



THE OFFICE OF CLEAN ENERGY DEMONSTRATIONS



OCED and Industrial Demonstrations

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Office of Clean Energy Demonstrations

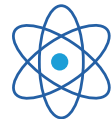
U.S. Department of Energy

21 March 2024



Office of Clean Energy Demonstrations

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.”



Advanced Reactor Demos (\$2.5B)



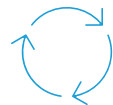
Industrial Demonstrations (\$6.3B)



Clean Energy on Mine Land (\$500M)



Long-Duration Energy Storage (\$505M)



Carbon Management (\$7B)



Regional Clean Hydrogen Hubs (\$8B)



Distributed Energy Systems (\$50M)



Liftoff Enabling Programs(\$133M)

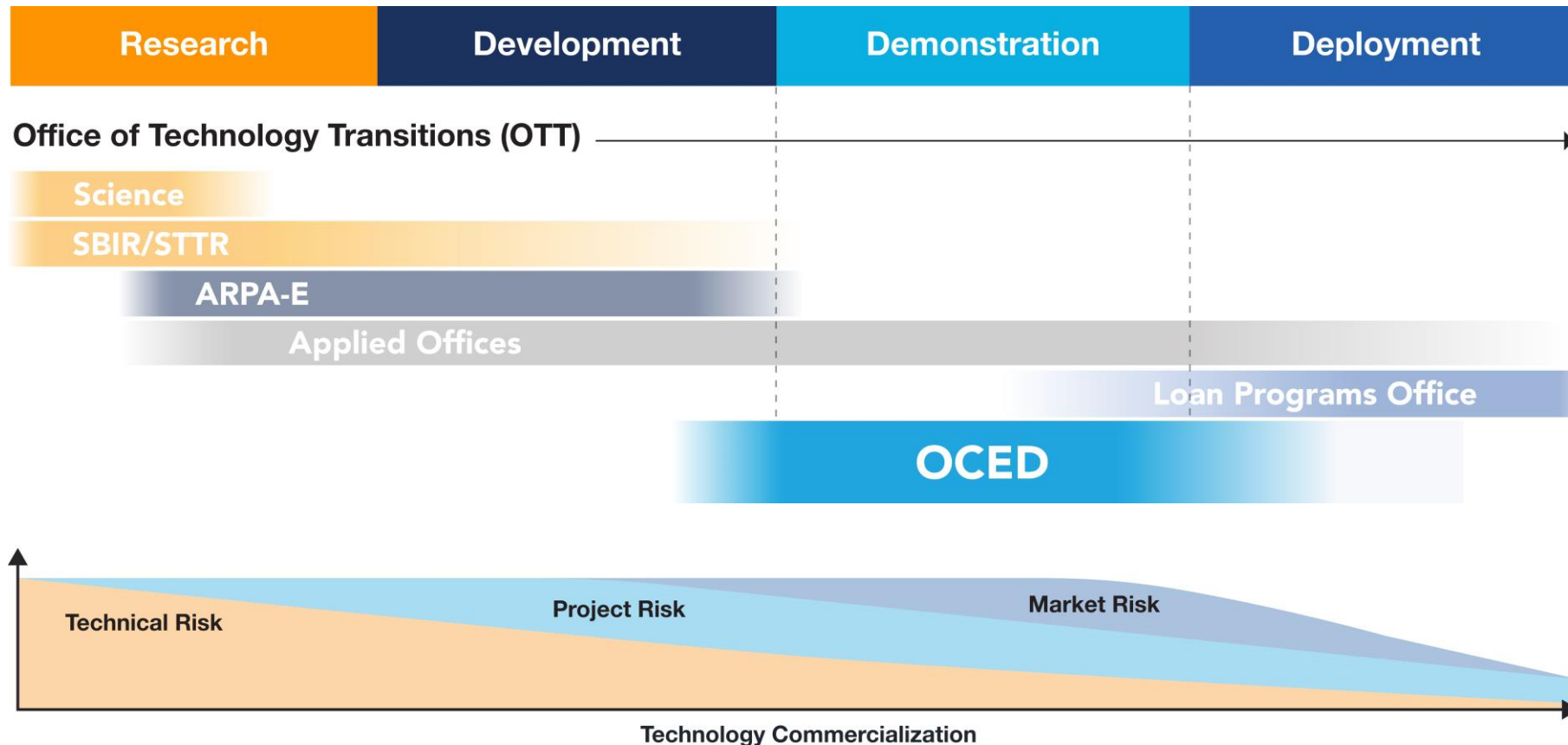


Energy Improvements in
Rural or Remote Areas (\$1B)

OCED Scope and Mandate

Focused on a specific stage of the RDD&D continuum – **Commercial Demonstrations:**

- Involve **more time, cost and risk than a prototype**, and
- **Significantly reduce investor risk** for subsequent installations.



