The EU Emissions Trading Scheme (EU ETS)

Can Markets Protect the Climate?

Prospects for Greenhouse Gas Emissions Trading in the US and Europe

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Overview

• A brief history
• The design of the scheme
• Implementing the scheme
• The nascent carbon market
• Conclusions
EU climate policy

- The EU has ratified the Kyoto Protocol in May 2001.
- EU(-15) has taken on the target to cut emissions by 8% from 1990 to 2008-12.
- EU(-15) has nationally differentiated targets ("burden sharing").
- Measures are taken at Member State and EU level.
- Besides the EU ETS many other things are done to cut emissions.
A brief history

• Reluctance in the Kyoto negotiations
• Understanding the instrument
  – ECCP Working Group I
• March 2000 – Commission Green Paper
• October 2001 – Commission Proposal
• December 2002 – Common Position

http://europa.eu.int/comm/environment/climat/emission/history_en.htm
The design of the scheme

... a new chapter in EU environmental policy
Main Elements

• Multi-year compliance periods (Phase I – 2005 to 2007, Phase II – 2008 to 2012 etc.)
• Covers activities carried out in installations as listed in Annex I (downstream scheme)
• Covers 25 Member States (May 2004 enlargement widened the scope of the scheme)
• Covers – in Phase I – only CO₂, while listing all six gases
• Permit – contains obligation to report and surrender allowances
Coverage in Annex I

- Energy activities
  - Combustion installations with a rated thermal input >20 MW
  - Mineral oil refineries
  - Coke ovens
- Production and processing of ferrous metals
- Mineral industry
  - Cement and lime
  - Glass
  - Ceramic products – tile, bricks etc.
- Pulp and paper
More on coverage

• The major sector not covered is transport.
• Inclusion of N₂O in chemicals and PFC in aluminum sectors was discussed.
• Share of Kyoto emissions covered by the scheme ranges from 20 % to 60 %, depending mainly on the fuel mix in the power generation sector.
Main Elements 2

- National (allowance) allocation plan
- Initial allocation - at least 95% of allowances free of charge in Phase I and at least 90% free of charge in Phase II
- Only installations with a permit can receive allowances
- Quantities – *subsidiarity* und transparency
- Ex-ante determination of total quantity and allocation per installation
- Common allocation criteria – see Annex 3
Main Elements 3

• Monitoring and reporting at installation level
• Enforcement and sanctions, incl. financial penalty - €40 in Phase I and €100 in Phase II
• Allowances are administered in an electronic registry system
• Opt-out possibility in Phase I, as well as opt-in and pooling in Phase I & II

Note: prices are in € per ton of CO₂, hence €40/tCO₂ is about $190/tC
Main Elements 4

An open system

- Integration of Kyoto project mechanisms – recent amendment of the Directive
- Linking with other programs on the basis of bilateral agreements
- Extension to other activities and gases
Implementing the scheme

... (hard) work in progress
Putting in place the cap-and-trade infrastructure

- Transpose the Directive into national law in 25 Member States
- Assign institutions in 25 Member States
- Devise guidelines for monitoring and reporting
- Devise regulation governing the registry scheme
- Establishment of 26 elements of the electronic registry scheme (25 MS registries + community transaction log)
Putting in place the cap-and-trade infrastructure 2

- Identify and permit over 12,000 installations in 25 Member States
- Collect data needed an draw up national allocation plan in 25 Member States
- Assess 25 national allocation plans
- Assess any applications for opt-out, opt-in and pooling

A substantial part of this work has a one-off investment-type character.
Emissions monitoring and reporting

• Guidelines have been elaborated in 2003
• ... and entered into force on 29 January 2004
• Built on all relevant work from around the world (e.g. WCSD/WRI work)

The registry system

- The registry system requires the establishment of a solid IT-infrastructure with 26 linked elements
- Technical work has started in the first half of 2003
- Regulation has been finalized in mid-2004 and will be published soon
- Securing the compatibility with the parallel development of UN registries is an important factor – i.a. integration of CDM credits
- First allowances are to be credited by 28 February 2005
The National Allocation Plan: a challenge

- Identifying covered installations
- Gathering and processing of relevant data
  - base period decision, Emissions, capacity use, production etc.
- Fixing the total cap – a path to Kyoto target
- Elaborating allocation formulae at sector and installation level
- Organizing public consultation and securing political acceptability
- Overcoming know-how gaps
NAP timelines

• Deadline in the Directive is 31 March 2004
  – Deadline for 10 new Member States is 1 May 2004
• 7 Member States submitted on time (incl. 2 new Member States)
• 24 out of 25 allocation plans have been submitted by now
• 16 out of 24 allocation plans have been assessed by now

http://europa.eu.int/comm/environment/climat/emission_plans.htm
Assessing allocation plans

- Within 3 months after submission of a complete allocation plan
- If Article 10, Annex 3, or the Treaty is violated the Commission may reject the plan
- Reasons need to be given for any rejection
- Amendments by the Member State
- Implementation of the plan—issuance of allowances – only after a satisfactory plan
7 July NAP package

- on 7 July the Commission has concluded the assessment of 8 plans – 5 were approved without conditions (Denmark, Ireland, Netherlands, Slovenia, Sweden), 3 with conditions (Austria, Germany, UK)
- main problem areas identified in the first package
  - exaggerated growth rates
  - inadmissible ex-post adjustments
  - unsubstantiated intended use of Kyoto credits
- 2.9 billion allowances, i.e. about 40 %

20 October NAP package

- on 20 October the Commission has concluded the assessment of 8 plans – 6 were approved without conditions (Belgium, Estonia, Latvia, Luxemburg, Portugal, Slovak Republic), 2 with conditions (Finland, France)

- main problem areas identified in the second package
  - excessive allocation & exaggerated growth rates
  - inadmissible ex-post adjustments
  - unsubstantiated intended use of Kyoto credits

- < 1 billion allowances, i.e. about 15 %

9 outstanding plans

- Spain, Italy, Poland, Hungary, Czech Republic, Lithuania, Malta and Cyprus have submitted and the assessment is in process
- Greece is still elaborating a plan
NAP assessment in figures
Some key NAP issues

- A soft harmonization trend
- New entrant reserves and forfeiture on closure is a predominant choice, plus transfer rule in some plans
- Discretionary banking option is hardly used
- Governments commit to substantial purchase of Kyoto units
The nascent carbon market

- A forward market has emerged in 2004.
- Prices over 2004 are in the range of € 6 to € 13* per allowance.
- Since August price in the € 8 to € 9** range.
- Volume is ever increasing from 50,000 allowances in January to 2.5 mio. in October.
- So far market is dominated by brokers.
- However, several players are active to set up organized markets, daily price fixings etc.

* $ 28.5 to $ 62 per tC; ** $ 38 to $ 43 per tC
Other implementation issues

- Allowances represent a substantial asset value.
- Tax and accounting treatment still to be clarified.
- The degree of preparedness among companies is a function of the company size.
  - Major power utilities are best prepared.
- Thinking about the phase 2 has started and will intensify with the start of the scheme.
Conclusions

• The EU ETS signifies a new era in EU environment policy.
• The EU ETS architecture is a first step in the evolution to an international carbon market.
• The timeline for implementation is very challenging.
• First phase was conceived as a learning phase.
• The learning has already started.
• The experience will be useful and available for design and implementation of other schemes.
The EU has started thinking ahead on post-2012 climate policy

http://europa.eu.int/comm/environment/climat/future_action.htm

Thank you for your attention!