Truckee Tahoe Airport

SimpliFlying Immersion
February 10, 2025

Call to Action

Problem

Aviation emissions today account for 3% of global emissions, primarily from jet fuel burn

In unmitigated, aviation emissions could account for up to 22% of global emissions by 2050.

IATA projects that SAF will account for 65% of aviation decarbonization

Scaling SAF will require sending demand signals, increasing production, and achieving price parity with fossil jet fuel

Solution

SAF is a molecularly similar fuel to jet-A, produced from renewable feedstocks

SAF burns cleaner, improves air quality, and can utilize existing infrastructure and engines

SAF is where the industry is going, it's only a matter of time.

Building a Coalition & Strategic Vision

The elected board and airport are a values driven organization, showcased in the airport's strategic plan which includes a sustainability pillar and the transition to SAF

Truckee Tahoe is a destination airport that serves private and business aviation. The region benefits from the nearby concentration of wealth in the Bay Area and Silicon Valley

Truckee is historically an environmentally conscious region and recognizes the importance of reducing GHG emissions to preserve the natural environment.

CTA

The airport became a global leader in the SAF transition as the first to achieve the milestone of offering only a SAF blend to all users in 2023

Implementation Roadmap

JUST START. Small amounts of SAF are better than waiting until you can achieve 100%.

Understand as an organization the environmental impact of aviation emissions and commit to prioritizing decarbonization

Develop a strategic plan prioritizing SAF transition - Initial SAF purchases in 2021 were 1/10 deliveries at a 30/70 blend

After working with supplier, deliveries increased to 1/4 at a 30/70 blend

Increasing deliveries increased price, putting pressure on pricing structure and customers. Build a strong coalition of willing buyers within private aviation

Decision to use a tiered pricing model and decrease margin by $1, supplemented by property tax income, tiered pricing strategy, and landing fees

SAF deliveries increased to 10/10 consistently, Truckee became the first airport to achieve this milestone

After formal contract for 100% SAF, Truckee began marketing the accomplishment

Looking forward, Truckee is focused on increasing SAF blend as possible and ensuring environmental attributes for all SAF purchased

Comparative Advantage

KTRK used a fuel supplier with access to SAF through a reliable, global SAF producer

When the transition to SAF began, Truckee was using AvFuels, a supplier receiving fuel from Neste. This supported KTRKS's transition as they were able to work with AvFuels to increase supply and send demand signals

KTRK has geographic proximity and a favorable truck route from regional SAF blending and distribution.

Producer Neste was blending at Sunoco Terminal in Shelby, CA to receive as many incentives as possible. This proximity to the Bay Area made delivery to Truckee a possible earlier than many other GA airports

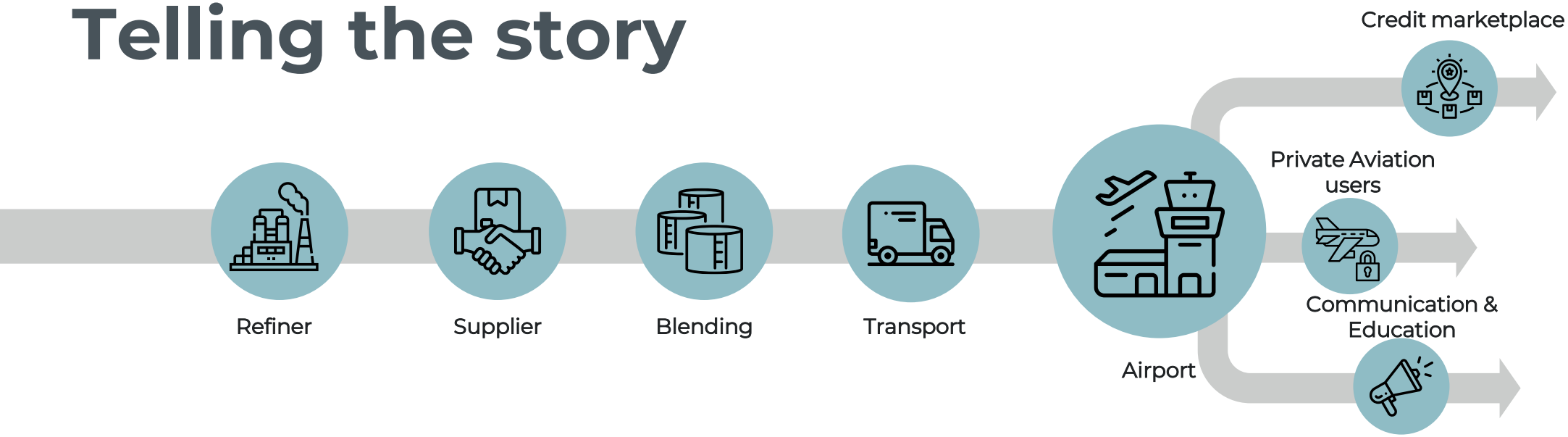
KTRK benefits from state policy that incentivizes producers to sell into California.

