

EU Sustainable Aviation Policy: Lost in Translation?

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Executive summary

This SERA briefing sets out the scale of the sustainable development challenge now facing the aviation sector and proposes solutions – with particular regard to climate change – to help ensure EU sustainable aviation policy does not end up “lost in translation”.

This briefing is intended as an information resource for politicians, policy makers and opinion formers. It has been developed in light of a roundtable discussion involving EU politicians from several EU member states, alongside key industry and NGO leaders (see Appendix 1). Whilst the views expressed are formally those of SERA alone, we hope that the briefing will contribute to the development of a shared way forward for EU sustainable aviation policy, avoiding economic “boom and bust”.

The aviation industry now faces a fork in the road. Will the aviation sector and EU aviation policy be driven by events and high profile NGO campaigns, with the aviation industry under constant attack, much like the tobacco industry is today (path A)? Or will the industry be more forward looking, pushing itself beyond its “comfort zone”, to build common ground with NGOs on EU aviation policy development (path B)?



To ensure that initial hopes for EU sustainable aviation policy are not “lost in translation”, SERA recommends:

- A European Environment Agency assessment of the challenge aviation poses to EU climate change policy objectives, looking ahead to 2020 and 2050
- That the UK should use its EU presidency to agree, as a priority, a credible EU climate target for the aviation sector
- That the option of placing airports at the heart of EU emissions trading is considered from a political as well as a technical perspective
- That social equity is placed at the heart of EU policy appraisal, particularly in relation to fair taxation, the ring-fencing of revenue, and the problem of night noise

SERA is especially concerned that, in the absence of a credible EU target, aviation linked with EU emissions trading may amount to little more than “smoke and mirrors”. It does not have to be this way. Addressing aviation’s climate change impact through EU emissions trading is a declared priority of the UK Labour Government’s presidency of the EU in the second half of 2005. SERA supports the Labour Government’s leadership position, and hopes that a credible EU target on aviation and climate change can be agreed as part of the UK’s EU Presidency.

A handwritten signature in black ink, appearing to read 'Philip Douglas'.

Philip Douglas
Vice-chair, SERA

A handwritten signature in black ink, appearing to read 'Hywel Lloyd'.

Hywel Lloyd
Chair, SERA

The aviation industry faces a fork in the road

Path A: Like “big tobacco”, the aviation industry is under attack. EU aviation policy is driven by events and high profile NGO campaigns

Industry positioning

- Strategic aim: To secure the weakest possible EU emissions trading settlement, in the belief that this plus a PR offensive will prevent any aviation tax increases
- Aviation industry does its best to downplay and postpone the priority of setting a credible EU climate target for the aviation sector
- Leading elements within the industry water down their views on the importance of targeting aviation’s non-CO₂ climate impacts
- On night flights, a cause of substantial concern for airport communities under the flight path, the industry refuses to offer any substantive compromise

Possible Path A storyline

The UK’s EU presidency in the latter half of 2005 came and went, but no robust EU climate targets for the aviation sector were agreed. Community groups under the flight path, national and EU NGOs, and mainstream industry sectors increasingly found themselves in the same camp – united against the special treatment granted to the aviation sector. Concerns grew that the lack of a level playing field between aviation and mainstream industry sectors, already covered by Kyoto targets, was putting at risk the competitiveness of such mainstream sectors. Meanwhile, EU finance ministers committed to investing in modern public services came under increasing pressure to deal with a growing public sector borrowing requirement.

No-one quite expected the winter floods of 2007, stretching the Environment Protection Agencies across Europe to their limits. But it was parts of Africa and Asia that were the worst hit. Alongside the relief effort, environment and development campaign groups united in their call for a more robust approach to climate change, singling out the aviation sector – where there was still no target to focus discussions on EU emissions trading. Mainstream industry complained that they were already stretching every muscle to reduce their emissions.

EU finance ministers responded. The UK doubled its Air Passenger Duty (APD), whilst a raft of other EU member states increased their taxes on domestic aviation and instigated proposals for measures similar to the UK APD. As the images of flooding in parts of Africa and Asia hit the TV screens, France and Germany led by example, ring-fencing aviation tax revenue to help fund the relief effort and to delivering the Millennium Development Goals on poverty reduction. Other EU member states followed the example of Sweden, which for some time has had a CO₂ cap for Stockholm Arlanda airport, limiting growth of that airport.

