Washington State House of Representatives Office of Program Research



Environment & Energy Committee

ESSB 5447

Brief Description: Promoting the alternative jet fuel industry in Washington.

Sponsors: Senate Committee on Environment, Energy & Technology (originally sponsored by Senators Billig, King, Nguyen, MacEwen, Mullet, Wellman, Gildon, Keiser, Shewmake, Lovick, Boehnke, Warnick, Randall, Conway, Dhingra, Dozier, Liias, Lovelett, Saldaña, Stanford, Van De Wege and Wagoner).

Brief Summary of Engrossed Substitute Bill

- Requires the Department of Ecology (Ecology) to allow one or more carbon intensity pathways for alternative jet fuel by no later than December 31, 2023.
- Requires Washington State University and the University of Washington to calculate emissions of ultrafine and fine particulate matter and sulfur dioxides in communities surrounding an international airport owned by a port district in a county with a population greater than 1,500,000.
- Creates a preferential business and operations (B&O) tax rate of 0.275 percent for the manufacturing and wholesaling of alternative jet fuels.
- Establishes a B&O and public utilities tax credit for certain sales and purchases of alternative jet fuel.
- Provides that the tax incentives begin when one or more facilities in the state begin to produce a cumulative 20 million or more gallons of alternative jet fuel per year.

Hearing Date: 3/13/23

Staff: Robert Hatfield (786-7117).

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This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.

Background:

Work Group Report.

In 2021 the Legislature reestablished the Sustainable Aviation Biofuels Work Group. It was convened by the Washington State University Office of Clean Technology, now known as the Office of National Laboratory Partnerships, and provided a report, including pertinent recommendations, to the Governor and Legislature on December 1, 2022.

Clean Fuels Program.

As of January 2023 the Department of Ecology has adopted rules and begun implementing a Clean Fuels Program (CFP) limiting the greenhouse gas (GHG) emissions attributable to each unit of transportation fuel (carbon intensity) to 20 percent below 2017 levels by 2038. Electricity and liquid and gaseous fuels are within the scope of the CFP, so long as the fuels or electricity are used to propel motor vehicles or are intended for transportation purposes.

The CFP establishes standards for assigning GHG emissions attributable to transportation fuels based on a lifecycle analysis that considers emissions from the production, storage, transportation, and combustion of the fuels, and associated changes in land use. Applications for specific fuel pathways that describe in detail all stages of a fuel's production must be evaluated by Ecology in order for a carbon intensity for the fuel to be calculated. Under the CFP rule, separate carbon intensity standards are established for gasoline and its substitutes and diesel and its substitutes. The CFP functions by assigning bankable, tradeable credits for the production, import, or dispensation for use of transportation fuels with associated lifecycle GHG emissions that are less than the 2017 baseline carbon intensity levels for gasoline or diesel established by Ecology, or when other specified activities are undertaken that support the reduction of GHG emissions associated with transportation in Washington.

Certain specified fuels, including transportation fuel used for the propulsion of aircraft, are exempt from CFP carbon intensity reduction requirements, but are eligible to generate credits when such fuels have a carbon intensity less than the carbon intensity standards established for gasoline or diesel.

As part of the calculation of the carbon intensity of a fuel, the CFP factors in an energy economy ratio (EER), which is a dimensionless value that represents the efficiency of a fuel as used in a powertrain as compared to a reference fuel used in the same powertrain, which are often expressed as a comparison of miles per gasoline gallon equivalent between two fuels. For example, electricity used in a battery electric vehicle is assigned an EER of 3.4 relative to a gasoline-powered vehicle in the CFP rule because the powertrain of a battery electric vehicle is relatively more efficient at converting the same amount of energy into vehicular movement than a gasoline fuel engine. A forklift with a powertrain using a liquid propone gas fuel source is assigned a 0.9 EER because that fuel and vehicle combination is less efficient at using the same amount of stored energy as compared to a gasoline vehicle engine. Alternative jet fuel, which is a fuel made from petroleum or nonpetroleum sources that can be blended and used with conventional petroleum jet fuels without the need to modify aircraft engines and existing fuel

distribution infrastructure, is assigned an EER of 1.0, and may earn credits under the CFP if it has a carbon intensity less than the baseline carbon intensity standard for diesel fuel and diesel substitutes.

