



Truckee Tahoe Airport

Sustainability Report

2024



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Executive Summary

Truckee Tahoe Airport continues to demonstrate leadership in sustainability, advancing beyond its initial commitments to further decarbonize operations. In 2024, the airport adopted a more ambitious target of carbon neutrality by 2045, exceeding the aviation industry's standard goal of net zero by 2050, reflecting their dedication to environmental leadership and urgency of climate action.

In 2024, the airport continued tracking Scope 1, 2, and 3 emissions across 22 sites within its grounds. Scope 1 sources included natural gas for heating at five buildings and diesel and gasoline for airport equipment and machinery. Scope 2 emissions came from purchased electricity, while Scope 3 covered Employee Commuting (Category 7) and Use of Sold Product, Fuel (Category 11).

Total emissions across all scopes reached **4,843.12 metric tons of CO₂e** in 2024, a **4.6% increase** from 2023. This included:

- **Scope 1: 313.5 MTCO₂e** (6.7% decrease from 2023), driven by a 7.7% reduction in diesel use, a 55% reduction in gasoline use, and a 13.3% rise in natural gas consumption.
- **Scope 2: 137.3 MTCO₂e** (3.3% increase from 2023)
- **Scope 3: 4,392.3 MTCO₂e** (5.6% increase from 2023) due to Category 11 (Use of Sold Product, Fuel), which accounts for 90% of the airport's carbon footprint.

2024 marked the first full year post-100% SAF implementation. The airport's carbon intensity per gallon sold declined from 17.9 lbs CO₂e/gallon in 2023 to 16.4 lbs CO₂e/gallon in 2024. Despite a 15% increase in fuel sales volume, emissions from sold fuel rose only 5.6%, demonstrating SAF's role in reducing emissions per gallon sold and providing a pathway for the airport to manage Scope 3 emissions while supporting business growth.

The airport continued to make substantial progress in its sustainability initiatives throughout 2024. Most notably, Truckee Tahoe Airport successfully implemented two JetEx 7400 electric Ground Power Units (eGPUs) in Spring 2024, significantly reducing emissions from aircraft ground operations as they replaced gasoline-powered units. The airport continued its fleet electrification initiative kicked off last year, purchasing two 2023 Ford F-150 Lightning electric trucks in Q1. Additionally, the airport implemented a comprehensive hangar revitalization program focused on energy efficiency and environmental protection, including complete roof repairs on 20 hangars, partial repairs on 12 hangars, energy-efficient lighting installation in 9 hangars, and floor sealing in 12 hangars to prevent fuel spillage and groundwater contamination.

Truckee Tahoe Airport expanded its environmental stewardship beyond emissions reduction with a significant \$2 million investment in wildfire mitigation projects. These initiatives help maintain forest health at manageable levels, reducing both fire risk and severity while protecting the environment and neighboring communities. This program represents a holistic approach to sustainability that acknowledges the interconnection between climate change, forest management, and community resilience.

The airport strengthened its commitment to regional climate action as a Governing Partner of the Climate Transformation Alliance (CTA), a regional coalition committed to achieving net-zero greenhouse gas emissions in the Tahoe-Truckee region by 2045. Through this leadership role, Truckee Tahoe Airport helps support regional climate planning efforts, implement sustainability initiatives, and advocate for policies that promote long-term environmental stewardship.

Looking ahead to 2025, Truckee Tahoe Airport plans to build on these successes through several strategic efforts, including SAF knowledge sharing through an immersion event designed to educate and inspire others in the aviation industry about their successful SAF transition. They also are planning to develop a comprehensive emissions strategy across scopes 1, 2 & 3 in order to achieve their goal of carbon neutrality by 2045.

Introduction

The aviation industry remains a notable contributor to global greenhouse gas (GHG) emissions, driving the need for proactive sustainability initiatives. Truckee Tahoe Airport continues to be an industry leader in reducing its environmental impact through strategic emissions tracking, operational improvements, and land management efforts.

The airport actively monitors Scope 1, 2, and 3 emissions, using this data to inform its decarbonization strategy. In 2024, key initiatives included the implementation of electric Ground Power Units (eGPUs), fleet electrification, a hangar revitalization program, and an expanded wildfire mitigation strategy. These efforts aim to reduce reliance on fossil fuels, improve energy efficiency, and enhance environmental resilience.

Beyond emissions reductions, Truckee Tahoe Airport is committed to preserving biodiversity and responsibly managing over 2,000 acres of surrounding land. Through wildfire prevention efforts, habitat conservation, and infrastructure upgrades, the airport is integrating sustainability into both its operations and community impact.

While not currently subject to stringent environmental regulations, the airport remains engaged with emerging policies, programs, and industry best practices to ensure continued leadership in sustainability. By proactively addressing operational emissions and investing in cleaner technologies, Truckee Tahoe Airport is reinforcing its long-term commitment to responsible aviation.

This 2024 Sustainability Report provides an overview of the airport's environmental progress, covering carbon emissions, energy consumption, conservation efforts, regulatory considerations, and future sustainability goals. Through innovation, strategic planning, and stakeholder collaboration, Truckee Tahoe Airport continues to build a more sustainable future.



Organizational Profile

The Truckee Tahoe Airport, situated amidst the Sierra Nevada Mountains in California, stands as a pivotal air transportation facility within the region. Owned by Truckee Tahoe Airport District, the medium-sized airport operates with a structure aimed at efficiently managing general aviation, commercial, and corporate air travel. Handling 30,536 operations in 2024 (28,096 powered aircraft, 2,440 gliders), this airport serves as a vital link connecting the Truckee Tahoe community to various national and regional destinations such as the Bay Area, Western States (NV to CO), and Southern CA. Classified by the National Plan of Integrated Airport Systems (NPIAS) as a General Aviation Airport, Truckee Tahoe Airport operates within the broader aviation industry, contributing significantly to regional accessibility and serving as a crucial economic asset to the local area. Its reach extends to supporting tourists, businesses, and residents by providing essential services and facilities, facilitating travel and transportation needs. The airport's dedication to safety, efficiency, and service excellence further solidifies its role as an indispensable transportation hub within the region.

Environmental Performance

Organizational Boundary & Sources of Emissions

The Airport's GHG Emissions Inventory follows the control approach outlined in the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. Under this approach, TTA accounts for 100% of emissions from operations it controls.

Scopes define the level of control an entity has over emissions. Sources refer to specific activities generating emissions.

- **Scope 1:** Direct emissions from TTA-owned and controlled sources, such as fuel for airport vehicles and natural gas for facility operations.
- **Scope 2:** Indirect emissions from purchased electricity used for heating, cooling, and powering facilities.
- **Scope 3:** Indirect emissions from activities by others at the airport, including aircraft operations, tenant fuel use, and employee commuting.

This inventory primarily covers Scope 1 and Scope 2 emissions, with select Scope 3 categories included based on data availability.

Greenhouse gases included in this inventory include Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O). These are the primary GHGs regulated under the Kyoto Protocol. Other Kyoto Protocol gases—sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs)—were excluded due to their limited relevance to aviation operations and data availability.

Emissions Overview

In 2024, the Airport continued tracking Scope 1–3 emissions as part of its sustainability efforts and Strategic Plan initiatives, using NZero, an energy intelligence software that monitors GHG emissions year-round.

