THE FOUNDATION FOR SCIENCE AND TECHNOLOGY

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DINNER/DISCUSSION SUMMARY

Can carbon trading contribute to meeting carbon emission reduction targets?

Held at The Royal Society on 2nd April, 2008

We are grateful to the
Department for Environment, Food and Rural Affairs (Defra)
for supporting this event

Chair: **The Earl of Selborne KBE FRS**
Chairman, The Foundation for Science and Technology

Speakers: **Professor Bob Watson CMG**
Chief Scientific Adviser, Department for Environment, Food and Rural Affairs (Defra)
Professor Michael Grubb
Chief Economist, Carbon Trust
Marc Stuart
Co-founder and Director of New Business Development, EcoSecurities

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PROFESSOR WATSON said that in the light of the crisis we now faced over climate change, carbon emissions simply had to be reduced in one way or another. Carbon trading through markets was essential, whether at global, European or national levels. This was a challenge to both governments and the private sector.

For governments there was a need for a global regulatory framework. The British Government and the World Bank had many similar views. We needed a different trading system, new energy trading strategies, a more inclusive approach bringing in all major carbon emitters (for example aircraft and shipping), new ways of coping with problems of mitigation and adaptation and new instruments and sectoral targets to promote a low carbon economy. This involved poor as well as rich countries which should be able to benefit from technology transfer and help of other kinds.

For the private sector there was need for a broad long term market approach of a self regulating and voluntary kind, working within a framework of the private as well as the public interest. Such an approach called for research into innovatory technology with its many applications and new ways of attracting investment.

In the future we needed to strengthen the machinery set up under the Kyoto Protocol, ensure better and clearer implementation of the Clean Development Mechanism(CDM), with a watchful eye for any abuses such as those arising from additionality and to establish a much tougher system of governance and accountability. Above all we had to learn best how to adapt things in the light of experience.

PROFESSOR MICHAEL GRUBB said that the Emissions Trading System (ETS) to reduce carbon emissions was the big beast in the jungle. It involved all EU member states, and constituted a European framework under national control. It has been in operation since early 2005, and was still in the process of evolution. Its effectiveness depended on putting a cap on emissions, which created a market and eventually prices for carbon emission permits. At the beginning of Phase I prices had been volatile. They had then risen and later fallen drastically after the grant of too many permits revealed by verification. Phase II was tougher and reflected some of the lessons which had been learned. Arguments over national allocations had illustrated the need for a more centralized system. Real progress was now being made as incentives for cutting emissions, developing alternative technologies and attracting investment. There was a nice balance between top down direction and bottom up advantage and profitability.

Better coordination with the UN system under the Kyoto Protocol and, as we hoped, its successor, was essential and had been unduly delayed. For Phase III post 2012 new targets had to be set and the whole system revised. It was for example necessary to bring in the chemical industry and to shift towards auctioning permits on a national basis with no free allocations. Poor countries needed help in reducing their emissions as well: hence the need for better liaison with the UN system. The attitude of industry was already changing as the size of the problem was better understood, and experience was gained in coping with it.

He added that in spite of criticisms the ETS had proved its worth. He did not regard carbon taxation as a realistic alternative in spite of its promotion in some quarters. It would mean transferring money to governments in a way that carbon cap and capture avoided. We now had to make a success of Phase II, and look forward to Phase III.

DR STUART described the business approach. The Clean Development Mechanism (CDM) had two main purposes: to restrain carbon emissions and to promote sustainable development by establishing true value. These were fine in broad terms, but like most things the devil was in the detail. So far big projects had fared better than small ones. Great uncertainties remained, there were many inconsistencies, and long term prospects for investors and others were far from clear. Problems over additionality had not gone away. The current position in the United States, arising from both public attitudes and legislative complexities, were not encouraging, although things were now changing. His broad conclusions were that the market approach was right but it had to be consistent with policy objectives including scientifically established reduction targets; long term commitments were essential; and the system itself needed to be simpler, clearer and properly policed. Our fundamental aim was to decarbonise the world economy across all sectors, and learn by flexible experience how best to achieve it.

In discussion the following points were made:

Present targets were achievable provided that the United States could be brought in, together with such other countries as Russia, Japan and China. Some scientists already believed that the existing targets were too modest. European leadership was important. Global agreements on energy and carbon cap and capture were essential. There had to be long term incentives which encouraged innovation and investment.

Development of nuclear power among other non-fossil fuel energy sources was important, even if, like coping with deforestation, it fell somewhat outside the present market system. Incentives were necessary.

Some people in the private sector were already achieving carbon reductions and were ahead of governments. Government intervention or guidance to protect investors was arguable.

No-one should forget the law of unintended consequences. The best environmental motives did not always lead to the best environmental results (for example over biofuels).

The idea of establishing personal carbon allowances sounded good, as did the principle of contraction and convergence, but both were fraught with practical difficulties.

Everyone could agree on the need for greater energy efficiency, but it was not clear that carbon cap and capture always helped. Some countries were already promoting green investment schemes and eco-towns as demonstration projects.

A new approach to economics, including bringing in true environmental costs manifest over forest protection, water conservation and protection of biodiversity, was necessary. This had been clear at the recent Kyoto Conference of the Parties at Bali.

It was not easy to think differently but never was it more important, whether in taking better account of the long term future or in promoting innovation, investment and appropriate pricing. Some people and governments were doing their best, for example the British Government with its Climate Change Bill now before Parliament. Generally there was still much more talk than action.

Sir Crispin Tickell GCMG KCVO

Details of past events and the presentations from the meeting are on the Foundation web site at www.foundation.org.uk.

Other links are:
The Carbon Trust:
www.carbontrust.co.uk
Climate Exchange:
www.climateexchangeplc.com
Climate Strategies:
www.climate-strategies.org
Department for Business, Enterprise and Regulatory Reform
www.berr.gov.uk
Department for Environment, Food and Rural Affairs:
www.defra.gov.uk
Deutsche Bank
www.db.com/presse/en/content/press_releases_2008_3759.htm?month=3
EcoSecurities:
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