



octopus
ELECTROVERSE

**CHARGING INFRASTRUCTURE INSIGHTS
UK & EUROPE**

SEPTEMBER 2026

HIGHLIGHTS OF THE MONTH

UK Market Scale and Driver Behaviours

In September 2026, the UK's electric vehicle charging network reached 117,000 charge points (EVSEs) across 40,000 physical locations. While charge point growth in September was recorded across 8 UK regions, when looking at geographic density for total charge points, Greater London, the South East, and Scotland continued to account for 51% of all UK charge points. When examining charger density per 100,000 inhabitants, the West Midlands, East of England, and North West joined Scotland and Greater London in the top 5 regional locations.

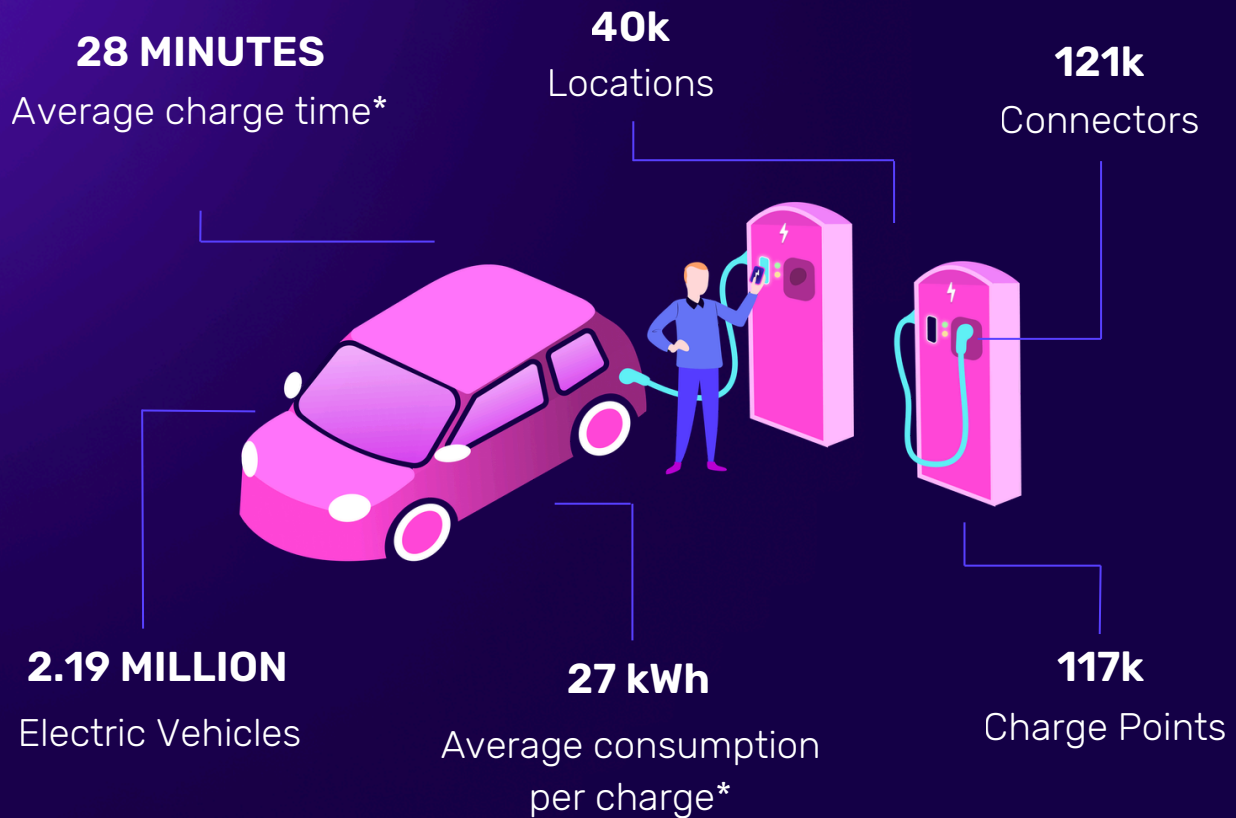
Network Charging Economics

Tracking the price per kWh reveals a slight shift in overall UK costs this month. The overall average cost of a charge rose to £0.70 per kWh in August, up £0.01 from the previous month. In September, ultra-rapid charging averaged £0.76 per kWh, while slower AC charging rates remain at the yearly baseline of £0.52 per kWh.

The European Perspective

Across the broader European market, charging infrastructure remained at 1.38 million charge points across 398,000 locations. When comparing Europe and the UK, nuances emerge. For example, slow AC charging (under 8 kW) represents 46% of total UK connectors, whereas mainland Europe is heavily dominated by fast charging (8–50 kW), accounting for 67% of total connectors. Despite these contrasting lower-speed strategies, ultra-rapid charging remains the fastest-growing segment across both the UK and continental Europe, reaching 171,600 connectors across the continent.

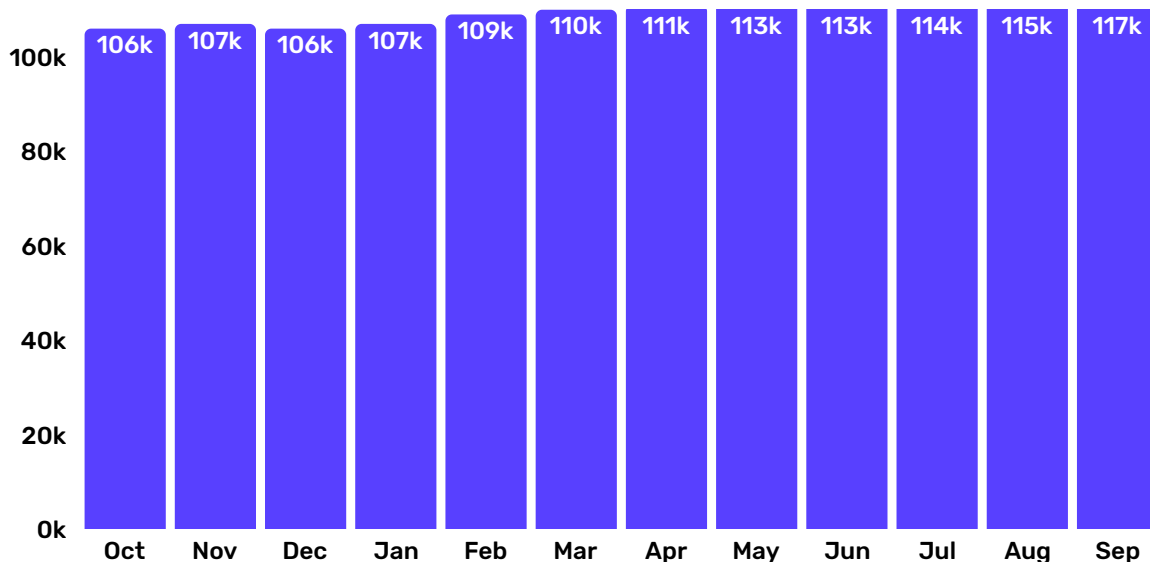
UK HEADLINE STATISTICS



*Based on last month of Electroverse consumers charging data on Ultra Rapid Chargers

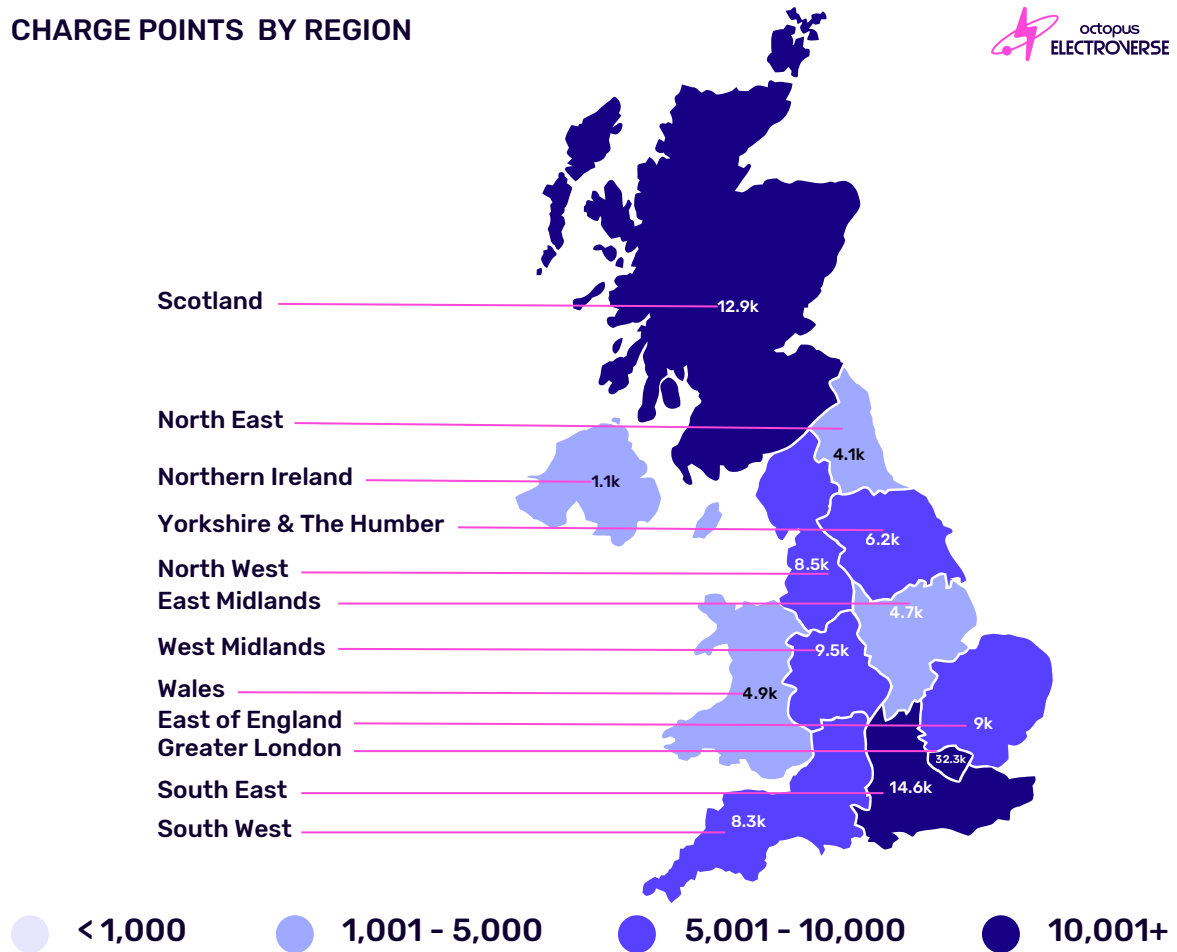
In August 2026, the UK's total number of charge points grew to around 117k. Per region, Greater London, the South East and Scotland account for ~51% of all UK charge points, but when looking at charge points per 100k inhabitants, the West Midlands, East of England and the North West join Scotland and Greater London in the top 5 locations.

