



earthfinance

Accelerating the global
economic transition to
a sustainable future

Cascadia Sustainable Aviation Accelerator

Leveraging the region's unique capabilities in finance, corporate, tribal, academic, engineering, and feedstock to rapidly accelerate SAF production at cost parity

The Problem: Producers face major barriers to scaling SAF in the Pacific Coast region, ranging from fragmented infrastructure to uncertain offtake and financing.

The Solution: Leverage a united and broad coalition of stakeholders from across the entire SAF value chain--business, tribes, philanthropy, finance, policy and community in the PNW--to radically accelerate the production and adoption of sustainable aviation fuels.

Focus Areas: Cascadia is working to radically transform infrastructure, policy, energy, feedstock, next-gen technology, and market dynamics to build a competitive and thriving next generation renewable fuel economy.

Target outcomes include:

- Recruit production to Cascadia – achieving 1B gallons by 2035
- Drive down technology uncertainty and investment risk
- Deliver significant financial value across the value chain
- Secure Cascadia as a next generation sustainable aerospace hub
- Build essential operational infrastructure
- Improved air quality and environmental benefit

**Founding
Partners:**



WASHINGTON STATE
UNIVERSITY



<https://www.cascadiaaccelerator.org/>

Energy Transitions Require Systems Level Solutions

SYSTEMS LEVEL SOLUTIONS TO SYSTEMS LEVEL CHALLENGES

In partnership, the Cascadia Sustainable Aviation Accelerator and the Cascadia Sustainable Aviation Institute will drive systems-level solutions that accelerate the broader market transition to SAF. These two organizations will bring public and private establishments together to implement the necessary policy, finance, infrastructure, energy, feedstock, and R&D solutions to drive investor confidence in a healthy sustainable aviation fuel marketplace. By de-risking the broader marketplace, global investment in SAF production across the Pacific Northwest could deliver a 13X ROI in direct and indirect economic impact.

PARTNERSHIPS NEEDED

Multi-industry collaboration across the entire jet fuel value chain is essential to a successful transition to alternative clean fuels in aviation, one of the hardest to decarbonize industries. Partnerships include organizations from the entire ecosystem, working together in a coordinated manner to drive holistic and systemic-level solutions.

- ✓ SAF Producers
- ✓ Airlines
- ✓ Fuel Consortiums
- ✓ Airports
- ✓ Aerospace Manufacturers
- ✓ Airplane Lessors
- ✓ Business Community
- ✓ Community Organizations
- ✓ Credit Exchange Marketplace
- ✓ Labor Unions
- ✓ NGO's
- ✓ Research Institutions
- ✓ Municipalities
- ✓ Military
- ✓ Airport Partners
- ✓ Standard Setting Bodies
- ✓ Financial Institutions
- ✓ Private Aviation
- ✓ Energy Providers
- ✓ Tribal Nations
- ✓ Infrastructure
- ✓ Feedstock Providers

BROADER CASCADIA SUSTAINABLE AVIATION ACCELERATOR, A 501(C)(6):

Accelerator aims to enable capital investment across the Cascadia region in SAF production, infrastructure, new clean energy projects, and feedstock. This trade organization will drive industry and policy solutions that promote market adoption of SAF and bring physical fuel to strategically important airports across WA, MT, OR, ID, and British Columbia.

CASCADIA SUSTAINABLE AVIATION INSTITUTE, A 501(C)(3):

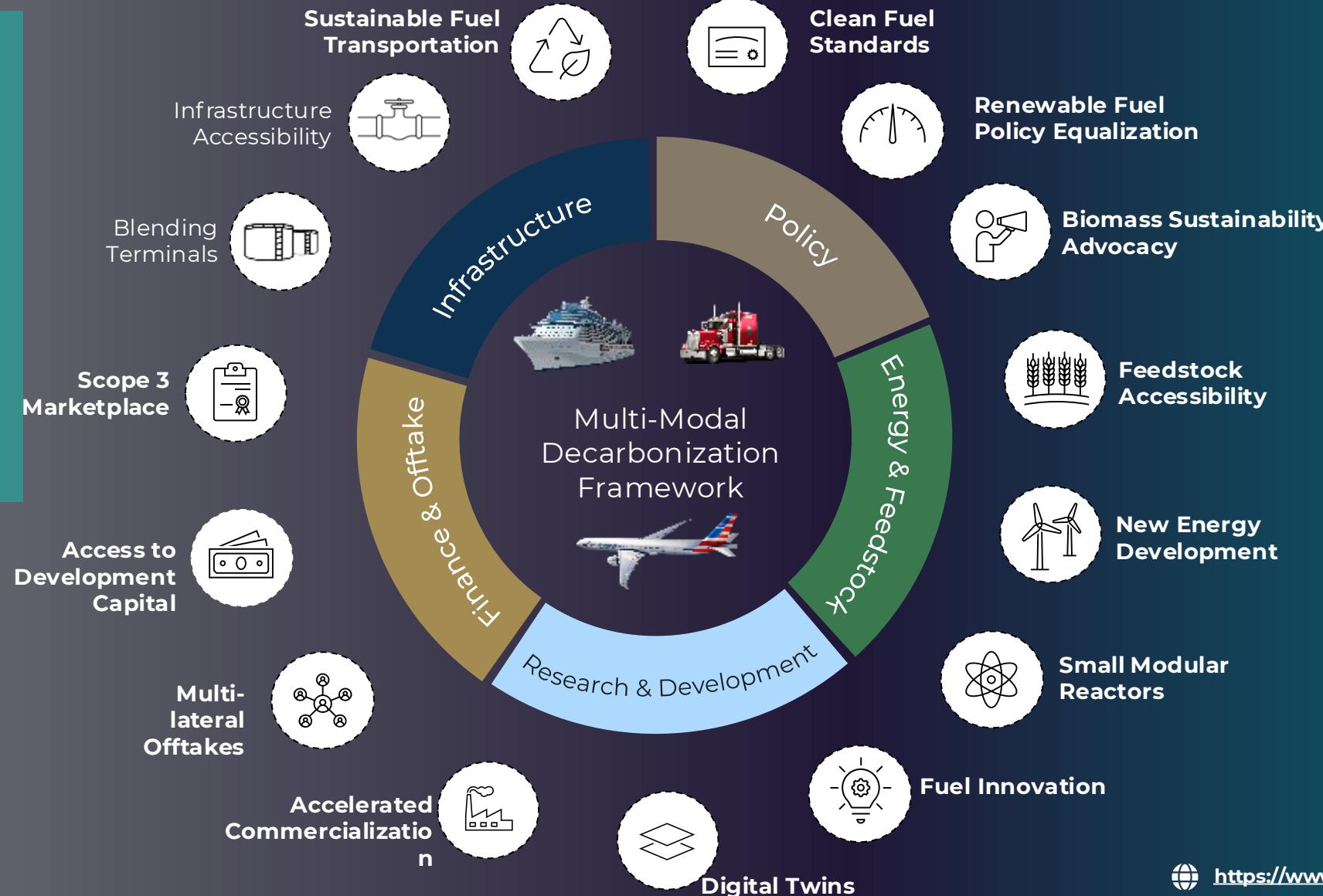
While the Accelerator is focused on de-risking the entire SAF value chain, the Institute is dedicated to rapidly accelerating the commercialization of new SAF technologies and helping producers scale refining processes to bring down cost. In addition, the Sustainable Aviation Institute is a key enabler of achieving 100% qualification.