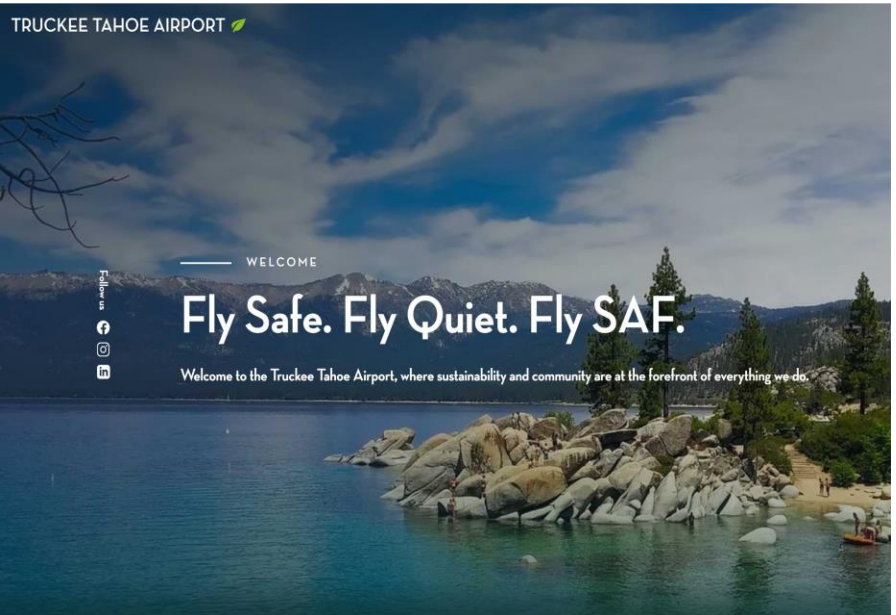
KTRK is in California, benefiting from the long-standing state low carbon fuel standard

A single business entity that owns and operates the airport simplifies a SAF transition.

Truckee owning their FBO minimized the internal stakeholders and companies that required negotiation and education. While this made the transition more seamless, FBOs globally are committed to SAF

Telling the story





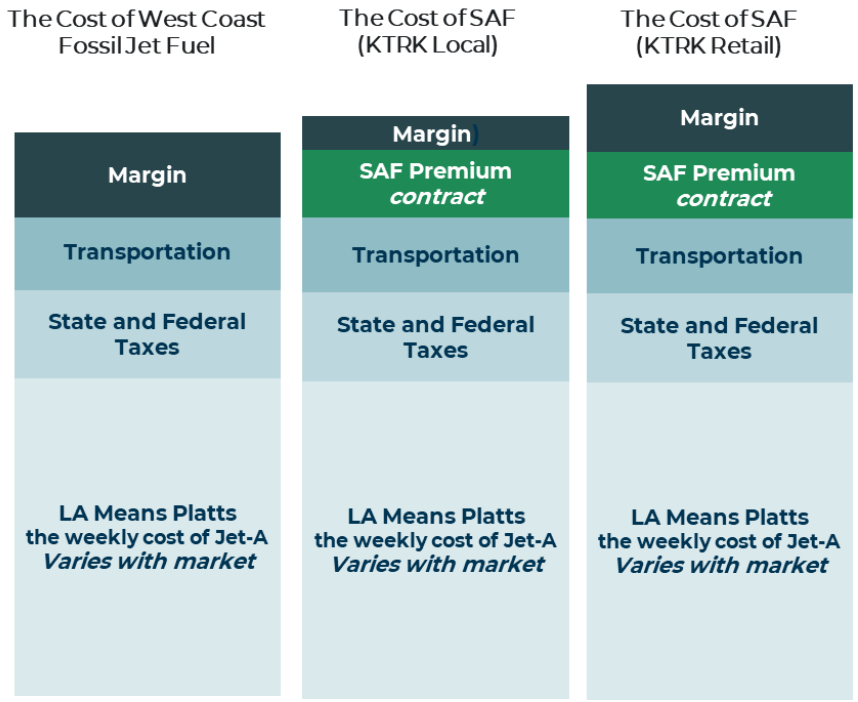
*Compared to conventional jet fuel. **At this stage, the blended SAF is commingled with conventional jet fuel.

