

get to grips with  
**climate  
change**



# The EU emissions trading scheme as *the* driver for the global carbon market

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# The EU ETS as the Pillar of the Carbon Market

- Applicable since 1 January 2005, for 25 EU countries (extended to 27 countries in January 2007)
- Mandatory cap on absolute emissions across more than 10,000 large energy-intensive installations across the continent
- Covers around 2 billion tonnes of CO<sub>2</sub> emissions, half of EU's total emissions
- Simple and cost-effective approach to reducing emissions, with single market for trading allowances
- Linking foreseen with other emissions trading schemes
- Credits from emission-reducing projects in 168 countries useable by companies for meeting objective



# Stages of development of EU ETS

- Phase 1 from 2005 to 2007
- Phase 2 from 2008 to 2012 - overlapping with first commitment period of the Kyoto Protocol
- Phase 3 from 2013 to 20xx
  - Length decided in legislative review

# A balance towards the end of the start-up period

*Establishment of IT infrastructure underpinning the market.*

*Companies start monitoring and reporting emissions.*

*Availability of robust and verified emissions data.*

*Valuable learning for companies and regulators alike.*

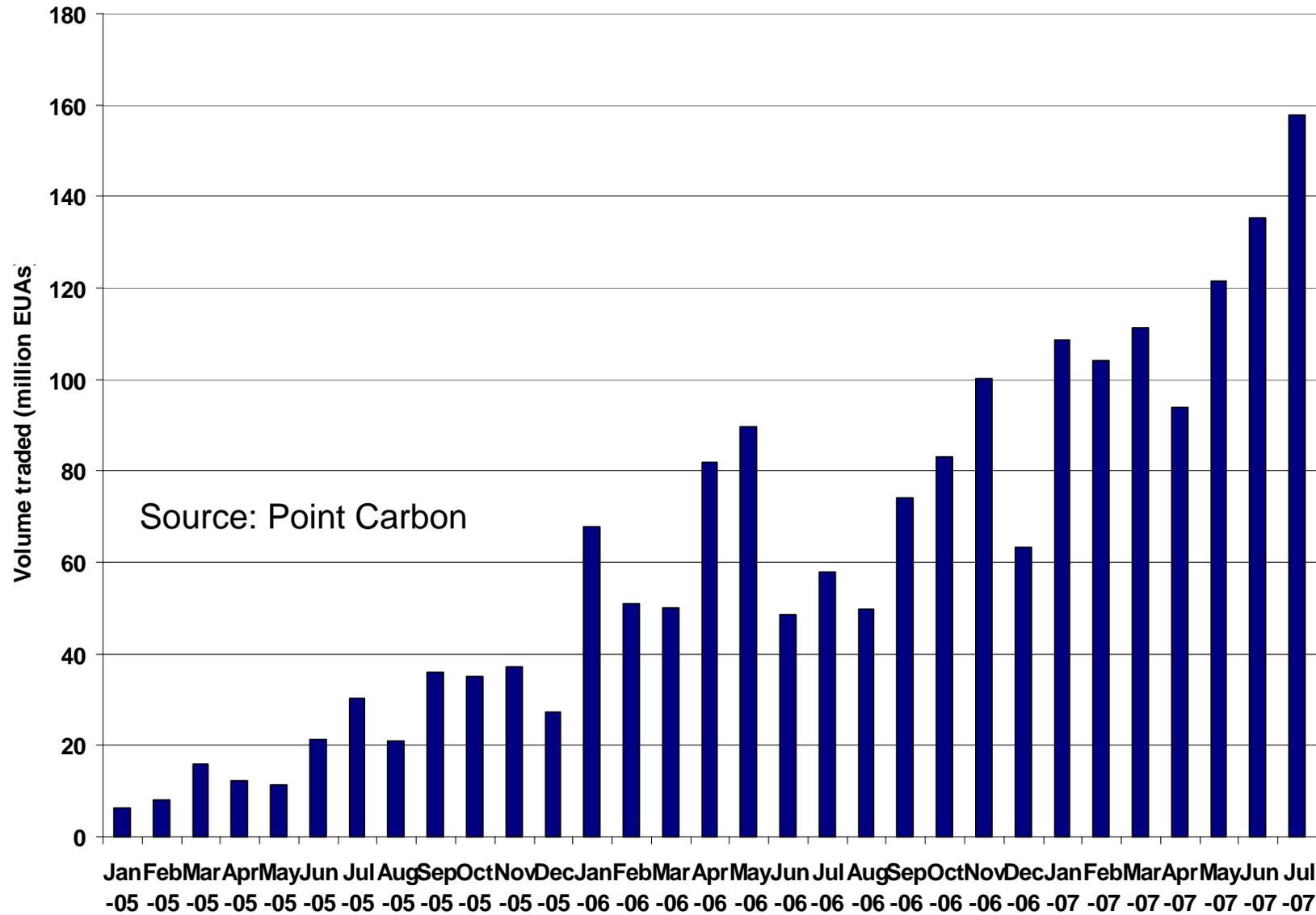
*Increasingly liquid secondary market has emerged.*

*Lots of interest triggered outside Europe.*

*Limited immediate environmental benefits.*



# Volume of allowances traded





# EU ETS Price Development



# To what extent will the second trading period be different?

*There will be fewer allowances in the market.*

*We will capitalise on the valuable experience from the first trading period.*

*There will be more auctioning.*

*The market will increasingly mature.*

*Governments will do much better in handling market-sensitive data.*

*The first trading schemes paralleling the EU ETS will emerge (e.g. RGGI in 2009)*



