



Overview

The U.S. Department of Energy (DOE) established the Office of Clean Energy Demonstrations (OCED) to help scale the emerging technologies needed to tackle our most pressing climate challenges and achieve net-zero emissions by 2050.










OCED received more than \$25 billion in funding from the Bipartisan Infrastructure Law and Inflation Reduction Act to deliver clean energy demonstration projects at scale in partnership with the private sector to accelerate deployment, market adoption, and the equitable transition to a decarbonized system.

Project Oversight

To ensure the success of its projects, OCED is focused on demonstration project management oversight excellence. OCED will apply lessons learned from past DOE demonstrations and the private sector to enhance how it oversees projects. OCED will also support other offices to ensure a consistent approach to implementing these projects across DOE.

OCED also seeks to ensure excellence as it advances energy and environmental justice in large-scale demonstration projects to support an equitable clean energy transition. OCED will ensure the workforce and local communities are a key part of the solution to build an equitable clean energy future.

Project Portfolio

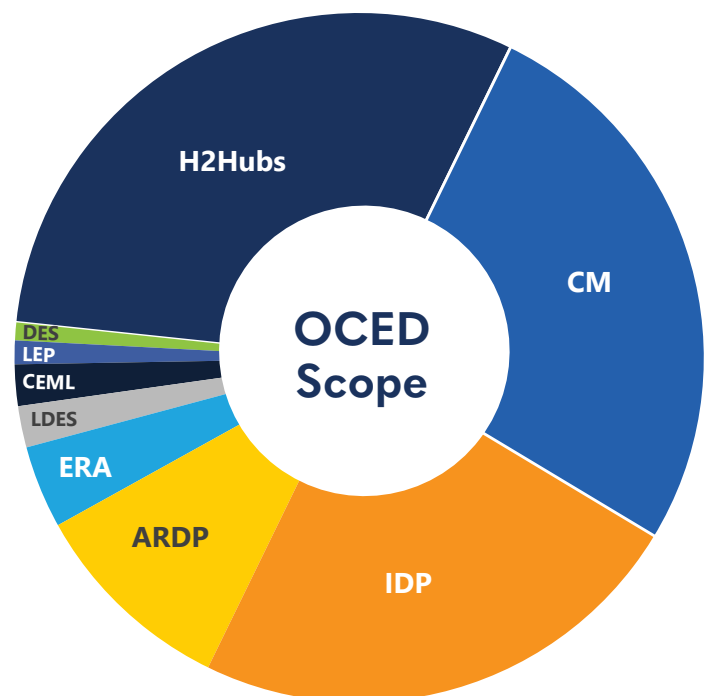
 Regional Clean Hydrogen Hubs (H2Hubs) \$8 billion	 Energy Improvements in Rural or Remote Areas (ERA) \$1 billion
 Carbon Management (CM) Regional Direct Air Capture Hubs, Carbon-Capture Demos & Large-Scale Pilot Projects \$7 billion	 Long-Duration Energy Storage Demonstrations (LDES) \$505 million
 Industrial Demonstrations (IDP) \$6.3 billion	 Clean Energy Demonstrations on Mine Land (CEML) \$500 million
 Advanced Reactor Demonstration Projects (ARDP) \$2.5 billion	 Liftoff Enabling Programs (LEP) \$133 million
	 Distributed Energy Systems Demonstrations (DES) \$50 million

What Does OCED Do?

OCED is a multi-technology office with demonstrations that include clean hydrogen, carbon management, industrial decarbonization, distributed energy systems, advanced nuclear reactors, long-duration energy storage, demonstration projects in rural or remote areas and on current and former mine land, and more.

The technologies in OCED's portfolio face significant barriers to scale. OCED's role is to address these barriers and help de-risk them. Central to OCED's approach is consistent engagement with a wide range of stakeholders and pursuit of projects that advance an equitable transition by providing benefits to communities across America.

Most of OCED's projects are structured as collaborative partnerships that use cost share agreements. OCED will provide up to 50 percent of the funding in its public-private partnerships, assisting its industry partners with the early steps to commercialization and deployment.



Clean Energy Demonstration on Current and Former Mine Land

Funding Amount: \$500 million

Program Info

Overview: The Clean Energy Demonstration Program on Current and Former Mine Land (CEML) focuses on demonstrating the technical and economic feasibility of deploying clean energy projects on both current (operating) and former (abandoned or inactive) mine land across the country.

Repurposing mine land for clean energy provides a strong economic boost to America's mining workforce and communities, setting them up to lead in the clean energy transition. Thanks to the investments from the Bipartisan Infrastructure Law, there is a once-in-a-generation opportunity to support key energy communities and deploy cheaper, cleaner energy across America.

Eligible clean energy technologies under this program include solar, microgrids, geothermal, direct air capture, fossil-fueled electricity generation with carbon capture, utilization, and sequestration, energy storage, and advanced nuclear technologies.

This program requires up to five clean energy projects be carried out in diverse geographical regions, at least two of which must be solar. These demonstration projects are expected to be replicable, providing knowledge and experience that catalyze the next generation of clean energy on mine land projects.

These demonstration projects will provide models for mine land development and community engagement that can be used by the private sector to unlock the potential of mine land for siting clean energy. OCED's projects will prioritize job creation, greenhouse gas emissions reductions, and economic benefit for host communities.



Contact Info

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More Resources

Technical Assistance: OCED is offering no-cost technical assistance to inform decision making on topics related to developing clean energy projects on mine land. Visit: <https://www.nrel.gov/state-local-tribal/ceml-technical-assistance.html>

