



SOLUTIONS FOR BUSINESS

Beneficial Electrification and What It Means for Your Business

What you need to know about using clean energy from the grid to power your electric equipment

Choosing electric equipment reduces greenhouse gas emissions, is better for the environment and uses more clean energy.

Electrification: Why It Matters

The grid offers plenty of clean energy, which is why using equipment powered by electricity is a smart choice. Electric equipment supplied by clean energy eliminates the emissions associated with traditional internal combustion (IC) engines, reducing the environmental impact of operation. Additionally, minimizing noxious fumes, toxic spills and unwanted noise pollution improves worker health and safety. Electrification offers long-term cost benefits, helps reduce greenhouse gas emissions and supports clean air for all Arizonans.

Did You Know?

According to the American Council for an Energy-Efficient Economy (ACEEE), electrification is the process of moving away from equipment that uses fossil fuels to those that utilize electricity.

As electricity is increasingly generated from renewable sources such as wind and solar, electrification allows businesses to reduce carbon emissions and encourage clean energy practices.

Types of Electric Equipment

Belt Loaders

- Same durability, versatility, and performance as gas-powered belt loaders
- 10-15% of energy costs compared to IC belt loaders
- AC & DC systems
- Remote diagnostics and monitoring
- Equipped with on-board charge stations



Baggage Tugs

- Inching devices in e-GSE allow operator to conveniently move tugs into luggage trailers
- High low-end torque improves towing capacity
- Compact dimensions
- Increased versatility with additional cables so tugs can be used as a ground power unit



Standby Truck Refrigeration

- Compressors are quiet and eco-friendly
- Significant reduction in fuel savings when plugged into shorepower
- Electric truck units are often equipped with intelligent technology offering remote start/stop capability and monitoring



Forklifts

- Longer lifetimes due to fewer moving parts
- Two-year ROI
- Indoor or outdoor use
- Significant noise reduction
- Electric hydraulic power steering
- Superior maneuverability as batteries serve as steady counterbalance



Electric School Buses

- Improves air quality and reduces noise throughout the community
- Supports grid resiliency when not in use
- Transport times in the morning and afternoon allow for clean energy charging throughout the day



Electric Vehicle Service Equipment

- Increases adoption of electric vehicles
- Reduces vehicle operation cost
- Can inform charging habits to support the use of clean solar energy during mid-day



Cost Savings

Electric equipment is less expensive to operate than traditional internal combustion equipment. While the initial investment may be 10-15% higher, the long-term costs are less.

The energy required to operate electric equipment is typically 80-90% less than traditional gas-powered equipment. Electric engines do not idle, making their run time less and reducing the hours of operation and total fuel consumption.

Powering your equipment with clean energy from APS lowers operating costs, reduces carbon emissions and helps achieve long-term sustainability goals.

Start saving today.

For more ideas and to learn what rebates are available, call the Solutions for Business team at (866) 333-4735, email us at aps.solutionsforbusiness@dnv.com or visit aps.com/businessrebates.

Cost Comparison of Forklift Electrification

A warehouse operation running a forklift 2,500 hours per year:

- Estimated \$1,500-\$2,000 per year in operating costs for an electric forklift, compared to \$10,000-\$12,500 per year for a propane forklift.
- An electric forklift only costs about \$500 per year to maintain, but an IC engine forklift costs about \$1,500 per year.
- Taken together, buying an electric forklift can save a business up to \$10,000-\$11,000 per year in cost.