For the Airport, emission sources include:

- **Scope 1:** Direct emissions from natural gas, diesel, and gasoline used onsite for daily operations.
- **Scope 2:** Indirect emissions from purchased electricity used onsite.
- **Scope 3:** Indirect emissions, including Category 11, Use of Sold Product (Fuel) & Category 7 Employee Commuting. Employee commuting emissions were carried over from the 2023 inventory in accordance with GHGP guidelines, which recommend updates every 3–5 years unless significant changes occur. Since commuting patterns have remained stable, the previous data remains a reasonable estimate, ensuring consistency with best practices in emissions reporting.

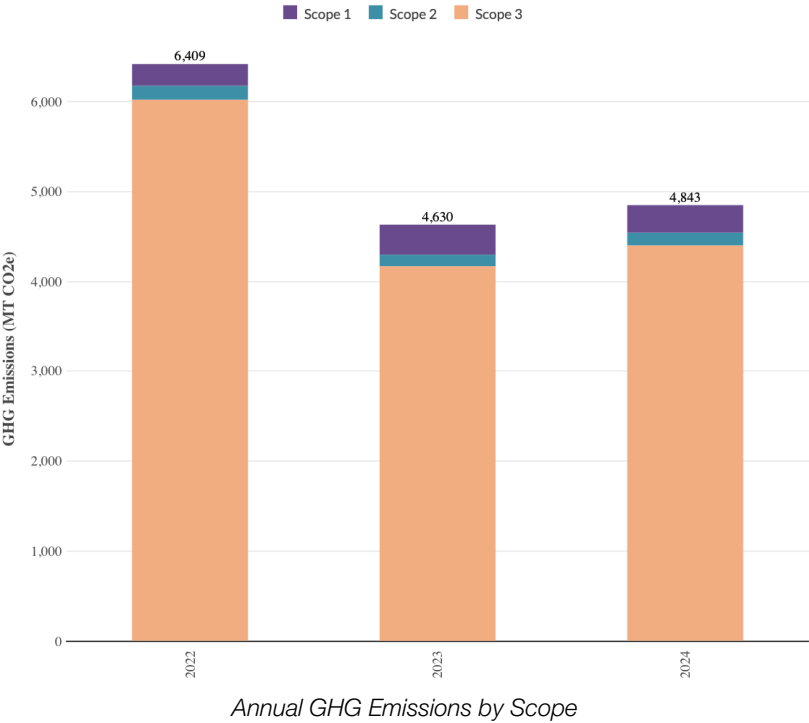
In 2024, Truckee Tahoe Airport's total emissions across all three scopes were 4,842.6 MT CO₂e, a 4.6% increase from the 2023 inventory. Emissions from Scope 1 and Scope 2, which are directly under TTA's

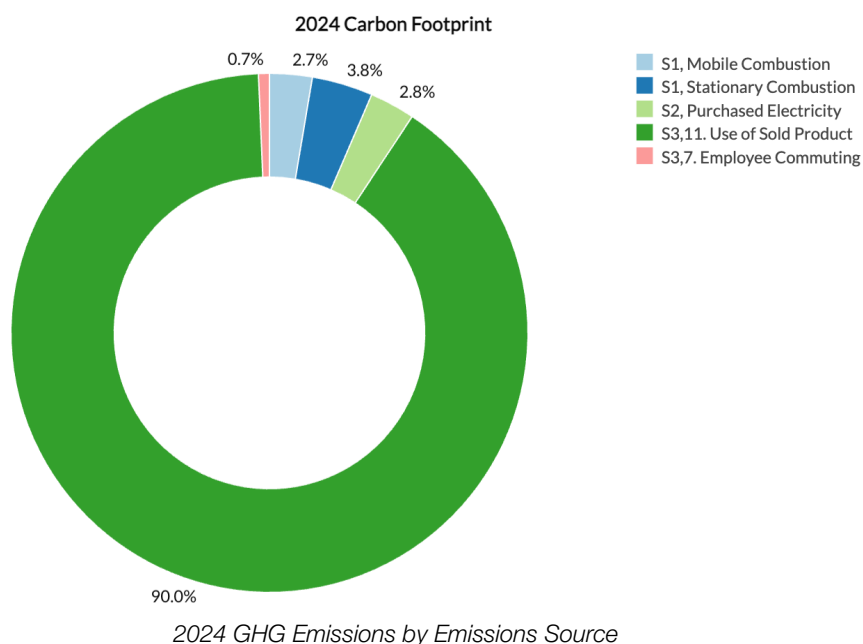
control, decreased by 3.8%. Scope 1 emissions decreased by 6.7%, while Scope 2 emissions rose by 3.3%. The overall 4.6% increase (S1-S3) was driven by a 5.6% rise in Scope 3 emissions, specifically Category 11 (Sold Fuel), as Scope 3 accounts for 90% of the airport's carbon footprint.

Table 1: Annual GHG Total Emissions by Scope (MTCO2e)

Scope	2022	2023	2024	% Change (2023 → 2024)
Scope 1	248.5	335.9	313.5	-6.7%
Scope 2	148.5	132.9	137.3	+3.3%
Scope 3	6012.1	4161.3	4392.3	+5.6%
Total	6,409.03	4,630.09	4,843.12	+4.6%

Chart 1: Annual GHG Total Emissions by Scope (MTCO2e)





In 2024, GHG emissions followed a similar breakdown to previous years, with Scope 3, Category 11 (Use of Sold Product) being the largest contributor (90%).

Scope 1

Scope 1 emissions include direct emissions from stationary and mobile combustion sources, such as gasoline and diesel used to power airport equipment, as well as natural gas for heating buildings.

From 2023 to 2024, **Scope 1 emissions decreased by 6.7%**, driven by:

- A **7.7% reduction** in diesel usage, leading to a **7.8% decrease** in emissions.
- A **55% reduction** in motor gasoline usage, resulting in a **55% decrease** in emissions.
- However, **natural gas usage increased by 13.3%**, resulting in higher emissions. This rise may be due to increased heating demands from weather variations, operational changes, and the Maintenance Building being fully operational throughout 2024.

