

August 8, 2025



The Honorable Lee Zeldin
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

**Re: Request for Comments on “Renewable Fuel Standard (RFS) Program:
Standards for 2026 and 2027, Partial Waiver of 2025 Cellulosic Biofuel Volume
Requirement, and Other Changes”**

Dear Administrator Zeldin,

On behalf of the Electric Natural Gas Coalition (eNG Coalition), I am writing to provide comments pursuant to the U.S. Environmental Protection Agency’s (EPA) Request for Comments in response to *Renewable Fuel Standard (RFS) Program: Standards for 2026 and 2027, Partial Waiver of 2025 Cellulosic Biofuel Volume Requirement, and Other Changes* (Proposed Rule).¹

eNG Coalition is a global platform dedicated to raising awareness of electric natural gas (e-NG), promoting its tradability, fostering policy support, and driving harmonization of applicable regulations and standards. eNG Coalition’s members include energy producers and end-users with substantial industrial expertise and investment capacity across energy technologies. We believe that e-NG, as part of the broader energy economy, can play a critical role in supporting energy security via increasing domestic energy production, create employment opportunities and economic growth, diversify the US energy mix, and benefit human and environmental health.

At this stage, eNG Coalition’s primary goal is to ensure that e-NG is properly included as a qualifying renewable fuel within the RFS program. Our comments provide essential background information regarding the production process and benefits of e-NG, as well as a justification for its inclusion as an eligible pathway.

¹ <https://www.federalregister.gov/documents/2025/06/17/2025-11128/renewable-fuel-standard-rfs-program-standards-for-2026-and-2027-partial-waiver-of-2025-cellulosic>

Background: Electric Natural Gas (e-NG)

e-NG, also known as e-methane, is a synthetic form of natural gas produced using electricity, carbon dioxide (CO₂), and water. First, through a process called electrolysis, electricity is used to produce hydrogen by splitting the water molecule.² This hydrogen is then combined with CO₂ in a chemical reaction known as the Sabatier process to produce methane (CH₄), which can be stored, transported, and used in existing natural gas infrastructure. The resulting e-NG has the same chemical properties as geologic natural gas, making it compatible with current energy systems and applications.

Importantly, CO₂ captured from industrial processes serves as a crucial feedstock for e-NG; this process transforms CO₂ which is typically considered a waste product into a valuable commodity. This CO₂ can be obtained from various industrial operations that combust fuels, as well as from biogenic CO₂³ generated at biofuel production facilities, among other sources.

Benefits of e-NG in the US Economy:

e-NG has the potential to serve multiple roles across the US energy economy, providing a versatile solution in support of EPA and the administration's economic, energy security, and environmental goals:

Renewable Gas Supply for Existing Infrastructure

One of the key advantages of e-NG is its compatibility with existing natural gas infrastructure. e-NG can be injected into natural gas pipelines and used in transportation applications considered by the RFS, existing power plants, industrial facilities, and households without requiring significant changes to the infrastructure. This makes it a scalable supplement to geologic natural gas, increasing energy supply and diversification via the repurposing of waste CO₂.

Facilitating Energy Storage and Grid Flexibility

e-NG can serve as an energy storage solution which improves the flexibility and reliability of the U.S. electricity and natural gas grids, where (1) renewable biomass in the form of biogenic CO₂ is combined with (2) hydrogen produced using excess renewable electricity, to create storable natural gas. This stored energy can be kept in existing infrastructure like

² While hydrogen production from electrolysis is the most common production pathway, e-NG Coalition supports the use of all clean hydrogen production pathways as a feedstock for creating e-NG.

³ See *Fossil vs Biogenic CO₂ Emissions*, International Energy Agency (<https://www.ieabioenergy.com/iea-publications/faq/woodybiomass/biogenic-co2/>)

pipelines or underground storage, making it scalable and dispatchable, as both a fuel and power source.

Encouraging Innovation and Investment

The development of e-NG supports innovation across several key areas in energy production, storage, and infrastructure. This includes through the advancement of e-fuels production technologies, improving hydrogen production efficiency, and enhancing carbon capture and utilization (CCU) methods. It also fosters the adaptation of existing natural gas infrastructure to handle renewable-based synthetic fuels, creating new technical and business opportunities. Additionally, e-NG encourages collaboration across the renewable electricity, hydrogen, and natural gas sectors.

Supporting Emission Reductions

e-NG plays a key role in reducing greenhouse gas (GHG) emissions by providing a cleaner supplement to geologic natural gas. When produced using renewable energy, e-NG has the potential to be carbon-neutral, as the CO₂ used in its creation can be obtained from biogenic sources, or captured from the atmosphere or industrial sources, preventing it from being released into the environment.

