

March 25, 2022

Rachel Assink
Rulemaking Lead
Washington Department of Ecology
300 Desmond Dr SE, Lacey, WA 98503

Re: Proposed WA-GREET model for Chapter 173-424 WAC, Clean Fuels Program Rule

Dear Rachel Assink:

Thank you for your and your colleagues' work developing the rules to implement the Clean Fuels Program. As a statewide advocacy organization, Washington Environmental Council works to develop, advocate and defend policies that ensure environmental progress and justice by centering and amplifying the voices of the most impacted communities. We have worked on establishing a state-level clean fuel standard for many years and are committed to realizing a just and equitable implementation of this law.

This letter provides our initial feedback on the proposed WA-GREET model, as presented and shared by Life Cycle Associates during Ecology's March 15, 2022, stakeholders' meeting. Our feedback is guided by our commitment to seeing the Clean Fuels Program achieve the reductions in the carbon intensity of transportation fuels mandated by RCW 70A.535. As part of this work, we are invested in ensuring that our state's climate policies are implemented in ways that maximize benefits and minimize harm to communities experiencing the greatest environmental health disparities.

To ensure the WA-GREET model includes values that reflect the best available science and allows the Clean Fuels Program to achieve its required carbon intensity reductions, we offer the following comments. These are priority areas where updates are needed to include more accurate and current information than what has been used for the modeling assumptions of other jurisdictions.

- *Proposed iLUC values for ethanol:* Under both California's Low Carbon Fuel Standard and Oregon's Clean Fuels Program, ethanol is the largest source of alternative fuel by volume and energy, making it a central part of these programs. Life Cycle Associates has proposed an iLUC value for corn ethanol that is significantly lower than California's value and an iLUC value for sorghum ethanol that is significantly lower than both Oregon's and California's values.

However, during the last stakeholders' meeting, Life Cycle Associates also referenced recent research that suggests, at a minimum, that decreases in iLUC values for corn ethanol over time have been based on insufficient evidence¹. Moreover, the most recent analysis² cited in Life Cycle Associates' presentation found that ethanol provides *no* net climate benefit when indirect land use change is taken more accurately into consideration — and likely has a *higher* carbon intensity than conventional gasoline.

The EPA's discretion to determine biofuel volume requirements under the federal renewable fuel standard will broaden significantly in 2023. As Washington develops a new state-level clean fuels program, we have a unique opportunity to play a timely and leading role in the consideration and integration of the best available science on the climate impacts of corn ethanol. Since the proposed WA-GREET model demonstrates a clear willingness to deviate from both California's and Oregon's programs in setting iLUC values for ethanol, we urge Ecology to use this opportunity to fully consider and utilize the most up-to-date analyses and engage impartially with the difficult questions that arise. This is fundamental to the proper functioning of the program, since the lack of scientific consensus on iLUC values for corn ethanol is not based only on disagreement over the degree of benefit, but rather on whether this fuel has any utility at all in reducing the carbon intensity of transportation fuels.

- *Global Warming Potential*: While the model currently allows for a 100-year or a 20-year GWP, it appears to preferentially use the 100-year GWP. Using this longer time frame hides the impact of key greenhouse gas emissions such as methane and hydrogen, which tend to have more acute global warming impacts on a shorter time frame. We urge Ecology to ensure that the appropriate global warming potential time frames are used in the WA-GREET model, depending on the type of greenhouse gas being evaluated. Increasing the sensitivity of this part of the model will better evaluate and identify the climate impact of different fuel types and help incentivize clean fuels in program implementation.
- *Natural gas leakage rates*: In addition to strengthening the model with more accurate global warming potential numbers, we urge Ecology to more accurately reflect current science on the leakage rates of natural gas within the WA-GREET model, which reflect higher leakage rates than previously assumed, and ensure that these more accurate leakage rates are consistently reflected across the model.

¹ "How robust are reductions in modeled estimates from GTAP-BIO of the indirect land use change induced by conventional biofuels?," Journal of Cleaner Production, June 10, 2020, <https://www.sciencedirect.com/science/article/abs/pii/S0959652620307630>.

² "Environmental outcomes of the US Renewable Fuel Standard," The Proceedings of the National Academy of Sciences, February 14, 2022, <https://www.pnas.org/doi/full/10.1073/pnas.2101084119>.



We also want to continue to affirm the importance of protecting and reducing pollution in communities as a critically important part of all climate policies, including this rule. We appreciate Ecology's work to conduct an analysis of the health consequences of the program and urge Ecology to prioritize consideration of air quality and public health impacts in the development of the Clean Fuels Program, especially the impacts to communities experiencing the greatest environmental health disparities. We furthermore urge Ecology to ensure that the development of the Clean Fuels Program is fully aligned with the environmental justice requirements of the HEAL Act.

Finally, we appreciate Ecology's intentional effort to make the information and assumptions of the WA-GREET model more transparent and publicly available. As part of this work, we especially appreciate the effort to conduct a peer-reviewed process and look forward to seeing the results of that review as they pertain to addressing the above-identified areas where there is both emerging science and disagreement within the scientific community.

Sincerely,

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