

# Energy Efficiency March 2005



### Why energy efficiency?

- To help meet greenhouse gas emission targets: Half of the UK's emissions reductions targets, agreed at Kyoto, domestically, and in the Energy White Paper, are expected to come from energy efficiency improvements. Savings of this magnitude require a doubling of the rate of improvement seen in the last thirty years.
- Makes environmental, social and economic sense: Environmentally, reducing energy demand cuts all the emissions associated with energy. Socially, without greater energy efficiency the eradication of fuel poverty will involve substantial increases in energy consumption and emissions. Economically, energy efficiency contribute to improved economic efficiency, reduces household energy bills, and improves business competitiveness.
- Not a compromise: Over the last 30 years the economy has doubled in size while energy use has barely increased.
- Cost effective: costs per tonne of carbon are either negative (since there are net resource savings) or low.

## What is the potential?

• The UK Government Performance and Innovation Unit (PIU) estimated that the current cost effective potential for energy efficiency is approximately 30% of final demand. Many industrialized nations have far better energy intensities (ratio of energy consumption to GDP) than the UK. It is estimated that £1.3bn of energy is lost annually to the Scottish economy.

#### What needs to be done?

- Targets: Energy efficiency targets should be set for the residential, commercial, industrial and public sectors to give greater impetus to energy conservation, complement those set for renewable energy, and provide the certainty necessary for future investment and innovation by the industry. The Northern Irish Office recently set a target of a 1% pa reduction in electricity demand between 2007 and 2012 and England has recently legislated for a 20% target improvement in residential energy efficiency by 2010 on 2000 base year levels. As a first step in Scotland a target should be set for domestic energy efficiency: we propose the PIU's recommendation of a 20% improvement in efficiency by 2010 and a further 20% by 2020. National targets should be complemented by mandatory local authority targets. The Energy White Paper and subsequent Energy Efficiency Implementation Plan set out proposals for increases in non domestic energy efficiency to lead to UK carbon savings of at least 7.9Mt by 2010 and a further 5Mt by 2020. Appropriate targets should be set for achieving the Scottish proportion of this.
- Energy Efficiency strategy: the strategy currently being developed should review the effectiveness of current initiatives at reducing energy consumption and target future resources on this basis. Yet the strategy should also strive to be ambitious and not simply restate what is currently going on in the sector. This has been a weakness of energy efficiency strategies in other parts of the UK.

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- Organisation : The delivery of energy efficiency is fragmented at national and local levels with many different bodies responsible for different aspects and spread across a wide range of departments. Staff employed in writing the energy efficiency strategy should be retained within a small unit tasked with overseeing the implementation of the strategy across different Scottish Executive departments and fully empowered to mainstream energy efficiency. At a local level we support the work being carried out by the Energy Savings Trust into Sustainable Energy Centres which they hope in future will provide the public with one stop shops on energy advice.
- Review of existing legislation: The principal piece of energy efficiency legislation in Scotland is the Home Energy Conservation Act. This Act should be reviewed at its current half way stage since most local authorities are failing to meet both the original and renegotiated (mainly reduced) aspirational targets which the Act set. This review must assess the resources and powers available to meet these targets, and the priority which local authorities give to home energy conservation. Local authorities should be required to write energy efficiency strategies, to report on these and to appoint an energy efficiency officer.
- Ambitious approach to proposals : The Executive should be ambitious rather than minimalist in the implementation of outside initiatives. One example where they are failing to be ambitious is the EU Energy Performance in Buildings Directive. This Directive requires, among other aspects, that whenever a building is constructed, sold, or rented out, a certificate detailing its energy performance, and cost effective improvements to it, must be made available. We are concerned that these provisions will be derogated on the basis of a lack of trained staff since this will delay rather than resolve the issue: it is unlikely that people will undergo or establish training until there is a job for them to do. A second issue regards the requirement to display certificates. This requirement should be made to

- apply to the commercial as well as the public sector as was the original intention. We would also like to see the introduction of a means of recording energy certification information on a local and national basis to provide more accurate and extensive information on the building stock and enable the adaptation of policies on this basis.
- Building standards: Scottish building standards require some of the most demanding levels of thermal insulation for new buildings in the UK. The next review of Building Regulations, due in 2007, should extend building regulations to refurbishments in a more meaningful way, and incorporate renewable technologies. 9/10 existing houses fail to meet new build building standards, and at the current rate of building it will take 100 years until all the Scottish housing stock is up to this standard. Building standards should be repeatedly strengthened to encourage housebuilders to develop low, or even zero, carbon homes. Building regulations also need to be rigorously extended in the commercial sector. The frequency of complete refurbishment and changes of use of office space is much greater than in other sectors.
- Step change in attitudes : Policies need to focus more on changing peoples' behaviour. What current policies have failed to do is create generalised market demand for energy efficiency. The EPBD will help - its labelling requirements will provide a similar enabling mechanism for market transformation in buildings as the energy label has provided for appliances. Thenecessary technologies are out there but need to be taken up to a greater extent. The barriers to take up of energy efficiency measures need to be given more attention and solutions sought. One policy option could be the extension of the interest free loan scheme for businesses to the domestic sector.
- Housing: We would support the extension of self certification of certain standards of thermal efficiency when private landlords register as required by the Antisocial Behaviour Act.