

## Clean Fuels Program Comparison Chart: California, Oregon, and Proposed Washington Programs

Provision.	WA 2SHB 2338 (2018) <i>Section/(Subsection)</i>	WA SHB 1110 (2019)	Pre-2019 California Rule <i>(Rule Citation)</i>	CA Rule Taking Effect January 2019	Pre-2019 Oregon Rule <i>(Rule Citation)</i>	OR Rule Taking Effect 1/2019
<b>Program Start Date.</b>	January 1, 2020. <u>3(1)</u> .	No later than January 1, 2021. <u>3(1)</u> .	April 15, 2010.	Same as pre-2019 rule.	January 1, 2016.	Same as pre-2019 rule.
<b>Program Goal.</b>	10% below 2017 levels by 2028. <u>3(1)</u> .	10% below 2017 levels by 2028 and 20 below 2017 levels by 2035. <u>(3)(1)</u> .	10% below 2010 levels by 2020. <sup>1</sup>	20% below 2010 levels by 2030.	10% below 2010 levels by 2025. ( <u>OAR 340-253-0000</u> ).	Same as pre-2019 rule.
<b>Intermediate Carbon Intensity Reductions on Path to Program Goal?</b>	Not specified.	Not specified.	Yes. Annual targets established until 10% reduction in 2020 is met. ( <u>17 CCR §95484</u> ). <i>(See Figure 1 in endnotes).</i> Separate annual carbon intensity (CI) targets are established for gasoline + its replacement fuels and diesel + its replacement fuels.	Yes. Annual targets established until 20% reduction in 2030 is met. ( <u>17 CCR §95484</u> ). <i>(See Figure 1 in endnotes).</i> Separate annual carbon intensity (CI) targets are added to pre-2019 rule for jet fuel + its replacement fuels.	Yes. Annual targets established until 10% reduction in 2025 is met. ( <u>OAR 340-253-8010</u> ). <i>(See Figure 2 in endnotes).</i> Separate annual carbon intensity (CI) targets are established for gasoline + its replacement fuels and diesel + its replacement fuels.	Yes, updated annual targets established until 10% reduction in 2025 is met. ( <u>OAR 340-253-8010</u> ) <i>(See Figure 2).</i> Separate annual carbon intensity (CI) targets are added to pre-2019 rule for jet fuel + its replacement fuels. CI baseline for 2019 & subsequent years is adjusted.
<b>Types of Fuels Required to be Covered by the Program.</b>	Transportation fuels that have a carbon intensity that is at least equal to a per-unit CI standard determined by the Department of Ecology. <u>4(1)(h)</u> .	Transportation fuels that are ineligible to generate credits because they exceed 80% of the 2017 per-unit CI levels identified by the department. <u>4(3); 7</u> .	Any transportation fuel that is sold, supplied, or offered for sale in California. ( <u>17 CCR § 95482</u> ). Transportation fuel is defined as any fuel used or intended as motor vehicle fuel or for transportation purposes.	Same as pre-2019 rule, with some amendments to the categories of alternative fuels covered by the program. ( <u>17 CCR § 95482</u> ).	Gasoline, diesel, ethanol, biodiesel, renewable hydrocarbon diesel, blends of the above fuels, and transportation fuels that are not explicitly listed among the clean fuels that can elect program participation. ( <u>OAR 340-253-200(2)</u> ).	Same as pre-2019 rule.

<sup>1</sup> Ca Exec. Order S-01-07 (01/18/2007) <https://www.arb.ca.gov/fuels/lcfs/eos0107.pdf>.

