

Congress of the United States
Washington, DC 20515

December 7, 2023

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

Ethan Zindler
Climate Counselor
U.S. Department of the Treasury
1500 Pennsylvania Avenue NW
Washington, D.C. 20220

Dear Secretary Yellen and Climate Counselor Zindler:

Thank you for your leadership in implementing the Inflation Reduction Act (IRA), America's most powerful response to the civilizational threat of climate change. Our climate goals are now within reach, and in these crucial years ahead, the stakes could not be higher. Already, every region in the U.S. is experiencing the increasingly harmful effects of climate change, according to the recently released Fifth National Climate Assessment.¹ In order to limit future warming and avoid irreversible ecological damage, we must make rapid and deep reductions in greenhouse gas emissions. The IRA's incentives for clean hydrogen and other emerging technologies offer great promise in reducing emissions in difficult-to-decarbonize sectors. As the administration finalizes rules for the IRA's 45V Clean Hydrogen Production Tax Credit, **we strongly urge you to ensure that the guidance results in a net decrease in greenhouse gas emissions.**

As policymakers, we must be attentive to the negative consequences of weak 45V rules for hydrogen production, which would imperil our climate goals and lead to significant U.S. emissions increases, including from Regional Clean Hydrogen Hubs recently announced by the Department of Energy. Hydrogen production is extremely energy intensive, and absent strong rules, clean hydrogen production could result in emissions that are equivalent to running 26 more coal plants, taking us in precisely the wrong direction in our transition to clean, renewable energy.² Strong rules will allow the U.S. to harness hydrogen's most promising climate, health, and economic benefits, setting up our domestic clean hydrogen industry for long-term success. That is why scientists, clean energy and forward-thinking companies,³ consumer advocates,⁴ climate groups,⁵ state legislators,⁶ and environmental justice advocates⁷ across the country have voiced their support for strong rules for the 45V credit.

We are troubled by competing efforts to weaken the administration's guidance on electrolytic hydrogen production, which would put communities' health at risk, increase electricity prices,

¹ <https://nca2023.globalchange.gov/>

² <https://blog.ucsusa.org/julie-mcnamara/without-sufficient-guardrails-the-hydrogen-tax-credit-could-increase-emissions/>

³ <https://greenh2catapult.com/2023/11/06/joint-letter-on-45v-implementation/>

⁴ <https://www.citizen.org/wp-content/uploads/Consumer-Advocates-45V-Letter.pdf>

⁵ <https://www.actionclimate.com/wp-content/uploads/2023/10/CAC-Hydrogen-Principles.pdf>

⁶ https://www.ncelenviro.org/app/uploads/2023/06/State-Legislative-Sign-On-Letter-re_IRA-45V-Clean-Hydrogen-Tax-Credit-Revised.pdf

⁷ <https://subscriber.politicopro.com/f/?id=0000018b-d509-deac-a19b-f58907a60000>

and amplify public distrust in hydrogen as a climate solution.^{8,9,10,11} It is critical that we have a rigorous framework that captures the full climate impact of hydrogen production and provides an accurate accounting of lifecycle emissions across the hydrogen production pathway and avoids causing spikes in electricity prices for low and moderate-income Americans.

Specifically, we urge the Department of Treasury to:

- Require that *all* electrolytic hydrogen projects –both grid-connected and behind-the-meter projects—comply with the “three pillars” of 1) additionality; 2) deliverability; and 3) hourly time matching. To the extent that any phase-in of those rules is envisioned, it should not allow projects complying with weaker, early-stage rules to be grandfathered in. It bears emphasizing that here, discussion of the three pillars is specific to electrolytic hydrogen, not fossil fuel-derived - or “blue”- hydrogen projects.
- Require the GREET model to accurately account for upstream methane leakage involved in fossil fuel-derived hydrogen projects. Methane is a highly potent greenhouse gas, and the GREET model currently assumes an average leakage rate of 1%, which is less than half of what scientists have observed nationwide and several times smaller than emissions rates in certain basins.^{12,13} Treasury should instruct the Department of Energy to adopt basin-specific estimates and update the nationwide default value to reflect the best available data.
- Prevent greenwashing of heavily polluting fossil fuel-based hydrogen projects by disallowing carbon-negative accounting of biomethane and prohibiting the use of carbon-negative fuels for offsetting or netting project lifecycle emissions.^{14,15} Without these changes, operators of current “grey” hydrogen projects, which are heavily polluting, could declare their processes “clean” without actually reducing emissions.
- Clarify that for all hydrogen projects, hydrogen emissions (e.g. from venting or purging) are not eligible to receive the 45V credit and should be accounted for in lifecycle emissions estimates and operational plans.

