

Economic Development & Transport Committee

EDT(2) 01-06 (p4)

Date: 11 January 2006

Time: 9.00 to 12.30

Venue: National Assembly for Wales, Cardiff Bay

Title: EU Green Paper on Energy Efficiency

Purpose

To highlight to Committee Members the relevance of the European Commission Green Paper on Energy Efficiency in the context of activities in Wales.

Summary / Recommendations

Many suggestions in the EU Green paper echo both UK and Welsh Assembly Government actions. EDTC are invited to note the contents of this report to be read in conjunction with the summary of the EU Green paper produced by APS.

Background

The Green paper on Energy Efficiency ‘Doing more with less’, published by the Commission in 2005, aims to gather views from wide range of stakeholders on how to curb rising energy use across the EU and arrive at a reduction of 20% by 2020.

Green paper proposals to combat barriers to energy efficiency and the Welsh context

The Green paper identifies the barriers presently preventing cost-effective efficiencies from being captured such as a lack of appropriate incentives, lack of information, lack of available financing mechanisms.

Annex 1 provides an overview of :

- proposals suggested in the Green paper (numbered for ease of reference)

and,

- activities already ongoing in Wales (making reference to non devolved areas).

Overview of current situation

The UK already has many ongoing initiatives and there are several reviews underway such as the Climate Change Programme review, which will highlight potential areas for greater activity.

A series of meetings were held over the summer hosted by DEFRA to discuss

the EU Green paper and a report outlining UK actions already underway is contained at annex 2.

In Wales the Energy Route Map consultation contains the actions intended put Wales at the forefront of clean energy. Energy Efficiency Action Plans already represent current UK and Welsh practice. The "Energy Saving Wales" Energy Efficiency Plan for Action was published in 2004 after a wide-ranging public consultation.

Financial implications

This paper is for consideration only. No detailed analysis of any financial implications has been undertaken.

Cross cutting themes

EDTC should be aware that fuel poverty policy is a matter for the Housing and Social Regeneration portfolio.

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Annex 1 : the proposals suggested in the Green paper, and, activities already ongoing in Wales making reference to non devolved areas (where appropriate).

Proposal 1

- **‘National Energy Efficiency Action Plans to identify measures to be taken at national, regional and local levels and subsequently monitor their success both in terms of improving energy efficiency and their cost effectiveness.’**

The Energy Route Map consultation contains the actions intended put Wales at the forefront of clean energy. For further details see the Energy Route Map:

<http://www.wales.gov.uk/subitradeindustry/content/consultations/ewrm-map-e.pdf>

Energy Efficiency Action Plans already represent current UK and Welsh practice. The "Energy Saving Wales" Action plan was published in 2004 after a wide-ranging public consultation. For further details see the Energy Saving Wales:

<http://www.businessenvironment.wales.gov.uk/documents/esw-e.pdf>

These documents are set in the context of EU legislation and UK wide programmes. Some UK programmes are under review at the moment; the Climate Change Programme Review, the Energy Review and the Stern Review. The outcomes of which will feed into UK –wide policy making over the next few months.

Proposal 2

- **‘Better informing EU citizens and businesses via publicity and improved product labelling.’**

Access to information is essential to change consumer behaviour. As part of the Welsh Assembly Government’s Energy Efficiency Plan for Action, Energy Saving Wales, a pilot Internet portal website, has been launched. This portal will provide to links key organisations that offer energy efficiency support services, information on financial incentives, training and awareness raising.

The Welsh Assembly Government also supports the publicity campaigns organised by the Carbon Trust, Energy Saving Trust and other key organisations.

Issues on product labelling are the subject of separate EU papers.

Proposal 3

Non devolved issue:

- **improving taxation, to ensure that the polluter really pays without, however, increasing overall tax levels**

Proposal 4

Non devolved issue:

- **better targeting State aid where public support is justified, proportionate and necessary to provide an incentive to the efficient use of energy;**

The review of state aid rules, aimed to make them more favourable to the environment (e.g. for Eco-innovation and productivity improvements), should bring clarity for energy efficiency developments in Wales.

Proposal 5

- **‘The public sector pointing the way by using public procurement to ‘kick-start’ new energy efficient technologies, such as more energy efficient cars and IT equipment.’**

Through the Sustainable Development Action Plan, the Welsh Assembly Government has been encouraging energy efficient procurement and practices by all public sector bodies.

