

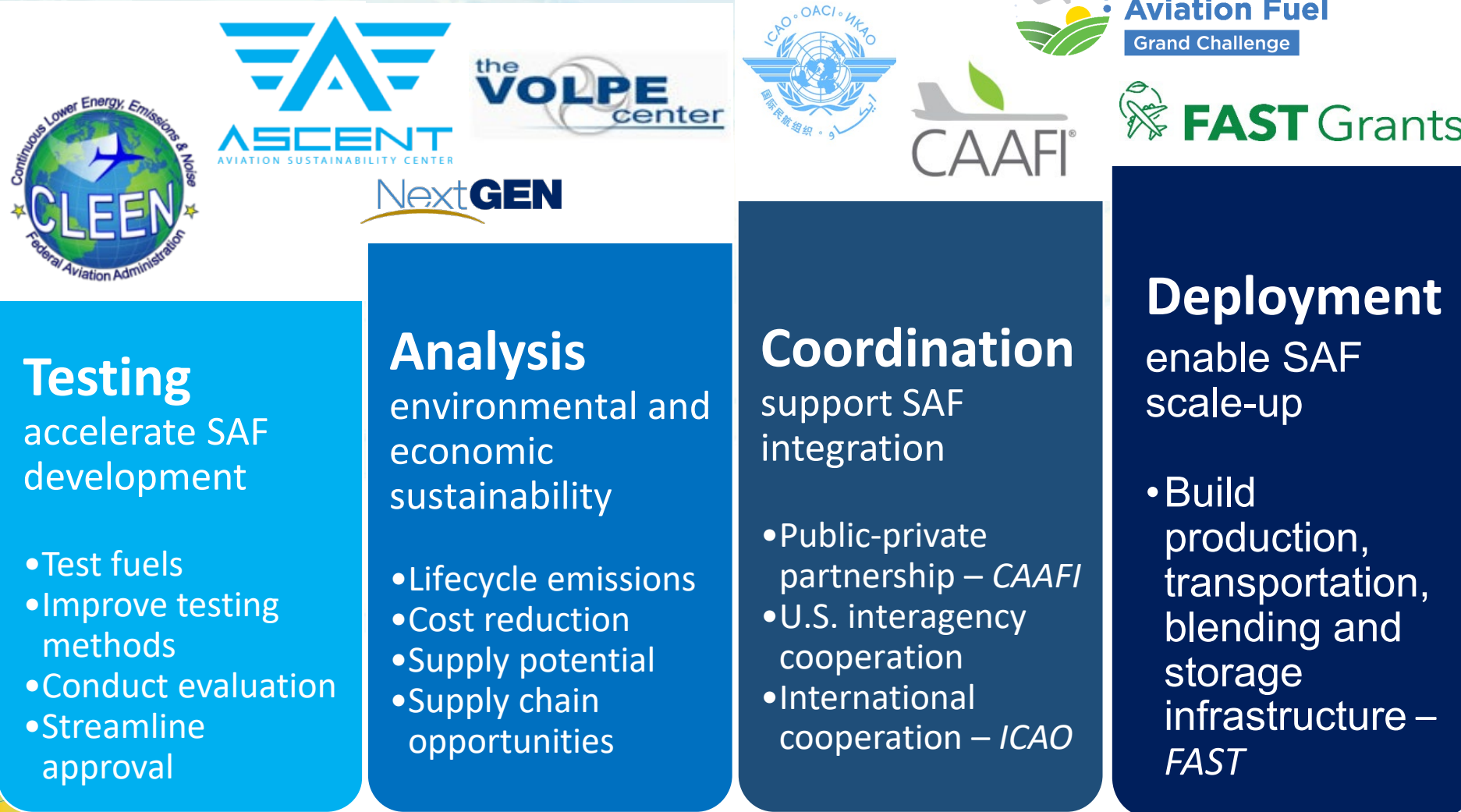


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SAF Programs supported by FAA

