

# EU Emissions Trading Scheme beyond 2013

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Greening the Transatlantic Alliance:  
E.U. and U.S. Perspectives on a Global Carbon  
Market to Combat Climate Change

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# Overview

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- EU Climate Change Policy
- EU ETS Directive
- EU ETS from 2013
- Future developments
- Final remarks

# EU Climate Change Policy

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## **EU and Climate Change :**

- 1994: ratification of the UNFCCC
- 2000: 1° European Climate Change Program (ECCP)
- 2002 ratification of the KP by EU and Member States
- 2003: Emissions Trading Directive
- 2005: ECCP II
- 2008: Climate Change and Energy Package
- 2009: Emissions Trading Directive revision

# EU Climate Change Policy

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## 2008 Climate Change and Energy Package :

- +20% energy efficiency
  - +20% renewables
  - -20% GHG emissions (-30%?)
  - +10% biofuels
  - Carbon capture and storage
  - Integrated energy markets
  - Integrated energy policy
- ⇒ Fighting climate change
- ⇒ Increasing security of energy supply
- ⇒ Promoting continued economic growth
- HIGHLY ENERGY EFFICIENT  
LOW CARBON ECONOMY

# EU Climate Change Policy

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## **2009 Legal formulation of the C&E package :**

- Directive 2009/28/EC – Renewables & Biofuels
- Directive 2009/29/EC – ETS review
- Directive 2009/30/EC – Fuel Quality
- Directive 2009/31/EC – CCS
- Decision 406/2009/EC – Non-ETS

# EU ETS Directive

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## **Directive 2003/87/EC**

→ establishing a scheme for greenhouse gas emission allowance trading within the Community

- Amended by :
  - Directive 2004/101/EC - Linking Directive
  - Directive 2008/101/EC - Aviation inclusion
  - Directive 2009/29/EC – ETS Revision

# EU ETS – Introduction

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## EU ETS

- cornerstone of the EU Climate Change strategy
- world's first international company-level cap-and-trade system of CO2 allowances
- is driving investment in low-carbon technologies
- should allow the EU to achieve its emission reduction target under the KP at a cost of below 0,1% of GDP

# EU ETS – Principles

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## **Fundamental principles of EU ETS**

- It is a “cap-and-trade” system
- Participation is mandatory for businesses in the sectors covered
- It contains a strong compliance framework
- Anyone can buy and sell allowances

# EU ETS – Principles

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## **Fundamental principles of EU ETS**

- The market is EU-WIDE, but :
  - offers emission reduction opportunities in the rest of the world by accepting credits from emission-saving projects carried out under CDM and JI mechanisms
  - is also open to establishing formal links with compatible mandatory cap-and-trade systems in third countries that have ratified the KP

# EU ETS – phases/trading periods

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## **Phase 1 – 2005-2007**

- three-year pilot phase of 'learning by doing' in preparation for the crucial phase 2

## **Phase 2 – 2008-2012**

- coincides with the 'first commitment period' of the Kyoto Protocol

## **Phase 3 – 2013-2020**

- will contribute to greater predictability → encouraging long-term investment in emission reductions;
- the EU ETS will be substantially strengthened and extended from 2013 → central role in the achievement of EU's climate and energy targets for 2020.

# EU ETS – A revised system from 2013

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- As part of a major package of initiatives agreed in 2008 to tackle climate change and increase the use of renewable energy (Climate Change & Energy Package), a substantial revision of the EU ETS will take effect from the start of Phase 3 in 2013.
- This comprehensive revision makes the ETS a key instrument in reaching the EU's goal of becoming a highly energy-efficient, low greenhouse gas-emitting economy.
- The revised EU ETS will have more harmonized rules, will offer increased predictability to market operators and will enjoy stronger international credibility.

