




European Emissions Trading Scheme - Market Outlook

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Outline of the Presentation

- Market outlook
- Review of current markets
- Traded volumes and allowance prices
- Business impacts of EU Emissions Trading Scheme (EU ETS)
- Summary of the presentation



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Market outlook



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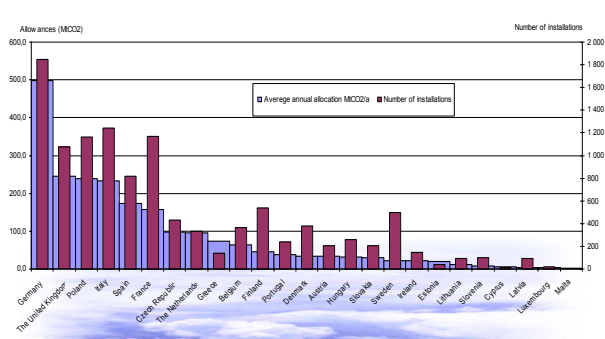
EU Emissions Trading Scheme

- The first commitment period started 1.1.2005.
- Obliges companies to cover their CO₂ emissions with emission allowances.
- Covers facilities from specific sectors:
 - Power industry (>20 MW combustion facilities, oil refineries, coking plants)
 - Production and process of ferrometals
 - Mineral industry (concrete, lime, glass, fiberglass, ceramics)
 - Pulp and paper industry, cardboard manufacturing
- Initially covers only carbon dioxide (CO₂).
- The first commitment period covers years 2005-07, from 2008-12 the periods cover five years.



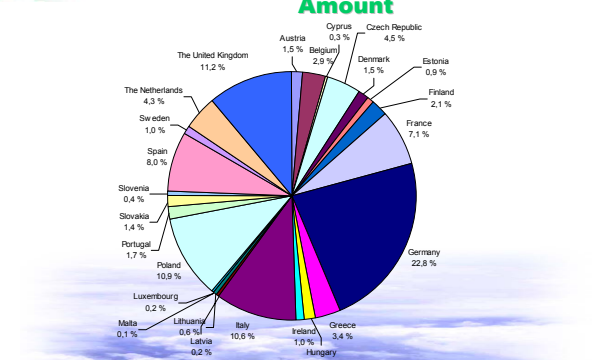
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National allocations



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Share of National Allocations of Total Amount



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The EU ETS – principles 1/2

- Installations covered by the Directive need a greenhouse gas **emission permit**
- **Emission allowances** are allocated to installations according to the national allocation plan (NAP), separately for 2005 – 2007, 2008 – 2012 etc.
- For the first period 2005 – 2007 scheme covers **only CO₂ emissions**. Other gases and industry sectors may be included in subsequent trading periods
- Allowances are valid only during the trading period for which they were issued
- Installations can **freely sell and buy** emission allowances in the market

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The EU ETS – principles 2/2

- Installations have to **monitor and report** their emissions
- Annual emission reports have to be **verified** by end-March each year
- Each year installations have to **surrender** a number of **emission allowances** corresponding to the verified emissions during the previous year by end-April
- Non-compliance leads to **sanctions**; the penalty is € 40 / t CO₂ during 2005 – 2007 and € 100 / t CO₂ during 2008 – 2012. In addition, missing allowances have to be surrendered the following year
- The "**Linking Directive**" enables the use of emission credits from JI and CDM projects in the EU ETS. CDM credits can be used already from 2005, JI credits from 2008 onwards