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Path B: Aviation industry pushes itself beyond its “comfort zone” to build common ground with NGOs. EU aviation policy is developed in partnership

Industry positioning

- Strategic aim: To avoid aviation tax increases by working with NGOs to agree an environmentally credible EU emissions trading settlement, based on a credible EU target for reducing or offsetting aviation’s climate impact
- The industry pro-actively argues for EU governments to agree a credible EU climate target for the aviation sector as part of the UK’s presidency of the EU
- BAA¹ and other leading elements within the industry argue – clearly, consistently and publicly – that aviation’s total CO₂ equivalent climate change impact, not simply aviation CO₂ emissions, must be targeted as a matter of urgency
- Leading elements within the industry contribute meaningful compromise policy solutions to EU governments on the challenge of night flights

Possible Path B storyline

In late 2005, EU politicians acted to create a level playing field between aviation and mainstream industry sectors – agreeing a target to reduce or offset aviation’s CO₂ equivalent emissions to 8 per cent below 1990 levels by 2010, applicable to all flights from EU airports.

EU politicians received a mixed reaction. Some airlines complained that the target was too tough, and some NGOs complained that the targets debate has simply been used as a tactical device to avoid increasing aviation taxes. Other NGOs reacted very positively. Leading elements within the industry welcomed the news, emphasising that EU emissions trading and carbon offsets were cost-effective ways of delivering the target.

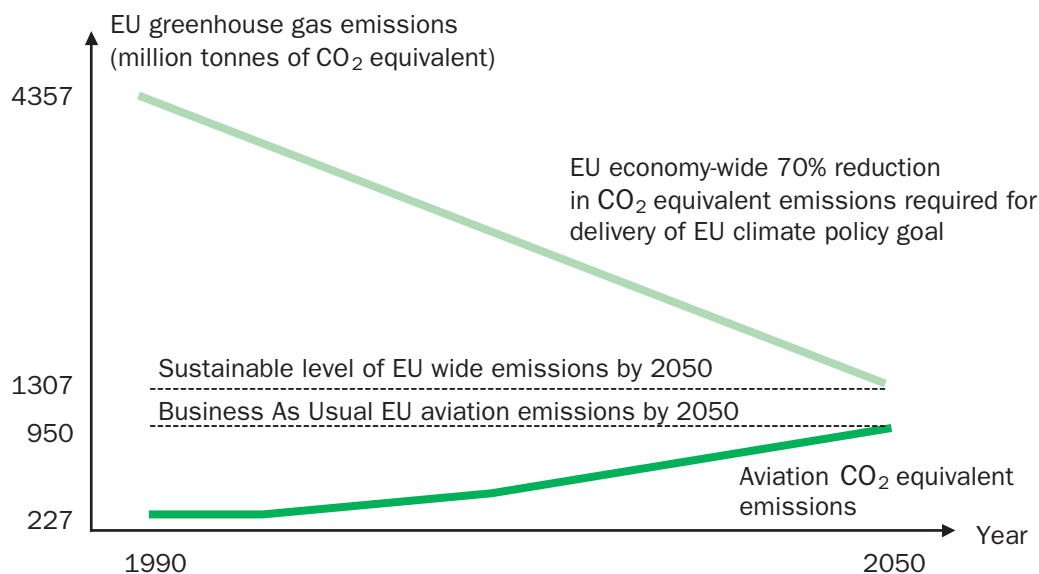
Within EU member states, the debate quickly shifted to delivering the target. The UK and most other EU member states committed themselves to going down the EU emissions trading route. The remaining EU member states considered that a simple carbon offset approach would be just as cost-effective and less bureaucratic. Communities under the flight path of EU airports complained that none of these measures would do anything to bear down on the problem of noise. The industry responded with separate night noise proposals.

No-one quite expected the winter floods of 2007, stretching the Environment Protection Agencies across Europe to their limits. But it was parts of Africa and Asia that were the worst hit. Alongside the relief effort, environment and development campaign groups united in their call for increased public funding of the Millennium Development Goals and for a more robust approach to climate change. By 2008, a wide range of EU industries – including metals, refineries and aviation – had united with NGOs on both sides of the Atlantic in an effort to secure US commitment to creating a global “level playing field” as regards climate change.

