



**STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY**

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

July 1, 2022

Dear Honorable Senators and Representatives:

In order to reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuel, the Washington State Legislature passed a Clean Fuel Standard in 2021 (E3SHB 1091; Chapter 317, Laws of 2021). The Clean Fuel Standard, now codified in chapter 70A.535 RCW, requires fuel suppliers to gradually reduce the carbon intensity of transportation fuels to 20 percent below 2017 levels by 2038.

The Department of Ecology (Ecology) has prepared this report to the legislature as required by RCW 70A.535.090(4). The law states:

*(4) The department must contract for a one-time ex ante independent analysis of the information specified in subsection (1)(c) of this section covering each year of the program through 2038. The analysis must be informed by input from stakeholders, including regulated industries, and informed by experience from other jurisdictions. The analysis must impute price impacts using multiple analytical methodologies and must make clear how the assumptions or factors considered differed in each methodology used and price impact imputed. The analysis required in this subsection must be completed and submitted to the appropriate committees of the legislature by July 1, 2022.*

For clarity, this one-time report is separate from the report Ecology must provide about the Clean Fuel Program activities every two years, starting in 2025. The biennial report will include:

*(c) The best estimate or range in probable costs or cost savings attributable to the clean fuels program per gallon of gasoline and per gallon of diesel, as determined by an independent consultant whose services the department has contracted. The estimate or range in probable costs or cost savings from the independent consultant must be announced in a press release to the news media at the time that the report under this subsection (1) is posted to the department's website, and must be simultaneously reported to the transportation committees of the house of representatives and the senate;*

For this report, Ecology contracted with a technical consultant, Berkeley Research Group (BRG). The scope of the study was developed by Ecology, and was informed by input from stakeholders of the Clean Fuel Standard rulemaking and other jurisdictions currently implementing low carbon fuel standards.

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The Clean Fuel Standard will take effect on January 1, 2023. Ecology is currently undergoing rulemaking to implement the program. The ex-ante analysis was based on program parameters identified in law and in draft rule language for Chapter 173-424 WAC. The analysis will inform the rule development and future implementation of the program.

BRG's ex-ante economic analysis of the Clean Fuel Standard estimates the costs and cost savings attributable to the Clean Fuel Standard.

Ecology received feedback from participants of a public briefing on May 3, 2022 that this report is overly conservative in estimating benefits to consumers from the reduced demand for fossil fuels and overestimates consumer price increases. In many ways, this is helpful for understanding what the worst case scenarios would look like.

The analysis found that, in each of the scenarios and illustrations, there are years in which consumer gasoline and diesel prices rise slightly, while prices for low-carbon fuels are reduced in every year. The analysis also found that the reduction in greenhouse gas emissions spurred by the CFS, along with other climate policies in Washington state, will provide a significant environmental and public health benefit.

The effect of reduced demand on fossil fuel prices is expected to be more muted in Washington than compared to California, where similar studies have been done. Washington uses a similar fuel formulation to the majority of the United States, whereas California uses a fuel formulation specific to their state. However, in this study, the gasoline and diesel price forecasts do show a price benefit for biofuel blending over time, thus accounting for a key benefit of the Clean Fuel Standard compared to those who continue to rely on conventional fuels.

Additionally, BRG found that, due to the strength of complementary climate policies in Washington, the Clean Fuel Standard plays an important supporting role in overall decarbonization of transportation. The Zero Emission Vehicles mandate is a stronger mechanism for reducing greenhouse gases from the transportation sector, though it does not provide a financial mechanism to fund the transition to lower carbon intensity fuels as the Clean Fuel Standard will. The Clean Fuel Standard will also play an important role in incentivizing early increases in biofuel blending and will provide incentives for all vehicle classes to shift to lower carbon technologies.

One important caveat to note is that this study assumes fuel suppliers pass on to consumers the costs and cost savings they experience as a result of the Clean Fuel Standard and do not adjust their profit margins. In reality, this behavior can be difficult to predict and is easily proven to not be true at all times. Perhaps most importantly, it is highly difficult to estimate future prices of fuels such as gasoline and diesel due to fluctuating commodity prices, and BRG clearly states their level of uncertainty in the attached report.

The full analysis findings are in the attached report.

Signed,



Kathy Taylor

Air Quality Program Manager

Attachment (1)

