

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 2050.¹ 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

¹ 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.² 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,

Martin J. Durbin
President, Global Energy Institute
U.S. Chamber of Commerce
www.uschamber.com

Frank Wolak
President and CEO
Fuel Cell and Hydrogen Energy
Association
www.fchea.org

Andy Marsh
CEO
Plug Power Inc
www.plugpower.com

Amy Davis
President
Accelera by Cummins
www.accelerazero.com

Mr. Hiroyuki Minesaka
President & CEO
Air Water America Inc.

Mr. Ishmael Chalabi
President & CEO
Air Water Gas Solutions Inc.

Manu Pillai
CEO
CarbonBridge Inc.
www.carbonbridge.io

W. Anthony Will
President & Chief Executive
Officer
CF Industries
www.cfindustries.com

Jill Evanko
President & Chief Executive
Officer
Chart Industries, Inc.
www.chartindustries.com

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>

Jason Caudle
City Manager
City of Lancaster
www.cityoflanasterca.org

Daniel McGill
Founder, CEO, Engineer
FASTECH
<https://www.fastechus.com/>

Andrew Vesey
CEO, North America
Fortescue Future Industries
<https://fortescue.com>

Guido Degen
CEO
GKN Hydrogen
www.gknhydrogen.com

Sridhar Kanuri
Chief Technology Officer
HyAxiom, Inc.
www.hyaxiom.com

Parker Meeks
Chief Executive Officer
Hyzon Motors
www.hyzonmotors.com

Darryl Pollica
President & CEO
Ivys, Inc. (dba Ivys Energy Solutions)
www.ivysinc.com

Liam Condon
Chief Executive
Johnson Matthey
www.matthey.com

Dr. Jennifer Holmgren
CEO
LanzaTech Global, Inc.
www.lanzatech.com

Dave Alonso
Senior Vice President
Mitsubishi Power Americas, Inc.
<https://power.mhi.com/regions/amer/>

Rob Hanson
Co-Founder & CEO
Monolith
www.monolith-corp.com

Rudolph Wynter
President
National Grid – NY
www.nationalgridus.com

Håkon Volldal
CEO
Nel ASA
www.nelhydrogen.com

Carey Mendes
President of Energy
Nikola
www.nikolamotor.com

Marco Caccavale
CEO
PDC Machines
www.pdcmachines.com

Salim Rahemtulla
President & CEO
PowerTap Hydrogen Fueling Corp.
www.powertapfuels.com

Matt Murdock
CEO
Raven SR
www.ravensr.com

Adrian Schaffer
President, Emerging Mobility
Ricardo
www.ricardo.com

Michael Tree
CEO & General Manager
Santa Cruz Metropolitan Transit
District
www.scmttd.com

Eric Rottier
CEO
Taylor-Wharton America Inc.
www.twcryo.com

Paul Mutolo
CEO
Standard Hydrogen Corp
www.standardhydrogencorp.com

Michael L. Koel
President
U.S. Energy, a U.S. Venture Company
www.usventure.com

Paul Eremenko
Co-Founder and CEO
Universal Hydrogen Co.
<http://www.hydrogen.aero>

Mark Newman
President and CEO
The Chemours Company
www.chemours.com