



Climate change is one of the greatest environmental threats facing the world. The devastating floods, droughts and storms we have seen in the UK and across the world in recent years show all too clearly how vulnerable we are to climatic extremes. The main greenhouse gas responsible for climate change is carbon dioxide (CO₂), which is released when fossil fuels are burnt. Wind, wave, tidal and solar power are clean, renewable forms of energy capable of replacing fossil fuels, but in 2002 only 3% of electricity was produced using renewable energy.¹ Under the Kyoto Protocol, the UK has a legal obligation to reduce emissions of greenhouse gases by 12.5% below 1990 levels by 2012.

Energy in the home

The Home Energy Conservation Act (1995) required district and unitary councils to draw up a plan for reducing energy consumption and carbon dioxide emissions in dwellings. It set a target of a 30% reduction in CO₂ emissions from dwellings over the following ten years. The strategy to achieve this target is to reduce energy use by improving the energy efficiency of dwellings, this will be achieved through advice, education and raising the public's awareness of what can be done to reduce consumption. Also, residents are informed about the benefits of renewable energy and advised on grant funding that is available.

Indicator EN1 - Energy Efficiency in Homes

Overall reduction in carbon dioxide emission %

Dacorum	17.92
East Herts	N/A
Hertsmere	12.81
North Herts	15.59
St Albans	15.4
Stevenage	N/A
Three Rivers	9.09
Watford	9.09
Welwyn Hatfield	14.35

For ideas and information on how to save energy in the home see www.energy-efficiency.org.uk

All Hertfordshire residents can receive free energy advice from their local Energy Efficiency Advice Centre, which can help by providing a home energy check and specific advice on grants, insulation, appliances and renewable energy. Contact your local EEAC by calling freephone 0800512012.

Additionally a consortium of Hertfordshire councils have set up the Warmer Homes Greener Herts bulk discount insulation scheme, which provides loft and cavity wall insulation to residents at a greatly reduced cost. The scheme receives funding from London Electricity under their Energy Efficiency Commitment and this is passed on to the consumer through lower prices. Contact the 'Warmer Homes Greener Herts' hotline 08007832503.

The HEF energy group has set up the 'Less is More' condensing boiler scheme to provide discounted condensing boilers to households. Replacing a fifteen-year-old central heating boiler with a new high efficiency one can save up to 32% on your fuel bills. For more information contact the helpline on 0845 609 0809.

The Herts Solar Club, operated with the support of Herts Environmental Forum, provides advice to householders on installing solar hot water heating systems. The Club also provides details of available grants as well as information on other forms of alternative energy. For more information contact: Herts Solar Club 01279 655261 (ext 1621) or email: solar@hef.org.uk

New schemes such as these will contribute to meeting the Home Energy Conservation Act target of at least 30% reduction in CO₂ emissions from domestic premises.

Indicator EN2 - Energy efficiency in public buildings

Hertfordshire County Council and several local authorities now purchase 'green' electricity for some of their buildings, generated from clean and renewable sources such as wind power. CO₂ emissions are also being reduced through the use of Combined Heat and Power units around the county. These make use of the waste heat from electricity generation to help meet demand for hot



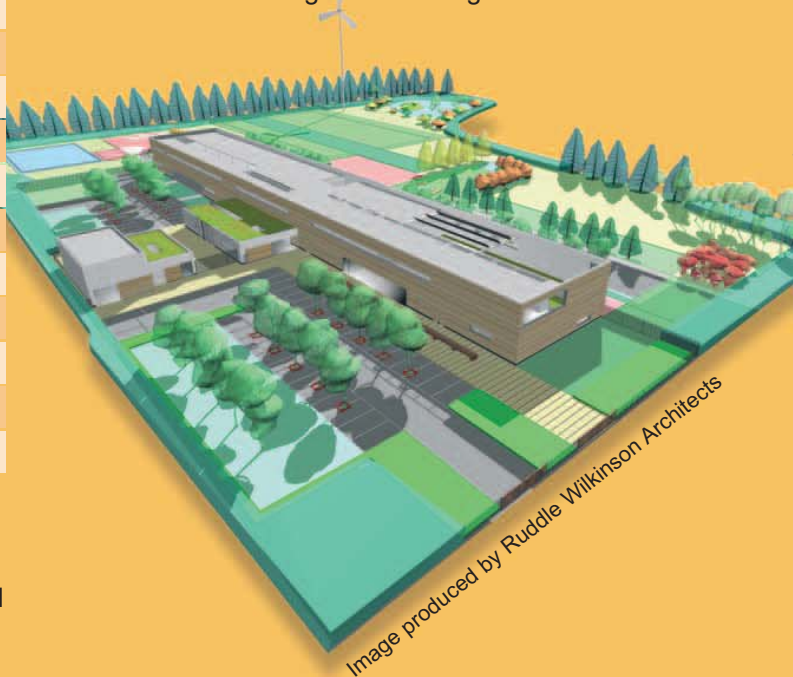
water and space heating. All councils are actively pursuing energy efficiency savings in their buildings.

As part of the Asset Management Planning process several national performance indicators, relating specifically to Council Buildings, are submitted annually to the ODPM.² Their role is to encourage the efficient use of assets over time and year on year improvements in energy efficiency. The indicators are as follows:

	Indicator 4B (Energy costs per M2 Gross Internal Area - gas, electricity, oil, solid fuel)	Indicator 4C (Water costs per M2 Gross Internal Area)	Indicator 4D (CO ₂ emissions in tonnes of carbon dioxide per sq. m.)
Dacorum	0.19	0.03	0.0001
East Herts	N/A		
Hertsmere	7.11	0.83	0.136
Hertfordshire	4.85	0.53	0.0688
North Herts	N/A	N/A	N/A
St Albans	N/A	N/A	N/A
Stevenage	N/A	N/A	N/A
Three Rivers	15.96	0.89	1.00
Watford	5.79	1.37	0.08
Welwyn Hatfield	N/A	N/A	N/A

minimise energy consumption by means of a high performance building envelope and high efficiency plant and heat recovery. The materials will be chosen to reduce embodied energy, transportation and future maintenance.

Hertfordshire County Council have commissioned a renewable energy study which will respond to the national imperative to deploy renewable energy by considering what can actually be done. A regional assessment for the East of England has estimated that 3% of energy generated in Hertfordshire could be met from renewable resources by 2010. The study will identify the potential and constraints for the development of the appropriate renewable energy technologies in Hertfordshire and determine whether the 3% target is meaningful.



Increasingly, planning authorities across Hertfordshire are adopting policies that will require developers to carry out an energy audit of proposed development and to consider what improvements could be achieved using renewable energy and incorporating energy efficiency measures at the design stage.

Hertfordshire County Council are working with Welwyn and Hatfield District Council to create a school which will have been designed and built to incorporate many sustainable environmental principles and features. In operation the Howe Dell Primary school will be thermally efficient, have heat recovery systems and renewable energy produced from wind and solar sources. The design will

²AMP Indicators replace the BV180 indicator appeared in last year's report.