UK CHARGE POINTS GROWTH

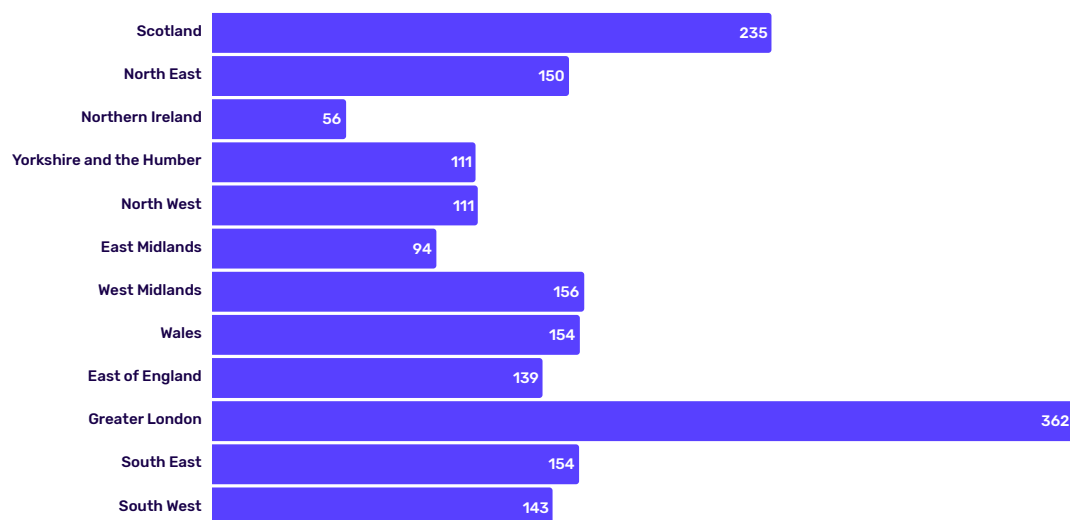


CHARGING INFRASTRUCTURE ACROSS THE UK

CHARGE POINTS BY REGION



CHARGE POINTS PER 100K INHABITANTS

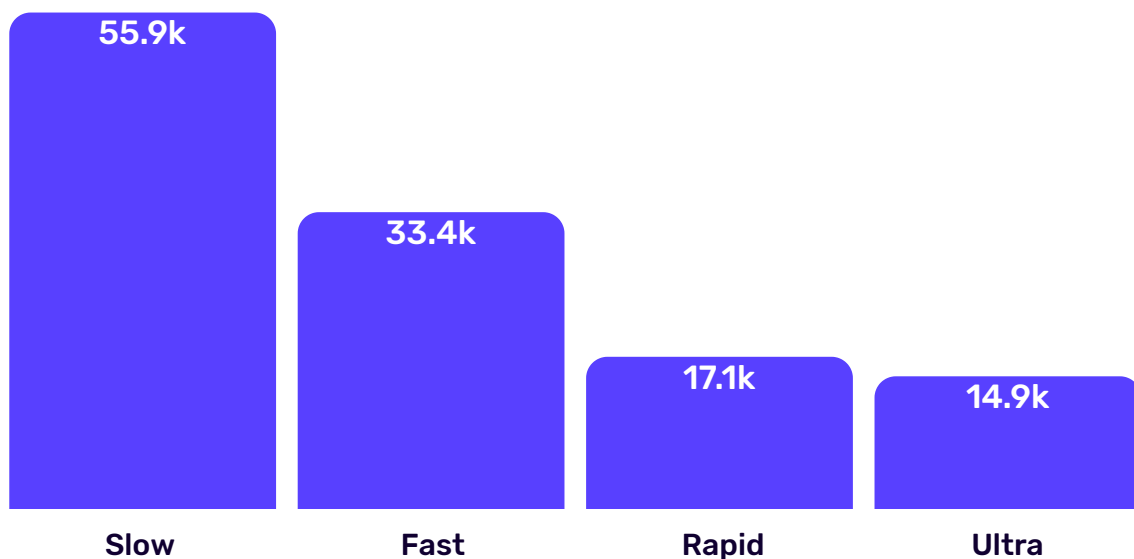


CHARGER CHARACTERISTICS

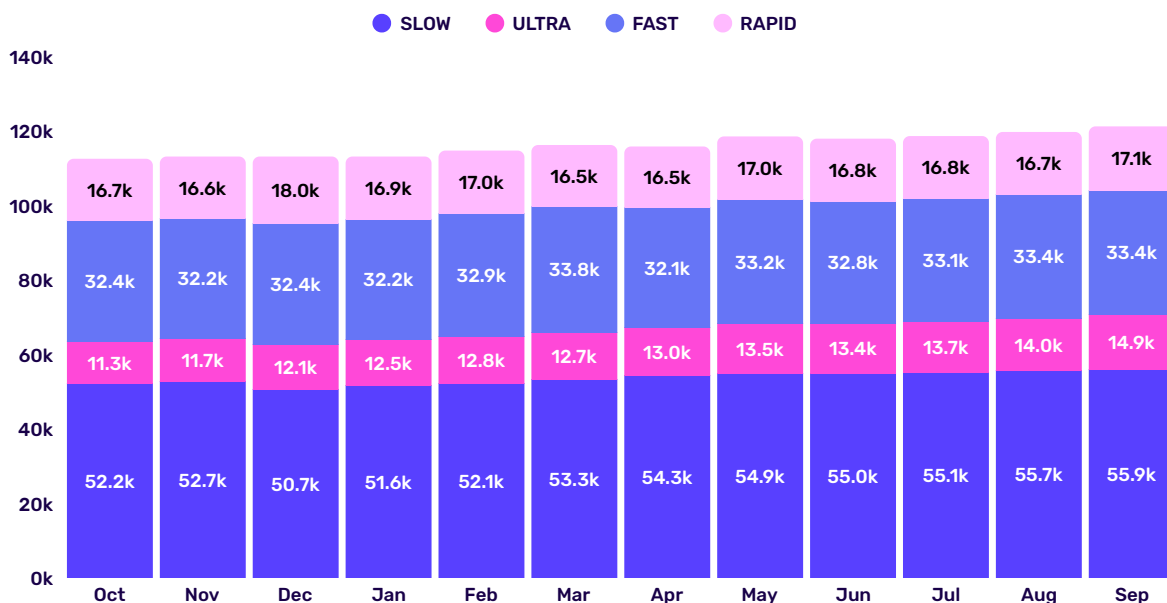
SPEED

Charging connectors offer varying speeds (kW), and are classified as **slow** (< 8 kW), **fast** (8 - 49 kW), **rapid** (50 - 149 kW), or **ultra-rapid** (>= 150 kW). In the UK, slow charging speeds make up around **46%** of the total connectors, with rapid and ultra-rapid contributing around **26%**. Charging speed utilisation often relates to varying driver needs: some slower chargers can act as home charging alternatives, so a greater number is required to meet demand.