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<b>Fuels Allowed to be Covered by the Program.</b>	Transportation fuels that have a CI that is less than the per-unit standard. <u>4(1)(i)</u> . Exempt transportation fuels. <u>4(1)(j)</u> .	Transportation fuels that have a CI less than 80 percent of the 2017 per-unit levels. <u>4(4)</u> . Exempt transportation fuels, including electricity, and fuels used to propel vessels, aircraft, and railroad locomotives. <u>4(5)</u> .	Alternative fuels that have a full fuel cycle CI that meets the CI compliance schedules for each program year until 2020. ( <u>17 CCR § 95482</u> ). Such fuels include electricity, hydrogen, hydrogen blends, fossil CNG and biofuels.	Same as pre-2019 rule, except that list of opt-in fuels includes: electricity, Bio-CNG, Bio-LNG, Bio-L-CNG, Alternative Jet Fuel, and Renewable Propane. ( <u>17 CCR § 95482</u> ).	Clean fuels with a CI less than the standard for gas or diesel: Bio-based compressed natural gas, bio-based liquefied compressed natural gas, bio-based liquefied natural gas, fossil compressed natural gas, fossil liquefied compressed natural gas, fossil liquefied natural gas, hydrogen or hydrogen blends, liquefied petroleum gas, and electricity. ( <u>OAR 340-253-200(3)</u> ).	Clean fuels, which include the same fuels the pre-2019 rule, except that fossil and renewable LPG are distinguished as separate categories of fuel, and alternative jet fuel is added to the list of clean fuels. ( <u>OAR 340-253-200(3)</u> ).
<b>Persons Required to Register and Report In Program.</b>	Producers or importers of fuel that exceeds the per-unit CI standard. <u>(5)(1)</u> .	Producers or importers of transportation fuels that are ineligible to generate credits. <u>7(1)</u> .	Any person who is responsible for a transportation fuel. The assignment of responsibility depends on the type of transportation fuel, but is generally the producer or importer of the fuel, unless responsibility is transferred to another party by written contract. ( <u>17 CCR § 95483</u> ).	Fuel reporting entities for categories of deficit-generating or credit-generating fuels are specified. The first 'reporting entity' is assumed to be the credit or deficit generator by default, and must initiate reporting for a given amount of fuel. Entities that receive transfers of fuel from a first "reporting entity" may also be required to report and retain responsibility for the fuel, if a written contract assigns program responsibilities to the recipient. Fuel exports must also be reported. ( <u>17 CCR § 95483</u> )	Producers or importers of fuels that are required to participate in the program. Any entities designated as "aggregators" to generate or trade credits on behalf of a person in the program. ( <u>OAR 340-253-250(2)</u> ). Assignment of responsibility may be transferred for certain fuels, so long as registration, recordkeeping, and reporting requirements are fulfilled. ( <u>OAR 340-253-310/320/330/340</u> ).	Same as pre-2019 rule.

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<b>Persons Allowed to Register in Program.</b>	Producers or importers of transportation fuels that do not exceed the carbon intensity standard and who elect to participate. <u>(5)(1)</u> .	Persons associated with the supply chains of transportation fuels lower than the 2017 per-unit CI levels, including producers, importers, distributors, retailers, or users, if they elect to participate in the program <u>4(4);7</u> .	Certain out-of-state fuel producers, distributors or marketers of imported fuel, and natural gas suppliers. All providers of the following fuels: Electricity, hydrogen, hydrogen blends, fossil compressed natural gas from North America, bio-compressed natural gas, bio-liquefied natural gas, and bio-liquefied compressed natural gas. <u>(17 CCR § 95483)</u> .	Certain out-of-state fuel producers, distributors, or marketers of imported fuel. "Clearing service" providers that take temporary possession of credits. Persons associated with fuels that are allowed to participate in the program, including utilities that supply electricity for electrical vehicles (EVs). <u>(17 CCR § 95483 and 95483.1)</u> .	Persons eligible to generate credits as a result of their association with fuels that are allowed to participate in the program. Credit-eligible persons associated with specific fuels and uses are identified. <u>(OAR 340-253-100 &amp; 320)</u> .	Same as pre-2019 rule, except that eligible credit generators are specified for the new types of credit-generating <i>fuels</i> (fossil LPG, renewable LPG, alternative jet fuel) and <i>uses</i> (forklifts, transportation refrigeration units). <u>(OAR 340-253-320, 330 &amp; 350)</u> .
<b>Compliance Period?</b>	Not specified.	Not specified.	Annual; Jan 1 through Dec 31 <u>(17 CCR §95485)</u> . Quarterly reporting.	Same as pre-2019 rule.	Annual; Jan 1 through Dec 31. <u>(OAR 340-253- 650)</u> . Quarterly reporting.	Same as pre-2019 rule.

