

TaxNewsFlash

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Final regulations: Clean hydrogen production credit and related energy credit

The U.S. Treasury Department and IRS today released [final regulations](#) (T.D. 10023) implementing the credit for production of clean hydrogen under section 45V and the associated energy credit under section 48(a)(15), as established and amended by H.R. 5376 (commonly called the “Inflation Reduction Act of 2022” (IRA)), respectively.

The final regulations provide rules for:

- Determining lifecycle greenhouse gas emissions rates resulting from hydrogen production processes
- Petitioning for provisional emissions rates
- Verifying production and sale or use of clean hydrogen
- Modifying or retrofitting existing qualified clean hydrogen production facilities
- Using electricity from certain renewable or zero-emissions sources to produce qualified clean hydrogen
- Electing to treat part of a specified clean hydrogen production facility instead as property eligible for the energy credit

The final regulations follow proposed regulations issued in December 2023, as well as supplemental proposed regulations issued in April 2024 containing additional information relating to the provisional emissions rate (PER) petition process and inviting comments on the U.S. Department of Energy’s (DOE) emissions value request process (EVRP).

The Treasury Department and IRS received approximately 30,000 written comments in response to the proposed regulations. As explained in a related [Treasury release](#), the final regulations incorporate safeguards from the proposed regulations, but differ from the proposed regulations in several respects, providing additional clarity and flexibility that will help facilitate clean hydrogen investment using both electricity and methane.

Significantly, the final regulations retain the “three pillars” requiring taxpayers seeking to use Energy Attribute Certificates (EACs) to attribute electricity use to a specific generator meet certain criteria for temporal matching, deliverability, and incrementality. However, the final rules differ from the proposed rules in several respects:

- Nuclear plants may demonstrate incrementality if the plant is at risk of retirement.
- Electricity from a generator that has added carbon capture and sequestration equipment within a 36-month window before the hydrogen facility is placed in service will be considered incremental.
- Electricity generated in states with robust greenhouse gas (GHG) emissions caps paired with clean electricity standards may be considered incremental.
- The final rules retain the requirement that electricity represented by the EAC be generated in the same hour as the hydrogen facility using electricity to produce hydrogen. However, the final rules extend the transition period allowing annual matching until 2030.

With respect to “blue” hydrogen, the final rules provide additional pathways for hydrogen produced using wastewater, animal manure, landfill gas, and coal mine methane. In the coming weeks, DOE will release an updated version of the 45VH2-GREET model that producers will use to calculate the section 45V tax credit. Additionally, the final rules aim to enhance the development of “book-and-claim” systems for natural gas alternatives and provide the information that such systems will need to provide. Taxpayers will be able to begin using book and claim systems that meet the requirements in 2027.

The final regulations apply to tax years beginning after December 26, 2023, the date the proposed regulations were published in the Federal Register. For tax years beginning after December 31, 2022, and on or before December 26, 2023, taxpayers may choose to apply the rules of Treas. Reg. §§ 1.45V-1, -2, and -4 through -6, provided that taxpayers apply the rules in their entirety and in a consistent manner.

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