The climate, scientific and economic cases for adopting the three pillars are deeply compelling. The three pillars will support substantial electrolytic hydrogen deployment, while helping us meet our net-zero emissions goals, according to recent analysis by the Electric Power Research Institute (EPRI).¹⁶ This new study adds to a mounting pile of compelling evidence which

⁸ <https://www.epri.com/research/products/000000003002028407>

⁹ <https://www.cbecal.org/wp-content/uploads/2023/10/Equity-Hydrogen-Initiative-Shared-Hydrogen-Position-1.pdf>

¹⁰ <https://energyinnovation.org/publication/consumer-cost-impacts-of-45v-rules/>

¹¹ <https://www.citizen.org/wp-content/uploads/Consumer-Advocates-45V-Letter.pdf>

¹² <https://www.science.org/doi/10.1126/science.aar7204>

¹³ <https://pubs.acs.org/doi/10.1021/acs.est.1c06458>

¹⁴ <https://www.canarymedia.com/articles/hydrogen/the-biomethane-boondoggle-that-could-derail-clean-hydrogen>

¹⁵ <https://blog.ucsusa.org/julie-mcnamara/biomethane-threatens-to-upend-the-clean-hydrogen-tax-credit/>

¹⁶ <https://www.epri.com/research/products/000000003002028407>

irrevocably refutes the claim that rigorous rules will stifle U.S. hydrogen development.¹⁷ ¹⁸ The three pillars will also support job creation and economic opportunities for Americans by incentivizing the deployment of new utility-scale clean energy development and turbocharging the creation of a new U.S. advanced electrolyzer manufacturing base.

We look forward to working together as the administration implements IRA provisions. It is essential that the administration get the implementation of the 45V tax credit right –the climate, public health, consumer, reputational, economic, and legal harms are too great otherwise.¹⁹

Thank you again for your leadership as we work towards a clean energy future. Please do not hesitate to reach out to follow up should you have any questions.

Sincerely,



Jamie Raskin
Member of Congress



Donald S. Beyer Jr.
Member of Congress



Eleanor Holmes Norton
Member of Congress



Alexandria Ocasio-Cortez
Member of Congress



Rashida Tlaib
Member of Congress



Mark Takano
Member of Congress

¹⁷ <https://zenodo.org/records/7948769>

¹⁸ <https://www.evolved.energy/post/45v-three-pillars-impact-analysis>

¹⁹ <https://www.nrdc.org/sites/default/files/2023-04/nrdc-catf-memo-ira-45v-legal-necessity-3-pillars-20230410.pdf>



Barbara Lee
Member of Congress



Katie Porter
Member of Congress



Jared Huffman
Member of Congress



Julia Brownley
Member of Congress



Doris Matsui
Member of Congress



Alma S. Adams, Ph.D.
Member of Congress



Steve Cohen
Member of Congress



Jim Tokuda
Member of Congress



Mark DeSaulnier
Member of Congress



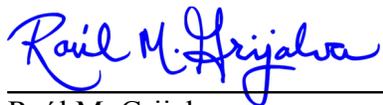
Henry C. "Hank" Johnson, Jr.
Member of Congress



Suzanne Bonamici
Member of Congress



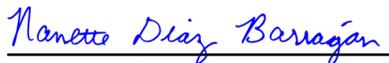
Bonnie Watson Coleman
Member of Congress



Raúl M. Grijalva
Member of Congress



Brittany Pettersen
Member of Congress



Nanette Diaz Barragán
Member of Congress



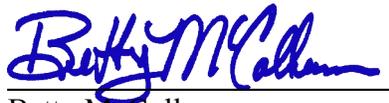
David J. Trone
Member of Congress



Ted W. Lieu
Member of Congress



Ilhan Omar
Member of Congress



Betty McCollum
Member of Congress



Earl Blumenauer
Member of Congress



Adriano Espaillat
Member of Congress



Nikema Williams
Member of Congress



Ro Khanna
Member of Congress



Dina Titus
Member of Congress



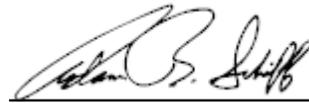
Emanuel Cleaver, II
Member of Congress



Jennifer L. McClellan
Member of Congress



Greg Casar
Member of Congress



Adam B. Schiff
Member of Congress



Frederica S. Wilson
Member of Congress



Jan Schakowsky
Member of Congress



James P. McGovern
Member of Congress



Robert Garcia
Member of Congress



Deborah K. Ross
Member of Congress



Shri Thanedar
Member of Congress



Yvette D. Clarke
Member of Congress



Delia C. Ramirez
Member of Congress



Ayanna Pressley
Member of Congress



Morgan McGarvey
Member of Congress



Robert C. "Bobby" Scott
Member of Congress



Melanie Stansbury
Member of Congress

Cc: Mr. John Podesta, Senior Advisor to the President for Clean Energy Innovation and Implementation; The Honorable Wally Adeyemo, Deputy Secretary of the Treasury; The Honorable Lily L. Batchelder, Treasury Department Assistant Secretary for Tax Policy; Mr. Seth Hanlon, Treasury Department Deputy Assistant Secretary for Tax and Climate Policy