



Anything as innovative as the Ford EV lineup is bound to generate some questions. Take a few minutes and explore the questions you may get from customers.

Battery Questions

What kind of battery do Ford plug-ins have and what's the capacity?

The Ford plug-in hybrid vehicles — C-MAX Energi and Fusion Energi — both use a 7.6-kilowatt hour (kWh) lithium-ion battery. The Focus Electric uses a 23-kWh lithium-ion battery.

How much does the battery cost to replace?

Current replacement battery pricing for C-MAX Energi, Fusion Energi and Focus Electric can be found on fordparts.com.

What are the chances of battery failure? I'm concerned the battery won't last.

The lithium-ion battery in Focus Electric, C-MAX Energi and Fusion Energi is warranted for 8 years or 100,000 miles. It will experience gradual capacity loss with time and use, similar to all lithium-ion batteries, which is considered normal wear and tear. For important tips on how to maximize the life and capacity of the lithium-ion battery, check the owner manual.

Battery Charging Questions

How long does it take to fully charge the battery?

Charging times vary based on the voltage capacity of the charging cord. The standard 120V convenience charging cord can be plugged into your home's standard electrical outlets. A 240V charging station requires special high-voltage wiring, similar to that used by an electric stove or electric clothes dryer.

	Standard 120V convenience charging cord	Available Ford-branded 240V home charging station	Public 240V charging station
Fusion Energi	7 hours	2.5 hours	Varies
C-MAX Energi	7 hours	2.5 hours	Varies
Focus Electric	20 hours	3.6 hours	Varies

What is the cost⁽¹⁾ to fully charge the battery?

Electricity rates vary across the country. But as you can see in the example below, charging a plug-in hybrid costs less than a dollar, while fully charging an all-electric can cost between \$2.40 and \$3.00. Rates at commercial charging stations will vary.

Plug-in Hybrid	All-Electric
\$0.85–\$0.94	\$2.40–\$3.00
120V: \$0.94 = \$0.12 x 7.8 kilowatt hours	120V: \$3.00 = \$0.12 x 25 kilowatt hours
240V: \$0.85 = \$0.12 x 7.1 kilowatt hours	240V: \$2.40 = \$0.12 x 20 kilowatt hours

Do I need to have a charging station?

If you drive a C-MAX Energi or Fusion Energi and can allow your vehicle to charge for about 7 hours (over night), you can use the standard 120V convenience charging cord to recharge. If you need to charge your plug-in hybrid faster, an available 240V charging station is necessary. For the majority of Focus Electric drivers who use the vehicle for their daily commute, the 240V home charging station may be a necessity.

How efficient is the charging cord that comes with my car?

Because certain vehicle systems are in use when the vehicle is charging, 120V convenience charging cord may lose some efficiency compared to a 240V charging station. When efficiency and charging time are concerns, a 240V charging station is an excellent option.

What happens to the battery after the life of the vehicle? Is it recycled?

For battery recycling information, you'll want to visit the website for the End-of-Life Vehicle Solutions Corporation (ELVS) Battery Recycling Program. Ford is helping to develop the high-voltage battery (HVB) end-of-life recycling infrastructure in the U.S. It provides educational material on battery removal, transportation and recycling, as well as a call center for end-of-life vehicle dismantlers through ELVS. More information can be found on the ELVS website at www.elvsolutions.org or by calling (855) 358-7228.

Where do I get information about purchasing a 240V home charging station?

AeroVironment™ offers total charging solutions – from hardware to turnkey installation services – and has installed over 11,000 charging stations across North America. For Ford vehicles, they sell a Ford-branded 240V home charging station with a 25-foot cable. For ordering information visit EVsolutions.com/ford or call (888) 219-6747.



AeroVironment is a trademark of AeroVironment, Inc.

For more information, download: [Helping Your Customers Connect to a Home Charging Station](#)



Fuel Economy Questions

What is MPGe?

MPGe stands for miles per gallon equivalent. Like miles per gallon, it's a way for the EPA to measure and compare fuel efficiency among similar vehicles. It's important to remember that MPGe is also an "estimate" and not a guarantee of the mileage you will get.

How is MPGe calculated?

The MPGe rating is calculated by determining how many miles a vehicle can go using the same energy content as a gallon of gas. The EPA calculates that 33.7 kWh of electricity is the equivalent to one gallon of gas.

Why don't I get the MPGe shown on the window label?

It's important to remember that the EPA-estimated MPGe for your vehicle is just that: an estimate. It's approximately how far the car could go on a full battery and a full tank of gas (full battery on all-electrics) — if it were driven in exactly the same controlled conditions that the EPA used in their testing.

Of course, real life isn't that controlled. As a driver, you directly impact the MPGe with your driving style, habits and what you take along in your car. Terrain and traffic can also affect MPGe. And all vehicles use more energy in cooler, wet or snowy weather, even if the climate control is turned off.



