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## Environment & Energy Committee

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### HB 1091

**Brief Description:** Reducing greenhouse gas emissions by reducing the carbon intensity of transportation fuel.

**Sponsors:** Representatives Fitzgibbon, Slatter, Berry, Dolan, Bateman, Ramos, Simmons, Ramel, Senn, Peterson, Duerr, Ryu, Valdez, Callan, Kloba, Chopp, Ormsby, Frame, Macri, Pollet, Goodman and Bergquist; by request of Office of the Governor.

#### Brief Summary of Bill

- Directs the Department of Ecology (Ecology) to adopt rules establishing a Clean Fuels Program (CFP) to limit the greenhouse gas (GHG) emissions per unit of transportation fuel energy to 10 percent below 2017 levels by 2028 and 20 percent below 2017 levels by 2035.
- Directs Ecology to update, prior to 2032, CFP rules to further reduce GHG emissions from each unit of transportation fuel for each year through 2050, consistent with statutory state emission reduction limits.
- Excludes exported fuel, electricity, fuel used by vessels, railroad locomotives, and aircraft, and certain other categories of transportation fuel from the CFP's GHG emission intensity reduction requirements.
- Requires the CFP to include processes for the registering, reporting, and tracking of compliance obligations and to establish bankable, tradeable credits used to satisfy compliance obligations.
- Requires annual reporting by Ecology on the CFP, as well as an analysis of the program's first five years by the Joint Legislative Audit and Review Committee.
- Retains the current distribution of revenue under the 2015 Transportation Revenue Package, eliminating changes that would have been triggered as a result of the establishment of a CFP.

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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.*

**Hearing Date:** 1/14/21

**Staff:** Jacob Lipson (786-7196).

**Background:**

Greenhouse Gas Reporting Requirements and State Limits.

The United States Environmental Protection Agency (EPA) and the Department of Ecology (Ecology) identify carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride as greenhouse gases (GHGs) because of their capacity to trap heat in the Earth's atmosphere. According to the EPA, the global warming potential (GWP) of each GHG is a function of how much of the gas is concentrated in the atmosphere, how long the gas stays in the atmosphere, and how strongly the particular gas affects global atmospheric temperatures. Under state law, the GWP of a gas is measured in terms of the equivalence to the emission of an identical volume of carbon dioxide over a 100-year timeframe (carbon dioxide equivalent or CO<sub>2</sub>e).

Under the federal Clean Air Act, GHGs are regulated as an air pollutant and are subject to several air regulations administered by the EPA. These federal Clean Air Act regulations include a requirement that facilities and fuel suppliers whose associated annual emissions exceed 25,000 metric tons of CO<sub>2</sub>e report their emissions to the EPA. At the state level, GHG reporting is regulated by Ecology under the state Clean Air Act. This state law requires facilities, sources, and sites whose emissions exceed 10,000 metric tons of CO<sub>2</sub>e each year to report their annual emissions to Ecology. Distributors of gasoline, diesel, and aircraft fuel whose GHG emissions exceed 10,000 metric tons and who pay fuel taxes to the Department of Licensing (DOL) must use the fuel sale information submitted for the DOL fuel tax purposes to report to the state the GHG emissions associated with the fuel.

Ecology and the Department of Commerce must report to the Governor and Legislature by December 31 of even-numbered years regarding total GHG emissions and GHG emissions by source sector in Washington. According to the most recent Ecology data, as of 2017 the total annual GHG emissions in Washington were estimated at 97.5 million metric tons (MMT) of CO<sub>2</sub>e. Of these emissions, a total of 43.26 MMT CO<sub>2</sub>e were attributable to transportation sources, of which on-road gasoline accounted for 21.53 MMT CO<sub>2</sub>e and on-road diesel accounted for 8.36 MMT CO<sub>2</sub>e.

In 2008, Washington enacted legislation that sets a series of limits on the emission of GHGs within the state. Ecology is responsible for monitoring and tracking the state's progress toward the emission limits. In 2020, additional legislation was enacted to update the state limits to the following:

- By 2020, reduce overall emissions of GHGs in the state to 1990 levels, or 90.5 MMT.
- By 2030, reduce GHGs to 45 percent below 1990 levels, or 50 MMT.
- By 2040, reduce overall emissions of GHGs in the state to 70 percent below 1990 levels,

or 27 MMT.