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<b>Requirement that Specific Fuel Types be Used for Compliance?</b>	Any combination of fuels may be used. <u>4(1)(b)</u> . Only fuels with a CI of less than 80% of the 2017 baseline are eligible to generate credits. <u>4(1)(g)</u> . If Program requirements conflict with biofuel or other motor fuel quality requirements, Program requirements supersede. <u>3(1)</u> . Fuel emission life cycle analyses must neutrally consider the fuels' political jurisdiction of origin, and may not discriminate against out-of-state fuels. <u>4(1)</u> .	Any combination of credit-generating activities may be used for compliance. <u>4(3)(a)</u> . Only fuels with a carbon intensity of less than 80% of the 2017 CI levels are eligible to generate credits. <u>4(3)(b)</u> . If Program requirements conflict with biofuel or other motor fuel quality requirements, Program requirements supersede. <u>3(1)</u> . Fuel emission life cycle analyses must neutrally consider the fuels' political jurisdiction of origin, and may not discriminate against out-of-state fuels. <u>4(1)</u> .	Regulation does not specify fuel types used to achieve compliance.	Same as pre-2019 rule.	Regulation does not specify fuel types used to achieve compliance.	Same as pre-2019 rule.
<b>Credit Banking and Trading?</b>	Yes. Department of Ecology (ECY) rules must allow credit banking and trading. <u>4(1)</u> .	Yes. ECY rules must allow credit banking and trading. <u>4(3)(a)</u> .	Yes. Credits are generated through supply of fuels with CI values below that of the applicable standard for a given year. Credits can be transferred between registered parties. Credits may be banked indefinitely. ( <u>17 CCR § 95486</u> ).	Yes. Credits are generated through supply of fuels with CI values below that of the applicable benchmark for a given year. Credits can be transferred between registered parties. Credits may be banked indefinitely. ( <u>17 CCR § 95486</u> ).	Yes. Credits are generated through the production, import or dispensing of fuel for use with a CI less than the carbon intensity target established for that particular year. Credits can be transferred between registered parties. Credits may be retained indefinitely. ( <u>OAR 340-253-1000/1005</u> ).	Same as pre-2019 rule.

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<b>Credits Earned for Anything Other than Low-Carbon Fuels? (Capacity Investments, Credit Weighting and Multipliers, Carbon Capture)</b>	Credits are generated when fuels with a CI lower than the per-unit standard are produced, imported, or dispensed. Only transportation fuels with a CI of less than 80% of the per-unit standard are eligible to generate credits.	Credits are generated when fuels with a CI lower than the per-unit standard are produced, imported, or dispensed, or when specified activities are undertaken that support the reduction of greenhouse gas emissions associated with transportation in Washington. <u>4(3)(a)</u> . Only transportation fuels with a CI of less than 80% of the 2017 per-unit baseline are eligible to generate credits. <u>4(3)(a)</u> .	No.	(a) Incremental credits can be earned for (i) residential electric vehicle charging using low-CI electricity, (ii) smart-charging technology, and (iii) smart electrolysis technology. ( <u>17 CCR § 95483, 95486.1</u> ) (b) ZEV refueling infrastructure (DC fast chargers and hydrogen refueling) is eligible to earn credits until 2025. These credits are capped at 2.5% of previous quarter's deficits ( <u>17 CCR § 95486.2</u> ) (iii) (c) Carbon capture and storage (CCS) projects, which may include refinery and alternative fuel producer investments in CCS or entities employing direct air capture that removes carbon dioxide from the atmosphere, in addition to innovative crude oil production using CCS (allowed under old rule). Projects must follow approved protocols and be verified. ( <u>17 CCR § 95489 &amp; 95490</u> ).	No.	Same as pre-2019 rule.