Table 2: Annual Scope 1 GHG Total Emissions (MTCO₂e)

Emission Source	Unit	2022	2023	2024	% Change (2023 → 2024)
Natural Gas	MMBTU	2,024.9	3,067.0	3,475.6	+13.3%
	Emissions (MT CO ₂ e)	107.6	162.9	184.6	+13.3%
Diesel Equipment Airport	Gallons	9,369	10,210	9,424.48	-7.7%
	Emissions (MT CO ₂ e)	99.0	108.0	99.6	-7.8%

Gasoline Equipment	Airport	Gallons	4,607.9	7,155.0	3,222.0	-55.0%
		Emissions (MT CO ₂ e)	41.9	65.1	29.3	-55.0%
Scope 1 Emissions			248.5	336.0	313.5	-6.7%

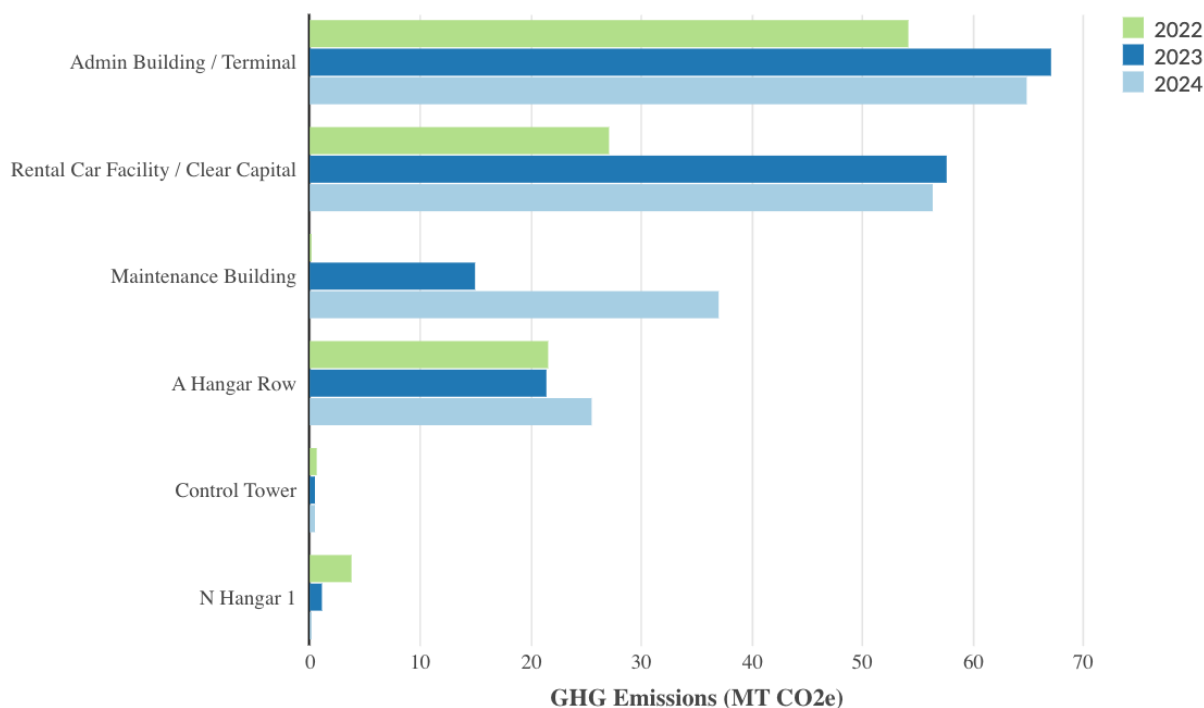
Natural Gas

In 2024, natural gas accounted for **3.8% (184 MT CO₂e)** of total emissions across Scopes 1–3. Within Scope 1 (stationary and mobile combustion), it contributed 59% of Scope 1 emissions.

Natural gas was used in five buildings in 2024, down from six in 2023 after N Hangar 1 became non-operational. The Admin Building/Terminal and the Rental Car Facility/Lift Coworking Space accounted for over 65% of total natural gas emissions.

In 2024, natural gas emissions, & corresponding natural gas consumption increased by 13.3%, partly due to the Maintenance Building, which began using natural gas in May 2023. As a result, 2024 reflects a full year of consumption, leading to a higher YOY increase.

Scope 1, Natural Gas (Scope 1) GHG (MT) by Site

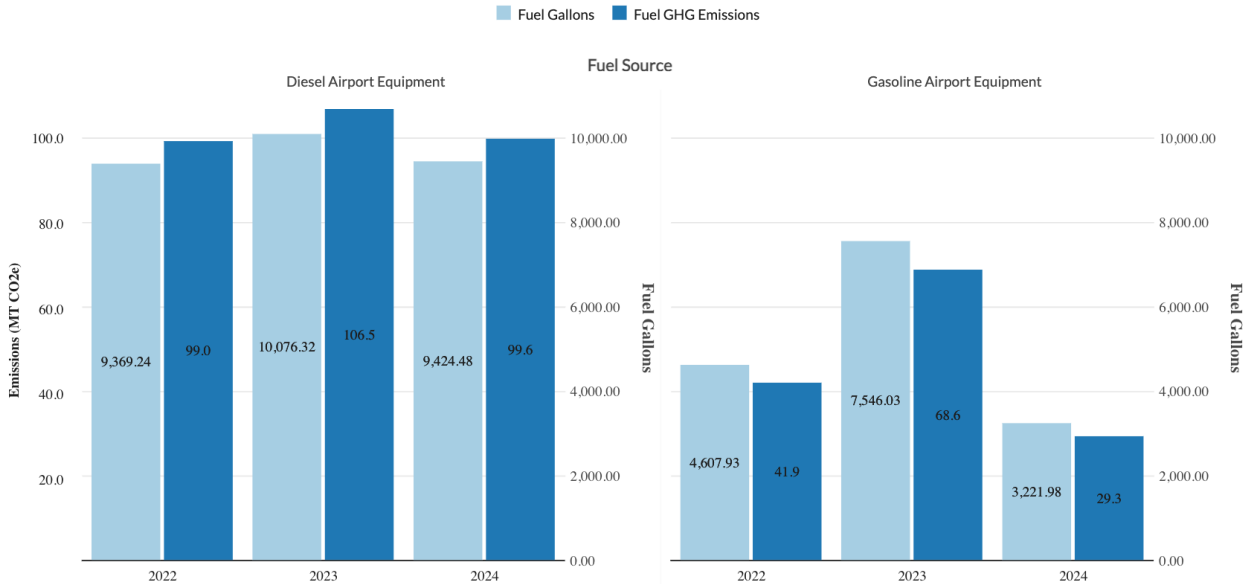


Airport Equipment (Diesel & Motor Gasoline)

In 2024, fuel used for airport equipment accounted for **2.7% (128 MT CO₂e)** of total emissions across Scopes 1–3. Within Scope 1 (stationary and mobile combustion), it represented 41% of emissions. Diesel and motor gasoline were primarily used for ground support equipment, maintenance vehicles, and other airport operations.

From 2023 to 2024, overall fuel consumption decreased by 27.2%, with diesel usage down 7.7% and motor gasoline usage down 55%. These reductions led to a 7.8% decrease in diesel-related emissions and a 55% decrease in emissions from motor gasoline.

Fleet: Monthly Fuel Emissions (MT CO₂e)



The key drivers of these reductions in fuel consumption were the deployment of two electric ground power units (eGPUs) in Spring 2024 and the ongoing fleet transition throughout the year.

eGPUs replaced traditional diesel-powered GPUs, providing clean, efficient electricity to parked aircraft and eliminating the need for fuel-intensive auxiliary power units (APUs) and diesel GPUs. This transition reduced fuel consumption and emissions for diesel fuel. Additionally, the airport continued its fleet transition in 2024, replacing two motor gasoline-powered vehicles with electric models. This shift further lowered fuel consumption and emissions for motor gasoline, supporting the airport's broader sustainability efforts.

