

easyJet and the environment



Omega

4th December 2008

The environmental challenge for airlines



Aviation is currently responsible for 1.6% of global greenhouse gas emissions. However, the external challenges are becoming more onerous:

- **Highly volatile price of oil**
- **Government's see aviation as a soft target for taxation**
- **EU legislation directed at aviation emissions a reality**



In order for air transport to have a sustainable future, it must:

- **Move beyond a dependency on kerosene – technology must and surely will provide the long term solution**
- **Meanwhile, adapt to a carbon constrained world and utilise kerosene in the most efficient way**
- **Engage in the regulatory process to ensure environmental efficiency is incentivised and technology investments are made**



easyJet carbon footprint



- **easyJet has grown to become Europe's fourth largest intra-European airline**
- **Business model is focused on one mission – shorthaul operations using '150' seater new technology aircraft in point-to-point markets**
- **Operating a distributed network across Europe**
 - **165 aircraft flying 43 million passengers per year**
 - **400 routes from 103 airports**
 - **operating 1000 flights per day in 26 countries**
 - **Average passenger load factor 81%**



A carbon footprint of 3.7m tonnes of CO2 in 2007



Environmental record of European Low Fare Airlines



- Latest technology fleets - Airbus A319, B737-800, Embraer 195
- Fuel efficient, quiet aircraft
- Low average age of fleet
- Operate from less congested airports, *therefore*
- Less holding and ATC delay



- Not contributing to air quality problems at hub airports
- Millions of road miles eliminated by use of regional airports
- Highest seat configuration *coupled with*
- High load factors *giving*
- Lowest fuel burn per passenger



The easyJet environmental code



1. To be environmentally efficient in the air

Investment in the latest technology

- Our 160 aircraft have an average age of 3.4 years
- Since 2000 our CO2 emissions per passenger have reduced 18%

Efficient use of aircraft

- Each A319 potentially carries 57% more passengers per flight than the European norm

We fly direct

- Offering a point-to-point product rather than a hub-and-spoke

Avoidance of air congestion

2. To be environmentally efficient on the ground

Quick turnaround times

- Short dwell time on the ramp

We have minimal use of ground equipment

We have simple airport infrastructure requirements

We keep surface journeys to a minimum by using local, convenient airports

- 200 million people live within 60 minutes of an easyJet airport

We minimise waste

- We are a ticketless airline
- We do not offer free food

3. To lead in shaping a greener future for aviation

Shaping the EU Emissions Trading policy

Shaping European policy on making air traffic control more efficient

Working with aircraft manufacturers on the next generation of aircraft

We offer our customers a carbon-offsetting programme



Environmental efficiency



The two key drivers to environmental efficiency are seat density and load factor
Example: the same high technology aircraft flown on the same route

easyJet A319

156 seats

85% load factor

132 passengers

57% more passengers

Traditional airline A319

124 seats

(source: Airbus)

67.8% load factor

(source: AEA Europe figure Jan - Jul 2008)

84 passengers

27% more fuel burn per passenger



Opportunities to improve fuel consumption



- The next generation of longhaul aircraft to enter service – A350XWB, B787 – promise a ~20% improvement in fuel burn. A greater improvement is expected for a new generation of shorthaul aircraft
- Aircraft manufacturers have also committed to a 50% cut in CO2 emissions by 2020. Meanwhile, there is significant opportunity to reduce emissions through efficient ATM

One-off benefits (current technology)	Percentage reduction
Air traffic management (ATM) influence	8.4%
Other airline operational decisions	3.8%
Airline strategic decisions ²	5.2%
Total	17.4%
Procuring new aircraft (annual benefit)	1.0%



Indicative assessment of potential CO2 reductions in Europe (based on current technology)

Source: Frontier analysis using data from Eurocontrol, AEA and IATA

1. ACARE goals – fuel efficiency per passenger km

2. Examples include retrofit of winglets

Fuel management



- **Factors impacting fuel efficiency**
 - Aircraft efficiency
 - Average aircraft age 3.5 years
 - Engine efficiency
 - Tech 56 insertion
 - Crew efficiency
 - Operating procedures
 - Pilot technique
 - Fuel policy
 - Operating environment
- **New 4D flight planning system**
 - Improved fuel analysis
 - Overall cost optimisation
- **Engine performance monitoring**
- **Weight saving programme**
 - Removable items
 - Lighter equipment
- **Crew initiatives**
 - Descent planning
 - Operating speeds
 - Acceleration altitude



A role for carbon off-setting



Carbon off-setting

- Off-sets through UN JI/CDM renewable energy project credits
- Direct purchase of credits
- Customer choice – integrated into the booking process

Help the Environment



Carbon
Offsetting

Reduce the impact of the **carbon emissions** from your flights on the environment through **UN certified** emission reduction projects.

Contribute £0.63 per person to balance the 48kg of Carbon Dioxide per passenger on this booking - there's no middlemen and easyJet doesn't profit from the scheme.

Where does my money go? 

Your money will be invested in UN Certified emission reduction projects to balance carbon such as:

Hydroelectric power in Ecuador

The Perlabi Hydroelectric renewable energy project is a small hydroelectric plant using water from the Chirizacha river in the Andes hillside in Ecuador, South America. It has expected emission reductions in the first 10 years of 74,000 tonnes. This project generates clean electricity, reducing reliance on fossil fuel power generation as well as creating benefits and job opportunities to the local community.



Total price for this booking will be: £0.63

[Add Carbon offsetting](#)

A greener future for aviation



The ecoJet concept, by 2015:

- **25% quieter**
 - **50% more fuel efficient**
 - **75% less NOx**
- relative to year 2000 aircraft**



A market driven solution - aviation and the EU ETS



- The EU Emissions Trading Scheme opened for business in 2005. It is designed to enable the EU to deliver its **emissions targets** in the most economically efficient way
- The ETS allows participants to trade CO2 emission allowances. This acts as an incentive for the company with the lowest cost of emissions reduction to sell their allowances and reduce their emissions
- Importantly, it allows companies with a high cost of emissions reduction to buy an allowance instead and/or grow their emissions



- An effective design will allow aviation to play a role in delivering the **overall** environmental objective



Summary



- **easyJet takes its environmental responsibilities seriously**
- **Investments in new technology are critical to ensuring a sustainable future**
- **easyJet is supportive of a well designed ETS for aviation**



**Airline business models can and will adapt
to a carbon constrained world**

