

**THIS IS DAVE.  
DAVE DRIVES AN EV.  
DAVE HAS RUN OUT OF CHARGE.  
DAVE DOES NOT HAVE THE CHARGING  
STATIONS THAT HE NEEDS.  
DON'T BE LIKE DAVE.**



**Do you have the infrastructure in place to support your transition towards electrification?**

**One of the biggest challenges for fleet electrification is having access to a developed and widespread charging infrastructure. Without the ability to recharge the plan falls flat.**

**Regardless of your location or available infrastructure capabilities SwitchedOnEnergySolutions® have tailored solutions to meet your requirements.**

**We provide an end-to-end all-inclusive solution from start to finish through to deployment and beyond.**



SwitchedOnEnergySolutions® Keeping you in charge.

**Telephone: 01761 451066 & 01278 550270**

[www.switchedonenergysolutions.com](http://www.switchedonenergysolutions.com)

# Which charger do I need? Which one is best for me? Does one size fit all?

From home charging to multi vehicle depot based charging, one size does not fit all.

The choice of charger depends on many different elements.

## What affects how long it takes to charge a vehicle?

There are many different factors however the principal factors include:

- Size of your vehicles battery. It is the car and the vehicles battery that is the principle factor to influence how fast the vehicle can charge at any one time. The bigger the cars battery the slower the charging point and the longer it takes to charge the battery.
- The maximum charge rate of your electric car. The speed and rate at which the charger can recharge.
- The state of charge of your vehicles battery at point of recharging. After 80% state of charge the car typically slows down the charge to protect the battery.
- The weather. As with most things in this Country the weather can affect the results. If the outside temperature is too cold or too hot, the car will charge slower to protect the battery.
- Battery temperature. If you have been driving for a while your car's battery will be nice and warm and can therefore charge at a faster rate and be more responsive.



Our sales support team and on site engineers are on hand to discuss the detail with you to advise and assist with your choice of charger.

Project EV launches into the electric vehicle charge point market, giving the customer and the installer a full range of feature packed, competitively priced products - from 7-22kW domestic AC to 40-300kW commercial DC charge stations.



\*No Earth Spike Required only applies for SE models.



## What is Slow, Fast, Rapid and Ultra-Rapid EV charging?

### **SLOW CHARGING: 3KW.**

Installed at homes, workplaces or on-street charging and lamp-posts.

A typical electric car (60kWh battery) takes just under 16 hours to charge from empty to- full with a 3kW slow charging point.

### **FAST CHARGING:7KW.**

Ranging from 7 to 22kW, fast chargers are found at destinations such as train stations, or leisure centres, where you are likely be parked for several hours.

7kW are most common and can add up to 30 miles of range in an hour.

### **RAPID CHARGING: 50KW.**

These DC charging points are often found in high numbers at locations where the dwell time is less than an hour, such as supermarkets and retail environments.

For many electric cars, you can add up to 100 miles of range in around 35 minutes with a 50kW rapid charger.

### **ULTRA-RAPID CHARGING:100KW.**

Ranging from 100kw up to 350kW these are the fastest way to charge an EV, often found in high numbers at locations close to main routes and in retail environments.

Ultra-rapid chargers can charge a car from 10-80% in around 30 minutes.

## How long does it take to charge an electric car?

It's not quite as long as a piece of string. With the advances in technology we can be reasonably accurate.

### **SLOW**

3KW charger. 7hrs to add 100 miles of range.

### **FAST**

7KW charger. 3.5hrs to add 100 miles of range.

### **RAPID**

50KW charger. 35mins to add 100 miles of range.

### **ULTRA RAPID**

150KW charger. 15mins to add 100 miles of range.

## How much does it cost to charge an electric car?

With electric cars, you pay per kWh of electricity. Not too dissimilar to the same as paying per litre of fuel with petrol or diesel cars. However, the price varies depending on where you charge, and the type of charger used. Public charging is typically more expensive than at home and the faster the charger, the more expensive it is typically.

### **HOME CHARGING.**

If you can charge at home, there are a number of options to suit your needs. Many energy suppliers offer electric car tariffs that allow you to make the most of off-peak rates.

### **FAST CHARGING.**

Typically cheaper than rapid charging, between 35p and 55p per kWh. Some fast chargers are subsidised and are free for the public to use.

### **RAPID & ULTRA-RAPID CHARGING.**

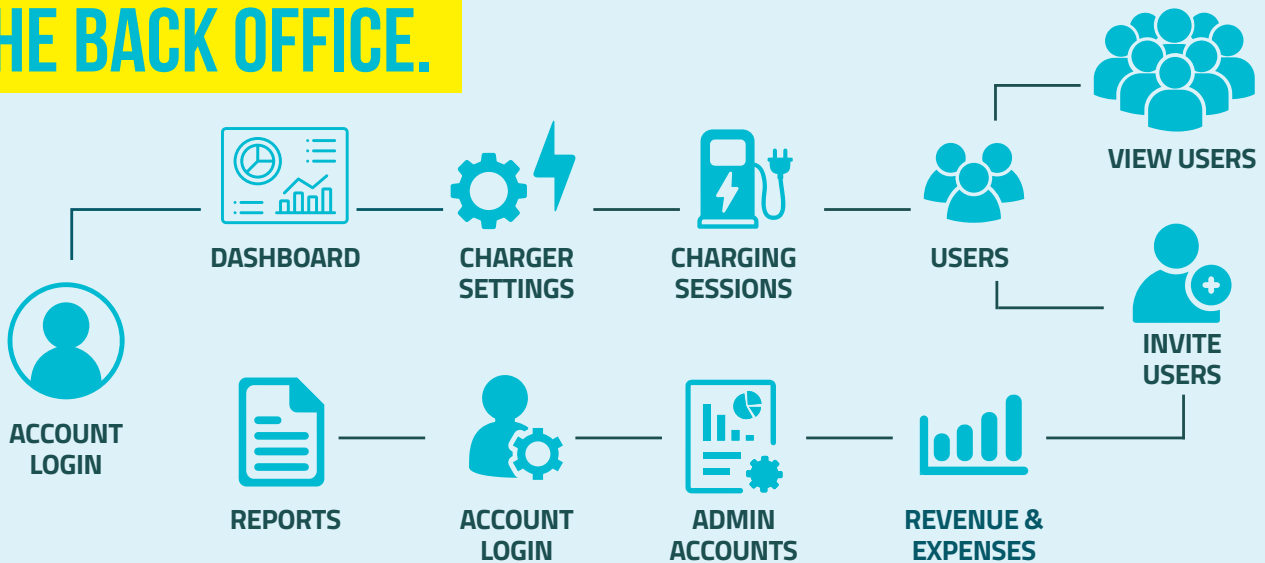
This is the most expensive option for refuelling and networks charge more for faster charger speeds and the infrastructure involved to build the charging stations.