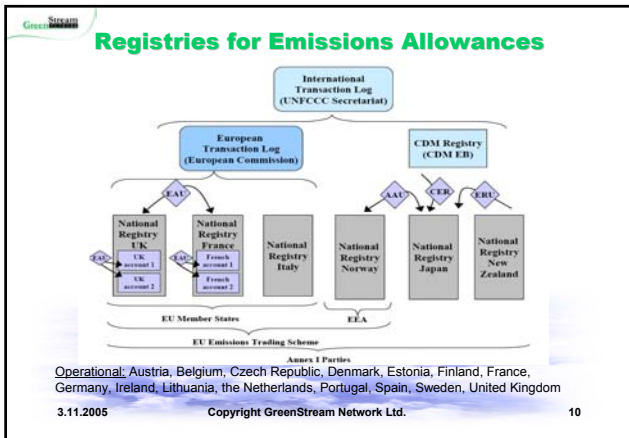
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Linking Directive

- In force from **13.11.2004**.
- The Directive enlarges the markets to global.
- National implementation in 12 months from publication of the Directive.
- Possibility of utilising CER credits from developing countries from 2005 and ERU credits from industrial countries from 2008.
- Plant specific caps on utilisation of imported credits?
- Issues relating to double-counting must be sloved.
- http://www.europa.eu.int/comm/environment/climat/emission/linking_en.htm



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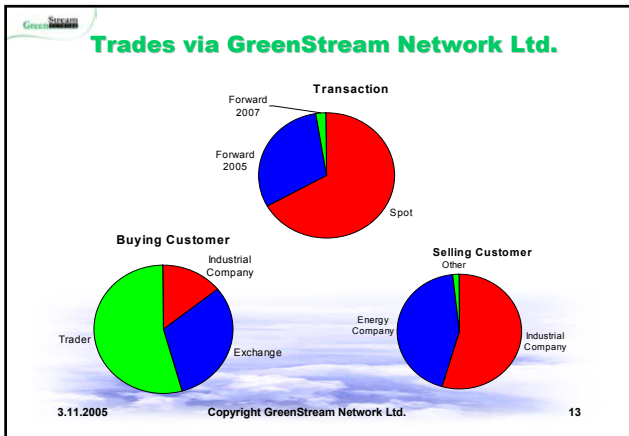




Current markets

- Most active companies are coming from the energy sector.
- Companies from the new Member States are not active on large scale.
- Price movements can be fast.
- Exchanges have started their activities.
- Bilateral deals are usually based on model contracts.
- Spot trading has started.
- Futures and options are coming into the picture.
- The role of intermediaries is still important.
 - Liquidity; prices; details of the deal-making.

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Activities of companies in the markets

Reasons not to participate

- Trading looks too complicated;
- Price is not good;
- It is difficult to estimate the price development;
- It is difficult to estimate the future emissions;
- Not all the required details are in place;
- Emissions trading is not core business.

Reasons to participate actively

- Emissions allowances are a new asset that requires management;
- Emissions trading affects companies both directly and indirectly;
- The price curves of different emissions trading products create opportunities;
- "Not Doing Anything" is also a decision!

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Exchanges for EU allowances

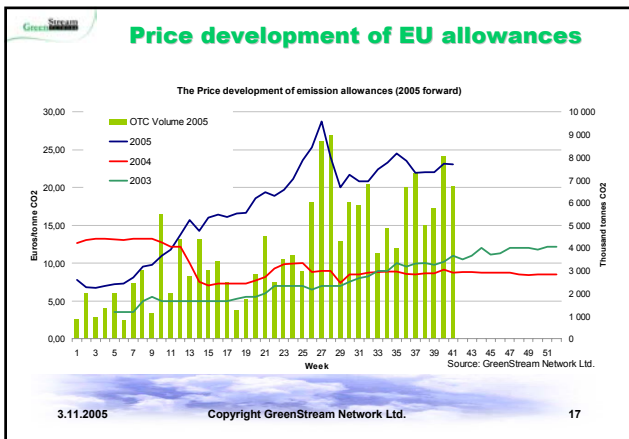
	ECX/IPE	EEX	Nordpool	EXAA	EuroNext	Climex /APX
Start-up	Futures April 22 nd , spot later?	Spot March 9 th	Forwards February 11 th , spot summer/05	Spot June 28 th	Spot June 24 th	June 27 th
Products	Futures (ECX CFI) with quarterly expiry	Spot auctioning	Forwards (05, 06, 07)	Spot auctioning	Spot	Spot (also CER & ERU) In the future forwards
Clip size	1000 t 50 000 t block trade	1 EUA	1000 EUA	1 EUA	1000 t	1000 t
Steps	0.05 EUR/t	0.01 EUR/t	0.01 EUR/t	0.01 EUR/t	0.01 EUR/t	?
Clearing party	LCH Clearnet Ltd. Via Clearing Members	EEX AG Clearing Facilities	Nordpool	OeKB	Caisse des Depots et consignations	APX

