EARTHJUSTICE
BECAUSE THE EARTH NEEDS A GOOD LAWYER

NORTHWEST REGIONAL OFFICE
810 3RD AVENUE, SUITE 610
SEATTLE, WA 98104-1711
T: 206.343.7340

August 1, 2025

Adam Saul
Washington Department of Ecology
Climate Pollution Reduction Program
P.O. Box 47600
Olympia, WA 98504-7600

Re: Earthjustice Comment on Proposed Updates to the Washington Clean Fuel Standard – Due August 1, 2025.

Dear Adam Saul,

Earthjustice submits these comments to detail discrete recommendations on how the Clean Fuel Standard ("CFS") rule can more accurately account for the carbon intensity of credit-generating fuels:

1. Ensure that transit agencies receive appropriate incentives for reducing greenhouse gas ("GHG") emissions from avoided vehicle trips and reward all agencies with fixed guideway systems for the full climate benefits of their systems.
2. Earthjustice is very concerned that the CFS program allows unjustified levels of credit generation for biofuels produced from crop-based feedstocks and recommends the Department of Ecology ("Ecology") address this issue as soon as possible.
3. Ecology should not erode the integrity of credit generation for liquid fuels by adopting mass balancing.
4. Ecology should not exempt alternative jet fuel from deliverability requirements for fuel suppliers using book-and-claim accounting for pipeline-injected biomethane.

Further, Earthjustice urges Ecology to eliminate the practice of avoided methane crediting so that Washington's CFS does not over-subsidize factory farm gas, provide a perverse incentive to adopt manure management practices that harm local communities, or undermine the market for zero-emission hydrogen production technologies that do not rely on methane. These comments do not delve deeper into the unintended consequences of avoided methane crediting because Earthjustice has joined coalition comment letters spearheaded by Food and Water Watch and Friends of the Earth that focus on these issues. Earthjustice also lifts up and supports comments submitted by Washington Conservation Action and Climate Solutions.

CREDITING FOR TRANSIT AGENCIES

A. Accurately Representing Transit's Role in Greenhouse Gas Reductions and Lifecycle Accounting

Ecology's proposed CFS rule fails to accurately document the GHG reduction potential of increased use of public transit. Public transit is an age-old system that conveniently transports the public and gets people out of polluting cars. Investing in robust public transit systems benefits public health and our climate because it reduces pollution, reduces consumption of fossil fuels, and promotes healthy lifestyles by encouraging walking and biking. The CFS rule provides a unique opportunity to continue investing in this system by recognizing and rewarding the unique GHG benefits provided by mass transit. Ecology should take this opportunity to correct the CFS' longstanding failure to accurately account for lifecycle GHG emissions that mass transit provides through avoided vehicle miles traveled ("VMT"). Herein, Earthjustice recommends discrete changes to how Ecology calculates credits generated by mass transit, to properly document and account for the multiple climate benefits provided by our transit system.

The CFS is a market-based tool intended to reduce lifecycle GHG emissions from Washington's transportation fuels. However, current rules undervalue public transit by omitting lifecycle benefits such as VMT reductions, mode shift, and transit-induced land use change. We outline why an adjustment to the energy economy ratio ("EER") for electric transit buses is warranted to reflect the full scope of lifecycle emissions reductions consistent with CFS accounting principles.

Transit reduces GHGs through multiple pathways:

- Direct fuel switching (e.g., diesel buses to electric);
- VMT reductions from riders who would otherwise drive;
- Congestion relief and operational efficiency; and
- Land use change, including compact development and reduced trip distances.[1]

According to the CFS, "EERs for fixed guideway systems are based on MJ/number of passenger-miles" and other EERs are based on "a comparison of miles per gasoline gallon equivalent (mpge) between two fuels." This means the EER for electric transit buses reflects only drivetrain efficiency and not the additional emissions avoided through displaced VMT. This creates an inconsistency among the transit EERs and broader

[1] American Public Transportation Association, *Quantifying Greenhouse Gas Emissions from Transit*, at 29 (revised Sept. 10, 2018), https://www.apta.com/wp-content/uploads/Standards_Documents/APTA-SUDS-CC-RP-001-09_Rev-1.pdf.

lifecycle accounting (e.g., avoided emissions from dairy biomethane and indirect land use changes from producing crop-based feedstock).

