

22 April 2022

Department of Ecology State of Washington P.O. Box 47600 Olympia, WA 98504-7600

Re: Climate Solutions comments on draft rules for Chapter 173-424 WAC, the Clean Fuel Standard

Dear Rachel Assink,

Climate Solutions thanks you for the opportunity to submit comments on the draft rules for Chapter 173-424 WAC, the Clean Fuel Standard. Climate Solutions is a clean energy nonprofit organization working to accelerate clean energy solutions to the climate crisis. The Northwest has emerged as a hub of climate action, and Climate Solutions is at the center of the movement as a catalyst, advocate, and campaign hub.

In addition to this letter, we submitted a joint comment letter on March 14, 2022 that addresses our position on credits from residential electric vehicle (EV) charging. We also submitted a joint comment letter dated November 5, 2021 regarding the carbon intensity (CI) reduction trajectory required by the rule, and requirements for meaningful, direct investments in overburdened communities. Our position on these topics is elaborated below as well.

Carbon intensity reduction trajectory

We strongly recommend that the rule require a 20% reduction in carbon intensity of fuels be achieved by the earliest date allowed in the law—2034. The Legislature granted the Department of Ecology ("the Department" or "Ecology") the authority to set this trajectory, which most closely aligns with achieving the statutory reduction in greenhouse gas emissions the legislature and executive committed to. ¹ This trajectory is of critical importance in our view, and in the view of many entities who worked to pass the law.

The trajectories of other states with Clean Fuel Standards are worth noting. California's current program requires a 20% reduction in carbon intensity by 2030; this standard was updated in 2018² to better meet their state's climate mandates as passed by the California Legislature (40% below 1990 levels by 2030).³ Oregon's Clean Fuels Program requires a 10% reduction in carbon intensity by 2025 and in 2020, Governor Brown issued an Executive Order to expand the program; Oregon's Department of Environmental Quality is considering a standard of 20%

¹ RCW 70A.45.020

² California Air Resources Board. "Low Carbon Fuel Standard". Accessed October 28, 2021. https://ww2.arb.ca.gov/sites/default/files/2020-09/basics-notes.pdf

³ Berkeley Law. "California Climate Policy Fact Sheet: Emission Reduction Policy". Accessed October 28, 2021. https://www.law.berkeley.edu/wp-content/uploads/2019/12/Fact-Sheet-Emission-Reduction-Policy.pdf



below 2015 levels by 2030 and 37% below 2015 levels by 2035.⁴ British Columbia's standard also requires a 20% reduction by 2030.⁵ To summarize, all three West Coast states and provinces that have adopted a Clean Fuel Standard, apart from Washington, require a 20% reduction in carbon intensity by 2030. Washington should get as close to alignment with the rest of the West Coast as possible by setting a carbon intensity reduction of 20% in 2034.

Such a standard better aligns with our statutory greenhouse gas limits, which were passed in 2020 to align with the most recent climate science: Washington must reduce its emissions to 45% below 1990 levels by 2030, a 70% reduction by 2040, and a 95% reduction and net zero emissions by 2050. In order to achieve these limits, and to do so in a way that is both equitable and efficient, the state's climate policy must be scaled appropriately. Prior to the 2021 legislative session, Governor Inslee's office estimated that the combination of three policies—the Clean Fuel Standard, the Climate Commitment Act, and the Healthy Homes and Clean Buildings package, the latter of which was not passed—would bring the state to just short of its 2030 limits. This analysis, however, was based on the original iteration of the Clean Fuel Standard bill, which required a faster emissions intensity reduction trajectory, including a 10% reduction by 2028 and 20% by 2035. By 2040, according to state law, we must reduce our emissions by more than 70 MMT from our most recent inventory year, necessitating a strong policy response. Thus, the Department should use the discretion granted by the statute to require the strongest reduction in the carbon intensity of fuels possible under the law, and more closely align with Washington's statutory greenhouse gas emission reduction requirements.