Scope 2

Purchased Electricity

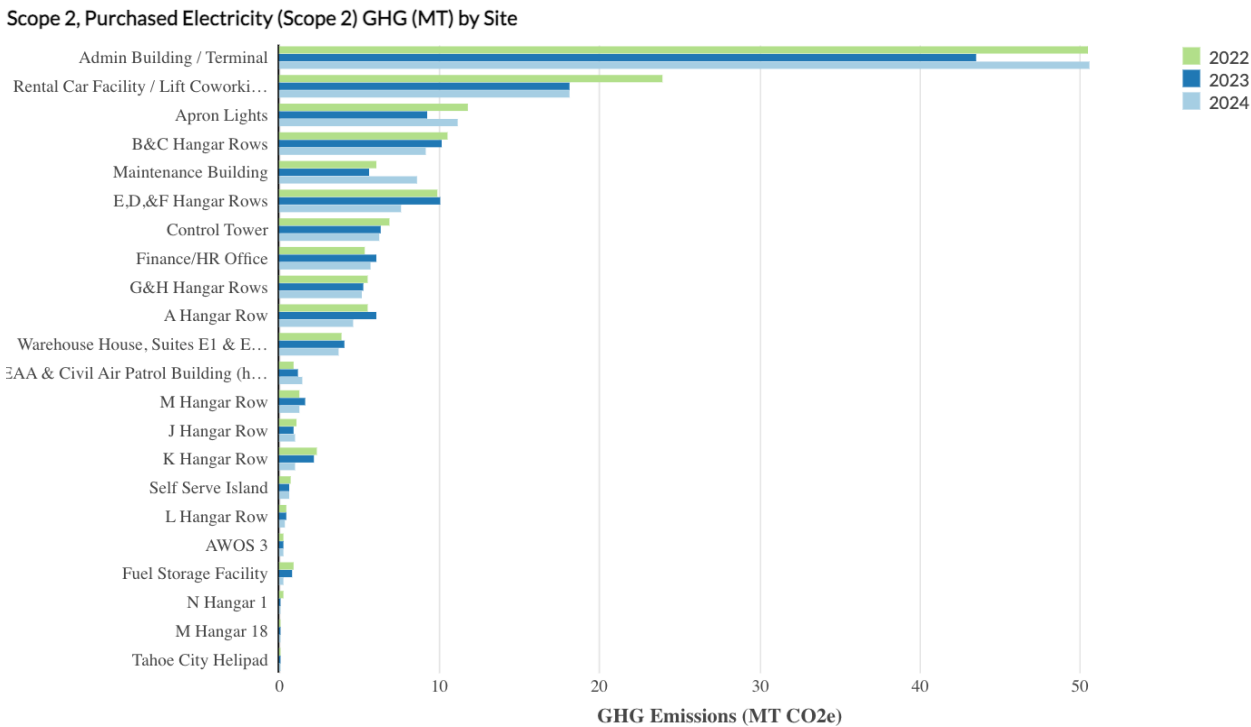
Scope 2 emissions result from purchased electricity. At the Airport, these emissions are tracked across 22 sites, including hangars, administration, airfields, maintenance, storage, a helipad, warehouses, and services.

Table 3: Annual Scope 2 GHG Total Emissions (MTCO₂e)

Emission Source	Unit	2022	2023	2024	% Change (2023 → 2024)
Scope 2 Consumption	kWh	773,499.36	806,311.03	834,847.78	+3.5%
Emissions	MT CO ₂ e	148.65	132.89	137.28	+3.3%

In 2024, Scope 2 emissions from electricity use accounted for 2.8% (137.3 MT CO₂e) of the total Scope 1-3 footprint. Over 50% of these emissions came from just two sites: the Rental Car Facility/Lift Coworking Space and the Admin Building/Terminal.

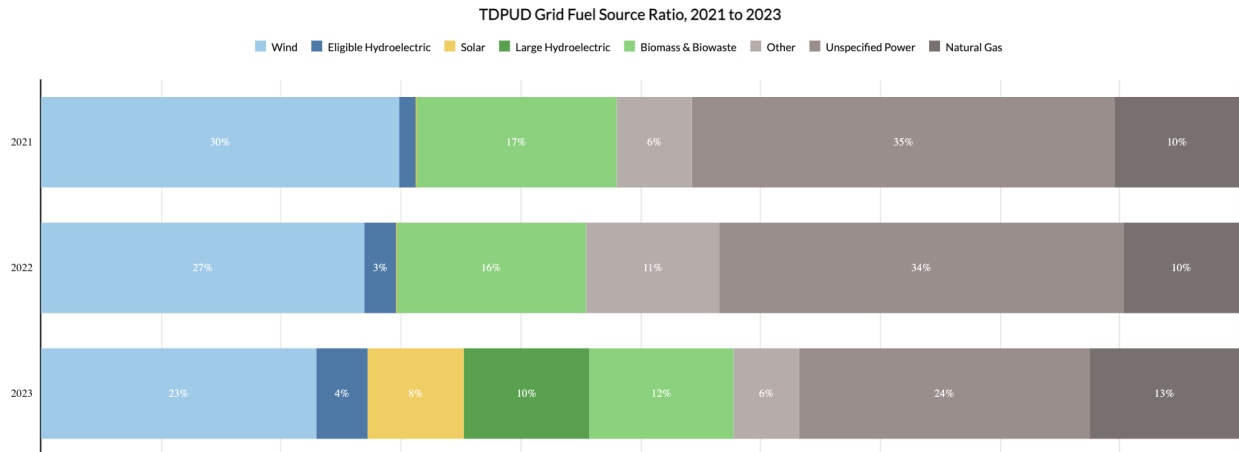
Year-over-year, Scope 2 emissions increased by 3.3% from 2023 to 2024. This was mainly driven by a 16.2% increase at the Admin Building/Terminal, the highest-consuming site, and a 20% increase in Apron Light electricity use (third highest consuming site).



Scope 2 Carbon Intensity

Truckee Tahoe Airport’s electricity-related GHG emissions are influenced by both energy consumption and TDPUD’s grid mix. As TDPUD transitions to cleaner energy sources, the carbon intensity of its electricity decreases. From 2021 to 2023, the carbon intensity of electricity supplied by TDPUD dropped nearly 20%, from 438 lbs CO₂e/MWh to 355 lbs CO₂e/MWh, due to increased renewable energy being incorporated into their grid mix.

For the Airport’s 2024 GHG inventory, since the 2024 TDPUD grid mix is not yet available, the 2023 value is used. Adjustments will be made in the 2025 sustainability report to reflect the correct grid mix factor.



This decline is driven by TDPUD’s growing use of renewables, as shown in the graph above, most notably, the addition of solar (8%) and large hydroelectric (10%) in 2024. As the grid continues to green, electrification—such as the continuation of adopting electric GPUs & EV vehicles and energy-efficient equipment—offers a key opportunity to reduce airport emissions.

Scope 3

Supply Chain Emissions

Scope 3 emissions are from the airport’s supply chain activities. In the 2024 inventory, these included fuel sales and employee commuting, totaling **4,843.1 metric tons of CO₂e**—**90%** of the airport’s total emissions (Scopes 1–3).