- By 2050, reduce overall emissions of GHGs in the state to 95 percent below 1990 levels, or 5 MMT, and achieve net-zero GHG emissions

### State Clean Air Act.

Ecology and seven local air pollution control authorities (local air authorities) have each received approval from the EPA to administer aspects of the federal Clean Air Act in Washington. Local air authorities have primary responsibility for administering the state and federal Clean Air Acts in counties which have elected to activate a local air authority or to form a multicounty air authority. In other areas of the state, Ecology is responsible for administering state and federal Clean Air Act programs.

Under the federal Clean Air Act, each state maintains a State Implementation Plan (SIP) that describes how the state implements clean air programs to achieve the federal National Ambient Air Quality Standards (NAAQS) for certain air pollutants, known as criteria pollutants. If the state does not achieve NAAQS in a portion of the state for a particular criteria pollutant, that area is considered to be in nonattainment, and the state must revise its SIP with the goal of regaining attainment with NAAQS. Areas that have previously been designated as nonattainment areas but that subsequently regained NAAQS compliance are considered to be maintenance areas. In maintenance areas, the SIP must be revised to incorporate local maintenance plans designed to prevent those areas from relapsing into nonattainment status. Areas in Washington covered by maintenance plans for various criteria pollutants as of January 1, 2021, include areas of King, Pierce, Spokane, and Thurston counties, as well as the cities of Vancouver, Yakima, and Wallula. No areas of Washington are currently designated with nonattainment status.

Violations of Clean Air Act requirements are punishable by a variety of criminal and civil penalties. Civil penalties of up to \$10,000 per violation are authorized by the state Clean Air Act.

### Fuel Content.

The state Motor Fuel Quality Act (MFQA), enacted in 1990, adopted motor fuel standards, authorized the Washington State Department of Agriculture (WSDA) to set state fuel standards, and established a sampling, testing, and enforcement program administrated by the WSDA. Under the MFQA, it is unlawful to deceive the purchaser of fuel as to its nature or quality, among other aspects. Violations of this prohibition are enforced by the WSDA. Washington's Renewable Fuel Standard was enacted in 2006 as a component of the MFQA, and establishes requirements for the biodiesel content of diesel fuel, and the ethanol content of gasoline:

- Special fuel licensees must provide evidence that at least 2 percent of diesel fuel annually sold in Washington is biodiesel or renewable diesel fuel. This requirement will increase to at least 5 percent if the WSDA determines that both in-state feedstock and oilseed crushing capacity can satisfy a 3 percent requirement. The WSDA has not certified that the state has met this threshold.

- Motor vehicle fuel licensees must provide evidence that at least 2 percent of the total gasoline sold in the state is denatured ethanol. This ethanol requirement may be increased if the WSDA determines an increase would not jeopardize the state's continued attainment of federal Clean Air Act standards, and that the state can economically support the production of higher ethanol blends.

#### Clean Fuel Programs in Other States.

California and Oregon have each instituted policies that require reductions in the GHG emissions associated with transportation fuels, as measured against a standard unit of fuel energy (carbon intensity). California's program, which began in 2010, requires a 10 percent reduction by 2020 and a 20 percent reduction by 2030 in the carbon intensity of gasoline and diesel fuel, in conjunction with the use of fuels that serve as substitutes for those fuels. Oregon's program, which began in 2015, currently requires a 10 percent reduction by 2025 in the carbon intensity of transportation fuels, although additional targets for Oregon's program have been set for 2030 and 2035 by executive order but have not yet adopted into program rules.

Both the California and Oregon programs function by assigning compliance obligations, also known as deficits, to persons associated with the production or import of fuels that exceed an average carbon intensity of fuel based on a baseline year. In tandem with the assignment of deficits, the programs provide for the generation of credits that denote the production or import of fuel with a carbon intensity of less than the baseline carbon intensity. As of 2019, California's program also allows the generation of credits for certain other activities with a nexus to the transportation fuel supply chain, such as for the installation of electric vehicle charging infrastructure. The programs of both states measure the carbon intensity of transportation fuels based on a lifecycle analysis of direct and indirect GHG emissions associated with the production, distribution, and consumption of the fuels. Both programs provide exemptions for certain categories of transportation fuels.

