# EVC™ Electric Vehicle Certificate

## VOLVO EX90 335kW Twin Motor Plus 106kWh 5dr Auto

### Combined real world range
(City & highway)

| | Cold weather | Mild weather |
|---|---|---|
| 200 - 300+ mi | 265 mi | 350 mi |
| 150 - 200 mi | | |
| 80 - 150 mi | | |
| 50 - 80 mi | | |
| 30 - 50 mi | | |

View full vehicle range stats

### Charge times
10 - 80% DC | 0 - 100% AC

| | |
|---|---|
| Max Rapid (500 kW) DC | 32 min |
| Standard Rapid Charger (50 kW) DC | 1 hr 35 min |
| Max AC Charger (11 kW) AC | 11 hr 30 min |
| Installed home (7.4 kW) AC | 17 hr |
| Wall plug / 3-pin (2.3 kW) AC | 54 hr 45 min |

View full charging stats

### Key specs

| | | | | |
|---|---|---|---|---|
| Battery capacity **111 kWh** | Charge power (max) **11 kW AC** | Vehicle consumption **2.9 mi / kWh** | Towing weight unbraked **750kg** | Heat Pump Available **Yes** |
| Battery usable **107 kWh** | Fastcharge power (max) **250 kW DC** | Vehicle fuel equivalent **117 mpg** | Towing weight braked **2200kg** | Heat Pump Standard **Yes (Confirm before order)** |

### Cost to fully charge

| | |
|---|---|
| Domestic tariff (24.5p / kWh)* | £26.22 |
| Public network tariff (79p / kWh)* | £84.53 |

*Domestic and public charge point prices are realistic estimates only - prices can vary based on tariffs

### Cost per mile

| | |
|---|---|
| Domestic tariff | 8.46p |
| Public network tariff | 27.27p |

*Domestic and public charge point prices are realistic estimates only - prices can vary based on tariffs

### Performance

| | |
|---|---|
| 0 - 62mph | 5.5 secs |
| BHP | 456 |
| kW | 335 |


zapmap

**Charge your EV with confidence**

Find and pay for EV charging, wherever you go




### Bidirectional charging




| | |
|---|---|
| V2L Supported | Announced |
| Exterior Outlet(s) | N/A |
| Interior Outlet(s) | N/A |
| V2H Supported | Announced |
| V2G Supported | Announced |

### Electric Car Insurance

Coming Soon

### EV Tariff

Charge your EV overnight from as little as 8p per kWh

| | |
|---|---|
| Example EV Tariff (8p/kWh) | £5.60 |

Coming Soon

# Glossary of Terms – A brief explanation about the EVC™ and why this is important to you

## Combined Real World Range

The combined 'real range' of the electric vehicle shown on the EVC is based on an indication of real-world range in several situations. Cold weather: 'Worst case' based on -10°C and use of heating. Mild weather: 'Best case' based on 23°C and no use of A/C. The actual range will depend on speed, style of driving, weather and route conditions. To be clear, your driving behaviour and style will influence the range of your EV, in addition to the external temperature. The data is provided by the Electric Vehicle Database.

## Battery Capacity / Battery Usable

Each EV will have a battery size shown as kWh (kilowatt hour). The kWh is equivalent of CC on combustion engine. Some manufacturers will offer the same car but with a different battery capacity for a customer. Generally, the bigger kWh will denote increased range and power but at an additional cost. The amount of electricity required to charge your battery is based on the battery capacity and this is how the EVC sets out the **Cost to fully charge** and the **Cost per mile.**

## Cost to fully charge

Understanding the running costs of your EV should be a crucial part of your decision. When you charge at home, your electricity / utility provider will charge you an amount which is shown as pence per / kWh. While some companies may provide EV specific tariffs, with cheaper overnight charging costs, our EVC certificate is based on the current maximum for a domestic tariff. It is important to be aware that public charge points are generally more expensive than your domestic tariff and if you foresee that this will form part of your EV experience, you should factor this into your cost analysis. The charge point you utilise should clearly state the price for the charging session; apps like Zap- Map **(see Charge Point Locator)** will also help you to understand the cost for charging. In some cases, charge point operators will increase their cost per / kWh based on the speed of charge required. For example, a 50 kW DC rapid solution would be cheaper than a 350 kW DC rapid solution. Use the **Charging Time** and **Charge Power / Fastcharge Power** to understand what your EV offers. The Key specs section will set out the battery size of your EV. The data is provided by the Electric Vehicle Database.

