Q&A: Aviation and the EU Emissions Trading Scheme

1 – What is the EU Emissions Trading Scheme, and how does it work?
Under the UN Kyoto Protocol, industrialised nations are required to reduce the amount of greenhouse gases that they emit into the atmosphere. The EU is committed to cut its emissions by 8% from 1990 levels by 2012, and the Emissions Trading Scheme (ETS) is Europe’s main mechanism to achieve this.

Currently, each EU nation agrees a National Allocation Plan (NAP) with the European Commission. These NAPs allocate individual limits for the plants or companies covered by the scheme. By setting the total number of permits below the current level of emissions, the ETS should lead to a reduction in the amount of CO₂ being emitted.

In the ETS, plants or companies are made to buy and sell permits that allow them to emit CO₂. The system is an incentive for these industries to reduce their emissions, as companies that exceed their individual limit are able to buy unused permits from firms that have taken steps to cut their emissions.

Member States can also resort to Kyoto’s so-called Clean Development Mechanism (CDM) and Joint Implementation (JI), which allows them to ‘buy’ carbon credits from carbon-reduction projects outside the EU that can be accounted for in their national emissions reduction targets. JI projects can be undertaken in other industrialised countries with Kyoto targets, while CDM projects can be hosted by developing countries, which under the Protocol have no targets.

Essentially, the ETS allows an overall emissions reduction target to be achieved; it rewards investments in environmentally-friendly technologies; and it also allows companies that cannot go any further in their emission reduction programmes nevertheless to participate in the general effort in reducing pollution.

2 – Why is the EU proposing to include aviation into the EU ETS?
European aviation accounts for 0.5% of worldwide CO₂ emissions. This figure is relatively minor, but air transport is a growth industry, which is why its environmental impact has become an increasingly important issue in Europe.

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Addressing this issue is essential to European airlines, for both ethical and business reasons. We want to preserve European citizens’ right to fly and enjoy aviation’s contribution to their regions’ economic and social development, but not to the detriment of the environment and the future of the planet. But it should be remembered that it is also in airlines’ interest to control their fuel consumption and thus CO₂ emissions: fuel prices represent a huge share of airlines’ operational costs, reaching unheard levels of 26% in 2006.

That is why the European Commission has proposed that the EU ETS should also cover CO₂ emissions from intra-EU aviation from 2011 and all flights to and from EU airports from 2012. If this scheme is approved unchanged by the European Parliament, this will place a cap on CO₂ emissions from aircraft flights at average 2004-2006 levels, while allowing airlines to grow through purchasing allowances from other industries in the ETS as well as from a number of emission-reducing projects outside the EU.

3 – Why is it important to allow European airlines’ traffic to grow?

Allowing for air traffic to grow is important for far more reasons than airlines’ own bottom line. This growth in air transport is the result of the demand in global trade and tourism. It is essential to European economy and political and social cohesion, and the so-called EU Lisbon strategy for growth and employment.

In Europe alone, more than 7.5 million jobs depend on air transport. 25% of all companies’ sales depend on air transport and for 60% of them air connections have a significant impact on business.

The average distance between Europe’s capitals and Brussels is 1,138km. In an enlarged Europe, aviation is essential to connect regions with one another, with the political centres, and with the rest of the world.

Far from enjoying tax privileges, air transport finances its entire infrastructure costs through user charges and taxes paid to national treasuries. By paying for the building, maintenance and use of its infrastructures, air transport is a net contributor to public funds. In Germany, for example, aviation charges and taxes generate a net surplus of €10 per 1,000km, while rail infrastructure costs result in a public subsidy of €54 per 1,000km – to be borne by the taxpayer.

Air transport contributes around 8% of European GDP. It facilitates global business and ensures Europe’s competitiveness in the global market. It is an indispensable instrument for Europe’s growth, now and in the years to come.

4 – How does the AEA view the inclusion of aviation into the EU ETS?

AEA, along with other industry associations, has consistently embraced the concept of ETS as a useful tool in the drive to manage the industry’s greenhouse gas emissions. A well-designed ETS can act as a catalyst enhancing the effectiveness of other measures, such as the operational and technological developments which can deliver
real environmental benefits. An ETS would allow airlines to buy surplus permits from other industries, thereby contributing to a general decrease in industry pollution, whilst enabling airlines to grow. A well-designed ETS would avoid distortions to competition, minimise administrative burdens and deliver on solid environmental gains; by buying permits required to grow, airlines would effectively operate in a way that could ultimately become sustainable. A poorly-designed scheme, on the other hand, could, like a tax, strip the airlines of the financial means to fund such developments.

However, ETS is only one of the tools that should be used to control air transport CO₂ emissions. To be fully effective, ETS must also go hand-in-hand with infrastructure improvements, in the air and on the ground. There is little point in allocating emissions permits to airlines, only for them to be used up in flying circuitous routings, or holding patterns waiting for a runway slot at a congested airport.

5 – Why does AEA view the ETS as being better than taxes?
A tax simply drains the aviation sector of financial resources needed for investments into research and development. Taxes that have an environmental objective are explicitly aimed at modifying demand for air transport – generally a euphemism for pricing passengers out of the market.

