November 6, 2023

The Honorable Janet Yellen
Secretary
U.S. Department of Treasury
1500 Pennsylvania Ave., NW
Washington, D.C. 20220

The Honorable Tom Vilsack
Secretary
U.S. Department of Agriculture
1400 Independence Ave., SW
Washington, D.C. 20250

Dear Madam Secretary and Mr. Secretary:

On behalf of the undersigned organizations, we write to express our support for the Department of Treasury's timely development of guidance that implements the Inflation Reduction Act's (IRA) Section 45V Production Tax Credit (PTC), and which maximizes opportunities to reduce methane emissions by incentivizing renewable natural gas (RNG) pathways for clean hydrogen production. Clean hydrogen at scale could significantly reduce lifecycle carbon emissions from various applications. As stated in the Biden Administration's U.S. Methane Emissions Reduction Action Plan, methane is a potent greenhouse gas (GHG) that accounts for around 10% of U.S. emissions, and RNG is an essential tool in combating this climate pollutant. We also highlight that through the careful selection of the recently announced Regional Clean Hydrogen Hub funding recipients, the President has clearly established his commitment to fostering methane reforming-based value chains for clean hydrogen production. RNG can be used as a feedstock to produce clean hydrogen, providing another beneficial use for low-carbon renewable gas in the energy, transportation, and industrial sectors. When clean hydrogen produced with carbon capture and sequestration uses animal manure derived RNG as a feedstock, the hydrogen can become carbon negative.

Under Section 45V of the IRA, Treasury is required to measure lifecycle GHG emissions using the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) model. Consistent with GREET, any modeling used for determining lifecycle GHG emissions for pathways involving RNG or biogas directly should include avoided emissions. RNG is derived from the capture, cleaning and conditioning of surface-level emissions from organic waste streams. Methane that otherwise would have been emitted into the atmosphere is refined into a clean, reliable energy resource, resulting in a negative displacement effect. Developed by the U.S. Department of Energy Argonne National Laboratory, the GREET model is continuously updated and has consistently included the quantification of avoided emissions benefits by various fuel pathways, including organic waste derived RNG. Accordingly, modeling of emissions avoidances – also referred to as counterfactual scenario analysis – is a well-established element of life cycle analysis science. This approach is also consistent with other domestic and international regulatory programs that consider lifecycle GHG emissions, including California's Low Carbon Fuel Standard (LCFS) program and the European Union's Renewable Energy Directive II programs.

Methane Avoidance Benefits Dramatically Accelerate Emissions Reductions from U.S. Agriculture…

Methane avoidance benefits under Section 45V guidance can catalyze significant investment in methane abatement and recycling across U.S. livestock operations. Since its formalization in the 2018 California LCFS rulemaking, avoided methane crediting in the program has contributed significantly to methane emissions reductions from manure-based RNG projects. EPA data indicates an annual improvement in emissions reductions from such projects of 247 percent in 2022 compared to 2017 -- compared to a more modest 26 percent annual improvement in 2017 compared to 2012.[1,2] In 2022 alone, emissions reductions from manure-based anaerobic digesters (ADs) were equivalent to reducing annual GHG emissions from oil and natural gas production in the Permian Basin by 44%.[3] RNG Coalition estimates that less than 7% of dairy and 1% of swine operations that could currently support RNG projects are capturing and converting their manure methane emissions into RNG.[4] As such, Section 45V could accelerate significant and cost-effective methane abatement across U.S. dairy and swine operations, if implemented as Congress intended.

…and Provide Environmental Benefits and Economic Development Opportunities for U.S. farmers.

There is also overwhelming research demonstrating that avoiding, capturing, and utilizing manure methane at dairy and swine farms offers not just GHG emissions reductions, but also environmental, economic, and health benefits. This explains why the U.S. Environmental Protection Agency and the Department of Agriculture continue to support AD deployment on U.S. farms – and why these projects are receiving grant and loan funding that has been authorized by the IRA and the 2018 Farm Bill. U.S. farmers can offset costs and generate income from RNG production. The AD process creates a high-quality fertilizer and other byproducts which can be used on-site or sold as animal bedding. ADs lower the pathogen risks to crops and animals and decrease run-off pollution to nearby waterways. Digested manure is largely odorless, offering a health and quality of life benefit for farmers and their communities. The revenue benefits to farming communities include job opportunities to construct and maintain ADs as well as support for other ventures such as agro-tourism and investment cooperatives that can boost local rural economies.

