Inflation Reduction Act of 2022
Hydrogen & Fuel Cell Incentives

The Inflation Reduction Act of 2022 was signed on August 16, 2022. The bill includes a wide array of financial incentives that will drive investment and deployment of clean hydrogen and fuel cell technologies.

Clean Hydrogen Production Credit creates a new ten-year incentive for clean hydrogen production tax credit (PTC) with up to $3.00 / kilogram or 30% investment tax credit (ITC). The level of the credit provided is based on carbon intensity.

Energy Credit extends the 30% fuel cell ITC through 2024 before a transition to the technology-neutral Clean Energy Investment Credit.

Energy Storage Credit adds a new provision to the energy ITC for energy storage, including hydrogen storage, available through 2025 before a transition to the Clean Energy Investment Credit.

Alternative Fuel Refueling Property Credit extends the credit through 2032, increases the 30% credit cap from $30,000 to $100,000.

Carbon Oxide Sequestration Credit provides an enhanced rate of carbon oxide captured for storage and utilization for qualified facilities through 2032.

Clean Vehicle Credit provides $7,500 for the purchase of fuel cell electric vehicles by creating a new clean vehicle credit built on the 30D credit for plug-in battery electric vehicles. Eliminates the per automaker cap of 200,000 vehicles. Adds a retail price cap of $55,000 for new cars and $80,000 for pickups, vans, and SUVs.

Qualified Commercial Clean Vehicles Credit creates a new 30% credit for commercial fuel cell electric vehicles through 2032 which is capped at $40,000.

Advanced Energy Project Credit revives the credit providing $10 billion to fund manufacturing projects producing fuel cell electric vehicles, hydrogen infrastructure, electrolyzers, and a range of other products.

Elective Payment for Energy Property adds an election for direct pay provisions to a range of tax credits including clean hydrogen production credit, the energy ITC, the carbon capture and sequestration credit, alternative fuel vehicle refueling property credit, advanced energy project credit, and others.

Clean Hydrogen Production Credit

The credit provides a varying incentive depending on the carbon intensity of the hydrogen production pathway. The credit measures emissions up to the point of production using the Argonne National Laboratory Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) Model. The incentive breakdown is detailed in the following table.

Kg of CO_2 per kg of H_2	Credit Value ($)
4 - 2.5 kg CO_2	$0.60 / kg of H_2
2.5 - 1.5 kg CO_2	$0.75 / kg of H_2
1.5 - 0.45 kg CO_2	$1.00 / kg of H_2
0.45 - 0 kg CO_2	$3.00 / kg of H_2

Inflation Reduction Act of 2022
Non-Tax H2 and FC Provisions

This bill also offers several grant and funding opportunities to advance manufacturing and deployment of hydrogen and fuel cell technologies.

- **Defense Production Act** - $500M
- **Advanced Technology Vehicle Manufacturing** - $3B
- **Domestic Manufacturing Conversion Grants** - $2B
- **Energy Infrastructure Reinvestment Financing** - $5B
- **Heavy-Duty Vehicles** - $1B
- **GHG Reduction Fund** - $7B
- **Grants to Reduce Air Pollution at Ports** - $3B
- **United States Postal Service Clean Fleets** - $3B
- **Advanced Industrial Facilities Deployment Program** - $5.8B
- **Federal Permitting Council** - $70M
- **Alternative Fuel and Low Emission Aviation Technology Program** - $300M

Prevailing Wage and Apprenticeship Requirements

Several labor requirements have been added across the Inflation Reduction Act that taxpayers must now meet in order to qualify for the full value for many of these credits.

Prevailing wage requirements require any laborer or mechanic employed by contractors or subcontractors in the re-equipping, expansion, or establishment of a manufacturing facility or new product construction, alteration, or repair work must be paid wages at rates not less than the prevailing rates for work of a similar character in the locality as determined by the Secretary of Labor. In addition, apprentice to journey worker requirements are also integrated throughout the bill, which set certain ratios of the number of qualified apprentice workers that must be employed for work on qualified facilities.

Facilities that do not meet these wage and apprenticeship requirements are typically only provided a fraction of the total credit available.

Domestic Content Requirements

In addition to labor requirements, many credits also have requirements for domestic content that taxpayers must meet in order to qualify for the full credit amount. These provisions require that any steel, iron, or manufactured product which is a component of a facility be produced in the United States. Many of these provisions phase in over time with facilities required to meet higher percentages of U.S. manufactured goods in subsequent years. There are some exceptions provided for facilities where meeting these requirements would be too costly or if relevant domestic products are not readily available in the quantity or quality needed.

FCHEA
Fuel Cell & Hydrogen Energy Association

FCHEA represents over seventy leading companies and organizations advancing innovative, clean, safe, and reliable energy technologies. FCHEA drives support and provides a consistent industry voice to regulators and policymakers promoting the environmental and economic benefits of fuel cell technologies and hydrogen energy. Visit us online at www.fchea.org.