

## THE OFFICE OF CLEAN ENERGY DEMONSTRATIONS

## Clean Energy Demonstration Program on Current and Former Mine Land – Nevada Gold Mines Solar PV Project – Decarbonizing Gold Mines in Nevada

The Clean Energy Demonstration Program on Current and Former Mine Land (CEML), managed by the U.S. Department of Energy's (DOE) Office of Clean Energy Demonstrations (OCED), aims to demonstrate the technical and economic viability of deploying clean energy projects on current (active) and former (abandoned or inactive) mine land in the United States. As part of this program, OCED sought applications demonstrating a range of technologies in diverse geographical regions to catalyze the next generation of clean energy projects on mine land. OCED selected five projects to begin award negotiations for a total of up to \$475 million in federal funding. In November 2024, OCED awarded the Nevada Gold Mines Solar PV Project – Decarbonizing Gold Mines in Nevada (Decarbonizing Gold Mines in Nevada project) more than \$14.6 million to begin Phase 1 activities for this demonstration, located in Humboldt and Lander counties, NV.



#### Project at a Glance

- » Total OCED Cost Share: Up to \$95 million
- » Phase 1 Total Project Amount: \$29,291,246\*
- » Phase 1 OCED Award Amount: \$14,605,623\*\*
- » Phase 1 Scope of Work: Advancing engineering, establishing business agreements, initiating community benefit activities, permitting activities, and refining the project schedule, budget, and financial model
- » Phase 1 Timeline: 16 months
- » Recipient: Nevada Gold Mines LLC is a joint venture between Barrick Gold Corporation and Newmont Corporation
- » Project Locations: Humboldt and Lander Counties, NV
- » Project Start Date: November 2024
- \*Represents the total project cost for Phase 1.
- \*\*Represents OCED's cost share for Phase 1. Additional funding for the project is subject to future award negotiations at the end of each project phase.

#### **About This Project**

Nevada Gold Mines LLC (NGM) seeks to install solar photovoltaics (solar PV) and battery energy storage systems (BESS) on two active gold mines in Humboldt and Lander counties, NV. NGM plans to build 40 MW of solar PV and 100 MWh of BESS at the Turquoise Ridge gold processing facility in Humboldt County, and 60 MW of solar PV and 148 MWh of BESS at the Cortez mining operations in Lander County, NV. Both systems would be interconnected behind-the-meter to NGM's existing power distribution system to directly serve the respective sites.

By utilizing onsite clean electricity generation and storage, the project would displace emissions from fossil fuel-based onsite generation and electricity purchased from the grid. NGM aims to lower mining operations emissions by 2 million

tons of carbon dioxide over the project's proposed lifetime, demonstrating a replicable pathway for the mining industry to potentially reach net-zero operations by 2050. Reducing mining emissions is critical as the nation ramps up its domestic supply chain to meet mineral demands in the clean energy, medical, aerospace, and advanced technology industries.

In November 2024, OCED awarded the Decarbonizing Gold Mines in Nevada project more than \$14.6 million to conduct Phase 1 of the project, which is expected to last 16 months. During Phase 1, NGM will advance engineering, refine the business plan, including the project's schedule, budget, and financial model, and begin permitting activities. Additionally, NGM will initiate community benefit activities, including engaging impacted tribes, communities, and workforce; developing plans to align project impacts with community priorities; and developing staffing and workforce development plans.

# Nevada Gold Mines Solar PV Project – Decarbonizing Gold Mines in Nevada Project Fact Sheet

#### **Project Site**

The Decarbonizing Gold Mines in Nevada project is located at NGM's active mining operations in Northern Nevada. The proposed sites are the Cortez and Turquoise Ridge mines in Lander and Humbolt counties, respectively. The communities around the Turquoise Ridge site are Justice40 communities.

#### **Community Benefits Commitments**

Community benefits commitments are a key component of the Decarbonizing Gold Mines in Nevada project. These commitments are informed and developed—in consultation with local communities—to mitigate potential negative impacts of the project and maximize local community benefits. The project aims to implement these commitments through:

- Conducting a social baseline study, project impact assessment, community needs assessment, and workforce impact analysis to develop strategies to align project impacts with community and labor priorities.
- Hosting presentations, workshops, townhalls, and site tours with local governments, tribes, the workforce, labor unions, and impacted communities to share project updates and gather input on the project.
- Engaging **Community Development Committees**, which include a mix of local leaders, community members, and representatives of local organizations, to provide direct community input into project decision-making.
- Co-developing an online platform with community members to support project reporting and information sharing.

More details on the Decarbonizing Gold Mines in Nevada project's community benefits commitments can be found in the <u>Community Benefits Commitments Fact Sheet</u>.



Pile foundation construction in preparation for mechanical installation at Nevada Gold Mines' existing solar facility

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.

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#### **CEML Program Goals**

Developing clean energy projects on mine land provides an attractive economic alternative to using undisturbed natural and agricultural land. Mine land is often located near critical infrastructure that makes it suitable for clean energy development, including electric substations, transmission lines, and access to roads or railroad lines. The projects in the Clean Energy Demonstration Program on Current and Former Mine Land have the potential to be replicated and scaled on the millions of acres of current and former U.S. mine land across the nation. CEML can help provide the mining industry with a range of ways to decarbonize their operations and minimize environmental impacts and air pollutants, abating greenhouse gas emissions and disturbances to fragile, surrounding ecosystems. Simultaneously, replicating clean energy technologies like these on other current and former mines can help maximize local workforce development and community opportunities for generations.



An electric shovel loading haul trucks at Nevada Gold Mines' open pit mining operations

#### Contact

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#### More Resources

Website: energy.gov/oced/CEML

Office of Clean Energy Demonstrations: energy.gov/oced