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<b>Exemptions for Certain Types of End-Uses of Vehicle Fuels?</b>	None specified.	None. The ECY's rules may include exemptions if needed to avoid mismatched incentives or fuel shifting with regard to similar programs. <u>(5)(2)</u> .	Exemptions for military tactical vehicles and support equipment. <u>(17 CCR §95482(d))</u> .	Exemptions for deficit-generating fuel used in military tactical vehicles and support equipment. Deficit-generating fossil propane and CNG used in school buses purchased before 1/2020. <u>(17 CCR § 95482(d))</u> .	Exemptions for: racing activity vehicles, military tactical vehicles and support equipment, farm vehicles, farm tractors, implements of husbandry, motor trucks used to transport logs, and certain motor vehicles used for construction work <u>(OAR 340-253-250(2))</u> .	Same as pre-2019 rule.
<b>Maritime Fuels Covered?</b>	ECY rule must exempt fuel used by vessels <u>4(1)(e)</u> .	ECY rule must exempt fuels used for the propulsion of all vessels. <u>(5)(1)(b)</u> .	Exemption for fuel used in ocean-going vessels, but exemption does not apply to recreational and commercial harbor craft. <u>(17 CCR § 95482(d))</u> .	Exemption for fuel used in ocean-going vessels, but exemption does not apply to recreational and commercial harbor craft or to shore power provided to ocean-going vessels at birth. <u>(17 CCR § 95482(d))</u> .	Exemption for fuel used by watercraft. <u>(OAR 340-253-250(2))</u> .	Same as pre-2019 rule.
<b>Aviation Fuels Covered?</b>	ECY rule must exempt fuel used by aircraft <u>4(1)(e)</u> .	ECY rule must exempt fuels used for the propulsion of all aircraft. <u>(5)(1)(b)</u> .	Exemption for fuel used by aircraft. <u>(17 CCR §95482(d))</u> .	Exemption for conventional jet fuel or aviation gasoline. <u>(17 CCR §95482(c))</u> .	Exemption for fuel used by aircraft. <u>(OAR 340-253-250(2))</u> .	Same as pre-2019 rule.
<b>Railroad Locomotive Fuels Covered?</b>	ECY rule must exempt fuel used by railroad locomotives. <u>4(1)(e)</u> .	ECY rule must exempt fuels used for the propulsion of all railroad locomotives. <u>(5)(1)(b)</u> .	Exemption for fuel used by interstate locomotives (to be interstate, the locomotive must have less than 90% of its fuel consumption, hours of operation, or rail miles traveled in CA). <u>(17 CCR § 95482(d) &amp; §95483(a)(2))</u> .	Exemption for fuel used by interstate locomotives (to be interstate, the locomotive must have less than 90% of its fuel consumption, hours of operation, or rail miles traveled in CA). <u>(17 CCR § 95482(d) &amp; §95483(a)(2))</u> .	Exemption for fuel used by railroad locomotives. <u>(OAR 340-253-250(2))</u> .	Same as pre-2019 rule.
<b>Can Exempt Fuels Generate Credits?</b>	Yes. Maritime, aviation, railroad, and other exempt fuels may generate credits. <u>4(1)(i)</u> .	Yes. Electricity and fuel used by aircraft, vessels, and railroad locomotives, and other exempt fuels may generate credits. <u>4(5)</u> .	No. <u>(17 CCR § 95487(a)(2)(C))</u> .	No, except that alternative jet fuel may earn credits, as may shore power to ocean-going vessels. <u>(17 CCR § 95487(a)(2)(C))</u> . <u>(17 CCR § 95482(d))</u> . <u>(17 CCR § 95486.1)</u> .	Sometimes. In general, only fuels used in motor vehicles are eligible to generate credits. However, electricity used to power fixed guideway (light rail) systems is eligible for credit. <u>(OAR 340-253-320/330/340)</u> .	Same as pre-2019 rule, except that alternative jet fuel is eligible to generate credits <u>(OAR 340-253-350)</u> .