Additional benefits from improved roadway conditions by not having those vehicles on the road include easier traffic flow and less need for road expansion. And when communities are planned around transit, they are more efficient even for those not using transit, or through indirect or induced land use change benefits. According to The American Public Transportation Association ("APTA"), "[a]n extensive literature demonstrates that people living in compact developments, even people who do not use transit, tend to drive less and walk and bike more."[2] Thus, a full lifecycle assessment should account for each of these GHG reducing benefits.

Multiple tools and methodologies enable quantifying the full benefits from transit:

- APTA is the national industry authority on transit performance and sustainability, and its GHG quantification methods are widely adopted by transit agencies. [3] LA Metro has used its methodology for years to estimate GHG displaced by their service. For example, LA Metro estimated that in 2018, mode shift accounted for over 200,000 metric tons ("MT") CO_2e and land use effects accounted for about another 800,000 MT CO_2e.[4] When these GHGs displaced were subtracted from LA Metro's emissions from operations, it yielded a net negative CO_2 balance of 616,000 MT CO_2e.
- The California Emissions Estimator Model ("CalEEMod")[5] is an emissions modeling tool approved by California air and planning agencies for evaluating GHG, criteria pollutant, and VMT impacts of development projects and plans, including for use in California Environmental Quality Act or National Environmental Policy Act documents. It includes standardized methodologies and assumptions for GHG reductions from transit-based strategies, including transit-supportive land use.[6]

---

[2] *Id*.
[3] *See, e.g.*, *id.*; APTA, *Quantifying and Reporting Transit Sustainability Metrics* (2012), https://www.apta.com/research-technical-resources/standards/sustainability/apta-suds-cc-rp-003-12/.
[4] LA Metro, *2019 Energy and Resource Report*, at 16 (2019), https://boardarchives.metro.net/BoardBox/2019/190918_2019_Energy_and_Resource_Report.pdf.
[5] California AQMDs & California Air Pollution Control Officers Association ("CAPCOA"), *CalEEMod: California Emissions Estimator Model*, https://www.aqmd.gov/caleemod/home (last visited July 31, 2025).
[6] CAPCOA, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, Chapter 3: Measures to Reduce GHG Emissions, at 30, 47–48 (Oct. 2024), https://www.caleemod.com/documents/handbook/full_handbook.pdf (land use and transit strategies are GHG reductions measures under the "Transportation" sector category).

- California Air Resources Board's ("CARB") quantification methodology[7] for the California High-Speed Rail Project uses Greenhouse gases, Regulated Emissions, and Energy use in Technologies ("GREET") factors[8] to demonstrate GHG reductions from mode shift, including auto and air trips avoided. The High-Speed Rail Authority estimates that 142 million MT CO_2e will be avoided from mode shift alone.[9]

- The Federal Highway Administration's Energy and Emissions Reduction Policy Analysis Tool[10] allows for emissions modeling of mode shift, land use, and VMT-reducing policies at a state level.

Avoided GHG emissions from transit's lifecycle accounting are not only quantifiable, they are also consistent with existing practices in CFS programs and other models used in regulatory settings. Passenger-based EER metrics, land use change factors, and avoided emissions estimates are integrated into certain pathways.

Based on available literature,[11] **we recommend adding a transit bus VMT-based EER of 2 to the current electric transit bus EER—i.e., adjust the electric transit bus EER from 5.0 to 7.0**. This would reflect the existing bus EER of fuel switching, but also account for some displacement of VMT from personal vehicles. While aligning the EER with the fixed guideway light rail value of 3.3 (i.e., adjusting the transit bus EER from 5 to 8.3) may be appropriate, we support a conservative approach in the near term.

