

Date : 30 January 2002
Time: 14.00 - 17.30
Venue : Committee Room 3, National Assembly Building, Cardiff Bay
Title : Household Energy Efficiency in Wales - Energy Saving Trust Paper

1 The Energy Saving Trust's Role and Perspective

The Energy Saving Trust (EST) seeks to achieve the sustainable and efficient use of energy by householders and small business consumers across the UK. EST is largely funded by government, and works through partnerships with a wide range of organisations to deliver this goals.

This paper covers only household energy efficiency. Our colleagues in the Carbon Trust lead on business energy efficiency, and we co-operate to address the needs of small and medium-sized enterprises (SMEs). This submission should not be taken as representing the views of individual Trust members.

2 Sustainable Energy

Wales utilises a range of energy sources. Irrespective of which resource is used energy efficiency is critical for sustainable development. Energy efficiency:

- improves the productivity of the economy and creates jobs,
- is beneficial for the environment because it reduces the amount of resources used, and the carbon emissions from those sources, and
- assists in tackling social deprivation, as the key to a long term solution to fuel poverty.

In the longer term, the development of renewable energy resources will also be an important component of any sustainable energy policy. Wales has an excellent resource of some renewables and we support the goal of 10% of electricity generation from renewables by 2010. Many renewables are best captured through many small scale investments: some, such as solar energy, at the level of the individual building. There are therefore synergies between energy efficiency and renewable energy projects and policies.

The EST and Carbon Trust are jointly (in 2002-4) implementing the Community Energy scheme to encourage the development of CHP schemes, covering both households and the no-domestic sector. A number of schemes in Wales are under active investigation with a view to grant support.

3 Energy Efficiency Activities

From April 2002 all gas and electricity suppliers will be obliged to offer energy efficiency incentives to their customers, under the Energy Efficiency Commitment (EEC). Guidance indicates that these should benefit customers in all countries, and we expect expenditure of approximately £8 million annually in Wales. Customers will be contributing on average £3.60 per fuel per year through their fuel bills. Half of this effort will be directed at the fuel poor. EST will be working with suppliers to ensure these schemes are promoted effectively.

For the fuel poor the Home Energy Efficiency Scheme in Wales scheme funds basic energy efficiency measures in the home up to a cost of £2,700 per household. The current budget is £9.2 million annually. EST works closely with the managing agent for the scheme to assist in its promotion.

In addition to this the UK Government funds EST to develop the infrastructure of energy efficiency, to increase the capacity of key players, and to change consumer behaviour in relation to energy use. Current expenditure in Wales is approximately £700k annually. The EST works in partnership with manufacturers, wholesalers and retailers of energy efficiency products, with energy suppliers, government at all levels, and community groups. Our network of local Energy Efficiency Advice Centres provides impartial advice on energy efficiency to householder and works with key local partners, such as local authorities.

4 Energy Efficiency Benefits

There is a broad range of benefits from energy efficiency.

- Because the cost of reducing energy demand is less than the cost of increasing energy supplies, energy efficiency contributes positively to productivity, employment and economic development,
- It reduces carbon dioxide emissions and other environmental problems associated with energy use;
- It prolongs the life of indigenous fossil fuels and enhances security of supply;
- It lowers fuel bills, making consumers better off;
- It is the only sustainable solution to fuel poverty, because householders will stay warm even if there are future energy price rises;
- It creates jobs in rural and urban communities. Jobs lost from declining industries may be redirected through retraining towards energy efficiency jobs in the heating and insulation industries;
- It saves carbon dioxide at a negative cost (minus £150/tC), because carbon emissions can be reduced with benefits to the rest of the economy.

5 EST Proposals for improving Household Energy Efficiency

There remains huge scope for further energy efficiency improvement, and therefore these benefits can be sustained over a long period. In our submission to the recent UK Government Energy Policy Review, EST outlined the range of measures needed to significantly reduce energy consumption in households through to 2020. A full copy of our submission - *Towards an Energy Efficiency Strategy for Households to 2020* - is available from the EST. Tables 1 and 2 below outline our key recommendations.

With the increased effort in energy efficiency we propose, savings of around 100 Terawatt hours (TWh) of energy can be achieved annually in the UK by 2010. By 2020 around 60TWh of electricity supply is expected to be lost from UK nuclear sources. Of this 60TWh around 20TWh would be supplied to households. The savings from energy efficiency would therefore easily compensate for the anticipated loss in nuclear electricity capacity. We expect that Wales would benefit from about 5% of these savings. But we have not developed detailed targets for each country. We would be happy to assist the National Assembly to develop such targets within the Energy Review.

Energy efficiency programmes on this scale would reduce the average household fuel bill by approximately £150 by 2020.

6 The Role of the Assembly

Delivering energy efficiency improvements requires action at a range of levels of Government. For example, energy efficiency standards for traded goods are best set at EU level and fiscal changes are the prerogative of the UK Government. This section focuses on the role for the National Assembly.