Breakdown of Scope 3 Emissions:

- **Use of Sold Fuel (Category 11):** 4,359.32 MT CO₂e (2024)
- **Employee Commuting (Category 7):** 33 MT CO₂e (2023, carried over per reporting protocol)

The airport tracks Scope 3 fuel emissions across the three fuel types it sells: Aviation Gasoline, Jet A, and Sustainable Aviation Fuel (SAF). Emissions from sold fuel are influenced by:

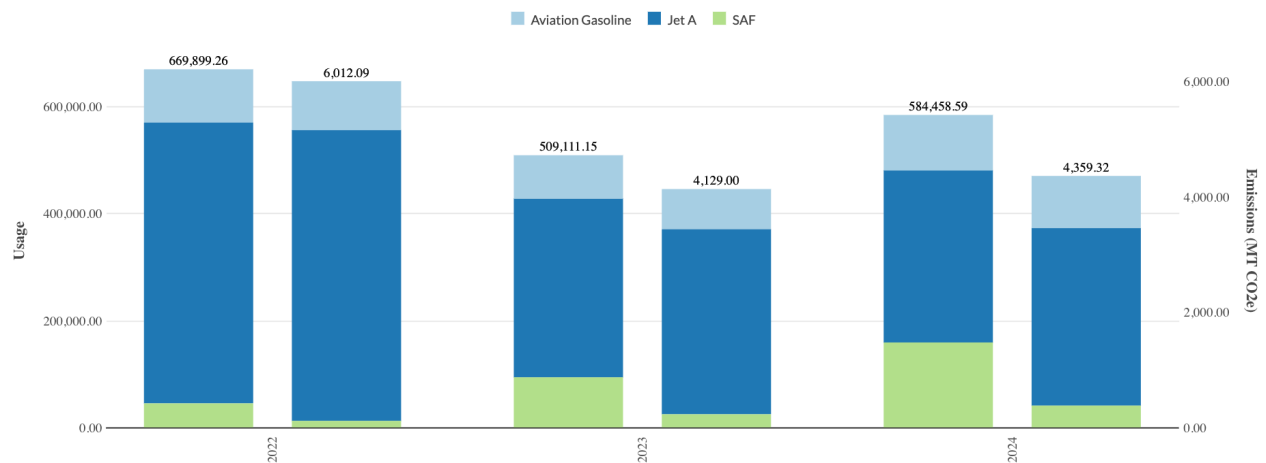
- **Fuel volume sold** (which the airport aims to grow as part of its operations).
- **Fuel carbon intensity** (which the airport is actively working to reduce).

Commitment to SAF and Emissions Reduction

To reduce emissions from sold fuel, the Airport transitioned to selling 100% blended SAF in 2023. While the exact blend percentage varied throughout the year, all fuel contained SAF, averaging 33% of SAF per gallon in 2024, up from 26% SAF in 2023.

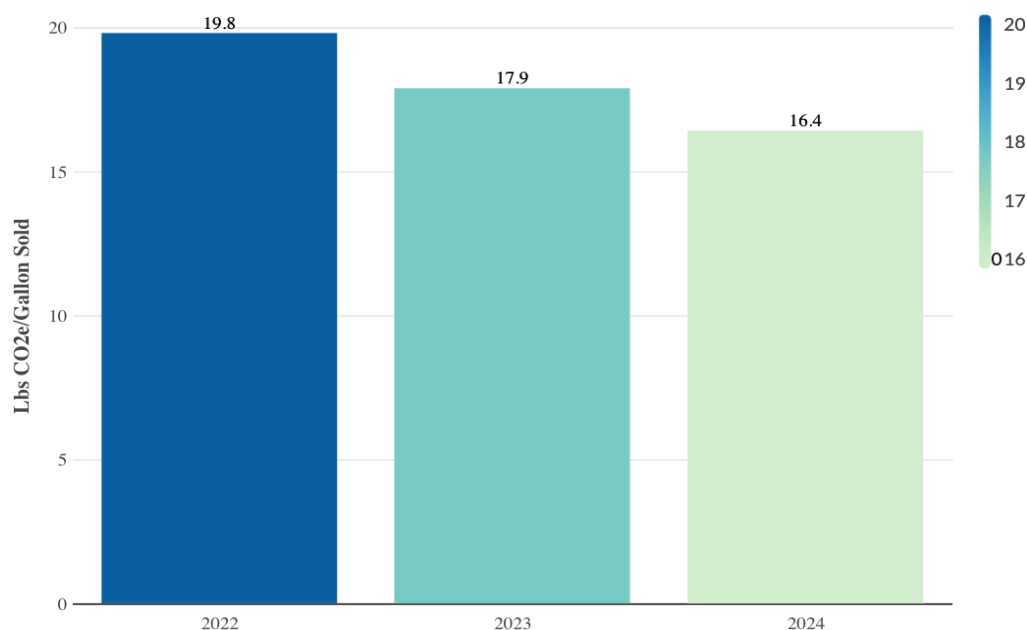
By blending SAF with conventional fuels, the airport enables immediate emissions reductions without disrupting fuel availability. As SAF production and availability expands, it will play an even greater role in the airport’s long-term sustainability strategy.

Scope 3, Category 11: Fuel Sold, by Usage (Gallons) & Emissions (MT CO₂e)



As seen in the graph above, despite a 15% increase in fuel sales in 2024 (509,111 gallons in 2023 to 584,459 gallons in 2024), emissions from sold fuel rose only 5.6%, demonstrating the impact of SAF in lowering emissions per gallon sold. A key sustainability metric to track a Scope 3 category which is impacted by positive business growth, *carbon intensity per gallon sold*, has steadily improved:

Scope 3, Category 11: Carbon Intensity per gallon sold



This 16.9% reduction from 2021 to 2024 in the Airport's Scope 3 carbon intensity per gallon sold highlights the effectiveness of SAF adoption in mitigating emissions while supporting operational growth.

Energy Use: Airport Operations

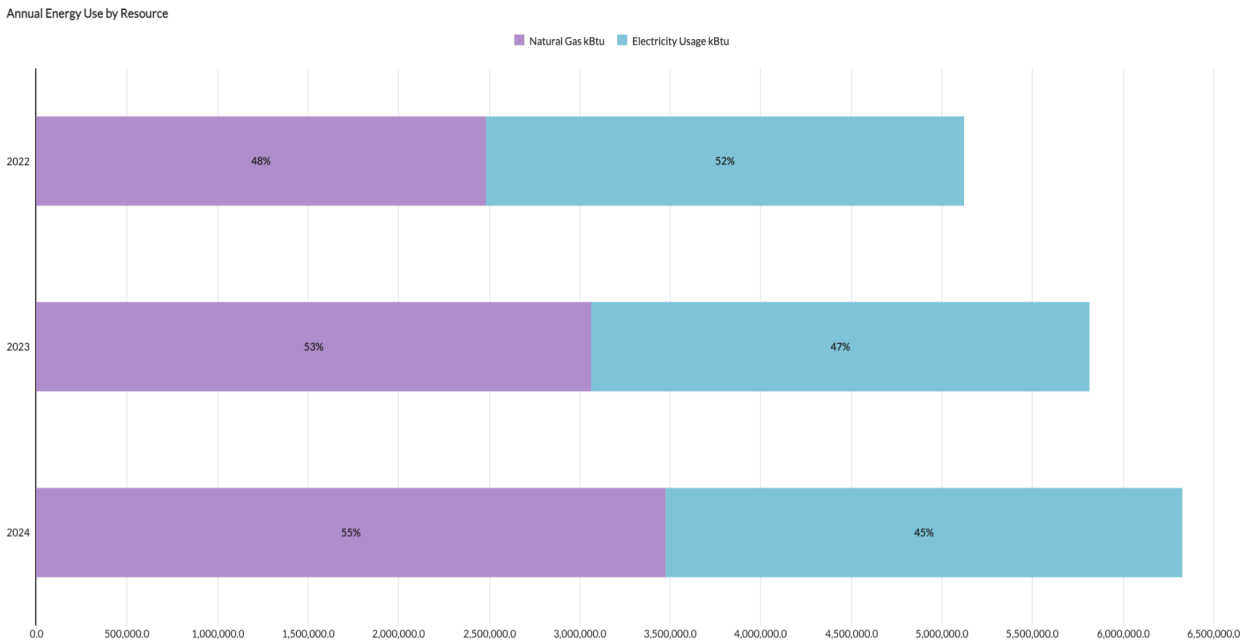
Energy consumption plays a key role in the airport's overall operations, with electricity and natural gas serving as the main energy sources for its facilities. Normalizing energy usage to a consistent unit (kBtu) provides