Earthjustice's proposal to adjust the EER for electric transit buses relies on the following methodology: The U.S. Department of Transportation provides per-passenger mile emissions for two transit bus fleets in Washington State. According to this data, the buses of the King County Department of Transportation and Central Puget Sound Regional Transit Authority have emissions of 0.452 and 0.327 pounds CO_2/passenger-mile, respectively.[12] In contrast, a single occupancy vehicle emits 0.96 pounds CO_2/passenger-

---

[7] CARB, *Quantification Methodology for the CHSRA High-Speed Rail Project*, at 10–14 (Apr. 15, 2024), https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/chsra_hsr_finalqm.pdf.
[8] Argonne's Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) model is also used in CFS and other clean fuels programs.
[9] California High-Speed Rail Authority, *2024 Sustainability Report*, at 58–59 (2024), https://hsr.ca.gov/wp-content/uploads/2024/09/Sustainability-Report-2024-FINAL-A11Y-20240916.pdf.
[10] *See* U.S. Department of Transportation ("USDOT"), *Resilience, Air Quality, and Sustainability Analysis Tools*, https://www.transportation.gov/grants/dot-navigator/resilience-air-quality-and-sustainability-analysis-tools (last updated Jan. 24, 2025).
[11] USDOT suggests light rail may yield more VMT reductions than transit buses, but that all transit avoids GHG emissions relative to single occupancy vehicles. USDOT, *Public Transportation's Role in Responding to Climate Change* (updated Jan. 2010), https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange2010.pdf.
[12] *Id*. at 13.

mile.[13] Thus, Washington's transit buses reduce the per-passenger mile emissions by more than half, justifying a multiplier of at least 2 for VMT reductions.

We would welcome the opportunity to work with Ecology on refining this value through technical analysis for a future rulemaking, while making some adjustment now to minimize the ongoing under-crediting of transit's lifecycle GHG benefits in this rulemaking. Additional analysis could include more refined VMT avoidance estimates and congestion relief and induced land use benefits.

B. Allow Full Credit Generation for All Fixed Guideway Transit Systems

Robust zero-emission transit agencies are vital for the mobility of low-income Washingtonians and for reaching climate targets. ***Currently, the CFS imposes a unique penalty on transit agencies*** by reducing their ability to generate credits for vehicles on fixed guideway systems installed before 2023. Specifically, the **CFS disfavors transit agencies with older fixed guideway systems** by not allowing them to generate credits that reflect their EER.[14] For instance, if legacy fixed guideway light rail systems were treated the same as newer systems, they would generate 3.3 times as many CFS credits as they do under the current rules.[15] Ending this disparity is a straightforward update to the CFS regulation that will better align the program with Washington's air quality, VMT, and equity goals.

Now is the time to make this straightforward update to the CFS. The provision that limits credit generation for older fixed guideway systems appears to be modeled after a similar provision that California previously included in its Low Carbon Fuel Standard ("LCFS") regulation, which applied to fixed guideway systems installed before 2011. However, **California recently amended its regulation to end this penalty**, noting that the change "provides equal treatment to all fixed guideway systems for the purposes of LCFS crediting and improves LCFS support for transit services in California."[16]

Removing the penalty on pre-2023 fixed guideway systems will make the CFS program more accurate, support use of these zero-emissions systems, and increase fairness in the program. The climate benefits of legacy fixed guideway systems are just as real as the benefits of newer systems. As a practical matter, additional credit generation for transit systems can help agencies increase service or make further investments in zero-emission infrastructure. This is at a time when merely maintaining service levels is a struggle for some cash-strapped agencies, and service curtailments can force some riders to switch from transit to gas-fueled cars to meet their transportation needs. Finally, this

---

[13] *Id*. at 11.
[14] WAC 173-424-540(1), (2) (excluding fixed guideway vehicles on track placed in service prior to 2023); *see also* WAC 173-424-420(3)(e)(ii) (requirement for reporting electricity separately for pre/post 2023 systems).
[15] WAC 173-424-900, Table 4.
[16] CARB, *Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information: Proposed Low Carbon Fuel Standard Amendments*, at 6 (Aug. 12, 2024), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/15day_notice.pdf.

update to the CFS will put fuel for fixed guideway transit systems on a level playing field with other low-carbon fuels that were established in the market prior to the program's adoption, such as ethanol or electric fuel from existing charging stations.