UK CONNECTORS BY SPEED



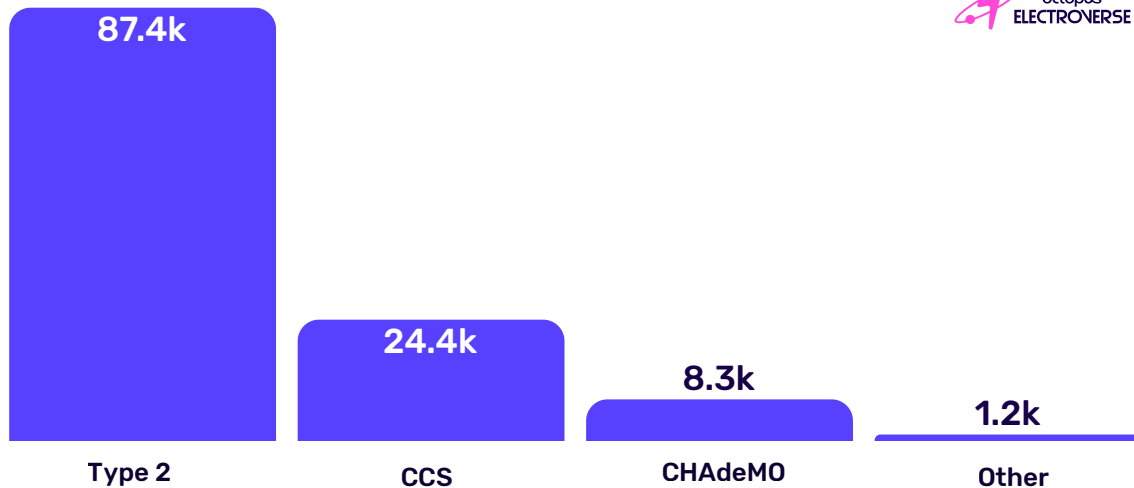
UK CONNECTOR GROWTH BY SPEED



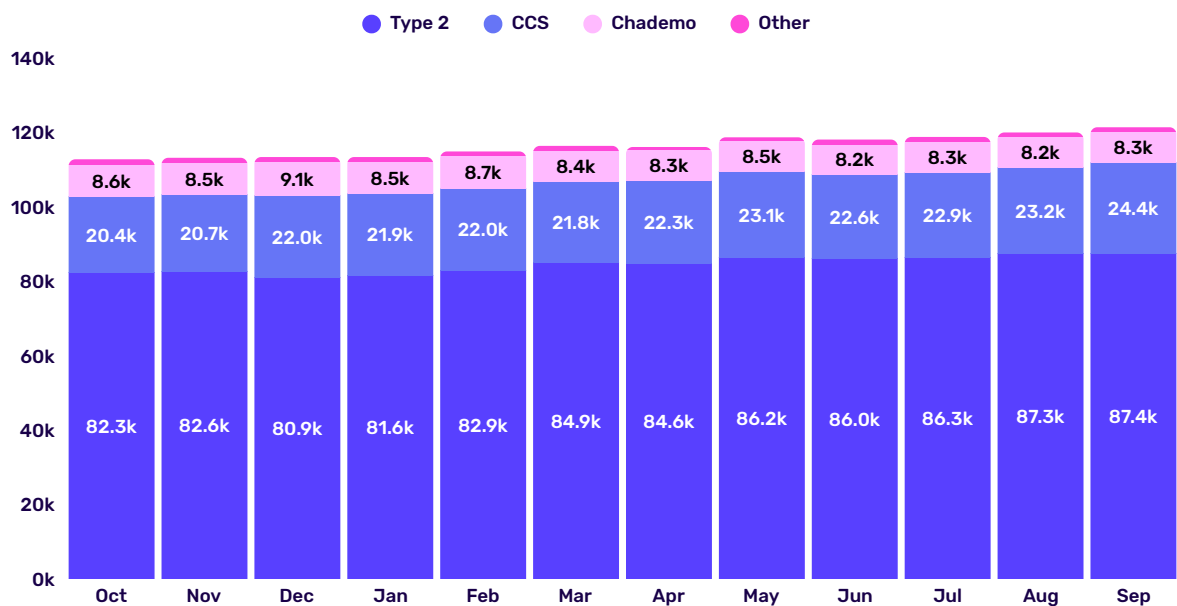
STANDARD TYPE

Type 2 and CCS connectors are being rapidly expanded across the UK, highlighting strong growth in both Slow and Fast charging for Type 2, and Rapid and Ultra-Rapid charging for CCS. Meanwhile, the number of CHAdeMO connectors is declining as CCS gradually replaces this older standard in new vehicles across the UK market.

UK CONNECTORS BY TYPE



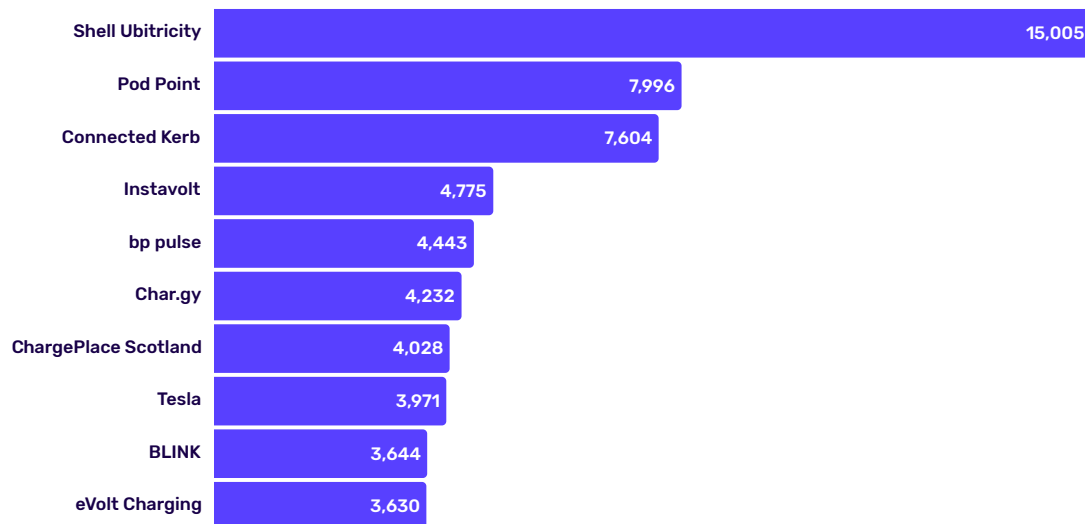
UK CONNECTOR TYPE GROWTH



CHARGE POINT OPERATORS

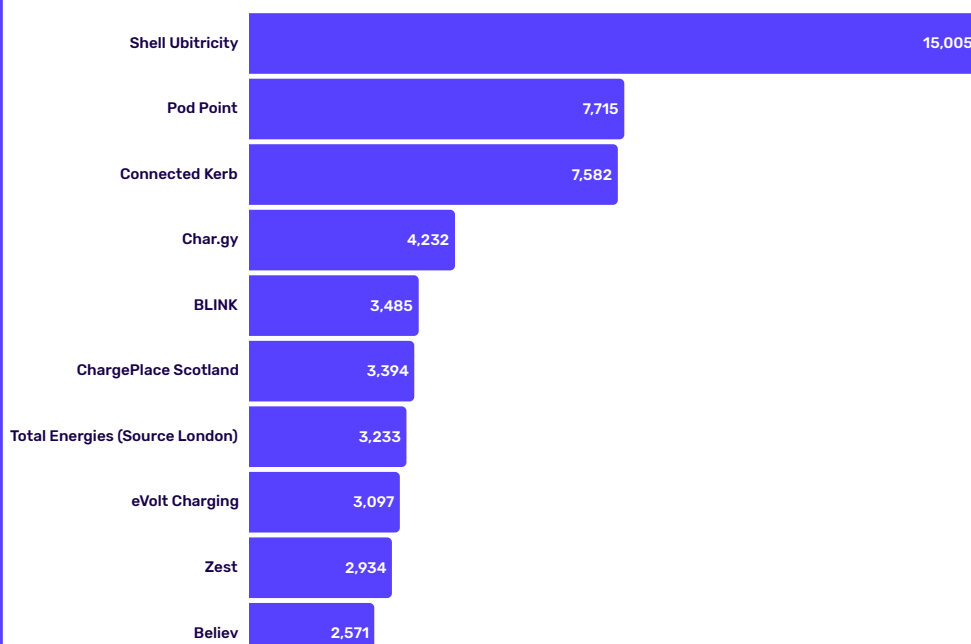
This graph details the largest operators by number of connectors across the UK. Operators, colloquially known as charging networks or 'CPOs', run and maintain the charge points on their network.

LARGEST OPERATORS - CONNECTORS

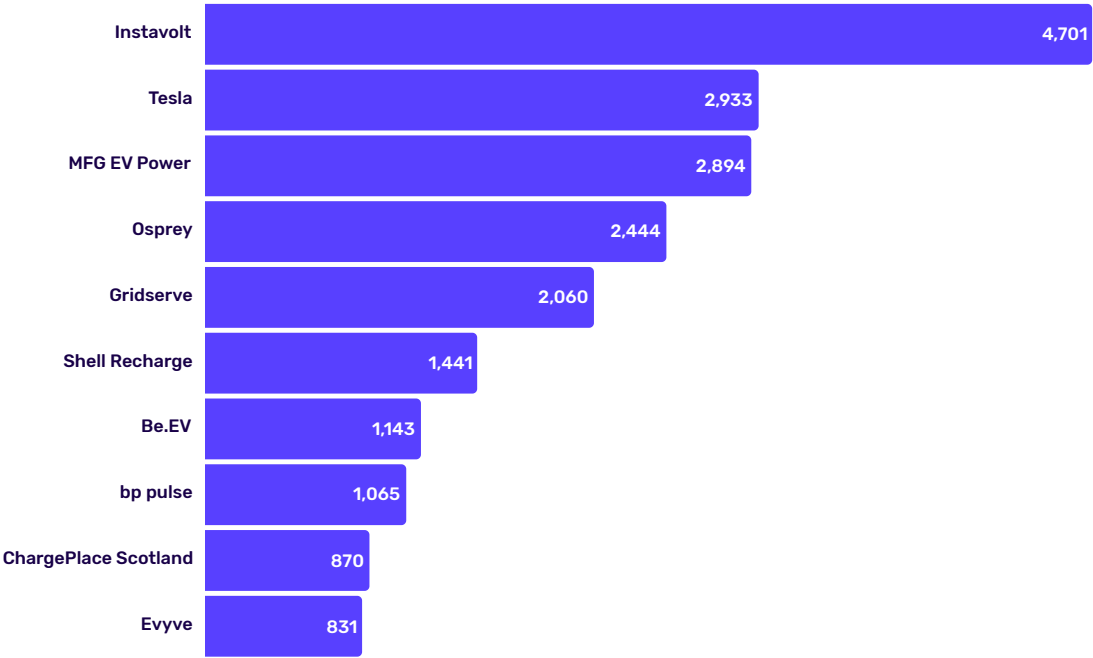


Operators specialising in slower AC charging, like Shell Ubitricity and Pod Point have established a lead in the total number of connectors across the UK. In contrast, InstaVolt & Tesla dominate the rapid DC charging landscape, closely followed by MFG EV Power. While many CPOs focus on either AC or DC infrastructure, some, such as ChargePlace Scotland, offer both.

