

## 45V Clean Hydrogen Production Tax Credit

### Background and Compiled Support for the Three Pillars

May 2024

#### Background

The three pillars of hourly matching, incrementality, and deliverability are needed to align clean hydrogen production tax credit (“45V”) implementation with [underlying statutory text](#). [NYU Tax Law Center](#), [NRDC](#), [CATF](#), [EDF](#), and [Earthjustice](#) provided further detail in their comments to the NPRM on how weakening the three pillars would violate statutory requirements.

Moreover, failure to finalize strong rules threatens to result in [hundreds of millions of tons of carbon emissions](#) by the mid 2030s, increased local air pollution, [electricity price spikes](#), undermined U.S. climate goals, and the buildout of taxpayer-subsidized hydrogen infrastructure entirely misaligned with the needs of a clean energy transition.

Weakening the rules would also substantially increase 45V’s fiscal costs. The [Electric Power Research Institute’s](#) lower-end estimates show that total fiscal outlays with the three pillars would amount to \$385 billion dollars, but that number rapidly slips into the upper 400’s and 500’s of billions of dollars as the pillars are weakened.

Additionally, weak rules offering ill-guided exemptions and carveouts – including the 5-10% overly broad allowance for existing clean energy, the qualification of all relicensed nuclear plants as “incremental”, and the grandfathering of projects under earlier weaker rules would – violate the IRA’s statutory requirements and carry myriad harms. Those loopholes will lead to [hundreds of millions of tons of increased carbon emissions](#), as well as increases in health-harming pollution and [electricity prices](#). They would also lead to billions of dollars of additional fiscal costs. For example, the 5-10% carveout could lead to an added \$50-100 billion in fiscal outlays. Such an outcome would irreparably compromise the credibility and longevity of the nascent industry and drive public opposition to deployment.

We also refer Treasury to the supplemental comment to the 45V Notice of Proposed Rulemaking (NPRM) by NYU Tax Law Center arguing that there is substantial risk that, as the public record currently stands, Treasury and the IRS may not be able to “articulate a satisfactory explanation” that the carveouts being considered—notably the 5-10% carveout from incrementality—meet the statutory requirements of 45V. Furthermore, commenters in support of the carveout failed to provide any evidence as to how such an exemption adheres to the 45V statutory requirements, meaning that it is unlikely that Treasury has a defensible record to finalize this exemption.

### **Supportive materials from industry groups spanning the hydrogen value chain:**

- [Air Products IRS Oral Testimony – March 2024](#)
- [Hystor IRS Oral Testimony 45V – March 2024](#)
- [Hystor Industry Support Letter – March 2024](#)
- **Written Comments to Treasury NPRM for 45V:**
  - [Air Products – February 2024](#)
  - [EDP Renewables – February 2024](#)
  - [AES – February 2024](#)
  - [ACCIONA & Nordex Green Hydrogen – February 2024](#)
  - [Intersect Power – February 2024](#)
- [Collective Industry support "What They Are Saying" of 3 pillars – December 2023](#)
- [Letter from Air Products, ACCIONA & Nordex Green Hydrogen, CWP Global, EDP Renováveis, S.A., Electric Hydrogen, Hy Stor Energy, and Synergetic – December 2023](#)
- [Hystor supports 3 pillars - December 2023](#)
- [Largest H2 supplier in the world - Air Products - supports 3 Pillars - December 2023](#)
- [Green H2 Catapult Letter - Industry Support - November 2023](#) (The Green Hydrogen Catapult is a coalition of ambitious green hydrogen market leaders)
- [H2 Industry Support 45v Letter - July 2023](#)
- [H2 Industry Support - June 2023](#)
- [H2 Industry and Environmental Groups 45v Letter - February 2023](#)

### **Supportive materials from environmental and climate groups:**

- [Washington Post Print Ad in support of Strong rules – May 2024](#)
  - Earthjustice, the Environmental Defense Fund, Evergreen, the League of Conservation Voters, the Natural Resources Defense Council, Public Citizen, Sierra Club, Sunrise Movement, and the Union of Concerned Scientists.
  - [QR Code Landing Page for Ad](#)
- **Below are detailed written comments submitted to Treasury for the 45V tax credit.**
  - [Climate Action Campaign + other enviro groups](#)

- [Earthjustice](#)
  - [Environmental Defense Fund](#)
  - [Natural Resources Defense Council](#)
  - [Sierra Club](#)
  - [Clean Air Task Force](#)
  - [Union of Concerned Scientists](#)
- [NRDC-CATF joint memo on the Legal Necessity of the 3 pillars - April 2023](#)
  - [Evergreen Action – June 2023](#)
  - [LCV\\_CAC\\_Enviro\\_Public Health 3 pillars - June 2023](#)
  - [Climate Action Campaign H2 Policy Doc](#)

**Supportive materials from community and environmental justice groups:**

- [Letter from 47 environmental justice, environmental, consumer advocate, public health and community groups to MachH2 Hub Administrators - February 2024](#)
- [Letter from 19 environmental justice, environmental and consumer advocate groups to ARCHES H2Hub Administrators and CA GO - Feb 2024](#)
- [Over 40 EJ groups support 3 pillars - November 2023](#)
- [Communities for a Better Environment - November 2023](#)

**Supportive materials from consumer advocate groups:**

- [Consumer Advocates 45v Letter - October 2023](#)
- [Cost Impacts for Consumers Memo \(November 2023\)](#)

**Supportive materials from fiscal responsibility groups**

- [Taxpayers for Common Sense support 3 pillars – February 2024](#)

**Supportive materials from Hill members:**

- [46 House Reps Support 3 Pillars December 2023](#)

- [8 Senators Support 3 Pillars - October 2023](#)
- [Senator Heinrich Welcomes 45V Rules - December 2023](#)
- [Senator White House Cheers 45V Rules - December 2023](#)
- [Senator Merkley applauds 45V Rules December 2023](#)
- [Senator Peter Welch applauds 45V Rules December 2023](#)
- [Rep. Jamie Raskin applauds 45V Rules December 2023](#)
- [Senators Support 3 Pillars May 2023](#)

**Supportive materials from state legislators:**

- [State Legislators representing 35 states call for 3 pillars for 45V](#)

**Other:**

- [New York Times - University of California: Before We Invest Billions in This Clean Fuel, Let's Make Sure It's Actually Clean](#)