WSPA
Antonio Machado
Director, Northwest Regulatory Affairs and Fuels

November 4, 2026

Sent via upload to: https://ecology.commentinput.com/?id=KYsWZej7h

Ms. Lauren Sanner
Climate Rulemaking Planner
Washington State Department of Ecology
300 Desmond Drive SE
Lacey, WA 98503

Re: WSPA Comments on Proposed WA-GREET 4.0 Model Updates and Transition – Rulemaking to Amend Chapter 173-424 WAC and WAC 173-455-150

Dear Ms. Sanner,

The Western States Petroleum Association (WSPA) appreciates the opportunity to provide comments on the Washington Department of Ecology's October 14, 2026, workshop concerning proposed updates to the WA-GREET 4.0 model and the transition to its use under Washington's Clean Fuel Standard (CFS). WSPA also appreciates Ecology's continued engagement with stakeholders as the agency develops the technical and implementation provisions that will inform the proposed rule.

WSPA is a non-profit trade association that represents companies that safely explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California, Washington, Oregon, Nevada, and Arizona. WSPA member companies participate in Washington's Clean Fuel Standard and similar programs in Oregon and California and seek to provide practical input based on extensive compliance and implementation experience.

WSPA recognizes the importance of maintaining a scientifically sound and consistent lifecycle carbon intensity (CI) methodology. Ecology's October 14, 2026, workshop addressed the methodology for crude oil CI changes, updated electricity fuel-mix assumptions, gasoline and diesel import shares, revisions to Tier 1 fuel pathway calculators, and the schedule for implementing WA-GREET 4.0.

This rulemaking presents an opportunity to incorporate updated modeling tools, improve consistency with other state clean-fuel programs, and provide greater clarity regarding the calculation and application of fuel carbon intensities. At the same time, changes to the model and associated compliance requirements must be carefully evaluated to ensure they provide meaningful improvements in accuracy and transparency without creating unnecessary administrative cost.

WSPA recommends that Ecology:

1. Prioritize Timely Review and Approval of Pending Fuel Pathway Applications
2. Apply a Materiality Standard to Crude Oil CI Adjustments
3. Ensure Transparency in the Gasoline and Diesel Import-Share Methodology
4. Provide Transparency Regarding Electricity Fuel-Mix Assumptions and Their Effects on Fuel CI Values
5. Provide Adequate Lead Time to Transition to WA-GREET 4.0 and Make Effective Use of Existing Reporting and Verification Processes
6. Provide Technical Documentation and a Stakeholder Comment Period for the Biogas-to-Electricity Efficiency Benchmark and Hydrogen Tier 1 Calculator

General Comments

Ecology Should Prioritize Timely Review and Approval of Pending Fuel Pathway Applications

WSPA recognizes the importance of updating the WA-GREET model to reflect current lifecycle emissions methodologies. However, WSPA requests that Ecology give equal attention to the timely review and approval of fuel pathway applications already submitted under the existing program. Improvements to lifecycle modeling provide limited practical benefits if program participants continue to experience delays in obtaining the certifications.

WSPA member companies continue to express concerns regarding the time required to review and approve fuel pathway applications, including pathways that have already received approval from the California Air Resources Board (CARB). These delays create uncertainty for fuel producers and suppliers seeking to participate in Washington's CFS, particularly when the underlying technical information has already been evaluated through a comparable state program. While WSPA recognizes that Ecology must independently confirm compliance with Washington's requirements, the review process should make appropriate use of existing certifications and supporting documentation to improve timely processing.

Washington's current regulations already establish a process for reviewing pathways approved by CARB or the Oregon Department of Environmental Quality. WAC 173-424-610 also allows Ecology to prioritize applications based on submission date, completeness, and potential greenhouse gas emission reductions. WSPA encourages Ecology to use this existing framework[1] to address outstanding applications and establish more predictable review timelines. Ecology should consider providing greater transparency regarding the status of pending applications, expected review milestones, and circumstances that may delay final certification.

Reducing the current backlog is directly relevant to this rulemaking. Transitioning all existing pathway CI values to WA-GREET 4.0 beginning January 1, 2029, will add to Ecology's pathway workload. WSPA therefore requests that Ecology prioritize the processing of existing applications before the transition so that the new model does not further delay applications already under review.

WSPA also requests clarification on how existing temporary pathway provisions and credit true-up requirements apply when final pathway certification is delayed. Under WAC 173-424-610, eligible participants may use approved temporary pathway codes, and the rule provides for additional credits when qualifying verified operational CI values are lower than those used for reporting, including certain temporary pathways that subsequently receive certification. California's Low Carbon Fuel Standard (LCFS) similarly provides a credit true-up mechanism following annual verification, including for eligible temporary pathways.

