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# **Extending the EU Emissions Trading Scheme to aviation**

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**European Commission**



# Overview

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- **The climate change challenge**
- **EU Emission Trading Scheme (EU ETS)**
- **Aviation**
  - **Significance of aviation emissions**
  - **Aviation in the EU ETS**
  - **Next steps**



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*The scientific evidence is now  
overwhelming: climate change  
presents very serious global risks,  
and it demands an urgent global  
response*

**Sir Nicholas Stern, 'The Stern Review' on economics of climate  
change, October 2006**



# The Climate Change Challenge

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- **EU objective to limit temperature increases to 2°C**
  - **To meet this objective urgent action is needed**
    - **Developed countries & EU: 30% GHG emission reduction target by 2020, compared to 1990 levels**
    - **Developing countries: Reduced growth *asap*, absolute reductions after 2020**
    - **Deforestation: halt within two decades and then reverse**
  - **Leadership:**
    - **EU leadership through a firm independent commitment to achieve at least 20% GHG emission reductions by 2020, compared to 1990 levels**
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## EU Emissions Trading Scheme (EU ETS)

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- A central pillar of EU climate change policy
- In place since 1 January 2005
- Mandatory caps on emissions from 11,500 energy intensive installations across the EU
- Covers almost half of total EU CO<sub>2</sub> emissions
- Cost-effective strategy for reducing emissions
- Step on the way to a global carbon market



## How do aviation GHG emissions compare to emission from other ETS sectors?

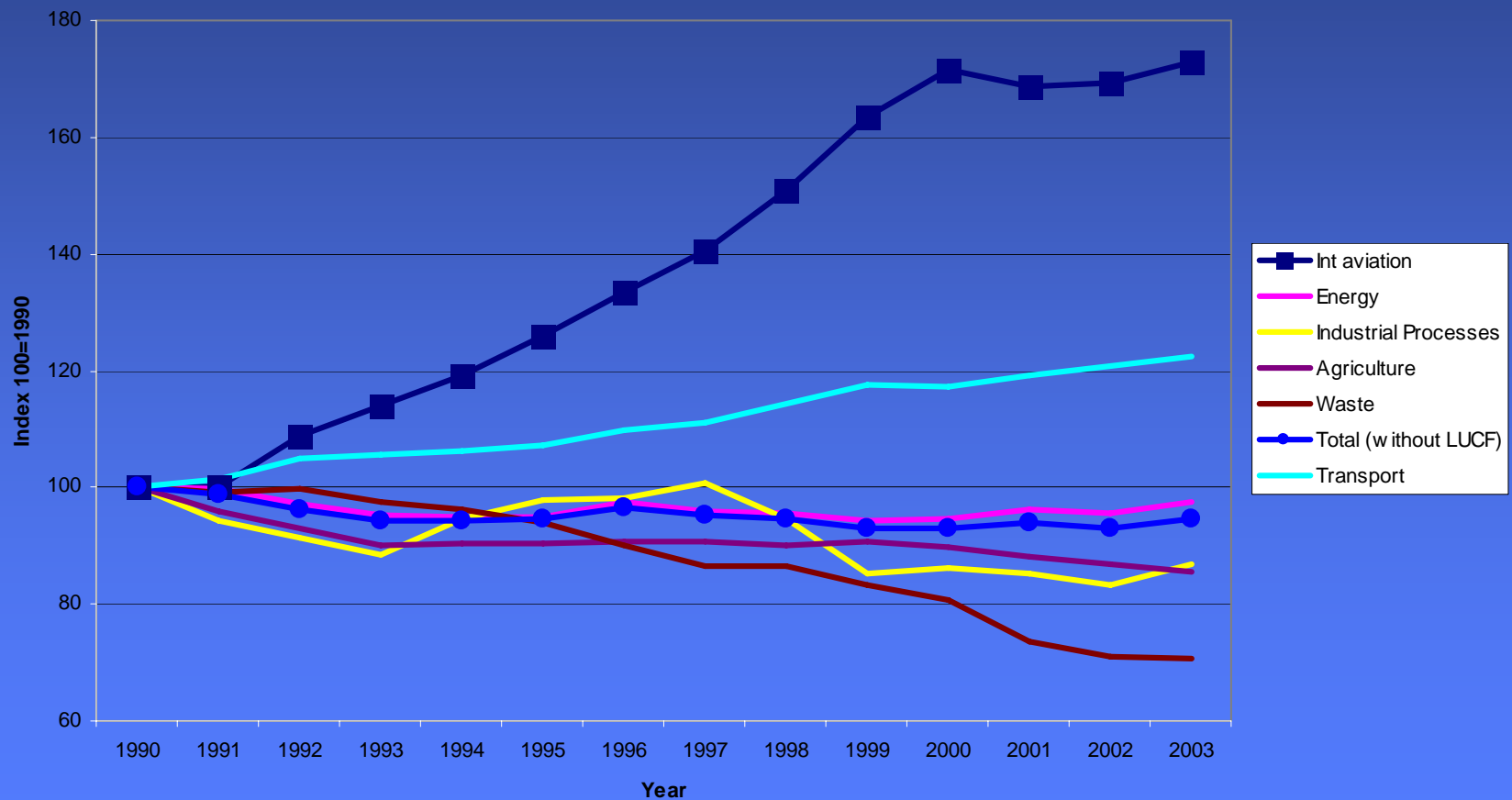
Combustion installations	1350
Installations for the production of cement clinker in rotary kilns or lime in rotary kilns or in other furnaces	170
Mineral oil refineries	147
Installations for the production of pig iron or steel	133
Industrial plants for the production of (a) pulp from timber or other fibrous materials (b) paper and board	30
Other	87
Total	1917
<i>For comparison: Aviation emissions from fuel sold in the EU</i>	ca. 144

