CATHAY PACIFIC AND THE ENVIRONMENT

INTRODUCTION
As a responsible corporate citizen, Cathay Pacific is committed to minimising our impact from our operational activities in the air and on the ground. The airline’s environmental objectives are outlined in its Sustainable Development Strategy. Details can be found in our Sustainable Development Report at www.cathaypacific.com/sdreport.

CATHAY PACIFIC AND CLIMATE CHANGE

Aviation is a small but growing contributor to climate change. Currently, aviation is estimated to contribute approximately 2% of human-induced carbon emissions globally and this is expected to rise to 3% by 2050 with growth in demand.

Cathay Pacific’s approach to reducing its emissions supports in full the International Air Transport Association (IATA)’s “Four-Pillar Strategy” by investing in technology, improving operations and infrastructure, and through appropriate economic measures.

1. Investing in technology
   - Cathay Pacific is making significant investments to underscore its commitment to modernise its fleet, with more than 60 new and fuel-efficient aircraft on order for delivery up to 2024.
   - Advancement in technology has led to ongoing incremental improvements in fuel efficiency. The airline has seen a fuel efficiency improvement of 16.3% (in terms of available tonne kilometers, ATK) and 24.8% (in terms of revenue tonne kilometers, RTK) since 1998.
   - The airline is a member of the Sustainable Aviation Fuel Users Group and an equity partner in Fulcrum BioEnergy, Inc., a company that specialises in the development of an efficient and reliable process for transforming municipal solid waste into a source of lower-carbon transportation fuels.
   - Cathay Pacific’s first sustainable biofuel flight is also the longest to date in the world. All of our A350-900 aircraft – including the first delivery in May 2016 – will be flown from Toulouse to Hong Kong using fuel containing a 10% blend of biofuel.

2. Improving operations and infrastructure
   - Cathay Pacific utilises real-time wind data and adopts flexible routes for dynamic flight planning.
   - The airline collaborates with industry partners and regulatory authorities to address air traffic management inefficiencies.
   - Initiatives such as regular engine core washing and reduced engine taxi-in are implemented resulting in fuel savings and reduced emissions.

3. Economic instruments
   i) FLY greener
      - Cathay Pacific was the first Asian airline to launch a carbon offset initiative in 2007.
- Passengers can use cash or miles to offset the emissions associated with their flights.
- The offsets are used to support a diversified portfolio of emissions reduction projects, which currently include a cook stove project in Shanxi, China, and a group of 65 wind turbines in Taiwan.

ii) Global Market-Based Measure
- Cathay Pacific is involved in the Global Market-Based Measure Technical Task Force, under the auspices of the International Civil Aviation Organization (ICAO). This task force is leading the industry’s work to develop airlines’ commitment to carbon neutral growth by 2020 and in developing proposals for a fair and equitable global agreement on emissions from international aviation.

OTHER ENVIRONMENTAL ISSUES

1. Noise
There has already been a 75% industry-wide reduction in noise over the past 30 years. Cathay Pacific continues to work on ways to reduce noise in its aircraft. Ongoing efforts include:
- Collaboration with airports, air navigational service providers, manufacturers, regulators and other airline partners on noise mitigation measures.
- Working with industry groups in the promotion of the ICAO’s “Balanced Approach” to noise management.
- Replacement of older aircraft with newer and quieter ones.

2. Air quality
According to the Hong Kong Special Administrative Region Government’s air emissions inventory, aviation contributes 6% of nitrogen oxides, 5% of carbon monoxide and less than 6% of other air pollutants to local levels of air emissions. Ongoing efforts to minimise the airlines’ impacts on air quality include:
- Continued fleet modernisation and retirement of older aircraft.
- Reduced engine taxiing and use of ground power sources instead of engine fuel whilst aircraft are being serviced on the ground.
- Replacement of older vehicles and equipment with ones that meet Euro V and other low emission standard.

3. Waste
The use of material resources such as paper, plastic, and food in our operations is part of our service and is inevitable. There are medium to long-term programmes in place to minimise impacts from their consumption and disposal. Ongoing efforts include:
- Adaptation of materials with lower environmental footprint across our products.
- Development of protocols to more accurately caters for our flights and donates consumable surplus food to food banks in Hong Kong.
- Recycling waste from our offices and flights.
- Switching to biodegradable plastic packaging.
- Utilising technological solutions to reduce paper usage and procure from responsible sources where it is used.
- Systematically recycling our retired aircraft where up to 90% of their components can be reused, recovered, or recycled.
- Carpets in our Economy Class cabin are produced from 100% nylon waste.

4. Biodiversity
The conservation of habitats and species diversity is important to Cathay Pacific as the airline acknowledges it has an impact on the destinations in its network. Ongoing efforts include:
- Introduction of Marine Stewardship Council certified fish on selected flights.
- Formalisation of our Sustainable Food Policy to ensure unsustainably produced food items are not consumed or served at company functions.
- Cathay Pacific is a signatory to the United for Wildlife Transport Taskforce Buckingham Palace Declaration and is committed to not knowingly facilitate or tolerate the carriage of illegal wildlife products.
- We have invested much effort and resources since 2009 and have been engaging and working with the global scientific community to review and develop guidelines on implementing our responsible cargo carriage policy, in particular on shark and shark products.

RECONIGITIONS

Cathay Pacific has been included in the highly regarded FTSE4Good Index Series, designed to measure the performance of companies that meet globally recognised corporate responsibility standards since 2009. The airline was listed in the Dow Jones Sustainability Index (DJSI) in 2013 and 2014, a world-leading and one of the most recognised sustainability indices. We obtained an ‘AA’ rating under the Hang Seng Corporate Sustainability Index and were listed in the Carbon Disclosure Leadership Index (CDLI) under the Industrials sector in 2011 and 2012, for having one of the top scores for showing positive actions that the company has demonstrated to promote climate change mitigation, adaptation and transparency.