on energy services can be found here: www.energysavingtrust.org.uk/housingbuildings/servicepackages/.

Community leadership

Leading a local area to reduce carbon emissions and remove fuel poverty can lead to lower fuel costs for residents, which in turn will provide increased disposable income, some of which may well be spent in the local economy. Developing a market for low carbon goods and services can offer opportunities for local businesses to develop in areas that will have national and international markets.

In England one of the key themes for Local Area Agreements (LAAs) is economic development and environment.

In Wales, key themes of the Communities First Partnerships include:

- ☐ Increasing the incomes of local people;
- ☐ Creating jobs; and

- Improving housing and the quality of the environment.

See module 14 for more information.

Resource efficiency

Local authorities can work in partnership with those responsible for advising local businesses about how to increase their resource efficiency. Businesses that are more efficient will inherently be more likely to survive.

In England, this advice is provided at a regional level through the Regional Development Agencies (RDAs). The majority of the RDAs (North West, North East, West Midlands, East Midlands, East of England, London and the South East) provide this service through Business Link. Further information can be obtained through the English RDA website: www.englishrdas.com/home.aspx and the Defra website: www.defra.gov.uk/Environment/waste/brew/.

In Wales, this service is provided through Envirowise. For more information, visit the Envirowise website: www.envirowise.gov.uk/wales.

Separately, advice to local authorities on how to improve the energy efficiency of their own estate is available from the Carbon Trust. See www.carbontrust.co.uk/carbon/la/ for more information.

Table of case studies

Case Study	Local Authority	Type	Summary	Link
London Boroughs				
Delivering a low carbon borough'	London Borough of Barking and Dagenham	London Borough	The borough's sustainable energy strategy	www.energysavingtrust.org.uk/housingbuildings/localauthorities/information/nonest/index.cfm?ty=1&ext_id=1224
Other				
Beacon Community Regeneration Partnership	N/A	N/A	Case study from Community Action for Energy	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%209.pdf
Ebbw Vale - The Valleys' key regeneration enterprise	N/A	N/A	Information about the re-development of the former steel works	www.blaenau-gwent.gov.uk/theworks/index.htm
BedZed - Beddington Zero Energy Development	N/A	N/A	Technical information about BedZed	www.energysavingtrust.org.uk/download.cfm?p=1&pid=338
The Hockerton Housing Project	N/A	N/A	Technical information about Hockerton	www.energysavingtrust.org.uk/download.cfm?p=1&pid=215
Thamesmead Ecopark - Gallions Housing Association	N/A	N/A	Technical information about Thamesmead	www.energysavingtrust.org.uk/download.cfm?p=1&pid=262

Table of resources

Resources	Summary	Link
Incorporating climate change and fuel poverty issues in to housing regeneration		
Housing Regeneration	New website about regeneration	www.regen.net
Building a Greener Future: Policy Statement	Policy document	http://www.communities.gov.uk/publications/planningandbuilding/building-a-greener
Eco Town Prospectus	Information about the new scheme	http://www.communities.gov.uk/documents/housing/pdf/eco-towns
Code for Sustainable Homes Technical Guide	Technical guidance on how to achieve code levels one to six	www.planningportal.gov.uk/uploads/code_for_sustainable_homes_techguide.pdf
The Carbon Challenge programme	Information about a scheme to fast-track	www.englishpartnerships.co.uk/carbon