Source: Verified 2005 emissions for ETS installations by category of installation (mio tonnes of CO<sub>2</sub>).



# Aviation emissions are growing rapidly

EU GHG emissions by sector as an index of 1990 levels





## Status of the Aviation ETS proposal

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- **Adopted by the Commission in December 2006**
- **Currently in the second reading stage of the decision making process**
- **Broad agreement may be reached this summer**
- **Entry into force at the earliest during the start of next year**



## Main content of 2006 Commission proposal (1/2)

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- **Covers CO<sub>2</sub> emissions only**
- **Emissions cap set at 100% of 2004 – 2006 average**
- **Intra-EU flights in 2011, expanded to all flights arriving in or departing from the EU from 2012**
- **Will not apply to flights arriving from 3<sup>rd</sup> country that has comparable measures in place**



## **Main content of 2006 Commission proposal (2/2)**

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- **Small percentage of allowances to be auctioned in 2011-12 (around 3%)**
- **Auctioning in later periods determined via EU ETS review.**
- **All other allowances to be allocated for free on basis of a benchmark**
- **Aircraft operators can buy allowances from other trading sectors and use CDM credits**



## Administration and enforcement

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- **Aircraft operators will be responsible entities**
- **Each aircraft operator will be administered by a single Member State**
  - **EU airlines: state which issued operating licence**
  - **Non-EU airlines: state to which most emissions are attributed**
  - **The Commission will publish and update a list of administering Member States**
- **Enforcement sanction - revocation or suspension of operator's operating authorisation**