As of submitting this letter, a carbon intensity reduction trajectory of 20% by 2034 has been supported by 12 environmental and climate organizations, 10 community organizations, 12 businesses and associations, 5 local elected officials, and 2 individuals in letters submitted to Ecology.

Public disclosure

Per the underlying law, the Department must disclose monthly credit prices, annual reports on credits and deficits and transportation fuels volumes, estimate of the impact on the cost of a gallon of gasoline, and greenhouse gas emissions reductions and their associated cost. Transparency regarding the program is important, and we encourage the Department to ensure this information is easily accessible and user-friendly. The California Air Resources Board's <u>data dashboard</u> for their program is a good example. When communicating the impact on a cost of a gallon of gasoline, it is important that the Department contextualize this information. For example, calculating the price impact simply by applying the average credit price to the CI of a gallon of

⁴ Oregon Department of Environmental Quality. "Proposed Targets." https://www.oregon.gov/deq/rulemaking/Documents/cfp2022m3Targets.pdf.

⁵ Government of British Columbia. "BC-LCFS Requirements". Accessed October 28, 2021. https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/renewable-low-carbon-fuels/requirements

⁶ Washington Governor Jay Inslee. "Policy Brief". December 2020. https://www.governor.wa.gov/sites/default/files/ClimateBrief-Dec2020.pdf?utm_medium=email&utm_source=govdelivery



gasoline (as is done by the Oregon Department of Environmental Quality⁷) presents a high-end cost impact estimate. This is because it assumes entities complying with the standard are not necessarily using the lowestcost method to comply, such as by taking action to reduce the lifecycle CI of their product that costs less than buying credits on the market. It also assumes a direct pass through in cost, which is not how the market always works due to external forces of supply and demand that impact fuel prices. Finally, any price impact from the Clean Fuels Program is often overshadowed by international market forces. We have seen this in California, where the cost of gas and diesel has simply not correlated with Clean Fuels credit prices. 8 Therefore, we ask Ecology to provide this fuller context as a part of its information sharing.

The rule also requires that electric utilities submit reports on their credit revenue and the programs and projects funded by it. We request that this information is publicly available and posted to a clean fuels website to increase transparency and broader stakeholder understanding and engagement around how these dollars are spent.

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 quideway 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. In other words, the Clean Fuels Program's credit and deficit system is based on fuel use, not infrastructure construction. Moreover, fixed guideway systems require maintenance over time. Transit agencies should not be penalized for having the forethought to build cleaner options early on. Thus, we posit that there be no distinction as to when fixed guideway systems were built. All should be credited equally, with the appropriate Energy Economy Ratio (EER).

Electricity: Forklifts

For similar reasons detailed above, Climate Solutions also does not believe that electricity used by electric forklifts to charge should be differentiated based on forklift model year. This is an unnecessary complication and makes it more difficult to estimate credits.

Electricity: Multi-family dwellings

The first right to credits for charging in multi-family dwellings should first go to the electric vehicle service equipment (EVSE) owner, and if they opt not to take the credits, then the utility should be eligible. It is important to allow EVSE owners who take the initiative to procure and provide EVSE in this context to be better able to recoup costs, thus changing purchase decisions and spurring a positive cycle for EVSE and other transportation

⁷ Oregon Department of Environmental Quality, "2020 Annual Cost of the Clean Fuels Program." https://www.oregon.gov/deq/ghgp/Documents/cfp2020AvgCost.pdf.

⁸ Climate Solutions' analysis based on CARB and EIA data, available upon request.



electrification investments. In the cases where the EVSE owner opts out of participating in the market, then utilities are well-positioned to use these credits for further transportation electrification investments.

Electricity: Non-residential

The EVSE owner should have the first claim to credits for most applications. We suggest allowing fleet owners to be able to first claim credits in circumstances where they are not be the owner of the EVSE. This should be thoughtfully designed to ensure there is not double counting of credits (claimed by both the EVSE owner and fleet owner). Fleet owner should be defined as "any entity with five or more vehicles registered in the same name." We view this option as important to spur adoption of electric vehicles within certain fleet types. If fleet owners or EVSE owners do not claim credits, then the utility should be able to.