Implementing Change

Context:

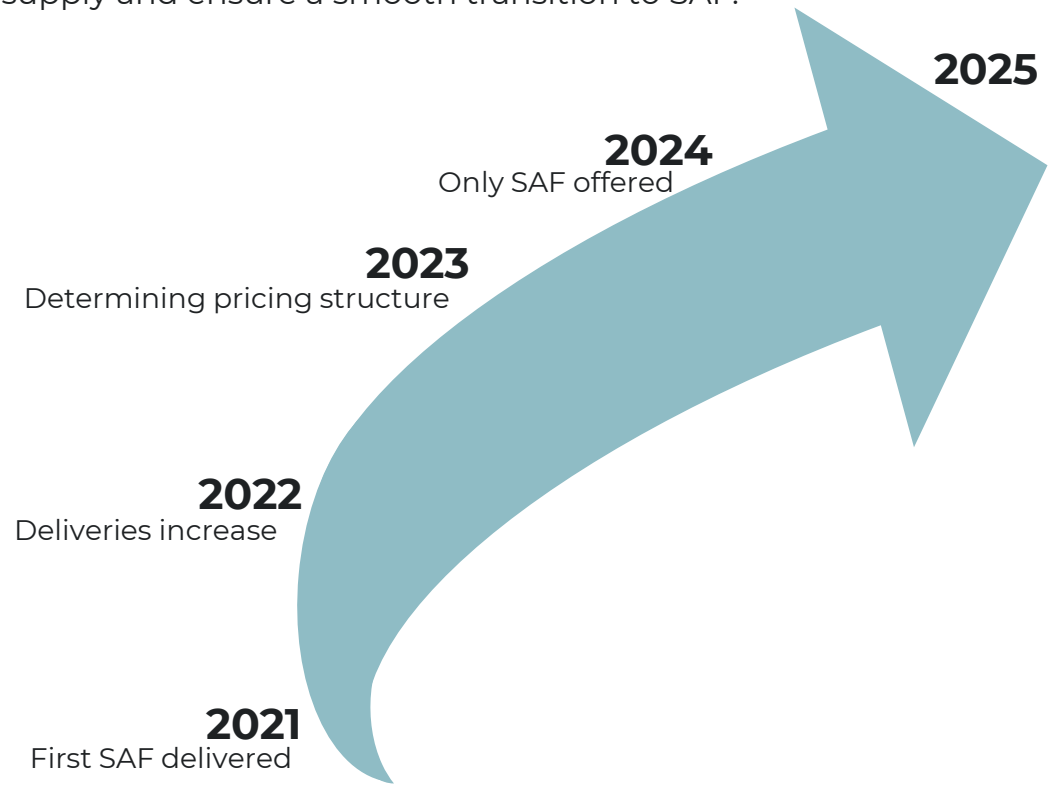
KTRK receives revenue from property taxes, airport operations, and public funding. Private aviation, the primary users of the airport, are often less price-sensitive high-net-worth individuals and corporations. Unlike commercial aviation, which faces higher taxes and competitive pressures, private flyers only pay a small fuel surcharge tax, contributing to the conventional pricing structure.

