

THE OFFICE OF CLEAN ENERGY DEMONSTRATIONS

Industrial Demonstrations Program – Mitchell Cement Plant Decarbonization Project

The Industrial Demonstrations Program, managed by the U.S. Department of Energy (DOE) Office of Clean Energy Demonstrations (OCED), aims to accelerate decarbonization projects in energy-intensive industries and provide American manufacturers a competitive advantage in the race to lead the world in low- and net-zero carbon emissions manufacturing. To advance industrial decarbonization, OCED sought applications for up to \$6 billion in funding to support the demonstration of transformational technologies necessary to reduce emissions in the U.S. industrial sector. Following negotiations, in August 2024, OCED awarded the Mitchell Cement Plant Decarbonization Project with \$300,000 to begin Phase 1 of the project, located in Mitchell, IN.



Project at a Glance - Phase 1

- » Total OCED Cost Share: Up to \$500 million
- » Phase 1 Total Project Amount: Approximately \$850,000*
- » Phase 1 OCED Award Amount: \$300,000**
- » Phase 1 Scope of Work: Permitting, community engagement, and other development activities
- » Phase 1 Timeline: 12-18 months
- » Recipient: Heidelberg Materials US, Inc., a supplier of cement, aggregates, ready mixed concrete, and asphalt in North America
- » Project Location: Mitchell Cement Plant; Mitchell, IN
- » Start Date: August 2024
 - *Represents the total project cost for Phase 1.
 - **Represents OCED's cost share for Phase 1. Additional funding for this project is subject to future award negotiations at the end of each project phase.

About This Project

The Mitchell Cement Plant Decarbonization Project, led by Heidelberg Materials US, Inc. (Heidelberg Materials), plans to construct and operate an integrated carbon capture, transport, and storage system at the newly modernized plant located in Mitchell, IN. This project intends to capture at least 95% of the carbon dioxide from one of the largest cement plants in the nation and store it in a geologic formation beneath the plant property. By demonstrating this technology at such a significant facility, Heidelberg Materials would help lay a pathway to decarbonize other cement plants across the nation.

During Phase 1 of the project, Heidelberg plans to capture the output from a previously funded Front-End Engineering

and Design (FEED) study, which is evaluating the cost and performance of retrofitting a cement plant with amine-based carbon capture technology, to support a full-scale integration at its facility and begin implementation of its community benefits commitments. OCED will provide project management oversight of the Mitchell Cement Plant Decarbonization Project by evaluating the status and quality of implementation at each phase of the project. Through its phased approach to project management, OCED will review and evaluate the project's progress, including community benefits, which impact OCED's decision to continue to provide federal funding and allow a project to progress to the following phase.

Mitchell Cement Plant Decarbonization Project Project Fact Sheet

Project Site

The Mitchell Cement Plant Decarbonization Project is located in Mitchell, IN at Heidelberg Materials' newly modernized cement plant.

Community Benefits Commitments

Community benefits commitments are a key component of the Mitchell Cement Plant Decarbonization Project These commitments, informed and developed with local communities, aim to maximize local community benefits and mitigate potential impacts of this project. The Mitchell Cement Plant Decarbonization Project plans to implement these commitments through:

- Creating 20-25 permanent operations jobs and an estimated 1,000 construction jobs during the construction phase of the project.
- Continuing to **work with multiple labor unions**, including the United Steelworkers and Building Trades unions, to potentially execute a Project Labor Agreement for construction.
- Supporting equitable access to benefits of the carbon capture and storage (CCS) industry by reducing barriers for local members of disadvantaged communities to secure CCS-related jobs and implementing a strategy for **contracting with small and underrepresented businesses**.
- Pursuing a negotiated **community agreement** to ensure community benefits are delivered.
- Supporting the Justice 40 initiative by completing a Justice 40 Assessment and Implementation Strategy during each project phase.
- Quantifying air quality impacts for any relevant air pollutants emitted, or expected to be emitted, from the project.
- Sharing project data publicly to **enhance transparency** with stakeholders and local community members.

More details on the Mitchell Cement Plant
Decarbonization Project's Community Benefits
Commitments can be found in the Community Benefits
Commitments Fact Sheet.



Heidelberg Materials Mitchell Plant – New Cement Preheater-Precalciner Tower.

Mitchell Cement Plant Decarbonization Project Project Fact Sheet

Industrial Demonstrations Program Goals

The U.S. industry is a backbone of the nation's economy, producing the goods critical to everyday life, employing millions of Americans in high-quality jobs, and providing an economic anchor for thousands of communities. Yet the sector's energy- and carbon-intensity contributes to nearly one third of the nation's carbon dioxide emissions, representing a unique and complex challenge to achieving a carbon-free economy. Decarbonizing the U.S. industrial sector will require equally unique and innovative technological solutions that leverage multiple pathways, including energy efficiency, electrification, and alternative fuels and feedstocks such as clean hydrogen. The Industrial Demonstrations Program includes new, emerging technologies that aim to help produce clean steel, cement, chemicals and other materials used in our nation's roads, bridges, transmission lines, electric vehicles, solar panels, wind turbines, and everyday lives, which in turn, benefit every American.





Heidelberg Materials Mitchell Plant – New Cement Finish Milling System

Contact

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More Resources

Website: energy.gov/oced/IDP

Office of Clean Energy Demonstrations: energy.gov/oced

The U.S. Department of Energy established OCED to help scale the emerging technologies needed to tackle our most pressing climate challenges and achieve net-zero emissions by 2050. OCED's mission is 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 energy system.