

CFS Environmental Justice Workshop

Climate Pollution Reduction Program
September 26, 2024



Workshop Agenda

- Program and rule timeline overview
- EJ considerations for this rulemaking
 - Avoided methane crediting
 - Alternative jet fuel
 - Zero emission vehicle infrastructure
- Other EJ issues
- Q&A, comments, and discussion

Timeline Overview

- Initial draft language released on August 29, with workshops held on September 9 and 12.
 - Links to draft language, workshop presentation materials, and video recordings can be found on our [rulemaking website](#).
- Comment period open through October 3, at 11:59PM.
 - Next rule language draft and dates for workshops/informal comment periods to be released after the end of the comment period.
 - CR-102 (formal rule proposal) in early 2025.

Clean Fuel Standard Basics

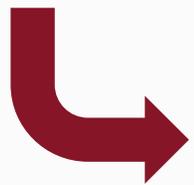
- Passed by the legislature in 2021 (RCW 70A.535) the Clean Fuel Standard (CFS) is a market-based system to reduce the carbon intensity (CI) of the production and supply of transportation fuels used in Washington.
- The CFS works with the Clean Vehicles Program (requiring new vehicles sold in WA to be low- or zero-emission) to decarbonize the transportation sector and help Washington meet its climate and greenhouse gas reduction goals.

How does it work?

- A **yearly standard** is set for carbon intensity (CI) of fuels
- Fuel suppliers and producers generate **credits** or **deficits** based on the CI of fuels sold in WA
 - Below CI yearly standard = **credits** generated
 - Above CI yearly standard = **deficits** generated
 - Organizations with deficits must buy enough credits to meet CI standard for that year
- The annual CI standard decreases over time, with a target of 20% reduction below the 2017 (baseline) levels by 2034
 - This is the most aggressive CI reduction timeline allowed under the current statute.

