

Thame Drive Electric



A Hybrid, Plug-in Hybrid or **Battery Electric Vehicle (BEV)?**

HYBRID EV
(HEV) or
"Self-charging
Hybrid"
and
"Mild Hybrid"

An HEV has a small battery and electric motor to boost efficiency. It needs a petrol or diesel engine as its primary means of propulsion, but provides about a mile of electric range.

PROS

battery pack designed to improve efficiency and boost acceleration. It cannot run on electric power alone.

A 'Mild Hybrid' has a very small

CONS

A hybrid should be as efficient and economical as an equivalent diesel car.

Hybrids have very limited electric range, so offer few savings in carbon emissions or particulates that damage air quality.



It's familiar to drive, there is no battery to charge. It offers fuel efficiency around town, but less so on motorways. May have advantages for towing.

HEVs and PHEVs are more complex than BEVs or petrol cars.

Gov't will end new sales in 2035

(perhaps before). Hybrids may be

banned from city Clean Air Zones.

PLUG-IN HYBRID EV (PHEV)

A PHEV also retains a petrol or diesel engine, but has a larger battery delivering 20- 50 miles of electric range, depending on the model.

The engine is only needed for longer trips. At other times you're paying for an engine and having to carry it around. If you mainly do long trips, you're paying for and carrying around a battery pack that's probably not being used.



The engine can be regarded as a 'back-up' should electric range be insufficient.

It's likely PHEVs will become less attractive as BEVs improve in cost and range, and charging infrastructure grows.

Lower CO2 emissions bring tax benefits especially for company cars

PURE BATTERY EV (BEV)

A BEV relies entirely on electric battery propulsion.

Zero CO2 emissions depend on having charged from a 'green electricity' supplier.



Gov't offers a £2,500 grant on EVs below £35,000, free road tax and low company car tax.

At the moment new BEVs have a higher purchase price (but this is offset by lower running costs).

BEVs have low running costs, zero on road CO2 emissions, great performance, quiet and relaxed 'single pedal' driving.... & 'preconditioning' for cold mornings!

Use of lithium & precious metals needs to be well-managed in the supply chain.