Office of Clean Energy Demonstrations

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Office of Clean Energy Demonstrations
Bipartisan Infrastructure Law Implementation

NOVEMBER 15, 2021
President Biden signs Bipartisan Infrastructure Law

MAY 15, 2022
180 Days into BIL Implementation

FACT SHEET: Biden-Harris Administration Hits the Ground Running to Build a Better America Six Months into Infrastructure Implementation
DOE Organization Chart

New Offices Under the Office of the Under Secretary for Infrastructure (S3)

- Office of Clean Energy Demonstrations (OCED)
- Grid Deployment Office (GDO)
- Office of Manufacturing & Energy Supply Chains (MESC)
- Office of State and Community Energy Programs (SCEP)
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 the Office of Clean Energy Demonstration (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.
OCED Role Across Research, Development, Demonstration & Deployment (RDD&D) Continuum

**Technology Readiness Level (TRL)**

- **Research**
  - Basic and applied research & experiments
    - [TRL 1-3]
  - Development & lab-scale prototyping
    - [TRL 4-5]
  - Pilot, sub and full-scale demonstration
    - [TRL 6-7]
  - Commercial-scale demonstration
    - [TRL 8]
  - At-scale long term commercial operations
    - [TRL 9]

**RDD&D Steward**
- Office of Technology Transitions (OTT)

**DOE Office FY22 Funding Map**
- Science
- SBIR/STTR
- ARPA-E
- Applied Offices
- Loan Programs Office

**Risk Profiles**
- Technical Risk
- Project Risk
- Market Risk

**Technology Commercialization**
OCED Mission and Key Tenets of Demonstration Projects

• **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
Scope of OCED in the Bipartisan Infrastructure Law

- Regional Clean Hydrogen Hubs ($8 billion)
- Upgrading Grids Demonstrations ($5 billion)
- 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)
- Industrial Emissions Demonstrations ($500 million)
- 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)
For More Information

Website: https://www.energy.gov/office-clean-energy-demonstrations
Email: dl-oced-engagement@hq.doe.gov