valuable insights into total demand, resource reliance, and opportunities for improving efficiency or transitioning to alternative fuels.

In 2024, total energy consumption increased by 8.8% compared to the previous year, driven by higher usage of both electricity and natural gas. The airport relies on these energy sources to power and heat 22 facilities, each contributing to the overall energy consumption profile.

Table 4: Annual Energy Use (kBtu)

Year	Electricity Usage (kBtu)	Natural Gas (kBtu)	Total kBtu	YOY % Change
2022	2,639,289.40	2,483,821.60	5,123,111.00	-
2023	2,751,247.40	3,067,027.60	5,818,275.00	+13.6%
2024	2,852,860.10	3,475,646.90	6,328,507.00	+8.8%



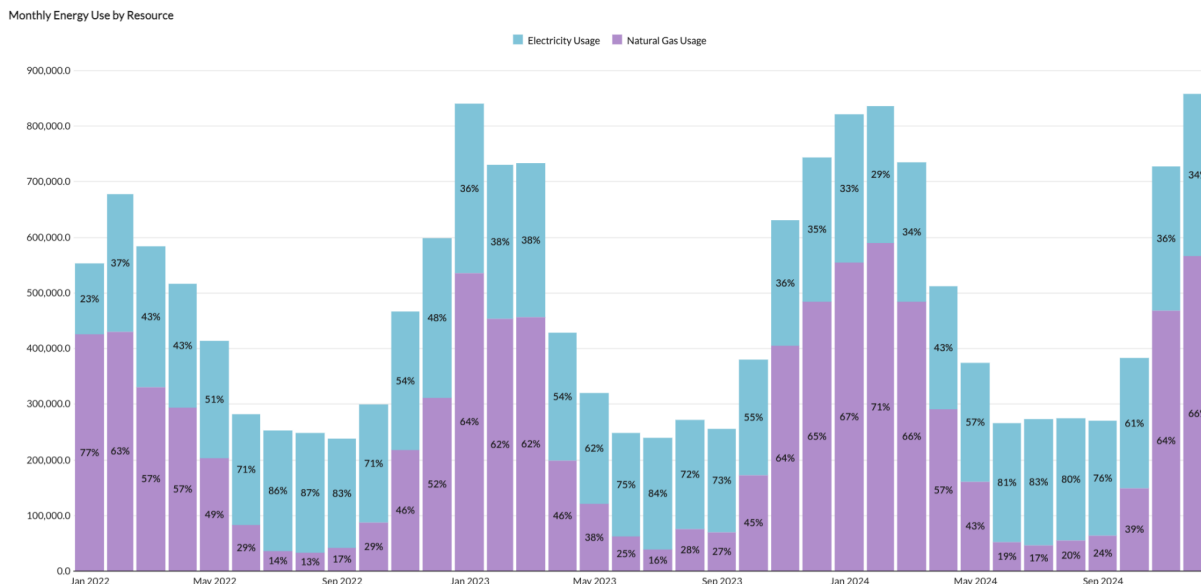
Energy consumption varies significantly throughout the year due to seasonal demand:

- **Winter:** Increased heating needs result in higher natural gas consumption and associated costs.
- **Summer:** Rising air conditioning demand leads to a sharp increase in electricity consumption, especially during warmer months.

As shown in the graph below, natural gas accounts for over 60% of winter energy consumption, while electricity makes up more than 70% of summer energy use. Understanding these seasonal patterns is essential for planning energy efficiency measures and identifying opportunities for emissions reductions.

Weather conditions, which are beyond the airport's control, significantly impact energy demand—colder winters increase natural gas usage for heating, while hotter summers drive higher electricity consumption for air conditioning. However, ongoing facility maintenance and upgrades, such as the Hangar Revitalization

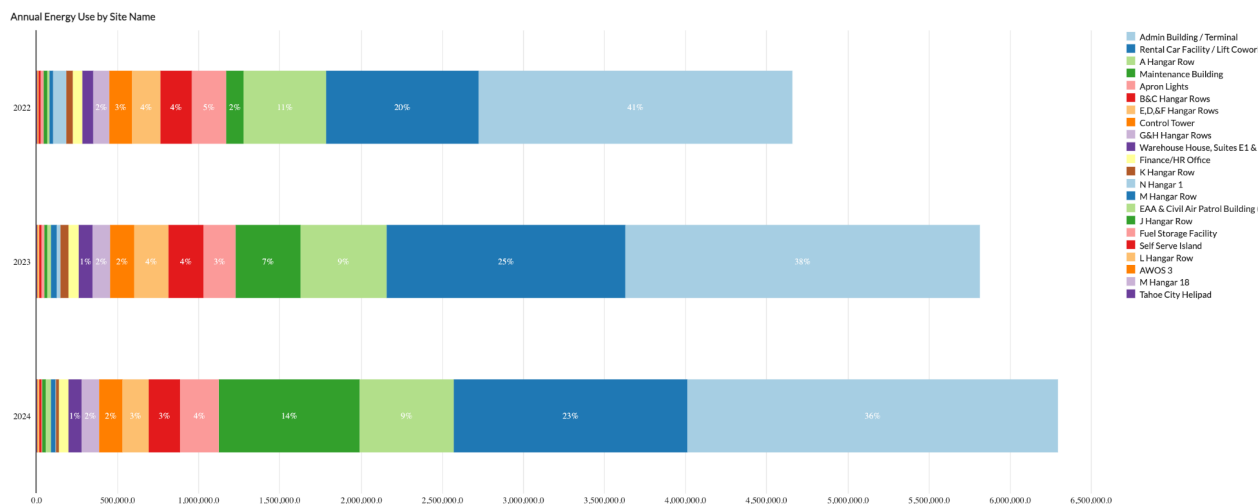
Program, help reduce energy waste and improve efficiency. These efforts give the airport greater control over energy use, minimizing unexpected costs and enhancing resilience despite weather-driven fluctuations.



