



Tradable emissions permits



the shape of things to come?



an open forum debate with leading figures in energy and environment policy

second the British Energy series of seminars

Tradable Emissions Permits: *The Shape of Things to Come?*

*The Second in the series of British
Energy Seminars held in London on*

Wednesday 20th October 1999

Contents

<i>Introduction</i> Peter Hollins, Chief Executive, British Energy plc	29
Biographies of Speakers	30
The Pros and Cons of Tradable Permits Dr Michael Grubb, Former Director, Energy & Environment Programme Royal Institute of International Affairs	32
Business Views and Discussions with Government Peter Agar, Deputy Director-General CBI & a member of the Steering Committee of the Business Group on Permits	33
The Government's Perspective Ian Coates, Economic Adviser on Climate Change and Energy Efficiency, DETR	34
Tradable Permits in an International Context Peter Vis, Head of Economic Analysis and Forward Planning, Climate Change Unit, The European Commission	35

Introduction

Peter Hollins, *Chief Executive*
British Energy plc

This document is a summary of the proceedings of a British Energy seminar “*Tradable Emissions Permits: The Shape of Things to Come*” held at the Institute of Contemporary Arts, London on 20th October 1999 before a large audience of politicians, civil servants, businesspeople, academics and others. Much of this material was originally published on our website but, such has been the interest shown in this series of seminars, we have thought it useful to present it in more permanent form (though some sections have been shortened).

The debate on permits has naturally developed since the autumn of 1999 but there is much fascinating background in these pages with many insights in the thinking of HMG, British business, overseas governments and the European Commission. It provides a yardstick against which we may measure the evolution of public policy – and note, incidentally, the drawbacks of the Climate Change Levy. To aid readers we have included short notes in the text reporting recent developments.

I give notice at the start of every seminar that British Energy has a natural interest in each subject under discussion. We are certainly pro-tradable emissions permits. But I am not sure I any longer need to add that each seminar is a genuinely free discussion led by independent experts. Our audiences now know this which, I suspect, is why they keep attending in such satisfying numbers.

Further information on the seminar, and on its predecessors, can be obtained from my colleague, Peter Haslam at peter.haslam@british-energy.co.uk.

[insert signature in blue]

June 2001

Biographies of Speakers

Peter Agar

Peter Agar has been Deputy Director General of the Confederation of British Industry (CBI) since 1994. He has particular responsibilities for policy development as well as representing the CBI to members, the Government and the media. He is a member of a



number of advisory committees to the UK Government and the European Commission.

He studied Economics at Cambridge University and York University and is a graduate of the Masters Programme of the London Business School.

Mr Agar has served at both HM Treasury and the Ministry of Overseas Development. In the private sector Mr Agar has worked for Coopers and Lybrand and OC&C Strategy Consultants

Dr Michael Grubb

Dr Grubb is an Associate Fellow of the Energy and Environmental Programme at the Royal Institute of International Affairs (Chatham House). He was previously Head of the Programme. Before joining the RIIA he worked at the Cavendish Laboratory and at Imperial College.

He graduated in Natural Sciences from Cambridge University and gained his PhD, on electricity systems and renewable energy, at the Cavendish in Cambridge.

Dr Grubb is well known for his work on the policy implications of climate change. His publications in this area include *The Kyoto Protocol: A Guide and Assessment*, a report on the options for international negotiations that helped to launch a global debate on the use of tradable emission quotas for climate control. In addition, he is an advisor to a number of international organisations and studies particularly concerning economic and policy aspects of climate change. He has been a lead author for the Intergovernmental Panel on Climate Change working group on international economics and equity issues.

Ian Coates

Mr Coates is Economic Advisor on Climate Change and Energy Efficiency at the Department of Environment, Transport and the Regions (DETR). He has particular responsibility for taking forward the design and implementation of carbon emissions trading in the UK. Other responsibilities include the provision of economic advice on the Climate Change Levy and negotiated agreements, and on the development of the UK's climate change programme. His previous experience has included work on regional economics, competitiveness and railway privatisation for the DETR.

Peter Vis

Mr Vis is the Head of Economic Analysis and Forward Planning at the European Commission's Climate Change Unit. He is one of the EC's negotiators at the conferences of the parties (COP). Formerly of HM Customs & Excise he has served in the Commission's Tax Department and its Environment Department where he had responsibility for energy taxation. .