So-called environmental taxes deliver additional revenue for governments with no guarantee, neither for the passenger or the airlines, that this revenue will be used for environmental objectives. They provide no incentive whatsoever for airlines to invest in more efficient aircraft, or more efficient fuels. Indeed, by attacking their customer base, it makes it more difficult for them to fund the new technologies that provide the best prospects for future emissions abatement. AEA member airlines have the youngest, and thus the most environmentally-efficient, fleet of all regional groupings of airlines in the world: this is a major factor in reducing CO₂ emissions and such investments should be encouraged, not discouraged.

This is precisely what the airlines believe a well-designed ETS could avoid, while still delivering environmental benefits.

6 – Is ETS the be-all and end-all of aviation’s contribution to environmental protection?
Far from it – and European airlines did not wait for this EC draft directive, or even, going further back in time, for the Kyoto protocol, to work on reducing the environmental impact of aviation. In fact, they have consistently adopted a responsible approach to addressing the environmental challenges facing the industry. It is worth noting, for example, that AEA member airlines’ fleet is the youngest, and thus most environmentally-efficient, of all regional groupings of airlines in the world, with an average age of 8 years and 9 months.

Although all important, this factor is only the tip of the iceberg. In 2005, AEA airlines agreed an Emissions Containment Policy which set out a comprehensive approach to address climate change based on four pillars, by 1) promoting best practice in
operational procedures, 2) stimulating research into new technologies and 3) supporting infrastructure improvements. ETS, the 4th pillar in this policy, is seen as a means to harness these improvements in delivering a genuine contribution from the industry towards meeting overall EU emissions targets.

Fuel efficiency, direct routings and new technology are all part of the efforts that have achieved a 70% reduction in aircraft emissions over the last 40 years. In addition to technological progress (the industry devotes up to 14% of its turnover to research), improvements in Air Traffic Management and other operational procedures (avoiding flying circuitous routes and holding patterns over airports), could further reduce fuel burn by between 8 and 18%. Further political progress towards the creation of a truly Single European Sky would lead to a 7% efficiency gains, when just a 1% saving could save up to 500,000 tonnes of fuel a year, according to Eurocontrol.

Technological and operational progress has made it possible to decouple aviation growth from higher fuel consumption. The “Operational Opportunities to Minimize Fuel Use and Reduce Emissions”, a set of recommendations formalised by ICAO, have been implemented by aircraft operators, airports, ATC and service providers for decades without any regulatory obligation. However, the industry is committed to doing more.

The first three pillars of the Emissions Containment Policy (technological progress, improvement of infrastructure and operational measures) will remain as important as ever to address aviation’s impact on the environment. ETS, although important, is only one component of a large battery of existing, tried, tested and efficient tools. The measures taken to reduce air transport's CO2 emissions will require efforts from all the parties involved in the aviation value chain to be sustainably successful. Airlines, airports, Air Traffic Management authorities, aircraft and engine manufacturers, fuel suppliers, national and local governments and other partners in the aviation chain will continue to be key in developing an environmentally friendly and ultimately sustainable aviation sector.

7 – What does AEA mean by "a well-designed ETS"?

It is not the role of AEA to define the key design elements of an “ideal ETS” for aviation, as this is the task of the regulator. However, AEA considers that a ‘well-designed ETS’ should conform to the following requirements and principles:

First, it should be a non-discriminatory system. Whatever the geographical scope of the ETS, all operators on all routes covered by the scheme should be treated equally.

It should also be an open system. The aviation sector should have the broadest possible access to emissions allowance markets, be able to trade with the other sectors and have access to flexible mechanisms such as Clean Development
Mechanism (CDM) and Joint Implementation (JI) *(for definitions of CDM and JI, see answer to Question 1).*

**There should be no cumulative action, with taxes and charges added on top of the ETS.** Member States and European authorities should agree to renounce other economic instruments such as taxes and charges, since the Commission itself recognises that ‘the inclusion of aviation in the Community scheme seems to be the best way forward and that emissions trading has the potential to play a role as part of a comprehensive package of measures to address the climate impact of aviation, provided it is appropriately designed’. *For AEA’s views on taxes, see answer to Question 5.*

**No market distortion:** any scheme must avoid competitive distortion within the EU, between EU and non-EU carriers, and between transport modes. This requires a unified and harmonised approach to the allocation of permits and target setting for aviation.

**A simple and manageable system:** the trading entities should be the aircraft operators. However, to keep the scheme administratively simple and practicable, small operators should be excluded where administrative complexity and transaction costs outweigh the environmental benefits of their inclusion.

**Transparent administration and compliance:** the administration and verification process should be transparent, consistent and harmonised. It should take full advantage of economies of scale and reduce administrative costs to the minimum. Therefore, it would be preferable that the process is centrally administered at European level, thereby eliminating unnecessary or duplicated systems and facilities.

**The Association of European Airlines (AEA)**

AEA has been the trusted voice of the European airline industry for over 50 years. AEA brings together 31 European network carriers, collectively carrying more than 320 million passengers and 6 million tons of cargo each year, operating 2,400 aircraft and serving 620 destinations in 160 countries with 10,720 flights a day.

A non-profit-making association, the AEA represents its members’ interests in contacts with the institutions of the European Union, the European Civil Aviation Conference, and all other related international and European organisations in the aviation value chain.

**For more information**

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