CROP-BASED FEEDSTOCKS

Earthjustice is also concerned with the proposed CFS's continued reliance on an outdated approach to crop-based feedstocks that it inherited from California. Crop-based biofuels divert crops from being used as food for humans and livestock, to instead create fuels for vehicles. As the increased demand for oil crops drives prices up, there is more incentive to cut down rainforests and other sensitive ecosystems to plant crops and greater risk that the world's most vulnerable people will not be able to afford food. In fact, the model that California's LCFS uses to determine the carbon-intensity of crop-based fuels assumes that deforestation does not occur because the populations that currently depend on oil crops for food go without those crops after they are diverted to fuel production. Essentially, the claimed climate benefits from crop-based biofuels are a direct result of the world's most food insecure people eating less.[17] Earthjustice asks Ecology to prioritize reforms to address the harms of the current system. *One straightforward action that Ecology should take to avoid reducing the credibility of its treatment of liquid fuels is to reject the proposal to adopt mass balancing.*

A. The Need for Crop-based Feedstock Limits

Washington's CFS has adopted an approach to crop-based feedstock similar to what California implemented years ago in its LCFS program. In the CFS, Washington acknowledges that indirect land use change ("ILUC") contributes to the lifecycle emissions of certain crop-based feedstock used to produce lower carbon fuels such as renewable diesel ("RD"), biodiesel ("BD"), sustainable aviation fuel ("SAF" or "AJF" or "alternative jet fuel"), and ethanol. In the early years of LCFS, which began in 2010, the ILUC values adequately incentivized the use of waste-based feedstocks over crop-based, particularly in diesel alternatives.[18] Recent data show use of crop-based feedstocks is increasing and studies raise concerns over their impact, which may not be adequately represented in the current ILUC values.

In its recent update to the LCFS, CARB recognized that crop-feedstocks are on the rise, despite existing ILUC factors. CARB held workshops requesting feedback from

---

[17] Comments of Jim Duffy to CARB re: LCFS, at 1 & Attach. A: Cap on Crop-based Biofuels, at 1–2 (Feb. 19, 2024), https://www.arb.ca.gov/lists/com-attach/6792-lcfs2024-AWUGdQdgVmMHeAZZ.pdf.

[18] Ethanol in California effectively has a blendwall of 10%. In Washington State, 15% ethanol may be sold in winter months, and USEPA has issued an emergency fuel waiver to allow E15 sales in the summer and is considering year-round sales of E15. Thus there is an effective 10-15% blendwall for ethanol in Washington State. EPA, *Ahead of the Summer Driving Season, EPA Allows for Nationwide Year-Round E15* (Apr. 28, 2025), https://www.epa.gov/newsreleases/ahead-summer-driving-season-epa-allows-nationwide-year-round-e15.

stakeholders on this issue, which Earthjustice and others commented on, including providing many supporting studies.[19] In a February 2023 workshop, staff showed a surge in crop-based oil feedstocks used in LCFS between 2020–2022.[20] In its January 2024 ISOR for the proposed amendments, staff noted that "[p]alm-derived fuels are considered a high-risk feedstock for deforestation."[21] The use of crop-based oils has only worsened since then. Quarterly data reports show that soy alone increased at least 166% in 2024 compared to 2022.[22] Soybean oil comprises a growing portion of the feedstock mix for biomass-based diesel, and domestic crush capacity is also expanding.[23]

Since 2022, RD and BD production capacity has also surged in the United States, demonstrating the industry's confidence in ongoing demand and policy incentives.[24] In June 2025, the U.S. Environmental Protection Agency ("EPA") proposed a significant increase in renewable volume obligations for 2026 and 2027 under the federal Renewable Fuel Standard ("RFS").[25] The RFS is a significant driver of liquid biofuels in the United States and provides a subsidy on top of state programs like the CFS, so an increase in the federal subsidy provides even greater certainty for biofuel expansion.

