

Office of Clean Energy Demonstrations

Melissa Klembara, Acting Deputy Director for Portfolio Strategy



Office of Clean Energy Demonstrations (OCED)

- DOE announced the establishment of OCED on December 21, 2021 to deliver \$21.5 billion provided by the Bipartisan Infrastructure Law (BIL) to support large-scale clean energy demonstration projects
- The founding of OCED builds on DOE's long-standing position as the premier international driver for clean energy research and development, expanding DOE's scope to fill a critical innovation gap on the path to carbon-free electricity in the United States by 2035 and a net-zero economy by 2050
- OCED will help bridge the gap between research and development to validate technologies in realworld conditions and provide confidence that the technology works as intended
- OCED's programs include billions of dollars to invest in clean hydrogen, carbon capture and removal, advanced nuclear, and demonstration projects in rural areas and economically hard-hit communities

Scope of OCED in the Bipartisan Infrastructure Law

- Advanced Reactor Demonstrations (\$2.5 billion)
- Carbon Capture Demonstrations (\$2.5 billion)
- Carbon Capture Large-Scale Pilot Projects (\$937 million)
- Energy Improvement in Rural and Remote Areas (\$1 billion)
- Clean Energy Demonstrations on Mine Lands (\$500 million)
- Energy Storage Demonstration and Pilot Grants (\$355 million)
- Industrial Emissions Demonstrations (\$500 million)
- Long Duration Demonstration Initiative and Joint Program (\$150 million)
- Upgrading Grids Demonstrations (\$5 billion)
- Regional Hydrogen Hubs (\$8 billion)

OCED Mission and Key Tenets

Mission:

- Deliver clean energy and industrial decarbonization demonstration projects at scale in partnership with the private sector to launch or accelerate market adoption and deployment of technologies
- Support the equitable transition to carbon-free electricity by 2035 and a net-zero economy by 2050

Key Tenets of Federally-Supported Demonstration Projects:

- Are a pathway to technical and commercial risk reduction and learning to make projects commercially viable by addressing technology challenges and driving down cost curves
- Must target relevant operational environments, scales, and timeframes to validate the performance, cost, and value
- Should enable downstream market adoption and deployment to accelerate scale-up leading to greenhouse gas reductions, job creation, and achieving environmental justice priorities
- Involve substantial risk and the known and unknown risks factors will impact project outcomes

Project Management Oversight Responsibilities

<u>Creating a center of excellence for project management oversight by:</u>

- Ensuring appropriate front end planning to account for lessons learned from prior demonstration projects
 - Using a phased approach for many provisions that allows time for design, teaming, financing, siting/permitting/NEPA planning
 - Planning adequate time for due diligence to identify and mitigate technical and financial risks before substantial funding is committed
 - Building project management expectations and requirements into the Cooperative Agreements
- Establishing an independent project review capability to provide annual reviews and reviews at key decision points
- Creating a Demonstration Governance Board to advise on key go/no-go decisions

Near-Term Priorities

In close coordination with the applied programs, OCED is focused on:

Stakeholder Engagement:

- Conducting meetings and workshops with industry and other key partners, including environmental justice groups, unions, communities, and others
 - Visit our BIL webpage for more information on upcoming events: https://www.energy.gov/bil/bipartisan-infrastructure-law-homepage

Program Design:

 Designing programs informed by stakeholder engagement and lessons learned from past projects, while also looking across the portfolio at complementary provisions and upcoming milestones

Staffing:

 Leveraging the recently launched DOE Clean Energy Corps to attract a diverse group of talented individuals while also bringing in the best and the brightest from within the federal government

Questions?

