



European Federation for
TRANSPORT and ENVIRONMENT

Greenhouse gas emissions from transport in the EU25

An analysis of 2004 data submitted to the UNFCCC

Key conclusions

- Between 1990 and 2004, GHG (Greenhouse Gas) emissions from transport increased by 32.2%, or 2 per cent per year on average;
- The share of transport in total EU25 GHG emissions rose from 17% in 1990 to 24% in 2004;
- Emissions from international aviation and shipping (outside Kyoto) have risen by 86 and 45% respectively, and accounted in 2004 for 22% of transport emissions.

Background

The European Community (EC), as a party to the United Nations Framework Convention on Climate Change (UNFCCC), reports annually on greenhouse gas (GHG) inventories within the area covered by its Member States. The 2004 inventory was published in June 2005 (EEA, 2006¹).

We have written this short paper to clarify the climate performance of the transport sector, also including the developments of the international 'bunkers' (international aviation and shipping) which are not covered by the Kyoto Protocol and hence not officially reported to the UNFCCC. The exclusion of the international bunkers often leads to an underestimation of the contribution of the transport sector to the climate change problem.

Increases in emissions 2003-2004

Emissions of climate-changing GHGs (GreenHouse Gases) from the EU-25 increased by 18 million tonnes (0.4 %) between 2003 and 2004. The increase of GHG emissions from the transport sector EXCLUDING international aviation and shipping was 2.2%. If we INCLUDE the emissions from international bunkers, the increase in transport emissions is much higher, namely 3.1%.

Increases in emissions 1990-2004

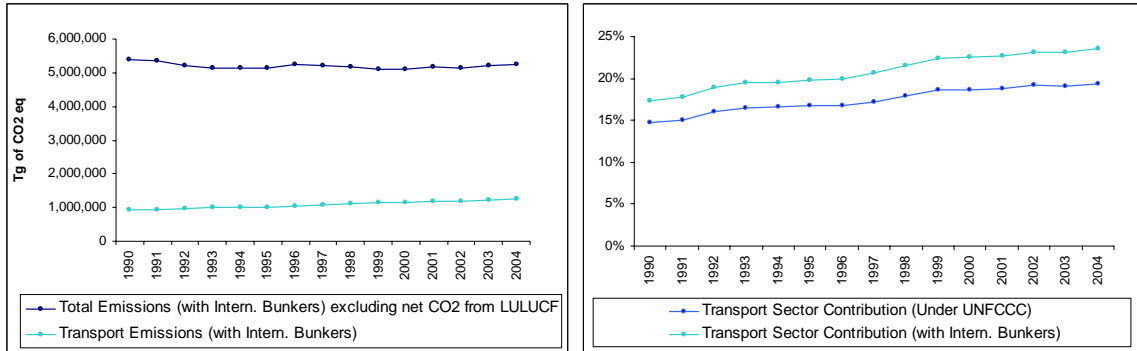
Excluding international bunkers, GHG emissions of the EU-25 compared to 1990 have been decreasing (-4.8%) while the transport sector GHG emissions have increased more than one quarter (25.9%). If we include international bunkers, GHG emissions of the EU-25 have decreased (-2.7%) and the transport sector GHG emissions have increased almost one third (32.2%).

If transport emissions had not increased since 1990 but rather stabilised, the overall reduction of GHG in the EU-25 (including the emissions from international bunkers) would have been -8.1% (instead of -2.7%). If the same calculations are applied without considering the emissions from international bunkers (i.e., all 'Kyoto' emissions) the

¹ http://reports.eea.europa.eu/technical_report_2006_6/en/

reductions would change from -4.8% to -8.4%. In conclusion, if the emissions from the transport sector wouldn't have been growing the EU would already be complying with the target of an 8% reduction of GHG emissions, defined in the Kyoto Protocol.

The next figures present the evolution of total GHG emissions in the EU-25 since 1990 (including the emissions from international bunkers) and the contribution of the transport sector.

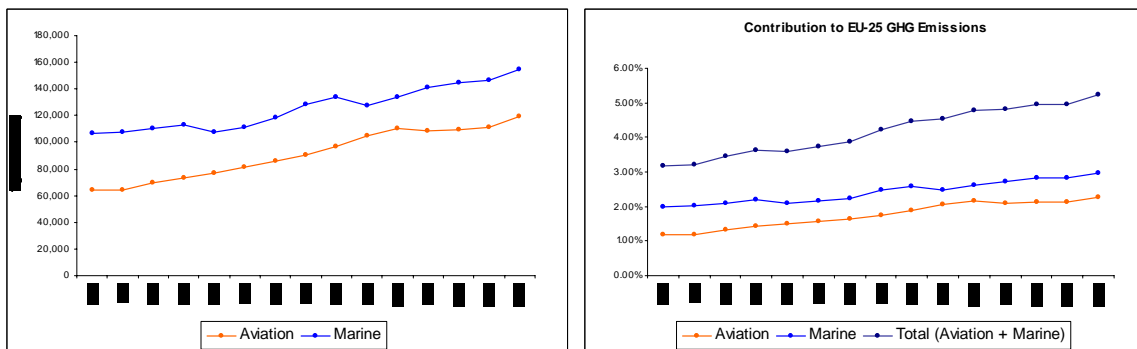


Share of transport

The share of the transport sector's emissions has been continuously growing since 1990. Without international bunkers the contribution grew from 15% in 1990 to 19.4% in 2004. Including international bunkers the share grew from 17.4% in 1990 to 23.6% in 2004.

Growth and share of international aviation and shipping

The contribution of the international bunkers to this increased share of the transport sector in the overall emissions is significant, as the emissions from international aviation and shipping have been increasing at higher rates as those of the transport sector. The following figures present the evolution of international aviation and shipping emissions since 1990 and its contribution to the total EU-25 GHG emissions.



The GHG emissions from international aviation have grown 86.1% between 1990 and 2004 (4.5% p.a.), with an increase of 7.5% between 2003 and 2004, meaning that the contribution of the sector to global emissions is rapidly increasing.

The same occurs with the emissions from international maritime transport which has increased 44.6% since 1990 (2.7% p.a.), with an increase of 5.6% between 2003 and 2004.

Given these facts, the contribution of these two sectors, not covered by Kyoto, to the overall emissions in the EU-25 accounted in 2004 for more than 5%, compared with 3.2% in 1990. In 2004 GHG emissions from aviation and shipping accounted for more than 22% of the total GHG emissions of the transport sector.