

# Sustainable Aviation Fuel (SAF) Study Session

April 27, 2021



# What is Sustainable Aviation Fuel (SAF)?

- Drop-in fuel made from sustainable sources that can be blended with fossil jet fuel
- Produced from waste oils from a biological origin, agriculture or forest residues, municipal waste, etc.
- SAF sustainability standards set by International Civil Aviation Organization (ICAO)



# Volumes & Availability



Image courtesy: Fulcrum Bioenergy website

- Still only one production facility (World Energy) in the US
- More volume imported via Neste
- Facility in Nevada nearing completion
- Facility in Oregon under construction
- Worldwide volumes ~ 5 million gal/yr
- Capacity increasing steadily

# Impact of California's Low Carbon Fuel Standard

- Sustainable aviation fuel can generate credits under the LCFS as of Jan 1, 2019
- Credit value is \$1.25-\$1.50 per gallon
- Since 2019, more SAF volume at LAX and SFO
- Incentives remain higher for on-road fuels (e.g., renewable diesel), so fuel producers focus on highest revenue-generating fuels



Strategic Plan  
Review:  
Progress toward  
10% SAF Goal



# Commission SAF Goal (Dec 2017)

- By 2028, 10 percent of jet fuel available at SEA will be produced locally from sustainable sources
  - Equivalent to 75 million gallons of “neat” SAF
- By 2035, 25 percent
- By 2050, 50 percent +

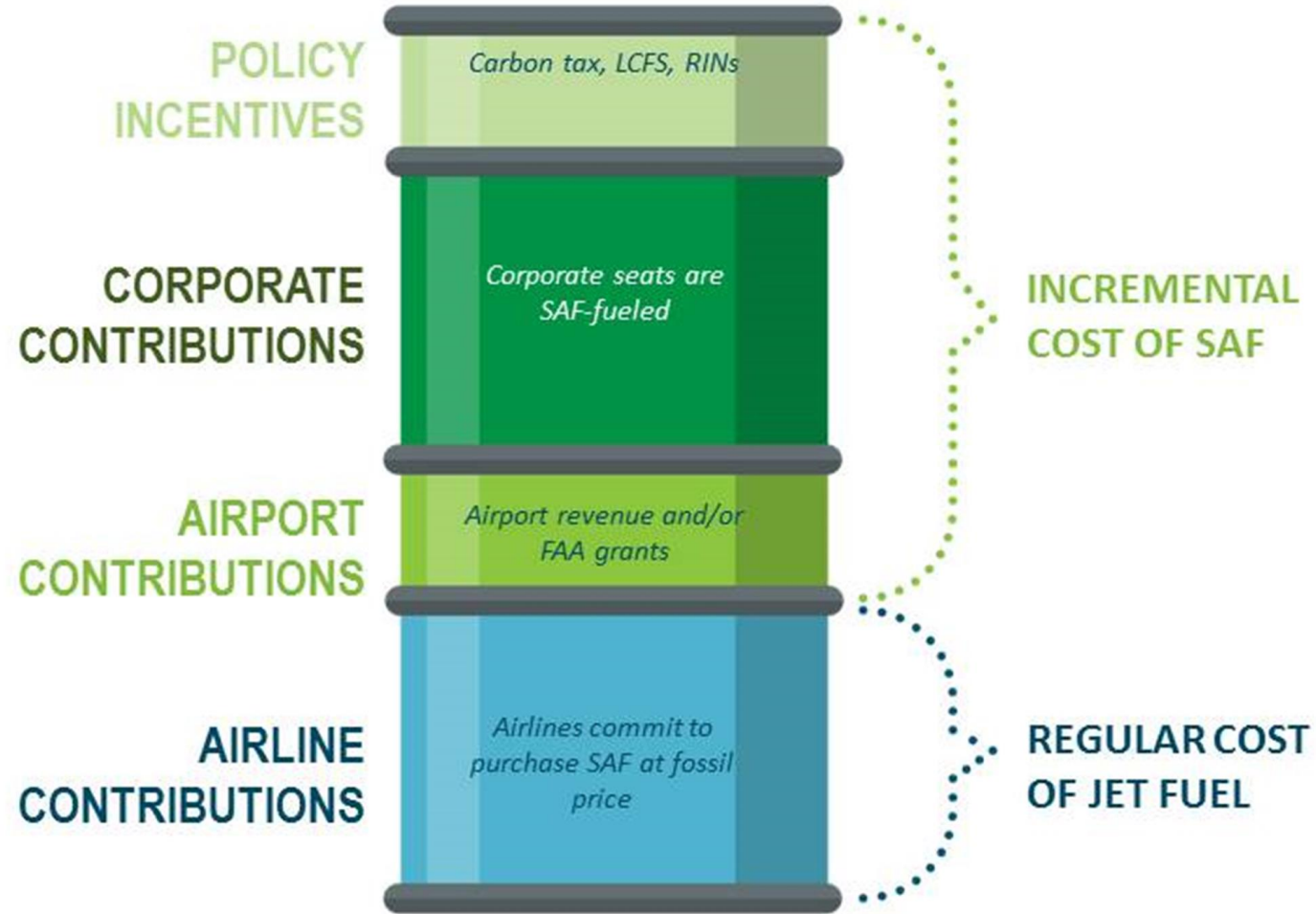


# SAF Strategic Plan (2018)

## Four Key Strategies

1. Airline-Airport Cooperative Model (aka “the MOU Group”)
2. Support local, state, federal policy to incentivize SAF use and in-state production
3. Obtain FAA approval to use airport funds/grants for SAF co-benefits or infrastructure
4. Enhance awareness of, and support for SAF use

