PUGET SOUND CLEAN AIR AGENCY

CLEAN FUEL STANDARD

PROPOSED DRAFT RULE
BACKGROUND
TECHNICAL ANALYSIS

Report publication date: October 2019

More information: www.pscleanair.org/CleanFuelStandard

BACKGROUND

Global climate change threatens the world's economies and ecosystems and is already having noticeable impacts on Washington State. According to the University of Washington's Climate Impacts Group, if not addressed, climate change will lead to many challenges for our state, including higher temperatures, reduced snowpack, sea level rise, and more frequent wildfires.

Transportation is the number one source of climate change-causing pollution in the four-county Puget Sound region (King, Kitsap, Pierce, and Snohomish Counties), accounting for over 40 percent of the region's greenhouse gases.

In 2017, the Puget Sound Clean Air Agency 's Board of Directors adopted a science-based target for the region to reduce greenhouse gas pollution by 50 percent below 1990 levels by 2030. In an analysis of a range of possible actions that could move our transportation sector toward this target, a Clean Fuel Standard showed the greatest potential to reduce greenhouse gas emissions.

Other west coast jurisdictions that have adopted Clean Fuel Standards include California, Oregon, and British Columbia.

On October 9, 2019, the Agency released a draft Clean Fuel Standard for public comment. For more information about the Agency's rulemaking process, see Next Steps.

WHO WE ARE

The Puget Sound Clean Air Agency is a regional government agency chartered by state law in 1967. Our jurisdiction covers King, Kitsap, Pierce, and Snohomish counties; home to more than 4.1 million people, over half the state's population.

We work to protect public health, improve neighborhood air quality, and reduce our region's contribution to climate change.

HOW IT WORKS

The draft Clean Fuel Standard applies to transportation fuel that is provided for sale in the four-county Puget Sound region — King, Kitsap, Pierce, and Snohomish Counties. The Clean Fuel Standard sets annual life-cycle carbon intensity reduction benchmarks for transportation fuels. The benchmark is lowered over time toward a reduction target of 25% below 2016 levels in 2030 (see below). Each transportation fuel is assigned credits or deficits based on how its life-cycle carbon intensity compares to the annual benchmark; the number of credits or deficits is proportional to how far the fuel is above or below the benchmark.

Regulated entities include importers and producers of fuels such as gasoline, diesel, ethanol, biodiesel, and fossil natural gas. These entities will be required to register with the Agency, report fuel transactions, and generate credits and or deficits. Producers and distributors of credit-generating fuels such as electricity, renewable natural gas, hydrogen, renewable propane, and alternative jet fuel, will be eligible to 'opt in' to the program to generate and sell credits. The draft regulation provides exemptions for specific fuel uses including inter-state locomotives, ocean-going vessels, aircraft, military tactical vehicles and tactical support equipment, and small volume fuel producers and fuels used in small volumes.

The draft rule provides multiple options for regulated entities to comply (offset deficits generated), including by improving the efficiency of their fuel production processes; producing and/or blending low-carbon biofuels into the fuel they sell; and buying and banking credits generated by low-carbon fuel providers.

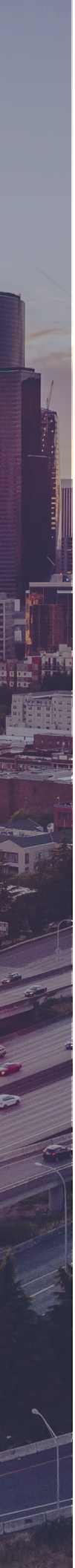
The draft rule requires that electric utilities and transit agencies that opt in and generate credits for electric vehicle fueling invest at least 35% of their credit revenue to benefit highly impacted communities. These investments must be in addition to anything required by other laws and regulations.