Electricity: Residential

Utilities should be the credit generator for credits stemming from residential EV charging, as they are in both Oregon and California. Out of the options presented at the January 27, 2022 stakeholder meeting, we strongly prefer option 1: the utility may claim 100% of EV charging credit. This is reflected in the April 13, 2022 draft rule, which we support.

One of the critical pieces of the Clean Fuels Program is that it drives in-state reinvestments in clean fuels and the associated infrastructure. Given our state's greenhouse gas emissions reductions limits, it is critical that these investments occur at scale in the near-term. Per statute, utilities are required to reinvest credit revenue in transportation electrification programs and projects, with a minimum of 30% of total revenue directly benefiting disproportionately impacted communities or those in nonattainment areas. These investments will create a positive cycle for electric vehicle provision and use in Washington, as well as further state goals surrounding environmental justice. Additionally, utilities have a long history of acting on behalf of their customers and are regulated as such. These credits are created by individuals charging their EVs at home; however, one household would not generate enough credits alone to warrant their individual participation in the credit market. Thus, it makes sense for utilities to aggregate their customers' credits and then spend them on behalf of their customers, by providing programs, rebates, and more that further EV adoption and support current EV users. Given this reinvestment on behalf of their customers, utilities are the ideal credit generator to meet the climate, air quality, and local job growth goals of the program as expressed in the statute's legislative intent.

For these reasons, we support the current structure in the rule: if a utility does not wish to claim residential base credits, and there is no approved backstop aggregator claiming these credits, then EV manufacturers may be eligible for residential charging credits.

We appreciate that the current draft rule does not require metering for residential credit generation. This aligns with both California and Oregon, neither of which have such a requirement, which is a barrier to participation. Both states have mechanisms to fairly estimate electricity used for residential charging. Furthermore, many utilities in Washington, including those covering the vast majority of current EV owners in the state, already have



ample data on EV charging thanks to their work on their Transportation Electrification Plans. Charging data estimates strike the best balance between participation, administration, and accuracy.

Electricity: Incremental credits

The question has been raised as to whether incremental credits should be provided for electricity charging data and, if so, who should be able to claim these credits. We do not support Ecology offering incremental credits as an option in this rule. As described in Climate Solutions' comment letter submitted November 5, 2022, the opportunity for and benefit of generating incremental credits from smart charging is low. Based on current utility resource mixes and where electric vehicles are located in the state, charging in Puget Sound Energy (PSE) territory would be best poised to pursue incremental credits—but PSE's hourly CI varies very little. The vast majority of Washington's public utilities rely heavily on hydropower and other carbon free electricity, removing variability in the CI for electricity from most public power entities as well. Furthermore, Washington utilities are required by law to transition to 100% clean energy under the Clean Energy Transformation Act (CETA), so seeking out lower CI electricity provides little additional value overall to what is already required by law.

The other option for generating incremental credits is through the purchase of Renewable Energy Credits (RECs), which could lead to negative interactions with other states' policies. Among others, these include Oregon's 100% clean energy law and California's cap-and-trade program, which pose a double-counting risk and may reduce the integrity of Washington's Clean Fuels Program. California's cap-and-trade program does not require the retirement of RECs for renewable electricity when accounting for the greenhouse gases associated with this power regulated under the program. Therefore, renewable electricity being used in California would be considered zero-carbon under California's cap-and-trade program, but the REC may be separated and also used under Washington's Clean Fuels Program to lower the CI of the electricity as a transportation fuel. This would constitute the zero-carbon attribute being claimed by two entities—one in California and one in Washington which we do not support. There is a similar concern with how Oregon's 100% clean electricity law will account for RECs, and as other states enact various clean electricity and climate policies, the need to ensure there is not double counting will increase. Again, because Washington utilities are statutorily required to achieve 100% clean electricity, we do not see a need to provide additional incentives to charge with clean energy and believe the risk of diluting the Clean Fuels Program outweighs any potential benefit.