Major Energy-Consuming Facilities

Among the 22 buildings monitored, the following accounted for the highest energy consumption in 2024:

- Administrative Building & Terminal – 36% of total energy use
- Rental Car Facility – 23% of total energy use
- Maintenance Building – 14% of total energy use
- These facilities represent key targets for energy efficiency initiatives aimed at reducing overall consumption and enhancing sustainability efforts.



Biodiversity & Conservation

Truckee Tahoe Airport is located in a mountainous region just northeast of Lake Tahoe and manages over 2,000 acres of land surrounding the airport. These land areas include the airport land, Alder Hill Beacon, Jones Property, Martis Valley Estates, Ponderosa Golf Course, and Waddle Ranch. Across these properties lie a variety of land types and vegetation, including Eastside pine, Sierran mixed conifer, sagebrush, bitterbrush, wet and dry meadows, montane riparian, and montane chaparral. The airport implements a variety of different land management activities to maintain the surrounding landscape with goals of providing recreational opportunities for the local community, enhancing forest health, reducing risk of wildfire, preserving cultural resources, maintaining water quality, and preserving the natural wildlife and habitat. Some of the land management activities include tree thinning and mastication, fertilizer and pesticide management, road and trail maintenance, and upkeep of local water resources.

There are a variety of different mammals, amphibians, reptiles, birds, and fish that live on the lands that the airport manages, including 8 special status species - either listed as threatened or endangered under the California or federal Endangered Species Act or the California Department of Fish and Wildlife Species of Special Concern (SSC) list (CDFW, 2019). There are also 5 plants known to be or with the potential to be present on the airport lands listed in the California National Plant Society *Inventory of Rare and Endangered Plants list*. (CNPS, 2020a). The airport seeks to enhance and preserve the habitat for these species and keep invasive species at bay, with many local community plans, general plans, and ordinances containing goals to maintain and protect the local wildlife.

Targets & Initiatives

In 2024, Truckee Tahoe Airport advanced its sustainability commitment by adopting a more ambitious target: carbon neutrality by 2045, which exceeds the aviation industry's standard goal of net zero by 2050. This accelerated timeline reflects the Airport's dedication to environmental leadership and its response to the urgency of climate action. Throughout 2025, the Airport will be exploring comprehensive strategies to achieve this goal across all emission scopes (1, 2, and 3).

Electric Ground Power Units Implementation (Scope 1)

Truckee Tahoe Airport successfully implemented two JetEx 7400 electric Ground Power Units (eGPUs) in Spring 2024, significantly reducing emissions from aircraft ground operations. These units, which replaced diesel-powered alternatives, logged impressive usage within their first year—GPU1 recorded 207 hours and GPU2 recorded 198 hours of operation. Rather than selling the older JetGo 550MTI (2013) and JetGo 600 MTI (2017) diesel units, the Airport retained them as backup systems, ensuring operational resilience while prioritizing the use of zero-emission alternatives.

Continued Fleet Electrification (Scope 1)

Building on the electrification initiative that began in 2023, Truckee Tahoe Airport continued transitioning its vehicle fleet to electric alternatives. In Q1 2024, the Airport purchased two 2023 Ford F-150 Lightning electric trucks, trading in a 2010 Ford F-150 and selling a 2013 Chevrolet 2500 to facilitate these acquisitions. The fleet transformation has now accumulated the following strategic vehicle replacements:

- A 2017 Ford Transit Connect van was replaced with a 2023 Ford E-Transit van (2023)
- A 2014 Subaru Forester was sold and a 2020 Ford Ranger was traded to acquire a Ford Mustang Mach-E (2023)
- A 2010 Ford F-150 and a 2013 Chevrolet 2500 were sold/traded for two 2023 Ford F-150 Lightning electric trucks (2024)

This comprehensive fleet electrification strategy demonstrates Truckee Tahoe Airport's systematic approach to reducing direct emissions from operational vehicles.

Hangar Revitalization Program (Scopes 1 & 2, Environmental Protection)

Truckee Tahoe Airport implemented a comprehensive hangar revitalization program focused on energy efficiency and environmental protection. The initiative included extensive roof repairs, lighting replacements, and floor sealing to prevent fuel spillage. Specifically:

- Complete roof repairs were performed on 20 hangars (H5-H10, K1-K13, K13S)
- Partial roof repairs were completed on 12 hangars (A17, A23, A25, A27, A29, B23, C21, D23, E13, J1, J3, J5)
- Energy-efficient lighting was installed in 9 hangars (C24S, H5-H10, K1, K9)

- Floors were sealed in 12 hangars (A10, A12, A26, C4, C11, C23, C24, F13, G4, G8, G9, G22) to prevent fuel spillage and groundwater contamination

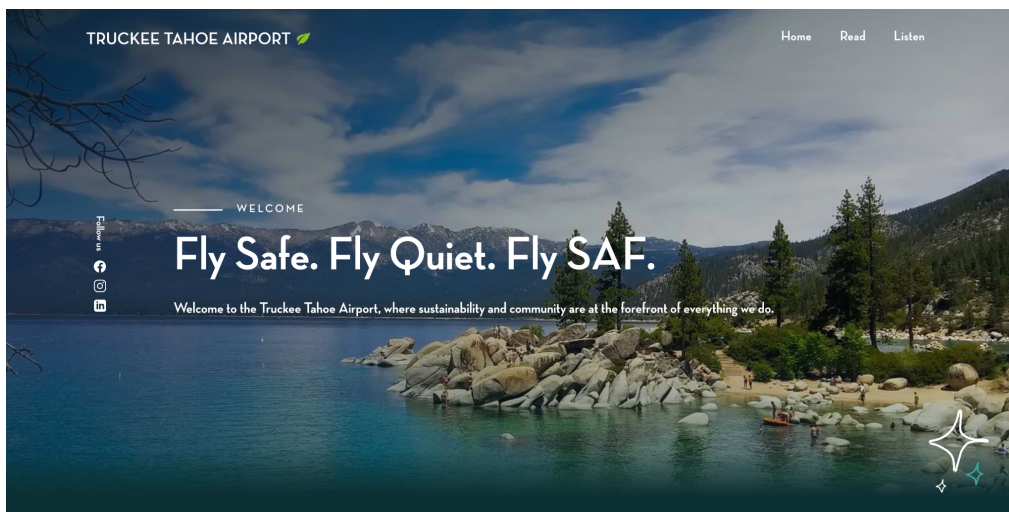
These improvements enhance energy retention through improved building envelopes and lighting efficiency while also preventing potential environmental contamination through sealed floors.

Wildfire Mitigation Program (Environmental Protection)

In 2024, Truckee Tahoe Airport expanded its environmental stewardship beyond emissions reduction with a significant \$2 million investment in wildfire mitigation projects. These initiatives help maintain forest health at manageable levels, reducing both fire risk and severity while protecting the environment and neighboring communities. This program represents a holistic approach to sustainability that acknowledges the interconnection between climate change, forest management, and community resilience. More detailed information can be found on the Airport's dedicated [webpage](#).

Stakeholder Engagement

Stakeholder engagement remains a cornerstone of Truckee Tahoe Airport's sustainability strategy. At the start of 2024, the Airport significantly enhanced its communication capabilities with the launch of a comprehensive sustainability webpage (saf.truckeetahoeairport.com). This webpage serves to share the Airport's environmental initiatives, progress, and commitment to sustainable aviation with all stakeholders.



