

City Airline and the Environment

Introduction and background

Air transport performs many important functions in modern societies. Aviation facilitates economic and cultural exchanges and is a significant source of employment and growth in many regions. However, aviation also contributes to global climate change, and its contribution is increasing.

In 2008 the aviation industry contributed approximately 2%¹ of the reported CO₂ emissions globally and forecast to grow to 3% by 2050. Also to be considered is that aviation generates 31.9 million jobs globally and global economic impact is estimated at US\$ 3.557 billion. That equals 7.5% of the world's GDP₂ (2007).

Even if aviation's emission contribution might sound relatively low the industry must take its responsibility and take action to minimize its part as much as possible.

The *2007 Spring European Council* demonstrated that the EU is taking the lead in the fight against global warming. EU leaders set a firm target of cutting 20% of the EU's greenhouse gas emissions by 2020 and the EU will be willing to put this goal up to 30% if the US, China and India make similar commitments³.

Environmental work today

We believe we can do a lot! We cannot be perfect but we can always improve.

City Airline strives to continuously improve our environmental work in order to minimize our environmental impact. We are working actively together with Svenska Flygföretagens Riksförbund (SFR), European Regions Airline Association (ERA), Miljöbron and University of Gothenburg in environment issues.

The goal is to obviously to reduce aviations emissions but also to contribute to the public's awareness in the matter. We believe that environmental awareness is the key.

1 www.icao.int, www.iata.org, and www.ipcc.ch

2 www.atag.org and www.iata.org

3 www.europa.eu

City Airlines objective is to offer direct routes from Gothenburg. Travelling non-stop means less travel distance, less emissions and less overall impact on the environment.

Flight Department

City Airline works closely with airports, other airlines and organizations to work out fuel saving procedures such as *Eco Descents* and *Constant Descent Approaches*.

Since 1st July 2008 a fuel saving evaluation program has been implemented in cooperation with the aircraft manufacturer. Adjusted speed settings, lower flap settings and less weight on board are a few examples that are reviewed and analyzed.

Our pilots are being trained in a program that we call the “Economic Flight Project” which ensures all factors that effect fuel burn are being analyzed. The environmental awareness is nowadays implemented in many procedures. City Airline consequently follows up fuel burn at every sector. A more precise fuel calculation mostly results in less fuel on-board. Less fuel on-board makes the aircraft lighter and therefore burns less fuel. As simple as that!

Our Operational Control Center in Gothenburg plans every flight as fuel efficient as possible. A more direct route at the most efficient altitude saves fuel.

On ground aircraft generally uses APUs (Auxiliary Power Units), small turbine engines that generate the aircraft with electricity. City Airlines policy is to use the APU as little as possible and instead uses electricity from GPUs (Ground Power Units) when ever possible to minimize the fuel consumption.

Our In-flight service has recently been updated. Minimizing plastics and using environment friendlier alternatives have minimized waste in economy class.

Even though City Airline’s fleet is one of the most modern in its category new aircraft techniques, materials and sizes are awaiting just around the corner. Both commercial and environmental awareness has therefore led to ongoing negotiations with aircraft manufactures about new optimized aircraft.

Technical Department

Our own maintenance personnel make daily comprehensive inspections making sure that doors and hatches are as aerodynamic as possible to reduce drag since drag increases fuel burn. For example, the possibility to remove the windshield wipers and replace them with a rain repellent is being investigated. This would significantly reduce drag and consequently fuel burn by approximately 1.3%⁴. An aerodynamic kit reducing drag in the aileron and flap area is also currently being investigated. This would reduce fuel burn further approximately by 1.5%⁵. Maintenance also strives to substitute environmentally hazardous chemicals and minimize risk when handling these.

Office

At the office waste is being recycled and the most environmentally sustainable alternative in all our choice of suppliers and products are being made. When recently moving to a new office building the contractor hired to renovate the premises received an extensive list of environmental demands such as low energy lamps, environment-friendly toilets/water taps, energy saving motion detectors and timers.

Goal, strategy and policy

In an effort to tackle aviation's small but fast-growing contribution to climate change, the EU has decided to impose a cap on CO₂ emissions for all planes arriving at or departing from EU airports. Airlines would then be allowed to buy and sell 'emission credits' on the EU 'carbon market' (called EU Emissions Trading Scheme, EU-ETS). The program will be implemented *1st January 2012* for all flights, both within the EU as well as international ones arriving or leaving the EU⁶.

Goal

City Airline has chosen not to wait until the mandatory EU-ETS implementation in 2012 but will strive to become 100% climate neutral as of *1st January 2012*.

The ambition is to be the most environment-friendly airline in Scandinavia by *1st January 2012*.

4 According to Embraer calculations

5 According to Embraer calculations

6 www.ec.europa.eu/environment/climat/emission

Strategy

Since we believe that even empty seats must be emission compensated City Airline will not offer an optional customer based climate compensation program. Instead City Airline's objective is to take full responsibility and to make sure that every flight is being compensated regardless of the number of passengers onboard. That is what City Airline considers to be environmental awareness.

The following time plan has been set up as a guideline:

2009	Develop an external and internal communication plan. Define KPIs (Key Performance Indicators) to be able to measure the progress of our environmental work and goals.
2010	Project investment assessment determining in what projects and schemes City Airline should participate Evaluate environment-friendly partners and suppliers (taxis, coaches, hotels, rental cars, catering etc)
2010 –2011	Implementation

Policy

In the meantime City Airline will continue to strive to enhance environmental awareness in our daily activities and has implemented the following Environment Policy in cooperation with University of Gothenburg.

City Airline will:

- 1) Undertake the responsibility to apply environmental laws and other regulations that concern our company
- 2) Strive to reduce and compensate for the CO₂ emissions from our flight activity
- 3) Make every effort to recycle our waste
- 4) Select the most environmentally sustainable alternative in our choice of suppliers and products
- 5) As far as possible substitute our environmentally hazardous chemicals, and minimize risk when handling these
- 6) Take responsibility for our employees' education and understanding required to ensure that our environmental work and goals will be attained
- 7) Strive for transparency in our environmental work and an active dialog with our staff, clients and other stakeholders
- 8) Strive to continuously improve our environmental work in order to minimize our environmental impact

If you have questions concerning City Airline's Environment Program, please contact Environment Manager Thomas Adielson at thomas.adielson@cityairline.com