

# Carbon Trading: Emission Impossible

December 6, 2009

*Will CO2 trading remain as the chief means of managing emissions? Brave Partners believes that without the greater involvement of financial investors (as opposed to compliance investors) this market will drift and remain inefficient. But getting financial investors further embedded is potentially a mission impossible.*

## If the cap fits

Cap-and-trade was proposed in 1970 in the USA as the most cost efficient method of reducing carbon emissions.

It was again put forward as a way of reducing emissions prior to the 1997 adoption of the Kyoto protocol. The world's largest emissions trading scheme, the EU Emissions Trading Scheme (EU-ETS), subsequently commenced trading on 1 January 2005. But in spite of smaller subsequent developments elsewhere in the globe, the EU-ETS is still the only significant CO2 cap-and-trade scheme in the world.

This is partly because there has been – and continues to be – debate as to whether CO2 trading should become the main mechanism to bring down emissions or whether a non-market based solution would be better. It is also because CO<sub>2</sub> trading hasn't been as flawless a solution as may have been envisaged at the outset.

According to the Financial Times last week (2 December 2009), “carbon trading has the best chance of becoming a global mechanism for tackling climate change.” Further (3 December 2009) “an emissions trading system is the best incentive for companies to reduce carbon outputs.”

## Plain sailing

Whether these statements are true in theory is academic. But it's very clear that the course of CO2 trading thus far hasn't all been plain sailing and that it's unlikely to become so at least in the immediate future.

Whilst in general the EU-ETS is considered to have been well set up and to have functioned in an orderly manner, in Phase I of the scheme (2005-2008) there were problems.

*This is partly because there has been – and continues to be – debate as to whether CO2 trading should become the main mechanism to bring down emissions or whether a non-market based solution would be better. It is also because CO<sub>2</sub> trading hasn't been as flawless a solution as may have been envisaged at the outset.*

In April 2006 the market experienced a significant price drop, from a high of €29.3 on the 20 April, to a low of €13.3 on the 28 of April. This was due to the disorderly release of important information about National Allocation Plans<sup>1</sup>. Following the price drop in April, the market price continued to drop through the Phase, partly because it's not possible to roll over credits generated in one Phase to another Phase. Accordingly the price fell almost to zero.

Phase I was criticised for failing to reduce emissions levels. With allowances too generous and the cost of emitting in excess of allowances so low, there was little incentive for robust changes in corporate practice.

However emissions quotas have been materially reduced by the European Commission in Phase II (2008-2012) – in some cases to more than 10% below what national governments requested. Phase II has set a final EU-wide CO2 emissions cap of just over 2bn tonnes, down from 2.3bn, and at the outset was generally considered to have been set up to effect a meaningful reduction in EU-wide emissions.

### But then came the recession

The recession, brought on by the credit crunch, has caused emissions to come down anyway.

Unsurprisingly New Energy Finance, provider of data in this sphere, has noted that the carbon market shrank in Q3. Also that the global voluntary market is to decline more than 60% this year in the face of economic slow down. Emitters who might usually need to buy extra rights to emit more may no longer need them if their CO2 output is lower, reflecting their lower output in general. Indeed pre Copenhagen-related effects there had been more supply than demand for "rights" which had caused the price to trend lower.

*Unsurprisingly New Energy Finance, provider of data in this sphere, has noted that the carbon market shrank in Q3. Also that the global voluntary market is to decline more than 60% this year in the face of economic slow down. Emitters who might usually need to buy extra rights to emit more may no longer need them if their CO2 output is lower, reflecting their lower output in general. Indeed pre Copenhagen-related effects there had been more supply than demand for "rights" which had caused the price to trend lower.*

In short, we've seen already that CO2 trading has been hampered by a range of teething problems including political and economic issues. And, critically, no-one knows what's going to happen next.

### Financial investors

In any event, BRAVE Partners believes that this market will only achieve long term success if the participation of financial investors can be increased. And this is a far from straightforward challenge.

The main players in the markets are currently "compliance" investors (companies that are required to meet a CO2 reduction target, as imposed by the Kyoto Protocol). But there's a second category of investors, non-compliance investors (or financial investors) whose objective is to achieve return on

<sup>1</sup> National Allocation Plans (NAPs): the targets set by governments and agreed by the European Commission.