	the creation of a number of zero and near zero carbon communities	challenge.htm
Setting SAP Targets For Affordability On Social Housing	Guidance for social landlords	www.eaga.com/downloads/eagapct/april2007energyauditcompany_settingsaptargets.pdf
Funding in regeneration for England	List of sources of regeneration funding	www.planningresource.co.uk/resources/funding/byLocation/3914/england/
Funding in regeneration for Wales	List of sources of regeneration funding	www.planningresource.co.uk/resources/funding/byLocation/3913/wales/
Supporting the development of low carbon business		
Sustainable Energy And Job Creation	Information about how sustainable energy can be used to create jobs	www.energysavingtrust.org.uk/download.cfm?p=2&pid=457
Procurement		
Combined Heat and Power Association	Association	www.chpa.co.uk
Energy Services and Technology Association	Association	www.esta.org.uk/esta/web/site-home.asp
How to Make an Energy Service Company Work	Advice from the London Energy Partnership on how to make an Energy Service Company work	www.lep.org.uk/uploads/lep_making_escos_work.pdf .
Energy Services	Energy Saving Trust briefing note on energy services	www.energysavingtrust.org.uk/housing/buildings/servicepackages/
Cornwall Sustainable Energy Partnership	Information about the Economic process group of CSEP	www.csep.co.uk/page94g.html
Resource efficiency		
English RDAs and Business Link	Information on English RDAs and Business Link	www.englandsrdas.com/home.aspx and www.defra.gov.uk/Environment/waste/brew/
Envirowise	Business resource efficiency advice in Wales through Envirowise	www.envirowise.gov.uk/wales
Carbon Trust	Advice to local authorities on how to improve the energy efficiency of their own estate	www.carbontrust.co.uk/carbon/la/

English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 14: Energy advice

Summary

Local authorities can play a key role in ensuring that appropriate energy advice is provided to all sectors of the community. The Climate Change and Sustainable Energy Act 2006 empowers parish councils in England and community councils in Wales to encourage or promote (through advice and assistance, including financial) energy-saving measures. Effective energy advice can help change behaviour which can result in the more efficient use of energy in all sectors. It can also help householders choose the most appropriate renewable and low carbon energy technologies for their homes where these are appropriate.

Training local authority staff to be energy aware is likely to result in carbon and financial savings for the council as well as in the wider community. Also ensuring that members of the community have access to high quality energy advice can assist in efforts to reduce fuel poverty as well as to tackle climate change.

This module looks at approaches for delivering energy advice and information.

There is no single best method for energy advice delivery. Often the most effective energy advice plans use a variety of delivery mechanisms to reach different audiences.

It should not be necessary for local authorities to set up their own advice services. Authorities should seek to work in partnership with a number of existing services and/or can supplement these with targeted schemes of their own design.

Developing a strategic view on energy advice

It is useful to be able to take a strategic view in the provision of energy advice and information. This should include an assessment of the reasons for providing advice, the people who can benefit from the advice, who will deliver it, and how it will be delivered. This can cover the advice needs of the community, as well as the needs of staff in the local authority.

It will be necessary to ensure that there is high level buy-in to this view, which should preferably be incorporated within overall energy, climate change and/or fuel poverty strategies to ensure that it is supported by corporate commitment. For more information on building corporate support, local authorities can refer to the Sustainable Energy Beacon Councils Toolkit, available on CD from Emma Buxbaum at IDEa: emma.buxbaum@idea.gov.uk.

Local authorities may also wish to organise a general awareness-raising day for council staff.

To help develop a strategic view, refer to Providing Energy Advice to Householders – A Guide for Local Authorities and Housing Associations, which can be accessed here: www.energysavingtrust.org.uk/download.cfm?p=1&pid=335.

Step 1: Assessing need

The strategic view needs to be clear about who would benefit from advice and why. Questions that can be asked here include:

- ☐ Are council staff aware of how to use energy efficiently whilst at work?
- ☐ Are front-line staff able to refer clients on to suitable sources of advice?

- ❑ Would council sustainable energy activities benefit from increased awareness in the community and therefore is there a need for an information campaign?
- ❑ Are there members of the community in particular need of help – for example those suffering from fuel poverty?
- ❑ Are there sections of the community that will require a separate approach to advice provision – for example Welsh speaking communities or BME groups who do not have English as a first language?
- ❑ What types of information and advice are needed by the different audiences?