Statewide Office of Renewable Fuels.

In 2022 the Statewide Office of Renewable Fuels was established within the Department of Commerce to leverage, support, and integrate with other state agencies to carry out specified statutory duties such as driving job creation, improving economic vitality, and supporting the transition to clean energy. The Office must meet specified requirements such as coordinating with certain entities and assessing opportunities for and barriers to deployment of renewable fuels and green electrolytic hydrogen in hard-to-decarbonize sectors of the state economy.

Business and Occupation Tax.

Washington's major business tax is the business and occupation (B&O) tax. The B&O tax is imposed on the gross receipts of business activities conducted within the state, without any deduction for the costs of doing business. A taxpayer may have more than one B&O tax rate, depending on the types of activities conducted. Major B&O tax rates are 0.471 percent for retailing; 0.484 percent for manufacturing, wholesaling, and extracting; and for services and activities not classified elsewhere, 1.5 percent for businesses with taxable annual income of less than \$1 million and 1.75 percent for businesses with taxable annual income of \$1 million or more. Several preferential rates also apply to specific business activities.

Public Utility Tax.

The gross income derived from the operation of publicly and privately owned utilities is subject to the public utility tax (PUT). These utilities include businesses that engage in transportation, communications, and the supply of water and energy. The tax is imposed in lieu of the B&O tax and is applied only on sales to consumers. Other income of the utility, such as the retail sale of tangible personal property, is subject to the B&O tax.

Tax Preferences.

State law provides for a range of tax preferences that confer reduced tax liability for a designated class of taxpayer. Tax preferences include tax credits, deductions, exemptions, preferential tax rates, and deferrals. Washington has over 700 tax preferences. Legislation that establishes or expands a tax preference must include a tax preference performance statement that identifies the public policy objective of the preference, as well as specific metrics the Joint Legislative Audit and Review Committee can use to evaluate the effectiveness of the preference. All new tax preferences automatically expire after 10 years unless an alternative expiration date is provided.

Climate Commitment Account.

The Climate Commitment Account is an account created as part of the state's cap and invest program. The account receives distributions from auction revenues under the cap and invest program and revenues may go towards implementing the working families tax credit and environmental and clean energy programs, activities, or projects.

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Summary of Bill:

Carbon Intensity Pathways.

By no later than December 31, 2023, the Department of Ecology (Ecology) must allow one or more carbon intensity pathways within the Clean Fuels Program for alternative jet fuel. Ecology must:

- allow biomethane to be claimed as feedstock for renewable diesel and alternative jet fuel consistent with that allowable for compressed natural gas, liquified natural gas, liquified compressed natural gas, or hydrogen production; and
- notify the Department of Revenue (DOR) within 30 days when one or more facilities capable of producing a cumulative production capacity of at least 20,000,000 gallons of alternative jet fuel each year is operating in the state.

Work Group.

Washington State University must convene an alternative jet fuels work group to further the development of alternative jet fuels as a productive industry in the state. Membership includes legislators and sectors involved in alternative jet fuel research, development, production, and utilization. The work group must provide a report including pertinent recommendations to the Governor and the appropriate committees of the Legislature by December 1, 2024, and December 1 of every even-numbered year until December 1, 2028. The work group expires January 1, 2029.

Statewide Office of Renewable Fuels.

In addition to current statutory purposes, the statewide office of renewable fuels must further the development and use of alternative jet fuels as a productive industry in the state. In carrying out its duties, the office must also consider alternative jet fuels, review certain tax and regulatory incentives, and collaborate with the alternative jet fuels work group.

Report on Airport Emissions.

Washington State University, in collaboration with the University of Washington's Department of Environmental and Occupational Health, must calculate emissions of ultrafine and fine particulate matter and sulfur oxides in communities surrounding an international airport owned by a port district in a county with a population greater than 1,500,000. This information must be reported to the Joint Legislative Audit and Review Committee (JLARC) by December 1, 2024, and by December 1 annually thereafter until JLARC has completed its final report on the alternative jet fuel tax incentives created in this act.

