The EU Emissions Trading System

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Overview

- Overview of EU Emissions Trading System (EU ETS)
- Inclusion of aviation in the EU ETS
- Summary
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EU climate change policy

- Tackling climate change is urgent – action required now
- The EU’s objective is to limit global temperature increase to 2°C above pre-industrial levels
- EU now has legislation in place to deliver a 20% reduction below 1990 levels by 2020
- EU will increase target to a 30% reduction below 1990 levels by 2020 in the context of international agreement on climate change
- EU leaders recognise that 80 – 95% reductions in the EU’s emissions are necessary by 2050
The EU ETS

☆ A “downstream” cap-and-trade system for major emitters

☆ Companies can choose:
  • To emit allocated emission rights (allowances) or
  • To reduce emissions below allocation and sell or bank allowances
  • To emit more than allocation and buy additional allowances

☆ Clear environmental outcome based on size of emissions cap

☆ Cost-effective emissions reductions to the level of the cap, because investments take place where cheapest
Key features of the EU ETS

- Started on 1 January 2005
- Initially focussed on CO₂, will be extended to other greenhouse gases
- Mandatory cap on absolute emissions from around 10,000 energy-intensive installations
- Currently covers around 2 billion tonnes of CO₂ emissions
  - Around half of the EU’s total CO₂ emissions
- Now applicable across 30 countries
- Linking foreseen with other emissions trading systems
- Drives the global carbon market:
  - EU allowances accounted for over 70% of trades in 2008
  - EU ETS is a main driver of demand for CDM credits from developing countries
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Scope of the system

- Aviation included in 2012
- Covers all flights departing EU airports
- Flights arriving at EU airports from 3rd countries covered only in the absence of equivalent measures by other States
Exemptions

★ Some flights excluded, such as:
  • small aircraft (below 5.7 tonnes MTW)
★ *de minimis* exclusion for commercial operators:
  • Operating less than 2 eligible flights per day; or
  • Total CO$_2$ emissions less than 10,000 tonnes p.a.
★ Exemptions exclude many operators from least developed countries
★ Over 100 States have no commercial operators covered by the system
Emissions cap

2012 cap = 97% of 2004-2006 baseline

2013-2020 cap = 95% of 2004-2006 baseline

By 2020 EU ETS forecast to save an additional 190 Mt CO$_2$ annually through inclusion of aviation
Aviation will be second largest sector in EU ETS after electricity generation

<table>
<thead>
<tr>
<th>Business Sector</th>
<th>Annual Emissions (mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustion installations</td>
<td>1491</td>
</tr>
<tr>
<td>Mineral oil refineries</td>
<td>152</td>
</tr>
<tr>
<td>Iron or steel</td>
<td>133</td>
</tr>
<tr>
<td>Cement and lime</td>
<td>188</td>
</tr>
<tr>
<td>Pulp, paper and board</td>
<td>31</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2092</strong></td>
</tr>
</tbody>
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*for comparison:* aviation emissions covered by the EU ETS approx 220

Source: Verified 2008 EU-27 emissions for EU ETS installations (m tonnes of CO2 equivalent).
Allocation of allowances

★ 85% allocated for free
  • 82% based on 2010 benchmarking (tonne-km)
  • 3% reserved for new entrants and fast growing operators

★ 15% allocated by auction
Economic impact of including aviation in the EU ETS

★ Minimises distortions in competition
  • Equal treatment of operators on a route

★ Small increase in the price of air tickets
  • estimated at €5 to €40 in 2020 depending on the journey length and carbon price

★ Limited impact on demand growth
  • forecast traffic growth may reduce from business-as-usual levels of 142% to 135%
Recognition of equivalent measures by other States

★ Where a 3\textsuperscript{rd} country adopts measures to reduce the climate impacts of flights arriving in the EU:

- EU will ensure optimal interaction between measures
- Legislation enables exemptions for arriving flights from scope of the EU ETS

★ In case of agreement on global measures, EU would amend Directive as necessary
What could be equivalent?

- In the legislation, equivalence defined in terms of environmental impact

- For developed countries, likely to involve market based measures such as cap and trade

- For developing countries, could include:
  - offsets (e.g. additional CDM)
  - sectoral crediting
  - nationally appropriate mitigation measures (NAMAs)
Use of auctioning revenues

- Auctioning proceeds should be spent on tackling climate change in the EU and third countries:
  - Reduce emissions
  - Adaptation
  - Administration of scheme
  - Global Energy Efficiency and Renewable Energy Fund
  - Avoiding deforestation in developing countries
  - Research and development (mitigation and adaptation in aeronautics and air transport)
  - Low emission transport

- Member States must report how they spend revenues to the Commission
Benefits for developing countries

★ Through the CDM, the EU ETS is a key driver for investments in developing countries.
  - expected market for JI and CDM in the EU ETS of up to 1.3 billion tonnes over 2008-12 (~ €8- €26 bn)

★ Aviation’s inclusion creates extra demand for CDM credits
  - economic benefits from CDM could substantially exceed total compliance costs of non-Annex I carriers

★ Auctioning of allowances creates revenues
  - which should be used to adapt to the impacts of climate change in the EU and third countries
Implementation

- Implementation well advanced
- Aircraft operators are currently monitoring emissions and activity (t-km)
- Allocations of free allowances to be determined next year
- Developing simplified approaches for small emitters to reduce administrative burden
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Key points

★ Tackling climate change is a key EU policy
★ EU ETS is a key mechanism to deliver EU’s emissions targets
★ Aviation included in the EU ETS from January 2012
★ EU ETS could provide a model for other States to use
Further information

Aviation and climate change website:
http://ec.europa.eu/environment/climat/aviation_en.htm

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