Nottingham energy efficiency advice for BME communities

To ensure all communities were actively involved in the council's LA21 strategy, the aim of this scheme was to engage with ethnic minority and non-English speaking households and provide targeted energy advice including information on energy efficiency grants.

A number of organisations were involved from community and voluntary organisations to local schools and council departments. NEA Nottingham led the project which was part funded by the Government's Environmental Action Fund (EAF). Powergen and the Boots Charitable Trust provided match funding.

Energy advice was given through a variety of media including

- ❑ Presentations;
- ❑ Energy audits;
- ❑ School quizzes;
- ❑ Leaflets, and
- ❑ Distribution of energy saving light bulbs.

The project exceeded all its targets:

- ❑ 1018 referrals to grant schemes were made (target of 600);
- ❑ 1455 energy advice cases were delivered (target of 800), and
- ❑ 248 people received basic energy training.

To help work out the current level of understanding of local authority staff and councillors, please refer to the Energy Training for Staff chapter of Energy Efficiency the Guide, which can be accessed here:

www.energysavingtrust.org.uk/download.cfm?p=2&pid=622.

To help local authorities determine the level of energy awareness of tenants and members of the public, please refer to the chapter titled Energy Advice for Tenants which can be found here:

www.energysavingtrust.org.uk/download.cfm?p=2&pid=620. This publication

also provides information about the type of advice that is required.

Furthermore, once new technologies have been installed in people's homes, whether they are renewable and low

carbon systems, district heating or energy efficiency measures such as heating system controls and low energy lighting, people's attitudes and behaviours should and will be affected. Therefore energy advice provision is particularly important at this point. Further information can be found in Seeing the Light: The Impact of Micro-Generation on the Way We Use Energy, a report produced on behalf of the Sustainable Consumption Roundtable, which can be downloaded here: www.sd-commission.org.uk/publications.php?id=239.

Step 2: Who will deliver the advice?

There are a number of existing providers of energy advice who local authorities may want to consider as potential delivery agents and partners for a strategic approach.

A national network of advice providers includes the Energy Saving Trust Advice Centres and Energy Efficiency Advice Centres (EEACs). They are keen to work with local authorities on a range of initiatives, both for the wider community and for local authority staff. Local authorities can contact their nearest advice centre or EEAC to discuss the potential for partnership working by calling 0800 512 012.

Energy suppliers offer energy advice to their customers and may be willing to support the delivery of local authority advice objectives. Ofgem maintains a list of the main energy efficiency contacts in each energy supplier. The most up to date list can be found here:

www.energysavingtrust.org.uk/housingbuildings/links/index.cfm?mode=listing&linkcat=67.

In addition, there may be local voluntary groups that are already active in providing energy advice. These will generally be groups that are working to reduce fuel poverty but could also include environmental organisations working on climate change mitigation.

Note that there is a Domestic Energy Efficiency Advice Code of Practice. More information can be found here: www.goodenergyadvice.org.uk. Local authorities may wish to ensure that any advice providers they work with are committed to operating in accordance with this code.

Step 3: How will it be delivered?

Approaches for delivering energy advice may contain a variety of schemes to ensure that advice reaches all relevant people. Initiatives could include:

- ❑ Training front-line staff to be aware and refer people to sources of advice;
- ❑ Training staff in energy management at work and in their own homes;
- ❑ Offering basic energy advice alongside other service delivery, e.g. during maintenance visits to council tenants;
- ❑ Holding energy advice 'surgeries';
- ❑ Working with community groups to develop volunteer energy advice providers;
- ❑ Making energy advice presentations at community events; and
- ❑ Offering an energy advice home visit service.

For each option, local authorities will need to consider who is best placed to deliver the training and/or advice. For delivery of these objectives as a whole it may be helpful to partner with a number of advice providers. Equally local authorities may find that developing a close working relationship with a single provider is the best way forward.

If there are elements of the approach that local authorities wish to deliver in-house, there are a number of helpful resources.