Evidence from Oregon suggests that the use of RECs, in addition to the policy conflicts mentioned above, may already be diluting the Clean Fuels Program. Thus far, approximately 70% of non-residential charging reported has been paired with RECs. The ability to purchase and retire very low-cost RECs from anywhere in the country, and thereby generate what is likely higher-value credits in the Clean Fuels Program, dilutes the program's impact on greenhouse gas reductions in the transportation sector. Oregon's rule, similar to the proposed Washington rule, requires that RECs must be generated by an electric generator placed into service after the first year of the respective program, but we still see the dilution despite this requirement.

Oregon Department of Environmental Quality. "Clean Fuels Program Third Quarter 2021 Data." https://www.oregon.gov/deq/ghgp/Documents/cfpQ3datasum2021.pdf.



If Ecology does ultimately allow incremental credits to be generated by unbundled RECs, there should be a deliverability requirement to a balancing authority serving Washington. In addition, that REC should not also be counted towards a utility's CETA compliance, nor toward a utility's specific CI. And lastly, as mentioned above, RECs associated with power imported from California or other states where the zero-carbon attribute is separated from the REC should not be allowed to generate incremental credits under Washington's Clean Fuels Program.

Electricity: Non-utility fuel pathways

We are not opposed to the use of voluntary bundled clean energy product being incorporated into a fuel pathway for non-utilities when used for the purpose of reducing the CI. However, the zero-carbon attribute should not be double counted and thus not also included in a utility's CI; it should only be incorporated into one specific fuel pathway. Ecology must confirm that utilities' renewable energy product that is sold to their customers, where the attributes are claimed separately by customers, are not counted toward the utility's fuel mix.

Hydrogen

We agree with the credit claiming hierarchy in the draft rule for hydrogen, with the caveat that an explicit option for fleet owners may be useful in certain circumstances.

Natural gas

The attestation on page 30 of the draft rule still includes "State of Oregon" in the language and must be corrected. This attestation regarding environmental attributes raises questions about book-and-claim accounting for renewable natural gas (RNG) environmental attributes. We believe that allowing fossil natural gas providers to claim a lower CI via the purchase of environmental attributes for RNG that is used out-of-state is inconsistent with the intent of the law. There should be a match with fuel delivered and used in-state to rectify this potential issue. After all, the statute includes requirements for local clean fuels production, so it is counter to the intent of the law to allow credit for clean fuels that may not be delivered to Washington. It would also be inconsistent as other fuels have deliverability and use requirements.

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.

WA GREET and calculating credits

Generally, we ask that Ecology ensure WA GREET is nimble so new pathways and methodologies can be incorporated in the future. For example, farm-level accounting of emissions/emissions reductions would be a level of detail that could be beneficial to eventually bring into fuel scoring.

As stated in previous letters, we believe there should be a clear pathway for opt-in fuels, such as Sustainable Aviation Fuel (SAF). Of note, the current rule lists alternative jet fuel as subject to the regulation (as do the rules

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in California and Oregon), but Washington statute explicitly states that fuels used for aircraft are exempt from the standard, and instead may opt-in.

It is important that WA GREET incorporates methodology to appropriately score the carbon intensity of a fuel's lifecycle while not incentivizing environmental harm. For this reason, it is critical that biomethane is scored appropriately. The counterfactual included in the scoring should be set so that it encourages methane capture for existing entities, but that revenue from potential Clean Fuels credit sales itself is not a driver for consolidation or creation of new concentrated animal feeding operations, which cause a lot of environmental harm.

We recommend instead using the full set of iLUC estimates used in the California program now, and regularly reevaluating estimates to correspond with updated scientific assessments. The current model draft uses the Argonne National Laboratory values for indirect land use conversion (iLUC) for corn ethanol. Though Oregon's program uses these values, they are much lower than those used in California. During Life Cycle Associates' presentation at the March 15, 2022 stakeholder meeting, they referenced research stating these lower iLUC values were based on insignificant evidence. Furthermore, the most recent (2022) analysis tied in Life Cycle Associates' presentation casts even greater doubt on these lower iLUC values. An iLUC value for sorghum is also being suggested that is much lower than the listed studies and is lower than both California's and Oregon's programs. The peer review by ICCT suggests these values are not reflective of the full body of research and recommends using the current values in California's program. It is critical that these fuel types are scored appropriately so that Washington can meet its greenhouse gas emission reduction goals rather than credit emissions reductions from biofuels that are not actually reflected in reality.