The Pros and Cons of Tradable Permits

**Dr Michael Grubb, *Former Director,
Energy & Environment Programme,
Royal Institute of International Affairs***

Emissions trading is a simple concept involving the creation of financial incentives to reduce greenhouse gas outputs. Government sets a cap on carbon emissions both at national level and for individual companies over a certain size. This must be set *below* present emission levels. Permits are then be allocated to companies. Those that fall below their emission thresholds are allowed to trade (sell) the balance of their permits to companies struggling to stay within their targets. Cleaner companies benefit from extra revenue; polluters incur additional costs obtaining additional permits or are forced to cut back on emissions. It works. Sulphur trading in the United States has proved very effective, attaining emission targets at a lower than predicted cost to both private and public sectors.

Whose emissions are controlled? The main target is obviously carbon burnt by regulated industries - power stations, oil refineries. But carbon is pervasive in our economy. There is a need to push costs “upstream” in order to regulate actual usage by cars and households. Tradable permits can achieve this and could work at an inter-governmental level too if carbon emission limits are attributed to nations in line with the Kyoto agreements. This has yet to be agreed in the detail needed for it to work. And, with 180 governments involved, that won’t be easy.

Lord Marshall’s 1998 report for the Government on the role of economic instruments said that the only questions about permits were when they would be introduced and to what extent they would be used. Marshall was attracted to an “upstream” version. He argued that companies should be allowed to trade in their own right though he thought it unlikely that all businesses could be involved; smaller and service companies could be taxed instead. Whitehall was always likely to prefer a broad-based tax because revenues raised would go straight to the Treasury. A trading scheme would mean that companies with surplus permits – i.e. those with good emissions records - would keep the proceeds from their sale. The Treasury has failed to liase with other Whitehall departments and is placing too much emphasis on the Climate Change Levy (CCL) at the expense of other instruments.

The Government has been sent reeling by the strength of the reaction from energy-intensive industries to its CCL proposals. Thus we now have negotiated agreements to reduce emissions in return for discounts under the Levy. This is helpful in that it provides information for any future allocation of emissions. But it begs the questions of how we measure the Levy’s effectiveness and how targets are set. Is there an objective basis or is it purely about horse trading? What if firms can’t hit their targets? The CCL is a useful tool for small businesses which would be very hard to reach via a trading system. But trading can complement the CCL and the growing network of negotiated agreements. It is important to recognise that negotiated targets are easier to achieve if companies see that they will fit into a more flexible trading system.

The CCL provides no incentive to cut *carbon* emissions as opposed to energy consumption. Yet it is carbon, not energy use as such, that produces global warming. It is vital that any scheme concentrates on fossil fuel use by electricity generators. The greatest and lowest cost potential for reducing CO2 emissions over the next ten years is in the electricity sector. Even the revised CCL fails to do this.

Emissions trading offers flexibility, efficiency and transparency (trading would involve markets with open exchange and a public price). It would reveal the real cost of emissions reductions as opposed to this emerging from closed negotiations. Trading would also allow us to focus on carbon emissions– and do so more cheaply, as America’s sulphur trading scheme has confirmed. The marginal cost for companies would be much lower than would arise from taxation or a regulatory command approach and it would also be cheaper for government

to implement. Emissions trading offers the most direct and efficient incentive to emissions limitation whilst yielding only a small increase in electricity bills.

Of course, trading would create a *de facto* tax. New firms would, however, have a choice over whether to start up while established firms would have no option but to carry the costs involved. Disincentives for new entrants could be overcome by offering reductions on their CCL payments. They might obtain permits through auctions or by purchase from existing users. Auctions would be a way of ensuring that new companies are not excluded from the system. But there is no denying that allocating permits is a difficult question, one currently preoccupying various working parties

Much of the 1990's has been wasted on a taxes *versus* permits debate. Europeans in particular have had to be persuaded about the advantages of the latter. There is an ill-founded moral objections to trading which some see as a 'licence to pollute'. The widespread belief that "if it isn't hurting it isn't working" lies behind much of the reluctance to use permits. Such perceptions partly arise because discussions are led by environment rather than economics ministries. Suspicion on the Continent also arises in part because they were proposed by the US.

We are at one of those rare moments when an awful lot can change rather quickly. The truth is that both taxes and permits will be needed but no part of the package can go in place until the role of the others are recognised. We can't have serious discussions on the CCL until we know how it will fit with a trading system. We can't have sensible negotiated agreements unless companies know whether those agreements would be tradable in an open and effective way.

