



International Partnership
for Hydrogen and Fuel Cells
in the Economy

United States Update

42nd IPHE Steering Committee Meeting
20 – 21 November 2024
Brussels, European Commission

Announcements / New Initiatives *United States*

- **Investments/Funding/Policies/Initiatives**

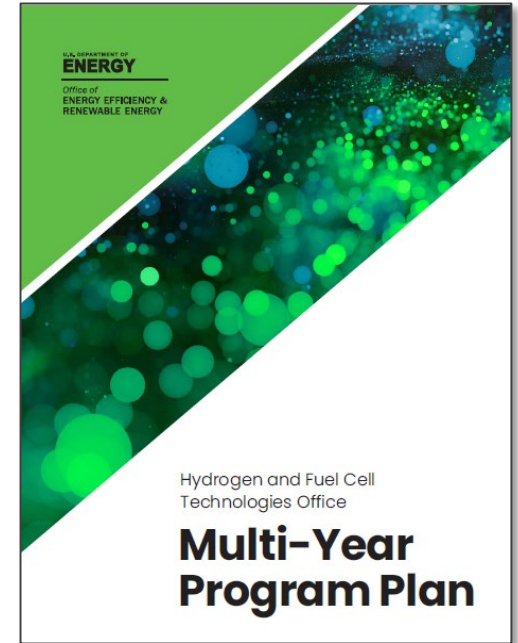
- Release of DOE Hydrogen and Fuel Cells **Multi-Year Program Plan (MYPP)** – with targets to help guide RD&D
- Launch of Clean H2 101 and FAQ **Web Resource**

- **New Research & Development, Demonstration and/or Deployment Activities**

- **\$475M** in EPA funding to advance **H₂-based operations at 6 ports**
- **\$97M** in USDOT funding for **H₂-related rail projects**
- **\$90M** to help build **H₂ Transportation Corridor**
 - Support projects in California, Colorado, and Texas to deploy clean **H₂ fueling infrastructure**
- **\$62M** includes fueling stations of the future, best practices for siting, permitting, community engagement
 - **20 projects across 15 states**

- **Key Collaborations** International examples: H2 Twin Cities Winners announced

- Houston+Nuevo Leon and Houston+Barrancabermeja



Examples of Lessons Learned and Impact *United States*









Program initiative, policy, regulation or mandate	Lessons Learned/Outcomes
<p>Community Benefits Plans (CBP)</p>	<ul style="list-style-type: none"> • DOE requires CBPs for various funding opportunities • Core policy priorities: <ul style="list-style-type: none"> • Community and labor engagement • Investing in quality jobs • DEIA • Justice40 • DOE and HIT developed FAQs and 101 document on H2 • Created an engaging and replicable workshop – <i>Harnessing Hydrogen</i> – for helping communities understand the role of clean H2 in the just transition to clean energy • Provided technical assistance to Tribes interested in H2 technologies
<p>Hydrogen Interagency Task Force (HIT)</p>	<ul style="list-style-type: none"> • Formed in 2023 to optimize and accelerate actions to execute the national clean hydrogen strategy. • Collaboration efforts across US federal agencies have been successful over the past year in terms of funding, program support, and technical sharing/outreach.



United States – Profile November 2024

Status of Deployments

- 
>500 MW
Backup Power
- 
~69,000
Forklifts
- 
~4.5 GW
Electrolyzers ⁺
- 
~380
Fuel Cell Buses ⁺
- 
~50
H₂ Retail Stations
- 
>18,000
Fuel Cell Cars

Leading Government Initiatives



IRA Hydrogen Incentives

Examples

- Clean Hydrogen Production Tax Credit (up to \$3/kg) and up to 30% Investment Tax Credit
- Tax credit of up to 100K/30% of the cost of alternative fuel refueling property.
- 30% credit for commercial FCEVs and \$7,500 credit for new FCEV purchases.

Justice40 Initiative

40% of benefits from federal investments to disadvantaged communities (EJ40)

Diversity, Equity, Inclusion, and Accessibility (DEIA)

U.S. Whole-of-Government Approach to H₂ – Hydrogen Interagency Taskforce (HIT)

Goals or Focus Areas

Clean Hydrogen \$1/kg production \$2/kg delivery \$9/kWh storage	Electrolyzers \$150/kW 73% efficiency 80K hrs durability
Fuel Cells (HD) \$80/kW 25K hrs durability	Enable J40 Priorities, DEIA

Deployment Goals

- 100% clean electricity grid by 2035
- Net-zero emissions by 2050
- 50-52% emissions reductions by 2030



Funding

Bipartisan Infrastructure Law includes **\$9.5B for Clean Hydrogen**. Funding announced includes:

- **\$7B for H2Hubs**
- **\$750M** RD&D efforts for electrolysis, manufacturing, and recycling

FY23 DOE Hydrogen Program: ~\$418M



Thank you



International Partnership
for Hydrogen and Fuel Cells
in the Economy

U.S. Hydrogen Interagency Task Force *Celebrating Progress* Video

