



# 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



# Overview



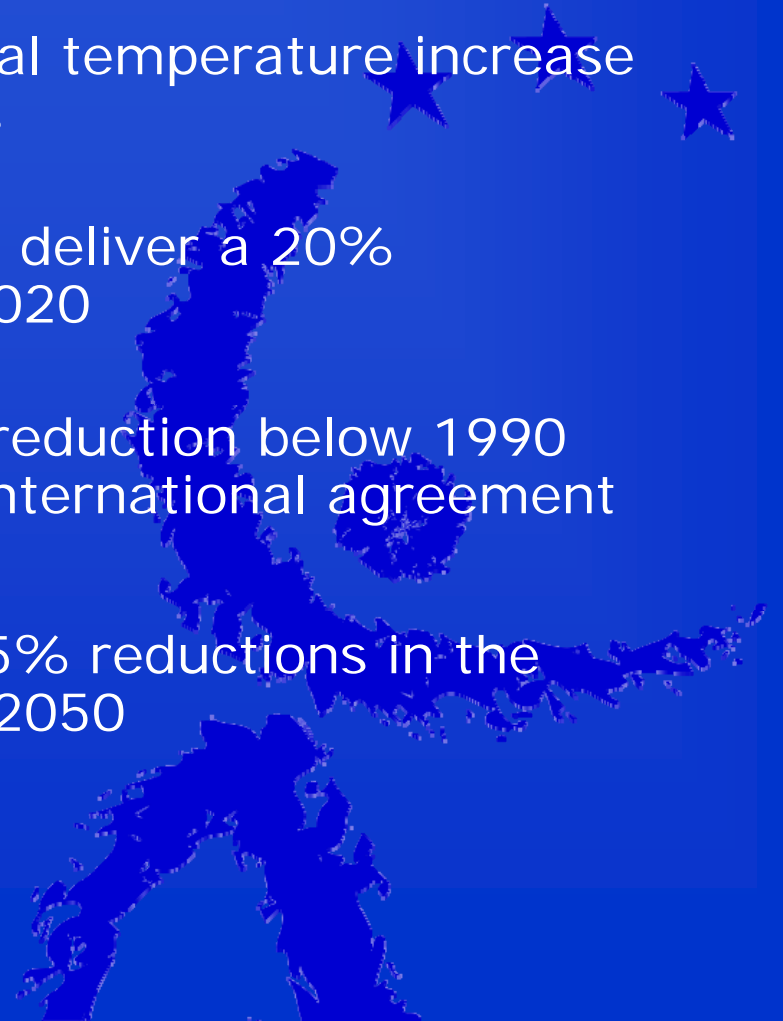
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# EU climate change policy



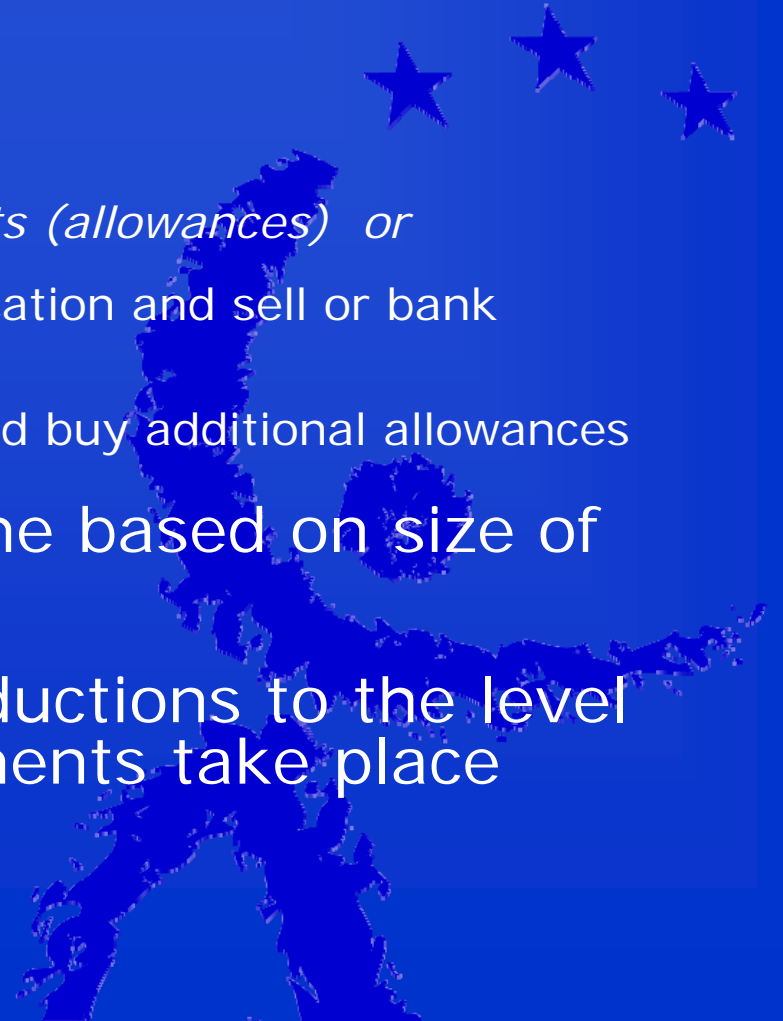
- ★ Tackling climate change is urgent – action required now
- ★ The EU's objective is to limit global temperature increase to 2°C above pre-industrial levels
- ★ EU now has legislation in place to deliver a 20% reduction below 1990 levels by 2020
- ★ EU will increase target to a 30% reduction below 1990 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



