



# The EU Emissions Trading Scheme (EU ETS)

## *Can Markets Protect the Climate?*

### *Prospects for Greenhouse Gas Emissions Trading in the US and Europe*

*9<sup>th</sup> Colloquium on Environmental Law and Institutions,  
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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
- October 2003 – entry into force of Directive 2003/87/EC

[http://europa.eu.int/comm/environment/climat/emission/history\\_en.htm](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 CO<sub>2</sub>, 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 N<sub>2</sub>O 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 CO<sub>2</sub>, hence €40/tCO<sub>2</sub> 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 and 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)

[http://europa.eu.int/comm/environment/climat/pdf/c2004\\_130\\_en.pdf](http://europa.eu.int/comm/environment/climat/pdf/c2004_130_en.pdf)



# 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](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 %

[http://europa.eu.int/eur-lex/en/com/cnc/2004/com2004\\_0500en01.pdf](http://europa.eu.int/eur-lex/en/com/cnc/2004/com2004_0500en01.pdf)

<http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/862&format=HTML&aged=0&language=EN&guiLanguage=en>



# 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 %

[http://europa.eu.int/comm/environment/climat/pdf/com\\_681\\_en.pdf](http://europa.eu.int/comm/environment/climat/pdf/com_681_en.pdf)

<http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/1250&format=HTML&aged=0&language=EN&guiLanguage=en>

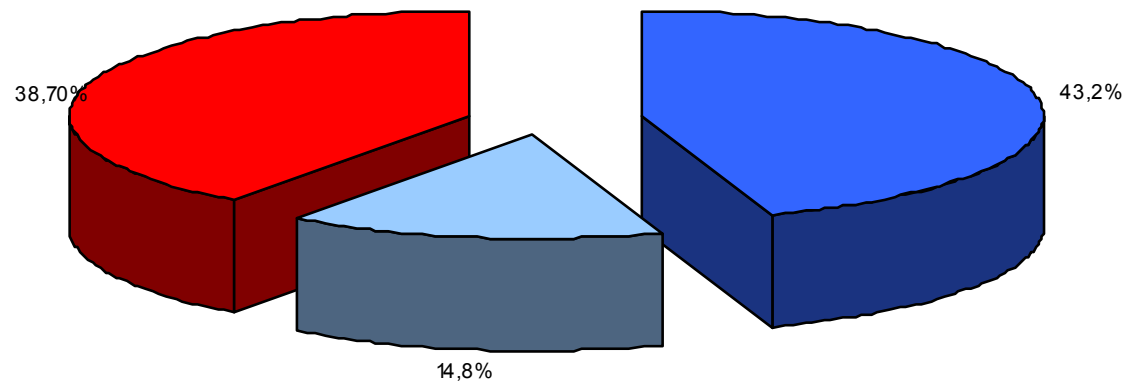


# 9 outstanding plans

- 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



- Aut, DK, D, Ire, Lux, NL, UK, Slov
- Bel, F, P, Fin, Lux, Est, Lat, Slov Rep
- Pol, Mal, Lit, Hun, CZ, Cyp, Sp, It



# 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](http://europa.eu.int/comm/environment/climat/future_action.htm)

Thank you for your attention!