The Welsh Assembly Government’s commitment to the public sector leading by example is being demonstrated in a number of arenas. The vehicle hire tendering within the Welsh Assembly Government now has to conform to the New Car Energy Efficiency Labelling System. This means that cars available to hire will be banded by their CO2 emissions rather than any other factor such as engine size. The Green Operations Action Plan aims to reduce energy consumption across government estates by 1% each year commencing from the base year of 2001/2002.

The WDA led Environmental Goods and Services programme is also key to support market development in relation to energy efficient products and services.

Proposal 6

- **‘using new or improved financing instruments, both at Community and national levels, to give incentives, but not aid, to both companies and householders to introduce cost-effective improvements’**

The Carbon Trust in Wales provides interest free loans as well as managing the Enhanced Capital Allowance scheme for energy efficient goods and services; these are available to business.

On the domestic side there are a number of schemes available in Wales which are outside the EDT remit however see next proposal.

Proposal 7

Text provided by Housing and Social Regeneration Division within whose portfolio this lies.

- **‘EU Buildings Directive – implementing and potentially extending building performance standards going further regarding buildings, where an existing Community directive applies, and possibly extending it to smaller premises in a manner that ensures cost effectiveness and minimum additional bureaucracy.’**

The requirements of Articles 1b and 1a of the Energy Performance of Buildings Directive in terms of a framework for calculating energy performance and setting minimum standards are being transposed through the reviews of the Building Regulations (Part L) and a review of the Standard Assessment Procedure (SAP) respectively. Building Regulations for England and Wales are the responsibility of ODPM who have also led the review of SAP. The UK Governments plans for tightening and enforcing building regulations in the interests of better regulation have been communicated by Defra who are co-ordinating the UK input into discussions on the Green Paper. The Welsh Assembly Government has powers for social housing regulation, but these are secondary to the requirements of the Directive.

EDT text:

In addition the Welsh Assembly is working with developers, construction clients and funders, the Design Commission for Wales and Constructing Excellence towards ensuring the built environment meets Wales’ sustainable development goals, including supporting the production of a model residential design guide (by the Planning Officers Society Wales). The Welsh Assembly Government’s TAN12 ‘Design’ gives guidance on issues including the incorporation of sustainable energy and energy efficiency in building design.

Proposal 8

- **‘Using the CARS 21 Commission initiative to speed up the development of a new generation of more fuel efficient vehicles.’**

Although not part of this initiative there is a joint Welsh Assembly Government/ Department for Transport/ Scottish Executive consultation exercise in 2004 on the future of the Energy Saving Trust’s TransportEnergy grant programmes. New programmes have been proposed which include:

- Low Carbon Research and Development Programme – providing grants towards the costs of research and development for prototype low carbon vehicles and technologies
- Low Carbon Demonstration Bus Programme – providing purchase grants to bus operators to incentivise the purchase of up to 150 low carbon buses
- Low Carbon Car Programme – providing purchase grants to incentivise the uptake of cars and vans that fall below a maximum CO2 limit
- Air Quality Retrofit Programme – providing grants for retrofitting air quality abatement equipment to existing vans, buses, coaches and HGVs

- Air Quality Vehicle Programme – providing grants to purchasers for eligible vehicles meeting the European Commission emission standards for Enhanced Environmental Vehicles as detailed in Directive 1999/96/EC
- Infrastructure Development Programme – providing grants to support the installation of cleaner transport refuelling and recharging infrastructure

However none of these programmes may commence until state aids clearance has been obtained from the European Commission. DfT is responsible for transport state aids matters within the UK and the proposed programmes were submitted to the Commission in April. DfT will fund all the programmes throughout the UK; Devolved Administrations may provide additional funding for all or any of the programmes.

Additional notes on transport from a Welsh perspective:

The Welsh Assembly Government continues to encourage the transfer of freight from road to rail through grant funding under the Freight Facilities Grant scheme. Grant is offered in recognition of the environmental benefits that can be "bought" by transporting freight by rail rather than road.

The Welsh Assembly Government is keen to see the integration of walking and cycling into everyday life, both as a means of transport and as active recreation. WAG has invested heavily in public transport services /infrastructure to make it easier.