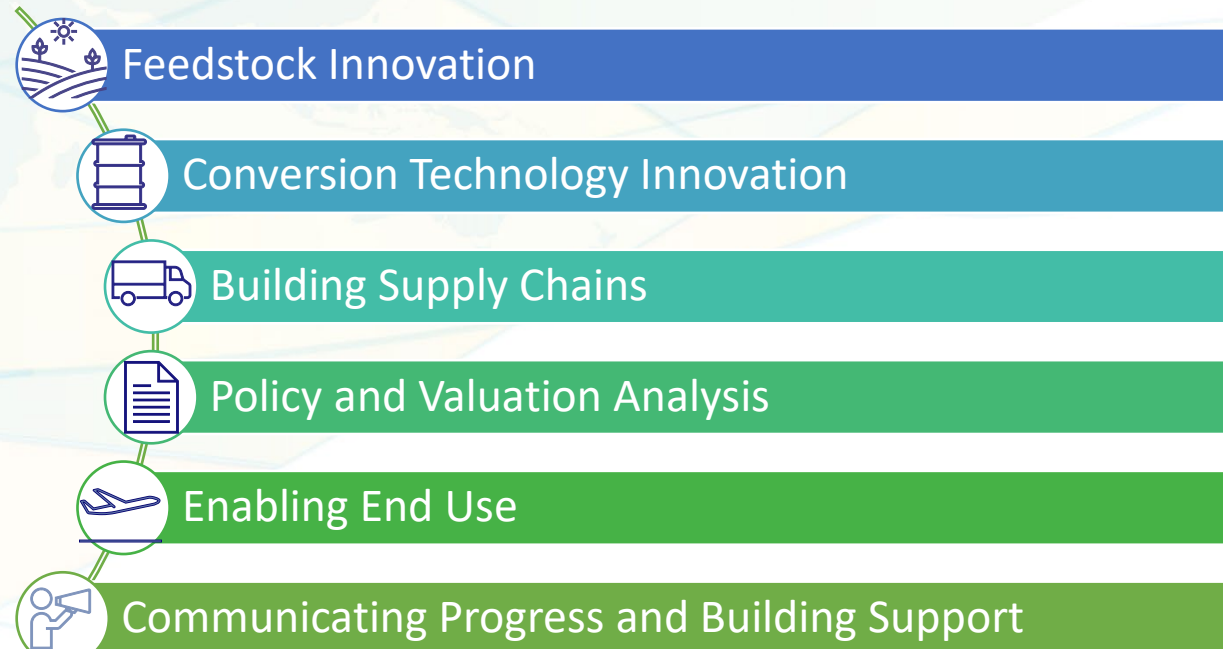
Presented by: **Prem Lobo**
Presented to: **ISCC Regional Stakeholder Meeting – North America**
Date: **November 13, 2024**

FAA SAF Program Focus

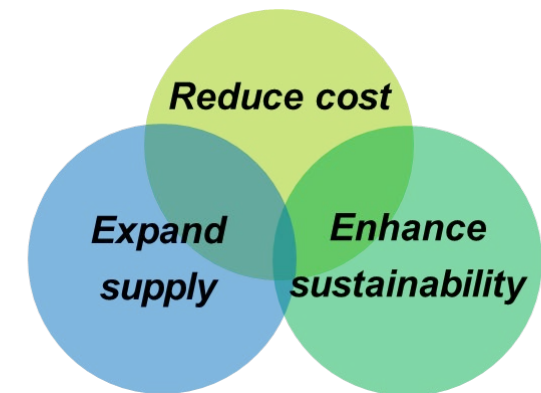


U.S. SAF Grand Challenge action areas support efforts to connect the entire SAF supply chain

- Focus federal actions to support industry scale-up of SAF
 - 3 Billion gallons per year by 2030
 - 35 Billion gallons per year by 2050
- } SAF that achieves at least 50% reduction in lifecycle GHG emissions