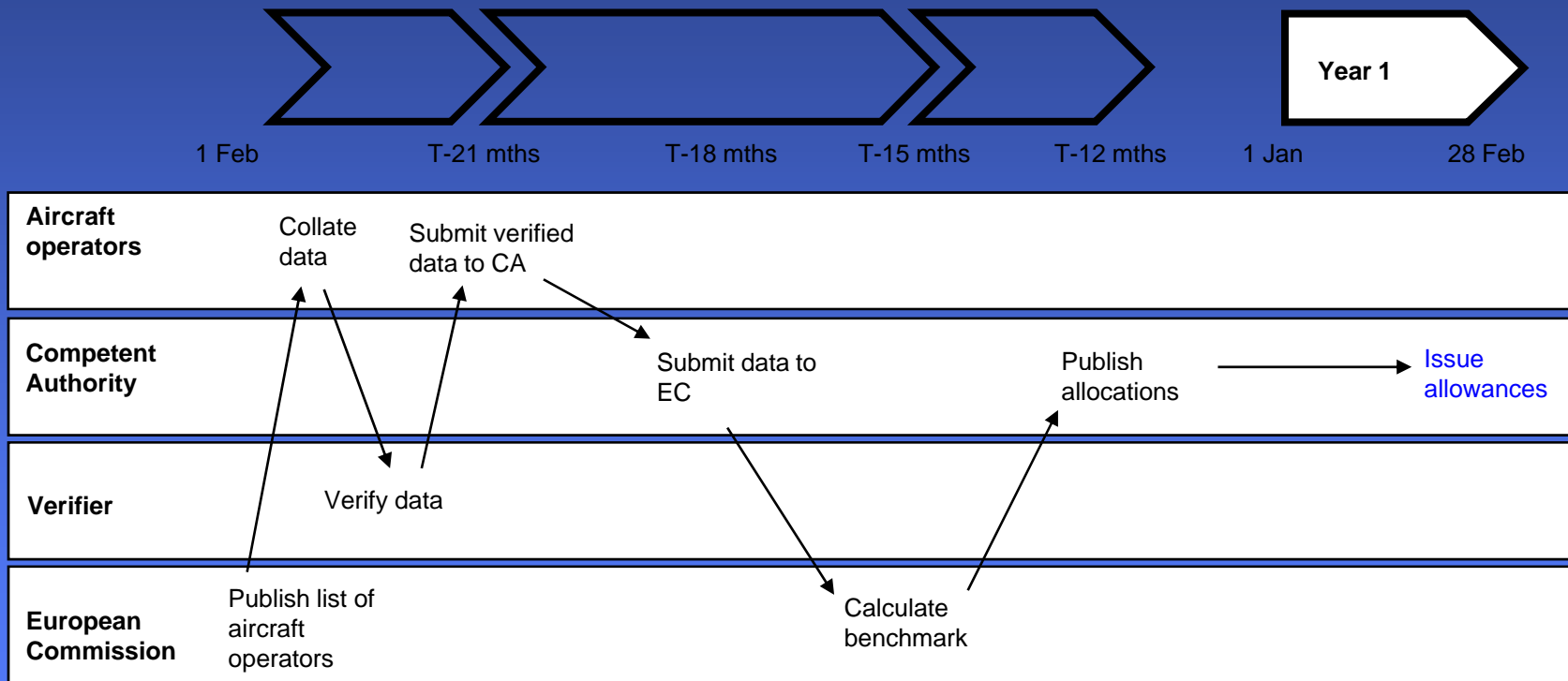
# Key step for operators - applying for allowances

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- **Application for free allowances**
  - Operators applying for free allowances will need to collect data on passenger numbers and mass of freight carried (tonne – km) over calendar year
  - Data needs to be independently verified and submitted to administering authority
  - Commission calculates benchmark to allocate allowances according to share of traffic
- **Allocation applies for 1 trading period**
- **Optional process – operators can buy all allowances instead, either from auction or general market**



# Data collection process to allocate free allowances





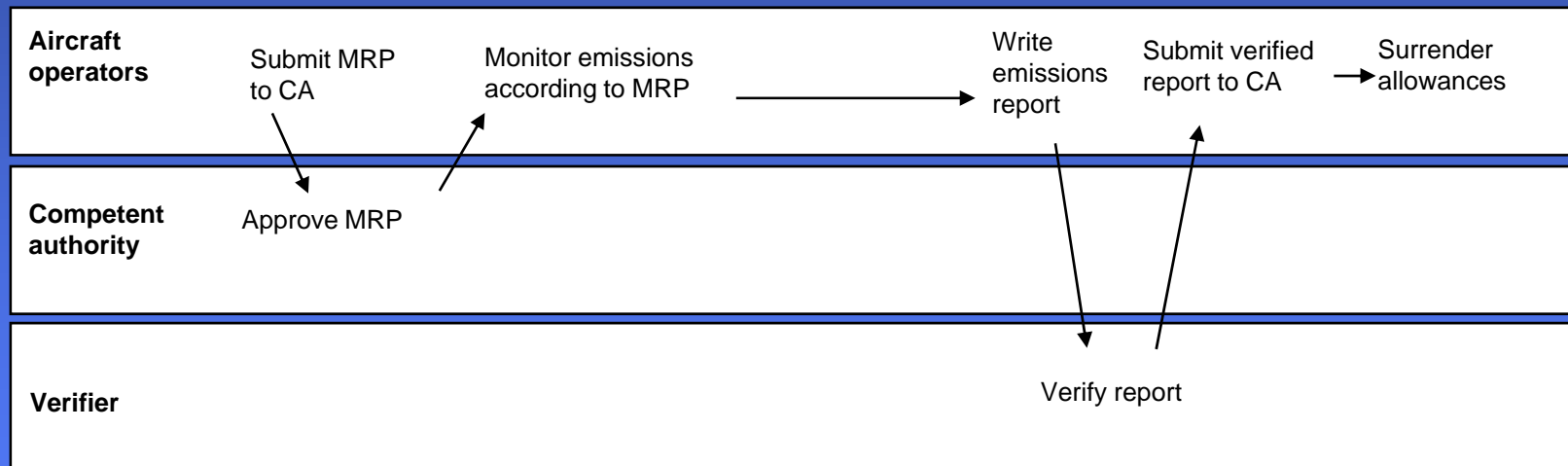
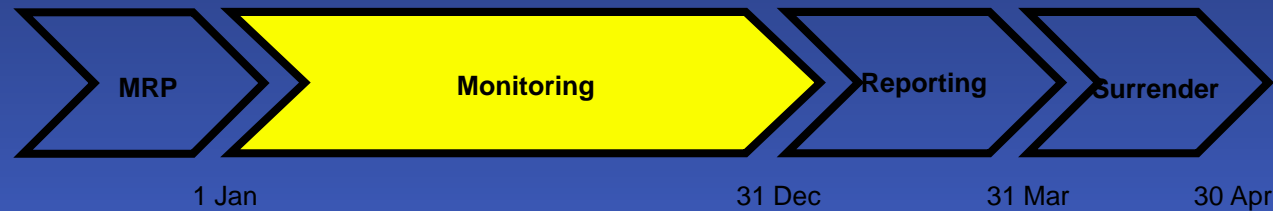
# Key steps for operators - reporting compliance

