

Sustainable Aviation Fuel State Incentives Memo

Statute allows the Legislative Oversight Committee Concerning Tax Policy (Committee) to request up to three specific tax expenditure evaluations to be completed by the Office of the State Auditor (OSA) each year [Section 39-21-403(2)(c)(I)(B), C.R.S.]. During the October 31, 2024 hearing, the Committee requested that the OSA look at overlapping incentives targeted toward the sustainable aviation fuel industry in Colorado.

According to the U.S. Department of Energy (U.S. DOE), sustainable aviation fuel is a “biofuel used to power aircraft that has similar properties to conventional jet fuel but with a smaller carbon footprint.” It is produced from biomass resources, such as oils and greases, municipal solid waste, and crops. Sustainable aviation fuel must be blended with conventional fossil jet fuel before it can be certified for use in commercial aircraft.

The sustainable aviation fuel production industry is developing both nationally and globally. Although many production facilities have been announced, including a potential facility in Colorado, there were only four operational sustainable aviation fuel production facilities in the United States—none of which were located in Colorado—as of August 2024 according to U.S. DOE. The Colorado Energy Office (CEO) also reported that it is not aware of any production facilities in Colorado at this time. We did identify at least two companies that are importing sustainable aviation fuel from another state and selling the fuel in Colorado, as of March 2025, but it is not clear if they qualify for any incentives.

According to a February 2024 report prepared by the Rocky Mountain Institute (RMI), the Rocky Mountain Region, which includes Colorado, Utah, New Mexico, and Wyoming, has good potential for future development within the sustainable aviation fuel sector due to its existing infrastructure and feedstock availability. However, sustainable aviation fuel production facilities are both expensive and time-consuming to construct, with recent estimates ranging from about \$117 million for a proposed Colorado facility to over \$5 billion for the federally-sponsored “Minnesota SAF Hub.” The U.S. DOE estimates that it takes an average of over 4 years for the completion of facility construction. Therefore, the existing incentives, which are intended to encourage growth in the industry, could be used in Colorado in the future.

We found that there are several state and federal provisions that could potentially provide overlapping incentives to the sustainable aviation fuel industry in Colorado. However, because the industry is in the early stages of development in the state, most of these incentives cannot be used by Colorado businesses and several of the incentives will no longer be available going forward unless additional funding is approved.

Colorado Tax Incentives and Programs

We identified one state tax credit targeted specifically at the sustainable aviation fuel production industry—the Sustainable Aviation Fuel Production Facility Credit [Section 39-22-556, C.R.S.]. This provision, which was first available for Tax Year 2024, provides a credit to partially offset the cost of developing sustainable aviation fuel production facilities. We also identified one state grant program—the Clean Air Grant—that is not solely targeted to the sustainable aviation fuel industry, but could potentially award funding to projects that produce or utilize sustainable aviation fuel [Section 24-38.5-116, C.R.S.]. The Sustainable Aviation Fuel Production Facility Credit and the Clean Air Grant are both administered by the CEO. As of January 2025, no sustainable aviation fuel facilities had received either the credit or grant. Further, the final deadline for applications for the grant passed on January 31, 2025 and no companies within the sustainable aviation fuel industry had applied.

More detailed descriptions regarding eligibility, requirements, operation, and limitations of each of the incentives mentioned above are included below.

The Colorado Sustainable Aviation Fuel Production Facility Credit [Section 39-22-556, C.R.S.] is a refundable income tax credit, available for Tax Years 2024 to 2032, that covers a percentage of the total cost of constructing, reconstructing, or erecting a sustainable aviation fuel production facility by a qualified taxpayer. A qualified taxpayer is defined in statute as “an aviation business, a sustainable aviation fuel producer, or an airport” that is subject to income tax in Colorado. A sustainable aviation fuel production facility is defined in statute as a “facility which produces sustainable aviation fuel” or a “facility directly related to enabling the production or distribution of sustainable aviation fuel as determined under the standards established by the [Colorado Energy Office].”