Specifically, WSPA asks Ecology to confirm: (1) whether temporary pathway holders may receive credit true-ups back to the start of operations when final certification is delayed; (2) whether a certification delay affects the timing or eligibility of a true-up; and (3) how true-ups will be handled for pathways still pending when existing pathways transition to WA-GREET 4.0. Clear answers will help ensure that participants receive appropriate credit recognition based on verified fuel performance.

[1] WAC 173-424-610(2) and (9)(a), Obtaining a Carbon Intensity (establishing application requirements and Ecology's review procedures for fuel pathways previously approved by CARB or OR-DEQ, including provisional pathways).

Apply a Materiality Standard to Crude Oil CI Adjustments

Ecology has proposed applying an incremental crude oil CI adjustment only in years when the current crude oil CI exceeds the baseline crude oil CI by more than 0.10 grams of carbon dioxide equivalent per megajoule (gCO2e/MJ). WSPA supports Ecology's use of a materiality threshold but recommends that Ecology further evaluate whether the proposed 0.10 gCO2e/MJ threshold represents a sufficiently material change to warrant corresponding changes to gasoline and diesel compliance obligations.

Rather than adopting the proposed threshold without evaluating its program effects, Ecology should use representative historical Washington crude oil data to test alternative measures and levels of materiality. The analysis should consider absolute changes in crude oil CI expressed in gCO2e/MJ, percentage changes between current and baseline three-year rolling-average crude oil CI values, and, most importantly, the resulting changes in gasoline and diesel CI, credit and deficit generation, and compliance costs. Ecology should also identify how frequently alternative thresholds would have triggered an adjustment historically. This analysis would help determine whether the proposed 0.10 gCO2e/MJ threshold reflects a material change in CFS outcomes or captures changes that have limited practical effect on the program.

The materiality standard should also operate symmetrically. For example, Ecology's proposed 0.10 gCO2e/MJ threshold would trigger an incremental adjustment when current crude oil CI is higher than the baseline, but the same principle should apply when crude oil CI decreases. If an increase in crude oil CI is sufficiently material to increase compliance deficits, a decrease of comparable magnitude should result in a corresponding reduction. The same threshold, averaging methodology, and adjustment process should apply material changes in either direction.

WSPA supports applying qualifying CI changes through a separate incremental adjustment methodology, using rolling three-year averages of current and baseline crude oil CI values. This approach would recognize changes in either direction while isolating the effects of crude oil production and sourcing from unrelated revisions to WA-GREET inputs and assumptions, such as electricity generation and fuel source mixes.

WSPA further recommends that Ecology apply a consistent materiality principle when methodological changes elsewhere in the CFS affect credit or deficit generation. The relevant consideration should be whether a change in underlying data, assumptions, or methodology materially affects program outcomes, rather than whether the affected fuel or pathway generates credits or deficits. This principle is particularly important when changes to electricity assumptions, efficiency benchmarks, or other methodologies can materially alter credit generation.

WSPA also recommends that Ecology distinguish between monitoring crude oil CI and modifying regulated parties' compliance obligations. Ecology may calculate and monitor crude oil CI on a monitoring basis, but changes that alter gasoline and diesel compliance obligations should occur periodically rather than annually and only after a rulemaking comment period. When a material change in crude oil CI warrants an adjustment, whether an increase or decrease, Ecology should present the proposed adjustment, supporting data and methodology, and resulting compliance effects for stakeholder review and comment before implementation.

This approach would provide transparency and regulatory predictability while avoiding frequent changes to compliance obligations that provide limited program benefit.

Ensure Transparency in the Gasoline and Diesel Import-Share Methodology

Ecology presented updated estimates of the shares of gasoline and diesel consumed in Washington that are produced within the state or imported from neighboring jurisdictions. Because these shares determine the weighted-average gasoline and diesel CI values used in the program, WSPA encourages Ecology to clearly document the data sources, assumptions, and calculations underlying the proposed import-share adjustments, including the treatment of fuel imports, subsequent exports, and the allocation of volumes among producing jurisdictions. Given the interconnected nature of regional fuel markets, the methodology should accurately reflect the fuels consumed in Washington while avoiding unnecessary complexity where the resulting CI impacts are limited.

Provide Transparency Regarding Electricity Fuel-Mix Assumptions and Their Effects on Fuel CI Values

The proposed WA-GREET 4.0 model incorporates updated electricity fuel-mix information, including revisions to the historical 2017 fuel mix and the use of 2021 electricity generation data. WSPA recognizes that electricity-related emissions are an important component of lifecycle CI calculations for various fuel pathways and that periodic updates to underlying data can improve the accuracy of those calculations. WSPA encourages Ecology to provide sufficient documentation of the data sources, assumptions, and calculations used in the proposed updates and explain how those changes affect fuel CI values relative to WA-GREET 3.0. Ecology should also confirm how the 2017 revision affects baselines or benchmarks and provide a side-by-side table of CI values under WA-GREET 3.0 and 4.0.