Truckee Tahoe Airport Sustainability Webpage

The new webpage exemplifies Truckee Tahoe Airport's innovative approach to stakeholder engagement by featuring interactive elements such as video interviews with key community leaders, including General Manager Robb Etnyre, Town of Truckee Manager Jennifer Callaway, and Mountain Lion Aviation CEO Chris Barbera. These personal narratives help stakeholders understand the broader impact of the Airport's sustainability initiatives on the North Lake Tahoe region and demonstrate the strong community support for environmental stewardship.

Building on the successful transition to blended SAF in 2023, the Airport has leveraged its digital presence to showcase tangible results and future commitments. The sustainability webpage highlights key achievements, including the 31% reduction in Scope 3 emissions, fleet electrification efforts, and the implementation of full-service fueling for 100LL aircraft. This transparent communication of metrics and milestones helps stakeholders track progress and understand the real-world impact of their support.

Truckee Tahoe Airport continues to recognize that effective stakeholder engagement is critical to advancing its decarbonization journey. The new sustainability webpage, combined with direct stakeholder interactions and community partnerships, demonstrates their ongoing commitment to keeping stakeholders informed and involved in their sustainability initiatives. As they pursue their goal of achieving carbon neutrality by 2045, this enhanced digital presence will play a vital role in maintaining stakeholder support and participation.

Future Plans

In 2025, Truckee Tahoe Airport plans to build on its existing sustainability initiatives through several strategic efforts:

SAF Knowledge Sharing

KTRK will host an immersion event designed to educate and inspire others in the aviation industry about their successful SAF transition. This knowledge transfer initiative aims to accelerate the adoption of sustainable aviation fuel across the general aviation sector by sharing best practices, lessons learned, and implementation strategies from the Airport's pioneering experience.

Comprehensive Emissions Strategy Development

Truckee Tahoe Airport plans to explore a comprehensive strategy for achieving carbon neutrality by 2045. This detailed roadmap will address emissions across all scopes (1, 2, and 3) and will be informed by the data collected through their partnership with NZero. The strategy will outline specific initiatives, timelines, and measurement methodologies to ensure transparent progress toward this ambitious goal.

The Airport's commitment to environmental leadership continues to evolve from implementing specific sustainability measures to actively advancing industry-wide transformation through education and detailed strategic planning.

Programs

Climate Transformation Alliance

Truckee Tahoe Airport is a Governing Partner of the Climate Transformation Alliance (CTA), a regional coalition committed to achieving net-zero greenhouse gas (GHG) emissions in the Tahoe-Truckee region by 2045. As a Governing Partner, the airport plays an active role in shaping strategy, guiding policy, and advancing collaborative climate action initiatives alongside local governments, businesses, nonprofits, and public agencies.

CTA focuses on carbon reduction, climate resilience, and sustainable development, leveraging collective expertise to drive impactful change. Through its leadership role, Truckee Tahoe Airport helps support regional climate planning efforts, implement sustainability initiatives, and advocate for policies that promote long-term environmental stewardship.

More information on the Climate Transformation Alliance can be found on their website (<https://climatetransformationalliance.org/>).

Relevant Findings & Legislation

EPA Endangerment Finding on 100LL fuel (2023)

Piston-engine aircraft are the leading source of lead emissions in the US, contributing 70% annually. The EPA has conducted thorough investigations into these emissions and their impact on air quality, including lead concentration assessments near airports and communities. Consequently, the EPA has issued an endangerment finding, identifying specific aircraft engines as significant contributors to air pollution and potential health hazards under the Clean Air Act. Despite not imposing immediate restrictions or new control measures on leaded fuel, this finding prompts regulatory action. The EPA plans to establish standards targeting lead emissions from aircraft engines, while the FAA will focus on fuel composition standards to address the issue. Truckee Tahoe Airport's transition to blended SAF has helped them prepare for EPA and FAA 100LL fuel regulation, as they now only provide limited quantities to piston aircraft that require it.

California Senate Bill 1193

SB 1193 was introduced to prohibit the sale of leaded aviation fuel (100LL) statewide due to its well-documented public health risks, particularly for communities near airports. The bill was driven by growing concerns over lead exposure, including a 2021 study revealing elevated lead levels in children residing near airports where piston-engine aircraft operate.

SB 1193 proposed a phased elimination of leaded aviation fuel sales by 2030, aligning with the EPA's endangerment finding on leaded avgas and broader federal efforts to transition the aviation industry to unleaded alternatives. The bill was strongly supported by community members, environmental justice groups, and public health advocates, citing California's history of phasing out lead in gasoline and paint as precedent.

As of September 2024, SB 1193 was signed into law, making California the first state to mandate a statewide ban on leaded aviation fuel. While Truckee Tahoe Airport has already transitioned to blended Sustainable Aviation Fuel (SAF) and only supplies limited quantities of 100LL to piston aircraft that require it, this legislation will necessitate a complete phase-out before the 2030 deadline. The airport's proactive efforts place it ahead of regulatory requirements, ensuring compliance with minimal operational impact.

More information on SB 1193 and its implementation timeline can be found in the official California legislative records.

California SB 253

SB 253 is a recently passed bill in California requiring public and private companies doing business in California to disclose their Scope 1, 2 & 3 emissions. While Truckee Tahoe Airport is not directly impacted by this bill, they may be indirectly impacted through charter company tenants such as NetJets. This means they will likely be requesting Scope 3 data from Truckee Tahoe Airport when reporting is required (2027 for 2026 calendar year).

CARB LCFS Policy Update

Originally passed in 2009, the Low Carbon Fuel Standard (LCFS) is a regulatory program aimed at reducing the carbon intensity of transportation fuels in California by setting annual benchmarks and incentivizing the use of low-carbon alternatives through credit generation and trading.

In November 2024, the California Air Resources Board (CARB) approved significant amendments to the LCFS. The updated regulations set more ambitious targets, aiming for a 30% reduction in carbon intensity by 2030, up from the previous 20% goal, and introducing a 90% reduction target by 2045.

The LCFS operates by assigning annual carbon intensity benchmarks to transportation fuels. Fuel producers that generate fuels below these benchmarks earn credits, while those above the benchmarks incur deficits and must purchase credits to comply. This market-based approach incentivizes the adoption of low-carbon fuels. Notably, the program has achieved a 13% reduction in the carbon intensity of California's fuel mix, displacing approximately 320 million metric tons of CO₂ since its inception.

For Truckee Tahoe Airport, these developments are particularly relevant. The airport's fuel supplier, Neste, currently benefits from the LCFS by earning credits for providing low-carbon blended SAF. As carbon intensity reduction targets become more stringent, the number of credits awarded may decrease, potentially leading to higher SAF prices to offset reduced credit revenue. The airport should closely monitor CARB's revisions to the LCFS amendments and assess potential impacts on fuel costs and operations.

For the most current information on the LCFS amendments and their status, refer to CARB's official communications and updates.

Sources

Climate Transformation Alliance. (n.d.). Home. Retrieved February 20, 2025, from <https://climatetransformationalliance.org/>

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