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<b>Exemptions for Small-Volume Fuels?</b>	ECY may exempt fuels produced in small volumes. <u>4(1)(d)</u> .	ECY may exempt fuels produced in small volumes. <u>5(1)(a)</u> .	Yes. Regulation does not apply to non-biomass-based fuels that are supplied in an annual aggregated volume of less than the energy equivalent of 3.6 million gallons of gasoline. Exemption for liquefied petroleum gas (propane). <u>(17 CCR § 95482)</u> .	Yes. Regulation does not apply to non-biomass-based fuels that are supplied in an annual aggregated quantity of less than the energy equivalent of 3.6 million gallons of gasoline. Exemption for credit-generating fossil CNG (until 2021, when it becomes deficit-generating) or propane (until 2024, when it becomes deficit-generating) dispensed at a fueling station with annual throughput of 150,000 gallons per year. <u>(17 CCR § 95482)</u> .	Yes. (1) Transportation fuels produced or imported in an aggregate volume of less than 360,000 gallons of fuel/year. (2) Small volume producers with a production of less than 10,000 gallons of fuel/year. (3) Small volume producers that directly use their entire volume of fuel and produce less than 50,000 gallons of fuel/year. <u>(OAR 340-253-250(1))</u> .	Same as pre-2019 rule.
<b>Carbon Intensity (CI) Calculations Based on Lifecycle Emissions?</b>	Yes. Production, storage, transport, and combustion of fuels and associated changes in land use all considered in life cycle assessment (LCA). ECY may rely on other state LCAs. ECY may require submission of GHG data by transportation fuel suppliers and electric utilities. ECY may adjust CI calculations for covered fuels. <u>4(1)(a)(i) and (iii)</u> .	Yes. Production, storage, transport, and combustion of fuels and associated changes in land use all considered in life cycle assessment (LCA). ECY may consider other state and national laboratory-developed LCAs. ECY may require submission by transportation fuel suppliers and electric utilities of data and information to calculate GHG emissions. ECY may adjust CI calculations for covered fuels. <u>4(1)(a)(i)-(iii) &amp; (4)(1)(c)</u> .	Yes. A fuel pathway CI consists of the sum of the GHG emitted throughout the production and use life cycle of the fuel, expressed on a per-unit-of-fuel-energy basis. It is denominated in units of gCO <sub>2</sub> e/MJ. Fuel pathways must be validated during an initial application process and verified annually by approved third parties. <u>(17 CCR § 96486.1 &amp; 95488 &amp; 95500)</u> .	Same lifecycle conceptual principle applies to CI calculations of fuel pathways as in pre-2019 rule, except that 2019 rule revises the many of the logistical details of applying for and certifying a fuel pathway and calculating CIs of various transportation fuels. <u>(17 CCR § 95488 &amp; 95500)</u> .	Yes. A fuel pathway CI consists of the sum of the GHG emitted throughout extraction, production, distribution, and combustion. It is denominated in units of gCO <sub>2</sub> e/MJ. <u>(OAR 340-253-400)</u> .	Same as pre-2019 rule, except that an updated carbon intensity model (OR GREET 3.0) is used, and fuel pathway categories are added and amended. <u>(OAR 340-253-400)</u> .

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<b>Power Train Efficiency Included in Carbon Intensity Calculations?</b>	ECY rule may include power train efficiency. <u>4(1)(a)(i)</u> .	ECY rule may include power train efficiency. <u>4(1)(a)(i)</u> .	Yes (termed Energy Economy Ratio (EER)). ( <u>17 CCR § 95486(b)(3)(B)-(D)</u> ).	Same as pre-2019 rule.	Yes (termed Energy Economy Ratio (EER)). ( <u>OAR 340-253-1020</u> ).	Same as pre-2019 rule.
<b>Calculation of Carbon Intensity of Electricity?</b>	Based on each utility's mix of electric generation resources. ECY may require submission of GHG data from electricity providers. <u>4(1)(a)(ii)</u> .	Based on each utility's mix of electric generation resources. ECY may require submission of GHG data from electricity providers. ECY may apply a asset-controlling supplier emission factor used in other clean fuels programs. <u>4(1)(c)</u> .	Statewide electricity CI value, based on CA-specific pathways and electric generation sources. Electricity generation sources dedicated to transportation electrification may be eligible for alternate carbon intensity certification. ( <u>17 CCR § 95486</u> ).	Same as pre-2019 rule, except that electric vehicles charged in a residential setting with electricity with a CI lower than the regional average or that are smart-charged and metered (based on time of charging) may be eligible for the generation of incremental credits ( <u>17 CCR § 95483</u> )	Statewide average electricity CI is default option. An alternate CI can be used: (a) if a utility has applied for a utility-specific carbon intensity, or (b) if electricity is generated at same location where it is dispensed into a motor vehicle. ( <u>OAR 340-253-400(3) &amp; 340-253-470</u> ).	Same as pre-2019 rule.
<b>Overlap with Other Carbon or Energy Regulatory Programs?</b>	ECY must consider overlap with Clean Air Rule adopted under RCW 70.94. <u>4(3)</u> .	ECY must consider overlap with Clean Air Rule adopted under RCW 70.94. <u>6(2)</u> .	Regulated parties may use credits for compliance with other GHG reduction initiatives, including under CA AB 32 (which includes CA's cap & trade program), if the other programs allow use of LCFS credits for purposes of program compliance. However, other program credits may not be used for CA LCFS purposes. ( <u>17 CCR §95487</u> ).	Credits generated outside of the LCFS program, including credits generated in other CA tradeable emission credit programs, may not be used in the LCFS program. ( <u>17 CCR §95487</u> ). Renewable energy credits (RECs) or other environmental attributes associated with electricity may be retired in the clean fuels program to establish a lower-carbon intensity electricity used for EV charging ( <u>17 CCR 95488.8</u> ).	Not specified in rule.	Same as pre-2019 rule, except that environmental attributes associated renewable power, biogas, and biomethane may not be claimed in other programs except for the federal renewable fuel standard. ( <u>ORS 340-253-0400 &amp; 0600</u> ).



