DEFINITIONS

HEV - Hybrid Electric Vehicle. Internal combustion (I/C) engine with battery drive. Engine & regenerative brakes charge battery

Mild HEV - I/C engine with 12v or 24v battery drive

PHEV - Plug-in Hybrid, I/C engine. Battery plugs in for full charge, regenerative brakes

BEV - Battery Electric Vehicle. Electric-only propulsion system with no secondary source of propulsion

FCEV - Full Cell EV. Uses hydrogen fuel cell to generate electricity for battery

EV SPEAK -

Terms & Definitions to master the "Alphabet Soup" of EVS

Hybrid Electric Vehicles (HEVs) are powered by an internal combustion engine and an electric motor, which uses energy stored in batteries. A HEV cannot be plugged in to charge the battery. Instead, the battery is charged through regenerative braking and by the internal combustion engine.

Plug-In Hybrid Electric Vehicles (PHEVs) are powered by an internal combustion engine and have and electric-only propulsion system which uses energy stored in batteries. PHEV batteries can be charged using a wall outlet or charging equipment, by the ICE, or through regenerative braking.

Fuel Cell Electric Vehicle (FCEVs), are similar to all-electric vehicles. Fuel Cell Electric Vehicles use a hydrogen fuel cell to produce electricity to power an electric motor. Although automakers could design an FCEV with plug-in capabilities to charge the battery, most FCEVs today use the battery for recapturing braking energy, providing extra power during short acceleration events and to smooth out the power delivered from the fuel cell with the option to idle or turn off the fuel cell during low power needs.

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