B. ILUC risks are real and increasing

There is general consensus that agriculture, including crop-based feedstocks, leads to increased deforestation risk, particularly in Brazil and Southeast Asia. Further, because crop oils are highly fungible, a risk for one oil is actually a risk for all. Since 2015,

---

[19] March 15, 2023 Earthjustice letter Appendix A.

[20] CARB, *Low Carbon Fuel Standard Public Workshop: Potential Regulation Amendment Concepts*, at slide 38 (Feb. 22, 2023), https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/lcfs_meetings/LCFSpresentation_02222023.pdf.

[21] CARB, Proposed Amendments to the LCFS Regulation, Appendix E: Purpose and Rationale, at 13 (Jan. 2, 2024), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/lcfs_appe.pdf (citing European Commission, *Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the status of production expansion of relevant food and feed crops worldwide* (Mar. 13, 2019), *https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0142)*.

[22] CARB, *Low Carbon Fuel Standard Reporting Tool Quarterly Summaries*, https://ww2.arb.ca.gov/resources/documents/low-carbon-fuel-standard-reporting-tool-quarterly-summaries (last visited July 31, 2025).

[23] Crush capacity indicates increased use of soybean oil domestically, rather than exporting it. The volumes that once had been exported will be substituted by other commodities, such as palm oil. *See* Scott Gerlt (American Soybean Association Chief Economist), *Soybean Crush Expansion, 2025 Update* (Apr. 10, 2025), https://soygrowers.com/news-releases/soybean-crush-expansion-2025-update/.

[24] *See* Cerulogy, *Remember the AVMO: Growth of the USA's renewable diesel production capacity* (Dec. 12, 2024), https://www.cerulogy.com/remember-the-avmo-growth-of-the-usas-renewable-diesel-production-capacity/.

[25] EPA, *Proposed Renewable Fuel Standards for 2026 and 2027*, https://www.epa.gov/renewable-fuel-standard/proposed-renewable-fuel-standards-2026-and-2027 (last updated July 10, 2025).

CARB's LCFS has included an ILUC value of 71.4 for palm oil feedstocks, and as of 2025, palm and palm derivatives will be assigned the same carbon intensity as fossil diesel. CARB also included sustainability certification requirements for feedstocks. Washington has proposed no guardrails. However, given the fungibility of feedstocks and the risk of substitution fraud, it is not enough to assign a high ILUC value to a single crop and have sustainability requirements that are slow to be implemented and themselves are prone to failures.[26] RD oversupply is a major factor suppressing credits prices. Without limits, RD and BD crowd out cleaner advanced fuels, including electricity, and undermine program integrity.

C. Oil crop concerns include waste feedstock streams

While waste-based feedstocks like used cooking oil ("UCO") and tallow are generally seen as low-carbon alternatives in clean fuel programs, recent investigations have raised serious concerns about fraud and feedstock legitimacy. According to Reuters, in 2024 the EPA confirmed that it is auditing multiple renewable fuel producers for potential misuse of virgin oils such as palm oil fraudulently labeled as UCO to qualify for RFS credits and other subsidies.[27] An industry biofuels group Renewable Fuels Association ("RFA") sent a letter to EPA calling even more attention to the potential fraud and need for strong verification and oversight of foreign feedstocks.[28] In its letter, RFA called for suspension of renewable identification numbers ("RINs") generated for biofuels using imported waste oils until proper labeling and testing are available, suggesting some may contain virgin palm oil or be otherwise mislabeled. Even without any changes to the regulation, this potential mislabeling and fraud would lead to environmental leakage. These issues illustrate that serious concerns regarding the use of waste-based oil may warrant additional restrictions or tighter oversight, such as traceability certifications.

