

Hydrogen Means Business in California!

October 13, 2023

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

The Honorable Jennifer Granholm
Secretary
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

The Honorable John Podesta
Senior Advisor to the President
for Clean Energy Innovation and Implementation
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20220

Re: Section 45V Clean Hydrogen Production Tax Credit Implementation

Dear Secretary Yellen, Secretary Granholm, and Mr. Podesta:

On behalf of the [California Hydrogen Business Council](https://www.californiahydrogen.org) (CHBC), we write to address the importance of pragmatic, forward-looking implementation of the Section 45V Credit for Production of Clean Hydrogen Tax Credit (PTC). The CHBC is the largest and longest standing hydrogen trade association in the U.S. with over 130 members that span the hydrogen market. Our member base represents the companies that provide jobs in all sectors including production, supply chain, and end users.

Congress passed the Inflation Reduction Act (IRA) to supercharge investment in a new generation of technologies that will create millions of good paying jobs, ensure our nation's energy security, and accelerate decarbonization. Along with the Bipartisan Infrastructure Law, Congress spoke clearly – hydrogen is crucial for our energy security, decarbonization, and workforce transition, and we must swiftly scale to make the U.S. a center of the clean hydrogen economy and to realize the benefits of the seven hydrogen hubs across the U.S. that were announced by the White House on October 13.¹

Companies are deploying clean hydrogen projects in real time. It remains undecided where many of these investments will be made – a determination driven, in part, by policy. Though clean hydrogen technologies are robust and commercially ready, we have to compete with incumbent, cheaper fossil fuels. As with any technology, economies of scale will drive cost reduction. And incentives like the PTC can create the level playing field needed to begin the scaling process.

It is imperative that the implementation of the Clean Hydrogen PTC not lose sight of the ultimate goals – driving economy-wide decarbonization, creating good-paying jobs, and ensuring energy security. Untenable PTC

¹ [Biden-Harris Administration Announces Regional Clean Hydrogen Hubs to Drive Clean Manufacturing and Jobs | The White House](https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/13/)

requirements that are outside the scope of the statute would shift clean hydrogen investments overseas and allow overseas competitors to undercut clean hydrogen manufacturing.

Narrow geographic requirements are inconsistent with the statute, will stifle hydrogen projects, and would create disparate geographic winners and losers, inconsistent with the Congress' intent of creating a national clean hydrogen economy. Section 45V is prescriptive in its deference to the GREET model, which utilizes North American Electric Reliability Corporation (NERC) regions as a relevant geographic input. As such, the Section 45V rules should afford taxpayers the ability to procure power and environmental attributes across a geographic area no narrower than the NERC region.

Additionality is outside the scope of the statute, ineffectual to marginal grid emissions – particularly in jurisdictions with robust clean energy mandates (such as California) – and would disproportionately subject hydrogen project developers to multi-year interconnection delays. Additionality is inapposite to the lifecycle analysis methodology prescribed by Section 45V. Requiring one industry to disproportionately carry the burden and cost of grid decarbonization would be counterproductive and have a chilling effect on domestic clean hydrogen projects. Furthermore, studies commonly referenced in support of additionality actually demonstrate that this requirement achieves negligible emissions benefits, particularly in realistic and future grid scenarios.² Section 45V must afford project developers the ability to utilize the full suite of existing clean power resources, including existing hydroelectric and nuclear.

Temporal matching should align with existing renewable portfolio standards, which afford a multi-year window for retiring environmental attributes. Several studies demonstrate that annual matching has no or minimal impact on consequential carbon emissions in comparison with hourly matching. This is particularly true for dispatchable resources, such as electrolyzers. In markets with high penetration of renewables, hourly matching will ultimately be needed to reach deep electric-sector decarbonization. However, such requirements should be phased in, and must be applied evenly to every load. Placing discriminatory burdens on clean hydrogen at its launch point goes strongly against the legislative intent of the Inflation Reduction Act. Furthermore, there is no existing market for hourly matched Renewable Energy Credits (RECs) nor will one exist for the foreseeable future. The current state of the REC market is largely driven by annual compliance with Renewable Portfolio Standards (RPS) and annual goals in the voluntary markets. The ten tracking systems nationwide accommodate these annual needs with monthly or quarterly “minting” of RECs as well as generating annual reports to be used by entities to show compliance with state mandates or for internal needs. At the moment, only 2 of the 10 tracking systems have hourly accounting. These hourly RECs are largely used for entities with internal goals and have limited capabilities. Hourly RECs are not a tradeable product at this time and will not be for several years. Requiring a nascent industry to track electricity on an hourly basis would be unprecedented and inconsistent with the spatial and temporal variability of intermittent renewables.

We must scale clean energy technologies concurrent with decarbonizing the grid; one cannot wait for the other. This approach is consistent with other clean energy and electrification deployments. The clean hydrogen industry is at the ready and committed to advancing our collective energy security, job creation, and decarbonization goals

² Ricks, Wilson, Xu, Qingyu, & Jenkins, Jesse D. (2023). Minimizing emissions from grid-based hydrogen production in the United States, Figure 2. Environmental Research Letters. <https://iopscience.iop.org/article/10.1088/1748-9326/acacb5/meta>

– that is what is at stake. We are hopeful that the Section 45V Clean Hydrogen PTC guidance will be pragmatic, forward-looking, and in furtherance of Congress’ intent. We look forward to continued discussions with the Administration on these efforts.

Sincerely,

A handwritten signature in blue ink that reads "Katrina M. Fritz". The signature is written in a cursive, flowing style.

Katrina M. Fritz, Executive Director
California Hydrogen Business Council