LARGEST SLOW/ FAST OPERATORS - CONNECTORS



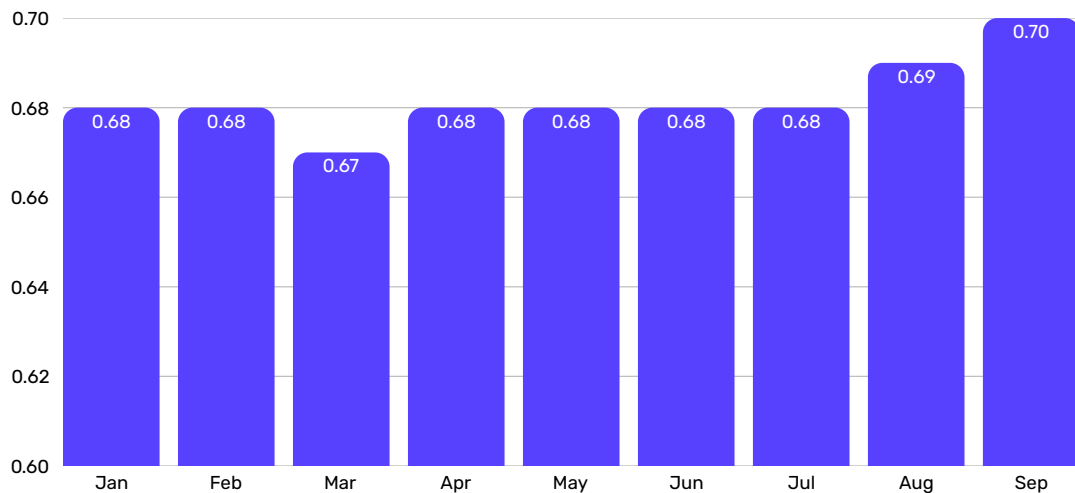
LARGEST RAPID/ ULTRA OPERATORS - CONNECTORS



PRICE OF A CHARGE PER KWH

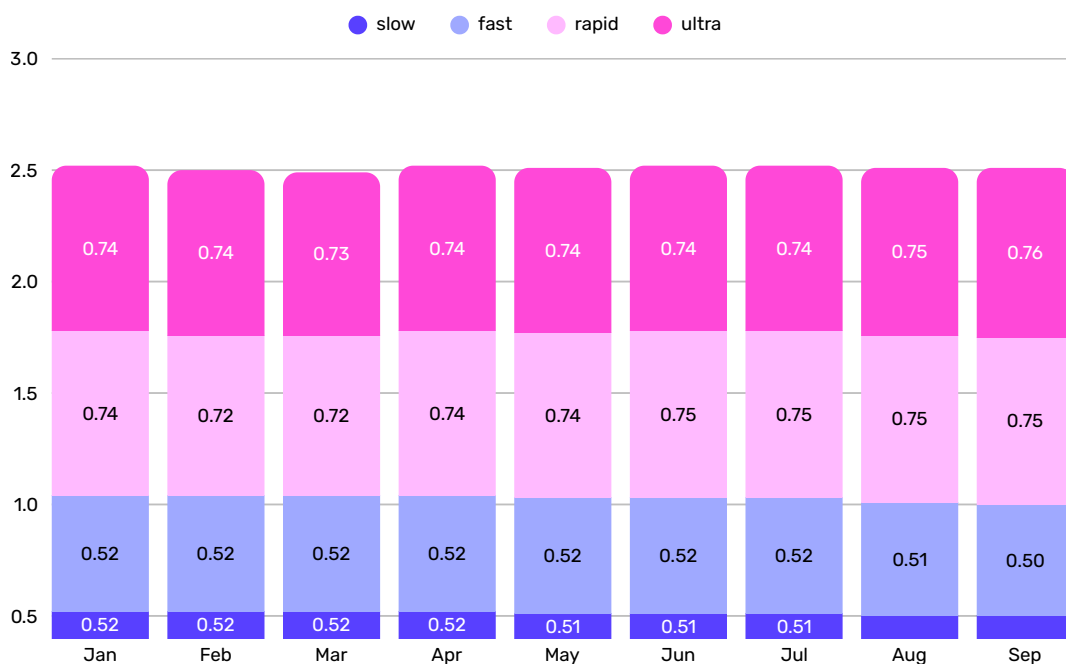
This section looks at the analysis of charging costs across the network, tracking the average price per kWh and how rates fluctuate based on charging speed.

AVERAGE PRICE PER KWH



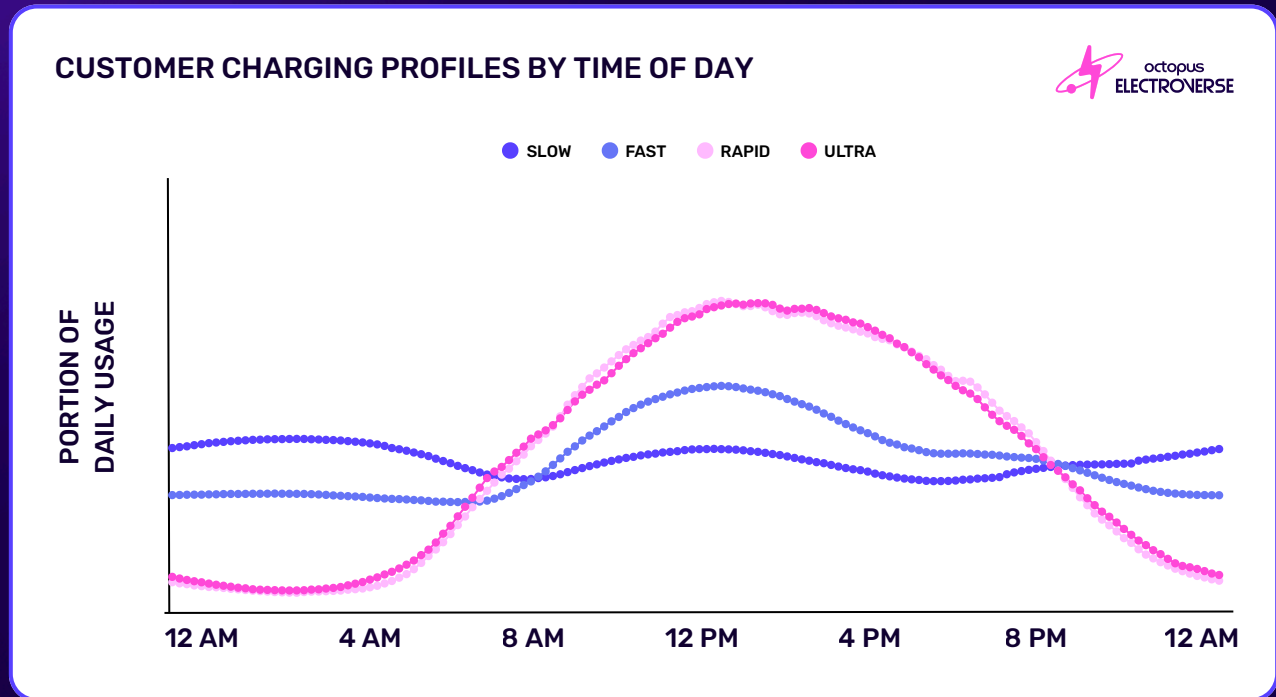
The overall average cost of a charge has remained remarkably stable throughout 2026, sitting firmly at 68p for most of the year before increasing to 70p in September. This increase has been primarily driven by ultra-rapid charging costs rising to a yearly high of 76p per kWh. Crucially for budget-conscious drivers, slow and fast charging rates have remained stable at ~52p per kWh.

AVERAGE PRICE PER KWH BY SPEED

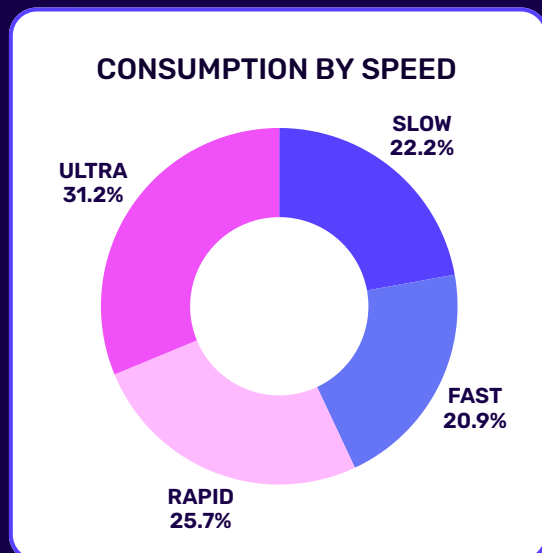


USAGE PROFILES

Daily usage curves illustrate how EV drivers interact with EV charging infrastructure. Rapid and Ultra usage peaks during the daytime when drivers are charging on the go. In contrast, slow charger utilisation remains relatively steady, with an uptick overnight as drivers use cheaper, slower speeds as an alternative to home charging.



