

EMBARGOED UNTIL 00.01 hrs Thursday 16 NOVEMBER 2000

UK CLIMATE CHANGE PROGRAMME “HOLED BELOW THE WATERLINE”?

The UK Government's hard-won credibility in the international climate change negotiations in The Hague could be undermined, according to a new report by Cambridge Econometrics and Forum for the Future. A key part of the Government's response now appears to be seriously flawed.

The report shows that a potential eleven million tonnes of CO₂ savings will be lost annually as a result of the Government failing to achieve its target of at least 10,000 MWe of combined heat and power (CHP) by 2010. The findings represent a major setback for the Government, which is relying on CHP to deliver 20 per cent of its CO₂ savings target.

CHPA Director David Green stated:

“Ministers have recognised the terrible impacts that climate change is having. But even with the country still awash with floods, it appears that the Government's own climate change strategy is holed below the waterline.

“While the Government is to be commended for the leading role it has taken in the climate negotiations, if it is to retain this leadership it must have a credible national programme of action to tackle the causes of climate change.

“The Cambridge Econometrics report is now calling into question the validity of a central plank of the Government's strategy”.

Deputy Prime Minister John Prescott unveiled the target of 10,000 MWe of CHP by 2010 at the last international climate change meeting in Bonn (COP 5). The report shows that under today's market conditions, the Government's policy framework will deliver less than 6,600 MWe of CHP. This figure is barely a third of the national economic potential for CHP identified by Government.

The Government and ACBE (the Advisory Council on Business and the Environment) have repeatedly stated that CHP is the key technology for achieving the UK's targets under the Kyoto protocol. The Royal Commission on Environmental Pollution recently advised that the UK must deliver on this target for CHP in order to tackle the long-term effects of climate change. But as this new report shows, with current policies the target of 10,000 MWe will not be met even by 2020.

David Green concludes:

“CHP is one of the most cost-effective measures for cutting CO₂ emissions available to Government today. The Cambridge Econometrics report shows that the 10,000 MWe target can be met at no net cost to the country. The Government cannot afford to ignore CHP any longer.

“Both renewable and CHP energy targets for 2010 are now under serious threat. All those in the sustainable energy industry look forward to working with Government to develop a strategy for realising the full benefits of CHP.”

ENDS

NOTES TO EDITORS:

1. A summary of key quotes from the report, *Combined Heat and Power to 2020: The Economic and Environmental Implications of Exploiting the Potential of CHP* is attached. The full report will be released at the Association's National Conference on Thursday 16 November 2000 at the QE II Conference Centre, Westminster.

Copies of the report are available in advance by E mail from Syed Ahmed, Head of Research, at the CHPA on syed.ahmed@chpa.co.uk

For press places for the CHPA national conference please contact Syed Ahmed on 020 7828 4077.

2. Every 1,000 MWe of CHP operating saves emissions of 3.6 million tonnes of carbon dioxide being released.
3. The CHPA released its own consultation on a UK Strategy for CHP on 19 October 2000. Copies can be downloaded from the CHPA website at www.chpa.co.uk.
4. The Government has estimated that the potential for CHP exceeds 17,000 MWe.

For further information please contact David Green, Director, or Graham Meeks, Assistant Director, on 020 7828 4077

COMBINED HEAT AND POWER TO 2020

The Economic and Environmental Implications of Exploiting the Potential of CHP

PAUL EKINS and ANDY RUSSELL, Forum for the Future with
CHARLIE HARGREAVES Cambridge Econometrics

The report is based on research undertaken in the second year of the Solar Millennium Project within Forum for the Future's Sustainable Economy Programme (SEP). The aim of the Project is to explore the energy, environmental and economic implications of an ambitious programme of investment in renewable energy, combined heat and power (CHP) and domestic energy efficiency

Key findings

There is a firm awareness among policy makers of the environmental and potential economic and social benefits of Combined Heat and Power (CHP). These benefits result from the more efficient fuel use achieved by CHP, which reduces emissions and reduces fuel costs.

Because of these benefits, the Government has a target to increase CHP capacity from its current level of below 5 GWe to 10 GWe by 2010. The first objective of the study was to assess whether, on the basis of current policies, this target is likely to be achieved. If not, a second objective of the study was to use modelling to estimate the economic and environmental implications of applying policies which would allow the target to be met.

The Royal Commission of Environmental Pollution (RCEP) has estimated that, to make a significant contribution to international efforts to mitigate climate change, the UK will need to fully realise the potential for CHP. This potential out to 2020 has been estimated by ETSU and BRE. A third objective of the study was to gain insights into the economic and environmental effects of implementing policies such that a large proportion of this potential is realised.

The single largest influence on CHP's economic viability is the difference between the price of the fuel input to CHP plant (usually natural gas) and the price of electricity. The larger this price difference, the greater CHP's economic attractiveness.

This price difference will be influenced by the proposed partial exemption of CHP from the Climate Change Levy (CHP). However, a number of factors have acted

to undermine the economic viability of CHP, including the nature of the New Electricity Trading Arrangements (NETA), which tend to undervalue the embedded benefits of CHP, and, more recently, a significant hardening in the price of natural gas. The impact of NETA on CHP is still a matter of strong debate, as is the effectiveness of the ameliorating measures that the Government has proposed. In addition, the planning consents policy, which has favoured CHP over the last two years, is to be lifted as soon as NETA comes into operation.

All these factors cast doubt on whether the Government's target of 10 GWe by 2010 will be achieved without further measures explicitly in support of CHP. These doubts are amply validated by the results of this modelling exercise, which shows that on current policies only 6.6 GWe of CHP capacity will be achieved by 2010, rising only to 8.6 GWe by 2020.

There are many potential CHP support policies available, including fiscal policies (such as full exemption of CHP from the CCL, or an increase in the rate of the CCL), technology-support policies (such as support for CHP from the CCL's energy efficiency fund and the enhanced capital allowances scheme), regulatory policies (such as using the power that the Government has taken in the new Utilities Act to create a CHP percentage obligation on electricity suppliers akin to that for renewables, or maintaining a consents policy that strongly discriminates in favour of CHP). These policies are discussed in some detail in the main report.

Overall the modelling results show that on current policies the Government's target of 10 GWe of new CHP capacity by 2010 is likely to be missed by a substantial margin. New policies in support of CHP will have to be put in place soon if this target is to be attained.

The results further show that achieving this target, and going on to achieve 19 GWe by 2020, would yield significant environmental benefits. The reductions in carbon and sulphur emissions would make an important contribution to the achievement of UK and European environmental objectives.

Moreover, these environmental benefits can be achieved at essentially zero macroeconomic cost. The argument for a strong programme of CHP support by the Government is, on these results, very strong.

