

Fluctuating gas prices, advancements in battery technology, environmental concerns and federal incentives have all led to an increased interest in electric vehicles (EVs). As your electricity provider, Idaho Power is preparing for accelerated consumer adoption of EVs and wants to help our customers better understand the technology.

### What is an EV?

EVs run off an electric motor and a battery pack. They're powered entirely by electricity and have zero tailpipe emissions. Also referred to as Battery Electric Vehicles (BEVs) or Plug-in Electric Vehicles (PEVs), EVs are charged by plugging into a charging station. **Example: Nissan Leaf.**

Plug-In Hybrid Electric Vehicles (PHEVs) are hybrids with larger battery packs and an Internal Combustion Engine. PHEVs can be plugged into a charging station to recharge their battery pack(s) or run off gasoline. **Example: Chevy Volt.**



Nissan Leaf

Chevy Volt

## IDAHO POWERED™

### Idaho Power's leading the way:

To get familiar with the technology, Idaho Power has added several passenger EVs to our fleet, as well as hybrid-electric bucket trucks, electric utility vehicles and battery-assisted trucks. We also installed five charging stations of varying make and model at our Downtown Boise office, specifically for employee workplace charging. We will continue to monitor advancements in EV and charging station technology to make sure our customers have the information they need.

Email [ev@idahopower.com](mailto:ev@idahopower.com) for information.

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# EV WORKPLACE Charging





## Charging an EV

EVs are powered all or in part by electricity. The time it takes for a full charge depends on the type of vehicle, temperature, driving habits and the type of charging station, among other factors.

### There are three options for charging:

#### Level 1 – 120V, dedicated 15-20A circuit.

Used both at home and work, Level 1 charging draws a lower electrical demand but takes longer to charge a car than the other options.

#### Level 2 – 240V, dedicated 30-40A circuit.

Typically found at businesses and public sites, these units are also available for home use. This type of unit will recharge an EV much faster than Level 1, allowing multiple users throughout the day.

#### DC Fast Charging – 480V.

These units are typically found at public facilities. Note that not all EVs are equipped for fast charging.



Compare EV options  
and Federal Tax Credits at  
[www.fueleconomy.gov](http://www.fueleconomy.gov)

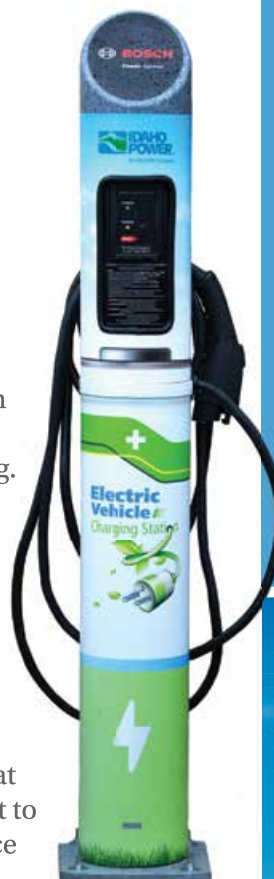
## Workplace Charging

Installing workplace charging stations for employee, customer and fleet vehicles offers a low-cost benefit that will expand your business' transportation and parking options. Charging at work or in public places can help EV drivers double their all-electric daily commuting range and provides a charging location for employees and customers without access to home charging. Level 1 and 2 charging stations cost anywhere from \$1,000 to over \$7,500, depending on the number of ports and functionality. Installation costs are additional.

**For employees:** Most employees spend 40 hours a week or more at work, and studies show that next to home, work is the preferred place to charge.

**For your fleet:** Adding EVs to your company fleet demonstrates your company's commitment to sustainability. EVs are fun to drive, easy to maintain, and may even reduce your business' transportation-related operating costs.

**For your customers:** Installing charging stations for customers with EVs provides a convenient way to recharge while they visit your business, and may encourage them to stay longer or visit more frequently.



## How much energy does it take to charge an EV?

It takes about 0.3 kilowatt hours (kWh) to go one mile in an EV. So for example, a 10-mile commute to work would require 3 kWh of electricity.

DOE's eGallon calculator provides up-to-date gasoline vs. electricity prices at: [www.energy.gov/maps/egallon](http://www.energy.gov/maps/egallon).

## I'm Ready to Buy – What's Next?

- ⚡ Choose the EV charging station that best suits your needs.
- ⚡ Consult with the product manufacturer on any special installation requirements.
- ⚡ Get bids from contractors and electricians before proceeding.
- ⚡ Ensure all local, state, and federal codes are met.



Visit [www.PlugShare.com](http://www.PlugShare.com) to find public charging locations in your area.

Idaho Power recommends using a licensed electrician for any home or workplace electrical work.