Carbon intensity

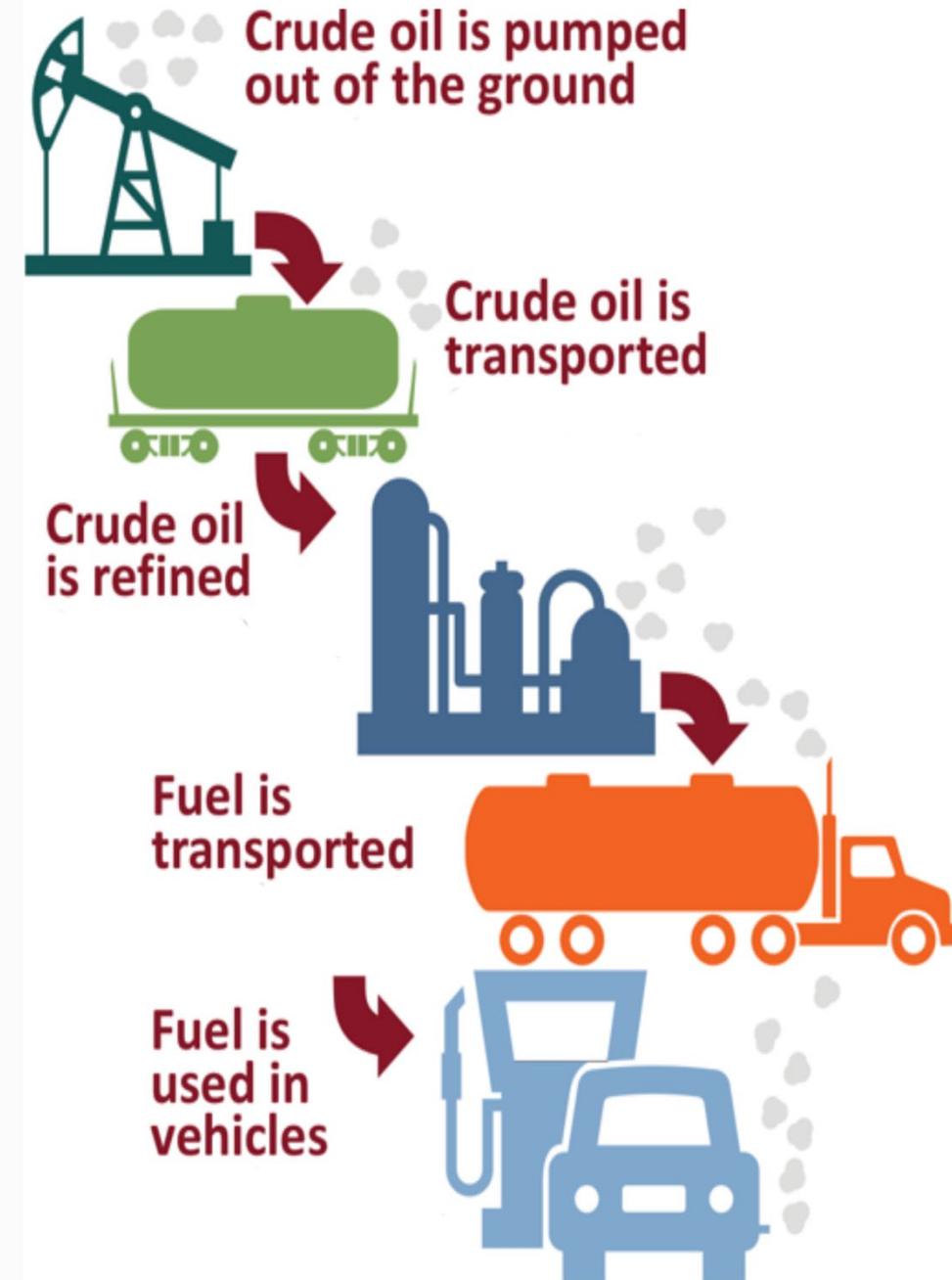
The Clean Fuel Standard accounts for greenhouse gas emissions over the full lifecycle of fuel



Each fuel acquires a certified *fuel pathway* specific to its unique production and supply



Each fuel pathway has a *carbon intensity score*



Environmental Justice and the Clean Fuel Standard



The CFS incentivizes a wide range of low-carbon fuels, with the aim of increasing affordability and accessibility **for clean transportation**

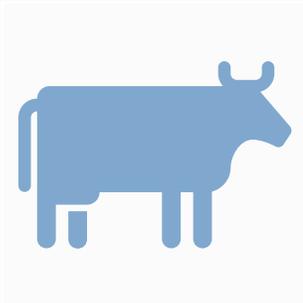


In addition to decarbonization benefits, many alternative fuels produce less air pollution than their petroleum alternatives



Electric utility revenues from CFS credits are used to promote transportation electrification, most of which must be spent on communities disproportionately impacted by air pollution

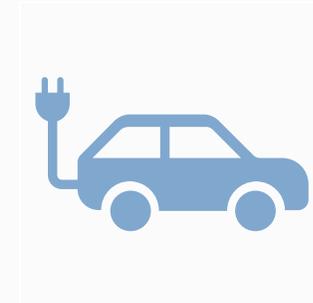
Rulemaking – Main EJ Topics



Biomethane and
avoided methane
crediting



Alternative jet fuel
and aviation
emissions



Capacity credits for
shared ZEV
infrastructure

Biomethane + Avoided Methane Crediting



Biomethane (also known as renewable natural gas, or RNG) is methane that is captured from **waste sources** (landfill gas, agricultural waste, wastewater sludge, etc.) and purified **and combined with fossil** natural gas.



Reducing methane emissions is **critical** for Washington to meet its greenhouse gas targets due to its extremely high global warming potential.