The Energy Advice Handbook provides a comprehensive account of domestic energy topics and has been prepared in consultation with energy and heating advisors. You can access this booklet here: www.energyinform.co.uk/form.html.

The Tenant Empowerment Toolkit provides examples of how to discuss energy efficiency with tenants. Local authorities can order a copy of the toolkit by contacting Practical help on 0870 241 2089 or e-mail practicalhelp@est.org.uk.

It may be beneficial to produce energy advice leaflets to reinforce energy advice given face-to-face. In addition to leaflets available from EEACs, there are useful tips on the Energy Saving Trust website which a local authority could use to develop their own: www.energysavingtrust.org.uk.

The Welsh Assembly Government has established an internet portal to help identify a range of publicly sourced advice in relation to energy efficiency and renewable energy. The site can be accessed at: www.energysavingwales.org.uk.

The table below lists case studies that local authorities may find useful when devising their energy advice programmes.

Older Persons Energy Network (OPEN)

This scheme based in North Somerset trains older and retired individuals as energy efficiency advisors. On a voluntary basis, advisors provide energy efficiency advice at events, presentations and home visits.

Coordinated by the Centre for Sustainable Energy (CSE) and North Somerset Council, the project also works in partnership with the Retired and Senior Volunteer Programme (RSVP).

The scheme has multiple aims to: encourage uptake of energy efficiency measures, increase the level of energy awareness within the region and reduce fuel bills while keeping homes warm and healthy.

Although energy advisors are volunteers, the training they receive provides participants with a City and Guild qualification in Energy Awareness. Every month volunteers meet with CSE to learn about new funds, discounts and energy information which in turn ensures all volunteers are kept up-to-date.

Within the first three years of the project, OPEN volunteers have:

- ❑ Given over 40 presentations;
- ❑ Conducted 20 home visits, and
- ❑ Attended numerous energy 'surgeries' and other local events.

Table of case studies

Case study	Local authority	Type	Summary	Link
Unitary authorities				
Older Persons Energy Network (OPEN)	North Somerset	Unitary, rural	Training volunteers to be energy advisors	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%205.pdf
BME energy advice	Nottingham City Council	Unitary, urban	Targeted energy advice to BME communities	www.energysavingtrust.org.uk/uploads/documents/cafe/cafe%20case%20study%204.pdf
London Boroughs				
Warmth for All	Camden Borough Council	London Borough, urban	A referral network aimed at older people and people with disabilities	www.camden.gov.uk/ccm/navigation/community-and-living/warmth-for-all/
District Councils				
Newcastle Warm Zone	Newcastle City Council	District, urban	A private-public partnership to tackle fuel poverty and provide energy efficiency advice	www.warmzones.co.uk/newcastle.html
Other				
Home Health	All Cornwall local authorities	Various	A referral and advice system working with GPs	www.energysavingtrust.org.uk/uploads/documents/housingbuildings/case13.pdf
Healthy Homes	South East Wales Energy Agency	Various	A fuel poverty referral network	www.energysavingtrust.org.uk/housingbuildings/funding/innovative/examples/index.cfm?ty=1&ext_id=1268

Table of resources

Title	Summary	Link
Developing an energy advice strategic approach		
Sustainable energy toolkit	Toolkit developed by the sustainable energy beacons	Available on CD from Emma Buxbaum at IdeA: emma.buxbaum@idea.gov.uk .
Providing energy advice to householders – a guide for local authorities and housing associations	Publication on developing an effective energy strategy	www.energysavingtrust.org.uk/download.cfm?p=1&pid=335 .
Energy Training for Staff	Information about energy training that staff will need and how to deliver it	www.energysavingtrust.org.uk/download.cfm?p=2&pid=622 .
Energy Training for Tenants	Information about energy training that tenants will need and how to deliver it	www.energysavingtrust.org.uk/download.cfm?p=2&pid=620
Seeing the Light: The Impact of Micro-Generation on the Way we Use Energy	A report produced on behalf of the Sustainable Consumption Roundtable	www.sd-commission.org.uk/publications.php?id=239
EEC contacts	Contact details for Energy Suppliers with EEC commitments	www.ofgem.gov.uk/Sustainability/Environmnt/EnergyEff/Documents/1/16321-29%20EEC%20Supplier%20contacts%20290906.pdf
Domestic Energy Efficiency Advice Code Of Practice	Code of Practice for delivering energy efficiency advice	www.goodenergyadvice.org.uk
Energy Advice Handbook	Handbook about delivering energy advice	www.energyinform.co.uk/form.html
Tenant Empowerment Toolkit	Toolkit with presentations and activities for training tenants in energy efficiency	practicalhelp@est.org.uk