A recent article provides evidence that increased demand for UCO in biofuels distorts the global vegetable oil markets, raising crop oil prices, and indirectly

---

[26] International Council on Clean Transportation, *How rapeseed and soy biodiesel drive oil palm expansion* (July 2017), https://theicct.org/wp-content/uploads/2021/06/Oil-palm-expansion_ICCT-Briefing_27072017_vF.pdf (explaining research indicating that increased production of diesel from soybean oil in the Unted States will contribute to high land use change emissions associated with oil palm expansion); Biofuelwatch, *Whistleblowers reveal profound failure of ISCC to implement biofuel "sustainability standards*," https://www.biofuelwatch.org.uk/2025/whistleblowers-reveal-profound-failure-of-iscc-to-implement-biofuel-sustainability-standards/.

[27] Leah Douglas, *US EPA says it is auditing biofuel producers' used cooking oil supply*, Reuters (Aug. 7, 2024), https://www.reuters.com/business/energy/us-epa-says-it-is-auditing-biofuel-producers-used-cooking-oil-supply-2024-08-07/.

[28] *See* Letter from Geoff Cooper, President and CEO, Renewable Fuels Association, to Michael Regan, EPA Administrator (Sept. 17, 2024),https://d35t1syewk4d42.cloudfront.net/file/2874/RFA%20Letter%20to%20EPA%20Administrator%20Regan%20re%20Feedstock%20Imports%20w%20Attachment.pdf.

incentivizing deforestation-linked commodities.[29] Despite being considered a feedstock with no ILUC impacts, the article shows that UCO, soybean oil, canola oil, and palm oil are close substitutes: "The interconnectedness of global oil markets suggests that heightened demand for UCO can influence prices of both waste-based and crop-based oils like soybean and canola oil, as they serve as substitutes in various industries." As UCO is diverted to fuel production, other sectors substitute with crop oils, causing spillover price effects and emissions leakage concerns.

D. ILUC factors are outdated

The current ILUC factors used in LCFS and CFS were last updated by CARB in 2015.[30] In a public comment letter, retired LCFS manager Dr. Jim Duffy noted that even the current ILUC factors underreport ILUC by 40% impacts from maintaining food consumption.[31] More recent research show that the RFS has increased corn prices by 30% and that corn ethanol produced under the RFS may have a carbon intensity equal to or even 24% higher than gasoline.[32] A 2023 Model Comparison Exercise by EPA reviewed the lifecycle GHG emissions of biofuels using five models found that crop-based biofuels had consistently higher GHG emissions than previously estimated.[33] Some of the models found that the fuels exceed the threshold level for low-carbon programs, including the RFS, and may even lead to net GHG increases.

In its 2022 Concise Explanatory Statement as part of the initial CFS rulemaking, Ecology acknowledges that it intends to update the ILUC values in the future.[34] We acknowledge this work can be extensive and Earthjustice and others have proposed alternative approaches to reducing the environmental risk of biofuels.

E. Mass balance

Earthjustice strongly opposes a mass balance accounting approach, which decouples the physical delivery of clean fuels from claimed benefits. There is a high risk

---

[29] *See* Andrew Swanson et al., *Secondary Impacts from Rising Used Cooking Oil Demand on Crop-Oil Prices, Department of Agricultural and Consumer Economics*, University of Illinois at Urbana-Champaign (Dec. 19, 2024), https://ideas.repec.org/a/ags/illufd/358377.html.
[30] CARB, Low Carbon Fuel Standard, https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2015/lcfs2015/lcfsfinalregorder.pdf (adopting new ILUC values in Table 5).
[31] Comments of Jim Duffy to CARB re: LCFS, at PDF p. 13 (Feb. 19, 2024), https://www.arb.ca.gov/lists/com-attach/6792-lcfs2024-AWUGdQdgVmMHeAZZ.pdf.
[32] Tyler J. Lark et al., *Environmental outcomes of the U.S. renewable fuel standard*, 119 Proc. Natl. Acad. Sci, at 2–3 (2022), https://www.pnas.org/doi/pdf/10.1073/pnas.2101084119.
[33] *See* EPA, *Model Comparison Exercise Technical Document*, EPA-420-R-23-017, at 86, Table 6.7-1, and at 113, Table 7.7-1 (June 2023), https://nepis.epa.gov/Exe/ZyNET.exe/P1017P9B.txt?.
[34]Ecology, Concise Explanatory Statement Chapter 173-424 WAC, Clean Fuels Program Rule & Chapter 173-455 WAC, Air Quality Fee Rule, at 88 (Nov. 2022), https://apps.ecology.wa.gov/publications/summarypages/2202057.html.

