EMISSIONS TRADING – MARKET DYNAMICS Mr Tim Atkinson, Head of UK Emissions Market, Natsource Tullett Europe (London)

Growing world market

In the last two years, the global carbon market doubled in volume over the previous years, according to Natsource analysis for the World Bank (See Figure 1). Government and multilateral institutional buyers led the market, with more than half of the purchases made by the Dutch government and the World Bank Prototype Carbon Fund. This year could bring a different picture, as companies get more clarity about the EU Emissions Trading Scheme (EU ETS) and as more governments allocate funds for purchasing programmes.

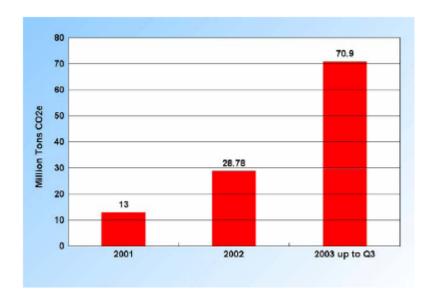


Figure 1: Global Carbon Market Size (Source: Natsource)

In the global carbon markets of early 2004, the EU's member states and Accession countries are the centre of attention. Corporate representatives and government officials are working to complete consultations, and national allocation plans (NAPs) were due to be delivered to the European Commission by 31 March 2004 (Only 5 Member States achieved this deadline – Germany, Denmark, Finland, Ireland and the Netherlands).

Simultaneously, policymakers are negotiating a 'Linking Directive' containing rules for use of certified emission reductions (CERs) from the Clean Development Mechanism (CDM) and Emission Reduction Units (ERUs) from Joint Implementation (JI) schemes from installations not covered by the ETS [07 April 2004 - The European Council has just agreed the final text of this directive].

Russia continues to play a defining role in this market, clouding it with uncertainty but the resolve of EU policymakers shows few signs of wavering. The EU Emissions Trading Scheme (ETS) is now European law. Also, Denmark, Austria, Italy, Sweden, Finland and Germany appear likely to ramp up governmental purchasing of CDM and JI credits in 2004-05. Depending on the outcome of the Linking Directive, the private sector and government could also be competing for good CDM and JI projects by year's end.

Understanding financial risks

The reality in European company boardrooms is sinking in: policy is becoming certain, a serious trading market is just around the corner and financial risks must now be managed actively. Initially, senior management needs to understand carbon-related financial risks. Most firms do not need to know their allocation with pinpoint accuracy in order to assess the range of risks and begin to develop a strategy prior to NAP publication.

With today's investor expectations of companies' engagement in addressing key financial risks, it makes sense to develop a serious risk management strategy in parallel with a lobbying plan - because it can be refined over time as the specifics on allocations of allowances becomes clearer. Given the intensity of corporate advocacy and government consultations on NAPs, no EU firm wants to wake up in August – having received the Commission's approval of initial allocations – but having no clue about what to do next. Not that lobbying isn't important – but given the short deadlines involved in this case, most firms know that prudent risk management involves parallel efforts in lobbying, strategy and engagement in the trading market. Consequently, a role change will emerge in corporations, as policy analysis and advocacy with governments give way to strategy development, implementation, risk management and trading.

The basic elements for assessing the financial risk of emissions caps under the EU ETS revolve around answers to four primary questions:

- What is the potential range of emissions shortfall under a couple of reasonable allocation scenarios during the two phases?
- How much can be done internally at various price points in order to meet the targets on time – and how much can be expected to be done through trading?
- By applying reasonable EU carbon market price scenarios, what is the likely combined financial impact of necessary internal actions and external purchases?
- Does this financial impact rise to the level requiring an active risk management strategy to be formulated?

Once the answers to these questions are known, a strategy can be developed that responds to the level of risk a firm is facing.

For many companies, there are ample reduction opportunities available in the near term – but for the latter part of the decade, the caps look tighter and financial impacts appear greater. For other firms, given their projected economic growth and related emission increases, almost any allocation scenario will trigger a serious risk management review and strategy formation at an early stage.

It pays to be prepared

Virtually every emissions trading market experience teaches that early preparedness and engagement pays off financially For example, in the UK emissions trading scheme, firms that prepared early and completed baseline verification process quickly were able to take advantage of rising prices in the early stages of the market (see Figure 2). In contrast, firms that were not well prepared faced delays in baseline verification and came to the market late, after prices had dropped and early market opportunities were captured by others.



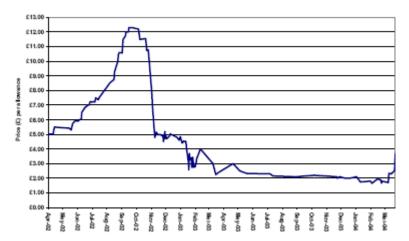


Figure 2. UK Allowance Prices Curve (April 2002 – March 2004) (Source: Natsource)

Similar examples arise on the "buy" side: in the US acid rain trading program, prices often rise near compliance deadlines, which can put firms that delay market engagement in the position of buying when time is short and high prices prevail. In market terms, analysts often refer to this as "compliance buying," when a company only enters the market when a compliance issue is clear – often on the eve of a compliance deadline -- and then pays the current price, no matter how high. Of course, if an exposure is small enough, compliance buying may make sense: why waste the time to engage the market regularly? But for buyers with more significant exposure, it becomes an expensive approach.

At the other extreme, there are firms with a large financial exposure that dictates a more active management regime. They may manage a part of their position directly while joining a set of carbon purchasing initiatives or funds to provide additional supply lines of allowances and Kyoto mechanism credits.

In between, there is a wide range of potential approaches - firms may operate as fairly low-key players for the majority of time, then engage intensively when or, if they, decide to invest in new plant, which they then need to hedge. Others will engage intensively as traders from the start, bringing market liquidity and helping assure that the system works.

Risk management guidelines

A key element for companies is being pro-active in organising internally. This ensures that no time is lost when allocation decisions become clear. This organisation involves:

- Building a team that involves environmental policy, engineering, finance, trading, legal
 and accounting professionals, who will interact closely in developing and implementing
 strategy;
- Identify and map your company's internal cost of abatement across a range of potential projects;
- Examining available tools to hedge risk and maximise opportunity;
- Understanding market operations, including how key provisions may evolve over time; it
 is critical to appreciate that some structures may work well when the market reaches
 maturity, but are not suitable in the early days of an emerging market with little depth
 and clarity;

• Learning by doing, engaging in test trades to familiarise various departments with contractual procedures, credit risk assessment, implications for balance sheet, internal reporting lines and sign offs for decisions.

The coming year appears to be one of change for firms under the EU ETS, with increasing policy clarity, new challenges and increasing market opportunities. Those companies who prepare early will be best placed to take advantage of these opportunities.

April 2004