Ways to Tackle Climate Change	Contains a section on encouraging local people to take action	http://www.defra.gov.uk/environment/climatechange/uk/publicsector/localauth/index.htm
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English unitary / London Borough	English county council	English district council	English parish / town council
Welsh county or county borough council		Welsh town / community council	

Module 15: Adaptation to climate change

Summary

The focus of this report is on measures for mitigating the causes of climate change. However, some degree of climate change resulting from past and present emissions of greenhouse gases is already inevitable. Therefore it is important for local authorities to take into account both steps for mitigation (to reduce future emissions) and adaptation (to adapt to the changes already taking place).

Local authorities provide many services that will be affected by climate change. The UK Climate Impacts Programme (UKCIP) climate scenarios project demonstrates that we could have wetter winters, hotter and drier summers and more frequent extreme weather events such as storms and flash flooding. These are likely to have implications for services including: emergency planning, waste management, planning, estates management, provision of leisure facilities and social services. Local authorities will have an interest in working with other partners, including the police, fire and emergency services and the Environment Agency, in minimising the increased risks to communities associated with these impacts.

This module does not attempt to outline what local authorities can do with regards to adaptation (although it does point out some key resources for this). Rather it aims to highlight how a strategic approach to both mitigation and adaptation is important.

Future of adaptation

A more strategic approach to adaptation in response to climate change is now required. The UK Government is developing an Adaptation Policy Framework, which will set out the strategic context in which adaptation can take place. It will set out roles and responsibilities for who should take action and where. It will also help to resolve potential cross-sectoral conflicts where adaptation in one sector could prevent another sector from successfully adapting, as well as identifying synergies where adaptive actions could provide multiple benefits.

Phase 1 saw a consultation to find out what adaptation activity is already happening. Phase 2, the development of a cross-Government framework which will identify priority areas for action, is now underway and will be ready by the end of 2007. For more information visit Defra's website: www.defra.gov.uk/environment/climatechange/uk/adapt/policyframe.htm.

In Wales, the Welsh Assembly Government has recently consulted on a climate change adaptation plan for Wales: Responding to our Changing Climate. This document highlights the key issues for a number of sectors including local authorities. It then sets out a series of proposed actions which the Assembly Government considers should be undertaken to respond to the changes already underway. Of these actions, there are a number for which local government will have a role to play. Further information on the consultation can be found here: <http://wales.gov.uk/consultations/closed/envandcouncloscons/1314797/?lang=en>.

Strategic approach

Whilst many actions and measures that local authorities can implement will lead to benefits for both mitigation and adaptation, a strategic approach, where both are considered, is important to avoid areas of possible conflict between the two.

The key areas here are the design of individual buildings and the layout of groups of buildings. The individual design of buildings will need to take into account improved levels of efficiency for both heating and cooling. The ideal way to do this is to consider sustainable design principles such as passive solar gain combined with shading for example through planting deciduous trees. The passive solar gain can reduce the need for winter heating, whilst the deciduous trees can provide shading in summer months to prevent excessive heat gain. It will also be important to consider if the area set aside for the development will be prone to climate change impacts such as flooding in the future.

