CO2 market boost best route to hitting Kyoto targets

By Stephen Boucher and Estelle Cantillon

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THE EU cap-and-trade scheme for CO2 emissions will begin on 1 January 2005. Its success or failure will determine the EU's ability to meet its emissions target under the Kyoto treaty and the prospect of using markets for addressing global environmental problems. But more efforts should be devoted to ensuring the nascent CO2 market develops into a well-functioning one.

Under the scheme, approximately 15,000 installations across Europe will receive allowances to cover their emissions. They will be free to sell any surplus or buy any deficit from other plants. Trading will allow plants with the lowest cost to reduce their emissions to take on more of the reduction, relative to their high cost peers. This will reduce the cost for Europe to meet its Kyoto target.

The United States launched a similar experiment in the early 1990s to reduce its emissions of sulphur dioxide. The cost savings due to trading are estimated to be larger than 20%. Because it includes a greater number of participants and therefore more opportunities to trade, a successful EU CO2 market could save European industry even more.

Several factors are nonetheless compromising the development of a well-functioning CO2 market. Firstly, uncertainty about who will get allowances and how many. This creates undue uncertainty about future prices and discourages potential traders. By contrast, in the US scheme, the allocations were determined a full four years before the first compliance period. Since the allowances have not been given out, only futures can be traded. Markets for futures are more complex than spot markets. A spot transaction is a simple exchange of an asset against money. In a futures transaction, what is traded is a promise to deliver an allowance in the future. Credit risk is an issue – what if your counterpart defaults? – and contracts tend to be non-standard. In the US spot trading began as early as two-and-a-half years before the start of the scheme.

No centralized mechanism has been put in place to help with the initial price discovery, a process by which market participants learn about the supply and demand conditions. The US Environmental Protection Agency organized yearly auctions of withheld allowances as early as eighteen months prior to the first compliance period. The auctions, by aggregating market sentiment, contributed to the price discovery.

Due to these drawbacks, very few trades are taking place. Spreads are large and the market is very volatile. Surprisingly, attention in EU capitals remains solely focused on the number of allowances. Yet all stakeholders – the European Commission, national governments, the industry and the financial sector – should now make sure that the CO2 market works. A simple back-of-the-envelope calculation shows the gains from a well-functioning market are of the same order of magnitude as those resulting from haggling over allocations. But first several issues need to be addressed to make sure the market develops properly and in a timely fashion. At the regulatory level, plant level allocations must be decided and confirmed as soon as possible so that firms can start planning. Member states need to decide jointly and as soon as possible on the opportunity to use an EU-wide auction for a fraction of the allowances to contribute to the price discovery process and help 'jump-start' the market. The lesson from the US experience is that even a small fraction (2.8%) may be enough.

Finally, the legal status of allowances – commodity or financial asset – needs to be clarified and, ideally, coordinated, to foster the development of standardized futures contracts. In the meantime, the financial sector needs to boost its efforts to aggregate and publish information about prices and trades, and to educate market participants about the value of trading. Arguably, the scheme starts with a warm-up phase (2005-07) to give participants an opportunity to learn the rules of the game. There may be a tendency to be more lenient with rules during this time, which would be a mistake. There is path dependency on how markets develop. Given the potential contribution of a well-functioning market to lower the cost of compliance, making sure the best market form develops should become the priority.

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