

Electric Vehicle FAQs

What is a Plug-in Electric Vehicle (PEV)?

A Plug-in Electric Vehicle (PEV) is any motor vehicle that can be recharged by an external source of electricity and operates on public highways. Batteries on the vehicle store electricity that provides all or a portion of the power source to operate the vehicle.

Where can I find more information about a particular PEV?

For more information about a particular Plug-In Electric Vehicle, pricing, charging specifications, batteries, safety or other vehicle details, please contact the automobile manufacturer. Also see <http://www.pluginamerica.org/vehicles>

What do the different acronyms related to Electric Vehicles mean?

EV: Electric Vehicle
PEV: Plug-in Electric Vehicle
PHEV: Plug-in Hybrid Electric Vehicle
BEV: Battery Electric Vehicle
EREV: Extended Range Electric Vehicle
ZEV: Zero Emission Vehicle
EVSE: Electric Vehicle Supply Equipment
ICE: Internal Combustion Engine

What rebates are available for the purchase of an Electric Vehicle?

For state and federal incentives, visit <http://www.pluginamerica.org/incentives>.

For State of Colorado rebates, click on this link to the Colorado Revised Statutes code subsection detailing the "Tax credit for purchase of vehicles using alternative fuels":

<http://www.michie.com/colorado/lpext.dll/cocode/1/6288c/63cb7/63f72/63f74/64474/64590?fn=document-frame.htm&f=templates&2.0#>

The following document describes how to calculate the rebate the State of Colorado will give to purchasers of Electric Vehicles (considered an alternative fuel).

<http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251598004950&ssbinary=true>

What are my charging options for a Plug-in Electric Vehicle (PEV)?

Level 1 – Utilizes a standard 120-volt house outlet protected by a 15-amp or 20-amp fuse or breaker.

Level 2 – Utilizes a 240-volt circuit similar to what is used for central air conditioners or clothes dryers. This circuit would normally be protected by a 40-amp fuse or breaker (varies depending on purchased equipment).

How long will it take to charge my PEV?

Charging times will vary greatly depending on the size of battery bank on the PEV or BEV and the level of charging that is selected. Typical charging time for Level 1 is 8 to 24 hours and typical charging times for Level 2 is half the time of Level 1, approximately 4 to 12 hours. Contact the automobile manufacturer to obtain an accurate approximation of charging time for your particular PEV and charging station installation.

What do I have to do to get my home ready to charge my PEV?

Please refer to the "Preparing for your New Electric Vehicle"
<http://www.fcgov.com/utilities/residential/conserves/EVs>

Can Fort Collins Utilities install a PEV charging station for me?

No, Fort Collins Utilities can only work on utility-owned equipment to provide the necessary service to the house or business point of delivery. The home or business owner may choose to contact a licensed electrician. All EVSE installations are the responsibility of the home or business owner and shall meet necessary requirements included in the City of Fort Collins' Electrical Permitting and/or Building Inspection processes.

What are the dimensions of the charging station and electrical requirements?

Equipment dimensions, electrical requirements, certifications and available dates vary by manufacturer and equipment model. To learn more about particular equipment, contact your preferred equipment manufacturer. For station manufacturers, see: <http://www.pluginamerica.org/accessories>

Does charging equipment require an attendant?

No, an attendant isn't required to operate the equipment. UL-listed equipment has been designed to meet strict safety standards.

What safety features are typical for Electric Vehicle charging?

There are many features required by the National Electrical Code (NEC) for charging equipment that allow for safe operation by the general public. For example, all EVSE operating above Level 1 shall be permanently connected and fastened in place and have no exposed live parts. This equipment must also provide a means to keep the cable and connector de-energized whenever the electrical connector is uncoupled with the PEV.

The Society of Automotive Engineers (SAE) has published a standard stating the requirements for the J1772 connector to ensure safe and reliable operation. This standard is available for purchase at http://standards.sae.org/j1772_201001. Additionally, many EVSE manufacturers include circuit interruption devices that detect and protect from ground fault and over current (short circuit) events.

Does the City of Fort Collins have public charging stations?

A Level 1 and Level 2 public charging station will be located at the Fort Collins Utilities Service Center (700 Wood St.) in spring 2012. The City of Fort Collins currently is exploring the option of adding more public charging stations in convenient locations around the city. More information will be available later in the year.