Proposal 9

- **‘Mobilise all European players: national governments, regions, municipalities, industries, and individuals – and cover all the energy producing and consuming sectors.’**

‘Energy Saving Wales’ the Energy Efficiency Plan for Action is based on strong partnership approach and supports the activities of the Carbon Trust Wales and other key organisations in Wales which provide energy efficiency information and support. The Carbon Trust in Wales provides highly effective services to companies and the public sector such as; energy visits; energy audits, carbon management and interest free loan schemes as well as managing the Enhanced Capital Allowances tax relief scheme.

Proposal 10

- **‘...to ensure that only the most fuel-efficiency (CCGT) technology for electricity production is being used’**

Wales is following a clean energy/high efficiency path:

- **Gas**

A lot of investment has been committed in Wales to production of electricity from gas. The Baglan H turbine is a demonstration project that can achieve 60% efficiency when functioning, which is a world record for a CCGT plant.

- **Coal**

The production of clean efficient coal suffers from under investment in the UK. Welsh Assembly Government is keen to engage with the DTI's Carbon Abatement strategy.

Proposal 11

- **'...promotion of distributed generation.'**

Distributed generation assists efficiency by helping to avoid transmission losses. Distributed generation is best when a combination of energy generation sources are available within a locality. The Welsh Assembly Government is looking at the feasibility of biomass in rural areas supported by the Wood Energy Biomass Scheme (WEBS). There are many other projects are underway using Combined Heat and Power and small hydro schemes.

Wales has a target of 4TWhr per annum of renewable electricity production by 2010 and 7TWhr by 2020.

A microgeneration strategy for Wales is under consideration.

Proposal 12

- **Investment and funding**

Energy capital projects provide energy generation essential for the economic wellbeing of Wales and also provide significant economic development opportunities. A variety of significant projects are on the horizon providing funding for clean energy projects, biomass and marine technology projects. Structural Funds support is on offer to some of these projects The UK Government has recently announced funding for the Low Carbon Building Programme across the UK which organisations in Wales will be eligible to bid for.

The Commission suggested that the increased energy efficiency and the promotion of clean urban transport should constitute explicit targets for the activity of the European Regional Development Fund for period 2007-13.

Proposal 13

• Technology

The Welsh Assembly Government is committed to driving innovation and R&D in the sustainable energy field. The Energy Route Map flags this importance and new Welsh Energy Research Centre, Energy Technium in Pembroke and the Sustainable Technology Technium at Baglan are underway, in addition to the relevant activities at ECM2.

The Welsh Assembly also supports the Carbon Trust's Innovation Programme..

Annex 2: Outline of UK Contribution to inform discussion in Energy Working Group

Actions underway at National Level

The UK's Energy Efficiency Action Plan (April 2004) sets out a range of measures in the household, business and public sectors which together intended to deliver over 12 million tonnes of additional carbon savings through energy efficiency by 2010. These measures include:

- A new aim to secure annual carbon savings from the household sector in the UK of around 4.2 million tonnes by 2010 and, in fulfilment of the Sustainable Energy Act 2003, a designated aim to deliver annual carbon savings of 3.5 million tonnes of carbon per year from households in England
- To double the level of the [Energy Efficiency Commitment](#) (an obligation on electricity and gas suppliers in the domestic sector to deliver energy savings) activity from 2005, and to extend it to 2011 subject to a review in 2007. This is expected to lead to investment of over £2Bn, saving customers £4Bn from their bills to 2020;
- New fiscal measures, including a tax allowance to encourage private sector landlords to invest in their properties
- Changes to the [Building Regulations](#), which will raise standards of new and refurbished buildings by 20% and implementation of the Energy Performance of Buildings Directive to unlock market demand for higher energy performance
- New energy services pilots, through which energy suppliers will be able to offer innovative new energy efficiency packages to their customers
- Implementation of the [EU Emissions Trading Scheme](#) and additional [Climate Change Agreements](#) linked to the Climate Change Levy will ensure that every energy intensive industry

and power generator continues to use energy more efficiently

- Commitment to leadership by government, including new energy targets for the central government estate and a new commitment for central government to use only the best energy performance buildings
- A stronger emphasis on communicating about climate change
- [Fuel poverty](#) programmes will continue to tackle heating and insulation standards in the homes of those least able to afford to keep warm
- The [Decent Homes](#) programme, which will continue to improve energy standards in social housing.
- Continuing to raise product standards through the Market Transformation Programme
- Continuing to inform, advise and support individuals, businesses and the public sector through the activities of the Carbon trust and Energy Savings Trust
- A Strategy to promote Combined Heat and Power (CHP)
- Supporting innovation in lower carbon technologies, particularly through the Carbon Trust's innovation programme

Full details can be found at <http://defraweb/environment/energy/review/index.htm> .

