

## International Aviation Climate Change Fund – Frequently Asked Questions

### Why should airlines act on emissions now?

A variety of emission related regulations and/or taxes are inevitably going to be enforced on the aviation industry within the next couple of years<sup>1</sup>.

One option is to wait, attempt to oppose and then finally comply with the multitude of ineffective, bureaucratic and costly regulations in the different countries across the world.

Another option is to take advantage of international aviation's specific status (outside of the Kyoto Protocol, for now) to create a single industry-driven solution for aviation's emissions bypassing the national tax systems. If designed with industry, the solution will guarantee increased operational effectiveness (reduced fuel and therefore emissions), eliminated risk of emission non-compliance and bring improved customer image.

### Why such an ambitious timeframe?

The ICAO Assembly Sessions happen every 3 years, so the next opportunity for approving such a global action will be in 2010. Additionally, it seems that the issue has reached a "tipping point".

### Who will bear the cost?

Customers will pay through the increased charges of around 2% for air travel. The impact of freight prices is expected to be similar. Airlines should see the charges as revenue neutral.

### Is the new idea really better for aviation than emissions trading? Can it work with EU ETS?

The approach can be described as a hybrid: "charge, cap & fund". It combines the benefits of price and quantity based instruments and delivers certainty of both marginal abatement costs to airlines and environmental outcome. Other approaches deliver only one of those aims.

Achieving certainty of costs and environmental outcome is becoming possible now thanks to the emergence of liquid markets for CO<sub>2</sub> (the largest being EU ETS) and associated emission credits, so uncertainty can be replaced with professional investment techniques (including futures contracts, risk management, banking and borrowing).

The following table summarizes the advantages and disadvantages of the IACC Fund approach using the same criteria as used by European Commission (EC)<sup>2</sup>. *The additions are shown in italic.*

	Advantages	Disadvantages
<b>IACC Fund</b>	Certainty about marginal costs to airlines once charge level has been set	<i>Ambitious timeframe (need to obtain industry and political support leading to ICAO decision in Sept 2007).</i>
Hybrid approach:	Certainty about the environmental outcome once a cap has been defined	<i>Need to create a new supra-national organization and fund.</i>
"charge, cap & fund"	Potential for giving incentives to reduce non- CO2 impacts	
	Could build on existing infrastructure for collecting en route air navigation charges	
	Concept of a global approach endorsed by ICAO	
	Greatest potential for global implementation <i>within 2-3 years</i>	
	<i>Opportunity to over-deliver on the emission cap (upside). Linking with EU ETS trading.</i>	

<sup>1</sup> Recent examples of regulations include: doubling of the UK departure tax; the European Commission proposal for the EU emission trading system to be extended to air travel to and from Europe from 2012.

<sup>2</sup> "Impact Assessment: Reducing the Climate Change Impact of Aviation", European Commission, SEC(2005) 1184; [http://ec.europa.eu/governance/impact/docs/ia\\_2005/sec\\_2005\\_1184\\_en.pdf](http://ec.europa.eu/governance/impact/docs/ia_2005/sec_2005_1184_en.pdf) (details on pg 40)

### **Will the charge be additional to the UK departure tax?**

No, it should replace at least part of the UK departure tax. It might not be politically easy, even though the recent increase of the tax has been justified by the environmental concerns. Benefits of global action should be considered.

### **What about national tax revenue?**

Some might argue that IACC Fund has one hidden disadvantage: it does not deliver revenue to the national/regional tax system. However, according to the intention of the proposed legislation in Europe any revenue raised (through auctioning of the permits for instance): "shall be used to mitigate greenhouse gas emissions, to adapt to the impacts of climate change, to fund research and development for mitigation and adaptation, and to cover the costs of the administering [...]". Therefore, the argument of missing regional tax revenue cannot be used.

