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Foreword

On hearing the latest scientific evidence about climate change, many of us are concerned, but might think there is nothing one person can do about it. Surely it is something for the UN, G8 or the EU, by definition a global matter for Presidents and Prime Ministers?

Very true, of course - up to a point. There is a developing international agenda. But as individuals we are far from powerless. Indeed we are key players. Most of us, at the moment, are part of the problem, in terms of how we use and abuse energy in our homes and in modes of transport.

We need to recognise that tackling climate change is not just about government policies and technology. It also involves a battle for hearts and minds. The concerned but passive individual can become an active citizen on environmental issues - part of the solution. This is starting to happen. More citizens are active recyclers, are concerned about their local environment and understand the threat of climate change. Much can be done on a number of levels. Microgeneration, power from the people, is growing in importance.

In many respects microgeneration epitomises today's society. It is high tech and can be tailored to individual taste. It provides freedom and independence to the user. These are themes that are encapsulated by some of the iconic products of the 21st Century - the iPod, the BlackBerry®. But take-up of microgeneration by the wider population is minimal in comparison to these bestsellers.

Our vision for 2020 as set out in the Energy White Paper acknowledged that microgeneration has a role to play in delivering sustainable, secure, affordable heat and electricity through competitive markets.

But since the publication of the Energy White Paper, the challenges we face in achieving our energy policy goals have been thrown into sharper relief:

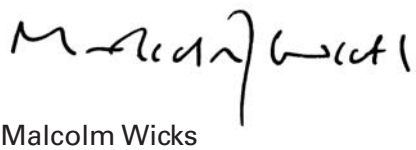
- We have more evidence of the adverse impact of climate change
- The UK has become a net importer of gas sooner than expected, and is also becoming a net oil importer
- Energy prices have risen sharply, reversing some of the excellent progress we have made in reducing fuel poverty

The Energy Review is examining the costs and benefits of options to make further progress towards meeting our White Paper goals. This microgeneration strategy provides an important contribution to that debate by highlighting the potential of microgeneration and plotting a path towards achieving this potential.

Our consultation in the Summer of 2005 explored the barriers preventing widespread take-up of microgeneration technologies. This strategy builds on information gathered during that consultation period and sets out a series of actions that will help address these barriers.

The objective of this strategy is to create conditions under which microgeneration becomes a realistic alternative or supplementary energy generation source for the householder, for the community and for small businesses. This is a challenging objective. To achieve it we will need to work in partnership across Government (both national and local), with Ofgem and with the industry.

But I am confident that we will meet this challenge and I look forward to a day when installations of different microgeneration technologies are seen on every street.



Malcolm Wicks
Minister of State for Energy

Executive Summary

Microgeneration is defined in section 82 of the Energy Act 2004[1] as the small-scale production of heat and/or electricity from a low carbon source. The suite of technologies caught by this definition includes solar (photovoltaics (PV) to provide electricity and thermal to provide hot water), micro-wind (including the new rooftop mounted turbines), micro-hydro, heat pumps, biomass, micro combined heat and power (micro CHP) and small-scale fuel cells. These technologies potentially have much to offer in helping us to achieve our objectives of tackling climate change, ensuring reliable energy supplies and tackling fuel poverty. As well as providing low carbon energy to homes and small commercial buildings, microgeneration can provide the same service to community buildings, such as leisure centres and schools.

In such premises, not only does the microgeneration installation help to reduce carbon emissions; it can also help to educate and inform communities about energy and, hopefully, persuade people to reduce their own carbon footprint.

In 2004 there were approximately 82,000 microgeneration installations in the UK. Yet a study commissioned by the DTI from the Energy Saving Trust (EST) suggested that by 2050, microgeneration could provide 30-40% of the UK's electricity needs and help to reduce household carbon emissions by 15% per annum[2]. There is clearly some way to go to achieve this potential.

A range of constraints is currently affecting the wide-scale deployment of microgeneration. The upfront cost of an installation can be off-putting. And even where there is demand for some form of microgeneration inadequate promotion and poor information may be preventing that demand being converted into actual purchase. There is also a range of technical issues that mean that the installation of a microgeneration technology is not quite as straightforward as, for example, changing a boiler. They also mean that access to the rewards available for electricity generating microgenerators is more difficult than it should be. Finally, planning policy and Building Regulations both provide opportunities and can act as constraints.

The objective of this strategy is to create conditions under which microgeneration becomes a realistic alternative or supplementary energy generation source for the householder, for the community

[1] www.opsi.gov.uk/acts/acts2004/20040020.htm

[2] www.dti.gov.uk/energy/consultations/pdfs/microgeneration-est-report.pdf

and for small businesses. If this can be achieved we will start to see the level of growth in installations required for microgeneration to make the significant contribution to our energy goals that is its potential. To deliver this objective a number of actions are required to address the various constraints outlined above. These actions are listed on pages 42-44. A wide range of actions is required to address all areas, varying from the Low Carbon Buildings capital grant programme, improvements to existing communications activity, a review of the permitted development regime to a pilot to assess the benefits of smart metering combined with microgeneration. Successful implementation of all the actions listed will require concerted action by Government, the Devolved Administrations, Regional Development Agencies, local authorities, Ofgem and the microgeneration industry.

Progress in implementing these actions will be assessed on a continual basis with a report published each year as part of the annual report on progress against Energy White Paper[3] objectives produced under the Sustainable Energy Act 2003[4].

[3] www.dti.gov.uk/energy/whitepaper/index.shtml#wp
[4] www.opsi.gov.uk/acts/acts2003/20030030.htm