

# **SUSTAINABLE AVIATION FUELS (SAF)**

The Port of Seattle has set a goal to power every flight fueled at Seattle-Tacoma International Airport with at least a 10% blend of sustainable aviation fuel (SAF) by 2028. To further this goal, the Port has partnered with a wide range of public and private sector leaders to identify policies, programs, and market incentives that will speed the production and availability of these fuels.

## WHAT ROLE CAN THE PORT OF SEATTLE PLAY TO BRING SAF TO SEA-TAC?

#### **Infrastructure**

In 2016, the Port joined other stakeholders to investigate the best locations to store and blend SAF into the airport's fueling systems. The report identified some key locations on and off the airport's property. The Port may have access to land to support locations for blending or production facilities.

### **Partnerships**

The Port is in a unique position to help aggregate demand for fuel and send a strong market signal for SAF production here in Washington state.

One major tactic to this end is the creation of an annual Washington SAF Summit, which the Port first hosted in March 2019 - bringing together advocates, producers, business leaders and elected officials to raise awareness and identify opportunities for collaboration.

For more information, visit www.washingtonsaf.org

#### **Financing**

In 2017, Carbon War Room/Rocky Mountain Institute and SkyNRG investigated the feasibility of using different airport revenue streams at Sea-Tac to help bring down the cost to all airlines compared to petroleum jet fuel, as well as support the build-out of fueling infrastructure. The report identified a range of funding sources, and included ways an airport could be involved without directly paying for fuel.

## **Advocacy**

The Port can reduce barriers and help create incentives for SAF use through advocacy at the local, state and federal level:

- Implementing a state clean fuel standard
- Ensuring authority for airports to use airport revenue and federal grant funding to support the air quality and carbon reduction benefits of fuel switching
- Better leveraging US Departments of Defense,
   Energy, and Agriculture funding for SAF research and implementation
- Funding new and expanded federal loans, grants and incentives for SAF feedstock production and processing, as well as biorefinery construction

# WHAT ARE SUSTAINABLE AVIATION FUELS (SAF)?

Sustainable Aviation Fuels are a blend of neat biofuel with traditional "Jet-A" aviation fuel.

#### **Neat biofuel**



Jet fuel produced from renewable organic matter, including used cooking oil, animal tallow, wood waste, algae, kelp, aquatic grasses, oilseeds, municipal solid waste, etc.





Jet fuel is non-renewable fossil fuel designed for use in aircraft powered by gas-turbine engines

#### WHAT ARE THE BENEFITS OF SAF?



SAF reduces carbon dioxide emissions by 50-80% compared to fossil fuel.



Biofuel feedstock, or source material, **absorbs carbon dioxide (CO<sub>2</sub>) during its growth cycle** (e.g. photosynthesis).



**SAF reduces sulfur emissions, soot, and ultra-fine particulates**. All of which are associated with adverse human health impacts.



Biofuels, when blended, are virtually identical to the Jet A-1 fuel currently in use.



SAF can simply be dropped into the current fuel supply.

No new engines, no new aircraft and no separate fuel delivery systems are needed at airports.



Creates **clean energy** jobs throughout our state, from Eastern Washington farmers to Northwest Washington refiners to aviation industries roles in the Puget Sound.

"The state of Washington has been very forward looking in understanding that they play an important role in the development of sustainable aviation fuels in this region. There is tremendous economic benefit to develop sustainable aviation fuels...

The Port of Seattle and Sea-Tac has taken a real leadership in this area." - Michael Wolcott, Ph.D., Civil and Environmental Engineering Department, Washington State University

**More information:** www.portseattle.org/page/sustainable-aviation-fuels