#### 2015 Transportation Revenue Package.

In 2015, the Legislature enacted a bill that raised revenue for transportation purposes from a variety of transportation-related sources ("Transportation Revenue Package"). Among other sources of revenue, the Transportation Revenue Package generated revenue by increasing fees for:

- enhanced and commercial driver's licenses; and
- vehicle weight fees that apply to passenger vehicles and motor homes.

In general, the enhanced and commercial driver's license fees are deposited into the Highway Safety Fund (used for driver's license implementation, driver improvement, and financial responsibility, among other programs), while the vehicle weight fees are deposited into a combination of the Multimodal Transportation Account (used for transportation purposes) and the Freight Mobility Multimodal Account (used for certain freight mobility projects approved by the Freight Mobility Strategic Investment Board). However, if a clean fuel standard policy is

adopted by rule or otherwise initiated by a state agency prior to July 1, 2023, the additional revenue raised from the driver's license and vehicle weight fee increases in the 2015 Transportation Revenue Package would be redirected from the Highway Safety Fund, Multimodal Transportation Account, and Freight Mobility Multimodal Account, and would instead be deposited into the Connecting Washington Account, which is used for projects that have been identified in a transportation appropriations act as "Connecting Washington" projects or improvements.

## **Summary of Bill:**

### Program Goal.

The Department of Ecology (Ecology) is directed to adopt a rule establishing a Clean Fuels Program (CFP) limiting the greenhouse gas (GHG) emissions attributable to each unit of transportation fuel (carbon intensity) to 10 percent below 2017 levels by 2028 and 20 percent below 2017 levels by 2035. The rule must establish a start date for the program of no later than January 1, 2023. By December 31, 2031, Ecology must update its CFP rules to reduce the carbon intensity of transportation fuel for each year through 2050 so that total emissions from transportation sources in 2050 are consistent with a 2050 reduction in overall emissions of GHGs in the state to 95 percent below 1990 levels, or 5 million metric tons, and achieving net-zero GHG emissions.

### Covered and Exempt Fuels.

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 (transportation fuels). Excluded from the CFP carbon intensity reduction requirements are the following:

- transportation fuel that is exported or otherwise not used in Washington;
- electricity;
- transportation fuel that is used for the propulsion of all aircraft, railroad locomotives, or vessels;
- military tactical vehicles and tactical support equipment;
- transportation fuels that are used in volumes below thresholds adopted by rule by Ecology;
- and
- any other fuels that Ecology may adopt rules to exempt in order, with respect to similar GHG or low carbon fuel programs, to avoid mismatched incentives, fuel shifting between markets, or other outcomes counter to the intent of the CFP.

Until January 1, 2028, the following fuels are also exempt from the CFP's carbon intensity reduction requirements:

- special fuel used off-road in vehicles used primarily to transport logs;
- dyed special fuel used in vehicles that are not designed to transport persons or property, not designed to be operated on highways, and that are used primarily for construction

- work, including timber harvest and mining; and
- dyed special fuel used for agricultural purposes that are exempt from state fuel taxation.

### Mechanics of the Clean Fuels Program.

The rule adopted by Ecology to implement the CFP must include:

- standards for assigning levels of 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. Ecology must establish separate carbon intensity standards for gasoline and its substitutes and diesel and its substitutes;
- processes for assigning and verifying bankable, tradeable credits for the production, import, or dispensation for use of transportation fuels with associated lifecycle GHG emissions that are less than 80 percent of the 2017 baseline carbon intensity levels established by Ecology, or when other specified activities are undertaken that support the reduction of GHG emissions associated with transportation in Washington;
- a requirement that producers or importers of transportation fuels that are ineligible to generate credits must register in the CFP;
- the option to elect to register and earn credits in the CFP for: (1) persons associated with transportation fuels with a carbon intensity below the carbon intensity standard; and (2) persons associated with exempt transportation fuels, including electricity and fuel used to propel vessels, railroad locomotives, or aircraft;
- a determination of the carbon intensity of electricity supplied by electric utilities participating in the CFP based on the mix of generating resources used by each electric utility; and
- cost containment mechanisms.