We suggest alignment with Ecology's existing utility calculations under CETA to determine the carbon intensity of unspecified electricity, which was a topic of discussion at the April 13, 2022 stakeholder meeting. ¹¹ Per current rule, this amounts to 0.437 metric tons CO2e/MWh of electricity. This number should be reevaluated over time as the electricity content of market purchases changes.

We 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.

Finally, we would like to reiterate the importance of appropriate EERs. These are not currently listed in the draft rule. The EERs currently in California's and Oregon's rules are a reasonable place to start.

¹⁰ 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.

¹¹ WAC 173-444-040



Advance credits

We ask Ecology to consider offering advance credits for purchases of electric vehicles to limited and specified entities, similar to what is offered in Oregon's program. However, we have very strong concerns about how advance credits are currently constructed in the draft rule language and object to their current form.

Oregon's program offers advanced credits for electric vehicles purchased by public transit, local government, Tribes, school districts, and companies contracted to provide services to local governments or school districts. Entities must apply to receive these credits, and part of the application requires details on where and how these vehicles will be used to ensure local benefit and that these credits will manifest through clean fuels use. Advance credits can help these entities with the upfront cost of electric vehicles. This type of credit also helps the state pursue its transportation electrification and climate goals—which will be easier to achieve by getting more electric vehicles on the road in the near-term. Somewhat frontloading credits for electric vehicles aligns with other state policy as well as the aims of the Clean Fuel Standard itself.

The way the current rule is drafted provides the option of advance credits only to the "Washington Department of Transportation or other public entities that are implementing state transportation investments funded projects and program [sic]". The draft goes on to say that WSDOT or said public entities may earn advance credits for exclusively for a list of investments that are funded in the transportation package passed this spring, Move Ahead Washington. It does not make sense to provide advance credits for the implementation of programs that are already receiving funding—especially when that funding is coming from the Climate Commitment Act. The Clean Fuels Program should, to the extent possible, expand investments in clean fuels and transportation electrification that are not already being addressed in existing policy.

We understand that RCW <u>70A.535.050</u> (3) specifies that state transportation investments funded in an omnibus transportation appropriations act that decarbonize the transportation sector must be eligible to generate credits. However, there is already a path for such investments—say, a green transit grant that results in a battery electric bus being put into service, installation of public charging stations, or an electrified ferry—under other portions of the rule. These do not need to be, nor should be, associated with advance credits. The intent of this section of the law is to specify that projects stemming from state investments are eligible to participate in the program.

Other investments in the list eligible for advance credits in the draft rule include electrical grid and hydrogen fueling infrastructure investments from the state. These should also not be eligible for advance credits, especially when the draft rule includes capacity credits, for which hydrogen fueling infrastructure would already be eligible. Advance credits should only be provisioned for vehicles.

Well-crafted advance credits would help address the upfront investment required to purchase these vehicles, and these credits will be ultimately generated by these vehicle's fuel use. The current draft language includes repeated references to vehicles as the basis for advancing credits, which is inconsistent with other draft language and therefore should be changed.



We suggest taking Oregon's approach, but with added flexibility. It would be prudent to also include state agencies as eligible to receive advance credits. It would also be meaningful if private entities (such as port drayage owner-operators or Transportation Network Company drivers) could apply together for advance credits via an entity that acts as an aggregator and helps ensure accurate reporting and accountability. This could be offered for these entities when they are operating in an overburdened community, at least at first, so Ecology can test this concept with a smaller population where accelerating transportation electrification would have the most significant impact.

