MOTION OF THE PORT OF SEATTLE COMMISSION TO DEVELOP A COMPREHENSIVE PORT OF SEATTLE SUSTAINABLE AVIATION FUELS STRATEGY

ADOPTED DECEMBER 19, 2017

TEXT OF THE MOTION

The Port of Seattle is committed to implementing its long-standing goal of transitioning from traditional jet fuel to sustainable aviation fuels (SAF) at Seattle-Tacoma International Airport (Sea-Tac). Over the years, significant progress has been made to establish the economic and logistical feasibility of this effort. Transitioning to SAF will not only advance the Port's Century Agenda Greenhouse Gas (GHG) Reduction Goals but may also contribute to the reduction of aviation-related ultrafine particulate emissions. In addition, these efforts have the potential to create new sources of employment and economic opportunities throughout our region and state related to production, transmission, and deployment of SAF.

To advance the Port's well-established efforts to transition to SAF at Sea-Tac, the Port of Seattle shall adopt the following goals:

- By 2028, 10 percent of jet fuel available at Sea-Tac will be produced locally from sustainable sources.
- By 2035, 25 percent of jet fuel available at Sea-Tac will be produced locally from sustainable sources.
- By 2050, the maximum blend currently approved for jet fuel will be produced locally from sustainable sources (e.g., 50 percent from sustainable sources is the maximum blend currently approved for HEFA-based SAF).

These timelines may be adjusted with technological advances, regulatory changes, and policy updates.

The SAF must meet the following principles: reduce lifecycle aviation-related greenhouse gas emissions; be drop-in fuel so no infrastructure or aircraft engine modifications are required; not take land out of food production; and reach price competitiveness.

The following steps will enable the Port to achieve these goals:

• In 2018, the Port will reach an agreement with the major airline tenants at Sea-Tac to establish a mutual commitment to advance the use of SAF that meets International Air

Transportation Association (IATA) and ASTM International fuel standards and protocols to ensure safe and effective use.

- Create a market signal to facilitate the establishment of a domestic/local source of SAF at a commercially competitive rate.
- Ensure a commitment from the airlines that they will use SAF preferentially to meet goals established in the motion as long as there is a commercially competitive supply.
- Drive initiatives to ensure cost competitiveness for SAF through a variety of methods that are not mutually exclusive, including:
 - Work with airlines to support state and federal legislation establishing a costeffective Low Carbon Fuel Standard (LCFS) consistent with bills, executive orders, policies and regulations implemented in the States of California and Oregon and the Province of British Columbia; or similar provision that includes options for aviation tax credits as well as renewable diesel for marine and on-road use.
 - Work with airlines to advocate to the Federal Aviation Administration (FAA), federal and state legislators, regulatory agencies, industry groups, and other partners for use of airport revenues to offset costs of SAF through their co-benefits.
 - Work with airlines to advocate to the FAA for new grant programs, or to adjust existing Voluntary Airport Low Emissions (VALE) grant programs to support SAF through their co-benefits.
 - Seek mutual financial investments with the Port and its partners.
 - To help create the demand for renewable diesel, which can be an important part of making the market demand for SAF, the Port shall work with the following partners including, but not limited to: Washington State Ferries, cruise lines, tug boat operators, other harbor craft, truck operators, fishing boats, the United States Coast Guard, and the Department of Defense.

STATEMENT IN SUPPORT OF THE MOTION

The Century Agenda of the Port of Seattle includes the goals of reducing Scope 3 GHG emissions, which include aviation-related emissions at Sea-Tac, by 50 percent by 2030 and to meet increased energy needs through conservation and renewable sources.

As the operator of the region's largest commercial airport and an engine for economic vitality, the Port of Seattle is engaging in partnerships with the aviation industry to achieve these important environmental and community goals. The ambitious nature of the following goals is

only matched by the fact that Sea-Tac has been the fastest growing airport in the United States for the past three years.

The use of SAF has been demonstrated as an effective means of reducing lifecycle greenhouse gas emissions, particulate emissions, and reliance on fossil fuel.

In addition, recent studies have indicated that SAF might reduce aircraft emissions of ultrafine particles (UFPs), which would bring additional benefits to local communities. UFPs, which derive from a variety of sources, could have detrimental impacts on air quality and human health. The Port is supporting efforts to study whether and how much UFP emissions result from aviation activities and the potential improvements generated by using SAF in order to help direct policy and solutions to improve the quality of life for local communities.