- 26 Workstreams , 139 Activities

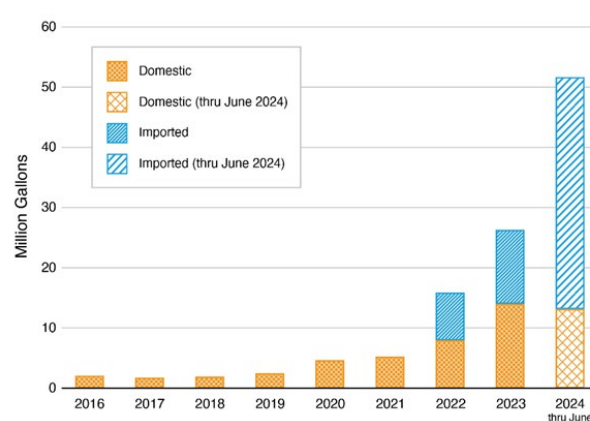


SAF Grand Challenge Metrics

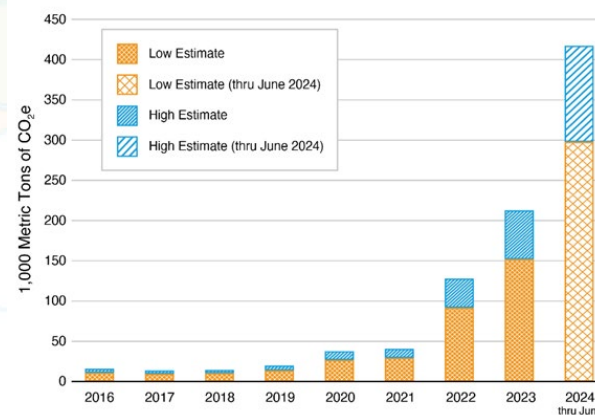
1. Estimated Total U.S. SAF Production
2. Estimated Life Cycle Carbon Dioxide (CO₂) Reductions Achieved with U.S. SAF Production
3. Planned Production Potential of SAF in the United States
4. Applicable Research, Development, and Deployment (RD&D) Projects



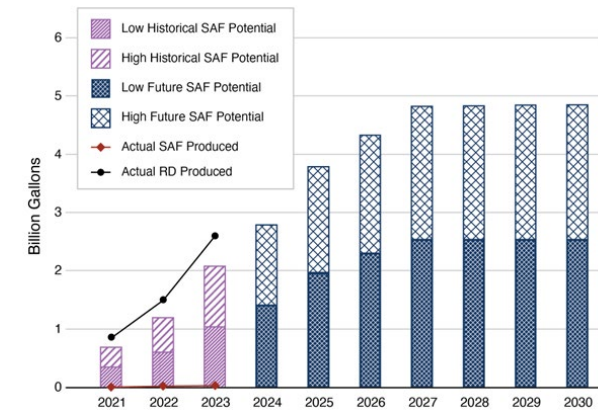
SAF Production



Annual U.S. GHG Reduction



U.S. SAF Production Potential



SAF Grand Challenge Implementation – Next Steps



Sustainable Aviation Fuel Grand Challenge

2021 – 2023 Progress Report



Prepared by the U.S. Department of Energy, U.S. Department of Transportation, and U.S. Department of Agriculture,
in collaboration with the U.S. Environmental Protection Agency.



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Inflation Reduction Act (IRA) – Production support through 2027

IRA Tax Credits

SAF Tax Credit

§13203 : 2023-2024

- Achieves 50% lifecycle GHG reduction
- \$1.25 per gallon up to \$1.75 for additional lifecycle emissions reduction (\$0.01 for every 1% in GHG reduction)

Clean Fuels Production Credit

§13704 : 2025-2027

- Lifecycle GHG <50kg CO₂e/MMBTU (Jet Baseline = 94kg CO₂e/MMBTU)
- Enhanced value for SAF up to \$1.75 for 100% reduction