The review of the UK's Climate Change Programme is considering the need for additional cost-effective measures.

Measures to improve energy efficiency in the transport sector are set out in the Powering Future Vehicles Strategy (July 2002) and the Transport Ten Year Plan which focuses on addressing the negative impacts of congestions, promotes increased use of public transport and shifting goods from road to rail.

Full details at: [DFT weblinks]

Obstacles to be overcome

The UK considers that the principal barriers to improvements in energy efficiency are:

- Investment costs including aversion to risk on the part of lenders, insufficient pay-back periods,

competing priorities for investment

- "Hidden Costs" such as management costs in the business sector and the 'hassle factor' of undertaking energy efficiency improvements in the domestic sector.
- Split incentives, such as the landlord/tenant issue and other market failures
- Ignorance, inertia and lack of interest on the part of energy consumers

The significance of individual barriers to change will vary by both sector and the use of energy (e.g in buildings or manufacturing)

Priorities for Action

The UK considers that the broad areas which should be considered as priorities for action are:

- Strengthening the evidence base and promoting consistency and coherence across any package of measures in the interests of better regulation.
- Strengthening product standards and labelling
- Addressing energy efficiency in the transport sector
- Improving the Energy Efficiency of both new and existing buildings
- Addressing the split-incentive issue in the private-rental sector
- Improving feedback on consumer consumption and more effective communications
- Incentivising change in large non-energy intensive organisations, including the commercial and public sectors, and increase transparency of energy use
- Continuing to drive energy efficiency in the industrial sector
- Making effective use of fiscal instruments
- Stimulating the development and deployment of energy efficiency technologies
- Promoting distributed generation, particularly micro-generation
- Engaging 3rd countries more effectively through dialogue with international partners and

facilitating better sharing of information and best practice

Instruments to be used / appropriate level of action

Some key instruments that could be used and which reflect the priorities set out above include:

- Development, and revision at appropriate intervals, of European and National Action Plans as a framework for consistent package of instruments to improve energy efficiency
- Ensuring EU-ETS works effectively and Phase2 allocations are strong and ensuring coherence and consistency with any emerging proposals for white certificates.
- Obligations on suppliers mandated at European level (under the Energy Services Directive) but detail to be determined at national level.
- Trading and White Certificates could be an important tool, looking ahead to potential EU-wide trading, it will be important for there to be some consistency in how national white certificates are developed.
- Improved emission standards for vehicles [and other transport instruments] top be agreed at European level.
- Use the Eco-design of Energy using products Directive to raise product standards, particularly of cold and wet appliances and establish standards for consumer electronics and reduce stand-by losses. Tighten tolerances on labelling and standards.
- Target better consumer information at both a national and European level through domestic schemes and revision of the Labelling Directives
- Tightening and enforcing national building regulations.
- Improving consumer information through informative metering to be delivered at national level within the European framework set out in the Energy Services Directive.
- Undertaking benchmarking of energy efficient standards and policies at a European level and disseminating best practice through regular review and reporting process, possibly under the Energy Services Directive
- Fiscal instruments, such as tax allowances, levies and use of indirect taxation, are potentially helpful levers to be deployed at national level though action at European level could help increase Member States freedom of action in this area, for example through changes to the VAT

Directive to allow reduced rates for a range of energy-efficient products and energy-saving materials for DIY installation.

- Promotion of energy efficiency as a key element of bi-lateral and EU- dialogues with key international partners, particularly the merging economies, and working closely with International organisations and individual countries to exchange best practice
- Conducting increased and clearly focussed research and development on energy efficiency technologies covering all stages from research to deployment at both a national and European Level, including committing more funds to FP7 and the Intelligent Energy programme and ensuring that there are strong linkages and co-ordination between national and European research efforts.