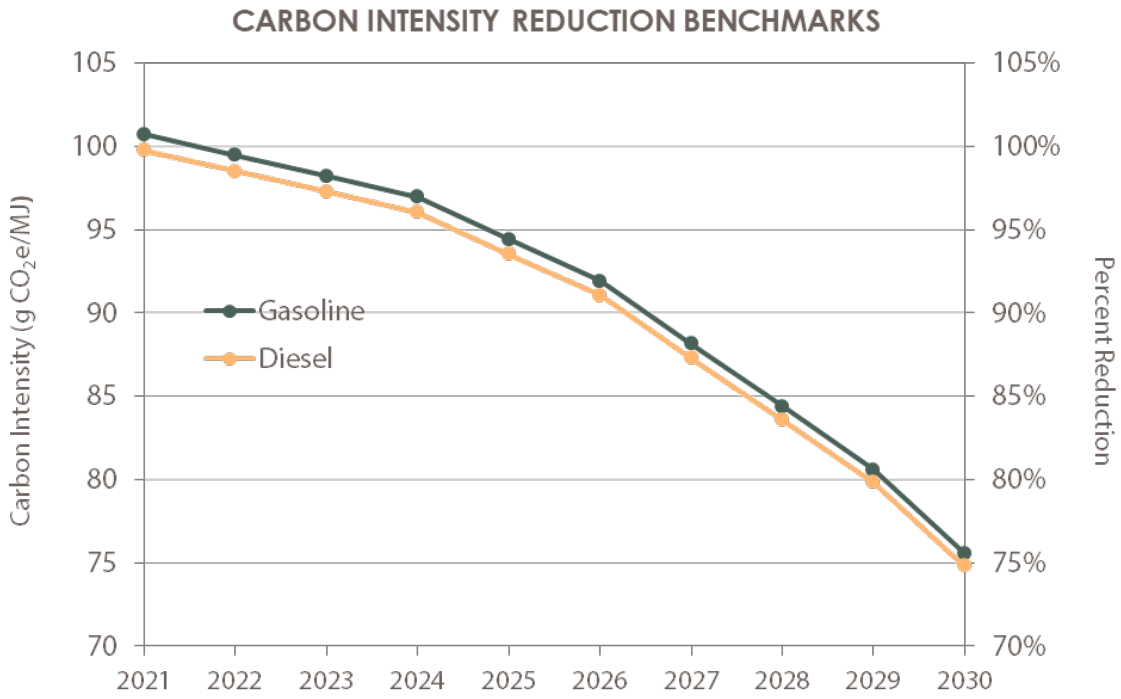
The rule also designates an Equity Credit Aggregator to claim any electricity credits not claimed by other eligible entities. The Equity Credit Aggregator will be a non-profit organization with a mission to assist highly impacted communities in transitioning to low-carbon transportation, and will be advised by an Equity Advisory Committee.

WHAT IS LIFE-CYCLE CARBON INTENSITY?