FAST Grant Program

New grant program under section 40007 of IRA

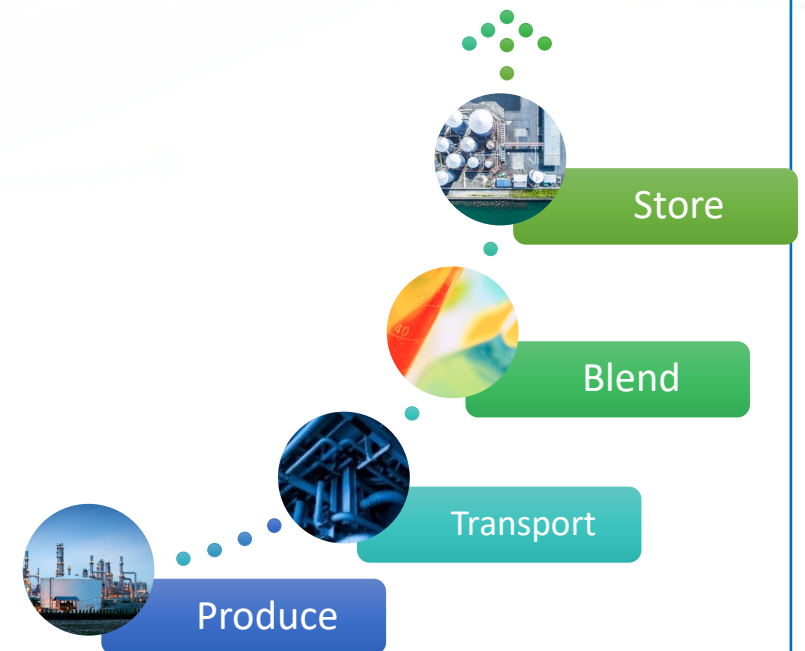
Fueling Aviation's Sustainable Transition

Key Objective: *make investments to accelerate the production and use of SAF, thereby supporting the goals of the SAF Grand Challenge, to meet U.S. aviation climate goals to reduce aviation carbon emissions*

\$297 million (total) competitive grant program

- ❑ \$245 million for SAF projects to enable production, transport, blending, or storage of SAF
- ❑ \$46 million to develop or apply low-emission aviation technologies

Grant awards announced August 16, 2024



<https://www.faa.gov/general/fueling-aviations-sustainable-transition-fast-grants>



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Types of FAST-SAF Projects

- Tier 1 grants: Smaller grant awards focused on regional supply chains that could identify infrastructure and distribution needs of key proponents (e.g., airports).
- Tier 2 grants: Larger grant awards for infrastructure projects to facilitate and scale fuel production, transportation, blending, and storage.
- Relationship of Tier 1 and Tier 2 Projects
 - Tier 1 project results could support follow-on infrastructure projects by applicants
 - Applicants can directly propose Tier 2 projects without first doing Tier 1 work in cases where there are existing, high quality supply chain studies and/or the infrastructure needs are clearly understood.