Based on Octopus Electroverse consumption data from the last 12 months



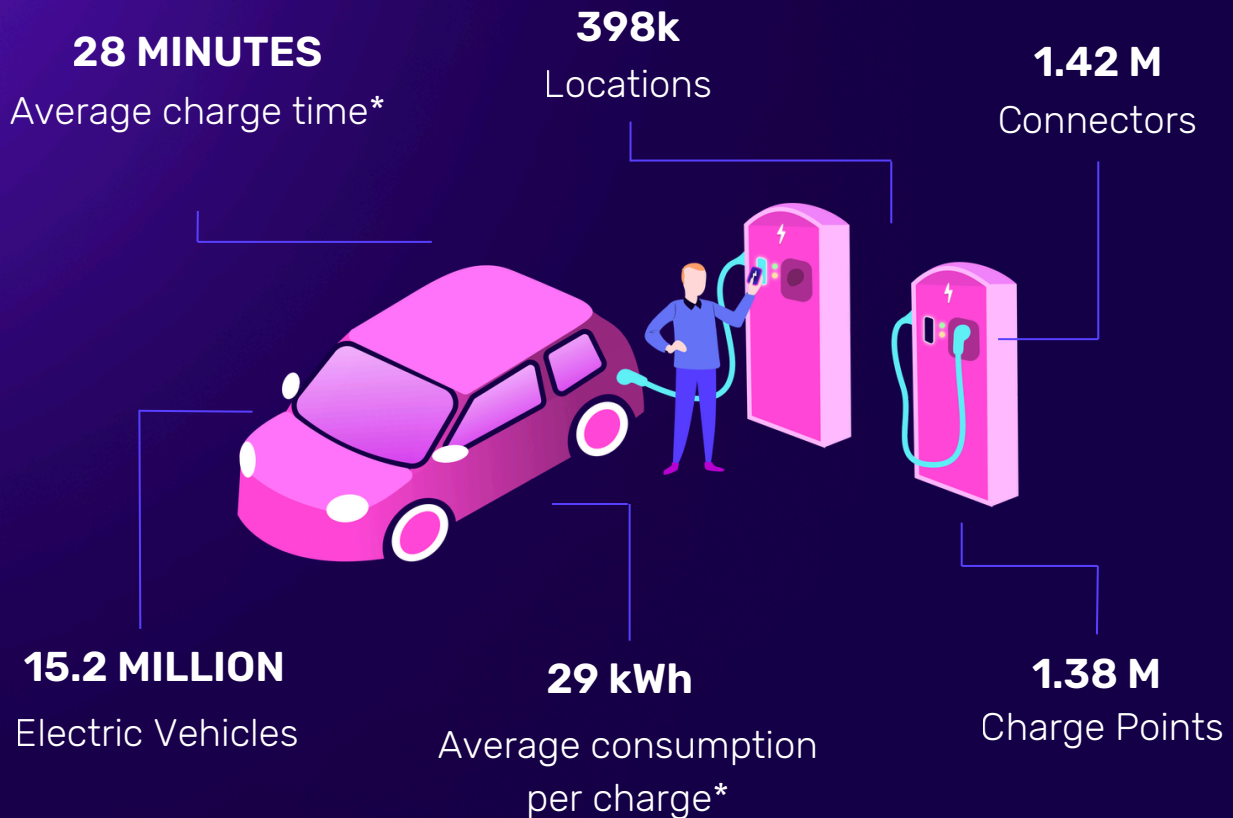
AVERAGE TIME CHARGING BY SPEED

SPEED	TIME
SLOW	05 hr 31 minutes
FAST	03 hr 8 minutes
RAPID	00 hr 35 minutes
ULTRA	00 hr 29 minutes

Based on Octopus Electroverse consumption data from the last month

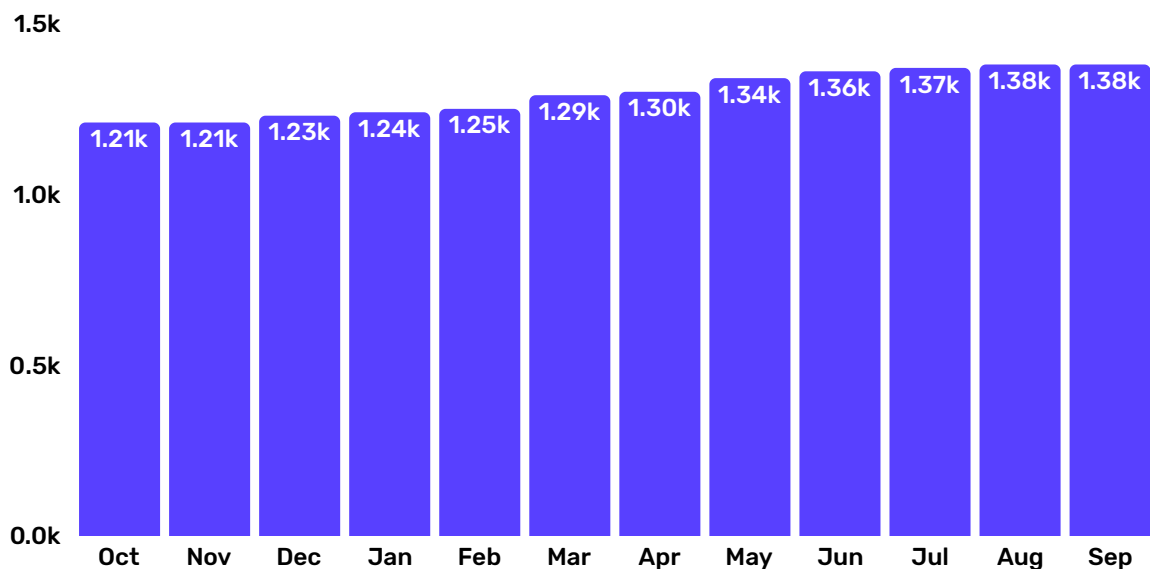
When we look at the distribution of Consumption by Speed, nearly **57%** of the total kWh volume consumed by Electroverse drivers is via ultra-rapid & rapid chargers, despite these only accounting for around **12%** and **14%** of total connectors, respectively. This is partly because these connectors can deliver more energy more quickly.

EUROPEAN HEADLINE STATISTICS



*Based on last month of Electroverse consumers charging data on Ultra-Rapid Chargers

EUROPE CHARGE POINTS GROWTH

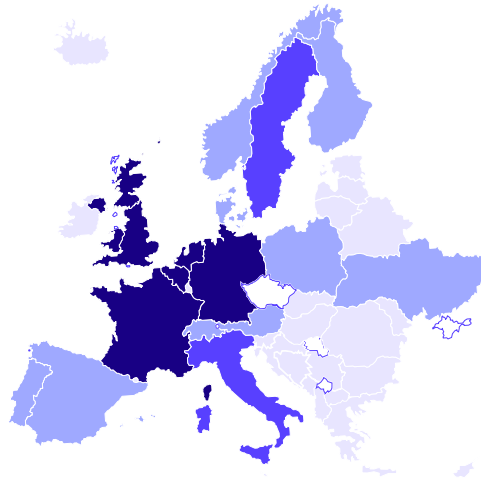


This graph highlights the steady growth of charge points across Europe.

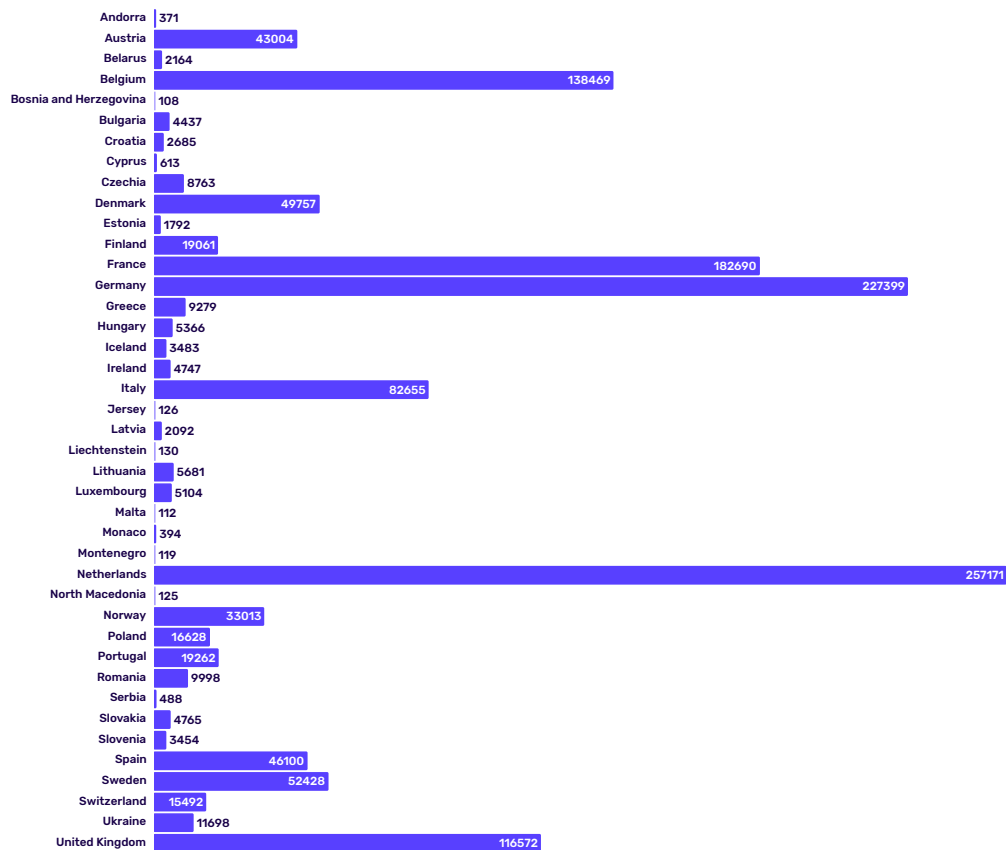
The graphs on the following pages show the mechanisms for achieving this growth vary widely across European markets, both in terms of charging speeds and speed of rollout.

