

EV 101: Essential Terms



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TERM	DEFINITION
Battery Electric Vehicle (BEV)	A vehicle powered entirely by electricity with no gasoline engine.
Zero Tailpipe Emissions	No exhaust emissions while driving.
Driving Range	The estimated distance an EV can travel on a full charge.
State of Charge (SOC)	The current battery level displayed as a percentage.
Battery Capacity	The total amount of energy the battery can store.
Kilowatt-hour (kWh)	A measurement of battery capacity and stored energy.
Kilowatt (kW)	A measurement of charging speed or power output.
Charge Time	The amount of time required to recharge the battery.
Level 1 Charging	Charging using a standard 120V household outlet.
Level 2 Charging	Faster charging using a 240V home or public charger.
DC Fast Charging (Level 3)	High-speed public charging that rapidly replenishes the battery using direct current.
AC (Alternating Current)	Electricity used in homes for Level 1 and Level 2 charging.
DC (Direct Current)	Electricity used in fast charging that flows directly into the battery.
Volts (V)	The electrical pressure that pushes current through a circuit. higher voltage enables faster charging.
Amps (A)	The amount of electrical current flowing through a circuit.

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Watts (W)	A unit of power equal to volts multiplied by amps.
High-Voltage Battery	The main battery pack that powers the vehicle's motor.
Onboard Charger	The system that converts AC power into DC power for the battery.
Regenerative Braking	Captures energy while slowing down to recharge the battery.
Electric Motor	Powers the wheels using electricity instead of gasoline.
Instant Torque	Immediate power delivery when accelerating.
All-Wheel Drive (AWD)	Power delivered to all four wheels for added traction.
e-Axle	An integrated electric motor and power control drive unit.
Thermal Management System	Regulates battery temperature for performance and longevity.
Heat Pump	An energy-efficient system that heats the cabin using outside air.
Pre-Conditioning	Warming or cooling the battery and cabin before driving to improve performance and efficiency.
NACS (North American Charging System)	Charging port standard compatible with Tesla Superchargers and newer Toyota BEVs.
J1772	AC charging connector used for Level 1 and Level 2 charging.
CCS1	DC fast charging connector used on earlier Toyota BEVs.
Over-the-Air Updates	Wireless software updates delivered directly to the vehicle.