Amp Americas (Cassandra Farrant)

Amp Americas appreciates the opportunity to submit comments in response to the rulemaking for the Clean Fuel Standard. Please see our comments.

Amp Americas

August 1, 2025

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

Re: Comments on Proposed Rule Amendments to the Clean Fuel Standard (Chapter 173-424 WAC)

Dear Mr. Saul:

Amp Americas ("Amp") appreciates the opportunity to comment on the Clean Fuel Standard ("CFS") proposed rule language released June 16, 2025. Amp appreciates Washington's leadership in reducing greenhouse gas ("GHG") emissions from the transportation sector and promoting investment in low-carbon fuels, and strongly supports the CFS.

We endorse comments submitted by the RNG Coalition, and emphasize that avoided methane crediting and book-and-claim accounting mechanisms are absolutely critical to supporting renewable natural gas ("RNG") projects, associated methane emission reductions, and the program's overall objectives. In particular, Amp:

- Opposes the proposed limits on avoided methane crediting
- Opposes new deliverability requirements on RNG
- Supports establishing a "true-up" mechanism
- Opposes punitive penalty provisions that will hinder additional project development

About Amp

Founded in 2011, Amp develops, owns, and operates RNG facilities that convert dairy waste into renewable energy. Over our history, Amp's projects have prevented over 2 million metric tons of carbon equivalent emissions, and we hope to rapidly expand our impact over the next several years, provided sufficient market conditions exist to support continued project development.

As a pioneer in the dairy RNG industry, Amp registered the first 5 dairy RNG-to-CNG pathways and supplied RNG for the first 11 dairy RNG-to-hydrogen pathways in California's LCFS program. Our experience developing, operating, and reporting on these and other assets gives us a unique perspective on the impact CFS policies have on investment and project development activity related to low carbon fuels. Our projects and resulting methane and carbon dioxide

reductions have been made possible by clean fuel policies, and we encourage Washington maintain a technology-neutral, performance-based policy framework that will allow the CFS to continue driving emissions reductions.

Rapidly Reducing Potent Methane Emissions is Critical to Addressing Climate Change

Methane is a potent GHG, with a global warming potential over 80 times greater than carbon dioxide ("CO_2") over a 20-year period, and it is responsible for up to 45% of current warming effects.[1] However, it is also short-lived in the atmosphere – existing for about a decade, compared to over a century for CO_2 and other long-lived gasses – which means that reducing methane emissions in the near-term presents a tremendous opportunity to rapidly reduce the impacts of climate change *and may be the most important action we can take to do so*. Indeed, this point was made in a recent article by noted environmentalist Carl Pope, who notes his regret in previously neglecting efforts to address methane emissions and emphasizes that rapidly reducing methane emissions is our best – and perhaps, only – hope to avoid catastrophic climate tipping points.[2]

Per the United Nations, "if the world is to achieve the 1.5°C temperature target, it must make deep methane emission reductions."[3] The UN Environment Programme's 2021 *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions* states:

> *Reducing human-caused methane emissions is one of the most cost-effective strategies to rapidly reduce the rate of warming and contribute significantly to global efforts to limit temperature rise to 1.5°C. Available targeted methane measures, together with additional measures that contribute to priority development goals, can simultaneously reduce human-caused methane emissions by as much as 45 per cent, or 180 million tonnes a year Mt/yr, by 2030.*[4]

Avoided Methane Crediting is Needed for Methane Reductions from RNG Projects

Dairy biogas projects are low cost in terms of GHG reductions, but high cost in terms of energy production. In order to sustain investment in these projects and continued methane reductions, avoided methane must be accounted for and valued. That's why policies like the CFS have

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[1] IPCC, 2021: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. See Summary for Policymakers, Figure SPM.2 (Warming Contributions). https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf

[2] Pope, Carl, *"What Environmentalists Like Me Got Wrong About Climate Change." The New York Times*, June 23, 2025. https://www.nytimes.com/2025/06/23/opinion/climate-change-methane-natural-gas.html

[3] https://news.un.org/en/story/2021/10/1104492

[4] UN Environment Programme, *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions, dated 2021 (*https://www.unep.org/resources/report/global-methane-assessment-benefits-and-costs-mitigating-methane-emissions)

succeeded in scaling dairy digester and RNG development, when other approaches have not—lifecycle accounting explicitly values avoided methane emissions, which supports low-cost climate mitigation where energy-only markets cannot.

Continuing avoided methane crediting under the CFS is absolutely critical to maintaining the viability of existing projects and development of new ones. Dairy digester projects cost tens to hundreds of millions of dollars and take 2-3 years to develop and construct. Financing and total project costs are tied to ongoing revenue streams, and limiting the availability of methane crediting will significantly increase costs and make project financing difficult, if not impossible, for dairy digesters with a 20+ year expected project life.