## The emerging shape of the second phase and EU-wide cap

- First period annual average allocation (incl. reserves and auctioning) for approved phase 2 NAPs amounts to 2142 Mt
- Verified emissions in 2005 for approved phase 2 NAPs amount to **1974 Mt**
- Proposed second period annual average allocation (incl. reserves and auctioning) for approved phase 2 NAPs amounted to 2126 Mt
- Allowed second period annual average allocation (incl. reserves and auctioning) for approved phase 2 NAPs amounts to **1928 Mt**
- **Net shortage in relation 2005 verified emissions amounts to ~130 Mt or 6.5 %**

*N.B.: In phase 2 additional emissions / installations of over 54 Mt are covered. Installations emitting about 30 Mt are only covered if the UK as of 2007, due the opt-out in 2005/06.*



# A trend towards auctioning

- In the 1<sup>st</sup> trading period Denmark, Ireland, Hungary and Lithuania decide to auction allowances
- So far only a few million allowances have been auctioned by Ireland, Hungary and Lithuania – very limited experience
- The 2<sup>nd</sup> trading period will see more auctioning: Germany (< 9 %) UK (7 %), Netherlands (>4 %), Ireland, Hungary, Lithuania, Austria, Belgium, ... – growing experience
- Several Member States will auction left-overs from new entrant reserves in 1<sup>st</sup> and 2<sup>nd</sup> trading period
- RGGI rules foresee a minimum of 25 % to be auctioned and several states (incl. New York) consider 100 % auctioning



# Regulatory changes / evolutions in 2008 to 2012

- Fine-tuning and improvement of the infrastructure
  - Revised monitoring and reporting rules
  - Revised registries regulation
- Opt-in of the first non-CO<sub>2</sub> emissions
  - Some Member States have requested the inclusion of installations in the fertiliser industry emitting N<sub>2</sub>O
- Gradual integration of carbon capture and storage (CCS)
- Increased harmonisation of the coverage of combustion installations (e.g. chemical crackers)
- Aviation will be integrated into the EU ETS as of 2011 – Commission proposal of December 2006

# Soon the political focus will shift to the third trading period!

*Review of the EU ETS in view of the emerging  
international climate regime post-2012:*

*Fine tuning and optimisation of the design.*

*Extension of coverage.*

*Internationalisation of the EU ETS.*

*The carbon market coming to age.*



## Timeline for ETS review

- Review report „*Building a global carbon market*“ released in November 2006
- Stakeholder consultation in a dedicated group under the ECCP umbrella – first half 2007
- Commission prepares a proposal to amend the ETS Directive – end 2007 (as part of integrated climate and energy policy implementation package)

***The EU ETS remains Europe's central instrument to tackle climate change post-2012!***



## Focus areas for the review

- The scope of the Directive
- Further harmonisation and increased predictability
- Robust compliance and enforcement
- Links to third countries

***Focus is needed to allow for high-quality review.***

[http://ec.europa.eu/environment/climat/emission/review\\_en.htm](http://ec.europa.eu/environment/climat/emission/review_en.htm)



# Highlights in the ETS review

- Harmonise cap-setting: timing and procedure for setting EU-wide cap
- Harmonise allocation: increased (mandatory) use of auctioning, possibly benchmarking in some sectors
- Harmonise new entrants: establishment of an EU-wide reserve or no reserve
- Extended periods for cap-setting and allocation
- Expand coverage: N<sub>2</sub>O, CCS etc.
- Link to emerging schemes (RGGI, California, Norway, Australia etc.)
  - possible emergence of a US ETS



## The EU-wide cap in phase 3

- When is it determined?
- How is it determined?
- How high is it?

<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
<b>2180 Mt</b>	<b>1964 Mt*</b>	<b>?</b>

\*Assuming Portugal's proposed cap is accepted.

All figures for EU-25, without aviation, extension of scope from phase 1 to phase 2 by over 50 Mt.



## How to allocate post-2012?

- There is no silver bullet!
- Allocation has significant distributional implications – this makes the exercise “interesting”.
- NAP-1 and NAP-2 experience provides valuable lessons about overly complex allocation rules.
- Both auctioning and free allocation based on benchmarks are considered.
- There is growing interest in comprehensive auctioning.

*May we live in interesting times.*

*R.F.K., Cape Town, 1966.*



# Ex-ante benchmarking

- Is a variant of free allocation reflecting the efficiency characteristics of installations
- Is perceived as fairer than grandfathering based on historic emissions
- Is a significant technical challenge in terms of data needs
- Is a significant process challenge in terms of agreeing EU-wide benchmarks
- Is only feasible in a simplified manner
- Is likely to be unfeasible across the board, unless radically simplified



# Auctioning

- Is a way of selling allowances into the market
- Is probably the simplest from the administrative point of view (no data needs)
- Is raising revenue
- Is a technical challenge in terms of sound auction design
- Is only feasible across the board with a comprehensive post-2012 agreement in place
- Is a way to avoid undue distributional advantages for those sectors passing through the allowance value



## To summarise

- The introduction of the EU ETS in 2005 is a major achievement and signifies a paradigm shift in Europe's climate policy.
- It is important to keep in mind that the first period of the EU ETS was established as a learning period for regulators and companies alike.
- The second trading period will see improvements in many areas
- The review of the EU ETS is aimed at further improvements and extension of the scheme.
- The EU ETS is followed closely across the world and a successful scheme is therefore of strategic importance for the post-2012 climate architecture.
- The internationalisation has started and will proceed over the second trading period and beyond.



**YOU CONTROL  
CLIMATE CHANGE.**



**TURN DOWN. SWITCH OFF. RECYCLE. WALK. CHANGE**

More info on EU climate policy: [http://europa.eu.int/comm/environment/climat/home\\_en.htm](http://europa.eu.int/comm/environment/climat/home_en.htm)