

FAA Update on Sustainable Aviation Fuels (SAF)

To: Alternative Aviation Fuels: Developing an Action Plan for the Southeast

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Date: April 24, 2019



Federal Aviation
Administration



Environmental Protection that Allows Sustained Aviation Growth

ENVIRONMENT AND ENERGY GOALS



NOISE

Reduce the number of people exposed to significant noise around U.S. airports



AIR QUALITY

Reduce significant air quality impacts attributable to aviation



ENERGY

Achieve net fuel burn reduction by 2020 relative to a 2005 baseline and deploy sustainable aviation fuels.



FAA Environment and Energy (E&E) Research Programs



Continuous Lower Energy, Emissions and Noise (CLEEN)

- Reduce aircraft fuel burn, emissions and noise through technology & advance alternative jet fuels
- Cost share partnership with industry



ASCENT Center of Excellence (COE)

- COE for Alternative Jet Fuel and Environment
- Cost share research with universities



Additional Efforts

- Commercial Aviation Alternative Fuels Initiative (CAAIFI)
- Contract mechanisms (e.g., SEMRS, PEARS-II)
- Volpe Transportation Systems Center



ASCENT Center of Excellence (COE)

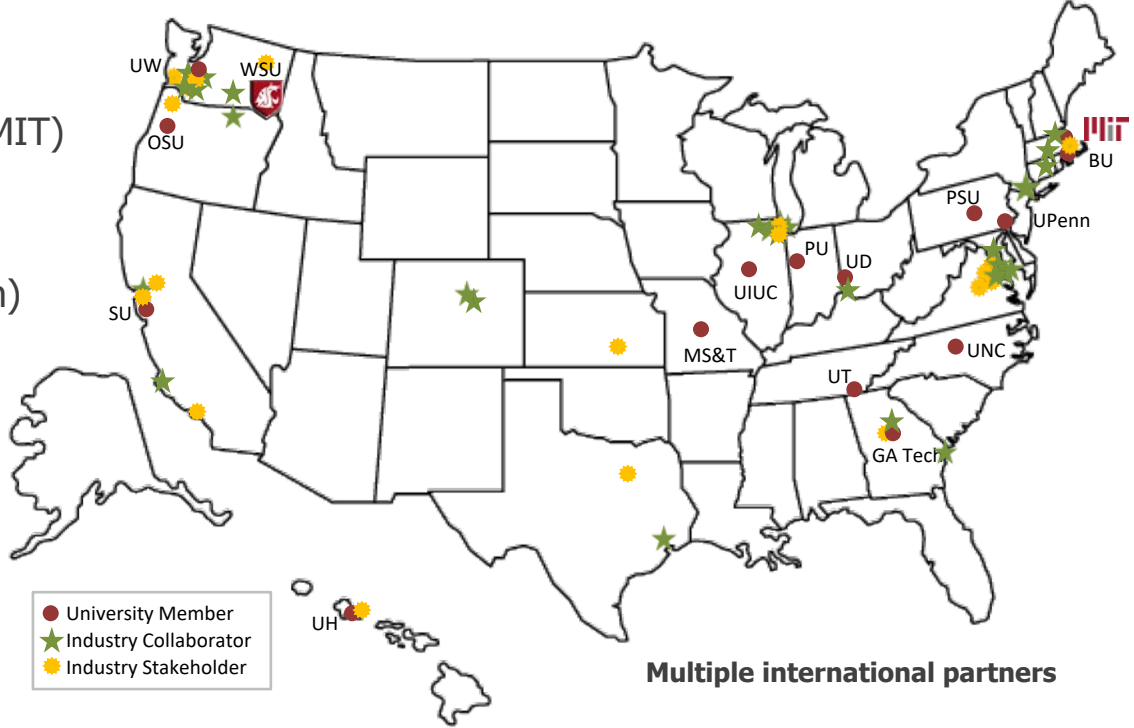
Lead Universities:

- Washington State University (WSU)*
- Massachusetts Institute of Technology (MIT)

Core Universities:

- Boston University (BU)
- Georgia Institute of Technology (Ga Tech)
- Missouri University of Science and Technology (MS&T)
- Oregon State University (OSU)*
- Pennsylvania State University (PSU)*
- Purdue University (PU)*
- Stanford University (SU)
- University of Dayton (UD)
- University of Hawaii (UH)*
- University of Illinois at Urbana-Champaign (UIUC)*
- University of North Carolina at Chapel Hill (UNC)
- University of Pennsylvania (UPenn)
- University of Tennessee (UT)*
- University of Washington (UW)*

* Denotes USDA NIFA AFRI-CAP Leads and Participants & Sun Grant Schools



Advisory Committee - 58 organizations:

- 5 airports
- 4 airlines
- 7 NGO/advocacy
- 9 aviation manufacturers
- 11 feedstock/fuel manufacturers
- 22 R&D, service to aviation sector

For more information:
<https://ascent.aero/>



Federal Aviation Administration

Efforts Relating to Fuels

Testing

- Support Certification/Qualification testing
- Improve Certification/Qualification process