Types of FAST-Tech Projects

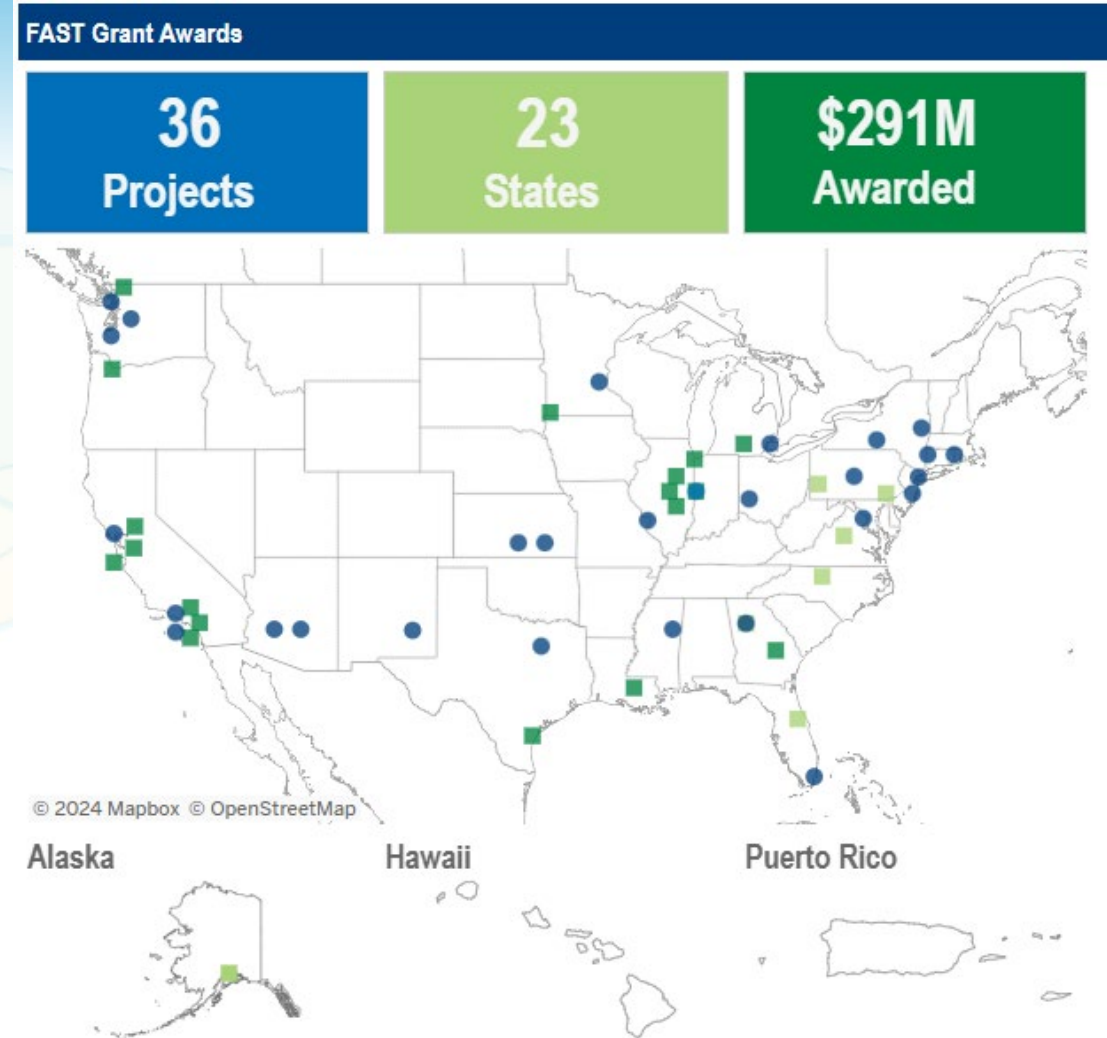
- Category 1: Designing, prototyping, and testing of discrete low-emission aviation technologies
 - Work under the project is intended to reduce technical risk and understand the emissions reductions benefits of these technologies.
 - Relatively near-term impact on emissions from future engine and aircraft designs.
 - Technologies might be limited vehicle types or specific company product lines.
- Category 2: Enhancing aircraft and engine technology testing and demonstration capabilities to accelerate development and demonstration of a broad range of low-emissions aviation technologies.
 - Work under the project is intended to develop testing facilities or assets in order to provide new test methods, capabilities to test technologies not previously possible, provide higher fidelity data and/or data not otherwise attainable with current facilities, methods or capabilities.
 - Longer-term impact on emissions from future engine and aircraft designs.
 - Support development of tech over broad range of vehicle types.
 - Impact of projects could endure for long time period and help entire industry.
 - Improve understanding of technologies to enable future benefits.



FAST Grant Awards

The FAA award selections:

- 7 SAF Tier 1 projects - supply chain studies to identify infrastructure needs
- 15 SAF Tier 2 projects - infrastructure for SAF production, transportation, blending, and storage
- 13 Low-Emission Technology Category 1 projects - developing low-emission aviation technologies
- 1 Low-Emission Technology Category 2 project - developing test capabilities to advance low-emission aviation technologies