Other Key Considerations for RNG-to-Clean Hydrogen Production Pathways

We strongly encourage Treasury to allow hydrogen producers to qualify their annual production for tax credit eligibility by procuring any amount of manure-derived, and other low-carbon intensity RNG over the course of the taxable year and calculate an average feedstock carbon intensity based on the actual amounts of RNG and other feedstocks used. This would allow for effective accounting of carbon-negative lifecycle emissions commodities like RNG, which is aligned with the goals of the IRA.

We would also urge Treasury to permit flexible use of a book-and-claim accounting system under Section 45V, consistent with Congressional intent. Efficiencies of scale are inherent to centralized hydrogen production, just as decentralization is inherent to RNG development due to the necessity to co-locate with sources of waste biomass. Since hydrogen is often consumed near its production source, and the infrastructure for hydrogen transportation is insignificant when compared to the existing gas infrastructure, hydrogen production facilities cannot often be located near RNG facilities. Accordingly, for any meaningful

---

[1] U.S. EPA, AgStar Data and Trends, Emissions Reductions from Manure-based Anaerobic Digestion Systems, https://www.epa.gov/agstar/agstar-data-and-trends, January 2023

[2] CARB, Proposed Amendments to the Low Carbon Fuel Standard Regulation and to the Regulation on Commercialization of Alternative Diesel Fuels, https://ww2.arb.ca.gov/rulemaking/2018/low-carbon-fuel-standard-and-alternative-diesel-fuels-regulation-2018, 2018.

[3] The Permian is the most prolific U.S. hydrocarbon producing region, accounting for 30 percent of U.S. crude oil production and 25 percent of total GHG emissions from U.S. hydrocarbon basins, according to data from the Clean Air Task Force.

[4] RNG Coalition analysis assumes that dairy and swine farms with >1000 animals could commercially support RNG projects.

opportunity to decarbonize hydrogen production through RNG procurement, hydrogen producers must be able to aggregate RNG production facilities across the pipeline grid. By leveraging existing pipeline infrastructure, book-and-claim also best facilitates system-wide emissions reduction efforts, consistent with the IRA intent to promote clean energy investment across all U.S. jurisdictions. An RNG deliverability requirement would preclude most RNG-to-hydrogen projects from access to the tax credit, thus constraining RNG project development throughout the country and increasing the level of investment required to accelerate deployment of clean hydrogen. Emissions avoidance via displacement of geologic natural gas with RNG in the gas grid has value irrespective of where the displacement occurs and where the RNG is produced. Use of RNG through the gas grid is an effective tool for decarbonizing emissions along the distribution system including the end use applications where the product is delivered.

The IRA presents a major opportunity to reduce GHG emissions – and we believe the sustainable development, deployment, and utilization of RNG should play a key role in those pursuits. A Section 45V credit that incorporates avoided methane benefits has the potential to rapidly accelerate the RNG industry's capacity to help the U.S. achieve its 2030 commitments under the Global Methane Pledge, while also providing myriad benefits to U.S. farmers and their communities.[5]

Thank you for the opportunity to share our considerations on this critical issue.

Sincerely,

Geoffrey Dietz
Director, Federal Government Affairs
The Coalition for Renewable Natural Gas

Paul Bleiberg
Executive Vice President, Government Relations
National Milk Producers Federation

Michael Formica
Chief Legal Strategist
National Pork Producers Council

Cc: The Honorable Jennifer Granholm, Secretary, U.S. Department of Energy
       The Honorable David Turk, Deputy Secretary, U.S. Department of Energy
       The Honorable David Crane, Under Secretary for Infrastructure, U.S. Department of Energy
       The Honorable Robert Bonnie, Under Secretary for Farm Production and Conservation, USDA
       The Honorable Lily Batchelder, Assistant Secretary for Tax Policy, U.S. Department of Treasury
       The Honorable John Podesta, Senior Advisor to the President for Clean Energy Innovation and Implementation, The White House
       The Honorable Ali Zaidi, Assistant to the President and National Climate Advisor, The White House

---

[5] The U.S. has committed to reducing methane emissions by 30% relative to 2020 levels by 2030 under the Global Methane Pledge.