

CDM: The Classic Market Bubble?

Briefing Note - May 2006

- *Are you investing in CDM projects?*
- *Who will buy your credits after 2008?*
- *Do you know the supply & demand in the carbon markets?*
- *Are you hedging your bets?*

“Cycle characterised by rapid expansion...”?

Point Carbon (2006), in their recent analysis of the carbon market, estimated that 431 million Kyoto project certificates (CERs, ERUs) were traded in 2005, of which 28 million were JI credits. In comparison, 76.9 million certificates (9 million from JI projects) were estimated to have traded in 2004. This represents a fivefold increase in traded volumes in one year.

The United Nations Framework Convention on Climate Change (UNFCCC) secretariat estimate that approximately 930,000,000 CERs could be produced by the 740 projects in the existing CDM project pipeline. More projects are being added to the pipeline each month.

“Often more than warranted by the market fundamentals”?

According to the European Commission a number of Member States have a gap to close between their recorded 2003 emissions and the allowable net emissions under the Kyoto target. The total gap for these Member States is 296.5 million tonnes per year CO₂ equivalent excluding land use & forestry and about 180 million tonnes per year including forestry. This figure therefore represents the excess emissions, which these Member States still need to offset by using the instruments at their disposal to secure compliance with the Kyoto targets. The EU Emissions Trading Scheme captures approximately 45% of EU greenhouse gas emissions, suggesting that it should contribute at least a volume equivalent to 45% of the reductions required in the second phase of the scheme, or 135 million tonnes carbon dioxide.

The United Nations Framework Convention on Climate Change (UNFCCC) emission inventory data records the total emissions from Annex 1 Parties to the Convention. In 1990, the total emissions from Parties bound by the Kyoto Protocol were 11,337.1MtCO₂e. In 2003, the total emissions from

BUBBLE:

Definition (investopedia)

Pronounced: (būb'əl)

noun

1. An economic cycle characterized by rapid expansion followed by a contraction.

2. A surge in prices, often more than warranted by the fundamentals and usually in a particular sector, followed by a drastic drop in prices as a massive sell-off occurs.



Environment
Economics &
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E3 International was founded in response to the emergence of sustainability as a mainstream issue for business and a shift in the nature of environmental regulation – from traditional command and control measures to more subtle, more complex and more sophisticated approaches, often characterised by market based instruments and mechanisms.

Over the years it has grown into a niche advisory, solutions and services group working with major corporations in Australasia and Europe to support their responses to these developments – in particular to manage risks and capture opportunities.

E3 has a presence in Australia and Europe, with professional staff located in Brisbane, Sydney, France and UK.

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these same Parties were 9,111.69MtCO_{2e}. The Kyoto Protocol target for these Parties totals 10,788.59MtCO_{2e}.

In other words, the Kyoto market is currently (2003 data) over-allocated by 1.6 billion assigned amount units (AAUs), before any additional CDM credits have been created.

The extent to which this over-allocation will exist in 2008-2012 depends on:

- 1) The usual factors driving emissions growth or reduction: the balance between economic growth and the reduction in carbon intensity in the Kyoto-liable Parties
- 2) The extent to which liable Parties choose to trade, in particular the participation rates of Russia, Ukraine and Canada.

Much has been made of whether Russia will participate heavily in the carbon market. In practice, based on 2003 emissions, the absence of Russian assigned amount units (AAUs) would still leave an over-allocation in the Kyoto market of over 135 million tonnes. In addition, the signals from Canada suggest that large-scale purchases of Kyoto instruments are unlikely, at least under the present government, which would reduce demand by a further 280 million tonnes CO_{2e}. This leaves an over-allocation of over 400 million tonnes CO_{2e} before any CDM project credits are considered. The other major potential provider of assigned amount units (AAUs) is Ukraine. On 2003 emissions data, it has just over 450 million Kyoto allowances available.

“A surge in prices...followed by a drastic drop”

The situation in the Kyoto market appears analogous to the EU Emissions Trading Scheme in 2005. Liable Parties have been over-allocated in aggregate against their historical emissions. The extent to which there is a short in the market – which drives price and thus investment and efficiency gains in the medium term – depends on the economic growth and changes in carbon intensity in liable Parties in the interim between setting the allocation and the target dates. If, as appears the case in the EU Emissions Trading Scheme, economic performance of the liable sectors has not compensated for the initial over-allocation, so final emissions are much lower than original allocations, then prices will remain low.

“In other words, in 2003, the Kyoto market is over-allocated by over 1.6 billion assigned amount units (AAUs), before any additional CDM credits are created.”

Post Kyoto

A key element missing from this discussion concerns “what happens next?” In a world that is increasingly carbon constrained, CDM projects will continue to have value in whatever scheme replaces/follows the Kyoto Protocol. The financial value of these projects in such a scheme remains unknown.

Caveats

This briefing note is not intended as investment advice. Nothing in this briefing note should be construed as an offer, a contract or any other form of legally binding commitment between E3 and another party.

E3 develops models of supply and demand in the Kyoto and EU carbon markets, based on published emissions data and projections based on reasonable assessments of economic growth and changes in carbon intensity by country and by sector. For more details, contact Andy Kerr or Craig Windram.