London Borough of Havering

In their Climate Change Strategy, the London Borough of Havering have taken the main functions of each service area and assessed them to ascertain how:

- ❑ These responsibilities are likely to be affected by climate change given the current predictions;
- ❑ The services contribute to the emissions of greenhouse gases;
- ❑ The services can both assist in the reduction of greenhouse gases and in adapting to climate change to ensure continued service delivery; and
- ❑ The service can respond.

The strategy can be downloaded here:
www.idea.gov.uk/idk/aio/6609009.

Resources

There are a number of key resources for local authorities on taking action to adapt to our changing climate. These are listed below.

The UK Climate Impacts Programme (UKCIP) website has a section specifically for local authorities: www.ukcip.org.uk/resources/sector/default.asp?sector=11. This resource looks at the impacts and potential adaptation responses local authorities can take for each of the following areas:

- ❑ Planning
- ❑ Housing and buildings
- ❑ Transport and highways
- ❑ Health and social
- ❑ Environmental services and awareness.

The Nottingham Declaration Action Pack (although initially designed for local authorities in England, the majority of it is relevant to local authorities in Wales) provides a step by step approach to developing a strategic approach to both mitigation and adaptation. This resource can be found here: www.nottinghamdeclaration.org.uk.

Defra has also published research giving guidance on designing new developments in the light of climate change: www.defra.gov.uk/science/project_data/DocumentLibrary/GA01073/GA01073_4083_FRA.pdf.

All local authorities in Wales have signed the Welsh Declaration on Climate Change. This commits the individual authorities to work to adapt to the effects of climate change as well as to reduce emissions of greenhouse gases. To support local government in the delivery of this, the Welsh Local Government Association published Action Not Words, a guidance document setting out some areas for action. This can be downloaded here: www.wlga.gov.uk/content.php?nID=367;pID=1040;lID=1.

The Town and Country Planning Association (TCPA) have produced a publication Climate Change Adaptation by Design – A Guide For Sustainable Communities, which can be downloaded here: www.tcpa.org.uk/downloads/20070523_CCA_lowres.pdf. This document sets the context, proposes a framework for delivering adaptation action, illustrates a number of adaptation options using practical examples, and provides further details on some of the key technologies.

The findings of a programme of collaborative research: Building Knowledge for a Changing Climate: www.k4cc.org/.

England

The Government's planning policy statements (PPS) are a useful resource – especially PPS25: Development and Flood Risk and the supplement to PPS1 on climate change. These planning policy statements can be found on the Communities and Local Government website at:
<http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/>

The government's Planning Portal also has an area devoted to resources for local government:
www.planningportal.gov.uk/england/government/en/.

Wales

Local authorities in Wales are expected to take account of the draft Ministerial Planning Policy Statement (MIPPS) on Climate Change. This requires local authorities to include climate change mitigation and adaptation in their Local Development Plans.

The MIPPS will be supported by a climate change compendium, due to be published in 2007, which will provide practical information about the detailed policies and other tools that can be used to implement climate change planning policy.

More information on the draft MIPPS on climate change and the climate change compendium is included in a 2006 written cabinet statement, available here:
<http://wales.gov.uk/about/cabinet/cabinetstatements/cabinetstatements2006/1049386/?lang=en>.

Table of resources

Resources	Summary	Link
Adaptation Policy Framework	Information on the Government's adaptation policy framework which sets out the strategic context in which adaptation can take place	www.defra.gov.uk/environment/climatechange/uk/adapt/policyframe.htm
Action Not Words	A guidance document setting out some areas for action	www.wlga.gov.uk/content.php?nID=367;pID=1040;IID=1
Climate Change Adaptation by Design – A Guide for Sustainable Communities	This sets the context, proposes a framework for delivering adaptation action, illustrates a number of adaptation options and provides further details on some of the key technologies	www.tcpa.org.uk/downloads/20070523_CCA_lowres.pdf
Building Knowledge for a Changing Climate	Findings of a programme of collaborative research	www.k4cc.org/
Responding to our Changing Climate	Consultation document on the Welsh Assembly Government's climate change adaptation plan for Wales	http://wales.gov.uk/consultations/closed/envandcouncilscons/1314797/?lang=en
The UK Climate Impacts Programme (UKCIP) website has a section specifically for local authorities	Resource that looks at the impacts and potential adaptation responses that local authorities can take in a number of areas	www.ukcip.org.uk/resources/sector/default.asp?sector=11
The Nottingham Declaration Online Action Pack	Contains information for Local Authorities on developing a strategic approach to climate change adaptation	www.nottinghamdeclaration.org.uk

