

July 24, 2023

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

The Honorable Lily Batchelder  
Assistant Secretary for Tax Policy  
U.S. Department of the Treasury  
1500 Pennsylvania Avenue, N.W.  
Washington, D.C. 20220

Mr. John Podesta  
Senior Advisor to the President  
Clean Energy Innovation and Implementation  
The White House  
1600 Pennsylvania Avenue, N.W.  
Washington, D.C. 20500

Mr. William M. Paul  
Principal Deputy Chief Counsel and Deputy Chief  
Counsel  
Internal Revenue Service  
1111 Constitution Avenue, N.W.  
Washington, D.C. 20224

**Re: Section 45V Clean Hydrogen Production Tax Credit Implementation**

Dear Secretary Granholm, Ms. Batchelder, Mr. Podesta, Mr. Paul:

On behalf of clean hydrogen industry executives and project developers in the United States, we write to address the importance of implementing pragmatic, forward-looking guidance for the Section 45V Credit for Production of Clean Hydrogen (PTC). The intent of Congress is to rapidly scale clean hydrogen production, transport, and use to speed the decarbonization of critical segments of the U.S. economy, create jobs, and enhance energy security. Accordingly, the Treasury Department must meet the dual objectives of stimulating the early growth of U.S. clean hydrogen while ensuring the environmental integrity of that market. We believe that overly restrictive proposals for hourly matching, additionality, and deliverability have the potential to skew the balance between clean hydrogen growth and environmental integrity in the nascent life of this market.

Congress passed the Inflation Reduction Act (IRA) to supercharge investment in a new generation of technologies that will accelerate decarbonization of the U.S. economy while creating millions of good paying jobs and enhancing our nation's energy security. Along with the bipartisan infrastructure law, Congress spoke clearly – the development and deployment of clean hydrogen will play a critical role in that future. Clean hydrogen in the U.S. could decrease economy-wide emissions by 10 percent and create 3.4 million jobs by 2050.<sup>1</sup> To realize these benefits, we must swiftly scale to make the U.S. a global clean hydrogen leader.

Companies are deploying clean hydrogen projects of all types in real time. It remains undecided where and when 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, less expensive fossil fuels. For example, electrolytic hydrogen currently costs roughly \$5/kg and is unable to compete with fossil-based hydrogen available for roughly \$1/kg. As with any technology, economies of

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<sup>1</sup> [https://h2fcp.org/sites/default/files/Road-map-to-a-US-hydrogen-economy\\_Executive-Summary.pdf?\\_ga=2.64305190.867347766.1688755025-1708075037.1687979596](https://h2fcp.org/sites/default/files/Road-map-to-a-US-hydrogen-economy_Executive-Summary.pdf?_ga=2.64305190.867347766.1688755025-1708075037.1687979596)

scale will drive cost reduction. And access to incentives like the Clean Hydrogen PTC are essential for creating the level playing field needed to begin the scaling process.

It is imperative that the implementation of the Clean Hydrogen PTC does not lose sight of the ultimate goals – driving energy security, job creation, and decarbonization of the most difficult-to-abate sectors. Unworkable PTC requirements could shift clean hydrogen investments overseas and allow other countries to undercut clean hydrogen manufacturing. Immediately 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. Further, the suggestion that hydrogen developers must solely be tied to new, “additional” renewable resources is outside the statute’s scope, redundant, and ineffectual to grid emissions amidst state and federal clean power incentives and would compound multi-year interconnection delays. According to DOE’s own Pathways to Commercial Liftoff report, this would require up to 200 gigawatts of new renewables online by 2030 just for hydrogen production – roughly equivalent to all the wind and solar generation ever built in the United States. Even the studies commonly referenced in support of additionality actually demonstrate that this requirement achieves negligible emissions benefits, particularly in realistic and future grid scenarios.<sup>2</sup> In sum, 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.

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 – 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,

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<sup>2</sup> 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>

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