Analysis

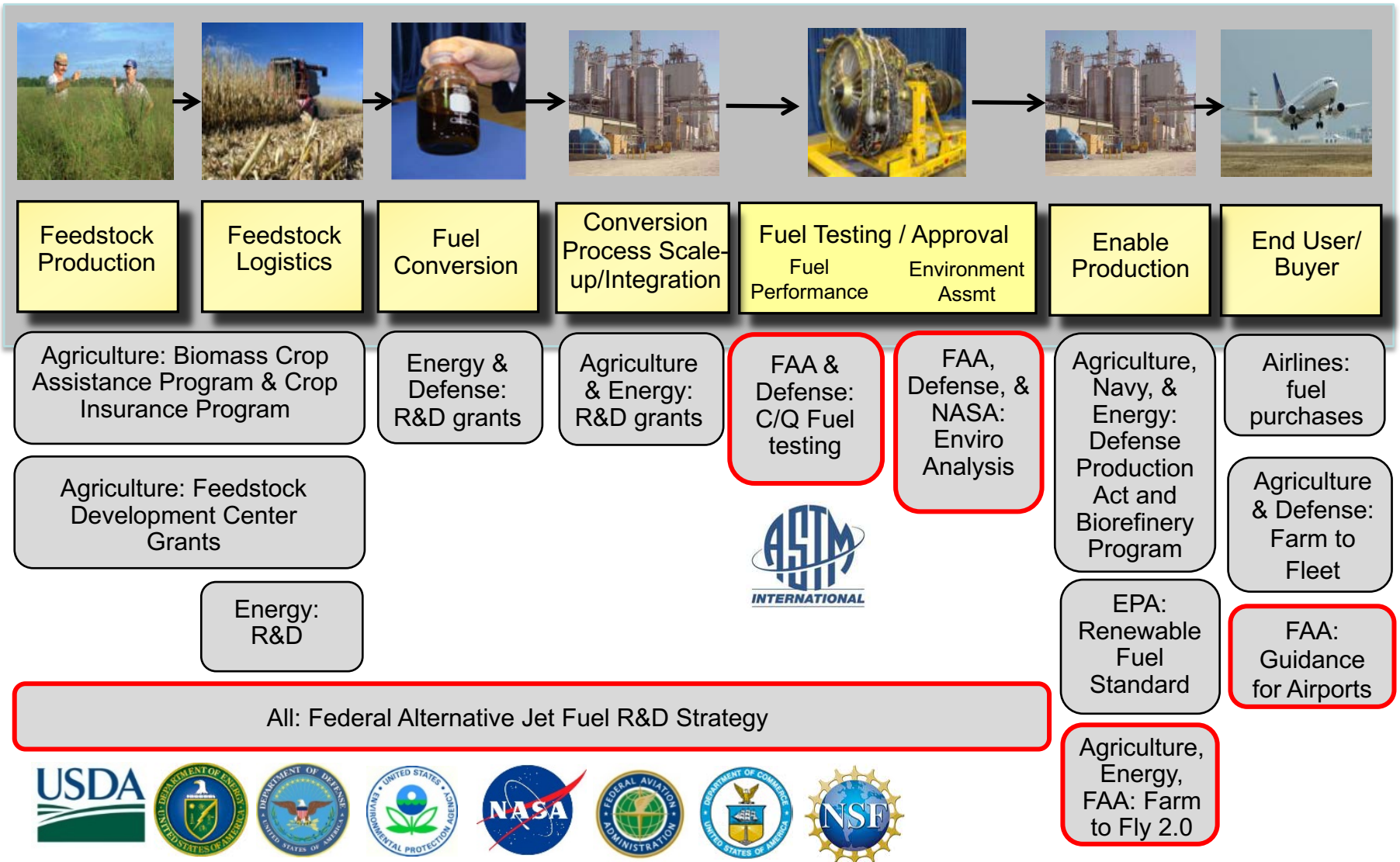
- Environmental sustainability
- Techno-economic analysis
- Future scenarios & policy
- Tools development

Coordination

- Interagency
- Public-Private
- State & Regional
- International



U.S. Federal Agency Efforts Across the Supply Chain



ICAO “Carbon Offsetting & Reduction Scheme for International Aviation” (CORSIA)



- ICAO (International Civil Aviation Organization) sets standards and recommended practices for civil aircraft to enable our global aviation system
- CORSIA is a Global Carbon Offsetting Scheme
 - Not a carbon tax or emissions trading scheme
 - Offsetting to help international aviation meet Carbon Neutral Growth goal
 - Offsets required from 2021-2035
 - Applies to Aircraft Operators, International Operations Only
 - Exemptions for aircraft $\leq 5,700$ kg, operators with $\leq 10,000$ metric tons CO₂, and humanitarian, medical, firefighting flights
 - Country-by-country implementation, with reporting to and determinations by ICAO
- CORSIA Eligible Fuels can be used by an airline to reduce their offsetting requirements





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**Federal Aviation
Administration**

Farm to Fly 2.0 (F2F2) Agreement

- Resolved to “enable commercially viable, sustainable bio-Jet Fuel supply chains in the U.S.”
- Focus government & aviation industry efforts towards U.S. state and regional fuel supply opportunities
- Activities complementary and coordinated
 - CAAFI & ASCENT (FAA)
 - NIFA AFRI CAPs (USDA)
 - DPA and IBR programs (DOE)

