octopus ELECTROVERSE

CHARGING INFRASTRUCTURE INSIGHTS
UK & EUROPE

OCTOBER 2026

HIGHLIGHTS OF THE MONTH

UK Market Scale and Driver Behaviours

In October 2026, the UK's electric vehicle charging network saw an increase of 2,000 chargepoints (EVSEs), growing to 119,000 across 41,000 physical locations. Driver behaviour remained largely unchanged with average charge time holding steady at 28 minutes and average consumption per charge staing at 27kWh.

Public Charging Economics

While public charging remains significantly more expensive than home charging, against the backdrop of extremely volatile petrol and diesel prices, the cost of public charging has remained markedly steady throughout 2026. Our network price tracking demonstrates that drivers who are fully reliant on public charging would have seen a 0.2-0.3p per mile saving vs either petrol or diesel* at the average 69p per kWh as fuel prices soared in the last month. Drivers who were able to primarily rely upon slower on-street charging would have seen a more significant saving of up to 5p per mile.

The European Headlines

Across the broader European market, charging infrastructure growth kickstarted again after a slower summer, growing to 1.41 million charge points across 398,000 locations. European growth was driven by The Netherlands, Germany and France - with Type 2 Fast chargers driving nearly two thirds of the growth across them mainland.

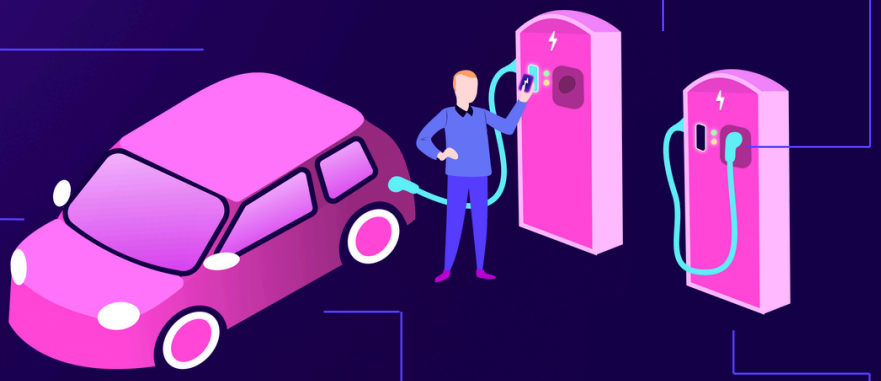
*Based on 3.5 miles per kWh for EV, 40MPG for petrol and 45MPG for diesel