## Charge point locator

If you expect to utilise a charging solution outside of your home or work, you are advised to download an app to help you find the right one for your EV. For the purposes of this EVC, our recommendation is that you download **Zap-Map** (available on Android and in the App Store), which is the UK's leading digital platform for EV drivers to search for available charge points, plan longer electric journeys, pay for charging and share updates with other EV drivers. To help you pay for your charging session, the **Zap-Pay** solution is a simple pay-as-you-go (PAYG) option for charging with those charge point operators who have partnered with Zap-Map. In some cases, charge points will not offer a contactless solution and you will need to download their app in order to carry out a charging session. The data is provided by Zap-Map.

## Electric Car Insurance

For individuals, business owners, fleet managers, company car users or salary sacrifice customer we are working on a dedicated motor insurance product. We hope to make this available soon.

Struggling with Jargon?

Check out our guides

## Combined Real World Range

The charging time for your EV will depend on three key factors - 1) the charge power of your EV (shown as kW AC or DC); 2) the charge point power (shown as kW AC or DC); and 3) the Battery Capacity (the size of the battery is shown as kWh on the EV). As you will see in the **Key specs** section, this EV has a maximum charging power you can achieve; should you connect to a charge point which has a capability beyond the maximum, the EV will not charge any quicker. AC solutions are commonly adopted at your home or at certain destinations and these are often referred to as slower or "overnight" charging sessions. DC solutions are referred to as rapid or fast charging solutions and these are often found at service stations, dedicated charge point locations or key destinations - this is about adding as much range as possible in the shortest amount of time. The analysis for the charging time is based on the maximum DC achievable, an average DC charge point, the maximum AC achievable, a home charge point AC and a standard 3-pin plug (which is not recommended as a long term solution). The EVC will base an AC charging time on a 0-100% charging session (taking into account the battery size). The EVC will base a DC charging time on a 10-80% charging session because many EVs will reduce charging power after 80% has been reached, as part of protecting the battery. The data is provided by the Electric Vehicle Database.

## Cost per mile

For a customer who wants to compare the running costs (or Whole of Life costs) of their EV, the **Cost per mile** should be utilised. This EVC calculates this figure using the overall **Combined Real World** Range and the **Cost to fully charge** the EV. The Whole of Life cost analysis does not include the cost of servicing, maintenance, tyres, breakdown recovery or motor insurance.

## Performance

As part of utilising, and insuring, your EV please note the key performance statistics. This includes the 0 - 62 mph time, the EV's power (shown as kW and hp) and, where applicable, the towing weight capacity braked / unbraked. The use of kW, or kilowatt, will replace the use of bhp and ps which has been used to denote the power of a combustion vehicle. Your motor insurance company may ask for one or the other, as part of procuring an accurate insurance quotation. The automotive industry relies on data from a variety of sources, so you may find that different descriptions of your EV are used within the insurance process.

## EV Tariff

For individuals, business owners, fleet managers, company car users or salary sacrifice customers we are working on a dedicated charging tariff with an energy / utility company. We hope to make this available soon.

## Bidirectional charging

More and more EVs are now capable of sending energy to other devices. To help drivers understand their EV's capabilities we have noted where this is available and how it operates. Vehicle to Load (V2L) allows your EV to charge electric appliances and powers tools such as a computer or kettle. An interior or exterior UK socket will be available on the vehicle to facilitate this process. Vehicle to Home (V2H) allows your vehicle to operate in conjunction with your home. In practice, your EV acts as a battery storage and can supply your home with energy where required i.e. during energy-intensive time periods. Vehicle to Grid (V2G) technology allows your vehicle to send energy back to the grid during high-demand periods and earn you money in the process of doing so. For drivers with sustainable energy solutions at home, such as solar panels, the integration of bidirectional technologies in the EV and their home charge point are now an essential feature.