Electric Vehicles and Charging: What Employees Need to Know

TYPES OF EVS:

Battery Electric Vehicle (BEV): Fully electric vehicle powered by a battery; requires plug-in charging.

Plug-in Hybrid Electric Vehicle (PHEV): Combines electric motor and gas engine; runs ~30 miles electric, then switches to gas. Charges and refuels with gasoline.

KEY DIFFERENCES BETWEEN INTERNAL COMBUSTION ENGINE VEHICLES AND EVS:

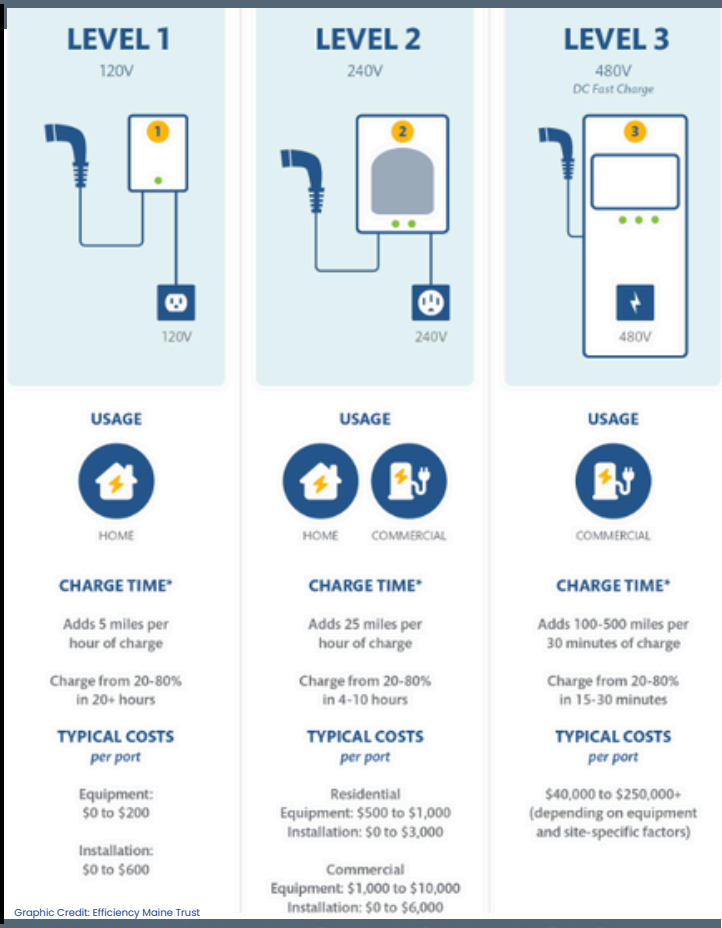
- **Acceleration:** EVs deliver instant torque for immediate acceleration, quicker off the line than most internal combustion engine vehicles.
- **Heating & Cooling:** EVs use battery power to heat/cool the cabin since there is no engine, which reduces driving range, especially in cold weather.
- **Cold Weather Range:** Low temperatures reduce battery efficiency, cutting range and slowing charging.
- **Preconditioning:** Warming or cooling the car while plugged in preserves battery range for driving.
- **Regenerative Braking:** EVs can recover energy while slowing down using regenerative braking.
- **One-Pedal Driving**: Allows drivers to decelerate by lifting off the accelerator – reducing the need for brake pedal use.

CHARGING

Public vs. Private Charging: Public stations are accessible to all and often accept payment and connect to the internet; private chargers are usually non-networked and used in the home or at the workplace.

Charging Best Practices: EV batteries operate best between 20-80% of charge. You don't need to charge to 100% every day unless regularly using the full range of the vehicle.

Paying for Charging: Use your **WEX EV RFID card** at the charging stations on the back of this sheet. For other EV stations and fuel purchases, use your WEX Fuel Card.



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and more to come.

LOCATING CHARGING STATIONS:

- **Plugshare**: A crowdsourced app and website that helps EV drivers find nearby charging stations, see real-time availability, and read user reviews.
- **A Better Route Planner:** An EV route planner that finds efficient routes by considering traffic, weather, battery level, and available chargers.
- **Charging Network Apps:** Each charging network operates its own app for locating stations, starting charges, and managing accounts.

WHAT IF...

- **Charging station isn't working?**
  - Use an app like PlugShare or A Better Route Planner to find another nearby charger. Report the faulty station to the charging network or notify your fleet manager.
- **Run out of range?**
  - Contact roadside assistance for support to either tow the vehicle to the nearest charging station or provide roadside EV charging if available.
- **Accident?**
  - Follow standard safety steps and inform emergency responders that the vehicle is electric so they can take proper precautions related to the battery.

ADDITIONAL RESOURCES:

- Maine DOT's Youtube Channel: "Driving an EV" video
- Efficiency Maine Trust's "About EVs" and "EV Incentives" webpage
- U.S. Department of Energy's "Alternative Fuels Data Center" webpage.

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