U.S. DEPARTMENT OF ENERGY

Office of Clean Energy Demonstrations

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Office of Clean Energy Demonstrations (OCED)

- The Bipartisan Infrastructure Law (BIL) more than triples DOE's annual funding for energy programs, including significantly expanded research and development (R&D) and entirely new demonstration and deployment missions

- DOE announced the establishment of OCED in December 2021 to deliver $21.5 billion provided by the BIL to support large-scale clean energy demonstration projects

- OCED will build 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 U.S. by 2035 and a net-zero economy by 2050

- OCED will help bridge the gap between research and development to validate technologies in real-world conditions and provide confidence that the technology works as intended

Scope of OCED in the Bipartisan Infrastructure Law

- Carbon Capture Demonstrations ($2.5 billion)
- Carbon Capture Large-Scale Pilot Projects ($937 million)
- Industrial Emissions Demonstrations ($500 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)
- Long Duration Demonstration Initiative and Joint Program ($150 million)
- Upgrading Grids Demonstrations ($5 billion)
- Regional Hydrogen Hubs ($8 billion)
- Advanced Reactor Demonstrations ($2.5 billion)

OCED Mission and Key Tenets

- **Mission:**
  - Deliver clean energy 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

Priorities and Key Focus Areas

- Conducting stakeholder outreach to ensure we are using the BIL funding to buy down risks to market adoption to achieve our long-term goals
- Identifying options for maximizing impact -- jobs, Justice benefits, and greenhouse gas reductions
- Ensuring appropriate front end planning to account for lessons learned from prior demonstration projects
- Creating a center of excellence for demonstration project management oversight in DOE