CHARGING INFRASTRUCTURE ACROSS EUROPE

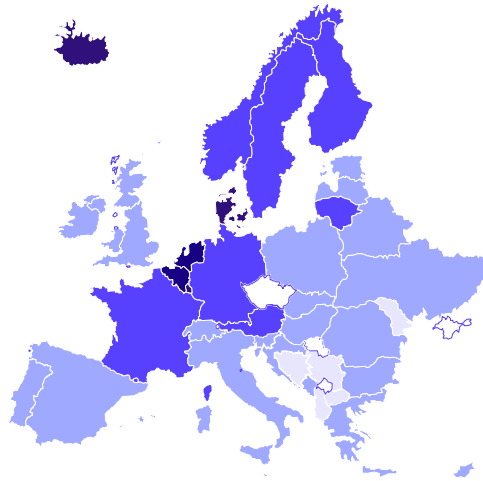
CHARGE POINTS BY COUNTRY



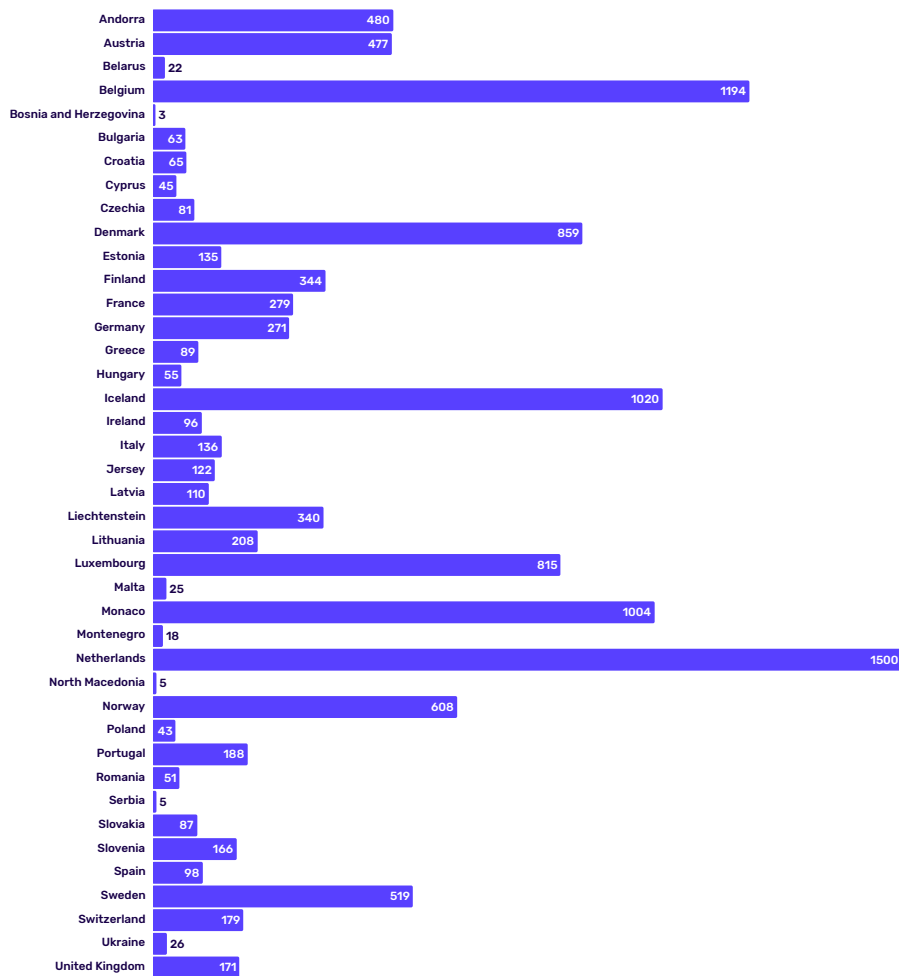
CHARGE POINTS BY COUNTRY



CHARGE POINTS PER 100K INHABITANTS

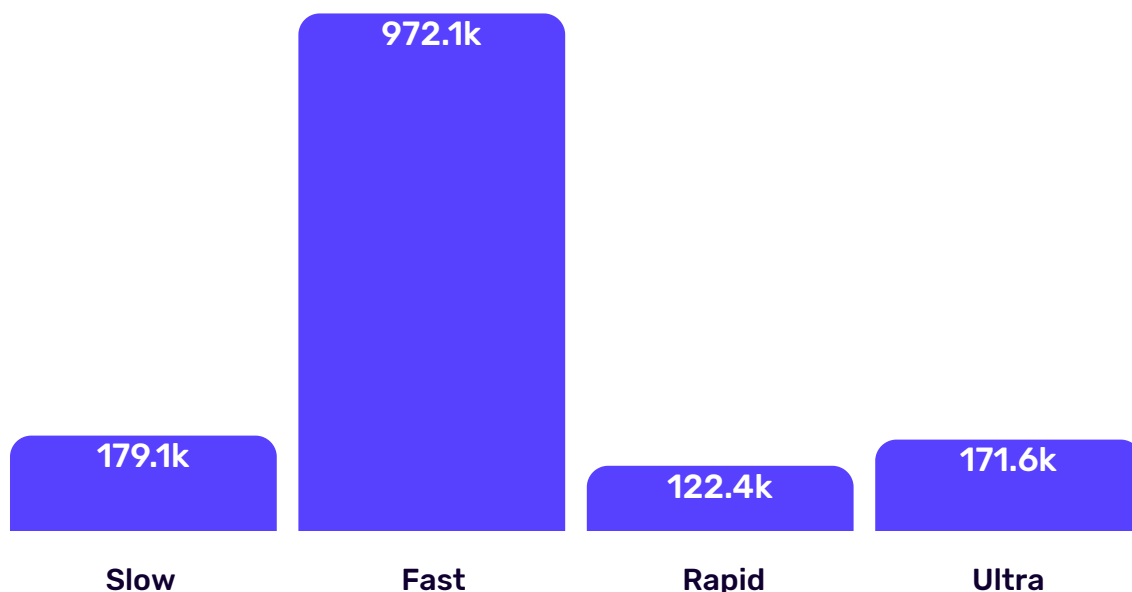


CHARGE POINTS PER 100K INHABITANTS



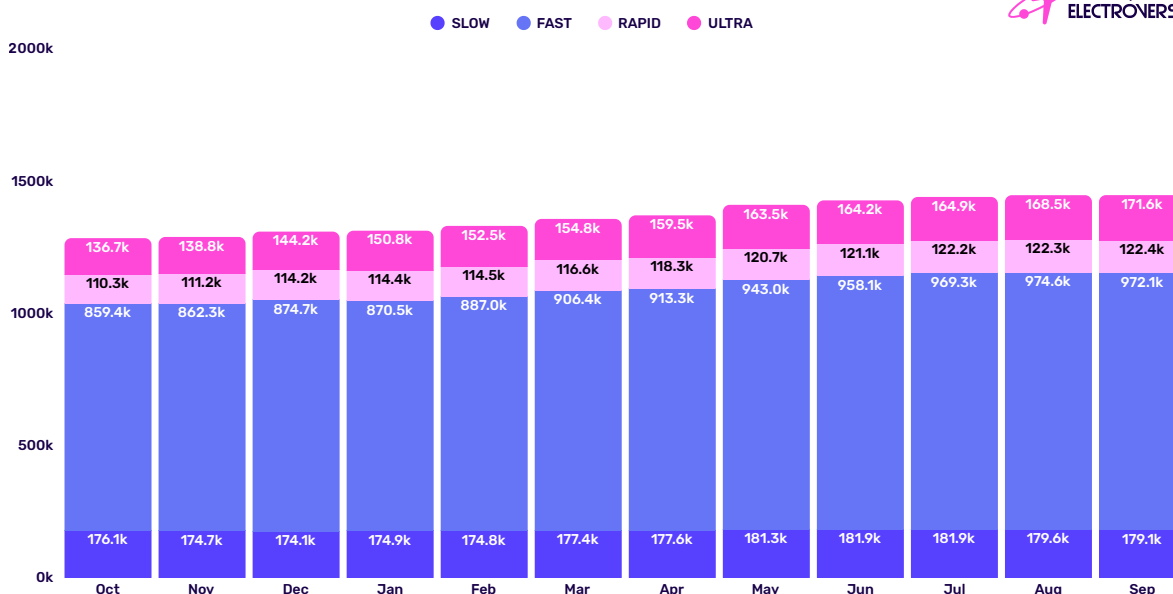
SPEED

EUROPE CONNECTORS BY SPEED

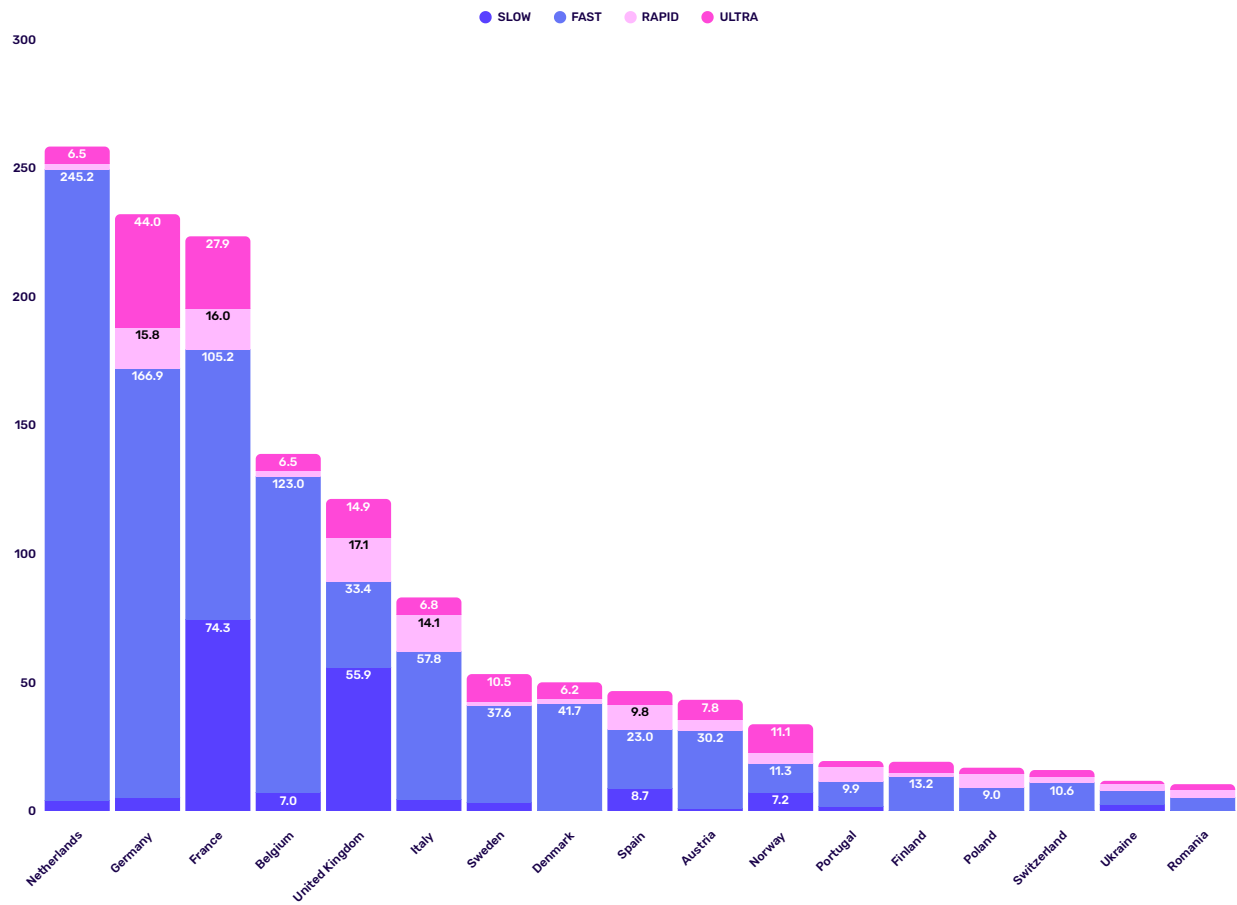


These graphs demonstrate the current state of charging speeds across Europe and offer insight into potential future trends. 8 - 50 kW fast charging speeds dominate Europe, contributing around **67%** of total connectors - comparatively, the UK has a greater number of slow charging connectors (**46%** relative to the total number). However, ultra-rapid is the fastest-growing segment of charging across both the UK and Europe.