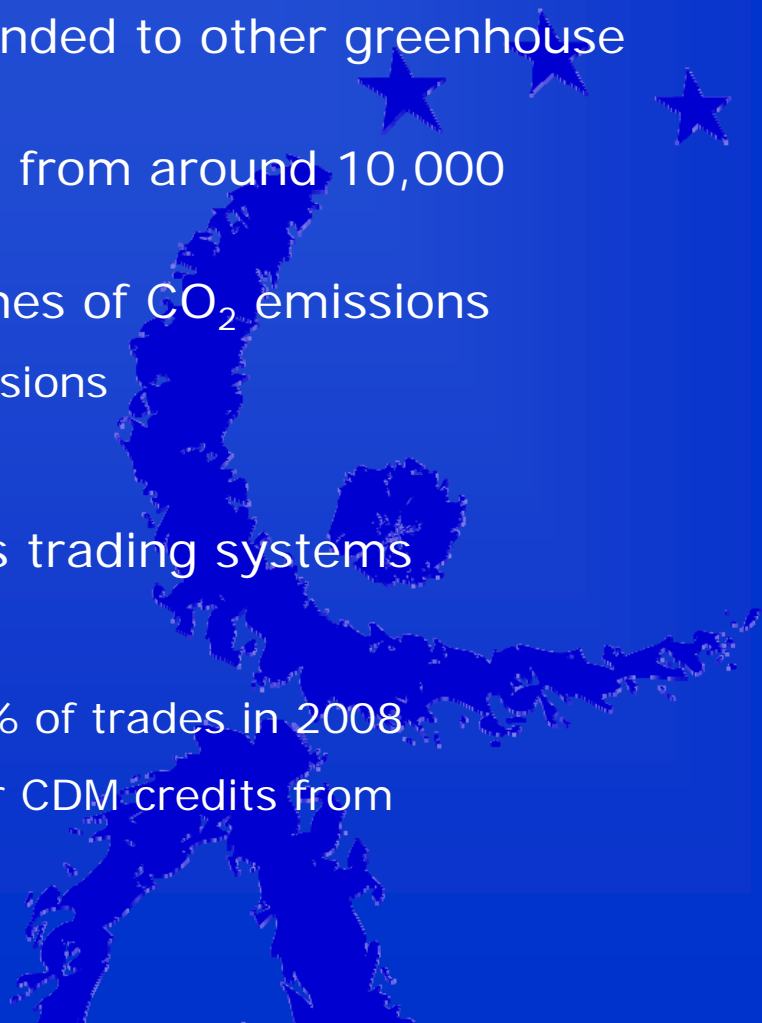
- ★ A “downstream” cap-and-trade system for major emitters
- ★ Companies can choose:
  - *To emit allocated emission rights (allowances) or*
  - *To reduce emissions below allocation and sell or bank allowances*
  - *To emit more than allocation and buy additional allowances*
- ★ Clear environmental outcome based on size of emissions cap
- ★ Cost-effective emissions reductions to the level of the cap, because investments take place where cheapest



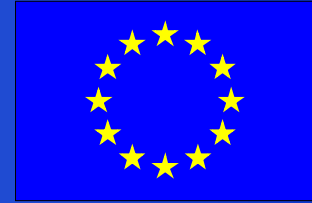
# Key features of the EU ETS



- ★ Started on 1 January 2005
- ★ Initially focussed on CO<sub>2</sub>, 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 CO<sub>2</sub> emissions
  - Around half of the EU's total CO<sub>2</sub> 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 3<sup>rd</sup> 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<sub>2</sub> 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



## ★ 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<sub>2</sub> annually through inclusion of aviation

# Aviation will be second largest sector in EU ETS after electricity generation



Business Sector	Annual Emissions (mt)
Combustion installations	1491
Mineral oil refineries	152
Iron or steel	133
Cement and lime	188
Pulp, paper and board	31
TOTAL	2092
<i>for comparison:</i> 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

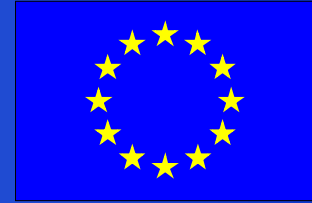


★ Where a 3<sup>rd</sup> country adopts measures to reduce the climate impacts of flights arriving in the EU:

- 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 1 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](http://ec.europa.eu/environment/climat/aviation_en.htm)

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