

industry



# SUSTAINABLE FUEL IN FOCUS FOR BUSINESS AVIATION

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**D**ozens of business aircraft set a historic precedent last October by departing the 2019 National Business Aviation Association's Business Aviation Convention and Exhibition using sustainable aviation fuel. The event marked the most prolific single-event use of sustainable aviation fuel in business aircraft and highlighted its viability in all markets.

The event also demonstrated the industry's lack of awareness of sustainable aviation fuel, especially its availability and ease of use.

Here's what you need to know about sustainable aviation fuel.

## How we got here

Business aviation accounts for less than 2% of all aviation carbon dioxide emissions and about .04% of global man-made emissions. Despite these already low numbers, the industry also has an impressive track record of improving fuel efficiency through the years. Business aircraft show a 40% improvement in fuel efficiency over the past 40 years.

"The business aviation industry has three goals to improve efficiency and decrease carbon emissions," said Alexandra Grose, the General Aviation Manufacturers Association's manager of government affairs and envi-

ronment. “We understand we need to increase the use of sustainable aviation fuel in order to achieve these targets.”

Specifically, the business aviation community pledged an average of 2% improvement in fuel efficiency per year from 2010 to 2020, carbon neutral growth from 2020 onward, and a 50% reduction of carbon dioxide emissions by 2050, relative to 2005 levels.

The industry planned to achieve these targets through improved technology; infrastructure and operational improvements, including improved navigation systems and procedures; alternative fuels; and market-based measures.

These targets were published in “Business Aviation Commitment on Climate Change,” a joint position paper between GAMA and the International Business Aviation Council. The position paper supported the ICAO Declaration on International Aviation and Climate Change.

The International Civil Aviation Organization’s “Vision for 2050 Sustainable Aviation Fuels – Declaration of the Second Conference on Aviation and Alternative Fuels” at Mexico City in October 2017, recognized the importance of researching and developing fuel efficiency and sustainable alternative fuels in order to lower the environmental impact of aviation.

Specifically, the vision tasked “States, industry and other stakeholders, for a significant proportion of conventional aviation fuels to be substituted with sustainable aviation fuels by 2050” in order to reduce international civil aviation carbon emissions significantly.

The goals – both specific to business aviation and on a global scale – of these proclamations can be met in part by widespread use of sustainable aviation fuel.

### **Available now, easy to use**

Sustainable aviation fuel isn’t a dream for the future – it is available now, though not widely available. The mass use of sustainable aviation fuel at NBAA-BACE’s static display pointedly demonstrated its fleet-wide applicability. And better yet, sustainable aviation fuel is a “drop-in” – no changes are required to the aircraft or

even the aircraft flight manual. Sustainable aviation fuel was designed to meet ASTM D7566, which in turn meets the requirements of D1655 – the standard for turbine-powered aircraft.

If your aircraft flight manual requires Jet A or Jet A-1, sustainable aviation fuel currently in production meets these requirements and may be used as a blend with conventional jet fuel.

Original equipment manufacturer warranties, maintenance and inspection schedules, and engine programs are also unaffected by use of sustainable aviation fuel.

Sustainable aviation fuel is more expensive than standard Jet A or A-1 but less expensive than you might think, partly because it is not used “neat.” Rather, sustainable aviation fuel is typically used as a 10% to 50% blend with straight Jet A. Over time, the cost will decline as supply increases.

### **How to get sustainable aviation fuel**

The greatest challenge to sustainable aviation fuel implementation is lack of widespread availability. Of course, a challenge to widespread availability is lack of demand, partly due to lack of understanding of the fuel.

Los Angeles International Airport typically has sustainable aviation fuel available as do some foreign airports, including Oslo and Bergen, Norway, and Stockholm, Sweden.

“GAMA and its members are working to educate the industry,” Grose said. “People don’t understand this is a drop-in fuel – no modifications, no design or maintenance changes are needed to use SAF – so they don’t know they should be requesting it.”

Grose urges aircraft owners, operators and pilots to tell their fuel providers they want to use sustainable aviation fuel. Increased demand will increase production, eventually lowering the cost through economies of scale.

The business aviation industry will continue its focus on sustainable aviation fuel and other measures to promote environmental stewardship at the Business Aviation Global Sustainability Summit in March 2020. □

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