



**STRICTLY EMBARGOED UNTIL 00.01 WEDNESDAY 26 NOVEMBER, 2008**

## **ENERGY RE-THINK NEEDED TO MAKE HOMES AND BUSINESSES GREENER**

Moves towards sustainable energy in the UK are being hampered by old ways of thinking according to a major new report published today by Foresight, the Government's futures think tank.

The study 'Powering Our Lives: Sustainable Energy Management and the Built Environment' looks at how the country's buildings and spaces will need to evolve to help cut carbon emissions.

The report concludes that the UK is 'locked-in' to using certain forms of energy not because they are better but because they have historically dominated over other options. This has created significant inertia because using a new form of energy also means changes in the infrastructure and the regulations to support it.

Professor John Beddington, the Government's Chief Scientific Adviser and Director of the Foresight Programme, said:

"The energy used to power buildings is responsible for over 50 per cent of UK carbon emissions. Urgent action needs to be taken if we are going to meet the 80 per cent emissions target outlined by the Government in the Climate Change Bill.

"We need to think again about how we produce and use energy and this report explores the link between the energy we use to power our lives and the places we use it in. Today's study offers a range of proposals for Government to consider on energy production while giving food for thought to all of us about the energy we use".

The report, sponsored by the Department for Communities and Local Government (CLG), concludes that there is no 'magic bullet' to reduce carbon emissions or 'decarbonise' the energy we use. However, it does propose behavioural and

regulatory changes which could be introduced over the next 50 years, to overcome this inertia.

Three keys areas for change are:

### **Upgrading of buildings and spaces to be more carbon neutral**

Urgent attention is needed to improve the energy performance of existing buildings – although targets have been set for new homes it is estimated nearly 70 per cent of housing stock in 2050 will have been built before 2000.

'MOT tests' to annually assess the energy efficiency of buildings could be a useful tool to make households and firms think about energy performance on a regular basis rather than ignoring it.

### **A move to decentralised energy systems**

Decentralised energy is energy generated closer to the place where it is used, so that any losses in transmission of electricity or heat are reduced. It can mean a solar hot water panel on a house, a combined heat and power system for a block of flats, or a larger power plant in a city centre or a rural area. The report calls for the provision of more varied, decentralised energy options to expand the use of renewable energy.

### **Human behaviours in the built environment**

Human behaviour determines energy use as much as building design. People have not yet responded at the scale and pace needed to meet future emissions targets –the benefits for doing so need to be made clear and incentives offered.

Professor Beddington added:

“Homes built in the future will be more carbon neutral, however the vast majority of buildings pre-date our awareness of emissions and climate change – these are where quick-wins can be achieved.

“Bringing older housing stock’s energy efficiency up to standard should be a priority – providing the right incentives and support are offered to encourage

homeowners, business, housing authorities and local government to change their thinking”.

Margaret Beckett, Minister for Housing, who is the report’s Ministerial sponsor, said:

“Given our buildings are responsible for almost half of the UK’s carbon emissions, we need to be taking action now if we are to succeed in hitting our targets.

“Today’s report provides valuable advice on the roles both Government and the general public can play in tackling one of the most pressing issues facing the entire world.”

Energy and Climate Change Secretary, Ed Miliband, said:

“The Government has set a target for reducing our greenhouse gas emissions by 80 per cent by 2050, and central to that goal is greening the energy we use in our homes and becoming more energy efficient.

“We will be building on current policies supporting individuals and communities as they develop secure, low-carbon energy supplies and retrofit buildings. Already, we’re introducing legislation to provide real incentives for those installing small scale renewable electricity and heat technologies.

“This report makes a valuable contribution to the debate.”

The two year project has involved over 150 experts from areas including economics, energy technologies, planning, construction, and social sciences.

As the project's sponsor, CLG will now take responsibility for the report’s findings to assist in policy development across government. A report in 12 months time will outline the project's progress including action by other stakeholders.

## **Notes to editors**

1) Download the full report at <http://www.foresight.gov.uk> (only available from Wednesday 26 November). Embargoed copies are available to the media on request.

2) Foresight is part of the Government Office for Science (GO Science). Its function is to help Government think systematically about the future. Foresight uses the latest scientific and other evidence to provide signposts for policymakers in tackling future challenges.

3) Foresight reports do not constitute Government policy. Rather, they are intended to inform the strategic and long-term choices facing Government departments, business and us all. The rolling programme of projects is selected by Foresight following wide stakeholder consultation. The projects run for 18 months to 2 years and include 3 main stages: scoping; developing the evidence base; and providing a series of policy options after analysing how the issue will change in the future. Once a project is agreed, the department with the greatest policy interest in the project is invited to become the sponsoring department and nominate one of its ministers to chair the High Level Stakeholder Group.

4) The Department for Communities and Local Government is the Government department responsible for housing policy, including tackling the long-term shortage of homes and developing a greener and more sustainable approach to building new homes.

5) The Department of Energy and Climate Change (DECC) was created in October 2008. It reflects the fact that climate change and energy policies are inextricably linked – two thirds of our emissions come from the energy we use. Decisions in one field cannot be made without considering the impacts in the other. DECC has three priorities: ensuring our energy is secure, affordable and efficient; bringing about the transition to a low-carbon Britain; and achieving an international agreement on climate change in Copenhagen in December 2009.

6) For further enquires, please contact the GO Science Press Office on 0203 300 8126.

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