Statute provides that the purpose of this credit is “to induce certain designated behavior by taxpayers, specifically the construction of sustainable aviation fuel production facilities in the state, by providing tax relief for certain businesses and individuals that construct or operate these facilities in the state.” According to statute, the credit is meeting its purpose if “the construction, reconstruction, and erection of sustainable aviation fuel production facilities in the state increase significantly in tax years for which the credit is allowed.”

In order to claim the credit, a taxpayer must submit an application for a tax credit certificate to the CEO after the facility’s construction has been completed. When the application is approved and the certificate issued, the credit can be claimed by the taxpayer in the tax year in which the facility is placed into service. The credits are issued by the CEO in the order in which eligible taxpayers apply. Statute provides the percentage used to calculate the credit award, which is based on the year that the facility construction begins, as provided in Exhibit 1.

Exhibit 1
Sustainable Aviation Fuel Production Facility Credit Percentages by Year

Calendar Year When Facility Construction Began	Percent of Qualified Costs Covered
2024-2026	30%
2027	24%
2028	18%
2029 - 2032	12%

Source: Office of the State Auditor analysis of Section 39-22-556(3), C.R.S.

Though statute does not provide a maximum award value per taxpayer, it does limit the cumulative total amount of credits that the CEO can award to \$1 million for Tax Year 2024, \$2 million per year for Tax Years 2025 and 2026, and \$3 million per year for Tax Years 2027 through 2032. For example, a taxpayer who successfully claims a credit certificate for construction of a sustainable aviation fuel production facility that began in 2025 and entered into service in 2030 would be entitled to a credit equal to 30 percent of the facility costs, up to a maximum of \$3 million.

Due to the high cost of constructing a sustainable aviation fuel production facility, it is likely that only one sustainable aviation fuel industry taxpayer could claim the credit each year. The proposed Colorado facility mentioned above is estimated to cost about \$117 million to construct. Hypothetically, if a taxpayer were awarded the maximum possible credit value of \$3 million, the percentage of costs covered for this project would be less than 3 percent of the total cost to build the production facility. All facilities awarded a credit will be required to annually report to the CEO that at least 60 percent of their total fuel production or distribution is sustainable aviation fuel for at least 3 consecutive years after they claim the credit. If this requirement is not met, the credit will be recaptured by the State. It is possible the distributors, mentioned above, that are importing sustainable aviation fuel into Colorado would be eligible for the credit; however, the businesses have not applied for the credit, so the CEO could not say whether those facilities would meet the standards.

Because the credit first became available in Tax Year 2024, we could not yet assess whether it is meeting its purpose or will in future years. As of January 2025, the CEO reported that no sustainable aviation fuel production or distribution facilities have submitted an application. Therefore, it is not clear when and if taxpayers might use this credit. We plan to evaluate the credit by December 2028.

The Colorado Clean Air Grant program [Section 24-38.5-116, C.R.S.] is a competitive grant, which had four rounds of funding between March 2023 and January 2025, to assist existing industrial and manufacturing operations in reducing emissions of air pollutants. Statute specifies that “projects producing or utilizing sustainable aviation fuel” may be considered, but gives the CEO discretion in determining what types of

projects will be considered and awarded grants. Statute provides that the purpose of this grant is “to help finance voluntary projects to reduce emissions of air pollutants from industrial and manufacturing operations.” The total funding available through this program is not to exceed \$25 million and must be expended by the end of Fiscal Year 2028.

To apply for the grant, an industrial or manufacturing operation is required to complete an application packet detailing the specific project(s) to be funded. An applicant must request at least \$100,000 in grant funding, and there is a maximum possible award of \$3 million. Projects that are awarded a grant must provide a 25 percent match of the funds awarded that cannot be met using other governmental awards. Awardees are required to comply with any on-site monitoring visits and must provide the CEO with quarterly progress reports that include both financial and program status updates and a final report due upon project completion. Awardees are required to provide additional reports as requested by the CEO for up to 5 years after project completion and must submit to on-site monitoring visits for up to a year after project completion. This program requires that all projects have an estimated payback period, defined by CEO staff as the amount of time needed to recover the cost of an investment, of greater than 3 years. The Clean Air Grant program’s final request for applications closed January 31, 2025, and CEO staff reported that they did not receive any grant applications for projects in the sustainable aviation fuel industry.