Except where inconsistent with specific statutory direction from the Legislature, Ecology's CFP rule must seek to harmonize with similar programs that have been adopted by other states with significant amounts of transportation fuel supplied to or from Washington.

Ecology may require electric utilities and transportation fuel suppliers to submit GHG emissions data and information that is different from the types of data currently submitted to the state by those entities. Ecology may also require periodic reporting on CFP activities from producers and importers of transportation fuels. Transactions that transfer ownership of fuels in the CFP must be accompanied by documentation assigning compliance responsibility for the fuels. To the extent practicable, CFP reporting rules for persons associated with the supply chains of transportation fuels must be consistent with the reporting procedures of similar clean fuels programs in other states and with other state programs that require similar information to be reported by regulated parties, including electric utilities.

### Alternative Credit-Generating Mechanisms.

In addition to the provision of transportation fuel with a carbon intensity below the Ecology-

established standard, Ecology's CFP rules may allow the generation of credits from specified activities related to the reduction of GHG emissions associated with transportation, including:

- specified carbon capture and sequestration projects;
- the fueling of electric vehicles directly with zero-carbon electricity or through the retirement of renewable energy credits associated with the electricity; and
- the use of smart vehicle charging technology that results in electric vehicle fueling during times of comparatively low carbon intensity of the electric grid.

Ecology's rules must allow the generation of credits from the provision of zero emission vehicle infrastructure and low-carbon fuel infrastructure. Ecology's rules may establish limits on the number of credits available from alternative credit-generating mechanisms, and any limits must consider the return on investment necessary for a credit-generating activity to be financially viable.

#### Public Reporting Requirements.

Beginning in 2025, Ecology must submit a report to the Legislature every year on May 1 detailing certain information regarding the previous year's CFP activities, including volumes of credits and transportation fuels. An estimate of probable costs or cost savings per gallon of gasoline attributable to the CFP must be prepared annually by an independent consultant under contract to Ecology, and must be announced to the news media in a press release when the annual report is submitted to the Legislature.

The Department of Commerce must develop a periodic fuel supply forecast to project the availability of fuels and credits necessary for compliance with CFP requirements. This forecast must be finalized no later than 90 days before the start of a CFP compliance period.

By December 1, 2029, the Joint Legislative Audit and Review Committee is required to perform an analysis of the first five years of the CFP. This analysis must include the costs and benefits of the program and an evaluation of the information summarized by Ecology in their annual reports.

#### Other Provisions.

The current distribution is retained for revenues granted by the 2015 Transportation Revenue Package, eliminating changes that would have been triggered as a result of the establishment of a clean fuels standard.

Ecology may require that persons electing or required to participate in the CFP pay a fee to cover the direct and indirect costs to Ecology and the Department of Commerce for developing and implementing the CFP. If Ecology elects to require program participants to pay a fee, it must adopt rules to set a payment schedule and the amount of the fee, and must enter into an interagency agreement with the Department of Commerce and complete a biennial workload analysis. Fees are deposited into a Clean Fuels Program Account (Account) used to carry out the

CFP.

Ecology must establish and consult with a forestland and agricultural landowner stakeholder advisory panel to solicit input on how to incentivize the sequestration of GHGs on forest and agricultural lands through program credit allotment.

Violations of CFP requirements are subject to civil and criminal penalties under state Clean Air Act authority. Penalties collected from CFP violations must be deposited into the Account.

Fifty percent of revenues earned by electric utilities from electricity supplied to retail customers to generate credits under the CFP must be used for transportation electrification, which may include the production and provision of renewable hydrogen. Of this 50 percent, 60 percent of the transportation electrification projects must be in or directly benefit federal Clean Air Act maintenance or nonattainment areas, areas at risk of maintenance or nonattainment designation, areas designated as maintenance or nonattainment as of January 1, 2019, or areas identified by the Department of Health as disproportionately impacted communities, if such areas are within the service area of the utility. Ecology may adopt rules governing the limitations on the use of the other 50 percent of revenues earned by electric utilities from participating in the CFP.

To the extent that the CFP conflicts with the state Motor Fuel Quality Act and biofuel requirements, the CFP's requirements supersede.

A severability clause is included.

**Appropriation:** None.

**Fiscal Note:** Preliminary fiscal note available.

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