Alignment with Administration and Congressional Priorities

Importantly, direction to support the development of technologies like e-NG can be found throughout recent executive orders (EO), agency documents, and congressional action via the *One Big Beautiful Bill Act* (OBBA).⁴ For example, the EO's *Unleashing American Energy*⁵ and *Declaring a National Energy Emergency*⁶ both explicitly support the development of natural gas and biofuels. EO *Strengthening the Reliability and Security of the United States Electrical Grid*⁷ establishes that it is the policy of the United State to utilize all power generation resources, especially those that are based on secure and redundant fuel supplies. In context of the latter, e-NG holds particular significance as a bridge between the inherently less reliable forms of renewable electricity and secure and redundant fuel supplies. Overall, e-NG sits at the nexus of all three executive orders.

⁴ <https://www.congress.gov/bill/119th-congress/house-bill/1/text>

⁵ <https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/>

⁶ <https://www.whitehouse.gov/presidential-actions/2025/01/declaring-a-national-energy-emergency/>

⁷ <https://www.whitehouse.gov/presidential-actions/2025/04/strengthening-the-reliability-and-security-of-the-united-states-electric-grid/>

Furthermore, EPA's *Powering the Great American Comeback Initiative*⁸ includes pillars of "Clean Air, Land, and Water for Every American" and "Restore American Energy Dominance", which are served by the development and use of e-NG.

Finally, the recent OBBA established significant alignment between congressional goals and support for clean fuels technologies like e-NG by upholding and improving tax credits that enable key components of the e-NG production process including the clean fuels tax credit (45Z), the clean hydrogen tax credit (45V), and the carbon sequestration tax credit (45Q).

Comments on the Proposed Rule

eNG Coalition's comments here within focus on the **qualification of e-NG, produced via upgrading the CO₂ component of biogas, as an eligible fuel production pathway under the RFS program**. Subjects addressed include (1) the definition of "produced from renewable biomass" (E-3);⁹ (2) additions to the pathways in Table 1 to 40 CFR 80.1426 (D-1);¹⁰ (3) EPA's acceptance of renewable electricity as a feedstock; and (3) alignment with goals of the Trump Administration and recent congressional action (E-7).¹¹

Definition of "Produced from Renewable Biomass" (E-3)

EPA asks for comments on a definition of "produced from renewable biomass" in the Proposed Rule. In considering an appropriate definition, EPA should seek to grow supply of domestically produced renewable fuels, including by considering the potential for new fuel pathways in a forward-thinking manner. eNG Coalition believes that, in the near term, this is likely to include biogas which is upgraded to e-NG.

eNG Coalition supports a definition for "produced from renewable biomass" where "the mass or energy in the finished fuel or bio intermediate comes from renewable biomass." This definition would enable the inclusion of e-fuel production pathways that utilize 100% non-fossil components, including biogenic CO₂ that is sourced from eligible forms of "renewable biomass", in line with EPA's long-standing definition of the term.¹²

Indeed, adopting the broader definition of "produced from renewable biomass" aligns with congressional intent for the RFS "to create incentives for and reduce barriers to the

⁸ <https://www.epa.gov/newsreleases/epa-administrator-lee-zeldin-announces-epas-powering-great-american-comeback>

⁹ <https://www.federalregister.gov/d/2025-11128/p-903>

¹⁰ See Table 1 to 40 CFR § 80.1426 (<https://www.ecfr.gov/current/title-40/section-80.1426>)

¹¹ <https://www.federalregister.gov/d/2025-11128/p-907>

¹² 40 CFR 80.2 "Renewable biomass" ([https://www.ecfr.gov/current/title-40/part-80/section-80.2#p-80.2\(Renewable%20biomass\)\)](https://www.ecfr.gov/current/title-40/part-80/section-80.2#p-80.2(Renewable%20biomass)))

increased production of and use of renewable fuel in the United States,”¹³ as well as the Trump Administration’s goals outlined across various EOs, including the Administration’s flagship *Unleashing American Energy*, which explicitly supports “the identification, development, or use of domestic energy resources with particular attention to... natural gas [and] biofuels.”¹⁴ Broadly speaking, the development and utilization of technologies like e-NG has had bipartisan congressional support, as evidenced by the inclusion of technology neutral clean fuels tax credit 45Z, hydrogen tax credit 45V, and carbon sequestration tax credit 45Q within both the *Inflation Reduction Act* (passed by the Democrat-controlled 117th Congress and Biden Administration) and the *One Big Beautiful Bill Act* (passed by the Republican-controlled 119th Congress and Trump Administration). Adopting a narrow definition which excludes certain renewable fuel production pathways is unnecessary and will run counter to this intent.

Adding an e-NG Pathway in Table 1 to 40 CFR 80.1426 (D-1)

In this rulemaking EPA has proposed, for Table 1 to 40 CFR 80.1426, to both add new pathways and specify pathways in rows that currently rely on the term “any”. We believe that this is an important opportunity for EPA to recognize e-NG that is produced via upgrading the CO₂ component of biogas as an eligible pathway in rows Q and T.