SCALE EQUITABLE,
CLEAN ENERGY



UNLOCK NEW
INVESTMENT



DE-RISK
TECHNOLOGY



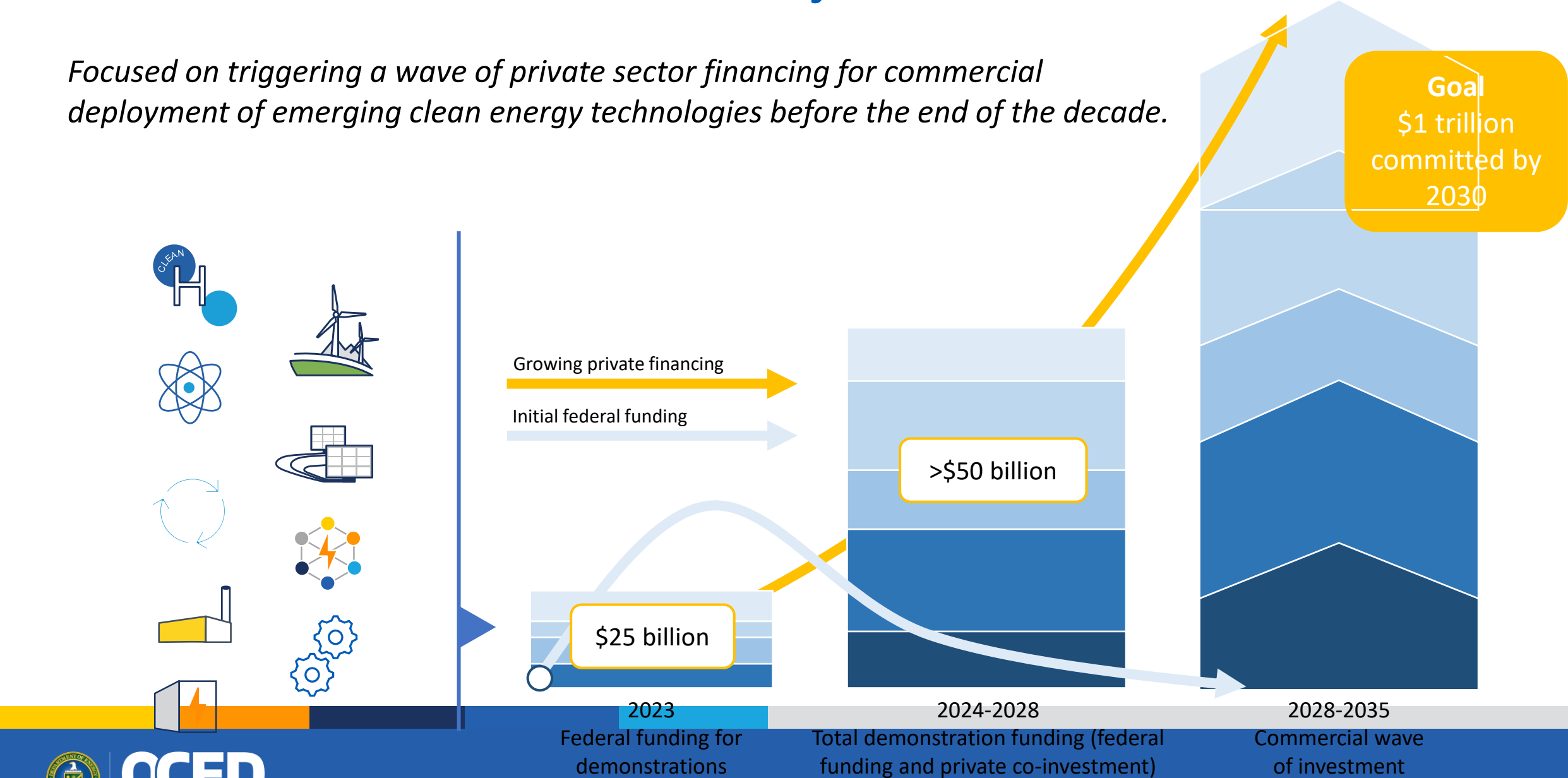
PROVIDE PROJECT
OVERSIGHT



ENGAGE &
COLLABORATE

The Mission is More Than the Projects Themselves

Focused on triggering a wave of private sector financing for commercial deployment of emerging clean energy technologies before the end of the decade.



Selected OCED Programs



INDUSTRIAL DEMONSTRATIONS (\$6B): IN REVIEW

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



CLEAN HYDROGEN (\$8B total): IN NEGOTIATIONS

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

Includes H2Hubs and Demand-Side Support Initiative



ADVANCED NUCLEAR (\$2.5B total): ACTIVE

Support domestic nuclear industry in design, licensing, construction, and operation of two advanced nuclear reactors, and unlock decarbonization use cases, such as high-temperature steam for industrial process heat.



POINT SOURCE CARBON CAPTURE (\$3.5B total): ACTIVE / IN NEGOTIATIONS

Demonstrate substantial improvements in the efficiency, effectiveness, cost, and environmental performance of carbon capture technologies for power, industrial, and other commercial applications.

Includes Carbon Capture Demonstration and Large Scale Pilots

LONG DURATION ENERGY STORAGE



DISTRIBUTED ENERGY SYSTEMS



LIFTOFF ENABLING PROGRAMS








INDUSTRIAL DEMONSTRATIONS

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

Project Types

-  Near-Net-Zero Facility Builds
-  Facility-level Installations and Overhaul Retrofits
-  System Upgrades and Retrofits for Critical Unit Operations or Single Process Lines

Current Status

- Announcement anticipated early 2024