The central challenge: Avoiding an economic “boom and bust”

The EU’s publicly stated long-term climate change policy goal is: “a long-term objective of a maximum global temperature increase of 2° Celsius over pre-industrial levels... In the longer term this is likely to require a global reduction in emissions of greenhouse gases by 70 per cent as compared to 1990, as identified by the IPCC”².

In this context, for the EU to simply accept the rate of aviation emissions growth shown in the graph below would be for the EU to abandon its stated commitment to addressing climate change, or for the EU to allow aviation to drive EU emissions trading prices through the roof, damaging EU competitiveness and the overall “Lisbon” agenda³. Either way, sustainable development would be impossible. As the graph below demonstrates, in the longer term, the EU will need to act to substantially curtail aviation growth rates, unless the aviation industry can bring forward breakthrough climate solutions within the sector. Investors need to factor the risk of a “sudden curtailment” of demand into current proposals for EU airport growth.



Data: From Dresder Kleinwort Wasserstein / European Environment Agency⁴

Note: The above graph assumes aviation’s total climate impact is 2.7 times that due to aviation CO₂ emissions alone, due to aviation upper atmosphere emissions. Recent scientific research suggests this is environmentally over-optimistic⁵

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Policy recommendations

SERA makes the following key policy recommendations in line with some key EU sustainable development principles – the need to take a long term perspective, to respect environmental limits, to promote a level playing field with respect to external costs, and to reduce poverty and social exclusion.

Recommendation 1: The European Environment Agency should assess the challenge aviation poses to EU climate change policy objectives, looking ahead to 2020 and 2050

Unfortunately, there still remains an urgent need to build a shared understanding of the scale of the challenge. Therefore, a European Environment Agency assessment of the challenge aviation poses to EU climate change objectives, looking ahead to 2020 and 2050, would be very timely. Importantly, SERA is not alone in wanting a long term framework. ACI EUROPE, the EU airports trade association, has called on the European Commission to establish a road map for long term global action, with an Action Plan which sets out the policy milestones for achieving aviation's emissions objectives by 2050.⁶

Recommendation 2: The UK should use its EU presidency to agree, as a priority, a credible EU climate target for the aviation sector

SERA calls on the EU to agree a credible EU target to create **a level playing field** between aviation and mainstream industry sectors already covered by Kyoto targets. This means agreeing an EU target to reduce or offset aviation's CO₂ equivalent emissions to 8 per cent below 1990 levels by 2010, in line with the legally binding EU target under the Kyoto Protocol. In the spirit of the Kyoto Protocol, the EU target should recognise the climate impact of all departures from EU airports, not simply of EU airlines or intra-EU flights – and target aviation's total climate impact, not simply aviation CO₂ emissions.⁷

Some organisations have voiced much more radical views, arguing that the aviation industry should pay for flights to be completely “carbon neutral”. In this context, an **“8 per cent Kyoto based EU target” is not only realistic but also essential** to “mainstream” aviation's position with respect to the Kyoto Protocol and to deliver the level playing field called for by a wide range of organisations, including SERA and key parts of the UK aviation industry:

“the anomaly by which international air and maritime emissions are excluded from Kyoto (while domestic aircraft emissions and those from airports are included) should be ended as soon as possible.” *BAA written submission to Green Alliance*⁸

“A major step forwards could be ... the allocation of international aviation emissions to national inventories in the next Kyoto commitment period (i.e. from 2010).” *British Airways written submission to UK Environmental Audit Committee*⁹

SERA believes that an EU climate target for aviation offers multiple benefits:

Political benefits:

- **Builds on common ground.** A target builds on EU member states shared desire to “do something”, whilst recognising the publicly stated differences between EU states
- **Deliverable.** Can be passed by Qualified Majority Vote. Agreeing a simple target could act as a valuable “stepping stone”, providing political direction to discussion on specific policy instruments, where EU agreement may well take longer to achieve

Industry benefits:

- **Reduced regulatory risk.** Without a credible target, aviation linked to EU emissions trading will be a weak measure, requiring parallel aviation tax increases
- **Reduced cost.** Delivering a target by emissions trading or by offset charges will be much cheaper than alternative tax measures. HSBC analysis (repeated at Appendix 2) shows that, at current EU allowance prices, even the most radical target – making an EU flight 100 per cent “carbon neutral” – would cost a passenger only EUR 6.30 (£4.20)

Recommendation 3: Commit to considering the option of placing airports at the heart of EU emissions trading from a political as well as a technical perspective

In the debate around aviation and EU emissions trading, it is conventionally assumed that airlines will be directly engaged in trading. This is not the only possible approach. Notably, the option that airports would trade in respect of aviation’s climate change impact is highlighted in the Terms of Reference of a contract recently let by the EC¹⁰.

