EU Emissions Trading – Review and Prospects

Moffatt Associates latest European Energy Trends Survey reveals, emissions trading is a 'hot topic' in energy circles at the moment. The huge rise in the price per tonne of carbon since the start of the EU Emissions Trading Scheme (ETS) on 1 January 2005 has stimulated debate about how the new scheme is developing and how successful it has been so far, provoking a wide range of views amongst market participants.

Objectives and targets

Since the launch of the ETS, volumes have grown significantly, as has the number of traders. This year, a total of 150 million allowances have been traded in the scheme, with a financial value of 2.5 million. So far the main participants have been utilities, but banks and other financial institutions are also stepping up their involvement. About 8-9 million allowances are now being traded every week on the ETS, although daily volumes vary significantly.

The first phase of the ETS runs from 2005 to the end of 2007 and caps emissions at 2001 levels. The scheme covers between 12,000 and 16,000 factories and plants, which account for 40% of emissions in the EU. The ETS includes power generation, glass, ceramics, steel, paper and packaging, oil refining, some chemical plants and lime and cement, but in practice most of the burden falls on the power industry.

Our survey respondents were divided in their views about whether the CO_2 emission reduction targets for the EU are plausible or not. While some thought they were, others believed that they were not achievable. However, there was no disagreement about the impact that the ETS has had on power prices so far. Almost all of those surveyed agreed that it has pushed prices upwards, and that the scheme will continue to have a bullish effect up to 2008.

Price drivers

Much of this is predicated on how short the market is expected to be. Carbon market analysts Point Carbon have estimated that the market will be 11 million tonnes short in 2005, 67 million tonnes in 2006, and 95 million tonnes in 2007, and it is this perception that is helping to drive the price.

Another noticeable trend has been the relative volatility of prices since the start of the ETS. This has been caused by several factors, including the weather and the publication of the last of the Member ▶

State National Allocation Plans (NAPs). For example, at the start of the ETS in January 2005, heavy rainfall in northern Europe caused prices to fall to €6 a tonne of CO_2, after an initial price of €8-€9 per tonne.

Later in the year, drought conditions in Spain contributed towards prices of almost €30 a tonne at the beginning of July. As of early October, EU Emission Allowances (EUAs) were trading for about €23 a tonne of CO_2. Although it was expected that emissions trading would raise prices to encourage investment in low-carbon technologies, the scale of the increase is still surprising.

A number of factors have been pushing up EUA prices since the start of trading. Coal, gas and crude oil markets are now tied to the emissions market, and each influences the ETS, with the European power market most closely linked to price movements. As mentioned, the lack of rainfall and high temperatures in southern Europe this summer have also contributed towards the high prices. This upward trend is expected to continue, and if Spain's hydro power generation remains affected by low rainfall, and particularly if this coincides with a cold winter, carbon prices are likely to carry on rising. If oil prices also continue to rise, there could be a significant impact on the price of carbon. Intra-day trading has largely been driven by the differential in price between coal and gas prices, where it is possible to switch between the two for power generation.

Reducing CO_2 emissions

The increase in gas prices over the last year has provided food for thought for those contemplating building more

gas-fired power stations to comply with the ETS. Gas prices in the UK, for example, have been at record levels because of expected supply constraints in the coming winter, while long-term gas contracts in the rest of Europe tend to follow oil prices. In contrast coal is becoming cheaper because of falling freight rates. This means that the carbon price may have to double before switching becomes economically viable.

Another element that has also played a role in the most recent price surge include the Commission's hard-line position on several of the NAPs, in particular those of Poland, the Czech Republic and Italy. The cuts in emission allowances required by the Commission in the NAPs helped to push prices up in July.

In terms of lessons learned so far, most respondents believe that the power industry has been able to profit from the fact that it was given free allocations of allowances, and the consensus is that this free handout should not be repeated in the next phase of the scheme, post-2008. This was also the principal change that respondents wanted to see in the second stage of the ETS. Many of those questioned believed that the best way forward is to introduce an auction mechanism, something that the European Commission is actively considering.

Many power companies have benefited from high CO_2 prices, and this effect has been most noticeable in Germany, where there is a lively debate about to what extent the high CO_2 prices are affecting power prices for end consumers. The power industry has rejected claims by the former Schröder government that it is profiting from free allocations by passing on the higher costs to consumers, but with the current political uncertainty, this dispute is not expected to be resolved in the near future.

Future EU policy

On the whole, our panel of experts believe that emissions trading is the best policy for reducing Europe's CO_2 emissions, although some feel that this should be just one of a range of initiatives, including for example taxation.

There was some disagreement about whether emissions trading will stimulate investment in more efficient forms of power generation, although there was a view that the ETS is already having the desired effect of persuading power producers to choose lower carbon solutions such as gas and renewables, especially for new plants. With the price for fuel switching from coal to gas around €21-€26 per tonne of carbon, current prices do give some incentive to power companies to switch from coal to gas, although this also depends on technology and power plant efficiencies.

