



Industrial Demonstrations Program – Zero-Waste Advanced Aluminum Recycling (Project ZAAR)

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 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 November 2024, OCED awarded Project ZAAR more than \$3 million to begin Phase 1 of the project, located in Wabash, IN.



Project at a Glance – Phase 1

- » **Total OCED Cost Share:** Up to \$67.3 million
- » **Phase 1 Total Project Amount:** \$6,731,774*
- » **Phase 1 OCED Award Amount:** \$3,029,298**
- » **Phase 1 Scope of Work:** Planning, permitting, and other design activities
- » **Phase 1 Timeline:** Up to 9 months
- » **Recipient:** Real Alloy Recycling, a company in the aluminum recycling and alloy production industry
- » **Project Location:** Wabash, IN
- » **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

Project ZAAR, led by Real Alloy Recycling, plans to construct a zero-waste salt slag recycling facility in Wabash, IN. Salt slag recycling closes the loop by allowing all products generated from the recycling of aluminum scrap and dross to be reused, thereby eliminating waste and reducing carbon emissions. This project aims to build a processing plant on the backend of an existing aluminum recycling facility to enable salt slag components, which are typically sent to landfills, to be recycled back into the aluminum recycling process or beneficially used in other industries such as cement. This project would improve aluminum circularity and would strengthen the nation's position as a world leader in secondary aluminum production.

During Phase 1 of the project, Real Alloy Recycling will conduct planning and design and prepare detailed analysis of expected project outcomes, provide documentation and reports necessary for OCED to complete the National Environmental Policy Act (NEPA) review, and continue engagement activities with the community, project partners, and stakeholders. OCED will provide oversight of Project ZAAR 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 the project to progress to the following phase.

Zero-Waste Advanced Aluminum Recycling (Project ZAAR) Project Fact Sheet

Project Site

Project ZAAR would be located at an existing aluminum recycling facility in Wabash, in northern Indiana.

Community Benefits Commitments

Community benefits commitments are a key component of Project ZAAR. The commitments are informed and developed—in consultation with local communities—to mitigate potential negative impacts of this project and maximize local community benefits. Real Alloy Recycling plans to implement these commitments through:

- Generating approximately **100 construction jobs and nine permanent jobs** at the Real Alloy Recycling facility in Wabash, IN.
- Offering comprehensive **training and up-skilling opportunities** in areas such as engineering, welding, autonomous systems, and manufacturing processes.
- Implementing diversity, equity, inclusion, and accessibility efforts to **increase engagement with qualified applicants** from underrepresented communities and those that face systemic barriers.
- Supporting the Justice40 initiative by completing a **Justice40 assessment and implementation strategy** during each phase.
- **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 Project ZAAR's community benefits commitments can be found in the [Community Benefits Commitments Fact Sheet](#).



Entrance to Wabash, IN facility

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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.



Salt slag

Contact

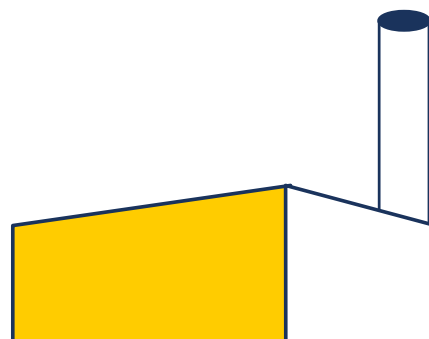
Program Email: engage_industrialdemos@hq.doe.gov

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.