## The back end: Control & Management.

As the old adage suggests “ Technology is important, however it’s what you do with it that counts.”

Its alright having a charging station however understanding and unlocking key data is crucial. If you cannot see it you cannot manage it. The back office is fundamentally the control that has been designed to make it simple to use and empower the client to obtain the most from it and to make the changes.

### THE BACK OFFICE.



### THE MOBILE OFFICE.

## Smart Energy Management: **ElectrIQs**

The smart way to reliably charge your electric vehicle - save money and reduce your carbon footprint, using our best home EV charging app. With ElectrIQs, you can remotely start an instant charge, set charging preferences, smart charge during off-peak hours or by setting a spending cap, view how, when and by how much you’ve charged your EV, find public charge points near you, and be fully regulatory compliant, with off-peak and randomised delay charging.

The mobile office app empowers the client to customise the solution around their individual requirement on demand but also to assist in the commercialisation of the solution; to generate revenue, to reduce cost, to enable the client to do what they want when they want.



**SOLAR BASED CHARGING**  
Match charging needs to the output of your solar panels.



**CHARGE MULTIPLE CARS**  
Charge more than one car from the app.



**FLEX CHARGING**  
Earn benefits by helping the environment and the grid.



**TARIFF SWITCHING**  
Easily control and switch your tariff with the electric miles app.



**AUTONOMOUS CHARGING**  
Charge your vehicle using the lowest cost of electricity.

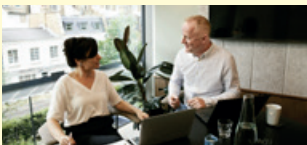
# What are the next steps?



## PHASE 1

### INITIAL CONSULTATION

Expert will meet with you to understand the site and your requirements



## PHASE 2

### SITE SURVEY

Our expert will undertake a physical site survey, to understand and draw up a comprehensive quote



## PHASE 3

### CONFIRM QUOTE

We will provide you with a detailed quote and site plan that will demonstrate what we will deliver, when and where



## PHASE 4

### INSTALLATION

On our agreed installation date, We will install you EV point. The Installer will provide you with a comprehensive understanding of the charge point



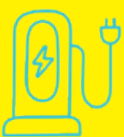
### PLANNING & DESIGN

The first phase of your journey with us begins with the electrical planning and design for the installation. We'll work with you to map out the infrastructure required for the EV charging stations and then provide a detailed feasibility plan that will include architectural drawings, procurement, timelines and budget.



### OCPP EV CHARGERS AND INSTALLATION

Aligned with your unique infrastructure plan, our highly-trained and experienced electricians will install and integrate your EV charging stations. Through the installation process, we provide the highest quality chargers suited for your project (EVC Level II or DCFC). After the installation is complete, our team will continue to support and maintain your electric vehicle chargers – for as long as you need.



### NETWORK OPERATIONS

With your EV charging stations installed, we then connect you to our proprietary EV-IV Network, granting you oversight and control over the usage of your electric car chargers. Through the EV-IV app, you will have access to billing management, power sharing, EV mobile charging and energy curtailment at your fingertips.



### SUSTAINABILITY PLANNING

We are the only EV integration company that proactively partners with clients to achieve their Environmental, Social, and Governance (ESG) goals. Through environmental planning, low-carbon fuel credits, and energy analytics, we strive to deliver and support our commercial and residential clients' needs for today and for the future.

## Shock proof your electricity bills with solar panels.

Never have to pay for your electricity costs again.

Create your own, use your own, even sell your own.

Become self-sufficient....and generate income from your unused energy.

Sounds ridiculous? Too good to be true?

To find out more give us a call.



## Keeping you in charge.

Central to any transition to fleet electrification is access to a robust re-charging network. Without it the plan falls flat.

There has never been a better time to capitalise on electrification by taking advantage of usage fees, incentives & carbon offsets.

To find out more give us a call.



## Never have to pay for your electricity or your fuel costs again.

GROW YOUR OWN MONEY TREE!

### Sounds ridiculous?

By combining both solar panels with electric vehicle charging points you can produce your own fuel, reduce your electricity costs and even reach a point at which the energy that you produce is yours free of charge.

How much would this save you?

To find out more give us a call.



# FIND OUT MORE

Telephone: 01761 451066 & 01278 550270

Email: [mike@switchedonenergysolutions.com](mailto:mike@switchedonenergysolutions.com) / [salessupport@switchedonenergysolutions.com](mailto:salessupport@switchedonenergysolutions.com)

Address: Mill Batch Farm, East Brent, Highbridge, Somerset TA9 4JN

[www.switchedonenergysolutions.com](http://www.switchedonenergysolutions.com)