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Acronyms

ACE	Association for the Conservation of Energy
BERR	The Department for Business, Enterprise and Regulatory Reform
BREEAM	Building Research Establishment Environmental Assessment Method
BSF	Building Schools for the Future
CAfE	Community Action for Energy
CEEF	Community Energy Efficiency Fund
CERT	Carbon Emissions Reduction Target
CHP	Combined Heat and Power
CLG	Communities and Local Government
CO ₂	Carbon dioxide
CPA	Comprehensive Performance Assessment
CREATE	Centre for Research, Education and Training in Energy
CSE	Centre for Sustainable Energy
CSEP	Cornwall Sustainable Energy Partnership
DEC	Display Energy Certificate
Defra	The Department for the Environment, Food and Rural Affairs
DFC	Devolved Formula Capital
DfT	Department for Transport
DQR	Development Quality Requirement
EAF	Environmental Action Fund
EEAC	Energy Efficiency Advice Centre
EEC	Energy Efficiency Commitment
EEPH	Energy Efficiency Partnership for Homes
EW	Energy from Waste
EMAS	Eco-Management and Audit Scheme
EPC	Energy Performance Certificate
ESCo	Energy Services Company
EST	Energy Saving Trust
ESTAC	Energy Saving Trust Advice Centre
EU	European Union
FenESS	Fenland Energy Services Scheme
FQP	Freight Quality Partnerships
GIS	Geographical Information Systems
GLEEN	Greater London Energy Efficiency Network
HECA	Home Energy Conservation Act
HEED	Home Energy Efficiency Database
HEES	Home Energy Efficiency Scheme (Wales)
HHSRS	Housing Health and Safety Rating System
IDeA	Information and Development Agency
kWh	KiloWatt hour
LA21	Local Agenda 21
LAA	Local Area Agreement
LACM	Local Authority Carbon Management
LACORS	Local Authority Coordinators of Regulatory Services
LCBP	Low Carbon Buildings Programme
LESA	Landlords Energy Saving Allowance
LGA	Local Government Association
LPG	Liquid Petroleum Gas
LSB	Local Service Boards

LSP	Local Strategic Partnership
LTP	Local Transport Plan
MIPPS	Ministerial Interim Planning Policy Statement (Wales)
NEA	National Energy Action
Niace	National Institute for Adult Continuing Education
Ofgem	Office of Gas and Electricity Markets
OPEN	Older Persons Energy Network
PFI	Private Finance Initiative
PPS	Planning Policy Statement
PTA	Passenger Transport Authority
PV	Solar Photovoltaics
RCE	Regional Centre of Excellence
RDA	Regional Development Agency
REAP	Resource Accounting for Sustainable Construction and Production
ROTATE	Recycling and Organics Technical Advisory Team
RSL	Registered Social Landlord
RSVP	Retired and Senior Volunteer Programme
SAP	Standard Assessment Procedure
SEEDA	South East England Development Agency
SEN	Sustainable Energy Network
SHG	Social Housing Group
SPD	Supplementary Planning Document
SPAF	Sustainable Procurement Assessment Framework
SPG	Supplementary Planning Guidance
SRA	Sustainability Risk Assessment
Sustrans	Sustainable transport charity
TA	Transport Assessment
TCPA	Town and Country Planning Association
TfL	Transport for London
TWh	TeraWatt hour
UKCIP	United Kingdom Climate Impacts Programme
WAG	Welsh Assembly Government
WHQS	Welsh Housing Quality Standard
WLGA	Welsh Local Government Association
WRAP	Waste and Resource Action Programme

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Glossary

Affordable Warmth

(General definition) the ability to heat a home to an adequate level for household comfort and health.

