

Introduction

The European Commission contracted PricewaterhouseCoopers to carry out the project CLIMA.B.3/SER/2012/0028r with the support of CE Delft and SQ Consult. The principal objective was to obtain an accurate and detailed understanding of the coverage of impacts on small emitters among non-commercial aircraft operators covered by the European Union Emission Trading System (EU ETS) emitting less than 25 000 tonnes of CO₂ per year (hereinafter small emitters).

From 2866 aircraft operators covered by the EU ETS, 88% are non-commercial small emitters. The emissions from these small aircraft operators only make up to 0.8% of the total aviation emissions in the European Economic Area.

The focus of the study was four fold: (1) to analyse the financial impacts on small emitters and competent authorities of the EU Member States, (2) to analyse the exclusion thresholds of Annex I j of the Directive 2003/87/EC including an assessment of financial, economic, competitive and environmental impacts, (3) to recommend options for simplifications for small emitters in complying with the EU ETS and (4) to suggest possible alternative means to regulate emissions from small emitters.

The study was conducted in the first half of 2013 and the information was gathered through online questionnaires without targeting to obtain a statistically sound sample. Feedback was received from 15 EU Member states and from companies representing altogether 133 small aircraft operators. Expert judgement was used for cost estimations where appropriate. A full day meeting was also held with industry stakeholders, service companies and Member States.

1. Financial impact for small emitters and competent authorities

The study found the average cost for small emitters to be disproportionately high compared to the benefits of inclusion of these emissions. Based on total cost (for compliance with the EU ETS, including the buying of allowances to cover actual emissions) per operator, the compliance cost for small emitters was calculated to be up to 46 EUR per tCO₂ of their emissions in 2011, while also noting that initial costs of establishing systems are higher than ongoing costs for applying these. A number of service companies also offer assistance to airlines to monitor and report their emissions, and deal with registry issues. Based on information received from several large emitters, the study estimated the average compliance cost per tCO₂ for a large emitter to be less than 1 EUR. The main cost item for small emitters was monitoring and reporting of annual emissions, followed by buying allowances in small quantities.

Small emitters also involve relatively high administrative cost for competent authorities.

2. Exclusion thresholds

The study concluded that introducing exclusion thresholds for non-commercial operators based on emissions would reduce administrative cost and only have a minor impact on the overall environmental effectiveness of the EU ETS for aviation. The study investigated the impact of several exclusion thresholds between 100 tCO₂ and 25,000 tCO₂. The application of

a threshold of e.g. 1,000 tCO₂ annually would exclude 2,201 non-commercial aircraft operators that are responsible for 0.2% of emissions (491 Kton CO₂) of the EU ETS for aviation.

Potential effect of emissions thresholds on coverage of non-commercial operators

Annual emissions (tCO ₂)	10	100	500	1,000	10,000	25,000	All
# of non-commercial operators	191	1,002	1,882	2,201	2,513	2,530	2,557
Share of non-commercial operators	7%	39%	74%	86%	98%	99%	100%
Emissions (MtCO ₂)	0.00	0.04	0.26	0.49	1.26	1.53	3.42
Emissions (% of full scope under the 2008 EU ETS Directive for aviation)	0.00%	0.00%	0.11%	0.21%	0.55%	0.66%	1.48%

3. Further options for simplifications

Based on the detailed assessment of all individual options and also a combination of options, the study identified 6 further options for simplification: (1) EU wide front desk function for all communication with aviation small emitters, (2) coordinated communication to small emitters from EU Member States, (3) pooling of monitoring, reporting and verification for small emitters, (4) to provide small emitters with a flexibility in changing their administrative Member State, (5) to allow small emitters to use the ETS Support Facility data as a basis for their emissions reporting under the EU ETS and (6) not to require verification of emissions from small emitters that use ETS Support Facility data.

4. Alternative means for regulating emissions

The study analysed possible alternative means of regulating emissions, also considering systems in other countries regulating aviation emissions, whereby certain small emitters would be excluded from having to comply with the EU ETS. It was concluded that, due to its simplicity, low administrative burden and environmental effectiveness, invoicing by Eurocontrol would be a possible alternative means for regulating emissions from small emitters. Other possible alternative means considered were emissions-based contribution to a climate fund, paying a set amount to administrating Member States instead of surrendering allowances and an upstream approach where fuel suppliers would surrender the allowances for fuel sold to small emitters.