UK HEADLINE STATISTICS

28 MINUTES
Average charge time*

41k
Locations

124k
Connectors



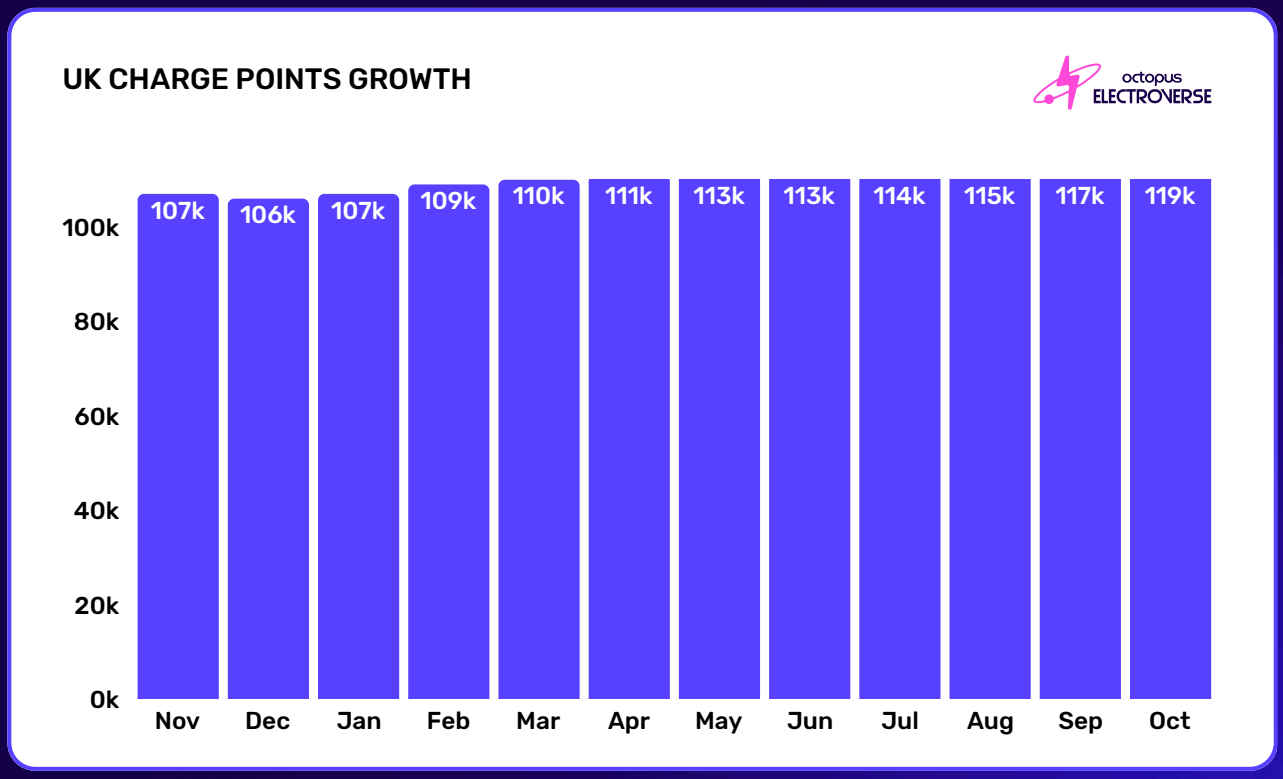
2.19 MILLION
Electric Vehicles

27 kWh
Average consumption per charge*

119k
Charge Points

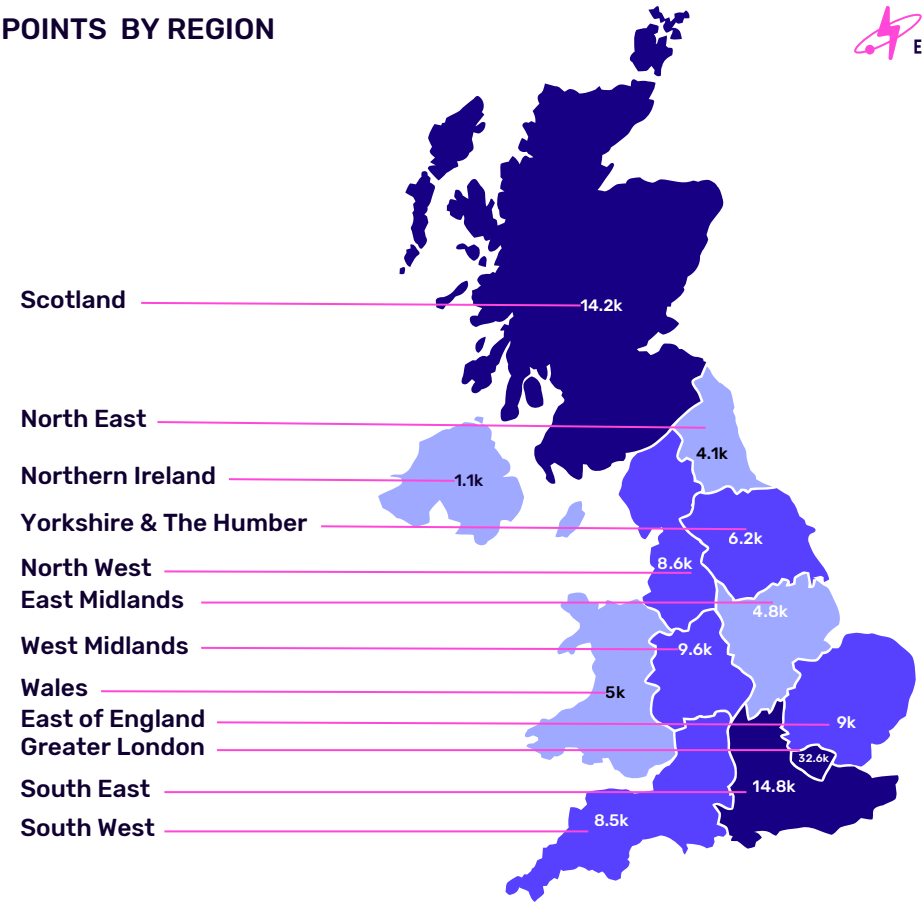
*Based on last month of Electroverse consumers charging data on Ultra Rapid Chargers