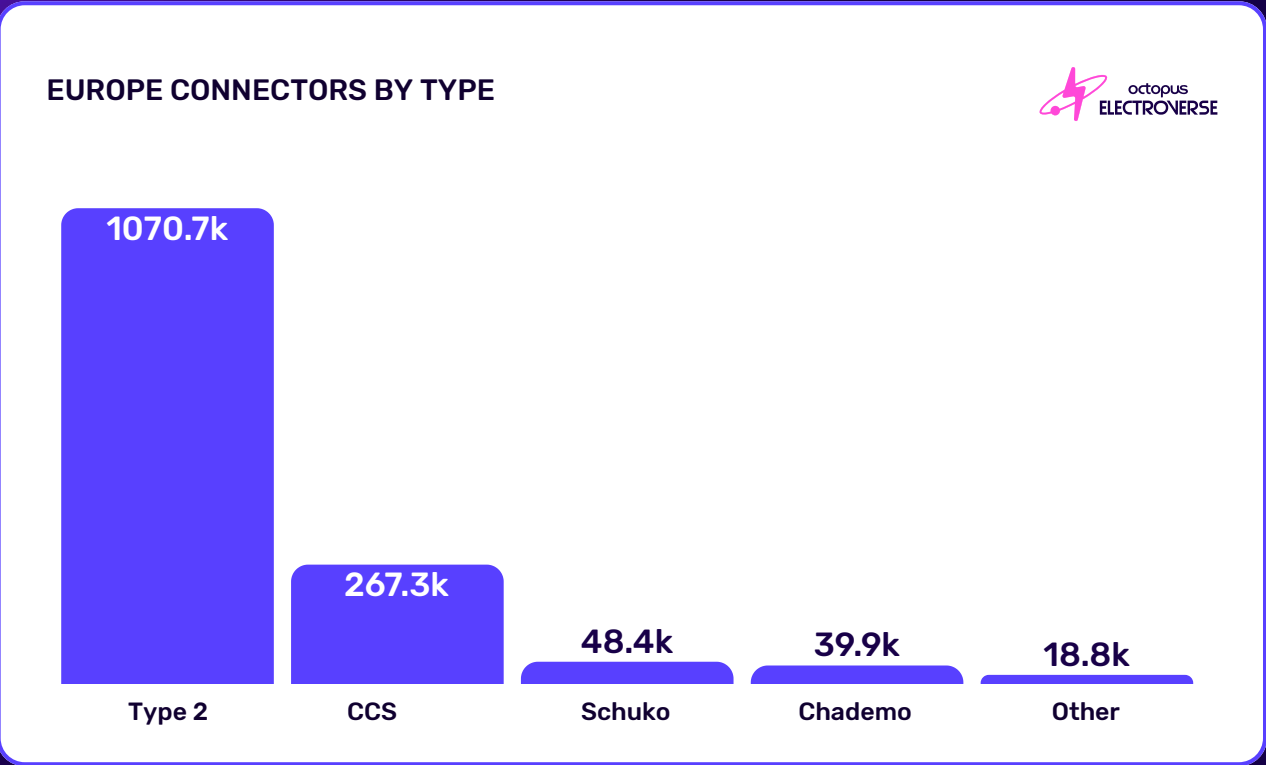
EUROPE CONNECTORS GROWTH BY SPEED



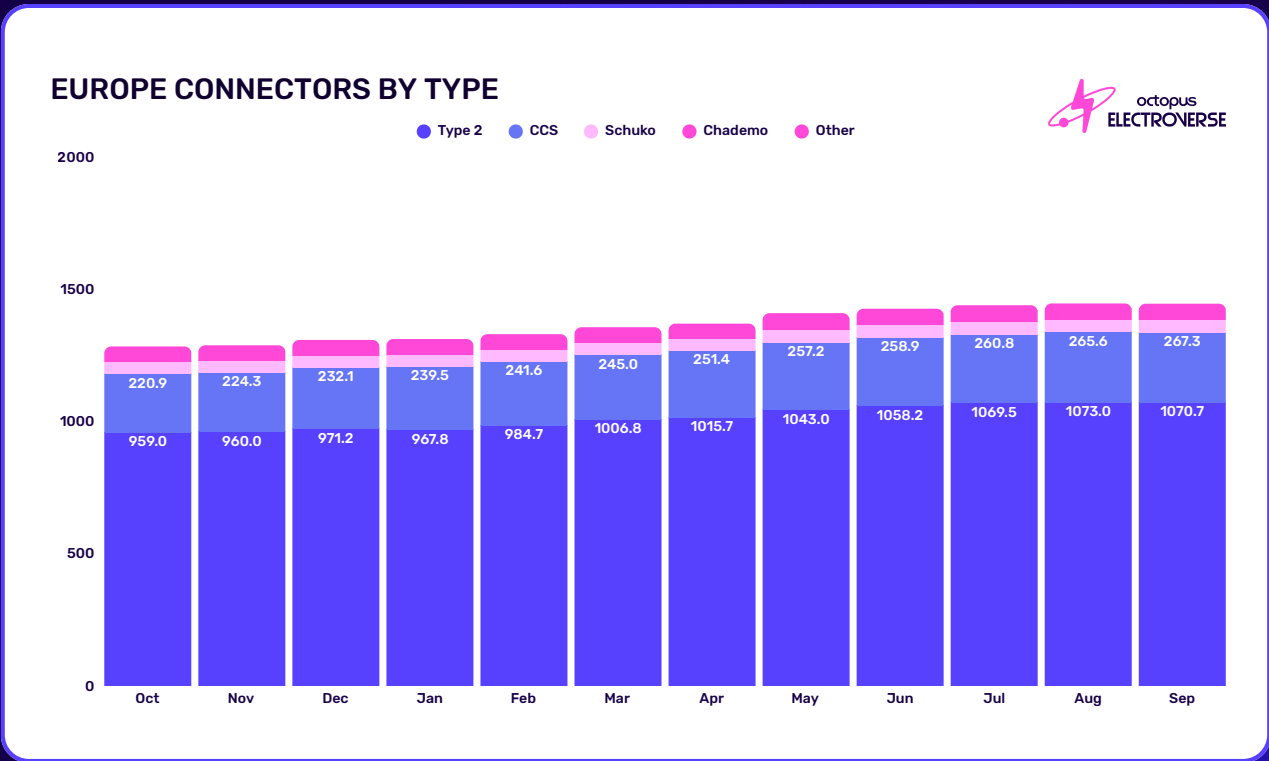
NUMBER OF CONNECTORS BY SPEED AND COUNTRY IN EUROPE (>10,000 CONNECTORS)



STANDARD TYPE

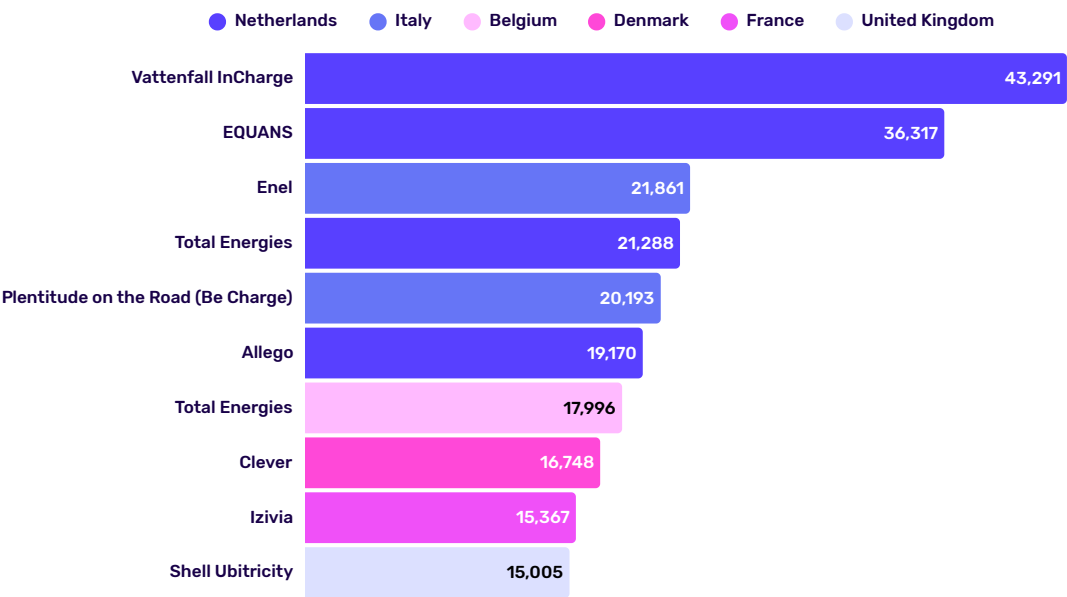


Connector trends across Europe closely mirror those seen in the UK. Market growth is being fuelled by the widespread rollout of Type 2 and CCS connectors, now standard on all new vehicle models. In contrast, CHAdeMO connector numbers have remained steady, continuing to support older vehicles still in use. Europe also has many Schuko connectors (similar to a standard household socket), though this category has shown little change and, as expected, is not an area of growth.

