

Minnesota Sustainable Aviation Fuel (SAF) Hub: 2024 Year in Review

Since launching in August 2023, the Minnesota SAF Hub has made significant strides in shaping the future of decarbonized air travel. The accomplishments below have laid the foundation for an operational SAF economy based in Minnesota that will create thousands of jobs, attract billions in capital investment and change the world in 2025 and beyond.

We achieved four milestones in 2024:

Launch of a demand consortium: A coalition of major companies—including Bank of America, Deloitte, Delta Air Lines, and Ecolab—has formed a demand consortium to purchase millions of gallons of SAF annually, starting in 2025. A unique design approach, the consortium has committed to the purchase of the first 15 million gallons of SAF. By ensuring steady demand, we can continue to scale production while lowering costs.

Blending facility construction planned: A new blending facility at Flint Hills Resources' Pine Bend refinery in Rosemount will be capable of producing 30 million gallons of SAF annually. This facility is a vital step toward building a robust SAF supply chain, delivering blended SAF to MSP International Airport.

First SAF-fueled flight from MSP Airport: On September 25, the first-ever SAF-powered flight from MSP International Airport took off using fuel derived from winter camelina, an environmentally sustainable oilseed crop grown in Minnesota. The Delta Air Lines flight flew to New York for Climate Week, bringing international attention to Minnesota's potential as a key player in the SAF industry and symbolizing what's possible in our work together.

First site selection in Minnesota for SAF production: DG Fuels announced plans for a SAF production facility in Moorhead. The facility represents a \$5 billion investment and 650 jobs for Minnesota's economy.

We also laid the groundwork for future projects and efforts:

Built a portfolio of potential projects: Over 2024, the MN SAF Hub engaged with over 20 producers across 7 different feedstock / technology pathway combinations. Minnesota's abundant agricultural feedstocks and strong existing infrastructure gives us many opportunities to pursue, and continue to develop in 2025.

Completed site feasibility assessment: One SAF value chain is alcohol-to-jet (ATJ) production. We commissioned a site feasibility study to identify the most promising sites for ATJ SAF production co-located with ethanol production. After assessing approximately 20 sites in Minnesota, three were prioritized for a deeper cost analysis. Hub members have access to full results upon request. We can also share the results with credible project developers.

Hosted a workshop with U.S. Department of Energy: Our workshop in May drew nearly 170 attendees and inspired similar workshops around regional SAF efforts in Seattle and Atlanta.

Added collaborators to the MN SAF Hub: Since August 2023, we have added five new collaborators, including agricultural groups, financial institutions, value chain players, and project managers. Our hub's efforts will benefit from broader expertise and reach as we enter a new phase of higher complexity.

Engaged in national and global conversations: The MN SAF Hub has appeared or been featured at Climate Week, Davos, and SAF Magazine. We have held meetings in Washington, D.C., Washington state, Appalachia, New York, Texas and California, and talked about SAF with people from the U.K., Australia, Netherlands, Sweden, Norway and Germany.

Looking ahead

The Minnesota SAF Hub will continue to grow in size and impact in 2025. Our first year was about standing up our effort and proving ourselves with early successes. In 2025, we will enter a much more complex phase of the work, where we will need pursue a broad portfolio of projects across multiple pathways and time horizons. In particular, we will focus on

- Securing additional **long-term commitment for SAF** via expanding our demand consortium
- Partnering with farmers and growers to expand our knowledge of, and share insights into, Minnesota's **agricultural and biomass feedstocks**, including mapping out how to measure carbon reductions of those feedstocks, reward reductions with financial incentives, and scale low-carbon feedstocks and practices
- **Solving challenges at a project level**, in partnership with state and local leaders
- **Sharing with the world** why Minnesota is an attractive place to produce SAF
- Identifying **opportunities to innovate** and demonstrate novel approaches and technology

Up for the challenge? We hope you will climb aboard.