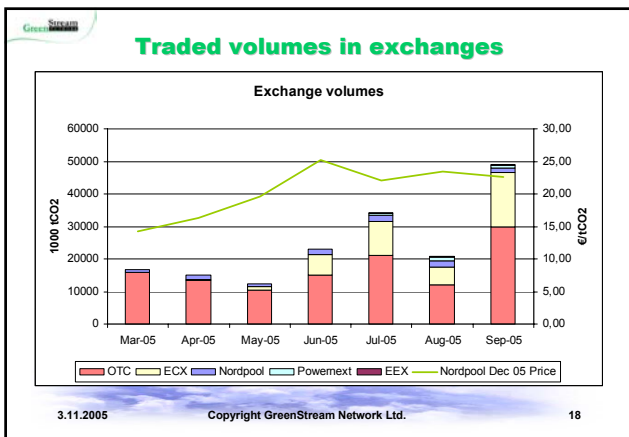
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Traded volumes and allowance prices

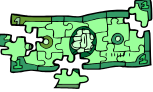
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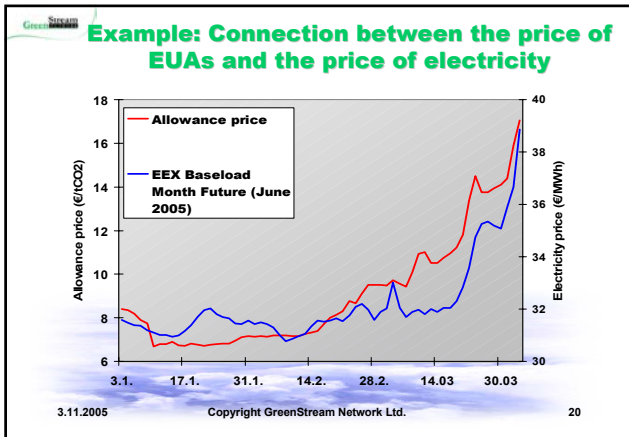


Pricing of allowances

- Prediction of price movements is not easy.
- The price is affected for example by fuel prices, weather conditions, industrial development and market psychology.
- There is no single factor determining the price.
- Actions of authorities are still having an impact on prices.
- Price curves for emissions allowances and reductions are different.
- The price for the next commitment period is affected by the estimations regarding the 2nd allocation and possible coupling of the EU market with other markets.



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Business impacts of EU Emissions Trading Scheme

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Effect of EU ETS on companies


- EU ETS has created a new asset that is being traded across the European Union.
- Emissions trading affects the companies directly via the value of emissions allowances and indirectly through related markets (electricity, heat, fuels...)
- Emissions trading affects the competitiveness of products and services, the business strategies and feasibility of investments.
- In addition of complying with its obligations, the companies must manage the carbon asset. The financial value of the asset is changing as a function of markets prices.
- The impact of emissions trading is project-specific. The investment decisions require knowledge for example about the future price development.



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Summary

- The emissions trading market is pan-European.
- The national authorities have still an impact on the markets; especially the status of registries is important.
- The market does not yet perform ideally; the market situation can change fast.
- Many companies have not yet started activities; preparedness is however quite high in most industrial sectors.
- The prediction of prices requires knowledge; good timing can increase the profitability significantly.
- The effects of emissions trading markets on companies are multiple; the impacts are strongest in energy sector.



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