

Study details path to sustainable aviation biofuels industry in Northwest

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The Pacific Northwest has the diverse feedstocks, fuel-delivery infrastructure and political will needed to create a viable biofuels industry capable of reducing greenhouse gases and meeting the future fuel demands of the aviation industry. Creating an aviation biofuels industry, however, will depend upon securing early government policy support to prioritize the aviation industry in U.S. biofuel development.

That's the conclusion announced today in a 10-month study by Sustainable [Aviation Fuels](#) Northwest (SAFN), the nation's first regional stakeholder effort to explore the feasibility, challenges and opportunities for creating an aviation biofuels industry in the Pacific Northwest. Boeing (NYSE: BA), Alaska Airlines (NYSE: ALK), Portland International Airport, Seattle-Tacoma International Airport, Spokane International Airport and Washington State University partnered in a strategic initiative to identify the potential pathways and actions necessary to make safe, sustainable aviation [biofuel](#) commercially available to airline operators in the area.

"It is critical to the future of aviation that we develop a sustainable supply of aviation biofuels," said Boeing Commercial Airplanes President and CEO Jim Albaugh. "Airlines are particularly vulnerable to oil price volatility, and the aviation community must address this issue to maintain economic growth and further mitigate the environmental impacts of our industry."

Albaugh described the study as a critical, first step in identifying the

regional specific actions – from biomass options, infrastructure and financing incentives – that should be taken to create a renewable fuels supply chain that meets rigorous fuel and safety standards.

To make a sustainable biofuels industry a reality, the study outlines an integrated approach recommending the use of many diverse feedstock and technology pathways, including oilseeds, forest residues, solid waste and algae. In addition, the study outlines the long-term importance of securing aviation biofuels as a top government priority and using the aviation industry to drive growth in domestic production.

The comprehensive study examined all phases of aviation biofuel development, including biomass production and harvest, refining, transport and airport infrastructure and actual use by airlines. However, as with any new energy supply, political support at the state and federal level is critical in the early stages of development. While the study does not advocate for permanent government support, it recognizes that focused public investments and parity with other biofuels programs will be needed to place the industry on an economically competitive basis.

Alaska Air Group Chairman and CEO Bill Ayer, said: "Alaska Airlines has made significant strides in reducing its environmental impact by enhancing the efficiency of its operations, including using satellite-based flying technology and investing in the most fuel-efficient airplanes in their class – but efficiency is only part of the answer. In order for the aviation sector to continue its impressive record of fuel efficiency and emissions reduction while continuing to grow, it is important that a sustainable supply of aviation biofuels is developed."

Unlike other ground transportation sectors, the aviation industry has fewer energy alternatives. For at least the next 20-30 years, commercial and military jets will need liquid, high energy-density fuels with the same technical performance as petroleum-based fuels.

"We are proud to join our partners in biofuels research that will help the aviation sector to continue its record of reducing its carbon footprint," said Steve Schreiber, Port of Portland aviation director. "The Northwest is uniquely positioned to serve as a blueprint for developing a U.S.-based, sustainable aviation biofuels industry."

"Airports have been leaders for years in finding ways to reduce their environmental footprint, from clean fuel sources for taxis and shuttles to electrification of ground equipment and pre-conditioned air, but in order to take the next big step we have to address emissions from aircraft," said Bill Bryant, Port of Seattle commission president. "We can't get there without biofuels. It not only will help the sustainability of the Northwest but also the [aviation industry](#)."

Dr. John Gardner, vice president for Advancement and External Affairs at Washington State University, said: "WSU will combine our world-class biofuel and agricultural researchers along with significant institutional assets to leverage the Northwest's abundance of agricultural and natural resources necessary to create a dynamic new aviation fuels industry. The long-term payback will be a stateside industry that greatly enhances our traditional economic strengths; from farming and forestry to engineering and aerospace, creating new opportunities and new jobs for the Northwest."

Launched in 2010, the SAFN initiative united more than 40 regional stakeholders ranging across aviation, biofuels production, environmental advocacy, agriculture, forestry, federal and state government agencies, academic research and technical consultancies. Climate Solutions, a Northwest clean-energy economy nonprofit, facilitated the stakeholder process and took the lead in researching and drafting the report.

"The course is clear that aviation biofuels are key to the future of sustainable air travel," said Lawrence J. Krauter, chief executive officer,

Spokane International Airport. "We can no longer base our future on imported petroleum, especially if the United States wants to remain an [aviation](#) leader. The SAFN study proves domestic biofuels are feasible and offers an economic opportunity for us to remain competitive as an industry and move toward a sustainable, domestic fuel supply."

Provided by Washington State University

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