

Union of Concerned Scientists

See attached comment letter.

April 25, 2022
Rachel Assink
Washington Department of Ecology
300 Desmond Drive SE
Lacey, WA 98503

Comments on Chapter 173-424 WAC Rulemaking, Clean Fuels Program Rule

Thank you for the opportunity to submit comments on rules pertaining to Washington's Clean Fuel Standard. The Union of Concerned Scientists (UCS) is the nation's leading science-based nonprofit organization, putting rigorous, independent science to work to solve our planet's most pressing problems. On behalf of our 12,000 supporters in Washington, I am writing to express our strong support for the Clean Fuel Standard, and our recommendation to ensure the rule is as ambitious as possible. We suggest requiring a 20% reduction in carbon intensity of fuels be achieved by the earliest date allowed in the law—2034.

Ecology's authority to require a 20% reduction in 2034 was granted by the legislature and is key to keep Washington on track to meet the statutory reduction in greenhouse gas emissions to which the state has already committed. It also more closely aligns with similar programs in neighboring states like California and British Columbia which require a 20% carbon intensity reduction by 2030. Oregon is similarly considering a standard of 20% below 2015 levels by 2030 and 37% below 2015 levels by 2035 as part of their Clean Fuels Program expansion.

Establishing a more ambitious carbon reduction trajectory will lead to faster pollution reductions and the commensurate benefits to our health and well-being. A strong Clean Fuels Program will put Washington on a path to a cleaner transportation sector, encouraging local investments in clean fuels and transportation electrification projects, to the benefit of Washingtonians.

WA GREET and calculating credits

We recommend using the full set of ILUC estimates from the California program, and regularly reevaluating estimates based on updated scientific assessments. Methodologies for calculating indirect land use change remain a source of active debate more than 10 years of research into the topic. There is no expert consensus on methodology or results, and it is unlikely that one will emerge any time soon, since the differences in approach reflect not simply questions of fact, but also of the most appropriate methodology, the appropriate counterfactual scenarios and etc. While the Argonne GREET tool is generally useful, the low ILUC values from the CCLUB module are based on number of questionable assumptions and result in an extremely low estimate of land use change emissions for corn, as described in the

ICCT peer review. A recent peer viewed study found much larger emission associated with corn ethanol expansion¹.

As both a matter of technical analysis and policy judgement, I strongly discourage you from relying on the ILUC values from CCLUB and encourage you instead to adopt the full set of ILUC values from CARB. The CARB values are both technically sound and were the result of an extensive public process with expert review and input from all stakeholders. While Argonne team has sound technical credentials, it is not a regulatory body, and the development of the CCLUB module was not the result of a public process. In the future it would be appropriate to collaborate with CARB and potentially US EPA or other regulators on a public process to consider revisions to the ILUC values.

In addition to the question of which ILUC values are most accurate, it is also worth considering the policy signal sent by adopting extremely low ILUC values. A lower ILUC value for the most widely used alternative fuel will substantially increase credit generation from the ethanol already blended into gasoline used in Washington, generating windfall compliance value for refiners with no additional action on their part. This will dilute the policy signal sent from the Clean Fuels policy to support additional clean fuel use. A lower ILUC score for corn and sorghum ethanol could theoretically increase the use of higher ethanol blends, such as E15 or E85. But realistically the compliance value of ethanol is not the barrier to increased use of higher blends, rather fueling infrastructure constraints are the primary obstacle. The compliance value of ethanol with CARB ILUC values, combined with RFS RINs, is sufficient to make E85 available at a very competitive price in California. And while I have not done a detailed analysis of this point, my expectation is that increased compliance value from lower ILUC values would not be passed along at the pump with a lower retail value, as fuel retailers set prices based on a variety of factors and are likely to retain any increased value once they can offer the fuel at an attractive price.

Extremely low ILUC values for corn and sorghum will also reduce the policy signal encouraging biofuel producers to produce non-crop-based biofuels. To increase the displacement of petroleum without expanding the footprint of corn, it is important to bring non-crop-based fuels to market. Fuels made from feedstocks without land use consequences must compete against well-established incumbent feedstocks like corn, and their low or zero ILUC score increases their compliance value relative to corn. If the corn ILUC number is very low, the opportunity to develop alternative feedstocks will be diminished.

Washington should be prepared to implement additional safeguards to the policy over time. UCS has suggested that in the next major California LCFS rulemaking CARB consider safeguards to avoid excessive reliance on vegetable oil-based fuels² and to ensure that support dairy manure biomethane credits do not contribute to dairy industry consolidation³. These suggestions are not ready for implementation without more extensive public discussion from stakeholders, so I encourage Washington to implement the policy now but stay engaged

¹ The Proceedings of the National Academy of Sciences, “Environmental outcomes of the US Renewable Fuel Standard.” February 14, 2022.

<https://www.pnas.org/doi/full/10.1073/pnas.2101084119>.

² <https://www.arb.ca.gov/lists/com-attach/83-lcfs-wkshp-dec21-ws-UyZRNAR2UV1QOgVs.pdf>

³ <https://www.arb.ca.gov/lists/com-attach/24-lcfs-wkshp-dec21-ws-AHVSN1MhVlpXNQRl.pdf> and <https://www.arb.ca.gov/lists/com-attach/19-dairywkshp220329-ws-VCFXMIQmWVVWNFQ1.pdf>

with ongoing opportunities to improve the policy either working in parallel with California or considering adopting or adapting improvements from other jurisdictions over time.

Electricity: Fixed guideway systems

We agree with the draft rule language that credits generated through the use of electricity to power fixed guideway transit vehicles should be first provided to the transit agency. If the transit agency opts not to claim these credits, they should then be offered to the utility.

We do not believe that fixed guideway systems built before or after a certain date should be treated differently under the program. Other systems are not treated differently based on when they were constructed or manufactured. The Clean Fuels Program's credits are based on fuel use, not infrastructure construction. Moreover, fixed guideway systems require maintenance over time to continue to displace petroleum fuels use. There should be no distinction based on when fixed guideway systems were built. All should be credit equally, with the appropriate Energy Economy Ratio (EER).

Advance Credits

We encourage Ecology to offer advance credits for purchases of electric vehicles to limited and specified entities, similar to what is offered in Oregon's program. Some of the additional entities proposed in the draft rule language have a less obvious pathway to credit generation under any circumstances, and it is premature to commit to offering advance credits. Moreover, any proposal to offer advance credits should be presented for public review, including the policy justification and mechanics of credit generation and ensuring accountability for credits advanced. The draft rule language offers too little transparency on these matters as written.

Backstop aggregator

We support the approval of a backstop aggregator for unclaimed credits. This entity should be not-for-profit and Washington-based, and all revenue generated by the sales of these credits should be invested to support transportation electrification directly benefiting overburdened communities.

We also concur with ICCT's recommendation to use the more recent global warming potential (GWP) factors—those from the Intergovernmental Panel on Climate Change Assessment Report 5. It is important to use the more recent science to better understand the impacts of various fuels.

Thank you for your consideration. We look forward to continuing to work with you to ensure a healthy future and cleaner transportation for all Washingtonians through the establishment of an ambitious Clean Fuels Program.

Sincerely,

Jeremy I. Martin, Ph.D

Director of Fuels Policy, Senior Scientist
Clean Transportation Program, Union of Concerned Scientists
Office: 202-331-6946 | Mobile 240-753-0852