

Difference Between Plug-in Hybrid Electric Vehicle (PHEV) and All-Electric Vehicle (EV)

Basic Differences

All Electric Vehicles, a/k/a EVs, are fueled by a battery and an electric motor.

EVs are more useful for those driving within or near the city, defined distances, because of the limited driving range in electric mode.

Plug-In Hybrid Electric Vehicles, a/k/a PHEVs, are fueled by a combination - They have a battery and electric motor, a gasoline tank, and an internal combustion engine (ICE).

PHEVs total driving range and performance are more suitable for drivers who need to cover longer distances.

	All Electric Vehicles EVs	Plug-In Hybrid Electric Vehicles PHEVs
Push-Button Start	Most PHEVs and EVs will have a push button start.	
Instrument Cluster	A PHEV display will show the fuel range and the battery range	An EV will display only have a battery range.
Fueling	EVs are refueled/recharged only when plugged into a charging station.	Once the electrical charge is depleted (used up) on the PHEVs, the vehicle will seamlessly/ automatically switch over to the gasoline engine (ICE). During braking, PHEVs are recharging the battery.
Charging Stations	Level 2 Charging Stations The most common charging stations around Vermont take approximately 3 ½ hours for a full charge. DC Fast charging stations that take approximately 30 minutes for a full charge. Directory of available charging stations can be found at https://na.chargepoint.com/charge_point 110 Outlet Charging Both EVs and PHEVs are equipped with a charging cord that allows recharging from a 110 outlet	
Performance Emissions	EVs are always powered by electric engine, zero-emissions and have a silent operation. EVs have a limited driving range.	The combination of 2 types of mechanics offers higher performance in maximum speed and driving range. PHEVs contribute both pollution and noise.

Common Acronyms

EV = All Electric Vehicles

PHEV = Plug-In Hybrid Electric Vehicles

ICE = Internal Combustion Engine