Driving Range Questions

Why do I get less EV range⁽²⁾ when it's cold or hot outside?

Like all batteries, the lithium-ion battery in your vehicle can be affected by cold or hot temperatures, changing the amount of charge the battery can retain. Your Ford plug-in has a built-in battery conditioner to help equalize battery temperatures. That's why, if there's prolonged hot or cold weather, it's important to keep your vehicle plugged-in.

Why would anyone buy a C-MAX Energi or Fusion Energi if they can only go an EPA-estimated 19 electric miles⁽³⁾?

According to the U.S. Department of Transportation, 51%⁽⁴⁾ of American commutes are within 1-10 miles, one way. With C-MAX Energi and Fusion Energi having an EPA-estimated electric-only range of up to 19 miles, that means it's possible to drive to and from your destination on electric power alone for over half your trips. No gasoline. No carbon emissions.

Why can't I keep my vehicle operating in EV only?

Your C-MAX Energi or Fusion Energi is equipped with a gasoline engine in addition to the electric traction motor, so you don't need to worry about running out of electric power. There are several conditions when the gasoline engine will start, even if your vehicle is in EV Now mode:

- When extra horsepower or torque is needed, such as when suddenly accelerating
- When extra power is needed to run the climate systems, including the air conditioning or defroster
- When extreme hot or cold outside temperatures require the battery conditioner to operate, requiring extra power
- When the lithium-ion battery has run low on power and needs to be recharged
- Any other situations when the onboard computer determines that power is needed from the gasoline engine

Of course, if you have a Focus Electric, it runs on EV only all the time.

Why don't I get the electric range shown on the window label?

The EPA-estimated all-electric ranges for plug-in vehicles are estimates, designed to allow you to make an "apples to apples" comparison among similar vehicles. This estimate is based on EPA testing under specific conditions. Real-world driving, with variations in driving style, habits, terrain, traffic and weather can all affect the range of the vehicle.

Why doesn't the battery charge level show the maximum range after I've charged it for the required time?

Your Ford plug-in vehicle actually learns and grades your driving habits — acceleration, cruising and braking — and anticipates your range based on your driving history. It uses the ignition key or Intelligent Access key fob to identify each driver, then displays a range based on that driver's past performance. Remember that using the heater or air conditioning can also lower your battery range.



Feature Questions

Why is the fuel tank pressurized on plug-in hybrids?

Since plug-in hybrids such as C-MAX Energi and Fusion Energi may not need to be refueled very often, pressurization is used to help keep the fuel fresh, in much the same manner as canning helps to keep food fresh. Pressurization also helps keep the fuel from evaporating.

Why is the trunk or cargo area so small?

For a variety of performance and handling reasons, Ford engineers (like many competitors) elected to locate the lithium-ion battery in the rear of the vehicle. While the battery does take up some space, it also allows you to drive gasoline- and carbon emission-free at times — a good trade-off in our opinion.



Why doesn't this vehicle have a spare tire?

A spare tire weighs a lot, which negatively affects fuel efficiency. In order to save weight, and thus maximize fuel economy, each plug-in vehicle is equipped with a Tire Mobility Kit, which includes a portable compact air compressor and a can of tire sealant to help seal small punctures caused by road hazard. Ford also offers roadside assistance. Plus, the Tire Mobility Kit frees up valuable cargo space.

Can I set specific charging times for my vehicle?

Yes. There are two ways:

1. **GO Times** can be set on the MyFord Mobile⁽⁵⁾ website (under My Car, Charge Settings) to begin the vehicle's cabin conditioning (heat or cool it) without using battery power. Effectiveness of cabin conditioning may be reduced by extreme outside temperatures or when using 120V charging.
2. **Value Charge Profiles** allow your car to charge when electricity prices are lower⁽⁶⁾ and can control charge settings for a preset location. You can set up Value Charging on the MyFord Mobile website (under My Car, Charge Settings) for any location where you have previously charged by creating a Value Charge Profile. You can choose "Charge Now" or "Value Charge" on the MyFord Mobile smartphone app, website or SYNC with MyFord Touch⁽⁷⁾ (Charge Settings, Charge Profile.)





Ownership Questions

How much is the federal tax credit and how do I claim it?

You can get up-to-date information on federal tax credits at fueleconomy.gov/feg/taxcenter.shtml. The current tax credit for C-MAX Energi and Fusion Energi is \$4,007, with a phase out that is yet to be determined. The current federal tax credit for Focus Electric is \$7,500, with a phase out that is yet to be determined. Visit the website for information on how to claim your federal tax credit. State tax credits may also be available.

What are the warranties on Ford plug-in vehicles?

