

Global Challenges at the Intersection of Trade, Energy and the Environment

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Are Current Trade Rules Sufficient for Regulating Trade in Emissions Permits?¹

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² Liz Bossley, CEO, Consilience Energy Advisory Group Ltd



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Summary

1. The international market in emissions permits is a key component of the climate change mitigation strategy of the Kyoto Protocol;
2. The Kyoto Protocol and the national emissions trading schemes that have developed in response to it do not dictate how the market in permits should trade or the form that emissions contracts should take;
3. The contracts and derivative instruments in emissions permits have evolved very rapidly and require close monitoring to ensure that abuses, such as the criminal evasion of VAT, witnessed in the European market are picked up quickly and dealt with by the appropriate regulatory or legal authorities;
4. Emissions regulators are themselves key actors in the emissions market. They determine the supply and demand fundamentals of the market and are direct participants through government auctioning of allowances.
5. Emissions regulatory authorities should be subject to the same oversight by financial regulators and subject to the same high standards of market behaviour as the private sector.

The Role of Trade in Cap –and-Trade

In order to answer the question posed by this paper, first let us remind ourselves of the mechanics of the cap-and-trade concept that underpins the Kyoto Protocol from which the bulk of the current trade in emissions permits flows.

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- A Central Authority, in the case of the Kyoto Protocol this is the body of the UN Framework Convention on Climate Change ('UNFCCC'), sets a limit on the permitted level of greenhouse gas emissions ('cap').
 - The Central Authority either sets this cap or allocates permits ('allowances') that bestow the right to emit greenhouse gases ('GHGs') below current or expected emissions levels.
 - Allowances are either given for free or sold by auction.
 - The emitter, faced with a shortage of allowances, can then:
 - Cut its production;
 - Invest in cleaner technology:
 - At home
 - Overseas⁴; or
 - Buy in the market sufficient allowances to cover its shortfall of allowances compared with its actual emissions level.

The Kyoto Protocol relies on the ability of markets to function efficiently to allow countries and companies to trade allowances and establish the international price of carbon. A clear carbon allowance price will allow emitters to choose which of the three options mentioned above— cut, invest or buy- is the most economically efficient for them.

The body of the UNFCCC can congratulate itself that, regardless of what else may have gone right or gone wrong in its climate change mitigation effort, we now have a functioning carbon market that is beginning to send a price signal to investors. This allows investor to draw up its internal carbon abatement curve and find the point at which different carbon reducing investments are cheaper than simply buying allowances in the market to comply with legislation.

So a high international allowance price is essential to the success of the Kyoto Protocol's objective of reducing GHGs by providing a stimulus to greater investment in clean technology.

⁴ The overseas investment option refers to the Kyoto 'project' mechanisms: Joint Implementation ('JI') and the Clean Development Mechanism ('CDM')



Unfortunately the price signal the market is currently transmitting is too low to incentivise investment in many new low carbon technologies, such as Carbon Capture and Storage. But that is a consequence of caps being set too high; it is not the fault of the market. In an efficient market, when there is an over-supply of any commodity its price falls. So the carbon market is operating efficiently. If the Copenhagen conference in December produces low carbon caps for a wider range of countries then there is a rapidly maturing market ready and able to deliver a price signal that will galvanise investment in carbon-reducing technologies.

The Market in Emissions Allowances or Permits

The UNFCCC did *not* legislate for how carbon allowances should trade. The Kyoto Protocol made no provision for the establishment of regulated exchanges to trade carbon allowances. It did not suggest a contractual framework for the emissions trade. It placed no ceilings or floors on the price at which allowances may trade. Most traders would agree that this was a wise decision. Regulators are not good at markets. The people best able to design contracts and trading instruments are the parties who have a vested interest in doing so: the companies who have to comply with the legislation and will either have to buy or sell the allowances.