*But there are two important issues to solve in order to affect this development:*

1. *There's never going to be an effective risk management formula that really works in the context of a market that's driven to such an extent by political decisions versus market forces.*
2. *CO2 is not a commodity despite being widely referred to as such. A commodity is a FINITE resource. The problem with CO2 is that there's too much of it and no market has previously existed to manage a "commodity" in excess supply. Quite on the contrary.*

*The only way CO2 related units of trade will achieve proper commodity status is if there's the GLOBAL political will to take us there. And we still seem to be a long way off this. Moreover there's been no precedent for making something artificially scarce, and it's an incredibly difficult end goal to achieve on a global scale.*

investment. Hence the logic of investment here mirrors other financial markets: i.e. buy when the prices are low – in relative terms - and sell when the prices are high – in relative terms (both, critically, in the context of a proper functioning market).

### Sustainable trading

Without the full and regular participation of this second category of (financial) investor, the market based on CO2 will, arguably, not evolve to any degree in terms of volumes traded or in terms of broadening the products available to buy and sell. And this, in turn, makes the market more fragile.

To be rude for a while – the carbon markets (like all successful markets) – needs speculators. Speculators provide the depth and liquidity that allows end users keen pricing and ready access.

If financial investors were to become more fully embedded, it would become harder to unravel what was initially conceived for compliance players. So this, in turn, would make the compliance based format more robust.

But there are two important issues to solve in order to affect this development:

1. **There's never going to be an effective risk management formula that really works in the context of a market that's driven to such an extent by political decisions versus market forces.**
2. **CO2 is not a commodity despite being widely referred to as such.** A commodity is a FINITE resource. The problem with CO2 is that there's too much of it and no market has previously existed to manage a "commodity" in excess supply. Quite on the contrary.

**The only way CO2 related units of trade will achieve proper commodity status is if there's the GLOBAL political will to take us there.** And we still seem to be a long way off this. Moreover there's been no precedent for making something artificially scarce, and it's an incredibly difficult end goal to achieve on a global scale.

If – and it's a big if - these two issues can be solved then financial investors will take a greater interest, making the market more solid. Frustratingly for financial investors who might want to become

involved, CO2 doesn't correlate with most financial products and is hence a potentially very useful tool.

According to the Securities and Investment Institute<sup>2</sup>: “carbon shows little short- or medium-term correlation with the broader markets linked to corporate debt such as rates, equities and FX.” This view is mirrored by that of Daskalakis/Psychoyios/Markellos (2006) who found that CO2 returns are not correlated to other financial assets or interest rates.<sup>3</sup>

But solving our two key issues apart, some better PR is probably needed to initiate the process of getting more mainstream financial investors to even start thinking about this market. And, if you read BRAVE Partners last week on Copenhagen, the same message on clarity of language persists: The debate around solving CO2 emissions should never have been allowed to become so impenetrable for people who might actually be able to provide some answers.

Solving CO2 trading could be a long, drawn out process. In the meanwhile Brave Partners’ outlook is that the CO2 market will – frustratingly -drift and remain inefficient.

### **BRAVE Partners services**

BRAVE Partners monitors the major developing factors that impact the carbon credit markets. BRAVE Partners can assist companies in assessing the future developments in carbon markets.

### **Interaction**

If you enjoyed this commentary and would like to receive a weekly update by E-Mail, then please contact BRAVE Partners on [commentary@bravepartners.com](mailto:commentary@bravepartners.com)

If you would like to comment on the content of this piece, then please send an E-Mail to [discussions@bravepartners.com](mailto:discussions@bravepartners.com)

- *BRAVE Partners is an advocate for deep, liquid, carbon markets.*
- *BRAVE Partners can advise companies on their carbon credit strategy.*

[enquiries@bravepartners.com](mailto:enquiries@bravepartners.com)

[www.bravepartners.com](http://www.bravepartners.com)

<sup>2</sup> Longen, C. (2008) “Carbon: A New Asset Class” Securities and Investment Review

<sup>3</sup> Daskalakis/Psychoyios/Markellos (2006) “Modeling CO2 Emission Allowance Prices and Derivatives: Evidence from the EEX”, Working Paper, Athens University of Economics and Business