There was general agreement that power producers are now having to consider CO_2 emissions when deciding on future investment. However, it is often more difficult for existing power stations to comply with the ETS, since the investment required to achieve the targets is very high.

The first phase of the scheme runs until 31 December 2007. What will happen in the second phase of the scheme, which will last from 1 January 2008-31 December 2012, is currently under discussion. A review of the existing ETS is underway and the results of the review are scheduled to be published towards the end of June 2006.

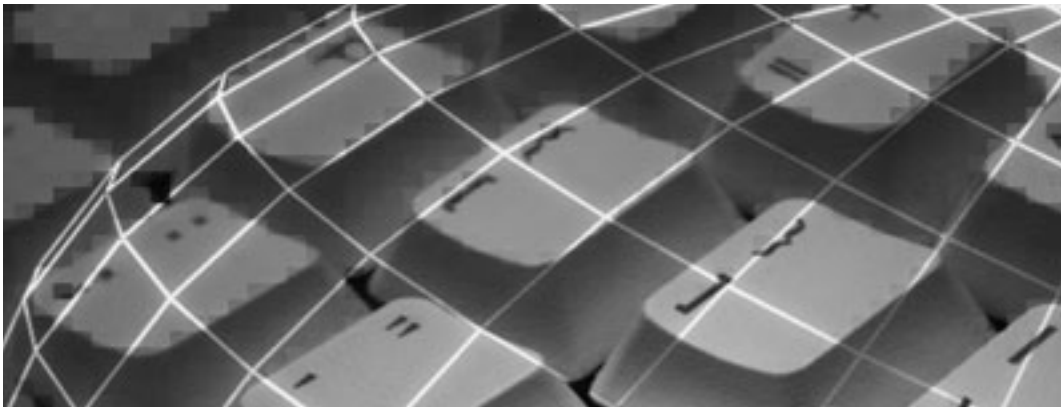
The Commission is looking at how the scheme has functioned in practice and whether changes should be made, including the extension of the scheme to other sectors and gases, beyond CO_2. Brussels has recently said that aviation should be included in the scheme, if possible in the second phase of the ETS. However, the relatively short timescale for the review means that drastic changes to the ETS are not expected, and most likely the main focus of the review will be the set up for the post-2012 phase.

The Emissions Trading Directive (2003/87/EC) allows for other greenhouse gases and more sectors to be included in the next phase of the scheme, and the present consultation gives member states the right to determine unilaterally what they wish to do in this area. There are concerns that this could add to the current non-homogeneity of the ETS across Europe. Such a development could be particularly detrimental for new entrants, who need certainty for investment decisions. The treatment in the second phase of the scheme of allowances that EU member states have put aside for new entrants will influence prices in the short and medium-term. However, few countries are expected to exercise their right to 'opt in' to different sectors over the next few years.

Different national interpretations of the definition of a plant have also caused some problems in the first phase, and will need to be resolved. Political considerations will also be a key price driver in the next few years. The new NAPs for phase 2 of the ETS have to be submitted to the Commission by the end of June 2006, and member states are now drawing up their new plans.

Interested parties are keen to ensure that their views are taken into account. For example UK power producers believe that their sector has had to shoulder most of the burden for cutting CO_2 emissions in the first phase, and is looking for other sectors to make an 'equitable contribution' towards emission reduction targets in the next stage of the scheme. The outcome of the new NAPs will influence company expectations on how the ETS will develop over the next few years.

After 2012 there may be further, more significant changes. Brussels is



considering the inclusion of road transport and shipping, as well as sulphur dioxide and nitrogen oxide emissions.

Market liquidity

Those questioned in our survey were divided over how important carbon trading on exchanges would be in the medium-term, compared with the OTC market. Emissions trading in spot or futures contracts in Europe is already available through Powernext in France, Nord Pool in Oslo, the European Energy Exchange in Leipzig, the European Climate Exchange in Amsterdam, the Climex Alliance across Europe and markets in Austria and Spain, and opportunities for trading are expected to grow.

By offering clearing, exchanges can in principle make it easier to trade for a growing number of market participants whose credit status and arrangements may vary widely. At present, however, brokered deals still remain more popular, with only 16% of total market share going through the exchanges in September, compared to over 30% in July and August.

New companies and new players are entering the market, and liquidity is improving. Financial institutions such as investment banks are increasingly interested in emissions trading and are offering services to package risks for buyers and seller. Several have begun trading in recent months. One key question is whether industrial players will enter the market, since in general these are less accustomed to trading than energy companies and are also more risk-averse.

Summary

In conclusion, our panel seem agreed that the ETS has so far worked relatively well, but that the scheme has had the effect of pushing up power prices, possibly more than had been expected. The overall consensus seems to be that the EU ETS will continue to keep prices high, leading to better margins and larger incentives to reduce emissions, and that liquidity will continue to improve. Even though it is still early days in the life of the scheme, emissions trading is widely regarded as a good way of helping to achieve the Kyoto targets.

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