### **Is the political attitude conducive to this proposal in 2007?**

The business and political support towards dealing with climate change has shifted significantly in the last two years. The timing of aviation's top level meetings is unique in 2007. Therefore, an innovative approach based on emission charges, as described in this document, has a great chance to be accepted as the market mechanism to deal with aviation's international emissions. Importantly it will provide a global mechanism to raise significant funding required both for adaptation and mitigation.

### **Will all international aviation be subject to emission charges for the IACC Fund?**

Great majority of civil flights (99%) should be subject to the proposed emission charge (including freight flights), for emission and equity reasons. For legal and practical considerations the following are proposed to be excluded: flights not subject to en-route charges (like flights by State aircraft) and aircraft with a maximum take-off weight of less than 5 700 kg (as in the EC proposal).

### **Will the scheme include domestic aviation?**

No, it will only cover international aviation. Domestic aviation will (always) be subject to national policies and its emissions are currently covered by the Kyoto protocol (for Annex 1 countries).

However, the integrated approach can be adapted by national organizations (funds) if they were created to manage emission charges for the domestic airline industry. The structure and objectives of such national funds might be different.

### **How will the emissions be measured and payments collected?**

The amount of fuel used during flight will be the basis to calculate the emissions, as these are directly proportional.

The fuel used is already reported by many airlines to the air traffic controllers. The reported values will be validated with the typical values for the given route and aircraft, to avoid mistakes and incorrect reporting. If fuel used is not reported, either an average or a maximum value for the given route and aircraft will be used, depending on the reason for the missing data. Ideally, the reporting should become standard for every aircraft to minimize the costs and disputes. Enforcement of payments will use the existing en-route charge approach: aircraft belonging to airlines with unpaid emission charges will not be cleared by the air traffic management operators.

### **Why is there such a problem with emissions from international aviation?**

Dealing with climate impact of international aviation emissions seem like an intractable problem. International Civil Aviation Organization (ICAO) has been trying to agree market based instruments for more than a decade. The European Union decided to take a lead that culminated in a proposal by European Commission in Dec last year to include aviation in the EU carbon trading scheme from 2012 (EU ETS; intra-Europe flights from 2011).

Major reason for the impasse is that international aviation is rather different from the other emitters of greenhouse gases, like power stations. It is characterized by: lack of substitutes (for flying long distance, replacing jet fuel), significant annual growth (5.5%), it is truly international, it is outside of Kyoto protocol, and efficiency gains depend strongly on performance of value chain providers (like aircraft traffic controllers).

**What was the key reason for Europe to select emission trading for aviation back in 2005? Was it cost-benefit analysis?**

The balancing argument to select the quantity mechanism (trading) as the preferred option rather than charges was a greater likelihood of political acceptability (due to the emission cap).

Hybrid schemes like the one described in this note have not been considered. They have only become possible now with maturing of markets for emission certificates, including EU ETS.

Cost benefit analysis has not been performed.

**Can the Fund approach work alongside a trading scheme, like EU ETS? How?**

It can and it should as the EU ETS is the largest and most mature carbon emission market. It is proposed to link the IACC charge to the EU ETS futures price and bring additional liquidity to this market.

Assuming however that international aviation were implemented in EU ETS (as currently proposed), IACC Fund could fulfill then the role of an official designated and authorized to represent each airline required to participate in this regional trading system. For each airline, it could operate emission compliance accounts and guarantee that required quantity of emission allowances are hold on each account at the end of the year. The emission allowances would be purchased and the accounts operated by the mitigation sub-fund (including surrendering of the emission permits to the local registrar). Effectively, the emission compliance operations would be “outsourced” to the IACC Fund organization as part of the EU ETS.

However, one globally scalable solution would deliver greater market efficiency. Linking up regional trading schemes is arguably to face significant political, economical and legal challenges<sup>3</sup>.

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<sup>3</sup> Kruger J., Oates W., Pizer W., Decentralization in the EU Emissions Trading Scheme and Lessons for Global Policy, Resources For The Future, RFF DP 07-02, <http://www.rff.org/rff/Documents/RFF-DP-07-02.pdf>