of fraud in a mass balancing approach, and Ecology does not have oversight systems in place to prevent such fraud.

Ecology proposes to amend its CFS rule to add the following language:

> Reporting gallons transferred in and out of commingled storage tank or that are commingled in production or in transport. The reporting entity may mass balance transfers out of a commingled tank or multiple commingled tanks at the same facility by fuel pathway code based on the gallons input into that tank or facility in the current or prior quarter. Liquid gallons reported under a specific fuel pathway code that were put into a tank two or more quarters prior may only be reported as transferred out of commingled storage if the reporting entity demonstrates to ecology that the tank has not fully turned over by the quarter it is reporting the volume being transferred out.[35]

This language would allow facilities to use the mass balancing approach for accounting and selling regulated fuels. ***We strongly recommend that Ecology strike this language and remove it from the proposed regulation.***

California's LCFS does not allow mass balancing for good reason: it undermines traceability and makes it difficult to verify whether a low-carbon fuel actually displaced a higher-carbon one in use. Therefore, California requires chain-of-custody documentation to ensure environmental integrity and prevent double counting. Adopting mass balancing would undermine the CFS's environmental integrity and increase the risk of credit inflation, as it opens the door to double counting without rigorous and cross-jurisdictional verification.

Under a mass balance accounting system, a company can co-process renewable feedstocks (e.g., bio-oils such as UCO, tallow, and crop-based oils) and fossil feedstocks but claim that all of the renewable content was delivered to a single destination. For example, if Company X produces 100 million gallons ("MG") of diesel, of which 5% is derived from bio-oils, and ships 5 MG to Washington, Company X may claim 5MG of RD delivered, when in reality only 0.25 MG of RD was delivered (i.e., 5% of 5 MG).

The proposed language that allows for mass balancing also conflicts with other provisions of the CFS rule, which require physical delivery of the fuel to the state:

> In order to receive and maintain an active fuel pathway code, the producer of any fuel must:
>
> (i) Maintain an active registration with the AFP;

[35] *Proposed* WAC 173-424-420(6)(d).

(ii) Provide proof of delivery to Washington through a physical pathway demonstration in the quarter in which the fuel is first reported in the WFRS[.][36]

Mass balancing is inconsistent with this requirement. This would essentially be a book-and-claim type of accounting.

In the example provided above, GHG emissions associated with only the 0.25 MG delivered to the state would be accounted for in the State's GHG emissions inventory, because State inventory is based on Intergovernmental Panel on Climate Change guidelines to report emissions within a defined geographic border (much like out-of-state biomethane must be reported as fossil gas included in state inventories).[37] Additionally, any co-benefits attributable from RD are only from the 0.25 MG. NO_x and PM benefits in older diesel engines may benefit from RD relative to fossil fuel. However, because only 1/5 of the 5 MG was actually RD, only 1/5 of the air pollutant benefits are being realized in the state.

The risk of fraud is high with a mass-balancing approach, and double counting is a real possibility. For example, if that 5 MG was claimed in Oregon's program, the same volume may be reported again under Washington's program unless there are strict accounting and verification processes in place. This must include any and all programs for which the fuel could not be double counted, including European or other programs. Ecology's CFS program does not have verification or accounting requirements that would fully mitigate these risks, and Ecology would need to dedicate resources toward oversight and enforcement to prevent such fraud. Bottomline—the risks to the public of fraud that undermines the goals of the CFS are high, while the benefits of including a mass-balance approach are unclear.

