



OCED
Office of Clean Energy Demonstrations

THE OFFICE OF CLEAN ENERGY DEMONSTRATIONS



The Energy Council
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Disclaimer

As DOE is actively engaged in financial assistance planning, we are subject to constraints during this period to ensure fairness of the process:

- DOE can only communicate public and non-privileged information during this meeting or event.
- DOE cannot discuss the details of active or planned financial assistance matters [e.g., Requests for Information (RFI), Notices of Intent (NOI), Funding Opportunity Announcements (FOA)] or entertain requests for a specific outcome or benefit related to a financial assistance activity.

OCED Mission

Deliver clean energy technology **demonstration projects at scale** in partnership with the **private sector to accelerate deployment, market adoption, and the equitable transition** to a decarbonized energy system.”



OCED Scope



Regional Clean Hydrogen Hubs (\$8 billion)



Long-Duration Energy Storage Demonstrations (\$505 million)



Advanced Reactor Demonstrations (\$2.5 billion)



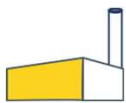
Energy Improvements in Rural or Remote Areas (\$1 billion)



Carbon Management (\$7 billion)



Clean Energy Demonstrations on Mine Land (\$500 million)



Industrial Demonstrations (\$6.3 billion)



New Demonstration Projects (\$50 million – and hopefully more!)





Regional Clean Hydrogen Hubs



OCED and Industry awardees will build 6-10 regional clean H2Hubs across the country to create networks of hydrogen producers, consumers, and local connective infrastructure to accelerate use of hydrogen.

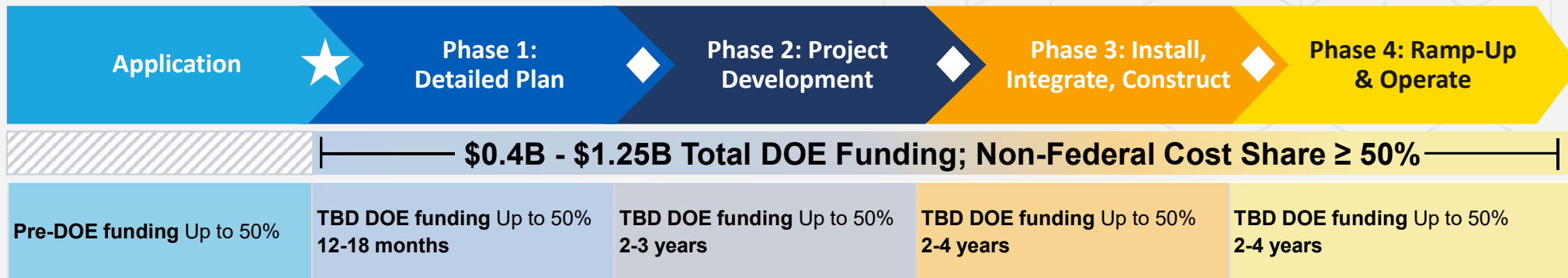
- Feedstock diversity
- End use diversity
- Geographic diversity
- Employment and training
- Connecting diverse parties to facilitate clean energy business interactions
- Understanding the role clean hydrogen could play in the energy transition
- Real-world context for hydrogen demand and supply
- De-risking technical questions (e.g., sensors, storage, transport) that will allow industry to use higher blended rates of hydrogen

Current Status

- Released funding announcement in September 2022
- Held webinar with encouraged/discouraged applicants in January 2023
- Full applications received April 7, 2023
- Selections in Fall 2023

Phased Approach to Project Management

-  Initial Application
-  Go/No-Go Decisions



Whole of Government Approach to H2 Liftoff



National Clean Hydrogen Strategy and Roadmap
(published in June 2023)



Hydrogen Shot
(\$1/kg by 2031)



Clean H2 Standard
(under development)



**Additional DOE funding:
Clean H2 Electrolysis
Clean H2 Manufacturing
and Recycling**
(additional \$1.5B)



Whole of Government Approach to H2 Liftoff , con't



IRA tax incentives will support early investment in clean hydrogen for both demonstration and commercial projects (ITC/PTC)



Demand-Side RFI



Coordination with Canada and Mexico on building out the H2 supply chain and economy across North America



H2 Pathways to Commercial Lift-Off Report (liftoff.energy.gov)



Key messages of the Clean Hydrogen Liftoff Report



PTC reduces production costs to kick-start the transition from high carbon intensity (CI) to low CI hydrogen for existing uses



DOE H2Hubs and open access infrastructure will move use cases into the money that would otherwise not take-off



In addition to industrial/chemicals use cases, heavy-duty transportation will be critical for market lift-off



Without sustained long-term offtake or merchant markets, domestic market acceleration could be slowed



Tax Incentives

The Inflation Reduction Act (IRA) will help catalyze the U.S. H2 Economy:



Provides Investment and Production Tax Credits, creating significant market support and predictability



Technology specific credits are stackable—H2 ITC and Carbon Capture ITC could both be utilized for a single project



IRA also provides direct pay options as well as the ability to buy and sell credits, giving industry flexibility to invest in new technologies





Industrial Demonstrations

Received funding from BIL and IRA to demonstrate transformational technologies to decarbonize energy-intensive industries

- Drive a U.S. competitive edge in low- and net-zero carbon manufacturing
- Help build a market for green products through high-impact, replicable solutions

Current Status

- Issued ~\$6B funding announcement in March 2023
- Concept papers due by April 2023
- Full applications due by August 2023



Energy Improvements in Rural or Remote Areas

Improve resilience, safety, reliability, and availability of energy in rural or remote areas and increase environmental protection from adverse impacts of energy use

- Rural or remote areas are defined as cities, towns, or unincorporated areas with fewer than 10,000 inhabitants

Current Status

- Hosted three regional workshops in Fall 2022
- Issued RFI in October that closed in December 2022
- Announced the \$15M Energizing Rural Communities Prize in March 2023
 - Full applications due by May 2023
- Issued \$300M funding announcement in March 2023
 - Full applications due by June 2023
- Issued \$50M grant funding announcement in May 2023
 - Pre-applications due July 13, 2023
- Developing focused Technical Assistance through national labs and EPA TCTACs

...TO ENGAGE WITH OCED!



- **OCED Website and Newsletter Sign-up**
energy.gov/oced
- **OCED Exchange (RFIs, NOIs, and FOAs)**
oced-exchange.energy.gov
- **Self-nominate to be a FOA reviewer**
oced-exchange.energy.gov/Registration
- **Apply to the Clean Energy Corps**
energy.gov/CleanEnergyCorps
- **Get in touch via email**
OCED@hq.doe.gov



Links



National Clean H2 Strategy and Roadmap (Draft):

[DOE National Clean Hydrogen Strategy and Roadmap \(Draft\) : DOE Hydrogen Program \(energy.gov\)](#)



National Clean H2 Standard (Draft Guidance):

[Clean Hydrogen Production Standard | Department of Energy](#)



H2 Shot:

[Hydrogen Shot | Department of Energy](#)



Additional H2 Funding at DOE:

[Hydrogen and Fuel Cell Technologies Office Funding Opportunities | Department of Energy](#)



H2 Liftoff Report:

[About the Pathways Reports - Pathways to Commercial Liftoff \(energy.gov\)](#)



Demand-Side RFI:

[Public Insight Requested for Demand-Side Support for Clean Energy Technologies | Department of Energy](#)

Thank you!



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For more information, please visit: energy.gov/OCED