(Government programme) The Affordable Warmth Programme sees National Grid working with Government, key agencies, local authorities and housing associations to improve the level of comfort in up to one million homes through the development of area based projects providing efficient heating to households in conjunction with energy efficiency measures and advice. Grants for energy efficiency measures can be sought from energy companies or funded by the local authorities or housing associations themselves.

Beacon Council

The Beacon Scheme identifies excellence and innovation in local government.

Carbon capture and storage

Carbon capture and storage (CCS) is an approach to mitigating global warming by capturing carbon dioxide (CO₂) from large point sources such as power plants and subsequently storing it instead of releasing it into the atmosphere.

Carbon footprint

A measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide.

Climate change levy

A tax on the use of energy in industry, commerce and the public sector.

Climate change mitigation

All activities related to reducing the level of greenhouse gases emitted as a result of society's activities.

Community heating

A system for distributing heat generated in a centralised location for residential and commercial heating requirements (see also district heating).

District heating

A system for distributing heat generated in a centralised location for residential and commercial heating requirements (see also community heating).

Eco-Schools

An international programme for environmental education.

EU emissions trading scheme

European cap and trade mechanism to reduce emissions of greenhouse gases from major emitters.

Fuel poverty

Where a combination of poor housing conditions and low income mean that the household cannot afford sufficient warmth for health and comfort. The widely accepted definition of fuel poverty is where a household needs to spend 10% or more of income to meet fuel costs.

Greenhouse gases

Greenhouse gases (GHG) are components of the atmosphere that contribute to the greenhouse effect. The main human influence on global climate is emissions of the key greenhouse gases - carbon dioxide (CO₂), methane and nitrous oxide.

Kyoto Protocol

Protocol to the United Nations Framework Convention on Climate Change agreed in 1997. Developed countries agreed to reduce their overall emissions of a basket of six greenhouse gases by 5.2 per cent below 1990 levels over the period 2008-2012, with differentiated, legally binding targets.

Microgeneration

The generation of zero or low-carbon heat and power by individuals, small businesses and communities using small scale renewable and low carbon energy technologies.

Practical help

The Energy Saving Trust's free enquiries and advisory service for local authorities and housing associations.

Renewable and low carbon technologies

Technologies which produce no, or highly reduced levels of, carbon dioxide emissions when generating heat and/or power

Salix

Salix is an independent, publicly funded company that provides interest-free match funding to the public sector to invest in energy efficiency measures and technologies that will reduce carbon emissions.

The Merton Rule

The term sometimes applied to policies in development plans that require a percentage of the energy in new developments to come from on-site renewables where it is viable. The London Borough of Merton adopted their Unitary Development Plan in 2003 with a policy that expects new non residential developments above a threshold of 1,000sqm to incorporate renewable energy production equipment to provide at least 10% of predicted energy requirements. In doing so they were the first local authority in the UK to include a policy of this kind in a UDP. The council has been heavily involved in promoting the approach leading it to be coined the Merton Rule. .

The Nottingham Declaration

The Nottingham Declaration on climate change is a voluntary commitment taken by local authorities that requires them to work with their community to develop an action plan to tackle climate change at the local level.

Warm Front

A government funded initiative, targeted at the home owner and private rented sectors, that provides grant funding for a package of insulation and heating improvements.

Zero carbon dwelling

'Zero carbon' means no net carbon emissions from all energy uses in the home including appliances - so the amount of energy taken from the national grid is less than or equal to the amount put back through low or zero carbon technologies.

