

ELECTRIC VEHICLE

Discussion Guide



Get the basic facts to know before buying an electric vehicle.

What I should ask before I buy an EV

THINK AHEAD ABOUT:

- Budget
- Car Type
- Buying vs. Leasing
- Financing
- Trade-In

Electric Vehicle

- What is the range for this car on a single charge?
- Can you upgrade the battery on this model?
- What services and maintenance are required, and how often?

Charging

- How long does the battery take to charge (Level 1, 2, and 3)?
- What charging port does it have?
- Do I need a special adapter to charge it at home?

Price

- What is the out-the-door price?
- What warranty deals are available?
- What additional fees will I be charged?
- What rebates or incentives are available?
- What are the expected service costs?

Other

- Do you have the car I want in stock and when can I get it?
- How long is the warranty on the car battery?
- What is the maximum load rating for towing (if any)?
- What kind of features can I add?
- Is there anything else I need to know?

If it is a plug-in hybrid EV, ask:
“Does it favor gas or electric?”

Compare EVs

VEHICLE	PRICE	BATTERY RANGE	TIME TO CHARGE	NOTES

ELECTRIC VEHICLE EV BASICS

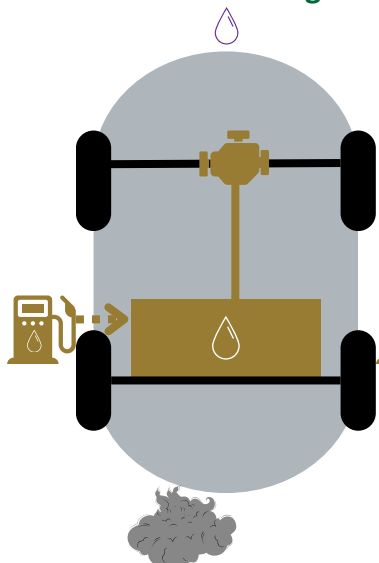
**SUSTAINABLE
PRINCETON.**

Get the basic facts to know before buying an electric vehicle.

VEHICLE TYPES

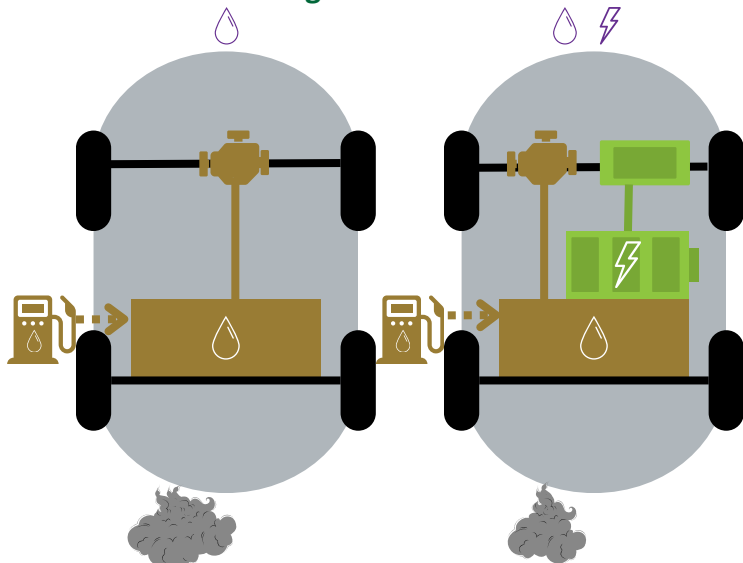
ICE

Internal
Combustion Engine



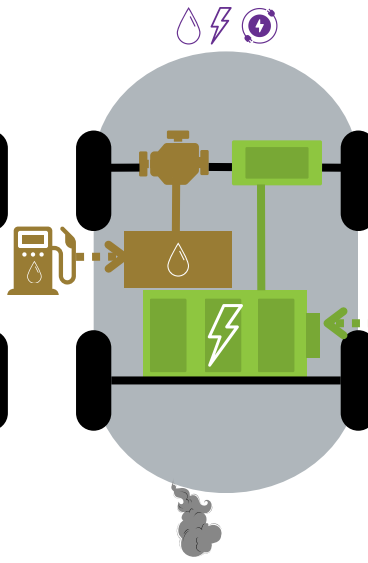
HEV

Hybrid Electric
Vehicle



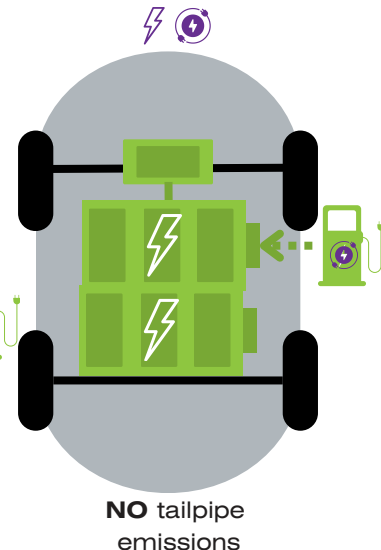
PHEV

Plug-In Hybrid
Electric Vehicle






BEV

Battery Electric
Vehicle



POWERED BY:

-  Fuel combustion
-  Regenerative braking
-  Plugging into electric power source

REGENERATIVE BRAKING:

In a conventional vehicle when the brakes are used all energy is lost. With regenerative braking, the electric motor is used as a generator and stores the captured energy in the battery.

CHARGER LEVELS

LEVEL

1

120 V AC
common residential outlet

LEVEL

2

208-240 V AC
higher-rate AC

LEVEL

3

400-1000 V DC
direct current fast charging



For additional information visit:
www.sustainableprinceton.org