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- **Annual compliance reporting**
  - Operators will need to monitor fuel use and submit reports of annual CO<sub>2</sub> emissions
  - Data needs to be independently verified and submitted to administering authority
  - Allowances need to be surrendered each year equivalent to reported CO<sub>2</sub> emissions
- **Reporting takes place each year**



# Administrative process – annual reporting of emissions





# Key areas under political discussion

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- **Start date of scheme**

Council 2012, Parliament 2011

Both support single start date for all flights

- **Level of emissions cap**

Council 100%, Parliament 90%, of 2004-6 average annual emissions

Parliament want an annual 1.5% reduction in cap from 2013

- **Level of allowance auctioning**

1<sup>st</sup> Phase - Council 10%, Parliament 25%

2<sup>nd</sup> Phase – Council increase in accordance with general review of ETS, Parliament maximum used in other sectors



## Key areas of discussion continued

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- **Treatment of new entrants and fast growing operators**
- **Use of Kyoto project credits and credits from other sectors**
- **Interaction with third country measures**
- **How to take into account non-CO<sub>2</sub> emissions**
- **Use of auction revenues to fight climate change in the EU and elsewhere**



## **A *de-minimus* clause will be important to business aviation**

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- **Scheme will apply to aircraft over 5.7 tonnes**
- **Exclusions being considered to take small operators out of the scheme**
  - **Council**

*fewer than 243 flights per 4 month period for 3 consecutive periods (e.g. 729 flights per year)*
  - **Parliament**

*CO<sub>2</sub> emissions less than 10,000 tonnes per year*
- **EP proposal for simplified system of compliance for aircraft below 20 tonnes**



## Next steps

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- **Work on EU proposal continuing**
    - Second reading in Parliament has started
  - **Work on implementation measures**
    - Internet consultation on monitoring provisions soon
    - Stakeholder meeting (end June)
  - **Study on options for NO<sub>x</sub> ongoing**
    - Legislative Proposal later this year
  - **Continue to work through ICAO and UNFCCC to develop a global approach to address climate change impacts from aviation**
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# Summary

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- **Political discussions on the design of the scheme are ongoing, but....**
  - there is broad agreement on the general thrust of the proposal
  - whatever the final outcome will be on design and timing, there won't be much "slack time" for implementation
- **...so meanwhile, it is in operators' interest to**
  - prepare for implementation
  - assist authorities in "getting right" the detailed implementing provisions under development (notably monitoring, reporting and verification guidelines)



## Further information

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**Aviation and climate change website:**

**[http://ec.europa.eu/environment/climat/aviation\\_en.htm](http://ec.europa.eu/environment/climat/aviation_en.htm)**