What are the key steps to trade in an ETS?

JOINT IETA ‘BPMR’ and CECEP Workshop : China’s national carbon market: Preparing SOE’s for carbon market trading

Beijing, December 13th 2016

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Commerzbank – The Leading Corporate Bank in the Center of Europe …

Commerzbank is the #1 bank for German corporates in the Mittelstand (SME) and large corporate business segment.

Transparent strategic focus on stable client relationships connected to our local markets in Germany and the Center of Europe.

Pan-European platform offering clients access to an extensive network of 230 branches in 14 European countries (1).

Innovative product expertise enabling access to a comprehensive range of corporate and investment banking product solutions.

Commerzbank combines a leading expertise in the provision of financing services to the successful German export industry (2).

(1) Corporate banking branches of Commerzbank and Polish subsidiary mBank; (2) In 2011, no other bank settled more foreign letters of credit opened in favour of German exporters.
... with a Strong International Presence

With over 53,000 employees and activities in more than 50 countries worldwide, Commerzbank is a leading international bank.

Our branches, representative offices and contacts to over 5,000 correspondent banks constitute an extensive international network.

Commerzbank maintains well-established client relationships to more than 100,000 corporate customers worldwide.

Outside of Europe, Commerzbank places a particular focus on Asia, increasingly relevant to our export-oriented client base.

Commerzbank is committed to providing banking solutions for all the cross-border activities of our strategic client base.
Commerzbank present in China since 1979

- 1979: Hong Kong Branch
- 1981: Representative Office Beijing (first German bank in Mainland China)
- 1994: Shanghai Branch
- 1997: Beijing Branch
- 2007: Shanghai becomes Asian Headquarter
- 2009: Tianjin Branch
Commerzbank’s Commodity Solutions team is an ideal positioned partner to support companies in the carbon procurement

Commerzbank has been active in the carbon market since its inception and has remained an active contributor to the development of the market over the last 15 years¹)

We were advisor to the German Bundestag on phase two of the EU ETS and worked with the Italian Ministry of the Environment, Land and Sea on the Kyoto compliance strategies.

We developed CDM and JI projects and established off take-contracts for compliance buyers and IFIs. Furthermore, we advised a development bank on the purchase of a large portfolio of “high grade” CERs generated from CDM projects and executed the transaction.

We have an active dialogue with multinationals and SMEs, industrial companies, utilities and trading houses supporting and advising them in carbon trading, risk management and procurement strategies.

¹) http://www.ft.com/cms/s/0/14e79710-c3eb-11d8-9d21-00000e2511c8.html?ft_site=falcon&desktop=true&siteedition=uk
²) http://www.ft.com/cms/s/0/cb8faaf4-a505-11db-b0ef-0000779e2340.html?ft_site=falcon&desktop=true&siteedition=uk
³) http://www.ft.com/cms/s/0/3c0af7a8-02ab-11dd-9388-000077b07658.html?ft_site=falcon&desktop=true
⁴) http://greenaviation.org/news

The first EU emissions trade using the ISDA documentation

Joint Bookrunner for the EIB Climate Awareness Bond, which raised approx. EUR 600 million for Renewable Energy and Energy Efficiency projects

The Italian Ministry of Environment selected CTF to advise on and facilitate JI projects in Russia and CIS⁶

Commerzbank becomes CO₂ neutral and joins the World Bank’s Carbon Pricing Leadership Coalition

2001

“Hesse-Tender” – Pilot Project – “First auction of carbon credits in Germany”

2004

Establishment of Carbon Trade & Finance (CTF) as a JV with Gazprombank (terminated in 2013)³

2007

2008

First ever EU aviation allowances transaction⁷

2011

2015

Joint Bookrunner for the EIB Climate Awareness Bond, which raised approx. EUR 600 million for Renewable Energy and Energy Efficiency projects

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⁴) http://www.ft.com/cms/s/0/14e79710-c3eb-11d8-9d21-00000e2511c8.html?ft_site=falcon&desktop=true&siteedition=uk
⁵) http://www.ft.com/cms/s/0/cb8faaf4-a505-11db-b0ef-0000779e2340.html?ft_site=falcon&desktop=true&siteedition=uk
⁶) http://www.ft.com/cms/s/0/3c0af7a8-02ab-11dd-9388-000077b07658.html?ft_site=falcon&desktop=true
⁷) http://greenaviation.org/news
Supporting and advising clients in their carbon risk management and procurement strategies

› Our support can be tailored to client’s needs. However, based on our experience we would recommend reviewing the following areas:

**General carbon strategy**

General insight into status and developments of international climate negotiations, local/regional developments, compliance obligations and positions under existing ETS

**Administration and compliance**

Installations covered by an ETS need to surrender allowances and offsets in line with their actual (verified) emissions. A detailed preparation and implementation is therefore required to avoid unnecessary costs and reduce the cost of compliance.

**Infrastructure and operations**

Based on available information on expected emissions, we will support you in your analysis of calculating the expected exposure and explain the possibilities to cover this exposure.

**Trading strategy**

Companies need to decide how active the trading strategy and procurement of carbon offsets should be:

› Passive strategy where deficit will be covered shortly before the surrender deadline.
› Tactical and active carbon trading strategy taking into account market conditions and opportunities.
› Hedging programme (for example monthly or quarterly “build up”) tailored to specifics of the airline and similar to fuel hedging strategies.
› Integrated commodity risk management approach (i.e. joint fuel/carbon-hedge programme).

Knowledge of the eligibility criteria of carbon offsets, the structure and liquidity in the primary and secondary offset market are crucial to minimise costs of compliance.
The establishment of a (national) ETS creates new obligations and challenges.