# SAF Strategic Plan (2018)

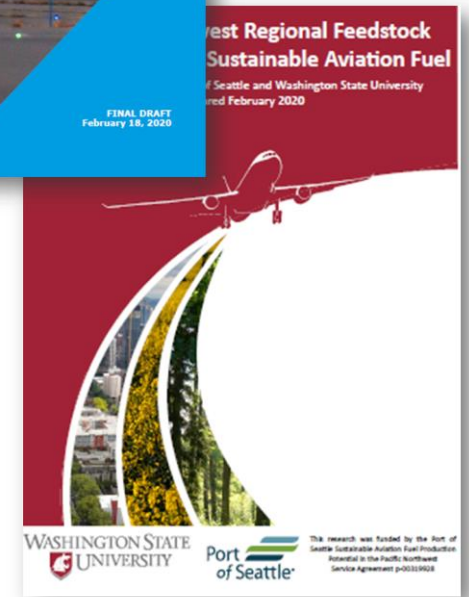


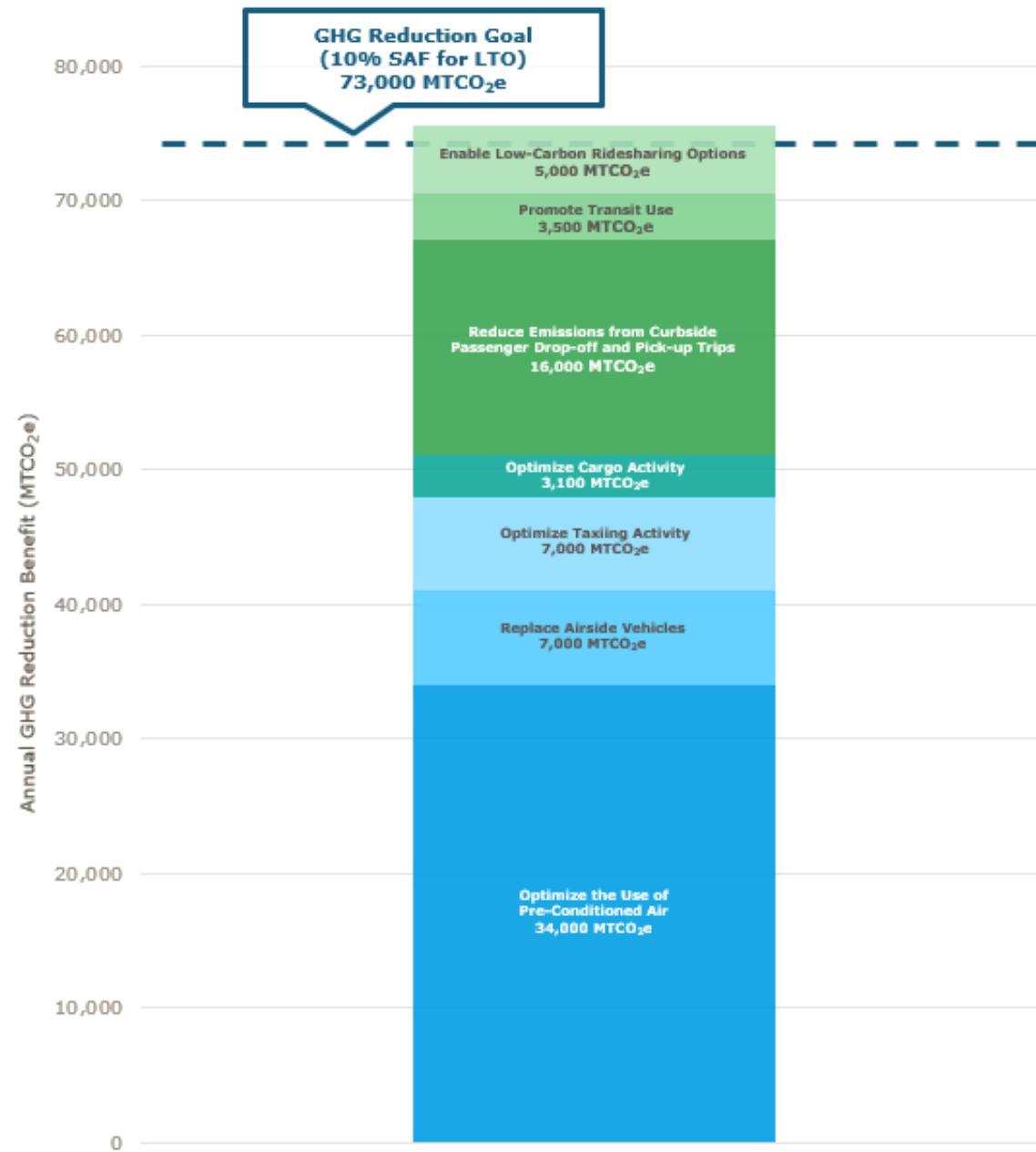
Note: illustrative and not specific to any true program or policy



# Airline-Airport Cooperative Model - Update

- Developed a SAF-emission-reduction equivalent strategy with airlines
- Evaluated ability to meet local/regional fuel goal - WSU Study





# SAF Policy Update



- Powerful advocate for passing LCFS in WA
- Continue to work with WA Commerce to identify legislation that promotes SAF production and use
- New opportunities at federal level with Biden Administration

# Meeting the 10% SAF Goal

- Requires near-parity or better than incentives offered in other jurisdictions and/or on-road fuels
  - Airlines at SEA also operate at other hubs and will favor lowest prices if trying to meet a SAF target
- Requires dedicated production facility being brought on-line quickly
  - Incentives to speed permitting
  - Incentives to bring down capital and operational costs

# Developments Since 2018

- LCFS passed in WA
- Private business aviation interests
- Corporate “SAFc” (corporate SAF-seat on commercial jet) concept & Sustainable Aviation Buyers Alliance
- European nations setting SAF percentage targets

