



Industrial Demonstrations Program – Vikrell Electric Boiler & Microgrid System

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 greenhouse gas emissions in the U.S. industrial sector. Following negotiations, in October 2024, OCED awarded the Vikrell Electric Boiler & Microgrid System project with more than \$588,000 to begin Phase 1 of the project, located in Casa Grande, AZ.



Awardee Fact Sheet

Industrial Demonstrations Program: Vikrell Electric Boiler & Microgrid System

Project at a Glance – Phase 1

- » **Total OCED Cost Share:** Up to \$51.2 million
- » **Phase 1 Total Project Amount:** Up to \$1,200,000*
- » **Phase 1 OCED Award Amount:** \$588,739**
- » **Phase 1 Scope of Work:** Permitting, community engagement, and other development activities
- » **Phase 1 Timeline:** 14 months
- » **Recipient:** Kohler Co. (Kohler) is a leading American manufacturing company
- » **Project Location:** Casa Grande, AZ
- » **Start Date:** November 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

About This Project

The Vikrell Electric Boiler & Microgrid System project, led by Kohler, plans to upgrade its new Vikrell bath and shower fixture manufacturing facility in Casa Grande, AZ. The project plans to install electric boilers and a microgrid consisting of a 21 MW solar array and a 20.5 MW battery energy storage system to reduce carbon dioxide emissions by an estimated 7,865 metric tons per year, reducing at least 75% and up to 90% of the pressing process CO₂ emissions from natural gas boilers on site. The project aims to demonstrate the viability of a renewables and microgrid system to decarbonize process heat emissions and demonstrate applicability to a wide range of manufacturing processes. The cutting-edge system intends to provide seamless switching between energy sources to optimize

decarbonization and economics, eliminating carbon emissions from natural gas boilers for industrial process heating.

During Phase 1 of the project, Kohler will conduct initial planning, engineering, and design tasks while carrying out tasks associated with OCED's completion of a National Environmental Policy Act (NEPA) review and intends to hold preliminary meetings with workforce and community groups in the area. OCED will provide oversight of the Vikrell Electric Boiler & Microgrid System project by evaluating the status and quality of implementation. 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.

Vikrell Electric Boiler & Microgrid System

Project Fact Sheet

Project Site

The Vikrell Electric Boiler & Microgrid System project will be located in Casa Grande, AZ.

Community Benefits Commitments

Community benefits commitments are a key component of the Vikrell Electric Boiler & Microgrid System project. The commitments are informed and developed—in consultation with local communities—to mitigate potential negative impacts of this project and maximize local community benefits. Kohler plans to implement these commitments through:

- Creating a **new full-time position with competitive wages** (upper 75th percentile pay bracket).
- Ensuring that any contracting firms used for construction, operations, and maintenance activities **establish workforce agreements with the subcontracted workforce**, which may include apprenticeship programs, training, and prevailing wages.
- **Engaging with community stakeholders**, including local tribes, through a partnership with EPIX (Electrified Processes for Industry without Carbon) and more.
- Reducing demand on the grid, alleviating stress on the energy infrastructure, and **enhancing grid stability** for local residents.
- Supporting the Justice40 initiative by **completing a Justice40 assessment** and implementation strategy during each phase.
- **Initiating conversations** with local stakeholders to determine the applicability of a Community Benefits Agreement.
- **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 Vikrell Electric Boiler & Microgrid System project's community benefits commitments can be found in the [Community Benefits Commitments Fact Sheet](#).



An aerial view of Kohler's Casa Grande, AZ facility

Vikrell Electric Boiler & Microgrid System

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.



An aerial view of Kohler's Casa Grande, AZ facility

Contact

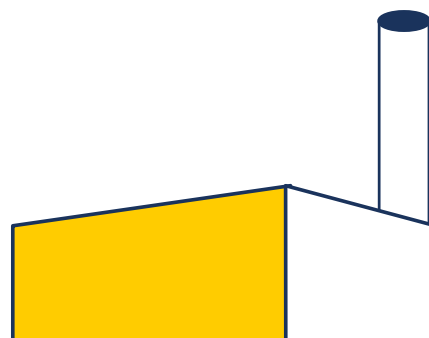
Program Email: engage_industrialdemos@hq.doe.gov

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.