In October 2026, the UK's total number of charge points grew to around 119k. Scotland saw the largest increase both in terms of the raw numbers and also the number of charge points per 100k, cementing it's position as the region with the second most charge points per capita.

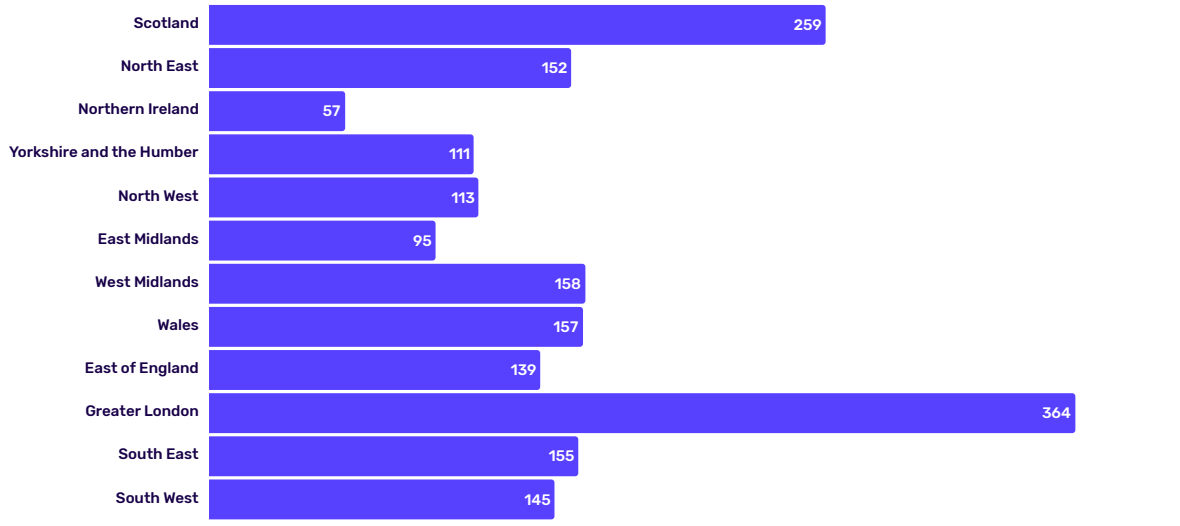