# EU ETS – A revised system from 2013

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Main changes:

- Broadening of the scope of the system (in addition to the inclusion of aviation from 2012)
  - to bring in certain additional industries and greenhouse gases, as well as installations undertaking the capture, transport and geological storage of CO<sub>2</sub> emissions
  - expected to bring into the system net additional emissions equivalent to 120-130 million tonnes of CO<sub>2</sub> per year from 2013, extending the coverage of the EU ETS from around 40% to 43% of total EU greenhouse gas emissions

# EU ETS – A revised system from 2013

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- Replacement of the current system of national caps by a single cap for the whole EU
- A linear 1.74% reduction in the cap each year until 2020 and beyond → by 2020 the number of allowances will be 21% below the 2005 level
- Progressive move towards full auctioning of allowances in place of the current system of free (Exceptions for specific energy-intensive industries at risk of carbon leakage)
- Possibility for MS to exclude installations emitting low amounts of CO<sub>2</sub> provided these installations are subject to equivalent measures

# EU ETS – A revised system from 2013

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- More harmonized rules on monitoring, reporting and verification of emissions → to enhance the reliability and credibility of the scheme
- Possibility to link the EU ETS to mandatory cap-and-trade systems in third countries not only at national level but also at regional or state level
- Harmonized rules on the use of carbon credits from CDM and JI projects in third countries → to encourage third countries to ratify the future global climate agreement

# EU ETS

## Allocation of allowances from 2013

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More harmonized approach

- A single EU-wide cap on emission allowances will replace the current 27 national caps implemented through national allocation plans (NAPs)
  - will provide stronger guarantees that the EU's greenhouse gas emission reduction targets for 2020 will be achieved
  - should be more effective in minimizing the cost of meeting the targets.

# EU ETS

## Allocation of allowances from 2013

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- The cap will start at the mid-point of the 2008 to 2012 period and be reduced in a linear fashion by 1.74% each year until 2020 and beyond.
  - by 2020 the number of allowances available will be 21% below the level of verified emissions in 2005 → very substantial contribution to the attainment of the EU's overall greenhouse gas emission targets
  - clear up-front announcement of the size and frequency of the cap's reduction for many years ahead → provides market operators with a long-term perspective and the necessary predictability on which they can base decisions to invest in emission reductions.

# EU ETS

## Allocation of allowances from 2013

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- Auctioning → basic principle for allocating allowances from 2013 (gradually replacing free allocation by governments).
  - Power generation sector will in principle have to buy all of its allowances from 2013
  - Installations undertaking the capture, transport and geological storage of GHG will have to buy all of their allowances from 2013
  - Other sectors → progressive transition to auctioning (with a view to reaching full auctioning by 2027 )
  - Exceptions for certain energy-intensive industries at risk of carbon leakage
  - Given the significant weight of power generation in the EU ETS, it is estimated that more than 50% of total allowances will be auctioned from 2013.

# EU ETS – Allocation of allowances from 2013

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- ❑ Auctions will be held by national governments but will be open to buyers from all EU.
- ❑ Rules on the design and execution of auctions to be adopted by June 2010 → to ensure they are carried out in an open, transparent and non-discriminatory way.
- ❑ It is estimated that auctioning could raise an EU-wide total of €30-50 billion per year by 2020 → Governments should use at least 50% of this income to combat climate change, in both Europe and developing countries.

# EU ETS

## Allocation of allowances from 2013

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- Open issues:
  - Auctions start
  - Quantity of allowances to be auctioned
  - Optimal level of centralization (EU vs national)

# EU ETS – Carbon leakage

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Exceptions to the auctioning of emission allowances could be made for energy-intensive sectors and sub-sectors at risk of carbon leakage

- their competitiveness is deemed to be at risk due to laxer emission constraints in other parts of the world
- risk that Europe-based industries relocate to less carbon-constrained jurisdictions
- European jobs would be lost and global greenhouse gas emissions would increase - a phenomenon known as 'carbon leakage'.
- will continue receiving all of their allowances for free, on condition that they use the most efficient technology to limit emissions.

# EU ETS – Carbon leakage

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- Decision 24/12/2009 – determination of sectors and sub-sectors judged to be potentially at risk on the basis of an agreed set of criteria.
- The Commission will reassess the situation in the light of a new global climate agreement and propose any adjustments considered necessary → could involve, for example:
  - adjusting the proportion of allowances that sectors should receive free of charge, or
  - extend the EU ETS to cover importers of products competing with those from European sectors considered at risk of carbon leakage.