Business Views and Discussions with Government

*Peter Agar, Deputy Director CBI
and a member of the Steering Committee
of the Business Group on Permits*

The CBI has said consistently that climate change is a real phenomena and that Britain must meet its Kyoto obligations. The question is how we do so cost effectively. Sorting out permits domestically would give the British Government "some tools in its cupboard" when it comes to international negotiations.

The Business Group on Permits was established in June 1999 in response to Gordon Brown's announcement of the CCL in March. It is a joint initiative between CBI and ACBE (Advisory Committee on Business and the Environment). The Group, supported by 25 leading companies (including BP Amoco, Blue Circle, ICI Petrochemicals, Dupont, British Energy, National Power, Scottish Power, Nestle UK, Cadbury Schweppes, British Steel, Ford and Vauxhall) is working to see whether emissions trading could be made practical and more cost effective than a Levy. A permit scheme must be attractive to potential users; the market will only work if it's sufficiently broad and liquid. We want to set out a set of principles and a policy framework and test support. I'm pleased to say that the Government is being supportive. It has established a Technical Group to work with us and meeting with Ministers have already taken place.

Update. *The Business Group on Permits submitted its plans to the Government on 27th October 1999. These were designed to operate within the CCL structure (despite the objections to the Levy of the companies concerned). Companies would sign up to binding emissions limits and then trade with each other to ensure they were met in the most cost-effective way. The new negotiated agreement targets could serve as a basis for*

trading. Companies which had not signed agreements with the Government would be offered incentives in exchange for emissions reductions. The Group believed that more firms would adopt binding targets through its trading scheme than via separate deals with the DETR. The DETR announced on 21st December 1999 that companies within the negotiated agreements regime would be able to conduct emissions trading with each other though details remained to be worked out.

The UK Climate Change Programme was published in November 2000. It included a voluntary emissions trading scheme, open to all organisations operating in the UK, including those that have signed Climate Change Agreements in order to receive an 80% CCL discount. The trading scheme is intended to “complement and to inject flexibility into other related policy instruments”. The Government has estimated that a successful scheme could save at least 2 million tonnes of carbon (or 7.7 million tonnes of carbon dioxide) per annum by 2010.

The Government’s Perspective

**Ian Coates, *Economic Adviser on
Climate Change and Energy Efficiency,
DETR***

The Government firmly believes that emissions trading will form a crucial element in Britain’s long term strategy to reduce greenhouse gas emissions. Developing a proper response to climate change is a government priority. 1998 was the warmest year on record and seven of the ten warmest years occurred in the last decade. *Climate Change and its Impacts*, the latest report from the Hadley Centre makes clear what is at stake. Britain has accepted a binding 12.5% reduction target for greenhouse gas emissions by 2008-2012. We expect tougher targets to come. The IPCC has talked about reducing emissions of greenhouse gases by around 60% over the next century and that would still leave the concentration of greenhouse gasses at twice their pre-industrial levels. Michael Meacher has made clear that Kyoto is only the first step. Britain’s domestic goal is a 20% reduction in Co2 emissions. This sends a strong signal to the international community.

The Kyoto Conference approved arrangements for flexible international mechanisms to hit carbon emission reduction targets for the developed world between 2008-2012. International emissions trading is a little further away but a full scheme should be up and running by 2008. Marg Walstrom, the EU’s Environment Commissioner, has recently announced that there will be a discussion paper on trading. The British Government wants business involved in this in order to draw on its considerable expertise. Many other nations are looking at domestic trading schemes; they have potential to link up and build an international trading scheme from the bottom up.

The Government’s climate change programme is geared to attaining these targets. A draft programme has now published with a number of initiatives including transport and energy efficiency and the CCL is seen as a part of this. Is taxation a worthwhile response? Yes: Marshall pointed out that a tax would reach SMEs when emissions trading would not. The transaction cost of getting these companies involved is too high to be economic at this stage. And I should like to emphasis the role of negotiated agreements in helping prepare permit allocation.

Absolute carbon emission targets could be a restriction on growth. Energy efficiency is another, complementary option. But we agree with the CBI in wanting to involve both groups of companies - those with absolute carbon emission targets and those with energy efficiency targets - in a trading scheme. Marshall urged a pilot scheme to be developed in conjunction with business and that’s what we’ve been working on. We’ve given assurances that ministers will support the principals which have been developed and that there will be a continuing Government

commitment to take this work forward. We see a key role for emissions trading as a complement to other measures. It will enable cost effective emission reductions to be achieved. It will provide business with experience in trading which can be exploited in an international scheme and could establish the City as a global centre for emissions trading.

