

ALL-ELECTRIC RANGE WHAT YOU NEED TO KNOW

What is WLTP?

The Worldwide Harmonised Light Vehicle Test (WLTP) procedure is used to measure fuel consumption and CO2 emissions and is designed to represent everyday driving. It was launched in Europe in 2017 and better reflects on-the-road performance compared to the NEDC test procedure. It is designed to enable comparisons to be drawn between different vehicles which are tested under the same controlled test conditions. The test covers different driving styles with different average speeds. Importantly, the ambient temperature used in the testing is a consistent 23C.

All-Electric Range

For our EVs we also display the WLTP Extra High test value which reflects the less efficient scenario of motorway driving. This better illustrates the variability in real-world driving on a Mustang Mach-E or Kuga PHEV. This follows updated guidance from the Vehicle Certification Agency in the UK.

Model	Derivative	WLTP Extra High (Motorway)	WLTP Overall
Mustang Mach-E	RWD Standard Range	202 miles / 326 km	273 miles / 440 km
	RWD Extended Range	280 miles / 452 km	379 miles / 610 km
	AWD Extended Range	253 miles / 408 km	335 miles / 540 km
	GT	236 miles / 380 km	310 miles / 500 km
Kuga PHEV	ST-Line Edition	28 miles / 46 km	39 miles / 63 km
	ST-Line X Edition	28 miles / 45 km	37 miles / 61 km
	Vignale	28 miles / 45 km	37 miles / 61 km

Real-World Variability. What Affects Range?

The WLTP test is performed in controlled test conditions to provide customers the ability to see a like-for-like comparison. In the real world, as with petrol or diesel vehicles, there are multiple factors that influence and impact range performance:

Environmental Factors



Temperature outside and inside



Road terrain and surface quality



Poor weather conditions

Vehicle



Battery health



Vehicle maintenance



Tyre condition

Driving



Driving style



Payload



Use of accessories

Maximising All-Electric Range

There are several steps that can be taken to maximise your all-electric range:

- Pre-conditioning the battery and cabin: Set departure times to warm the battery and prepare the cabin while plugged in to a charging source. Managed via SYNC or FordPass.
- Keep the vehicle plugged in whenever it is parked. In colder weather, parking under cover can be helpful.
- Regenerative braking can capture and reuse more than 90% of the braking energy improving the efficiency of the battery and extending the battery range.
- Maintaining a consistent cabin temperature is more efficient versus regularly turning the climate control on and off again.

Learn more about range variance and maximising range



What Affects Range?

Environmental Factors



Temperature outside and inside. Extreme cold or hot temperatures affect battery cell chemistry. EV Batteries need help to operate at an optimum temperature. Either cooling or heating the car while driving uses energy from the high voltage battery. Maintaining a consistent cabin temperature is more efficient versus regularly turning the climate control on and off again.



Road terrain and surface quality. Braking downhill provides the opportunity to recharge the battery via regenerative braking. Driving uphill requires more energy. Using Low (L) position on the electronic transmission selector provides an increased level of deceleration when you lift off the accelerator pedal. You can use (L) at all times, if desired, but it is designed to improve drivability and efficiency while descending hills. For Mustang Mach-E, selecting (L) does not have any effect if one pedal drive is activated.



Poor weather conditions. In addition to temperature levels, driving in windy or adverse weather conditions like heavy rain or snow can have a negative impact on range. Driving into a strong headwind will negatively impact range performance.

Vehicle



Battery health. You can increase the longevity of your high voltage battery by using the Departure Times feature. This can keep your battery at the optimal temperature and state of charge based on your settings and usage. Allowing your battery to cool before charging and setting the maximum state of charge to 90% for everyday usage improves longevity of your high voltage battery. Storing your vehicle in temperatures between 0°C and 45°C is the most beneficial for the high voltage battery. You can also increase the battery life by maintaining your state of charge below 100%. When you park your vehicle for an extended period of 30 days or more, we recommend your battery be at an approximately 50% state of charge. Storing your vehicle's high voltage battery at higher states of charge is less favourable than storing at lower states of charge.



Vehicle Maintenance Level. Following the guidance on service intervals can ensure that the brake fluid level and coolant concentration remain in line with Ford's recommendations. For Mustang Mach-E, enabling automatic Ford Power-Up Software Updates within the SYNC 4A system will ensure that the vehicle's software is kept-up-to-date for optimal performance.



Tyre Condition. Tyre quality and either over or under inflated tyres can affect performance – just like a petrol or diesel vehicle. Uneven wear on tyres can have an effect on range and this should be checked by an authorised Ford dealer to ensure wheel alignment is correct.

Driver



Driving style and speed. Fast acceleration and maintaining higher speeds above 50 mph consume more energy. Smoother acceleration and braking are key to achieving the best range. The One Pedal Drive feature on Mustang Mach-E is designed to maximise regenerative braking.



Payload. Transporting more weight in the form of heavy cargo or multiple passengers results in greater energy consumption. The more aerodynamic the vehicle, the less drag it has. Towing a trailer or, for Kuga PHEV, carrying a roof rack will impact range performance just as it does on a petrol or diesel vehicle.



Use of accessories. Use of electrical sockets and accessories within the vehicle, like charging your mobile device, also consumes energy from the high-voltage battery.

Learn more about
range variance and
maximising range