The Kyoto Protocol created this new commodity called the emissions allowance. Each allowance bestows the right to emit 1 tonne of CO₂ equivalent. As anticipated the financial services industry took up the challenge defined by their trading behaviour a suite of contractual and financial instruments that allow companies to buy and sell allowances to comply with legislation, to manage their emissions price risk and to underwrite the economics of carbon-reducing investments. Within a few short years we have seen the development of:

- Physical contracts;
- Forward contracts;
- Futures and other exchange traded contracts; and,
- Derivatives (Swaps and Options).



The Role of Regulators in Cap-and-Trade

In any market the financial regulatory authorities have a significant role to play, not in determining how the market trades, but in preventing market abuse such as price-fixing or the exercise of monopoly power or criminal practices such as money-laundering. The GHG emissions market is no different. Already we have seen apparent criminal behaviour involving a VAT scam in the European emissions market, which has resulted in arrests and prosecutions. This market must be subject to the same scrutiny as any other commodity market.

But the biggest potential abusers of the emissions market are regulators themselves i.e. the government bodies who determine and administer the creation and allocation of emissions allowances.

The emissions market is arguably a market in regulatory risk. No-one would be trading emissions allowances if there were not regulations and legislation obliging countries and companies to reduce their greenhouse gas emissions. The supply and demand fundamentals of this market are determined by emissions regulators and the caps and deadlines that they set. They have a responsibility to manage the release of price sensitive information as does the private sector.

Europe learned this lesson the hard way when data concerning the over-supply of allowances in the first phase of the European emissions trading scheme ('EU ETS') was leaked in May 2006. There were big winners and losers in the market as the news spread patchily to market participants. There is no suggestion that the leaks were anything other than well-intentioned clumsiness, but the impact was the same as deliberate abuse. Had this occurred in the private sector financial regulatory authorities would doubtless have investigated thoroughly.



Government Auctions

It was noted above that the Kyoto Protocol did not attempt to design the market in which carbon allowances will trade. As new national emissions trading schemes emerge around the world in most cases emissions regulatory authorities are leaving it up to market participants to decide for themselves how and where to trade and what contractual framework they will use.

The notable exception to this rule is government auctioning of allowances. This occurs when an emissions regulator is required to place a large allocation of allowances into the hands of the private sector and uses a public auctioning mechanism to achieve the necessary transfer. This makes the emissions regulator itself a significant market actor, who in an ideal world would be subject to oversight by a financial regulator.

The concept of an auction typically places limits on when and where the sale takes place, the quantity sold during the auction process and may also place limits on the type or number of buyers entitled to bid. There is also an implicit requirement on behalf of the seller to announce in advance the timetable for the sale and quantity to be sold. Commercial firms would rarely choose to put themselves in that position.

There is nothing intrinsically wrong with government auctioning of emissions allowances, but governments generally are not best placed to assess the credit status of a wide range of potential bidders. This drives them to pre-qualify a limited number of financially secure bidders and rely on them to trade on the allowances they buy at auction into the secondary market. In effect regulators erect a barrier to a large number of buyers who might otherwise wish to participate in the auction. To ensure that the 'price mark up' charged by pre-qualified intermediaries remains competitive, the government auctioning body should be put to proof that it made every effort to qualify as many bidders as possible.

European member states announce in advance how many allowances they will be selling and on what day. They even coordinate auction dates to ensure that they are not



all selling on the same day. There is obviously no malicious intent to manipulate prices in this coordination, but if industrial firms behaved in the same way they would be investigated for price collusion.

Conclusion

In response to the question 'are current trade rules sufficient for regulating trade in emissions permits?' the answer is almost certainly no.

This market has evolved quickly, but it is still in its infancy. It is a market in an 'artificial' commodity created by legislation. While the legislation is still being written market regulators must be vigilant to spot imperfections that may lead to abuse.

Because governments are themselves a key component of the market, both in determining the supply and demand fundamentals and as direct participants through the auctioning process, financial regulators would be well advised to test the activities of the emissions regulators against the high standards required of the private sector.

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