# EU ETS – JI and CDM credits

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- ❑ Recognition of JI and CDM credits as equivalent to EU allowances (1 EUA = 1 CER = 1 ERU) → can be traded within the system.
- ❑ All credits except those from nuclear facilities and from LULUCF activities may be accepted.
- ❑ During Phase 2 businesses in the EU ETS can buy credits for a total of around 1.4 billion tonnes of CO<sub>2</sub> to help offset their emissions.
- ❑ A number of EU governments plan to buy credits totaling around 550 million tonnes of CO<sub>2</sub> to help meet their Kyoto obligations, and have budgeted some €2.9 billion for these purchases - This use of credits is supplemental to their domestic action to limit emissions.

# EU ETS – JI and CDM credits

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From 2013, rules on the use of credits will depend on the conclusion of a satisfactory international climate agreement for the post-2012 period.

a) No international agreement

- ❑ operators will be able to carry over to Phase 3 any credits not used in Phase 2, plus a limited additional quantity.
- ❑ The overall effect will be that use of credits will be limited to no more than 50% of the EU emission reductions to be made between 2008 and 2020.

# EU ETS – JI and CDM credits

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## b) Satisfactory international agreement

- the European Commission may propose to allow additional access to credits as well as the use of any new types of project credits or other mechanisms created under the agreement.
- *From January 2013 onwards, however, only credits from third countries that have ratified the new agreement or from new types of project approved by the Commission will be eligible for use in the EU ETS.*

# EU ETS - Global carbon market

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- The EU carbon market in allowances has developed strongly.
  - Trading volume rose from 362 million allowances (tonnes of CO<sub>2</sub>) in 2005 to almost 3.1 billion in 2008.
  - European trading some 73% of the global turnover in CO<sub>2</sub> allowances and credits, which was worth €92.4 billion in 2008.
  
- The EU ETS has thus established itself as the engine of the global carbon market that is becoming a powerful tool for reducing greenhouse gas emissions cost-effectively.

# EU ETS – Global carbon market

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- Need for an effective global carbon market to support a post-2012 climate agreement.
- by linking domestic emissions trading systems
  - The EU ETS has been extended to Iceland, Liechtenstein and Norway since the start of 2008 and is open to linking with other compatible mandatory cap-and-trade systems
  - to create a carbon market among member countries of the Organisation for Economic Co-operation and Development (OECD) by 2015 and then
  - to expand this to include the big emerging economies from around 2020.

# EU ETS – Global carbon market

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- Creation of the *International Carbon Action Partnership* (2007) to support the establishment of a global carbon market by:
  - Sharing best practice and learning from each others' experiences.
  - Building and strengthening partnerships amongst Governments.
  - Ensuring design compatibility.

# EU ETS – Global carbon market

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- Reform of UN offset mechanisms
  - JI
    - improve effectiveness and efficiency
    - insure environmental integrity
    - opening to new participants
  - CDM
    - improve environmental integrity
    - increasing CDM in least developed countries

# EU ETS – Global carbon market

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- Sectoral crediting and trading
  - to increase mitigation efforts in developing countries and expand their access to carbon markets
- a) Sectoral carbon crediting mechanism
  - Highly competitive sectors in the more advanced developing countries
  - would cover entire national sectors (instead of single project as with CDM)
- b) Sectoral emissions trading systems
  - Company-level cap-and-trade systems in advanced industrial sectors
  - To be linked to those in developed countries

# Some final remarks

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## Comparative law perspective

- Lessons from the reference model, namely the Acid Rain Program
- Late amendments to the EU ETS → problems and inefficiencies that could have been avoided
- Weaknesses of the European legislative process

# Some final remarks

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## EU Climate Change & Energy Package vs International Framework

### a) Climate Change & Energy Package

- Very ambitious goals → risks for European economies competitiveness, but
- Quite clear and certain legal framework and medium- and long-term goals → predictability → suitable planning of measures and investments
- The formulation by the EU of a policy aimed at a high energy efficient low carbon economy can be an opportunity → first mover advantage

# Some final remarks

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## b) International Framework

- Weakness of the Copenhagen Accord
  - “letter of intents”
  - Non-binding
  - vague contents
  - Need for a further binding agreement with more concrete obligations
- Uncertainty for the post-Kyoto period
- Difficulties in planning measures and investments (especially CDM)

# Some final remarks

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## c) Timely action

- EU goals and legislation shall be implemented anyway
- Member States and operators shall take timely measures
  - Avoid past errors
  - Late action could result in high costs in the future, instead of exploiting the opportunities offered by the implementation of a HIGH ENERGY EFFICIENCY LOW CARBON ECONOMY