

# Ryanair and Transatlantic Flights – A Comparison of Carbon Surcharges

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## Background

On the 1<sup>st</sup> January 2012, all emissions from airlines flying in and out of the European Union came under the jurisdiction of the EU Emissions Trading scheme (ETS). Airlines will have to account for, and acquire an emissions permit for each tonne of carbon dioxide (CO<sub>2</sub>) emitted by their flights. All flights arriving at or departing from EU airports are covered, regardless of the nationality of the aircraft operator.

The total amount of new permits released to accommodate the introduction of air travel in the ETS will be calculated as 97% of a benchmark emissions level from the period 2004–06. The growth in air travel since this period means that airlines will have to purchase extra allowances to cover current emissions levels. It seems likely that for 2012 around 30% of carbon dioxide emissions from the airline industry will need to be covered by purchases through an ETS ‘aviation auction’ and purchases on the ETS market, while around 70% of permits will be freely given to airlines.

Benchmarked emissions based on 2004-2006 period	2012 ‘cap’ – 97% of baseline	Estimated total emissions level for 2012	Free allocation given to airlines	Purchase at the ETS aviation auction	Shortfall – airlines purchase on ETS market
221.4m (tonnes of CO <sub>2</sub> )	214.8m (tonnes of CO <sub>2</sub> )	260m (tonnes of CO <sub>2</sub> )	182.6m	32.2m	45.2m
			Free - 70.2%	Purchased - 29.8%	

Data taken from: [http://ec.europa.eu/clima/policies/transport/aviation/index\\_en.htm](http://ec.europa.eu/clima/policies/transport/aviation/index_en.htm)

There has been much debate on what the effect on prices and profits will be for consumers and airlines respectively. A recent article in the Journal of Transport Management has suggested that the allocation of free permits to airlines could deliver windfall profits to the industry of up to \$2.6 billion over eight years if airlines are able to pass on all the extra costs of the ETS to consumers (Malina 2012).

### **Airline Reaction**

Following the European Court of Justice's rejection of an American challenge to the legitimacy of including American airlines in the ETS, Hilary Clinton announced that if US airlines are not exempted from the EU ETS then the US government will be "compelled to take appropriate action" in response. Whether this represents the opening shots of a transatlantic trade war, or is a hollow demonstration of support for the US airline industry remains to be seen.

The Chinese Air Travel Association (CATA) has said that its member airlines will not cooperate with the ETS and refuse to take part in the emissions allocation scheme. The deadline before which permits must be purchased for 2012 is the 31<sup>st</sup> March 2013; so there is time for further negotiations. The fine for non-compliance with the scheme is a penalty of €100 per tonne of CO<sub>2</sub> emissions.

Ryanair's communications director recently announced that including aviation in the ETS "reduces the competitiveness of EU air transport with yet another misguided 'environmental' tax, which does nothing for the environment but penalizes EU consumers and families" (Ryanair Press Release 2012).

In theory the EU ETS should be less burdensome on efficient operators such as Ryanair. However, the ETS will always represent an additional cost to airlines, and this is likely to be the reason for Ryanair's opposition to the scheme.

The price response to the ETS has been for airlines to add surcharges to the cost of flights. Delta was amongst the first to announce a \$3 extra charge on transatlantic flights; United Continental, US Airways and American Airlines then immediately followed suit. Within the EU, Ryanair has announced a surcharge of €0.25 on all European flights.

Using Defra emission factors, we can estimate how much of the ETS costs these airlines are passing on to customers<sup>2</sup>:

### **Transatlantic flights**

- For a long-haul flight from London to New York (5,576km), an economy class passenger is (based on Defra's emission factors, including the indirect route uplift of 9%) responsible for emitting approximately 489.69kg of CO<sub>2</sub>.

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<sup>2</sup> The EU emissions permit calculations will be based on actual airline fuel consumption data, we use Defra emissions factors to provide our estimates in the absence of this data.

- Assuming the current ETS price of around €8 a tonne, and that the airline must purchase permits to cover 30% of total emissions, the extra cost to airlines on a London to New York flight will be €1.18 (\$1.54 – at 6/02/2012 exchange rate).

The response from the American airlines, to impose a surcharge of \$3 on transatlantic flights, is effectively the passing on of double the cost of the EU ETS scheme to customers. In their defence, the airlines might argue that they must protect themselves against potential volatility in the carbon price. Indeed the lobbying from the US airline industry and the relatively high surcharge may be based on a presumption of future price rises.

### **Ryanair European flights**

- The average Ryanair flight distance was 1,064km in 2010 (Ryanair annual report 2010)
- For this average Ryanair flight, and based on Defra emission factors, 105.98kg of CO<sub>2</sub> is attributed to each passenger.
- Ryanair has one of the highest passenger loading factors in the airline industry (their planes carry 5% more passengers than the industry average; Brighter Planet report 2011), so the emissions attributed to each passenger on a Ryanair flight will actually be less; this calculation is adjusted to reflect Ryanair's higher efficiency.
- Assuming the ETS price remains at around €8 a tonne, and that the airline must purchase permits for 30% of total emissions, the extra cost to the airline per passenger as a consequence of joining ETS will be approximately €0.24.

Ryanair's response appears to be far more generous than the transatlantic operators as their surcharge of €0.25 only covers slightly more than 100% of the extra ETS costs at the current carbon price.

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