Trading carbon

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The EU ETS has shown carbon trading can contribute to emission cuts but has yet to deliver investment in low-carbon technologies

The EU Emissions Trading Scheme (EU ETS) is a mandatory cap-and-trade scheme for carbon dioxide, which is central to the EU's climate change target of reducing emissions by 20% by 2020. Though proposals for schemes in the US and Australia have run into difficulties, there remains the real possibility of an eventual global cap-and-trade system. Such a system would in all likelihood play a central role in reducing global emissions up to 2050. The question is: would it be effective at delivering the real and stringent cuts needed to limit climate change to safe levels?

THE EU ETS

The EU ETS sets a decreasing cap for emissions from energy intensive sectors, and allocates or auctions emissions allowances (EUAs) which can be traded on the open market. It is currently in Phase II, which imposes reductions of 6.8% compared to 2005 emissions. Phase III will run from 2013 to 2020, when over half of allowances will be auctioned, and will set an overall reduction in emissions of 1.74% per year compared to Phase II levels. This will represent a 21% reduction by 2020 in emissions for all sectors covered compared to 2005 levels.

A SUCCESSFUL SCHEME AND A SUCCESSFUL MARKET

European companies are complying with the scheme's monitoring and reporting requirements. The emerging market in carbon has also functioned well despite a collapse in the price for Phase I allowances due to over-allocation. Point Carbon has predicted that in 2010 the EU ETS market will be trading around 5.4 billion tonnes of carbon dioxide equivalent with a value of €95 billion. This comprises about 64% of the global market.

REAL EMISSIONS REDUCTIONS?

Caps have been met so far but this does not necessarily translate into real cuts in emissions. For example, in Phase I there was a reduction of 4% compared to business-as-usual projections, but this was an actual increase in emissions of 38MtCO2. Carbon leakage is also an issue if companies move abroad to avoid caps, although free allocation of EUAs to at-risk sectors is being used to counteract this.

Furthermore, emitters can buy international credits (CERs) created through the Kyoto Protocol to meet up to 50% of their cap, although no country has allowed this proportion in Phase II and the UK has set a limit of 8%. The result is that actual emissions reductions within the EU are lower than those reported as part of the scheme, although in 2008 CERs were only 3.9% of those surrendered. The use of CERs has been criticised as it discourages cuts in emissions within the EU. In some cases their quality (in guaranteeing real and additional cuts in emissions) has also been questioned. This is an issue in the context of a global market: how to ensure that all allowances, wherever created, have equal carbon value?

HAS THE EU ETS DRIVEN INVESTMENT IN LOW-CARBON TECHNOLOGIES?

The answer is almost certainly not. The consensus is that an allowance price of at least €30 a tonne is needed to drive investment. The price reached €29 in 2008 but fell in the second half of 2008, mirroring oil prices, and is now around €15. The global fiscal crisis has also resulted in a reduction in emissions within the EU, leading to a surplus in the credits allocated for Phase II. These are bankable towards Phase III and will contribute to lower long-term carbon prices. As a result the Committee on Climate Change has revised down its 2020 forecast price from €56 to €22. This is much lower than the €100 a tonne Sir David King suggested is needed to decarbonise the economy.

A FLOOR PRICE FOR CARBON

The Labour Government's view was that the carbon price is irrelevant, as the important factor is achieving the emission reductions imposed by the caps. However, it did concede that the current price is too low to drive investment. Arguably, the need for a floor price would be removed if the cap on emissions was stringent enough to keep prices high and more stable, particularly if combined with a minimum price for auctioned allowances.

Other options to intervene in the market could involve either:

- A guaranteed floor price for carbon, although the issue is how it would be financed. This is the approach supported by the new Government, together with a move towards the full auctioning of permits.
- Combining the scheme with a carbon tax that would kick in if prices fell too low. An EU-wide carbon tax has not been a popular idea in the past but it has been mooted again recently.

FUTURE OUTLOOK

Before the fiscal crisis and the difficulties in the US over their proposed climate bill, it was generally thought that an increase in the global coverage of cap-and-trade, through the linking of proposed schemes, was only a matter of time. Have the global recession and a lack of confidence in the ability of financial markets to deliver desired outcomes, combined with the failure to reach agreement at Copenhagen, made this - in the short term at least – an unrealistic expectation?