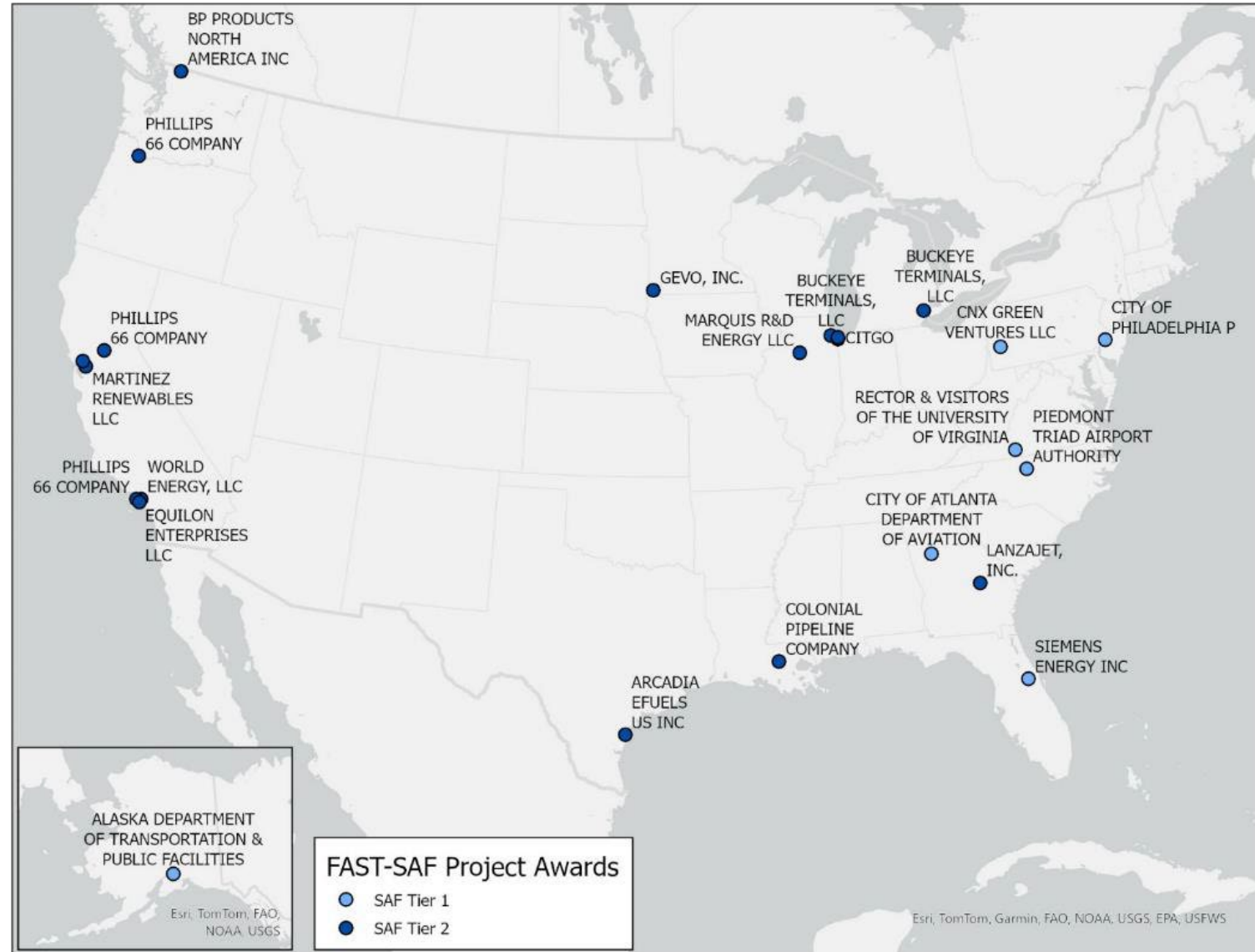
Full list of awards available at:

<https://www.faa.gov/general/fueling-aviations-sustainable-transition-fast-grants>