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<b>Credit Trading with Clean Fuels Programs in Other Jurisdictions?</b>	Not explicitly addressed. ECY must adopt rules that are consistent with other clean fuels programs, except as otherwise specified. <u>4(2)</u> .	Not explicitly addressed. Except as otherwise specified, ECY should seek to adopt rules that are harmonized with other clean fuels programs that supply or have the potential to supply significant amounts of transportation fuel to Washington, or to receive significant amounts of transportation fuel from Washington. <u>6(1)</u> .	Partial: A regulated party may export credits for compliance with other GHG reduction initiatives, if the other programs allow the use of CA credits. However, credits generated outside CA's LCFS program may not be used in CA's LCFS program. ( <u>17 CCR § 95487</u> ).	Credits generated outside of the LCFS program, including credits generated in other CA tradeable emission credit programs, may not be used in the LCFS program. ( <u>17 CCR §95487</u> ).	Not specified in rule.	Same as pre-2019 rule.
<b>Registration Requirements for Credit and Deficit Generators.</b>	ECY may adopt credit validation procedures. Producers or importers of fuels with CI above standard must register. Others may register upon electing to participate. Transactions of covered fuels must be accompanied by documentation assigning credit/deficit responsibility. <u>4(1)(g) &amp; 5(1)-(3)</u> .	ECY may adopt rules requiring the periodic reporting of information by persons associated with the supply chains of transportation fuels. Producers or importers of fuels with CI above standard must register. Persons must register in order to generate credits from fuels or other activities. Transactions of covered fuels must be accompanied by documentation assigning credit/deficit responsibility. <u>7</u> .	Registration applications are accepted through an online form. Requirements include qualification as a regulated or opt-in party, identifying information, and contact information. Registration must occur within certain deadlines. Transfers of LCFS compliance responsibility must be documented ( <u>17 CCR §95483.2 &amp; 95491</u> ).	Registration applications are accepted through an online form. Requirements include qualification as a regulated or opt-in entity, identifying information, and contact information. Certain registering entities must also register their fueling supply equipment. Registration must occur within certain deadlines. Transfers of LCFS compliance responsibility must be documented ( <u>17 CCR §95483.2 &amp; 95491</u> ).	Regulated parties, credit generators, and aggregators may register. Program registrants must submit information via an online program. Requirements include identifying information, contact information, and information regarding Oregon business operations. Registrations may be modified or cancelled. Certain records must be retained for 5 years by registered parties. Transactions involving fuels covered by the program must be accompanied by documentation assigning credit/deficit responsibility. ( <u>OAR 340-253-500</u> ).	Same as pre-2019 rule.

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<b>Program Cost Containment?</b>	ECY is authorized to adopt cost containment mechanisms, including mechanisms to allow a person to be in compliance when sufficient credits have not been obtained at the end of a program year. <u>4(1)(f)</u> .	ECY's rules must include cost containment mechanisms, which may include a credit clearance market to make credits available for sale to regulated persons after the conclusion of a compliance period at a predetermined cost, or similar procedures that allow a person who has not been able to obtain sufficient credits to do so after the conclusion of a compliance period. <u>4(6)</u> . The Department of Commerce must develop a periodic fuel supply forecast to project the availability of fuels needed to comply with program requirements. <u>10</u> .	Program incorporates a credit clearance process. If credit clearance process occurs at end of year, a regulated party that has not met obligations must acquire pro-rata share of available credits in clearance market. If no clearance process occurs, unmet obligations must retire accumulated credit balance plus interest within five years. ARB sets annual maximum credit price for clearance market, based on \$200/credit in 2016 plus inflation. ( <u>17 CCR § 95485(c)</u> ). 'Carryback' credits may sometimes be acquired in the three months after a compliance period to address compliance obligations from previous year. ( <u>17 CCR § 95486</u> ).	Same as pre-2019 rule, with some amendments to the calculations of inflation, and extending by one month the length of time after the conclusion of a compliance period in which a carryback credit may be acquired. ( <u>17 CCR § 95485(c)</u> ). ( <u>17 CCR § 95486</u> ).	Program incorporates a credit clearance process. Regulated party that has not met obligations must acquire pro-rata share of available credits in clearance market. Oregon Department of Environmental Quality (ODEQ) sets annual maximum credit price for clearance market, based on \$200/credit in 2017 plus inflation. At the end of a compliance period, a regulated party may carry forward a small deficit without penalty. 'Carryback' credits may be acquired to address compliance obligations from previous year. ( <u>OAR 340-253-1030</u> ). ODEQ can issue an emergency program deferral due to a fuel shortage, credit market disruption, or abnormal credit market behavior. ( <u>OAR 340-253-2000</u> ). ODEQ is directed to declare a forecasted fuel supply program deferral when it receives economic analysis predicting that the volume of credits available will be less than 100% of those needed by regulated parties. ( <u>OAR 340-253-2100</u> ).	Same as pre-2019 rule.