Other Possible State Tax Incentives. There are additional state incentives that a sustainable aviation fuel company could feasibly qualify for; however, these incentives do not specifically target the industry. For example, a sustainable aviation fuel business could potentially qualify for place-based incentives like the Enterprise Zone Tax Credits, depending on their business location. They could also potentially qualify for incentives related to machinery used in production of sustainable aviation fuel, such as the Manufacturing Sales Tax Exemptions. Additionally, a producer that uses clean hydrogen to make sustainable aviation fuel could potentially qualify for Colorado’s Clean Hydrogen Income Tax Credit.

Incentives in Other States. There are five other states—California, Illinois, Minnesota, Washington, and Nebraska—with tax incentives aimed at growing their respective sustainable aviation fuel production industries. However, these states have all focused on the post-construction phase with per-gallon incentives related to production, sale, or use. Colorado is the only state currently offering a tax incentive for the construction of a sustainable aviation fuel production facility.

Federal Tax Incentives and Programs

We also identified three federal tax incentives related to sustainable aviation fuel. One—the Advanced Energy Project Credit [26 USC 48C]—is available for the construction of a sustainable aviation fuel production facility and could provide a benefit similar to the State’s credit. However, federal law limits the credits that can be awarded to \$10 billion in total and, at the time of our review, all available credits had already been awarded; therefore, this credit will no longer be available unless additional credits are authorized. The other federal incentives target the production, sale, and use of sustainable aviation fuel and, although benefiting the industry generally, would not provide a benefit similar to those provided by the State that are targeted towards creating new facilities. Specifically, the Clean Fuel Production Credit [26 USC 45Z] provides a per-gallon income tax credit for each gallon of sustainable aviation fuel that is produced and sold in the U.S. on or after January 1, 2025. Finally, the Sustainable Aviation Fuel Credit [26 USC 6426(k)], which expired on January 1, 2025, provided a per-gallon excise or income/general business tax credit for sustainable aviation

fuel sold or used for end-use. We were unable to determine if any Colorado taxpayers had received this federal credit before it expired.

More detailed descriptions regarding eligibility, requirements, operation, and limitations of each of the incentives mentioned above are included below.

The federal Advanced Energy Project Credit [26 USC 48C] is a competitive income tax credit for up to 30 percent of an investment made for the construction of an advanced energy project, which includes sustainable aviation fuel production facilities. The Inflation Reduction Act of 2022 provided \$10 billion in funding for this credit. The Advanced Energy Project Credit is administered by the Internal Revenue Service in partnership with the U.S. DOE. According to the U.S. DOE, the \$10 billion has been awarded to projects in 2024 and 2025, and Congress is not considering legislation to make more funding available for it. Unless additional funding is provided, this federal credit will not be available for new sustainable aviation fuel production facilities in Colorado.

The federal Clean Fuel Production Credit [26 USC 45Z] provides an income tax credit of up to \$1.75 per gallon of sustainable aviation fuel produced and sold for end-use. Since the credit requires that the taxpayer both produce and sell the sustainable aviation fuel in order to qualify for the credit, and there are no operational sustainable aviation fuel production facilities in Colorado as of January 2025, there are currently no Colorado facilities that could qualify for this credit. Additionally, this credit is not available for fuel sold on or after January 1, 2028. Given the U.S. DOE's average minimum facility construction time of 4 years, it is unlikely any sustainable aviation fuel production facilities that might be constructed in Colorado would be completed prior to this credit's expiration.

The federal Sustainable Aviation Fuel Credit [26 USC 6426(k) and 26 USC 40B] provided an excise tax or income/general business tax credit of up to \$1.75 per gallon of sustainable aviation fuel sold or used for end-use. In the instance that the sustainable aviation fuel had already been blended with conventional jet fuel prior to its sale or use, the credit was calculated using only the amount of sustainable aviation fuel within the blend. This credit was available for fuel sold or used after December 31, 2022 and prior to January 1, 2025. The credit is no longer available and we do not know if any Colorado companies received this credit when it was available.

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