To facilitate the emissions calculation, an international airport owned by a port district in a county with a population greater than 1,500,000 must report to WSU the total annual volume of alternative jet fuel used for flights departing the airport by October 1, 2024, and by October 1 every year thereafter until JLARC has completed its final report on the alternative jet fuel tax incentives created in the act.

Alternative Jet Fuel—Tax Rates and Tax Incentives.

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The manufacturing and wholesaling of alternative jet fuel is subject to a preferential business and occupation (B&O) tax rate of 0.275 percent. The preferential tax rate begins after the DOR receives notification from Ecology that there are one or more facilities operating in the state with a cumulative production capacity of at least 20,000,000 gallons of alternative jet fuel per year. The preferential tax rate lasts for 10 years.

Certain tax credits are created for the manufacture, sale, purchase, and use of alternative jet fuel. Such tax credits may not be claimed until Ecology verifies that there are one or more facilities operating in the state with a cumulative production capacity of at least 20,000,000 gallons of alternative jet fuel per year.

The preferential tax rate and tax credits are subject to review by JLARC. The automatic 10-year expiration for tax preferences does not apply to this act.

B&O Tax Credit for Sales of Alternative Jet Fuel.

A B&O credit is available for certain sales of alternative jet fuel. The amount of the credit is \$1 per gallon of alternative jet fuel that has at least 50 percent less carbon dioxide equivalent emissions than conventional jet fuel. The credit amount increases by \$0.02 for each additional 1 percent reduction in carbon dioxide equivalent emissions beyond 50 percent. The credit may not exceed \$2 per gallon of alternative jet fuel.

Eligibility for the credit for sales of alternative jet fuel is limited to businesses that produce alternative jet fuel located in a qualifying county, or a business's designated alternative jet fuel blender located in Washington. A qualifying county is a county that has a population less than 650,000.

Contract pricing for sales of alternative jet fuel between a person claiming the credit and the final consumer must be adjusted to reflect the per gallon credit.

B&O Tax Credit for Purchases of Alternative Jet Fuel.

A B&O credit is also available for certain purchases of alternative jet fuel. The credit is equal to \$1 for each gallon of alternative jet fuel that has at least 50 percent less carbon dioxide equivalent emissions than conventional jet fuel. The credit amount increases by \$0.02 for each additional 1 percent reduction in carbon dioxide equivalent emissions beyond 50 percent. The credit may not exceed \$2 per gallon of alternative jet fuel.

Credits may be earned only on purchases of alternative jet fuel for flights departing in Washington.

Public Utility Tax Credit for Use of Alternative Jet Fuel.

A credit is allowed against the public utility tax (PUT) otherwise due for persons engaged in the use of alternative jet fuel. The credit is equal to \$1 for each gallon of alternative jet fuel that has at least 50 percent less carbon dioxide equivalent emissions than conventional jet fuel. The credit amount increases by \$0.02 for each additional 1 percent reduction in carbon dioxide

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equivalent emissions beyond 50 percent. The credit may not exceed \$2 per gallon of alternative jet fuel.

A person may not receive an alternative jet fuel PUT tax credit for amounts of alternative jet fuel claimed as credits for purposes of the B&O tax credit.

Climate Commitment Account—Use of Funds.

The State Treasurer may, subject to appropriations for this specific purpose, transfer from the Climate Commitment Account to the State General Fund an amount equal to any reduction in state revenue from the preferential B&O tax rate and the B&O and PUT credits for the prior calendar year, as annually determined by the DOR.

Definitions.

"Alternative jet fuel" is defined as a fuel made from petroleum or nonpetroleum sources that can be blended and used with conventional petroleum jet fuels without the need to modify aircraft engines and existing fuel distribution infrastructure, and that have a lower carbon intensity than the applicable annual carbon intensity standard in Table 2 of WAC 173-424-900. Alternative jet fuel includes jet fuels derived from coprocessed feedstocks at a conventional petroleum refinery.

Appropriation: None.

Fiscal Note: Available.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.