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Provision.	WA 2SHB 2338 (2018) <i>Section/(Subsection)</i>	WA SHB 1110 (2019)	Pre-2019 California Rule <i>(Rule Citation)</i>	CA Rule Taking Effect January 2019	Pre-2019 Oregon Rule <i>(Rule Citation)</i>	OR Rule Taking Effect 1/2019
<b>Use of Unclaimed Credits?</b>	ECY may designate an entity to aggregate unclaimed credits. <u>4(1)(k)</u> .	ECY may designate an entity to aggregate unclaimed credits. <u>4(7)</u> .	Not addressed.	Electric utilities may designate a third party to sell the utilities' credits. ( <u>17 CCR § 95483</u> ).	If an electric utility does not register in the program or designate an aggregator, then a backstop aggregator designated by ODEQ may claim credits that the utility could have claimed. ( <u>OAR 340-253-0330</u> ).	Same as pre-2019 rule.
<b>Expenditure Requirements for Persons who Generate Revenues from Program?</b>	25% of program revenues from electric utilities must be spent on transportation electrification projects (TEPs) in federal air quality nonattainment or maintenance status. Other 75% of electric utility program revenues must be spent per ECY rule. <u>6(1)</u> .	50% of program revenues of electric utilities must be spent on TEPs. 30% of overall utility revenues must be spent on TEPs in or benefitting federal air quality nonattainment or maintenance status, such areas that existed on the act's effective date, or an area designed by the ECY as at risk of such status. Other 50% of electric utility program revenues must be spent per ECY rule. <u>8(2)</u> .	Electric utilities that supply electricity used by residences to power electric vehicles may generate credits and must use all credit proceeds to benefit current or future EV customers and abide by certain other requirements. ( <u>17 CCR § 95483(e)</u> ).	Electric utilities that receive regulatory approval to initiate a statewide point-of-purchase rebate program for EVs, electric utilities must dedicate a specified percentage of credits to funding the program. ( <u>17 CCR § 95483(c)</u> ).	None specified in rule, except that a backstop generator designated by ODEQ must specify in a plan how it will use the revenue from the sale of credits. ( <u>OAR 340-253-0330</u> )	Same as pre-2019 rule.
<b>Penalties for Non-Compliance?</b>	Penalties under Clean Air Act (RCW 70.94). Penalty money must be used for grants to local governments for TEPs in federal air quality nonattainment or maintenance status areas. <u>6(2)</u> .	Penalties under Clean Air Act (RCW 70.94). Penalty money is deposited, along with program fees, into an account created to carry out the Clean Fuels Program. <u>11; 18</u>	Penalties under other California Air Resources regulations. Penalties for certain types of enforcement actions may only be used for environmental cleanup, prevention, and abatement; other penalties are deposited into state general fund. ( <u>Cal HSC § 38580, § 42405; § 43031.5</u> ).	Same as pre-2019 rule.	Violations are treated as Class I or Class II air quality violations, depending on the program requirement that was the subject of the violation. All penalties issued by the Oregon Department of Environmental Quality, including program penalties, are deposited into Oregon's general fund. ( <u>OAR 340-012-0054</u> ).	Same as pre-2019 rule, except that additional types of violations of program requirements are specified and classified for purposes of penalty amount.