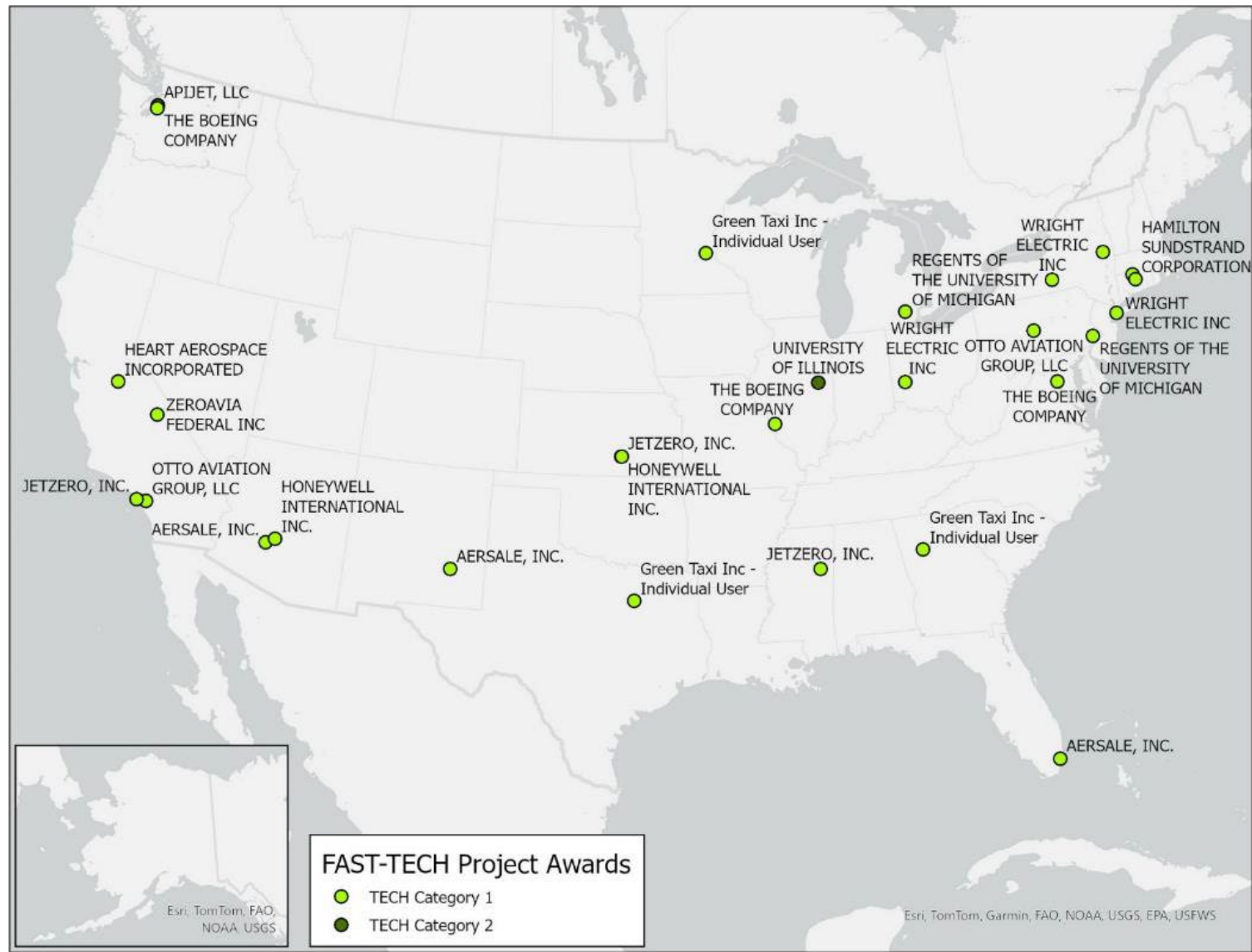
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FAST-SAF Awards



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FAST-Tech Awards



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2024 Airport Improvement Program (AIP) Grants

- The Airport Improvement Program (AIP) airport grant program funds airport infrastructure projects such as runways, taxiways, airport signage, airport lighting, and airport markings
- Two SAF related projects were awarded:
 - Houma, LA (HUM): \$1,300,000 for construction of 30,000 gallon SAF tank, containment area, and associated facilities to provide SAF to existing helicopter tenants
 - Naples, FL (APF): \$630,000 for construction of SAF tank



https://www.faa.gov/airports/aip/aip_supplemental_appropriation



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