In addition to the standard 3-year/36,000-mile Bumper-to-Bumper New Vehicle Limited Warranty, Ford plug-in hybrid and all-electric vehicles have the following coverage:

- Lithium-ion battery — Covered for 8 years/100,000 miles under the Ford Unique Component Warranty⁽⁸⁾
- EV Charge Port and other unique components — Covered for 8 years/100,000 miles under the Ford Unique Component Warranty⁽⁸⁾
- California warranty terms — The AT-PZEV Emissions and Performance Warranty for California-certified Ford hybrid and plug-in hybrid vehicles is 15 years/150,000 miles. It also covers the lithium-ion battery for California-certified Ford hybrid and plug-in hybrid vehicles for 10 years/150,000 miles.

If I have a power failure at home, can I run my refrigerator off the 110-volt power in my car?

No. The generators in plug-in vehicles are not the same as the generators used to power electrical appliances. Also, using your vehicle in any manner other than described in the owner's manual can void the warranty.

Can I tow a plug-in vehicle behind an RV?

Yes. C-MAX Energi and Fusion Energi may be flat-towed (four wheel-down towing) behind another vehicle, such as an RV. The maximum speed limit while towing is not to exceed 70 mph. The vehicle must be placed in Neutral with the parking brake released and the ignition switch in the accessory position before flat-towing. Front-wheel dollies or a flatbed trailer may also be used for recreational towing.

Focus Electric, however, can only be towed with all four wheels off the ground, such as on a flatbed or car-hauling trailer. If any wheels are on the ground while towing, vehicle or transmission damage may occur.

If I run mostly in EV mode, what is the oil change interval?

There's no set amount of time. However, hybrid and plug-in hybrid vehicles are equipped with an **Intelligent Oil-Life Monitor**, which can let you know when an oil change is required with a notification in the message center display. Since you may be driving your plug-in hybrid quite a bit in all-electric mode, your vehicle is also equipped with an automatic **Oil Freshness Mode** that occasionally runs the engine to help keep the oil in good condition. If you drive a Focus Electric, you're off the hook — there's no oil to change. See your owner manual for details regarding mechanical fluid change intervals.

What is the Intelligent Oil-Life Monitor?

It's an advanced system that can calculate oil change intervals based on actual vehicle use and operating conditions — up to 2 years and 20,000 miles.⁽⁹⁾ The message "Engine Oil Change Soon" will appear at 5% of oil life remaining. The message "Oil Change Required" will appear at 0% of oil life remaining. Make sure to do the oil change within 2 weeks or 500 miles of the notification appearing on the message center display. And make sure you or your service technician resets the Intelligent Oil-Life Monitor after each oil change.

What items should be checked every six months, regardless of oil change interval?

It's no secret that maintenance is an investment that can pay dividends in the form of improved reliability, durability and resale value. For the maintenance schedule for your vehicle, see the owner's manual or visit owner.ford.com and select "Maintenance Schedule" under the Vehicle Basics tab. In addition to items listed in the maintenance schedule, the following items should be checked every six months:

- 12V battery connections — clean as necessary. Note: Do not attempt to inspect or clean any high-voltage battery connections (orange wires)
- Cooling system fluid level and coolant strength
- Parking brake for proper operation
- Safety warning lamps (brake, ABS, airbag and safety belt) for operation
- Washer spray and wiper operation. Clean or replace blades as necessary

- (1) Using a national average electricity rate of \$0.12 per kilowatt hour. Source: eia.gov. Actual price will vary based on individual utility rates.
- (2) Actual range varies with conditions such as external elements, driving behaviors, vehicle maintenance and lithium-ion battery usage.
- (3) 2014 EPA-estimated rating of 40 city/36 hwy./38 combined mpg, 14.0-gallon tank; 19 miles electric. Range calculation based on www.fueleconomy.gov. Actual mileage will vary. Actual range will vary with conditions such as external elements, driving behaviors, vehicle maintenance and battery usage.
- (4) Source: National Household Travel Survey, U.S. Department of Transportation, Bureau of Transportation Statistics, 1/1/2014.
- (5) Complimentary for the first 5 years starting from vehicle sale date as recorded by the dealer. After 5 years, a subscription fee will apply. MyFord Mobile requires a compatible 2G independent cellular network. Evolving technology and cellular networks may affect future availability and functionality.
- (6) Contact your utility company to determine if they participate or to change rate plans. Not all utility companies participate.
- (7) Driving while distracted can result in loss of vehicle control. Only use SYNC/MyFord Touch/other devices, even with voice commands, when it's safe to do so. Some features may be locked out while the vehicle is in gear. Not all features are compatible with all phones.
- (8) Refer to vehicle-specific Warranty Guides at owner.ford.com.
- (9) Under normal driving conditions. Certain conditions could accelerate oil change intervals, including short-distance stop-and-go driving and driving in extreme temperatures.