

Key Information eMobility Technology & the Mercedes-Benz Plug-In Hybrid

This document provides key information from the Mercedes-Benz eLearning course X0045E-US.SSB.





What is Mercedes-Benz eMobility?

Mercedes-Benz eMobility describes any Mercedes-Benz vehicle with an electric motor. The electric motor can be utilized as the primary power source in Battery Electric Vehicles or as an add-on to a gasoline powertrain for Hybrid Vehicles. eMobility offers advanced technology to provide local emission-free driving with the luxury and performance of a Mercedes-Benz.

eMobility Powertrains:

Electric Vehicles (EV) Hybrid Vehicles (HEV)

Plug-In Hybrid Vehicles (PHEV)

eMobility Vehicle Comparison

	Electric (EV)	Hybrid (HEV)				
		Parallel	Series	Mild	Full	Plug-In (PHEV)
Electric Motor:	Yes	Yes	Yes	Yes	Yes	Yes
Internal Combustion Engine (ICE):	No	Yes	Yes	Yes	Yes	Yes
Primary Power Source:	Electric motor	ICE or electric motor & ICE in combination	Electric motor	ICE	ICE or electric motor, based on conditions	ICE only, electric motor only, or electric motor & ICE in combination
Plug-In Charging Capability:	Yes	No	No	No	No	Yes
Engine & Regenerative Braking Recharge Battery:	Yes	Yes	Yes	Yes	Yes	Yes
Key Identifying Factor:	Electric only; battery can be recharged via charging unit	When battery is depleted, ICE becomes main source of power	ICE serves only to charge battery and power generator	ICE shuts off only when decelerating or at a standstill	Electric motor is only charged while vehicle is being driven	Can run on electric-only for moderate distances; battery can be recharged via charging unit

Why eMobility?

Powerful acceleration

The electric motor consistently provides maximum torque for stronger acceleration speeds.

Better fuel economy

The ability to use an electric motor to power the vehicle allows local emissions-free driving for both Electric and Hybrid Vehicles and improved miles per gallon (MPG) for Plug-In Hybrids.

Intelligent Powertrain Management

Mercedes-Benz Intelligent Powertrain Management technology optimizes driving efficiency through the use of Intelligent Hybrid Systems, placing them above the competition.

New Mercedes-Benz Nomenclature

My Mercedes Electric Vehicle Hompage

Owners of a Mercedes-Benz eMobility vehicle will have their own homepage to monitor their vehicle's

- State of charge
- · Charging time
- Climate control
- Eco display
- and more

Preconditioning

Set the climate of the vehicle's interior remotely by choosing a departure time and activating remote climate control.

Preconditioning can also be set from within the vehicle using the instrument cluster, or from outside the vehicle using the smart key.

WAS	NOW	EXAMPLES	
BlueTEC, CDI	d for "diesel"	E350d	
Plug-In Hybrid, Electric Drive	e for "electric"	B250e / C350e	
Fuel Cell	f for "fuel cell"	B200f	
Hybrid	h for "hybrid"	S400h	
4MATIC (all-wheel drive)	4MATIC	E400 4MATIC	





Mercedes-Benz Plug-In Hybrids



*Check Dealer Ordering Guide for model-specific details.

May require additional equipment or packages.

Mercedes-Benz Intelligent Powertrain Management

HYBRID Operating Modes

Optimize efficiency and power with four hybrid drive modes (HYBRID, E-MODE, E-SAVE, & CHARGE)

Radar-Based Recouperation

On-board radar systems optimize the level of recuperated energy back to the battery

Predictive Drive Strategy

DISTRONIC PLUS or Active Brake Assist/CPA+ used to avoid any unnecessary gear shifts

Predictive Operation Strategy

Scans route conditions to optimize driving modes (3-foot grid, approximately 4 miles ahead)

Route-Based Operation Strategy

Uses a planned route in the COMAND system to optimize efficiency in urban environments