Areas of Interest

A special emphasis on high energy and carbon intensive processes and industries:

- iron, steel, and steel mill products
- aluminum
- cement and concrete
- glass
- crosscutting opportunities that may address multiple facilities or sectors.
- pulp and paper
- industrial ceramics
- chemicals
- other energy intensive industrial sectors

Applications are not limited to these industries; applicants must substantiate a project's ability to achieve priority criteria and will be judged in context of all responses.



Program Priorities

This funding opportunity is **supportive of multiple technology pathways.** It invites industry to present its best solutions, with the following guiding priorities to maximize the transformative potential for these funds:

- **Deep decarbonization**, by demonstrating significantly less carbon-intensive industrial production processes leading to cleaner materials;
- **Timeliness**, through rapid technology demonstrations that can address emissions in the near-term, meet funding horizons, and be replicated by fast followers;
- **Market viability**, with technological approaches designed to spur follow-on investments for widespread decarbonization as well as partnerships between buyers and sellers of the materials produced; and,
- **Community benefits**, tailored through substantial engagement with local and regional stakeholders, as well as labor unions and Tribal Nations across the project lifecycle, supporting environmental justice and economic opportunity for local communities.





Questions?

Learn more about OCED: energy.gov/oced/

Learn more about Liftoff Reports: liftoff.energy.gov/