



Industrial Demonstrations Program – Lebec Net Zero 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 December 2024, OCED awarded the Lebec Net Zero Project with more than \$7.8 million to begin Phase 1 of the project, located in Lebec, CA.



Awardee Fact Sheet

Industrial Demonstrations Program: Lebec Net Zero Project

Project at a Glance

- » **Total OCED Cost Share:** Up to \$500 million
- » **Total Project Amount:** \$15,705,782*
- » **OCED Award Amount:** \$7,852,737**
- » **Scope of Work:** Permitting, community engagement, and other development activities
- » **Timeline:** 15 months
- » **Recipient:** National Cement Company of California, Inc. is a cement plant serving southern and central California
- » **Project Location:** Lebec, CA
- » **Start Date:** December 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 Lebec Net Zero Project, led by the National Cement Company of California, Inc. (NCC-CA), plans to produce carbon-neutral cement at the Lebec, CA cement plant. The project plans to deploy three strategies: using locally sourced biomass from agricultural byproducts such as pistachio shells to replace a portion of the plant's fossil fuel reliance; producing limestone calcined clay cement (LC3) using a less carbon intensive alternative (calcined clay); and capturing and sequestering the plant's remaining carbon dioxide emissions, estimated at 950,000 metric tons each year. This project aims to demonstrate how a combination of decarbonization levers can drive emissions associated with existing U.S. cement production facilities to net-zero.

During Phase 1 of the project, NCC-CA will complete initial conceptual and engineering studies for the project, provide documentation and reports necessary to complete the National Environmental Policy Act (NEPA) review, and engage community and labor stakeholders. OCED will provide oversight of the Lebec Net Zero Project by evaluating the status and quality of implementation at each phase of the project. Through its phased approach to project management oversight, 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.

Lebec Net Zero Project

Project Fact Sheet

Project Site

The Lebec Net Zero Project is located at NCC-CA's cement plant in Lebec, CA, in the southern part of the state.

Community Benefits Commitments

Community benefits commitments are a key component of the Lebec Net Zero Project. The commitments are informed and developed—in consultation with local communities—to maximize local community benefits and mitigate potential negative impacts. NCC-CA plans to implement these commitments through:

- **Generating 20–25 permanent jobs and pursuing negotiated agreements** with the Building Trades for construction.
- Funding and offering several **workforce development opportunities**, including internships and job training opportunities.
- Continuing engagement with United Steelworkers Union and **utilizing the existing Collective Bargaining Agreement** covering 100% of hourly workers.
- Establishing a working relationship with Helmets to Hardhats, a nonprofit organization that **supports veterans transitioning out of active duty** into civilian careers utilizing union apprenticeships in the construction trades.
- Supporting the Justice40 initiative by **completing a Justice40 assessment** and implementation strategy during each phase and pursuing a community benefits agreement.
- **Improving air quality** for the surrounding communities, specifically particulate matter and nitrogen oxides.
- **Quantifying air quality impacts** for any relevant air pollutants emitted, or expected to be emitted, from the project.
- Sharing project information publicly **to support engagement, accountability, and transparency**.

More details on the Lebec Net Zero Project's community benefits commitments can be found in the [Community Benefits Commitments Summary](#).



Proposed site of carbon capture project

Lebec Net Zero Project

Project Fact Sheet

Industrial Demonstrations Program Goals

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.



Employee barbecue on Safety Day

Contact

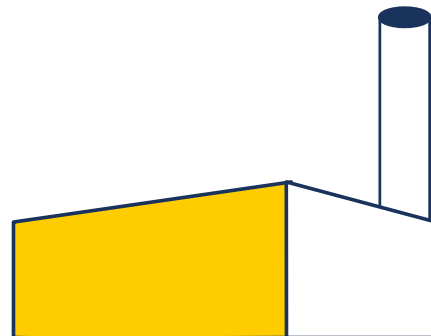
Program Email: engage_industrialdemos@hq.doe.gov

OCED Media Email: OCEDNewsroom@hq.doe.gov

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.