Modern Hydrogen

Submitted via online comment portal
From: Modern Hydrogen
Re: Comments on Proposed Amendments to WAC 173-424 – Clean Fuels Program Rulemaking
Date: 26 June 2025

Dear Mr. Saul:

Modern Hydrogen ("Modern") appreciates the opportunity to comment on the Department of Ecology's proposed amendments to Washington Administrative Code Chapter 173-424, which governs the Clean Fuels Program (CFP). As a Washington-based company headquartered in Woodinville, Modern is committed to supporting Washington's ambitious clean energy and climate goals through practical innovation and local job creation.

We respectfully submit the following comments regarding the proposed changes to credit eligibility for hydrogen derived from fossil feedstocks, particularly the rulemaking's intent to align with recent amendments to the California Low Carbon Fuel Standard (LCFS):

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1. Washington Should Build Upon, Not Just Follow, California's Lead

While California's LCFS framework reflects that state's legislative mandates and political priorities, we urge the Department to avoid deferring to CARB's decisions by default. Washington's clean fuels policy should remain grounded in the state's own values, statutory authority, economic context, and technological opportunities. To adopt CARB's rules completely in the name of "alignment"—without full consideration of their implications for Washington's economy and innovation ecosystem—is to allow another state to unduly influence Washington's climate and energy strategy.

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2. Support for Updating CFP to Reflect Evolving Technology and Policy

Modern fully supports the Department's intent to modernize the CFP in ways that reflect new policy and scientific insights. We share the Department's commitment to reducing greenhouse gas emissions and accelerating the decarbonization of Washington's energy system. Our comments aim to strengthen the rule by ensuring it remains technology-neutral, equitable, and conducive to the deployment of innovative solutions that are uniquely suited to Washington's economy and infrastructure.

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3. Recommend Lifecycle-Based Credit Eligibility, Not Feedstock Bans

We respectfully recommend that the Department adopt a lifecycle-based carbon intensity (CI) threshold as the primary basis for hydrogen credit eligibility, rather than implementing a categorical ban on hydrogen produced from fossil gas. An objective, verifiable CI-based standard is consistent with the Clean Fuels Program's original design and better reflects the actual climate impact of different production pathways.

Banning all fossil-derived hydrogen, regardless of technological measures to mitigate lifecycle emissions, represents a blunt policy tool that fails to reward innovation, penalizes low-emission technologies like methane pyrolysis, and risks locking Washington into outdated assumptions about hydrogen production that will harm job creation and economic development opportunities in the state.

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4. Methane Pyrolysis Enables Immediate, Scalable Decarbonization

Methane pyrolysis is a next-generation hydrogen production and carbon mitigation technology that captures carbon from methane prior to combustion and permanently sequesters it in solid form as a beneficial asphalt additive, effectively avoiding CO_2 emissions by recycling clean hydrogen as its own energy source for process heat. Critically, it achieves this without relying on scarce or expensive renewable electricity—preserving those valuable resources to deliver maximum decarbonization benefits in other sectors.

Our technology, which has matured since CARB's original rulemaking process, offers Washington a near-term, scalable pathway to decarbonize many hard-to-abate end-uses of the existing natural gas system. It is especially valuable in this time when siting, permitting, and building new clean electricity infrastructure takes decades. Methane pyrolysis bridges that gap by delivering clean hydrogen now—at commercial scale—while avoiding the combustion of methane altogether.

To exclude such a climate-positive pathway simply because it begins with a methane molecule, regardless of its lifecycle performance, is inconsistent with Washington's climate objectives.

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5. Do Not Lock Washington Into Outdated Technology Assumptions

By replicating CARB's categorical ban on fossil-derived hydrogen, Washington risks embedding rules that are already out of date. Methane pyrolysis had not yet commercially matured sufficiently to factor meaningfully into California's LCFS modeling or stakeholder engagement when CARB's most recent rule changes were written. Washington should not adopt legacy exclusions that fail to account for recent and emerging technologies that can drive real, near-term emission reductions.

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6. Modern Hydrogen's Contributions to Washington's Economy

Modern Hydrogen is proud to be part of Washington's clean energy economy. Our company is growing rapidly, creating high-quality jobs, manufacturing next-generation energy systems, and attracting investment into the state. We believe Washington has a unique opportunity to lead in decarbonized gas infrastructure and clean hydrogen exports—if the policy environment remains open to innovation.

Policies like the proposed feedstock-based credit restrictions would not only diminish demand for our solutions, but also undermine Washington's ability to scale local climate technologies into national and global markets.

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Conclusion

We respectfully urge the Department to reconsider the proposed restrictions on hydrogen credit eligibility based on fossil feedstock origin. A more effective and equitable approach would rely on verifiable lifecycle carbon intensity, which better reflects true climate impact and aligns with the goals of Washington's Clean Fuels Program.

Modern Hydrogen stands ready to work with the Department and other stakeholders to help build a clean energy future that is both technologically grounded and economically inclusive.

Sincerely,
Michael Jung
Government Affairs & Public Policy

Modern Hydrogen
Woodinville, Washington

michael.Jung@modernhydrogen.com