In aligning with Oregon's advance credit approach, Ecology should limit advance credits to 5% of total deficits, as opposed to 10% as is currently in the draft. According to correspondence with Oregon's Department of Environmental Quality, they will need applications for a large volume of electric vehicles in order to come close to that cap, so 5% is not overly restrictive and a lower cap could be expanded in a future update if the policy concept is working as intended.

The current rule states that entities must apply for advance credits to the Department, and it appears that the Department has sole discretion as to whether these applications are granted, without any public disclosure, process or input. Given that applications must be accepted at least once a year, and that Ecology must notify stakeholders about the timeline and the process, *Ecology should also allow for a period of public review and comment on applications*, similar to how CARB allows 45 days of public comment on updated fuel pathways prior to their potential certification.

Capacity credits

As stated in our comment letter dated November 5, 2021, it is reasonable to align with California's rules for capacity crediting, which this draft rule largely does. The draft language includes a requirement for an applicant to demonstrate that there is "consistent and calculable demand," which we think is critical to ensure that credits granted are associated with actual fueling/clean fuels use.

For Hydrogen Refueling Infrastructure Pathways, only green electrolytic hydrogen should be eligible. This is consistent with the approach to hydrogen as a fuel being taken by state law. 12

Reinvestments

As stated in the joint letter dated November 5, 2021, "credit revenue investment opportunities should be maximized and directed to benefit overburdened communities such as those identified on the Washington Environmental Health Disparities Map and other tools per Chapter 70A.02 RCW (the Healthy Environment for All Act)." Within the Clean Fuels Program, utilities will be playing a critical role in clean fuels reinvestments that will further transportation electrification. The underlying statute directs at least 30% of revenue generated by utilities to directly benefit "a disproportionately impacted community identified by the department of health" or to areas federally designated as being in non-attainment or at risk of non-attainment. It is incredibly important that

¹² See Substitute Senate Bill 5910 (now law) from the 2022 legislative session.



utilities consult with these communities on how to best support transportation electrification. We would also hope to see utilities prioritizing contracting with entities that utilize project labor agreements and compensate workers at prevailing wage rates as determined by local collective bargaining when reinvestments are being spent on installation of new infrastructure.

Utility investments stemming from clean fuels revenue should *complement*, not replace or be subject to the same limits of, existing or future transportation electrification programs. Similarly, the list developed by Ecology and WSDOT for programs and projects that half of utility revenue must be spent on, should ensure *additional* investments and meeting unmet needs. The statute specifies that this list must be based on what has "the highest impact on reducing greenhouse gas emissions and decarbonizing the transportation sector." The Clean Fuels Program provides an opportunity to expand possibilities and fill gaps that other existing policy mechanisms and programs do not. In order to indeed have the highest impact, programs and projects should be evaluated, their impact measured, and must be additional. It will be important for Ecology and WSDOT to consider investments that will be necessary to support a clean transportation system over the long-term and to support markets (such as zero emissions heavy-duty transportation) that are less established, but highly necessary.

The current draft rule requires that non-utility credit generators from non-metered residential EV charging "must use credit proceeds to benefit EV drivers and their customers, and educate them about the benefits of EV transportation." It appears this requirement would apply to possibly a backstop aggregator or an EV manufacturer. While we appreciate the direction to reinvest credit proceeds, the current language may be a bit limiting. We suggest: "A non-utility credit generator must use credit proceeds to benefit EV drivers and to expand access to EVs of all vehicle types and sizes and the associated infrastructure, with a focus on directing investments toward sectors that need additional financial support." As stated earlier, we also think that all revenue generated by a backstop aggregator should be invested in transportation electrification that directly benefits overburdened communities.

Conclusion

Climate Solutions strongly supported the passage of the Clean Fuel Standard and are excited to continue engagement in this rulemaking to ensure that the program is effective and equitable, and that it reduce climate pollution to the maximum extent possible. Please consider these comments in addition to Climate Solutions' previous comment letter, as well as the joint letters we have signed on to.

We are happy to discuss any of our thoughts further and answer questions. Thank you.

Sincerely,

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Washington Transportation Policy Manager

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