Under an “airports based approach” to linking aviation with EU emissions trading, EU airports would buy allowances in respect of CO₂ equivalent emissions from departing flights, to the extent necessary to deliver an agreed target. In line with EU public policy on the polluter pays principle, EU airports would be required to pass on the cost of EU emissions trading to the airlines. This could be done in one of two ways:

- **As an EU airport emissions charge** – varying according to aircraft engine and type. The EU has emphasised that it reserves the right to interpret existing agreed ICAO guidance in a way as to facilitate climate related ring-fenced emissions charges
- **As a general supplement to EU airport charges** – on the basis that airlines already have every incentive to reduce CO₂ emissions, as they are proportional to fuel burn, and airports can already introduce NOx charges if they so wish

SERA supports the UK Government’s efforts to link aviation with EU emissions trading – and believes the “airports based approach” identified in the European Commission’s study contract may be politically attractive for several reasons:

- **A fair approach is deliverable** – EU member states have legal jurisdiction over EU airports, whereas EU member states do not have the same jurisdiction over non-EU airlines. An airports approach linked with EU emissions trading makes it easier to target all flights, whether by EU or non-EU airlines. An airports approach could be extended to include emissions from long haul flights departing EU airports
- **Fairer to airlines** – avoids the perverse incentives under a “conventional airline approach” whereby cleaner airlines are grandfathered relatively few free allowances and hence end up subsidising their dirtier competitors. Also, under a “conventional airline approach” applied to intra-EU flights only, those airlines that just so happen to be shifting their business to long haul will gain a distorting windfall subsidy for doing no more than business as usual – paid for by low cost airlines focusing on intra-EU flights! Under an airports approach, the more an airline emits, the more it pays
- **Fair and feasible for airports** – no cost implications for airports, as airports would be required to recover the costs from airlines (e.g. through an airport emissions charge). Emissions charges are administratively feasible – some airports already have experience of levying emissions charges (e.g. Heathrow in respect of local air quality)

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Recommendation 4: Place social equity at the heart of EU policy appraisal

Social equity is rightly central to the EU sustainable development strategy. SERA believes aviation policy proposals, like all EU public policy, must be subject to a social equity appraisal. The social equity perspective underlines the importance of:

- **EU efforts to deliver the Millennium Development Goals on poverty reduction.** SERA welcomes Franco-German aviation tax proposals as a means of internalising aviation's external costs and boosting Millennium Development Goal funding¹¹
- **Aviation paying its way to society.** The Franco-German proposals are not the only way forward. If aviation is linked with EU emissions trading, separate EU Aviation Allowance Units will have to be issued, given aviation's legal status under the Kyoto Protocol. These could and should be auctioned, rather than given away for free. In addition, given the UK's focus on EU emissions trading for wholly intra-EU flights, SERA has called for an increase in UK Air Passenger Duty for long-haul flights, since such flights are generally used by higher income groups
- **EU efforts to bear down strongly on noise from night flights.** World Health Organisation experts argue that the average noise level at night should not exceed 30 dBA Leq (8 hour, indoor), with no single noise event being louder than 45 dBA L_Amax (indoor) decibels¹². As all EU states have signed up to these recommended levels, SERA calls on the EU to implement these levels in relation to night flights by 2010

Appendix 1: Participants in SERA aviation and EU leadership roundtable discussion¹³

Government

Charlotte Atkins MP	UK Minister for Aviation
Jean-Claude Gazeau	Director, Inter-ministerial Body for Climate Change, France
Pieter van Geel	State Secretary for Sustainability and Environment, Netherlands
Sir John Harman	Chairman, Environment Agency, England and Wales
Dr Tore Knobloch	Head of Division, Federal Ministry of the Environment, Germany
Niels Ladefoged	European Commission – DG Environment
Kristor Nilsson	State Secretary to the Minister for the Environment, Sweden
Tomas Novotny	Deputy Minister, International Relations, Czech Republic