The more firms that are involved, the more rules you must have to safeguard the system. Government must ensure that reductions are genuine, particularly if we are offering firms reductions in Levy payments to firms which have made negotiated agreements. This suggests a role for some kind of trading authority.

Tradable Permits in an International Context

Peter Vis, Head of Economic Analysis and Forward Planning, Climate Change Unit, The European Commission

I am one of the EC's team at the various COP (Conferences of the Parties). There's an ebb and flow in policy making and I feel that emissions trading is on a flow. But a word of caution is in order. We are some years away from such schemes actually working. Taxes, on the other hand, are a familiar, traditional method which therefore requires far less time to implement.

And tradable emissions permits are complicated. I even have difficulty explaining what I do to my wife. We have a communications challenge ahead of us which we may need to address sooner rather than later. The European Commission is looking at the educational aspects and plans to publish a communication next year that will try to de-demonise emissions trading. You can feel the hostility towards the concept at committees of the European Parliament. I prefer the term "cap and trade" because the tradable permit concept it is about capping emissions on Kyoto lines.

The Commission is also watching national developments. Denmark has approved a limited emissions trading scheme for its electricity generating sector that will start next year. Britain is thinking proactively but there are laggards; some member states have done little on the matter.

The autumn 2000 Hague Conference of the Parties (COP-6) is where deadlines on regulating emission trading are meant to be agreed. The EC as a whole has agreed a target of an 8% reduction in CO2 emissions by 2008-2012. Each member state is responsible for meeting that overall target for the Community. So Britain cannot just sit back and hit its 12.5% reduction target if other states have, in aggregate, failed to attain an 8% cut. The UK is on course to meet the 12.5% mandatory target and the Government's 20% reduction is not an impossible dream. As in Germany, the dash for gas has helped.

But the EC as a whole has problems. The early 1990's saw an appreciable drop in emissions but since, the middle of the decade, the trend has reversed. We are going to get back roughly to where we started, at Rio in 1992. Without positive action the EU will be well over target. There's an awful big turnaround to achieve. Even the Commission's 1997 energy tax proposals would only have reduced CO2 emissions by between 0.6-1.6% by 2010 (and no supporters were found in the European Council for the actions proposed). It is in any event unrealistic to talk only about tax; though a fully functioning EC scheme is still some years away policy makers are coming to realise that tax alone will not be enough to influence behaviour. The Americans face an even more alarming situation and are also looking at trading as a means of getting them out of it.

The US sulphur trading programme has worked well. However, greenhouse gas emissions are not so easily monitored. Several trading projects are already in operation; the EU fishing quotas, Britain's milk quotas, the Montreal Protocol on Ozone Depleting Substances (which allows a small transferring of allowances between the parties). There is the "Echo Points System" for trans-Alpine heavy goods traffic. All are useful case studies but not really appropriate in type or scale to the problem we face. So next year's Commission Communication will explore options, provide pointers and be followed by a consultation exercise. This may seem like a re-run of what has already happened in the UK but will be a pioneering venture for many member states.

The Community believes there must be coherence between what it is doing and what the rest of the world is doing; the global response so far has been rather weak. Kyoto has put emissions trading on the EU agenda. International emissions trading will become part of the picture. Detailed rules are meant to be negotiated at this autumn's Hague Conference of the Parties with a view to starting an international scheme in 2008. America is hoping for an unrestricted trading scheme and is supported by Australia, New Zealand, Canada and Norway, its fellow members of the "Umbrella Group". Many developing countries are hostile to this approach and we need to get them on board. Their attitude has blocked private company involvement in emissions trading, China and India being particularly hostile. Trading is seen as a way for the industrialised world to buy itself out of the problem. Yet the Kyoto statement does make clear that emissions trading should be supplementary to domestic action. The European Commission believes that unrestricted trading will enable some countries to evade action on their domestic emissions. Current EU policy states that no more than 50% of Kyoto targets should be met by international emissions trading.

Update. *The European Commission's Green Paper of March 2000 proposed an EU-wide trading scheme which it envisages will begin in 2005. The Commission is consulting via its European Climate Change Programme working groups.*