Taking a Multi-Modal Decarbonization Framework



Cross sector Collaboration:

Taking a multi-modal approach helps scale investment and resources across all transportation sectors, allowing investment in fuels infrastructure, policy, feedstock, energy, and offtake to benefit all heavy-duty transportation sectors.



Economic Impact of SAF Production Across the PNW

The production of SAF across the Pacific Northwest presents a significant economic opportunity, driving job creation, infrastructure investment, and regional economic growth. As a growing industry, SAF production will generate high-quality jobs in feedstock cultivation, refining, transportation, and technology development. The construction and operation of SAF facilities will attract capital investment and create demand for local goods and services, benefiting industries such as agriculture, forestry, and advanced manufacturing. Additionally, by leveraging the region's renewable energy resources and existing biofuel expertise, the Pacific Northwest can position itself as a global leader in SAF innovation, securing long-term economic resilience, and international investment.

Beyond direct economic benefits, investing in SAF production will have substantial indirect impacts on the region. Strengthening the SAF supply chain will create new market opportunities for farmers and forest product industries, enabling sustainable land management practices while providing an economic boost to rural communities. Increased SAF adoption will also enhance energy security, reducing reliance on imported fossil fuels and keeping energy expenditures within the local economy. Furthermore, by fostering a robust SAF ecosystem, the region can attract federal/international funding, private investment, and public-private partnerships, accelerating the transition to a low-carbon aviation sector and reinforcing the Pacific Northwest's reputation as a

By the numbers

Potential outcomes of achieving one billion gallons of local SAF production:

13X

economic impact delivered by SAF refineries over 20 years

\$500B+

total economic impact from \$38B in investment

7.5M

mTCO2 abated by 1B gallons of SAF

\$12B

Estimated annual cost of jet fuel across the region in 2030

Cascadia Sustainable Aviation Accelerator

A Catalytic Investment Opportunity

Energy transitions demand systems-level solutions, major investment, and market disruption – just as the shift from coal to petroleum required decades of effort. Sustainable aviation fuel (SAF) is the only viable clean alternative for the aviation sector over the next 30+ years, but it faces many of the same challenges as past transitions.

The Cascadia Sustainable Aviation Accelerator (CSAA), a public-private partnership, is designed to accelerate SAF adoption in the Pacific Northwest. It will advance decarbonization goals while cultivating a thriving, globally competitive SAF economy.

Key points:

- SAF is critical to meeting aviation's decarbonization targets and Paris Accord commitments.
- Transitioning will require >\$1.5 trillion investment over the next 30 years.
- CSAA will help bridge gaps in technology, infrastructure, and market adoption.
- The initiative strengthens regional leadership while positioning the PNW as a hub for sustainable aviation innovation.

The Potential for Impact

The transition from fossil-based jet fuels to sustainable aviation fuels brings significant value and impact across multiple social, economic, and environmental dimensions. Investing in a regional SAF ecosystem dramatically helps alter the environmental and human health related impacts of aviation.



ENVIRONMENTAL

Better Fuels
80%+
reduction in CO₂ emissions over SAF's full lifecycle

Global Warming
1-3X
reduction in CO₂ emissions over SAF's full lifecycle

Abatement
8 million mTCO₂
can be abated by 2030 using 1B gallons of SAF



ECONOMIC

Regional Production
5,000-7,000
new SAF facilities needed by 2050

Scale & Magnitude
<1%
of global jet fuel use currently comes from SAF

Economic Impact
13x
economic impact delivered by SAF refineries over 20 years



SOCIAL & HUMAN HEALTH

Air Quality
20-70%
reduction in particulate matter, soot, and NOx with SAF

Asthma
4x
higher risk of asthma hospitalization in airport-adjacent communities

Human Health
Correlation
exists between airport proximity and reduced life expectancy