Industry

Christine Bickerstaff	Engineering, R&T, Operations, Infrastructure, Environment, Airbus
Roy Griffins	Director General, ACI Europe
Keith Jowett	Chief Executive, Airports Operators Association
Janis Kong	Executive Chairman, BAA Heathrow
Herbert Lust	Environmental Policy Director, Boeing
Rick Stathers	Analyst, Schroder Investment Management
Roger Wiltshire	Secretary General, British Air Transport Association

NGOs / others

Keith Allott	Journalist, Environmental Data Services
Jos Dings	Director, European Federation for Transport and Environment
Dr Philip Douglas	Vice-Chair, SERA
Tim Johnson	Director, Aviation Environment Federation
Jonathon Porritt	Programme Director, Forum for the Future
John Stewart	Chairman, HACAN ClearSkies
Matt Walker	SERA office

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Appendix 2: HSBC estimate of cost of making an EU flight “climate neutral”¹⁴

Average CO ₂ emissions on a short haul flight	7.68 tonnes CO ₂ per hour
Average length of flight in Europe	2.5 hours
Average CO ₂ emissions per short haul EU flight.....	19.2 tonnes CO ₂
Multiplied by 2.7 (radiative forcing index)	51.8 tonnes CO ₂ equivalent
Average passengers per flight.....	123
Amount each passenger “emits” per flight.....	0.42 tonnes CO ₂
Cost of tonne CO ₂ (current EU allowance prices @ 1.4.05)	EUR 15 / tonne CO ₂
Cost of making EU flight 100 per cent “carbon neutral”	EUR 6.30 (£4.20)

References

1. In the run up to the publication of the UK Aviation White Paper, BAA emphasised the need for aviation's total climate impact to be targeted: <http://www.baa.co.uk/pdf/MikeClasper13October03.pdf>
2. Article 2, the 6th EU Community Environment Action Programme, adopted in co-decision in 2002. The EU 2 degrees C target was also adopted at the 1939th Council Meeting, Luxembourg, 25 June 1996
3. Information on the EU "Lisbon" agenda available at: http://europa.eu.int/growthandjobs/index_en.htm
4. Aviation emissions: Another cost to bear. Dresder Kleinwort Wasserstein, November 2003. "EU aviation" defined here as all departures from EU airports
5. EU TRADEOFF research indicates on a mid range estimate that aviation's total climate impact is 4.3 times that due to its CO₂ emissions alone. See: The Effect of Aviation on the Atmosphere, 22 July 2003. Funded by EC project SCENIC (EVK2-2001-00021) and the UK Air Travel – Greener by Design Group
6. Paragraph C of ACI EUROPE climate change position, available at: <http://www.aci-europe.org>
7. Based on 1992 data, aviation's total CO₂ equivalent climate impact is approximately 3 times that due to its CO₂ emissions alone. Aviation and the Global Atmosphere, IPCC, 1999
8. Available at: Appendix C: http://www.green-alliance.org.uk/ourwork/UKPresidencyEU_page209.aspx
9. Para 2, <http://www.publications.parliament.uk/pa/cm200304/cmselect/cmenvaud/233/4021109.htm>
10. Terms of Reference of study contract: Amendment of Directive 2003/87/EC to address the full climate change impact of aviation. European Commission, DG Environment
11. For more information, see: http://www.unep.ch/roe/assets/unep-eu/UNEP_EU_EnvNews_080.pdf
12. Guidelines for Community Noise, Berglund et al. WHO, 2000
13. SERA roundtable discussion on EU sustainable aviation policy held in London on 17 March 2005
14. Page 39, Aviation and climate change: prepare to trade. HSBC Transport / SRI briefing, 12 Dec 2003

SERA – the Socialist Environment and Resources Association – is an independent environment group affiliated to the UK Labour Party. SERA works to integrate green thinking into UK Labour Party policies and believes that social and environmental concerns must be addressed together. SERA campaigns by organising events such as conferences and seminars, and publishes regular briefing papers and a magazine entitled ‘New Ground.’

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