
Emissions trading

Carbon chaos

THE EUROPEAN Union's Emissions Trading Scheme (EU ETS) was launched in 2005. This prototype scheme was designed to help the EU to comply with the Kyoto Protocol, which is due to be activated in 2008. It places a limit on the amount of carbon dioxide (CO₂) installations can emit and obliges them to invest in greener technology, cut output, or buy allowances to cope with any excess.

Under the EU ETS member states capped the greenhouse-gas emissions of qualifying installations within its borders. The regulator in each country provided allowances, the right to emit 1 tonne of CO₂ equivalent (CO₂e), to each installation to cover around 95% of its forecast emissions for free.

There was considerable variation from country to country on how these allocations were made. To meet the other 5% installations could: cut production; invest in greener technology; or buy 5% of their total allowance needs from the market.

Installations were required to have their 2005 emissions verified by 31 March and to pay sufficient allowances to their domestic regulator by 30 April. An EU-wide report was due to be published on 15 May showing the compliance position of all 10,000 installations covered by the ETS. But things went wrong:

- The compliance data was leaked in a disorderly manner from the end of April;
- Although the allocation of only 95% of the allowances was intended to produce a shortage of allowances, compliance data showed the market had a surplus of allowances to sell – it was long instead of short; and
- A number of countries, notably Poland and Italy – two of the four biggest emitters in the EU after Germany and the UK – missed the deadline for submitting data, so the total market position is still unclear.

Prices during this turbulent period fell from Euro30/t (\$38/t) CO₂e to Euro8/t CO₂e before recovering and settling into an uneasy range of Euro15-20/t CO₂e.

National Allocation Plans (NAPs) had been overly generous and the market had a surplus of 60m-65m tonnes in 2005. However, the final position is still not fully reported. The European Commission must now decide how to cope with the surplus. NAPs for Phase 2 (2008-12) are due to be submitted by 30 June, but the deadline is unlikely to be met. Regulators in each country could pare back allowance allocations in Phase 2.

The difficulty will be in distinguishing between installations that exaggerated emissions forecasts in Phase 1 to obtain extra free allowances and those that forecast correctly, but then invested in new technology to cut their emissions per unit of output. The latter category cannot be penalised with a lower free allocation in Phase

2, or it will discourage further green investment.

The puzzle is why the emissions market continues to trade at over Euro15/t CO₂e if there is a surplus. The reported compliance position may be wrong, but it is most likely to be wrong on detail, not direction. The continued relative price strength could be attributable to the surplus of allowances being held by installations that have no route to market, either because they have no trading expertise, or they have insufficient credit capacity to buy a seat at the trading table.

Says Tim Atkinson, an analyst at the Natsource energy brokerage: "Industrial installations that hold the surplus are simply adopting a low risk strategy where they are holding onto surpluses in the event that production [and emissions] increases this year."

A key driver of the emissions price is the behaviour of European power producers. Carbon and power prices show a high correlation. Before generating power, producers compare how much they will make from generation (determined largely by the difference in power prices and fuel prices) with how much they would make by not producing, but selling their free emissions allowances.

At the margin – when there are insufficient free allowances available to the generating installation – the calculation becomes whether a profit can still be made from generating power once the cost of buying allowances is taken into account. Power producers generally regard free allowances as an asset and will look at the marginal economics of generation.

Toby Costin, a coal trader at Louis Dreyfus, says: "The more the emissions price rises the more power prices rise, so there is no need to look at clean carbon technology."

Some power producers favour high emissions prices because they can pass them on to consumers. The higher the power prices, the higher the profit margin on the low-emitting fuel sources such as nuclear, hydropower and gas. Ironically, coal-fired plants have seen the biggest profit gains, as coal prices have remained low compared with gas.

Regulators are considering auctioning allowances to power producers rather than giving a free allocation in Phase 2. But if generators want high prices they can buy in the free market for allowances, which bids up carbon and power prices. It does nothing to encourage the take up of emissions-reduction technologies. One solution is to charge generators for all of the costs of producing unwanted gases. This is not a new idea. The US – much criticised for not signing the Kyoto Protocol – has been doing it for years. □