

EVC™ Electric Vehicle Certificate

LEXUS RZ 450e 230kW Direct4 71.4 kWh 5dr Auto [Premium]

Combined real world range (City & highway)	Cold weather	Mild weather	Charge times 10 - 80% DC 0 - 100% AC
200 - 300+ mi		225 mi	Max Rapid (100 kW) DC 36 min
150 - 200 mi	170 mi		Standard Rapid Charger (50 kW) DC 1 hr 2 min
80 - 150 mi			Wall plug / 3-pin (2.3 kW) AC 32 hr 45 min
50 - 80 mi			Installed home (0 kW) AC 0 min
30 - 50 mi			Installed home (0 kW) AC 0 min
View full vehicle range stats			View full charging stats

Key specs			
Battery capacity 71.4 kWh	Charge power (max) 6.6 kW AC	Vehicle consumption 3.1 mi / kWh	Towing weight unbraked 750kg
Battery usable 64 kWh	Fastcharge power (max) 147 kW DC	Vehicle fuel equivalent 126 mpg	Towing weight braked 750kg

Cost to fully charge

Domestic tariff (29p / kWh)*	£18.56
Public network tariff (79p / kWh)*	£50.56

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

Cost per mile

Domestic tariff	9.28p
Public network tariff	25.28p


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Performance

0 - 62mph	5.6 secs
BHP	313
kW	230

Zap-Pay & Zapmap charge point locator

Find chargers, plan your route and pay for charging with the Zapmap app.



[Find charge points on Zapmap](#)

Home charge point and energy tariff

Sort your home charging and save money.

[Compare charge points with Rightcharge](#)

Business infrastructure and charge points


Get a charge point installed at your business.

[See options on RawCharging](#)

Churchill Expert Insurance

EV motor insurance for fleet and Salary Sacrifice customers.

[Get a specialised electric car quote](#)



Churchill Expert arranges and administers NIG policies underwritten by U K Insurance Limited

Independent electric car review

Find out what our review partners over at Green Car Guide thought about this vehicle.

[Read more on Green Car Guide](#)

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.

Motor insurance for fleets and salary sacrifice customers

For business owners, fleet managers, company car users or salary sacrifice customers who need a motor insurance solution please speak to the team at **Churchill car insurance** via the link. The data is provided by Churchill.

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.

Home charge point installation

For individuals who need a domestic charge point solutions, this EVC integrates with **Rightcharge**, who are one of the UK's leading charge point comparison websites. Rightcharge is the simple way to organise your home charging and save money. Rightcharge will recommend the right home charger and match you with a trusted installer. The data is provided by Rightcharge.

Business charge point installation

For businesses looking to undertake a more complicated arrangement, it is recommended that you take appropriate advice and consultation as this will be a significant investment. This EVC integrates with a leading commercial charge point provider – **Raw Charging**. For landlords, hospitality, property agents and large tenants, do liaise with their team. The data is provided by Raw Charging.

Independent Car Review

This EVC integrates with the **Green Car Guide**, an independent electric, hybrid and green car review platform which began in 2006. If you would prefer an independent analysis as opposed to, or in addition to, the manufacturer's analysis, please access their free resource. The data is provided by Green Car Guide.