



# MINING EQUIPMENT



Nevada's mining industry has a rich history and continues to be an important part of the state's economy. At NV Energy, the shift is on to help you boost your bottom line. We know how important energy is to mining operations. That's why our Business Energy Services team provides expert advice and options to help you save energy and money.

## Details



### Equipment Options

Retrofit options for mines can range from lighting and motors to variable speed drives.

Here are some energy-saving equipment to consider:

**Replace high-intensity discharge (HID) fixtures** with LEDs in truck bays, maintenance areas and milling and storage areas to cut energy use nearly in half. With most areas operating 24 hours a day, this switch can quickly add up to huge energy cost savings.

**Consider upgrading outside lighting** that operates all night, every night. With about 4,300 hours of operation, retrofitting a 400W metal halide light fixture with a 200W LED fixture quickly adds up to considerable energy savings. LEDs can handle the rough environment of a mine and they often operate better in cold temperatures. With five- to 10-year warranties, the initial cost quickly becomes cost effective.

**Change light fixtures** in office areas to energy-efficient, reduced-wattage T8 lamps or LED T8 lamps.

**Install variable speed drives (VSDs)**, enabling motors, pumps or fans to operate at varying speeds. VSDs help meet the requirements of the equipment without operating constantly—and unnecessarily—at full speed. When the speed of a pump or fan slows, the horsepower savings and, therefore, the energy savings associated with the reduction in speed are cubed. So a small decrease in speed can result in huge savings, especially with a large horsepower motor.

**Replace worn-out pumps and motors** with high-efficiency motors.

**Switch out analog controls for digital controls.** While changing control systems may seem costly, the benefits of digital controls include:

- Increase control points
- Smooth equipment operations
- Enable motors to use only the energy necessary to perform the operation, saving energy every hour that the equipment operates



## Energy-saving Projects

Mines across northern Nevada have taken advantage of NV Energy's rebate program. Here's just a few:

A mining customer replaced 50 150W metal halide fixtures with 70W LED fixtures and 150 175W metal halide fixtures with 98W LED fixtures.

- **Incentives received:** \$11,989
- **Estimated annual kWh savings:** 206,300
- **Estimated annual energy cost savings at \$0.08/kWh:** \$16,504

A mining customer installed VFDs on a 250 horsepower de-aerator pump and a 400 horsepower press feed filter pump.

- **Incentives received:** \$76,289
- **Estimated annual kWh savings:** 1,319,095
- **Estimated annual energy cost savings at \$0.08/kWh:** \$105,528

A pre-application is required; contact the Business Energy Services team today for help starting your application.



## Funding is limited—apply today!

Reduce your business's energy expenses, year after year. Get our free interactive Business Energy Savings Guide to learn more and discover what projects qualify for cash incentives.

Get Your **FREE** Guide



## LEARN MORE

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