Further, mass balancing is inconsistent with the CFS's authorizing statute because it allows regulated entities to satisfy their compliance obligations without reducing the carbon intensity of transportation fuels used in Washington.[38] The legal requirement for the CFS to reduce the carbon intensity of in-state fuels is discussed in more detail below.

There is no reason to introduce mass balancing, which requires more staff work and verification, cooperation across multiple programs and jurisdictions, and contravenes Ecology's duty to adopt a CFS that achieves certain reductions in the carbon-intensity of in-state fuels. There is no benefit and plenty of risk. We urge Ecology to remove this from the proposal.

---

[36] WAC 173-424-610(9)(g) (unaltered in proposed amendments).
[37] Ecology, Washington State Greenhouse Gas Emissions Inventory: 1990-2021, at 14 (2025), https://apps.ecology.wa.gov/publications/documents/2414077.pdf.
[38] RCW 70A.535.025(1).

BOOK-AND-CLAIM ACCOUNTING

Ecology must eliminate the proposed exemption for alternative jet fuel in its proposed text for WAC 173-424-600(7)(b) to avoid inconsistency with statutory requirements. Specifically, allowing alternative jet fuel producers to use book-and-claim accounting to take advantage of the environmental attributes of fuels that it does not actually take delivery of would contravene Ecology's duty to "establish standards that reduce carbon intensity in transportation fuels **used in Washington**."[39] Absent a deliverability requirement, book-and-claim accounting allows fuel suppliers to take credit for the environmental attributes of fuels that never enter Washington State. For instance, book-and-claim accounting allows a fossil CNG supplier to generate the same number of credits as a biomethane CNG supplier if the fossil fuel supplier purchases environmental attributes of biomethane that was produced at a factory farm in New York and purchased by a New York power plant. In this scenario, the production and use of biomethane in New York has no impact on the carbon intensity of transportation fuels used in Washington. Similarly, biomethane that is not used as a feedstock for alternative jet fuel does not lower the carbon intensity of that jet fuel.

Without a deliverability requirement, book-and-claim accounting is essentially an unauthorized offset scheme that does not advance the basic purpose of the CFS. Unless it actually displaces fossil fuels in Washington State's transportation fuel mix or transportation fuel supply chain, biomethane captured at a New York dairy has no more impact on the carbon intensity of fossil fuels used in Washington than any other carbon offset scheme. It would be equally illogical and unlawful to allow alternative jet fuel producers to increase their CFS credit generation by paying to plant a tree in Wisconsin, plug an orphaned well in Texas, or replace inefficient cookstoves in India. When the Legislature wants to include offsets in a climate program, it knows how to do so.[40] However, it did not authorize offsets in the statute governing the CFS.

Moreover, book-and-claim disincentivizes importing low-carbon fuel to Washington and advancing the Legislature's goal of reducing the carbon intensity of in-state fuels. This disincentive arises because suppliers avoid accounting for the emissions associated with deliveries of out-of-state fuel. This dynamic also gives an un-earned advantage to out-of-state biomethane producers over in-state biomethane producers, directly undermining Washington's ability to meet the thresholds the Legislature set for increased low-carbon feedstock production in the state in RCW 70A.535.025.

For these reasons, the proposal to exempt alternative jet fuel from book-and-claim deliverability requirements is inconsistent with statute and would create unnecessary litigation risk for the amended rule.

---

[39] *Id.* (emphasis added).

[40] RCW 70A.65.170(1) (requiring the adoption of protocols for generating offset credits for compliance with obligations under the GHG Cap and Invest Program).

CONCLUSION

We appreciate the opportunity to comment on Ecology's proposed amendments to the CFS rule and look forward to working staff to strengthen the CFS so that it better addresses Washington's climate and equity goals.

Sincerely,

Sara Gersen, Earthjustice

Jaimini Parekh, Earthjustice