Indeed, the most immediate production pathway for e-NG in North America involves combining (1) hydrogen that is derived from renewable electricity and water with (2) the CO₂ component of biogas. Here the eligibility of biogas upgrading as a fuel production pathway is well established, including through EPA’s differentiation between biogas, biogas-derived fuel, and RNG.¹⁵ RNG is the most common method of upgrading biogas, but deals primarily with the methane component of biogas. Similarly, e-NG production is a process where the CO₂ portion of biogas is upgraded to produce a renewable fuel. Simply put, the CO₂ component of biogas is already an EPA-approved feedstock, and therefore EPA can add another pathway for upgrading that biogas to produce e-NG.

Specifically, eNG Coalition requests the addition of new entries under “Production process requirements” under row Q and T that cover the upgrading of biogas to e-NG.

Renewable Electricity as a Process Feedstock

A primary input to the production of e-NG from renewable biomass feedstocks is renewable electricity, the majority of which is used in the electrolysis of water to produce

¹³ <https://www.federalregister.gov/d/2022-26499/p-750>

¹⁴ *Unleashing American Energy*, Section 3 (<https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/>)

¹⁵ <https://www.federalregister.gov/d/2022-26499/p-amd-2>

hydrogen. Renewable electricity in the United States is primarily procured via market-based transactions in the form of renewable electricity credits (RECs). Likewise, the use of RECs for renewable electricity consumption is an important component of producing low-carbon intensity (CI) e-NG.

eNG Coalition notes that in 2013 EPA ruled against the use of renewable electricity credits (RECs) as a means of sourcing electricity for process power under the RFS. At the time, EPA cited “tracking and enforcement issues”.¹⁶ However, mechanisms surrounding the use of RECs have advanced significantly since 2013. Under EPA’s Green Power Program alone over 100B kWh/Year of renewable electricity were transacted via RECs.¹⁷ This program covers only a portion of renewable electricity and REC procurement in the United States. The use of RECs is also well-established as a fundamental part of the clean hydrogen tax credit, 45V.¹⁸ This includes in-depth consideration surrounding tracking and enforcement issues and supplies a definition for “qualified EAC registry or accounting system.”¹⁹

With this in mind, EPA should reconsider its 2013 determination, taking into account the current state of REC procurement methodologies and their widespread use across applications in the United States. eNG Coalition is committed to working with EPA to ensure that REC tracking and verification under the RFS is robust and aligned with existing best practice.

Conclusion

This is a critical moment for EPA to advance the use of emerging renewable fuel technologies such as e-NG, particularly through inclusion in the RFS. Recent support for renewable fuels by the Trump Administration and Congress not only demonstrate strong alignment with this goal but create a favorable policy environment which signals that the time is right for commercial deployment and production of advanced fuels like e-NG.

Meanwhile, international efforts to accelerate clean fuel adoption continue to gain momentum. The European Union is implementing its Renewable Energy Directive (RED III), which includes specific targets for advanced biofuels and e-fuels in the transportation sector.²⁰ Other countries are likewise beginning to develop strategies which incorporate e-

¹⁶ <https://www.epa.gov/sites/default/files/2015-08/documents/absolute-energy-rec-determination-5-22-13.pdf>

¹⁷ See combination of all Supply Options with exception of “self-supply”:

<https://www.epa.gov/greenpower/program-data-viewer>

¹⁸ <https://www.federalregister.gov/documents/2025/01/10/2024-31513/credit-for-production-of-clean-hydrogen-and-energy-credit>

¹⁹ <https://www.federalregister.gov/d/2024-31513/p-274>

²⁰ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202502983#:~:text=RFNBOs%20also%20contribute%20towards%20a,conte

fuels across various sectors of the economy. For example, Japan is targeting 1% eNG by 2030 and 90% e-NG by 2050 in its existing gas infrastructure and investing in e-fuels demonstration projects.²¹ To maintain U.S. competitiveness and leadership in renewable energy innovation, the EPA must take action to support technologies like e-NG within the RFS framework.

In conclusion, e-NG Coalition strongly supports the objectives of the RFS and its potential to accelerate the development of new energy resources. We look forward to collaborating with EPA and other stakeholders to ensure that the RFS achieves its goals, and that the US remains at the forefront of innovating and developing energy technology. EPA should take the following actions if it wishes to continue to support the development of new renewable fuels technologies like e-NG:

- Adopt an Inclusive Definition of “Produced from Renewable Biomass” (E-3)
- Add an e-NG Pathway in Table 1 to 40 CFR 80.1426 (D-1)
- Allow Renewable Electricity as a Process Feedstock

Thank you for your consideration of these comments. We are happy to provide further information or engage in discussions on these important matters.

Sincerely,

/s/

Rafik Ammar
Policy Director
eNG Coalition

Email: rafik.ammar@eng-coalition.org

[xt%20of%20other%20legal%20acts.&text=\(1\)%20Directive%20\(EU\),energy%20and%20non%2Denergy%20consumption.](#)

²¹ <https://www.egeda.ewg.apec.org/egeda/meeting/21WSpresentations/S2-7.pdf>