As stated by the International Civil Aviation Organization (ICAO), global aviation generates approximately 2 percent of global GHG emissions and is forecast to grow to 5 percent by 2050. While most industries have a range of cost-effective options available to reduce carbon emissions, aviation does not. For the foreseeable future, there is no alternative to liquid fuels for jet aircraft. The single largest opportunity to decarbonize air travel is to replace conventional, fossil-based jet fuel with SAF. However, SAF commercialization is still in its infancy.

These fuels are not widely produced and if used at Sea-Tac today, they would currently need to be imported to Washington State by truck, rail, or barge. The fuel must then be blended with regular petroleum-based jet fuel before it can be used in aircraft and regular fueling infrastructure.

The Port has set an ambitious goal for Sea-Tac to become the first American airport to play a market development role by aggregating demand and making SAF available to all airlines. The Port has been an early supporter of research and development efforts to chart a path to making use of SAF commercially feasible and available to airlines operating at Sea-Tac. It is also among the first airports in North America to systematically evaluate infrastructure to bring SAF to the airport and develop a commercial-scale program.

In 2011, the Sustainable Aviation Fuels Northwest study, sponsored by the Port and our partners, was completed. It stated that developing a robust sustainable biofuels industry will produce significant jobs and tax revenues and substantially reduce financial outflows from the region. While no specific projections are available for a regional biofuel industry, one national study found that producing 475 million gallons of biofuel in 2009 resulted in 23,000 jobs across the economy, \$4.1 billion in added GDP growth, \$445 million in federal tax revenues, and \$383 million for state and local governments. Feedstock production would likely represent half the direct jobs, boosting employment in rural areas and small communities. In addition, the Northwest agricultural, forest, and urban areas have significant potential biomass resources. The region also has tremendous expertise through research universities, government agencies, and industries. For example, the Pacific Northwest National Laboratory is a designated national

research center on thermochemical conversion of biomass; and Washington State University conducts world-class research on biofuel conversion, forestry and agricultural practices. The Port will need to continue collaboration with these partners in order to develop a sustainable aviation fuels market in the Northwest.

For the past several years, the Port has been collaborating with Alaska Airlines, the Boeing Company, and other partners to work toward our goal of eventually powering every flight fueled at Sea-Tac with SAF, which has a lifecycle carbon footprint 50 to 80 percent lower than regular jet fuel. Important to this conversation is that reducing carbon dioxide emissions by using SAF also removes sulfur emissions, soot, and particulates from the air.

In 2016, the Port of Seattle, Alaska Airlines, and the Boeing Company completed a study that looked at the most cost-effective way to integrate SAF into the airport's fueling infrastructure. And this year, the Port participated with Carbon War Room-SkyNRG in a study that looked at the financing side of the supply chain.

These studies will help the Port take the next steps toward our goal of making SAF available, cost-effective, and practical for all airlines at Sea-Tac. Step by step we are building the links in the supply chain so that we can support economic development and protect the environment.

The Port of Seattle can leverage its unique position at the intersection of airlines, fuel suppliers, governments, and communities to support the scale-up of SAF. Airports can aggregate fuel demand across airlines and play an integral role in their regional economy.

Washington, Oregon, and California have worked together under the Pacific Coast Collaborative, teaming up to promote clean energy along the West Coast. Their collective work has grown the West Coast's clean energy economy more than twice as fast as the rest of the nation.

The Port adopted its 2018 state legislative agenda to support the following:

- Policies that promote use of clean energy technology and support a statewide reduction in greenhouse gas emissions, and that can be implemented in ways that leverage our state's competitiveness; maintain the efficient operation of essential public facilities such as airports and seaports; and support equity between our business partners.
- Policies that promote the use of low-carbon fuels for transportation and otherwise support the continued reduction in the cost of low-carbon energy sources to consumers in the state, including potential legislative changes to allow for electrification of large-scale transportation infrastructure.
- State support for partnership with the Port on sustainable aviation fuels, including statelevel actions intended to drive development of sustainable fuels within the state for use at in-state transportation facilities.

STATEMENT OF POLICY DIRECTION

The Commission hereby directs Port staff to develop a Port of Seattle SAF strategic plan by mid-2018. It must include ways to achieve the short, medium, and long-term goals, key milestones, engagement with the community and stakeholders, and timelines outlined in this motion.