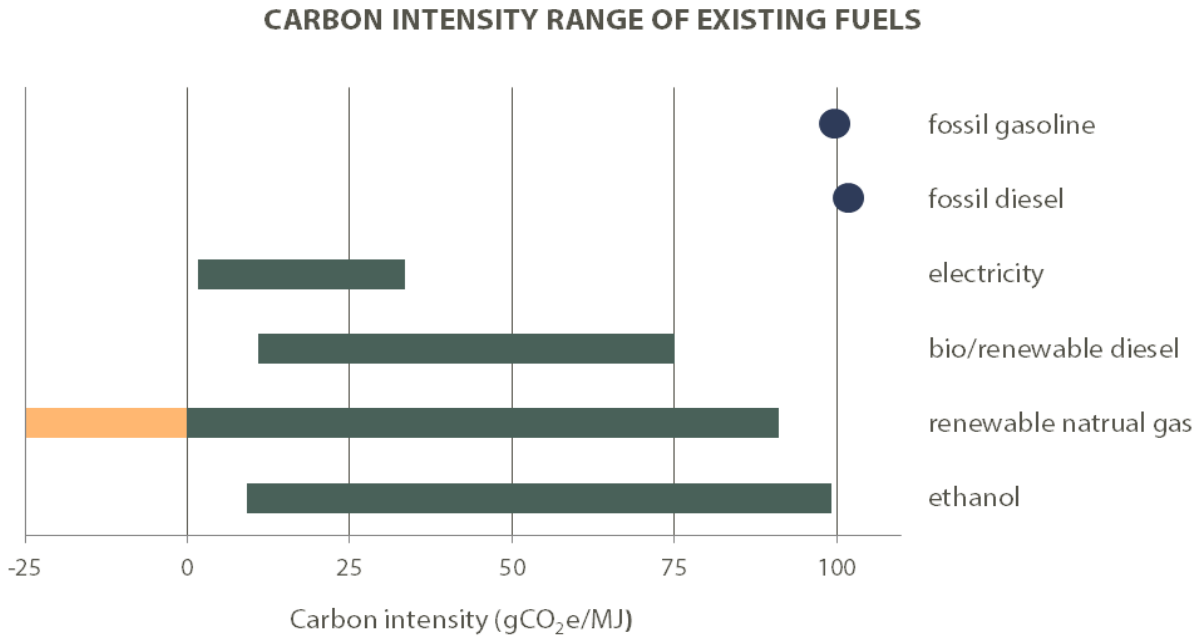
Carbon intensity is the amount of total carbon generated from the type of fuel used. It includes direct and indirect effects, such as land use changes that contribute to greenhouse gas emissions, and includes the complete life-cycle of the fuel pathway (often called "wells to wheels") from production to transportation to consumption.

Carbon intensity is a way to measure and compare different fuels' impact on climate change.





The draft Clean Fuel Standard's proposed target is a 25 percent reduction in carbon intensity for the region's transportation fuel pool by 2030.



The graph above illustrates the range of carbon intensities by fuel type based on direct tailpipe carbon emissions and indirect emissions included in the life-cycle calculation. For example, current certified bio-diesel and renewable diesel fuel pathways range from 10 to 75 gCO2e/MJ based on variations in feed-stock types, origin, raw material production processing efficiencies, and transportation. California's Low Carbon Fuel Standard program currently has 494 certified fuel pathways with assigned carbon intensity scores.

TECHNICAL ANALYSIS

The Puget Sound Clean Air Agency contracted with a consultant to assess the availability of clean transportation fuels and to conduct an analysis of the economic, air quality, and health impacts of a regional Clean Fuel Standard. The key findings from the analysis include:

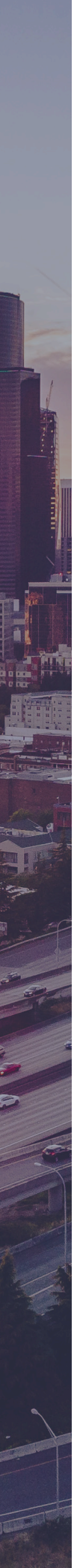
- A Clean Fuel Standard can significantly reduce the Puget Sound region's GHG pollution – up to a 26% reduction in carbon intensity of transportation fuels by 2030.
- A Clean Fuel Standard will improve air quality and public health, especially in communities near major roadways.
- A Clean Fuel Standard is consistent with the region's economic growth. Any changes to economic productivity and employment are estimated to be very small (plus or minus one tenth of one percent or less in 2030).

NEXT STEPS

The Agency has prepared a draft rule to create a Clean Fuel Standard. The draft Standard was released on October 9, 2019, starting a 90-day public comment period ending on January 6, 2020.

The Agency is holding a public hearing to receive comments on Thursday, December 19, 2019, from 12:30-4:30 p.m. and 5-8 p.m. at the Washington State Convention Center. Equal weight is given to comments submitted online and in person.

In early 2020, the Agency will consider all comments received during the comment period. The Agency's Board of Directors will then consider action on a potential final rule no sooner than the Board's meeting on February 27, 2020.