Provide Adequate Lead Time to Transition to WA-GREET 4.0 and Make Effective Use of Existing Reporting and Verification Processes

WSPA appreciates Ecology's decision to present a preliminary implementation schedule well before the proposed model becomes effective. Because Ecology noted during the workshop that the presentation materials need to be updated, the table below reflects WSPA's understanding of the WA-GREET 4.0 transition timeline. WSPA requests that Ecology confirm this timeline in writing.

Annual Reports Transition to WA-GREET 4.0

Annual Fuel Pathway Reports Submission Deadlines	Fuel Production Year			
	2026	2027	2028	2029
March 31, 2027	WA-GREET 3.0 (R)			
Sept 15, 2027	WA-GREET 3.0 (R)			
March 31, 2028		WA-GREET 3.0 (R) & WA-GREET 4.0 (O)		
Sept 15, 2028		WA-GREET 3.0 (R) & WA-GREET 4.0 (R)		
March 31, 2029			WA-GREET 3.0 (R) & WA-GREET 4.0 (R)	
Sept 15, 2029			WA-GREET 3.0 (R) & WA-GREET 4.0 (R)	
March 31, 2030				WA-GREET 4.0 (R)
Sept 15, 2030				WA-GREET 4.0 (R)
Note: R = Required, O = Optional				

WSPA supports Ecology's proposed transition period, under which WA-GREET 4.0 would become effective in January 2028, with all existing fuel pathway CI values transitioning to the updated model beginning January 1, 2029. As the table shows, pathway holders will already report under both WA-

GREET 3.0 and 4.0 for three consecutive deadlines (September 2028, March 2029, and September 2029). To avoid adding a further layer of duplicative work, WSPA recommends that Ecology use the WA-GREET 4.0 information submitted through the 2028 Annual Fuel Pathway Report (AFPR) process, including the September 15, 2028 submission covering production year 2027, to reassign existing pathway CI values for 2029, rather than requiring a separate recertification process.

WSPA also recommends that Ecology provide clear guidance regarding the effective dates of reassigned CI values, the treatment of existing pathways while updated calculations are pending, and the process for correcting or addressing technical issues identified during the transition. WSPA encourages Ecology to release the final WA-GREET 4.0 model, associated calculators, application guidance, and transition instructions sufficiently in advance of implementation to permit testing, staff training, and coordination with third-party verifiers.

Provide Technical Documentation and a Stakeholder Comment Period for the Biogas-to-Electricity Efficiency Benchmark and Hydrogen Tier 1 Calculator

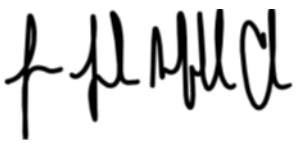
With respect to the proposed biogas-to-electricity efficiency benchmark, Ecology should provide a comment period with additional information explaining the technical basis for the 50% threshold, its applicability to different electricity generation technologies, and how the proposed adjustment would affect calculated CI values. Similarly, the proposed hydrogen Tier 1 calculator should be accompanied by documentation explaining its principal inputs, assumptions, and treatment of different hydrogen production pathways for comment. WSPA continues to evaluate the technical assumptions underlying these proposals and is not taking a position on the proposed efficiency benchmark or hydrogen calculator at this stage. WSPA may provide additional input as that technical review progresses.

Conclusion

WSPA appreciates Ecology's continued engagement on WA-GREET 4.0. In summary, WSPA requests that Ecology: (1) prioritize review and approval of pending fuel pathway applications and clarify how true-ups apply when certification is delayed; (2) apply a materiality standard to crude oil CI adjustments that recognizes increases and decreases while allowing voluntary verified downward adjustments below the threshold; (3) document the gasoline and diesel import-share methodology; (4) explain how electricity fuel-mix updates affect fuel CI values, baselines, and benchmarks; (5) confirm the transition timeline in writing and use 2028 AFPR submissions to reassign pathway CI values without a separate recertification; and (6) publish technical documentation and provide a stakeholder comment period for the biogas-to-electricity efficiency benchmark and hydrogen Tier 1 calculator.

WSPA appreciates the opportunity to submit comments on these important issues and remains committed to constructive engagement. Please do not hesitate to contact me directly at (360) 594-1415 or via email at amachado@wspa.org.

Sincerely,



cc: Jessica Spiegel - WSPA