Dairy digester projects also have real and significant operating and maintenance costs, including significant capital investments required to periodically replace the digesters themselves. They rely on continuous revenue streams to remain viable, and it is incorrect to assume that once a digester is built, it will continue operating and avoiding methane emissions in perpetuity. The simple fact is that when costs exceed revenues, digesters will cease to operate, and the associated methane and carbon reductions will cease to materialize.

That is the condition that clearly existed before policies began valuing avoided methane emissions. Ultimately, avoided methane crediting provides the source of revenue for these projects that allows developers to invest. If in the future, farm methane emissions are regulated directly, milk buyers will foot the bill for reducing emissions through milk prices or government will directly subsidize digesters. But until then, avoided methane crediting is the only proven way to support the development, ongoing operations, and associated emissions reductions that dairy digesters provide.[5]

Amp opposes additional limits on avoided methane crediting

Avoided methane crediting is both scientifically accurate and proven successful at supporting project development and significant methane reductions. Amp strongly opposes the proposed restrictions on avoided methane crediting, which would arbitrarily restrict crediting opportunities for dairy RNG projects compared to other pathways, limit new project development and likely lead to shut down of existing digester projects—and increased methane and carbon emissions—once avoided methane crediting periods end.

Coupled with currently low credit values, the proposed 15-year avoided methane crediting period is unworkable for new dairy digester projects. We strongly urge Ecology to avoid arbitrary sunsets on avoided methane and at least maintain its current approach, which allows for 30-years of avoided methane crediting.

[5] Freer-Smith, P., Bailey-Bale, J. H., Donnison, C. L., & Taylor, G. (2023). *The good, the bad, and the future: Systematic review identifies best use of biomass to meet air-quality and climate policies in California*. **Global Change Biology Bioenergy, 15**(11), 1312–1328. https://doi.org/10.1111/gcbb.13101

Amp opposes adding new deliverability requirements for RNG projects

Washington imports nearly all of its natural gas from Canada. Any biomethane injected into the pipeline system under the CFS displaces fossil natural gas that would otherwise be imported. Unlike the fragmented and isolated electricity markets in the western U.S., the North American natural gas system is deeply interconnected. This system has moved away from point-to-point delivery models, adopting trading hubs and flexible receipt and delivery points to provide customers with a variety of market options.

The North American natural gas market operates similarly to a book-and-claim system, where buyers do not physically receive the exact molecules of gas injected by their supplier. Instead, they receive an agreed-upon amount of gas based on a mass-balance that corresponds to the supplier's injection elsewhere in the system. This approach has proven efficient for managing natural gas supplies across the continent. It should continue to be leveraged to decarbonize gas end uses effectively and affordably. Under the CFS, RNG should be treated on equal footing with fossil natural gas—the CFS should utilize book-and-claim for RNG pathways and avoid imposing deliverability requirements.

Amp supports establishing a "true up" mechanism

Finally, Amp strongly supports creating a "true up" mechanism and appreciates its inclusion in the draft rule. RNG pathways encompass living, biological systems, and several parameters beyond the control of a pathway holder can affect the carbon intensity of a pathway (for example, temperature, herd count, changes to the manure volatile solid content, unplanned equipment downtime, evolving energy efficiency due to equipment age, force majeure events, manure collection practices, water usage, dairy feed and others). Due to these unpredictable and uncontrollable factors, verified pathways may deviate from provisional pathways through no fault of the project developer. A true up mechanism will protect the environmental integrity of the program and maintain rigorous accounting and verification, while allowing flexibility to accommodate reasonable uncertainties.

Amp opposes arbitrary, 4-to-1 penalty provisions

For similar reasons we support the true-up provisions, Amp has significant concerns with the proposed 4-to-1 penalty provisions in the proposed rule. Excessive penalties deter project investment, and in many cases may simply punish project developers for items beyond their control. We urge Ecology to reduce the 4-to-1 penalty and also include a grace period that provides sufficient time for pathway holders to address a carbon intensity exceedance before punitive penalties are applied.

Thank you again for the opportunity to comment on proposed rule amendments to the CFS. The program is a critical tool to help decarbonize Washington's transportation sector, and robust avoided methane crediting and book-and-claim accounting are critical to its success. By avoiding limits on avoided methane crediting or requirements for physical delivery of RNG, the state will best support existing and new projects to reduce methane emissions and deliver low carbon fuels.

We appreciate your consideration of these recommendations and welcome continued engagement as the rulemaking process progresses. Please do not hesitate to contact us for further information or clarification.

Sincerely,

Cassandra Farrant

Cassandra Farrant
Head of Environmental Programs and Regulatory Affairs
Amp Americas