Avoided Methane Crediting



- Clean fuels programs assess biomethane from dairy and swine manure as having the lowest carbon intensity (i.e., highest environmental benefit) of all biomethane sources on average due to **avoided methane crediting**
- This practice grants fuel producers CFS credits for capturing livestock manure-related methane emissions that would otherwise **be released into the atmosphere**

Avoided Methane Crediting

- In practice, this means that dairy/swine manure receives far more credits on average than methane captured from landfills, wastewater treatment plants, and other sources, despite having the same emissions when combusted in a vehicle
- This is due to different baseline calculations (i.e., emissions in the absence of biogas capture) between different biomethane sources

EJ Concerns

- Community concerns about health impacts, increased air pollution, methane leaks, etc. from biogas/dairy operations
- Effect on CFS credit prices and electrification investments
- Lack of alternative regulations targeting agricultural methane emissions
- Different treatment compared to other biomethane sources

Our Goals

- Incentivize **additional** methane reductions in Washington while balancing EJ concerns with dairy operations/CAFOs
- For context:
 - Washington has limited anaerobic digesters currently operating, despite being a significant dairy producer
 - Dairy farms may cause air quality and other environmental burdens because of their manure management practices, based on the experiences expressed by EJ communities in Washington and other states
 - Our rulemaking does not preclude state/federal legislation or policy changes on manure management and dairy methane emissions

Our Proposal

Pre-2023 projects would have their avoided methane credits phased out over time, with older projects receiving fewer credits.

Post-2023 projects would receive full avoided methane credits on a rolling basis from the project's operational date.

Justification

- We want to encourage methane capture projects for dairy/swine manure
- Provide reasonable support for biomethane to decarbonize sections of the transportation sector
- At the same time, limit the credits to a reasonable timeframe, reduce incentives for benefits that already occurred, and incentivize new methane capture and RNG production



Alternative Jet Fuel



Alternative Jet Fuel

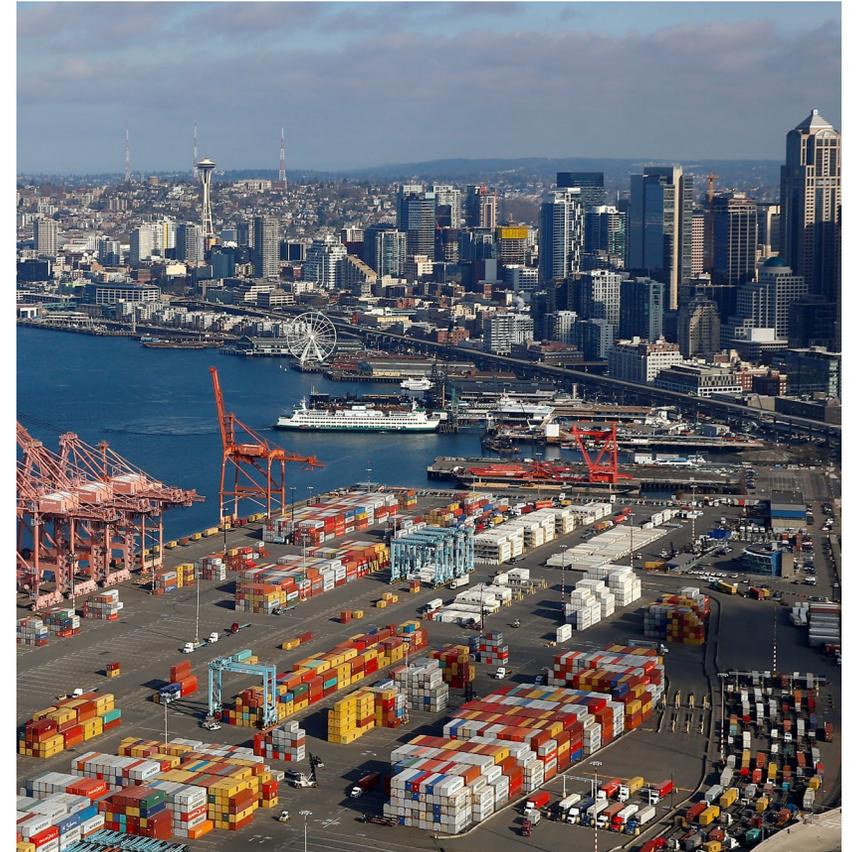
- Alternative jet fuel (AJF) encompasses numerous fuels that:
 - Can be used in existing aircraft
 - Have a lower carbon intensity than petroleum jet fuel
 - Can be made using a variety of production methods and feedstocks
- Engrossed Substitute Senate Bill 5447, passed by the state legislature in 2023, aims to make Washington a leader in AJF production