The National Assembly has relevant powers that affect home energy efficiency in a number of ways. But the two most important are those relating to housing and local government. The EST welcomes some of the initiatives already underway, including those set out in The National Housing Strategy for Wales:

- funding local authorities housing stock condition surveys,
- increasing investment as part of stock transfer,
- the Social Housing Innovation programme,
- setting a Housing Quality standard for local authority housing, and
- setting a Development Quality Standard for RSLs).

There are some further initiatives that we believe might be usefully considered. These include:

- reviewing the responsibilities of local authorities under the Home Energy Conservation Act (HECA) and the operation of HECA. Currently HECA duties concentrate on reporting

on progress to improve energy efficiency in the housing stock. With the onset of major new programmes (notably HEES in Wales and EEC), we believe that local authority resources might be more productively used in developing referral networks, co-ordinating and providing leadership in local communities in use of the greater resources now available,

- more specific guidance on energy efficiency improvements at the point of stock transfer,
- incorporating energy efficiency in any accreditation of the work of private landlords,
- setting Development Quality Standards for new private sector housing under devolved Building Regulation powers. This might allow Wales to take the lead in the UK in moving towards sustainable housing. However, it would clearly need to be done in close consultation with the construction sector.
- supporting community heating schemes, based on combined heat and power. Resources to support this are now available under the Community Energy Programme. This is likely to be most appropriate where there are existing heat networks,
- providing financial support for deployment of innovative renewable energy technologies at the household level.

EST staff based in Wales will be happy to take forward ideas for work in these areas with the EDC and officials in the Welsh Assembly Government.

7 Conclusions

The National Assembly has the opportunity to make some valuable decisions for achieving a sustainable energy supply for Wales. With significantly increased effort in household energy efficiency, major savings in energy use can be achieved.

Energy efficiency provides a range of benefits, in support of the Assembly's responsibility to deliver sustainable development. Uniquely amongst energy policy actions, energy efficiency supports all three pillars of sustainable development – economic, environmental and social.

The EST would be happy to assist the National Assembly in setting detailed targets for household energy efficiency improvement.

The Assembly's housing policy has already made major strides to promoting energy efficiency. But more could be done, particularly in the fields of housing and local authority policies. The EST is keen to work with the EDC and the Assembly generally to promote energy efficiency.

Table 1 Summary of EST Recommendations to 2010

UK target to reduce energy consumption in households by 12.5% to 2010, and a further 12.5% to 2020
To be achieved through 4 policies (as now):

	<i>Mechanism:</i>	<i>Savings to be achieved MtC/a by 2010</i>	<i>Savings to be achieved TWh/a by 2010</i>
Policy: Public/private incentives	Extension of EEC at 2005 and 2008	3.6MtC/a	51 TWh/a
Fiscal Incentives	Incentives for LAs Incentives for energy services Reduce VAT to 5% for all energy efficiency products	(including EEC 2002-5) Combined effort achieves	Combined effort achieves
Regulation	Tax credits for energy efficiency work, rebates on stamp duty for home purchasers Revise Building Regulations to achieve near-zero emission new build by 2012 Minimum appliance standards (EU level) for standby mode That Ofgem encourages embedded generation, and integrates environmental impacts into its policies.	c3.4MtC	c70TWh
Changing Consumer Attitudes	Providing information through labelling (EST and EU energy labels), publicity campaigns, and EST partnership work with manufacturers, wholesalers, retailers, energy suppliers, LAs governments, community groups, and local EEACs.		
	Total Savings to be achieved per annum by 2010:	7MtC/a	120TWh/a

Table 2 Further Action needed 2010-2020:

<i>Mechanism</i>		<i>Potential Savings MtC/a (estimates)</i>
Improved housing standards	All remaining improvements not achieved by 2010 Near-zero emission Building Regulations (as above) Increased replacement with new build (from 15,000/a now to 50,000/a).	1MtC/a 0.5MtC
New technologies	New refurbishment techniques; Installation of domestic CHP (dCHP) into c 8million homes by 2020	2.1MtC
Renewables	Insulation for solid-wall housing Increased installation of household renewables	1-2MtC Unquantifiable

Appendix 1

Energy Efficiency Advice Centres in Wales

The Energy Efficiency Advice Centre (EEAC) network covers the whole of the UK, allowing local centres to share the benefits of experience and approaches. In Wales the advice service is delivered from four bases at:

Cardiff (South East Wales)

Mold (North Wales)

West Wales (Mid and West Wales – exc. Swansea)

Swansea (Swansea only)

The EEACs offer free and impartial advice to all householders on the best and most effective methods of domestic energy efficiency. Each centre has fully trained energy advisors who provide a range of programmes targeting householders, schools, local authorities and SMEs. Many of the EEACs clients are fuel poor, disabled or elderly as a consequence the centres work closely with other support agencies to refer clients as appropriate.

Many of the energy advice centres have developed expertise in managing projects for other organisations e.g. the National Assembly's HEES pilot in Ceredigion; most of the local authority energy efficiency programmes; and the business advice package that involved staff training in energy efficiency (ex Welsh Office funding).