Sustainable Alternative Fuels

Sustainable alternative fuels offer a promising solution to reduce aviation’s carbon footprint. Sourced from renewable biomass or waste materials, they are fully compatible with current aircraft and fuel infrastructure and have the potential to emit fewer greenhouse gases than fossil fuels.

Already available for use in commercial aircraft when blended up to 50 per cent with traditional jet fuel, more than 1,500 commercial flights by more than 18 airlines have thus far been conducted using sustainable alternative fuels.

Efforts are on-going to initiate commercial-scale production and decrease production cost to reduce the price gap with fossil jet fuel.

ICAO Achievements

• Workshops on Sustainable Alternative Fuels February 2009 and October 2011.

• Conference on Aviation and Alternative Fuels Rio de Janeiro, November 2009.

• Global Framework for Aviation Alternative Fuel (GFAAF).

• Rio+20 Flightpath initiative: 4 connecting flights on alternative fuels from Montreal to the Rio+20 sustainability summit.

• SUSTAF experts group – recommendations for addressing future challenges.
Key Figures and Dates

- **142** Millions of tonnes of international aviation fuel burn in 2010
- **2009** Approval of first alternative fuels for aviation
- **2011** First commercial flights
- **2013** First regular commercial flights

How ICAO can help

- Information sharing and dissemination.
- ICAO GFAAF website.
- Production of guidance material.
- Providing forums for education, outreach and exchanges.
- Facilitating development of standardized definitions, methodologies and processes.
- Data collection and trends assessment to support informed decision-making.

The ICAO Environmental Report also contains helpful information on Sustainable Alternative Fuels for aviation in Chapter 4.

For more information on ICAO’s Sustainable Alternative Fuels, please visit: [www.icao.int/environmental-protection/GFAAF](http://www.icao.int/environmental-protection/GFAAF)

Or contact ICAO’s Environment Branch via: [env@icao.int](mailto:env@icao.int)