EJ Considerations for AJF

- While many policies are set by statute, Ecology will aim to:
 - Carefully assess the carbon intensity of alternative jet fuel reported in the CFS to verify incentives align with decarbonization impacts
 - Monitor work by the University of Washington and Puget Sound Clean Air Agency to evaluate air quality impacts of alternative jet fuel

Hard-to-Decarbonize Sectors

- We continue to monitor the development of alternative fuels that address aviation, marine, and other hard-to-decarbonize sectors
- These sectors disproportionately affect communities near airports, marine ports, flight paths, etc., who already face air pollution impacts and other environmental burdens from concentrated transportation emissions



Zero Emission Vehicle Infrastructure

- Our rulemaking has also proposed expanding eligibility of *capacity credits* to shared heavy-duty electric vehicle charging stations
- This is intended to accelerate the deployment of electric vehicle infrastructure, especially for fleets that operate near communities disproportionately impacted by air pollution



EJ Considerations

- Not including location requirements, due to logistical issues and unclear links between site location & local environmental benefits
- Designed to target individual owner-operators, smaller businesses, and others that cannot afford private charging
- Prioritizes heavy-duty vehicle charging, which has higher investment need and significant benefits in reducing greenhouse gas emissions and air pollution

Biofuels and Sustainability

- While sustainability certifications, biofuel credit caps, and revised indirect land use changes are **not** a focus of our current rulemaking, we are monitoring the California Air Resource Board's current rulemaking on these topics.
- CARB has proposed a cap on credit generation from soybean- and canola-oil-based fuels, but the changes are not final.

Other Topics

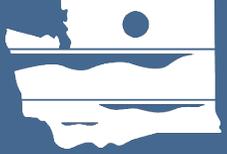
- *Annual carbon intensity standards* are not a subject of this rulemaking, as Ecology cannot adopt more aggressive standards absent state legislation
- Changes to the WA-GREET model (which is used to assess fuel carbon intensity) are also not being considered in this rulemaking
- We nevertheless welcome comments & feedback on these subjects for purposes of future rulemaking and policy development

Ecology Reporting Requirements

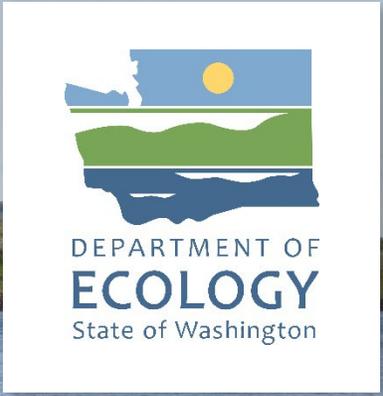
- On May 1, 2025, and every May 1 thereafter, Ecology will post:
 - Information about biomethane claimed in the program
 - Effects of the program on fuel prices, costs, and savings
 - Greenhouse gas emission reductions attributable to the program

Engagement Opportunities

- An informal comment period is ongoing and open until **October 3 at 11:59 PM PST**
- We will not be issuing responses to comments but will use them to help inform rule and policy development
- We are also open to meet 1:1 to discuss the rulemaking or general feedback about the CFS program – please contact us with your availability and what topics you would like to discuss



Q&A and Comments



Thank you

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