IN BRIEF

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The European Carbon Market: A Successful Launch
The Canadian Carbon Market: Still Under Construction

Under the Kyoto Protocol, the European Union (EU) has committed itself to reducing its greenhouse gas (GHG) emissions by 8% from 1990 levels between 2008 and 2012. The European Union Emissions Trading Scheme (EU ETS) is fundamental to Europe's carbon (CO_2 – more specifically, carbon dioxide) emissions reduction strategy and was launched in January 2005.

The EU ETS grants allowances to companies for their GHG emissions in accordance with their government's environmental objectives. The scheme permits a company to emit more than its allowance of GHGs as long as it has reached an agreement to buy allowances from other companies that emit less than they are permitted to.

In 2005, the EU member states issued allowances for 2.2 billion tonnes of CO_2,[(1)] capping the emissions of some 11,400 industrial facilities.[(2)] Similar amounts will be issued in 2006 and 2007. These amounts make the European allowance the leading CO_2 unit of value in the world, with a potential market of more than €50 billion.[(3)] In 2005, estimates put total trades at more than 260 million tonnes of CO_2, equivalent to 12%[(4)] of the 2.2 billion tonnes allocated to all facilities taken together. Considering that the market is young and has encountered delays in getting up to speed, the trading volume is noteworthy and encouraging.

SUPPLY, DEMAND AND PRICE OF ALLOWANCES ON THE EUROPEAN MARKET

Within the EU, the supply of allowances is initially determined by individual member states, which develop National Allocation Plans showing the allowances they plan to allocate over a given period and the methods to be used for granting allowances to the facilities concerned. The total quantity of allowances made available by the member state must correspond to the target assigned to it under the Kyoto Protocol; the member state must therefore ensure that the allowances it grants will enable it to reach its target. The member states' initial allocations were all aimed at "satisfying foreseeable needs." Public authorities and industrial companies calculated the expected emissions levels, defined on the basis of past emissions adjusted for achievable progress and the growth forecast for the coming period. In future, the supply of allowances will be limited to the amounts that the industries choose to place on the market.

Net demand for allowances comes from the needs of industries whose effective emissions exceed their allowances for each installation. The level of these emissions depends on a large number of factors, including three main ones: weather conditions for electricity producers, the relative prices of energy, and the level of economic activity. In 2006, European growth is expected to be significantly higher than it was in 2005, which will stimulate industry demand for allowances.

Over the past year, CO_2 allowance prices have almost tripled. On 3 January 2005, one tonne of CO_2 traded at €8.5, in comparison with €24 in mid-January 2006.[(5)] The rise in market prices for allowances primarily reflects the growing recognition of the effect of carbon constraints on industries and of the European Commission's authority to enforce these limits. It is the ability of the public authorities to enforce compliance with emissions reductions that creates scarcity of allowances on the nascent carbon market and determines their value.

NATIONAL REGISTRIES

To ensure that the trading system for CO_2 emissions allowances works properly and is environmentally sound, the emissions and the corresponding allowance volumes must be tracked reliably and securely. Each

country ensures that it has in place a registry to keep track of allowance ownership transfers. Using electronic databases, the registries ensure the accurate accounting of the issuance, holding, transfer and cancellation of allowances, as well as guaranteeing access to information, confidentiality and compliance with Kyoto Protocol provisions.

KEY ROLE OF THE SIX EUROPEAN EXCHANGES

Once the registries have been set up and the industrial installations have been registered, the carbon market's operations and liquidity are ensured by brokers and by the number of allowances issued and traded. The market requires sufficient liquidity to promote trading among participants by providing them with accurate pricing information. Market platforms are central to trade, as they can contribute to the market's liquidity and offer their clients a number of advantages such as:

- lower trading costs;
- reduced default risk; (6)
- guaranteed anonymity for participants;
- rapid execution of transactions;
- transparency of the average transaction price.

The market platforms are in fact centralized electronic exchanges that match up allowance buy and sell orders. In January 2006, there were six such exchanges in Europe:

- Nord Pool (Scandinavia);
- EEX (European Energy Exchange, Germany);
- ECX (European Climate Exchange, based in London and Amsterdam);
- EXAA (Energy Exchange Austria, Austria);
- Powernext (France);
- Climex (Netherlands).

All these exchanges are run by the major energy market operators in their respective countries and offer trading contracts on EU allowances. However, there are some significant differences between the exchanges, primarily regarding their target markets (large or small emitters), the rate structures offered to members, and the products offered (derivatives or spot contracts).

Clearly, despite its potential, the European carbon market is currently too small to allow so many exchanges to coexist. Over the long term, even if liquidity grows, the European exchanges are likely to consolidate, similar to what has already occurred with the financial markets. Failing such consolidation, the carbon market will become fragmented, more costly and less efficient for users. In the meantime, European exchanges are likely to continue to specialize in certain products.

DEVELOPMENT OF A FINANCIAL SERVICES INDUSTRY TIED TO THE CARBON MARKET

Despite the challenges and the flaws in the European carbon allowance trading system, and regardless of developments in the European exchanges over the next few years, Europe is developing a real financial industry for carbon allowances that will ultimately have its own specialized professions and institutions. Last December's announcement of an agreement between the Montreal Exchange and the Chicago Climate Exchange to create the first environmental products exchange in Canada is a positive step in terms of the development of Canadian expertise. If the required authorizations are provided, the joint venture will begin in mid-2006 and the exchange will provide clearing and registry services for futures contracts in carbon emissions. The exchange could eventually establish markets in other environmental products, such as sulphur emission or water pollution permits.

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(1) A CO_2 allowance equals one tonne of CO_2.

(2) Installations operating in the energy sector, iron and steel production and processing, the mineral industry and the paper and board industry will automatically be subject to the Emissions Trading Scheme.

(3) One euro traded for approximately CAN$1.40 in mid-January 2006.

(4) See the Web site of the Caisse des Dépôts française (http://www.caissedesdepots.fr/FR/index.php).

(5) See the Web site of the Point Carbon market analysis agency (http://www.pointcarbon.com/).

(6) Risk of counterparty default.