## Clean Fuels Program Comparison Chart: California, Oregon, and Proposed Washington Programs

Provision.	WA 2SHB 2338 (2018) <i>Section/(Subsection)</i>	WA SHB 1110 (2019)	Pre-2019 California Rule <i>(Rule Citation)</i>	CA Rule Taking Effect January 2019	Pre-2019 Oregon Rule <i>(Rule Citation)</i>	OR Rule Taking Effect 1/2019
<b>Program Fees?</b>	No	Yes. ECY may require a fee from those who are required or elect to participate. ECY must adopt rules to establish a payment schedule and the amount of the fees. Fees are deposited into an account created to carry out the Clean Fuels Program. <u>11</u> .	No	No	No	No
<b>Public Reporting on Program</b>	ECY annually reports to the Legislature every year starting in 2021 with program statistics and potential statutory changes. JLARC must analyze the impacts of the first 5 years of the program by 2026. <u>(7)</u> .	ECY annually reports to the Legislature starting in April 2023 with program statistics, and may recommend statutory changes annually. JLARC must analyze the impacts of the first 5 years of the program by 2027. The state Clean Air Act's protocols for the confidentiality of submitted information apply to the Program. <u>(7,9 &amp; 12)</u> .	Progress report in 2017 and full review of LCFS program in 2019 by CA Air Resources Board (ARB). Solicitation of public comments is required for both reports. All information submitted to ARB that is not identified as a trade secret is subject to public disclosure ( <u>17 CCR § 95488 &amp; 95496</u> ).	Certain details about program participants, fuel pathways, and credit/deficit markets must be posted on the ARB's website. All information submitted to ARB that is not identified as a trade secret is subject to public disclosure ( <u>17 CCR § 95488.8</u> ).	ODEQ must post an annual report on its webpage. ODEQ must post certain other information on its website, including registered parties, credit trading activity, and quarterly aggregated credit and deficit volumes. As part of a generally-applicable rulemaking requirement, the effects of changes to program rules must be evaluated five years after adoption ( <u>OAR 340-253-1055</u> ).	Same as pre-2019 rule.

## Clean Fuels Program Comparison Chart: California, Oregon, and Proposed Washington Programs

**Figure 1. California's Carbon Intensity Requirements for Gasoline and Fuels Used as a Substitute for Gasoline by Year.**

Year	2011 *	2012*	2013**	2014**	2015**	2016†	2017	2018	2019††	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Original CA Rule Carbon Intensity Requirement	95.61	95.37	97.96	97.96	97.96	96.5	95.02	93.55	91.08	88.62	-	-	-	-	-	-	-	-	-	-
2018 Amended CA Rule	Same	Same	Same	Same	Same	Same	Same	Same	93.23	91.98	90.74	89.50	88.25	87.01	85.77	84.52	83.28	82.04	80.80	79.55
Percentage Difference from Pre-Regulation Baseline	-0.25%	-0.5%	-1%	-1%	-1%	-2%	-3.5%	-5%	(-7.5%) -6.7%	(-10%) -7.5%	-8.25%	-10%	-11.25%	-12.5%	-13.75%	-15%	-16.25%	-17.5%	-18.75%	-20%

\*calculated with original base year (2010) values of 95.85, using the CI for crude oil supplied to CA refineries in 2006.

\*\*calculated with revised base year (2010) values of 98.95, using the CI for crude oil supplied to CA refineries in 2010. *Note:* Due to a 2013 court ruling (*Poet, LLC v. California Air Resources Board*) that found procedural defects in the adoption of the LCFS, the 2013-15 values remained stagnant as the ARB was ordered to remedy the defects while leaving the current regulations in place.

† Years 2016-20 reflect requirements after LCFS regulations were readopted with more aggressive cutbacks to meet original 10% reduction goal after the stall from 2013 to 2015.

†† Years 2019-2030 reflect reductions relative to a 2010 base year carbon intensity that was revised in 2018 regulation amendments.

## Clean Fuels Program Comparison Chart: California, Oregon, and Proposed Washington Programs

**Figure 2. Oregon's Carbon Intensity Requirements for Gasoline and Fuels Used as a Substitute for Gasoline by Year.**

Year	2016*	2017*	2018**	2019***	2020***	2021***	2022***	2023***	2024***	2025+***
Carbon Intensity Requirement	98.37	98.13	97.66	96.59	95.61	94.63	93.15	91.68	90.21	88.25
Percentage Difference from Pre-Regulation Baseline	-0.25%	-0.5%	-1.0%	-1.5%	-2.5%	-3.5%	-5%	-6.5%	-8.0%	-10%

\*2016 and 2017 carbon intensity requirements are calculated with a gasoline baseline of 98.62.

\*\*calculated with a gasoline baseline of 98.64 in year 2018.

\*\*\* Calculated with a gasoline baseline of 98.06 in 2019 and beyond.