Compliance cycle: Companies need to achieve technical and operational compliance with the ETS

- **31 December**: End of monitoring period of the current year
  - Submit changes in installation to CA

- **December**: Prepare annual emissions report for the current year

- **3rd quarter**: Verifier to start verification process for the current year

- **28 February**: Receiving free allowances (if applicable) for current year

- **31 March**: Submit verified emissions report to CA for previous year
  - Entries of verified emissions data in Registry

- **30 April**: Surrender allowances in Registry for the previous year

- **30 June**: Submit improvement/ non-conformity report on the previous year to CA (if applicable)

*Operators and aircraft operators may be requested by their CA to submit verified emissions report of the previous year as early as 28 February

Companies need to monitor, verify and report their emissions as well as surrender allowances in line with the actual emissions

Source: European Commission
Companies are obliged to surrender allowances in line with the actual emissions in the compliance year

- In case companies have a surplus of allowances, i.e. the actual emissions are below the (free) allocation, they need to decide if they want to sell the surplus or keep the allowances for compliance in the future or to sell at a later stage.
- If a company faces a compliance deficit, i.e. verified emissions are above the (free) allocation, it needs to cover this shortfall and purchase allowances in the market.
- More strategically, it is about “make or buy”. Is it possible to reduce CO2-emissions, what is the cost of an abatement, is it cheaper to invest in low carbon technologies than to purchase allowances?

Source: European Commission
An efficient carbon strategy helps to achieve operational compliance, minimises costs and maximises opportunities

Companies need to decide which entity (location), department and persons are responsible for

- the monitoring and external verification of annual emissions volumes, internal and external submission of the data, the regular update of emission forecast
- the submission of verified emissions data to the regulator and allowances/offsets
- the external carbon trading (in line with the trading policy, trading and counterparty limits) timing of the trades, execution, confirmation and settlement of trades
- the reconciliation of allowances and offset credits against registry accounts
External carbon trading and the carbon risk strategy should follow a systematic approach aligned with the business impact

› It is important that trading is not a goal in itself but a means to achieve a specified target. It should be tailored to client’s needs, exposures, risks and opportunities.

› The first step of implementing a successful carbon risk management strategy involves identifying the risks. These then need to be quantified and prioritised: How big are they in absolute terms, and how pivotal are they in terms of the success of individual deals or the entire company?

› Many companies already actively manage their interest rate, foreign exchange and commodity risks. The tools available for carbon are the same. It often makes sense to align the carbon strategy with the general risk management of a company.
Centralized approach in managing a company’s carbon exposure enhances the efficiency.

- **Registry**
- **Installation 1**
- **Installation 2**
- **Installation 3**

**Group Emissions Desk**

- Typically Part of the Treasury, Energy Trading, Energy/Commodity Procurement

**External Counterparties**
- Auction
- Bank
- Trading Houses
- Exchange
- other
Financial instruments and derivatives help companies to deal with price risk, protect margins and are important for price discovery

Spot transaction:
Price agreed today for immediate delivery of a specified quantity and type of credits or allowances.
Company A sells a defined amount of allowances or credits on a spot basis to Company B.
Settlement is typically 2 Business Days after the Trade Date and Payment is in general provided 5 Business Days after the Delivery Date.

Forward:
Price agreed today for future delivery of a specified quantity and type of credit or allowance.
Company A sells a defined amount of allowances or credits at a defined date in the future.

Future: Similar to a forward but exchange trade, standardised
Financial instruments and derivatives help companies to deal with price risk, protect margins and are important for price discovery

› Swap:

Buyer and Seller agree to exchange a specified volume of one type of carbon credit at a specified price, for a specified volume of another type of carbon credit at a specified price and agree to the payment of a corresponding cash spread.

Example: EUA vs. CER Swap: Company A delivers a defined amount of EUAs at the delivery dates and receives a defined amount of CERs plus a cash payment.

A commodity swap is typically defines as a contract where two sides of a deal agree to exchange cash flows, which are dependent on the price of an underlying commodity. A commodity swap is usually used to hedge against the price of a commodity.

› Options:

Right but not the obligation to buy or sell a specified amount of allowances at a specific date and price.

The buyer will pay a premium to enter such transactions.

A call options gives the buyer the right to buy allowances or credits at a specified price.

A put option gives the buyer the right to sell allowances or credits at a specified price.

› Combinations of options and other instruments are possible. Most contracts are with physical delivery of the carbon credits or allowances but cash settlement can be agreed.
Initial thoughts on a Risk Management Strategy: How big is the exposure, what are the Emissions @ Risk and how to hedge?

A risk management strategy which includes the purchase of allowances and credits needs to be implemented.

It is important to decide how active the trading strategy should be

- Passive strategy where deficit will be covered shortly before surrender deadline and surpluses will be carried over.
- Tactical and active carbon trading taking into account market conditions and opportunities
- Hedging program (for example monthly or quarterly “build up”) tailored to specifics of the airline and similar to fuel hedging strategies.
- Integrated commodity risk management approach
Concluding remarks: Participants and typical transactions in the carbon market

- **Specs and Trading houses**
  - [typically futured and derivatives]

- **(industrial) surplus**
  - [sales primarily on a spot basis]

- **Auction supply**
  - [sales primarily on a spot basis]

- **Compliance logistics**
  - [purchases prior to the surrender deadline, spot]

- **Power hedging**
  - [in line with power sales, typically forward]

- **Financing Transaction/ Working Capital**
  - [often combinations of spot and forward]

- **Strategic hedging**
  - [typically forward]
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