EU Emissions Trading System

Joint procurement of an auction monitor – Information day

21 November 2012

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Overview

- The role of the EU Emission Trading System (ETS) in overall EU Climate Policies
- Emissions trading: how does it work?
- Essential elements of the EU ETS in the three trading periods
  - Cap
  - Allocation
  - International credits
  - Linking
- Latest actions

THE ROLE OF THE EU ETS

in overall EU Climate Policies

EU ETS in a nutshell (1)

- Largest cap-and-trade system of the world
  - 84% (value) and 76% (volume) of global carbon market
- Designed to achieve greenhouse gases (GHG) emission reductions at least cost
- In place since January 2005
- Cap on emissions of ~10,000 energy-intensive installations across EU
  - Electricity and heat producers, steel, chemicals, cement, glass, pulp & paper
  - Extended scope as from 2013: new sectors and gases: Nitrous Oxide (N_2O) (chemicals), Perfluorocarbon **(**PFC aluminium) CO_2 from processes

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EU ETS in a nutshell (2)

- and ~4,000 aircraft operators
- Covering around 41% of EU CO2 emissions
- Operating in phases :
  - 1st phase 2005-07 based on National Allocation Plans (NAPs): pilot phase, building up infrastructure, gathering necessary experience; carbon emission became matter of economic considerations
  - 2nd phase 2008-12 based on NAPs: emission reductions achieved, major review to be in force as from 2013; economic crisis
  - 3rd phase 2013-2020: new design, 8-yr period, Community based instrument
- EU market value 77 billion € in 2011 (up by at least 6% year-on-year), EU market volume 6 billion allowances in 2011 (up by 17% year-on-year) (source Thomson Reuters Point Carbon)

Why it is important

- For **environmental** reasons:
  - guaranteed environmental outcome – due to the cap
  - flagship of Europe's approach to achieve its 2020 emission target of -20%

    2020 targets: -20% (-30%) GHG emissions, >20% renewable energy, +20% energy efficiency
- For **economic** reasons:
  - liquid market, up to 40 million allowances traded each day on a number of exchanges
  - stable and predictable regulatory framework for businesses
  - achieving smooth transition to a low carbon economy: price signal
- For **political** reasons:
  - experience in the EU ETS informs and influences new or emerging systems (Australia, China, South Korea etc.)
  - biggest source of demand for credits from projects in developing countries

EMISSIONS TRADING:

How does it work?

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Essential ingredients for a well-functioning ETS

- **Robust infrastructure**
  - Monitoring: to know how many tonnes are emitted
  - Reporting: to inform authorities
  - Verification: control to safeguard confidence
  - Registry: to account for verified emissions
- Instruments to represent one tonne or CO2 to emit: **allowances**
- Limited amount of allowances: **cap**
- Clear allocation rules: **how emitters receive allowances**
- **Functioning market to trade: scarcity and tradability**

Ensuring environmental objective at least costs

Ensuring compliance and compliance cycle

- Robust monitoring and enforcing is the backbone of emissions trading
- No or insufficient surrendering entails high penalties (€ 100 per t/CO2 not covered by surrendered allowances, ex-post compliance)
- Compliance rate usually higher than 99%

Functioning of the EU ETS: cost-effectiveness

- Cost-effectiveness means to achieve a given objective at least costs
- Ensured by market mechanism:

  Sale/purchase of allowances determined by business strategy and internal structure of cost of production of installations

  - Installations will sell allowances, if the price of one allowance is more than the cost of abating one tonne of its CO_2 emissions

    - Investing in abatement is cheaper than holding or using the allowances for compliance. Investing in abatement is the best economic choice from a business point of view

  - Installations will buy allowances, if the price of one allowance is less than the cost of abating one tonne of its CO_2 emissions

Comparison before and after revision of the EU ETS

Main elements

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The cap – how is it set?

- 1st and 2nd period:
  - Summing up 27 NAPs resulted in EU-wide cap which remained constant over the trading period, but in 2nd period ensured compliance with Kyoto
- 3rd period:
  - **EU-wide cap defined by the EU ETS Directive**
  - Reduction factor constantly decreases the cap beyond 2020
  - Reduction factor to be reviewed before 2025

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Large-scale emission allowance auctions

- 1st and 2nd period: around 4% in second period
- As of 2013, more than half of allowances expected to be auctioned
  - Auctioning Regulation No 1031/2010 adopted in November 2010
  - 8 Member States submitted applications for gradual phase-out of free allocation to electricity producers
  - Commission proposed reporting requirements for Member States on the use of the auction revenues

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Linking

- 30 countries participating in EU ETS:
  - 27 EU Member States
  - Three European Economic Area (EEA) states: Norway, Iceland, Liechtenstein
- Other linking possibilities:
  - Switzerland
  - Australia
  - New Zeeland
  - China
  - South Korea

Market developments:

LATEST ACTIONS

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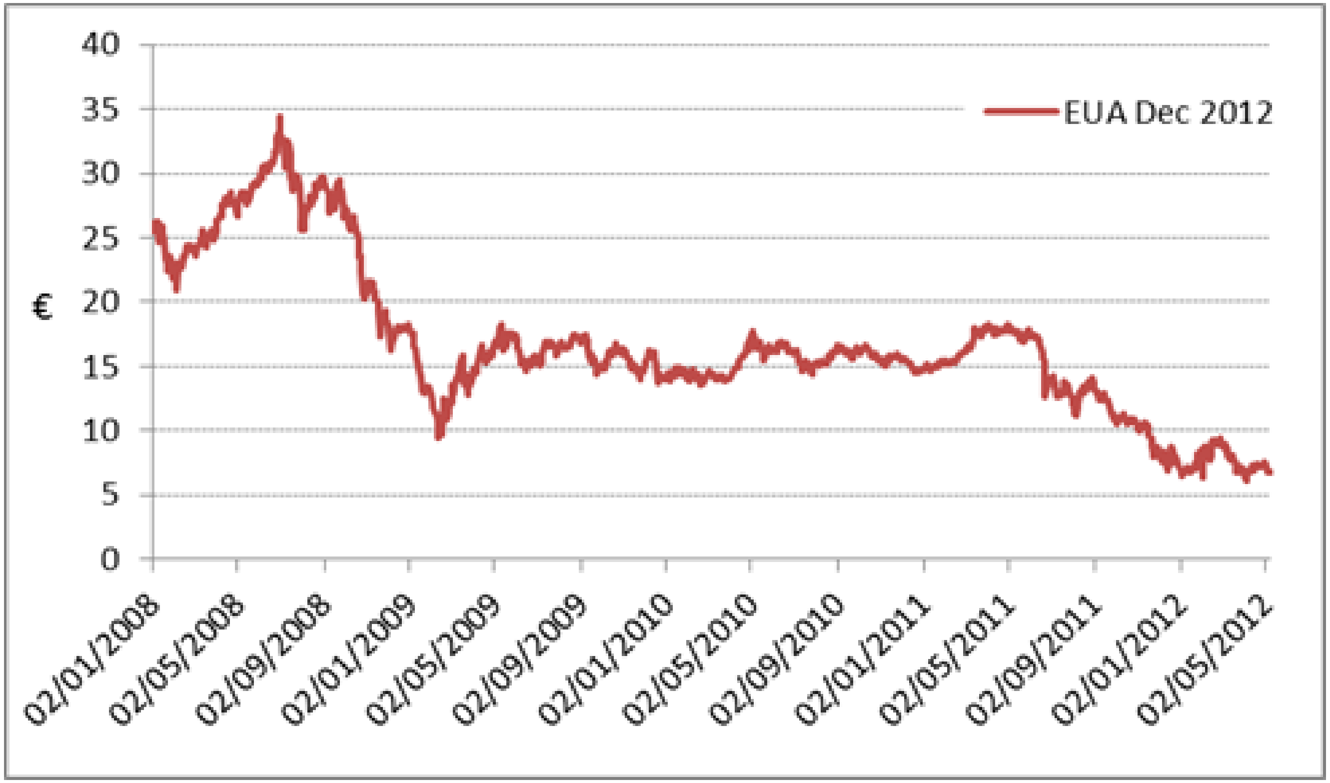
Impact of the recession, progress in energy efficiency and many changes

- Severe recession has deeply altered the demand for allowances
- As the impact assessment of the Energy Efficiency Directive proposal pointed out, full implementation of the EU ETS Directive can have an impact on the EU ETS price signal
- Worsening supply and demand imbalance: mounting surplus of allowances

⇩

A weak price signal

Carbon price evolution in phase 2



Source: Bloomberg New Energy Finance

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European Commission's approach

The Commission proposed on 13 November 2013 the **review of the time profile for allowances**:

- Volumes to be auctioned earlier in the 3rd phase should be auctioned later ("back loading")
  - 900 million allowances

The Commission proposed on 16 November 2013 a postponement of auctioning of aviation allowances

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European Commission's approach(2)

Carbon Market Report on 14 November 2012

- Structural measures proposed:
  - Higher target for 2020 ⇨ increase GHG reduction target to 30%
  - Retiring a number of allowances in phase 3 (from the amount foreseen to be auctioned)
  - Early revision of the annual linear reduction factor (1,74 %)
  - Extension of the scope of the EU ETS to other sectors
    - would also include sectors less strongly influenced by economic cycles
      - ✓ other energy related CO2 emissions such as fuel consumption in other sectors (transport?)
  - Limit access to international credits
  - Price management mechanisms

Thank you for your attention!

For more information see:

http://ec.europa.eu/clima/policies/ets/index_en.htm

For the EU ETS regulatory updates subscribe to:

http://ec.europa.eu/clima/rss/news_regulatory_en.xml

Ensuring compliance and compliance cycle (cont.)

- Compliance cycle
  - Each installation to monitor and report its emissions of year x-1
  - Preparation of report on emission of year x-1 as from Jan of year x
  - 28 Feb of year x: free allocation for year x (constant auctioning)
  - End of March of year x: verification of emissions of year x-1 by independent verifier
  - By 28 April of year x: surrendering of allowances for emissions of year x-1

Differences: transitional and definitive auction platform

- AR provides for some **derogations** when it comes to tasks performed by TCAP (in relation to definitive platform)
  - Derogations (Art 28.3 AR):
    - ✓ provision of remote access through electronic interface, dedicated connection and alternative means of access to auctions (Art 16.2 and 16.3 AR)
    - ✓ training and helpline services (Art 17 AR)
    - ✓ requirements for admission to bid (Art 19 AR) , submission and processing of applications for admission to bid (Art 20), refusal, revocation or suspension of admission (Art 21)
    - ✓ market abuse regime applicable to auctioned products (Art 36 to 43 AR)
    - ✓ monitoring the relationship with bidders, notification of money laundering, terrorist financing or criminal activity, notification of market abuse (Art 54, 55, 56 AR)
    - ✓ publication of contact details of bidders bidding on behalf of others (Art 60.3 AR)
    - ✓ language regime of communication by auction platform (Art 63.4 AR) and right of appeal (64 AR)