

COULD DO BETTER

THE SENTIMENTS OF THE GOVERNMENT'S ENERGY WHITE PAPER ARE ADMIRABLE, BUT IT IS THIN ON SPECIFICS, SAY KEVIN ANDERSON, SIMON SHACKLEY AND JIM WATSON

As researchers at the Tyndall Centre for Climate Change Research, we welcome the Energy White Paper's principal message, that a long term energy strategy is essential if the UK is to remain "on a path to 60% cuts in carbon dioxide emissions by 2050". We also welcome the strong emphasis on energy efficiency and the recognition that such efficiency improvements are not only economically advantageous, but also provide wider social and environmental benefits. Furthermore, we endorse the White Paper's embrace of renewable energy technologies.

But the absence of a clear target for energy efficiency and the softening of a 'hard target' to an 'aspiration' in relation to renewable energy's 20% contribution to electricity supply by 2020, are clearly disappointing. Even if such a target had been adopted, we would have remained uneasy about the absence of any detailed examination of the impact of economic growth on net carbon emissions. Percentage improvements in efficiency and renewable uptake do not directly lead to a reduction either in energy demand or the actual use of fossil fuels.

There is a significant risk that the good intentions outlined in the White Paper will not be translated into action. It will then be difficult to counter calls for an

expansion of nuclear power and fossil fuel generation with carbon dioxide capture and storage. Consequently, if the White Paper is to be converted into reality, the government must implement a set of regulatory instruments within the coming parliamentary term, that require all sectors to achieve absolute emissions reductions, rather than simply improving energy efficiency. For example, in relation to refrigeration, a standard could be introduced that states the maximum permissible energy consumption per unit of volume for all new appliances. With the private car, the motor industry could be advised of a forthcoming standard stipulating the maximum carbon emissions per kilometre for any new car sold.

SYSTEMS THINKING

Although the government extols the virtues of joined-up thinking, there are important facets of decision making that demonstrate its reluctance to both analyse and implement policy on such a basis. For example, whilst the aviation industry expands at approximately 5% p.a., efficiency improvements remain at little over 1% p.a. If the industry continues in this vein, by 2030 the carbon emissions from aviation alone will represent approximately 40% of the total carbon emissions from the UK estimated for 2050. The long-term repercussions of such interdepartmental myopia are difficult to overstate and raise serious concerns over the development of a genuinely inclusive energy strategy.

We agree with the White Paper that carbon trading offers an efficient mechanism for achieving carbon reductions, but would have liked to see the concept extended to provide individuals with a specific carbon allocation. Although domestic tradable carbon quotas represents a significant departure from conventional emission instruments, it could offer significant ethical, economic and efficacy benefits over a carbon tax, the Energy Efficiency Commitment or other voluntary schemes.

The government's ambitious long-term goal for carbon reduction, and its courageous break from the dogmatic pursuit of 'optimal energy supply' routes, so reminiscent of all post-war administrations, should be applauded. However, only if there is some convincing demonstration of this vision in the coming five to 10 years, will the present political and commercial support be sustained. It is the responsibility of those who believe the central pillars of a sustainable energy system to be energy efficiency, energy conservation and renewable energy, to continue to contribute to the energy and environment debate and to scrutinise government policy as it develops.

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