

Launch of the European Advanced Biofuels Flightpath

The European Commission, Airbus, and high-level representatives of the Aviation and Biofuel producers industries, launched the European Advanced Biofuels Flightpath. This action is scheduled to achieve 2 million tons of sustainable biofuels used in the EU civil aviation sector by the year 2020.

The parties agreed to make all best efforts to support the activities described in the attached *Flight path*, for reaching the objectives. It was agreed to enhance their co-operation in the areas mentioned in the Flight path, each in the respective sphere of their competence and within the limits of their overall resources and possibilities, and applicable rules and regulations. To prepare this launch, the European Advanced Biofuels Flightpath has been discussed widely by representatives from EU Member States' energy, research and transportation departments, industry representatives from the aviation and biofuels sector and non-governmental organisations.

The parties emphasised the need to work together to promote production, distribution, storage and use of sustainably produced and technically certified biofuels. The aim is to ensure the commercialisation of sustainably produced paraffinic biofuels in the aviation sector by reaching a 2 million tons consumption by 2020. For this, it is necessary to join forces in establishing appropriate and effective financial mechanisms to support the construction of industrial “first of a kind” advanced biofuel production plants.

More specifically, the action focuses on the following issues:

1. Facilitate the development of standards for drop-in biofuels and their certification for use in commercial aircrafts;
2. Work together with the full supply chain to further develop worldwide accepted sustainability certification frameworks
3. Agree on biofuel take-off arrangements over a defined period of time and at a reasonable cost;
4. Promote appropriate public and private actions to ensure the market uptake of paraffinic biofuels by the aviation sector;
5. Establish financing structures to facilitate the realization of 2G biofuel projects;
6. Accelerate targeted research and innovation for advanced biofuel technologies, and especially algae.
7. Take concrete actions to inform the European citizen of the benefits of replacing kerosene by certified sustainable biofuels.

The working methods and governance will be the ones established in the Strategic Energy Technology Plan (SET-Plan) of the European Union, as presented by the Commission and endorsed by the European Parliament and the Heads of States and Governments on 4 February 2011. The attached Flight Path gives an overview about objectives, tasks, and milestones of this venture.

Flight path

Time horizons	Action	Aim/Result
Short-term (next 0-3 years)	Announcement of action at International Paris Air Show	To mobilise all stakeholders including Member States.
	High level workshop with financial institutions to address funding mechanisms.	To agree on a "Biofuel in Aviation Fund".
	> 1,000 tons of Fisher-Tropsch biofuel become available.	Verification of Fisher-Tropsch product quality. Significant volumes of synthetic biofuel become available for flight testing.
	Production of aviation class biofuels in the hydrotreated vegetable oil (HVO) plants from sustainable feedstock	Regular testing and eventually few regular flights with HVO biofuels from sustainable feedstock.
	Secure public and private financial and legislative mechanisms for industrial second generation biofuel plants.	To provide the financial means for investing in first of a kind plants and to permit use of aviation biofuel at economically acceptable conditions.
	Biofuel purchase agreement signed between aviation sector and biofuel producers.	To ensure a market for aviation biofuel production and facilitate investment in industrial 2 nd generation biofuel (2G) plants.
	Start construction of the first series of 2G plants.	Plants are operational by 2015-16.
	Identification of refineries & blenders which will take part in the first phase of the action.	Mobilise fuel suppliers and logistics along the supply chain.
Mid-term (4-7 years)	2000 tons of algal oils are becoming available.	First quantities of algal oils are used to produce aviation fuels.
	Supply of 1.0 M tons of hydrotreated sustainable oils and 0.2 tons of synthetic aviation biofuels in the aviation market.	1.2 M tons of biofuels are blended with kerosene.
	Start construction of the second series of 2G plants including algal biofuels and pyrolytic oils from residues.	Operational by 2020.
Long-term (up to 2020)	Supply of an additional 0.8 M tons of aviation biofuels based on synthetic biofuels, pyrolytic oils and algal biofuels.	2.0 M tons of biofuels are blended with kerosene.
	Further supply of biofuels for aviation, biofuels are used in most EU airports.	Commercialisation of aviation biofuels is achieved.