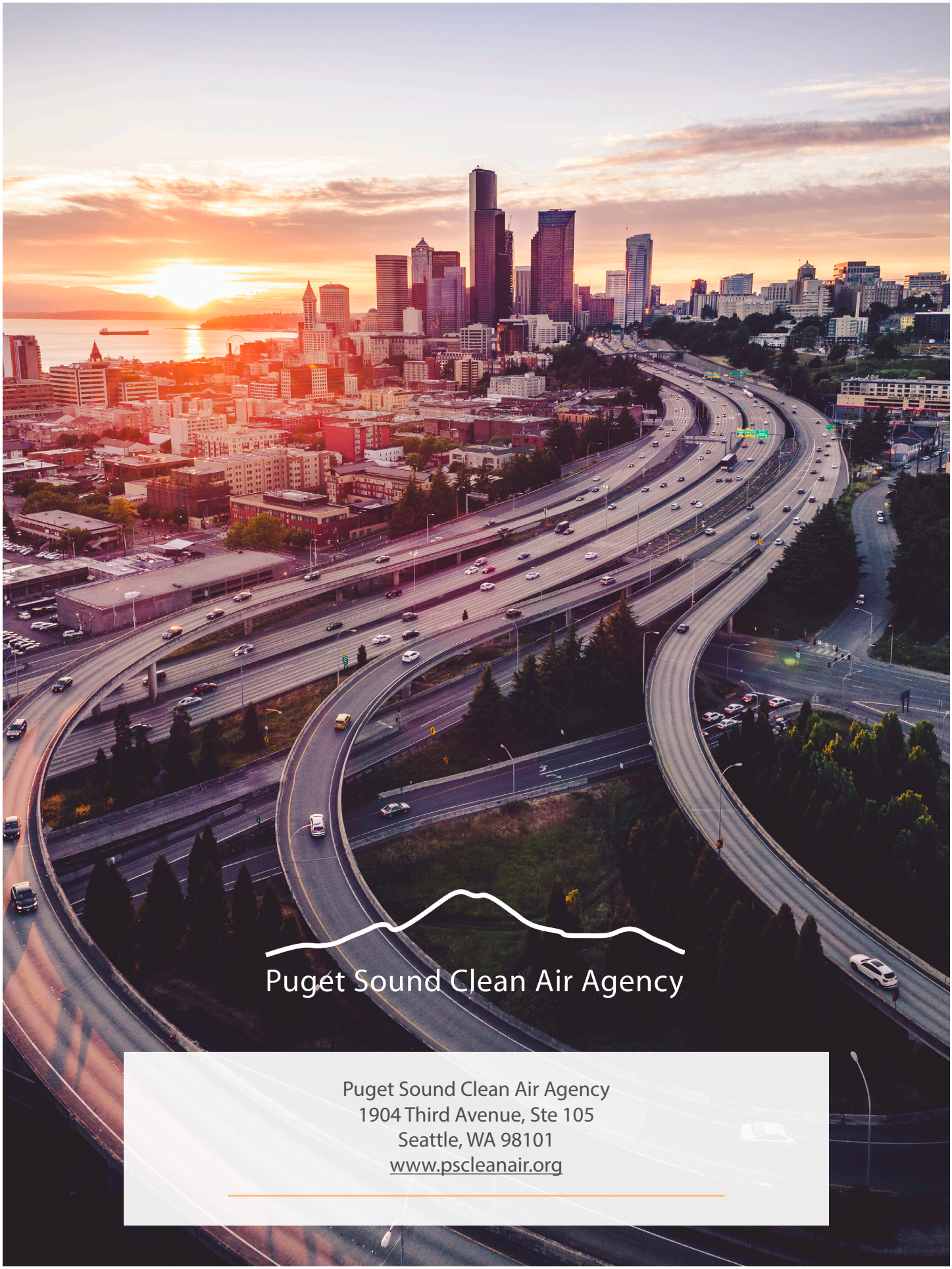


SUBMIT A PUBLIC COMMENT:

Email: CleanFuels@pscleanair.org

Mail: Send to the Puget Sound Clean Air Agency
1904 Third Avenue, Suite 105, Seattle, WA 98101

In-person public hearing: December 19, 2019



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