Pricing:

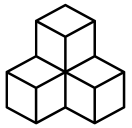


Supply chain:

KTRK and AvFuel implemented a system to ensure only SAF-blended fuel is delivered to the airport. This backend constraint helps manage the complex supply chain involving multiple stakeholders typically accustomed to conventional Jet-A. The SAF journey to Truckee involves production, blending, certification, and trucking, as the airport lacks rail or pipeline connections. Deliveries require careful planning and strong relationships with suppliers and ground teams to maintain adequate supply and ensure a smooth transition to SAF.



Reinforce, scale, replicate



Reinforcing and scaling at Truckee

Environmental attributes

As SAF begins to scale, users want to claim the environmental attributes and emission reductions from the fuel. For Truckee, management of the environmental attributes of the fuel they purchase and offtake is a work in progress with the industry and fuel supplier.

Procurement volume

Neste was the first producer to increase blending volumes beyond 30%. Continuing this process to further reduce Jet-A and increase SAF availability will support Truckee and the industry

Replicating the SAF strategy

- Make SAF a business decision
- Investigate with an RFP for fuel supply
- Advocate for your airport
- Communicate with supplier and users
- Price creatively
- Offer verification and reporting of impact

Truckee Tahoe Airport: SAF Transition Case Study

Journey to Offering ONLY a SAF Blend

Call to Action → **Building a Coalition & Strategic Vision** → **Understanding Comparative Advantage** → **Implementing Change** → **Learning & Adjusting** → **Sustaining & Reinforcing Change**

Learning ---------- **Listening** ---------- **Sharing**

Call to Action

- Aviation emissions account for 3% of global emissions, on track to reach 22% if unmitigated.
- If the industry is to achieve aggressive decarbonization goals, SAF will account for nearly 2/3 of decarbonization efforts.
- SAF is where the industry is going, it's only a matter of time.

Building a Coalition & Strategic Vision

- The SF Bay Area is highly concentrated region of economic wealth.
- Truckee/Tahoe region is known to be very environmentally aware.
- Airport leadership developed a strategic plan, identifying the importance of scaling SAF primarily for business and private aviation users from the Bay Area.

Understanding Comparative Advantage

Truckee airport benefits from:

- property tax revenue as a special district airport
- ownership of their FBO
- access to favorable state policy
- a fuel supplier with access to a global SAF producer
- geographic proximity to a SAF blending terminal.

Implementing Change

- Truckee made the decision to cut margin by $1/gallon, supplemented with a tiered pricing model, landing fees, and property tax revenue
- The airport invested in supply chain relationships and ordering system that ensured SAF deliveries were consistent and reliable.

Learning & Adjusting

- Achieving critical milestones by increasing supply over time was critical to show success of the transition.
- Negotiate contracts with suppliers to ensure reliable supply
- Including SAF in the supply was not inherently difficult, as it does not require any changes operationally at the airport.

Sustaining & Reinforcing Change

As SAF begins to scale, users want to claim the environmental attributes and emission reductions from the fuel. For Truckee, management of the environmental attributes of the fuel they purchase and offtake is a work in progress with the industry and fuel supplier.

Effective communication throughout the journey is critical: learning how to approach the transition, listening and engaging stakeholders to understand the change experience, and sharing learnings and impacts. Communicating with private aviation users was critical, particularly at the start of Truckee's transition, but also during price experimentation. Today, now that SAF is more mainstream, one on one education is less necessary, as the benefit of the product is more widely known, and messaging can shift to the benefits and helping others purse a SAF transition.

SAF is the only near-term solution

SAF can have impact today and will have an outsized role in decarbonization as the industry shifts.

Value of a strategic plan

Once SAF is included in the airports strategic plan, prioritizing the transition is met with less resistance.

Find your advantage

As state policies expand, investment continues and supply increases. GA airports will remain critical in scaling SAF.

Price creatively

Implementing landing fees, tiering pricing models, and other creative changes can bring SAF to a competitive price today.

Drop-in benefits

As a drop-in replacement, it utilizes existing aircraft and airport infrastructure. Understanding logistical ease of the transition is important.

Certified and reliable

Emission reductions must be quantified and reported with integrity. Trusted systems enable scale and can provide additional revenue.

Q&A