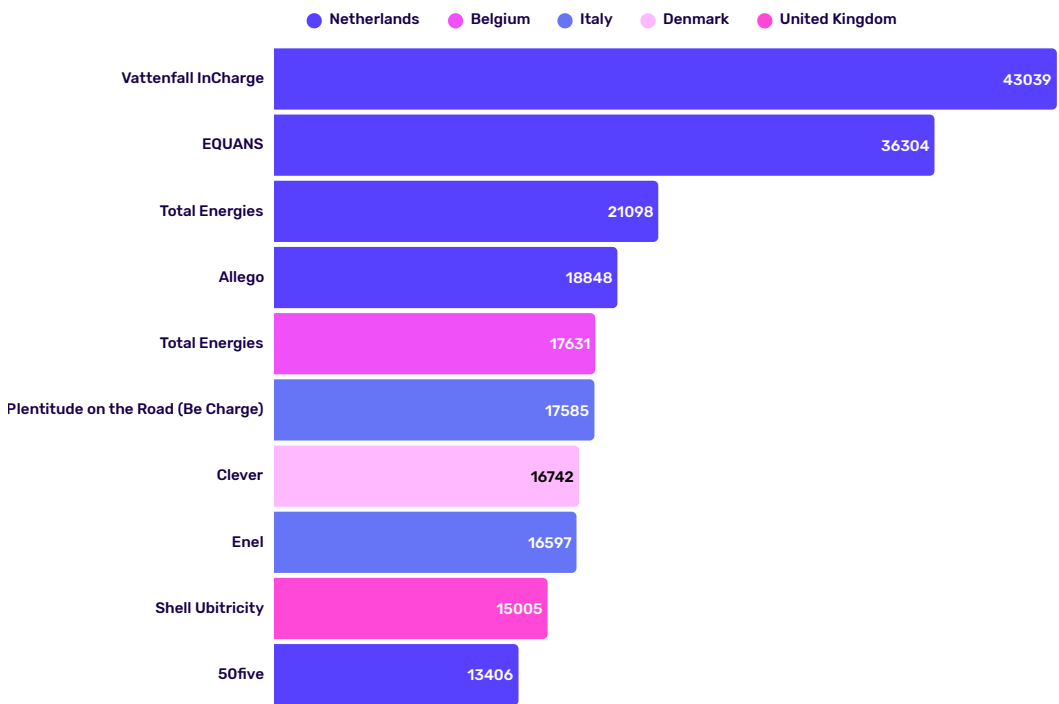


CHARGE POINT OPERATORS

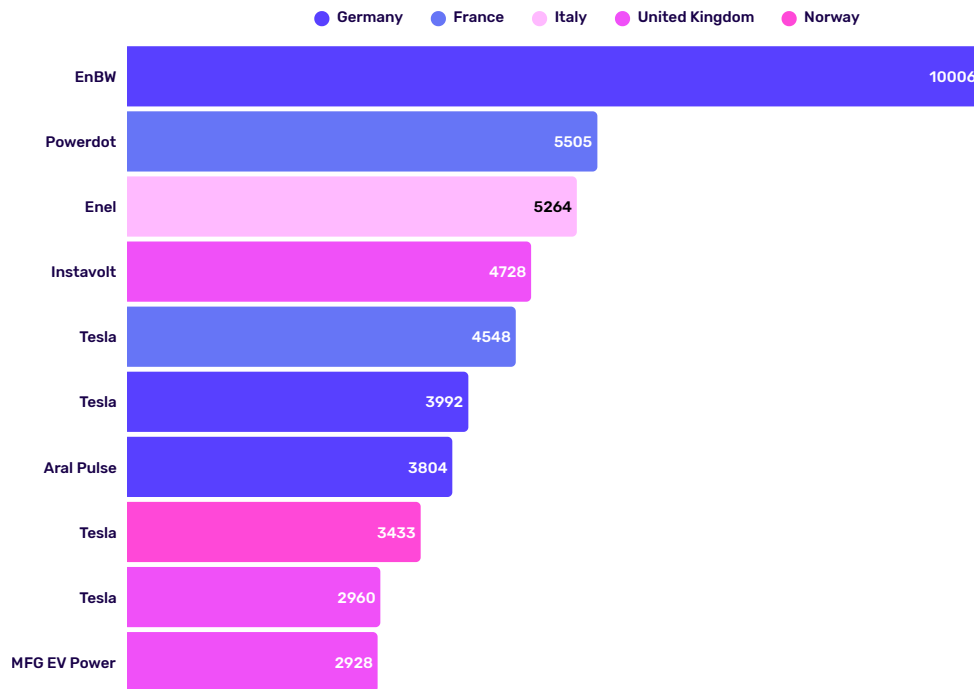
LARGEST OPERATORS IN EUROPE - CONNECTORS



LARGEST SLOW/FAST OPERATORS - CONNECTORS



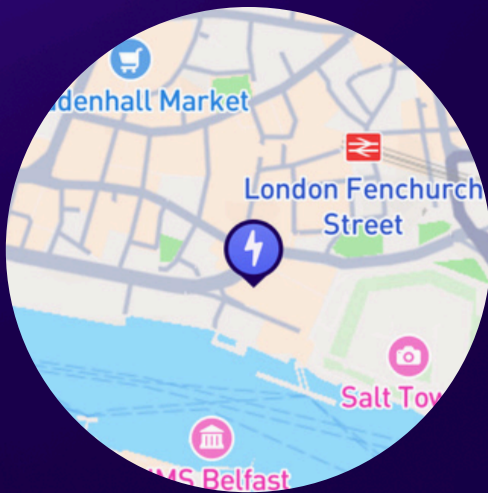
LARGEST RAPID/ULTRA OPERATORS - CONNECTORS



DEFINITIONS

DEFINING A CHARGE POINT

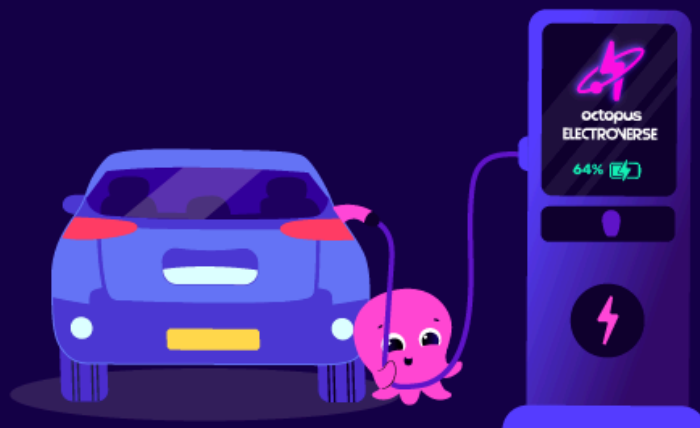
We use the term 'charge point' to simplify the language - in the industry this is known as an 'EVSE', which stands for **Electric Vehicle Supply Equipment**. An EVSE is an independently operated and managed part of a charge point, that is **able to deliver energy to one EV at a time**. This is the industry-approved definition and forms part of the data structure we receive from Charge Point Operators (CPOs).



A **location** is a physical site where there are one or more charge points. Think of a location as a single pin on the Octopus Electroverse map!

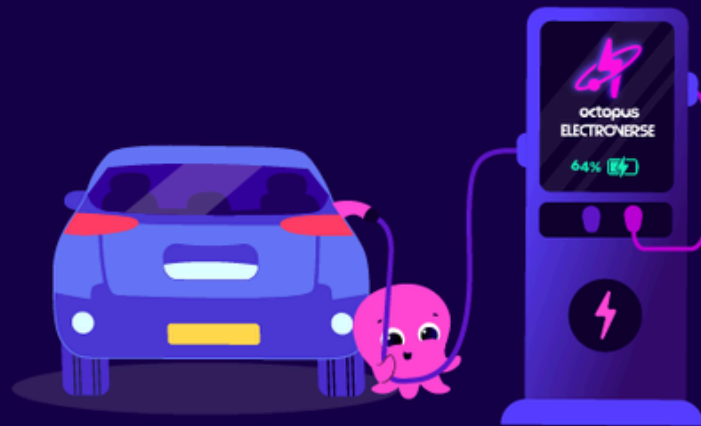
The EVSE hardware inside each charging unit determines how many vehicles can simultaneously charge at the same unit. A basic charge point has **one connector** and therefore **one charge point** that can be used to **charge one vehicle** independently.

**1 Connector,
1 Chargepoint.**



While a charging unit may have a **choice of connectors**, sometimes, it may only have the capability to **charge one vehicle** at a time, defining it as a **single charge point**. Here are some more examples:

2 Connectors, 1 Chargepoint.



2 Connectors, 2 Chargepoints.

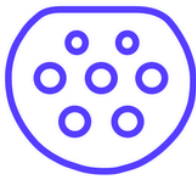


3 Connectors, 2 Chargepoints.



VISUALS OF CHARGING SOCKET TYPES

Currently, there are three main charging socket types: Type 2, CHAdeMO and CCS.



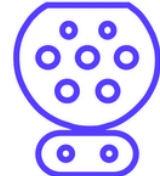
TYPE 2

Type 2 sockets will typically be reserved for slow charging speeds, delivering AC power.



CHAdeMO

CHAdeMO was the first type of DC socket, but is largely being replaced by CCS.



CCS

CCS sockets are capable of delivering large amounts of power, so are typically found on rapid and ultra-rapid charge points.

GLOSSARY

CPO

Charge Point Operator. The mobility provider managing the charging infrastructure (e.g. IONITY, Osprey, Shell Recharge, Connected Kerb etc).

EVSE

Electric Vehicle Supply Equipment. An EVSE is an independently operated and managed part of a charge point, that is able to deliver energy to one EV at a time.

kW

A kilowatt represents the rate of power (e.g. a charger's output). The higher the kW rating of a charger, the faster it can charge an EV.

kWh

A kilowatt-hour is the unit used to measure the number of kW used (e.g. charging prices are stated in kWh, and charging sessions are measured in kWh).

kW vs. kWh

Simply put, a kWh reflects the total amount of electricity used, whereas a kW reflects the rate of electricity usage.

SOURCES & REFERENCES

The Society of Motor Manufacturers and Traders (SMMT) : <https://www.smmt.co.uk/>

The European Automobile Manufacturers' Association(ACEA) : <https://www.acea.auto/>

Open Charge Point Interface (OCPI) : <https://evroaming.org/>

Population of European Countries) : <https://www.statista.com/statistics/685846/population-of-selected-european-countries/>

UK Population by Region : <https://www.statista.com/statistics/294729/uk-population-by-region/>

All other data : [The Octopus Electroverse database](#)