CHARGING INFRASTRUCTURE ACROSS THE UK

CHARGE POINTS BY REGION



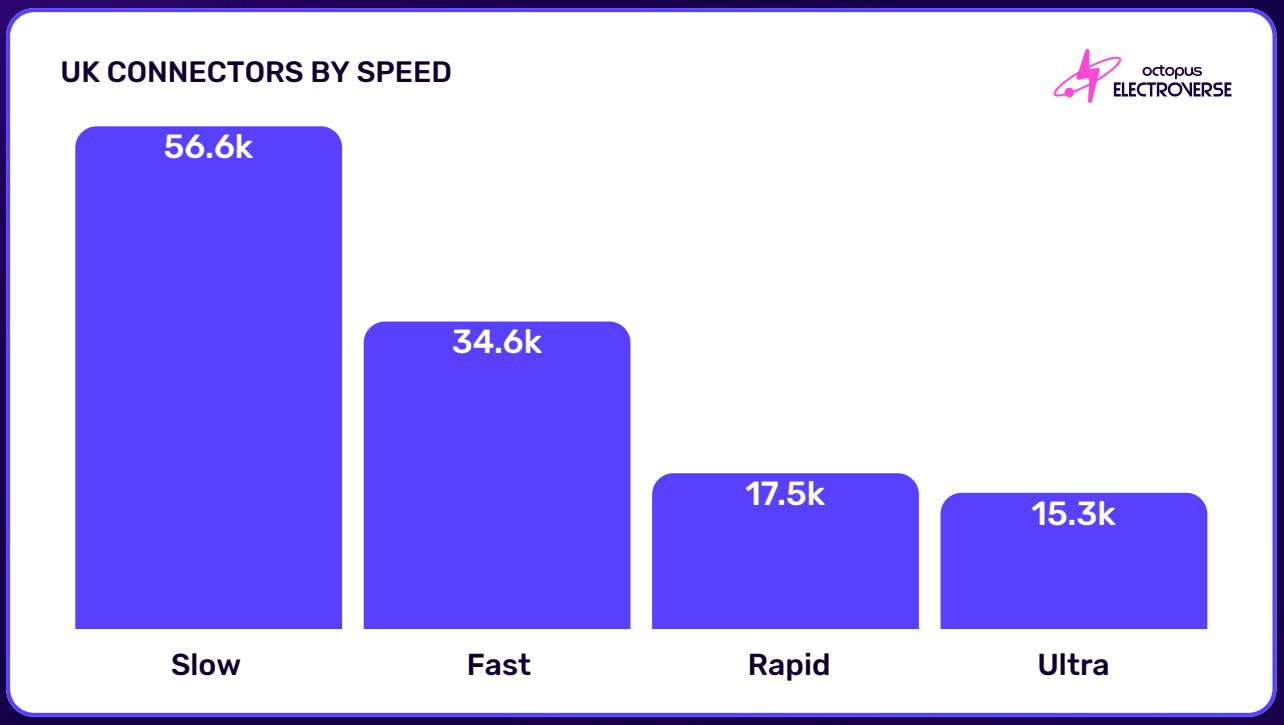
CHARGE POINTS PER 100K INHABITANTS

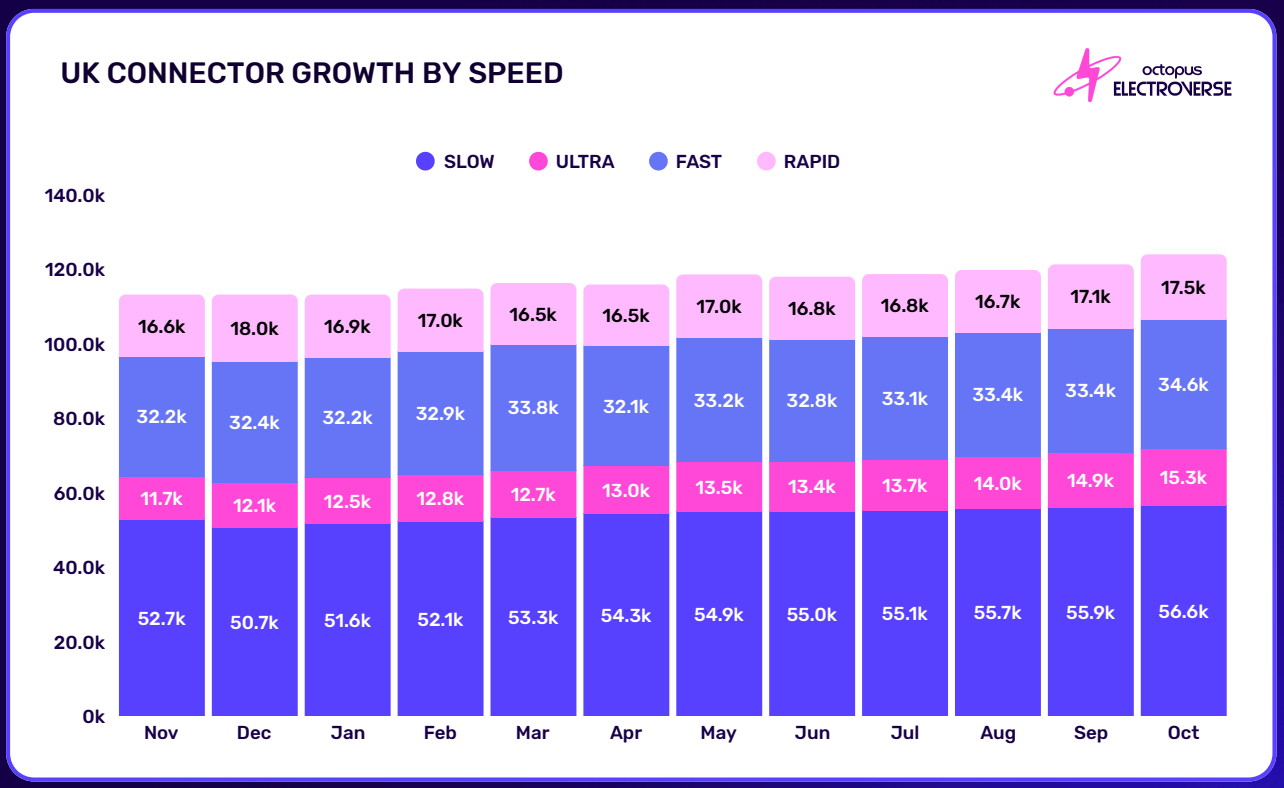


CHARGER CHARACTERISTICS

SPEED

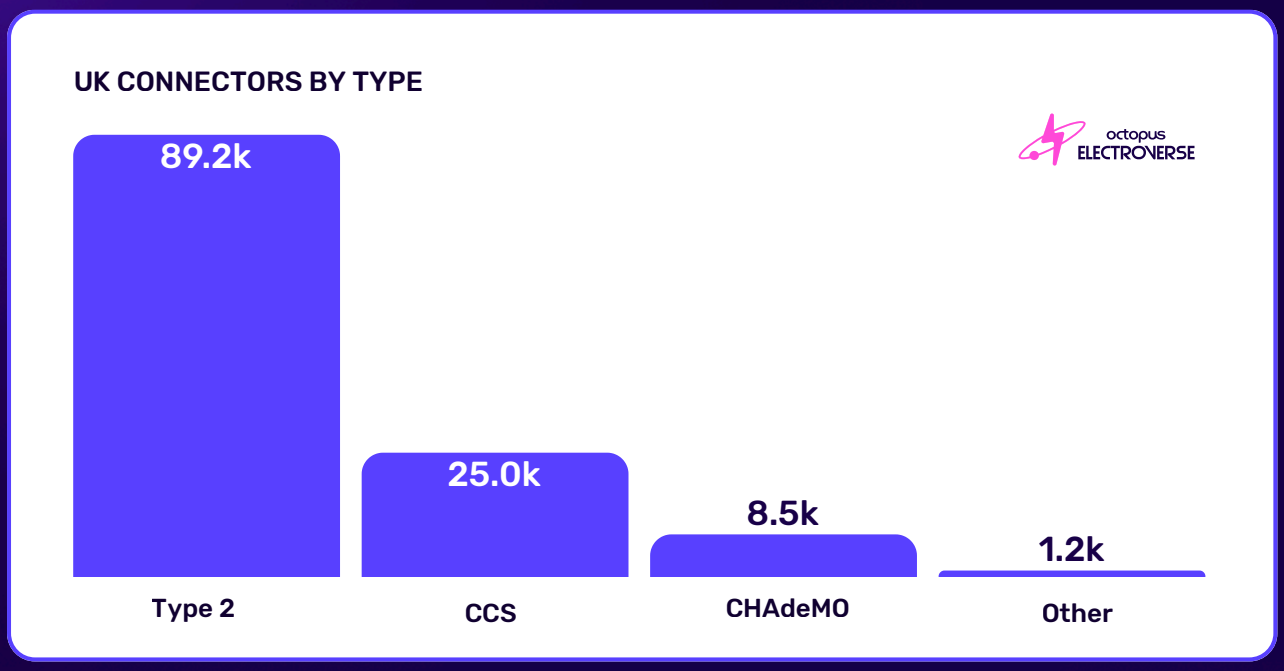
Charging connectors offer varying speeds (kW), and are classified as **slow** (< 8 kW), **fast** (8 - 49 kW), **rapid** (50 - 149 kW), or **ultra-rapid** (>= 150 kW). In the UK, slow charging speeds make up around **46%** of the total connectors, with rapid and ultra-rapid contributing around **26%**.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

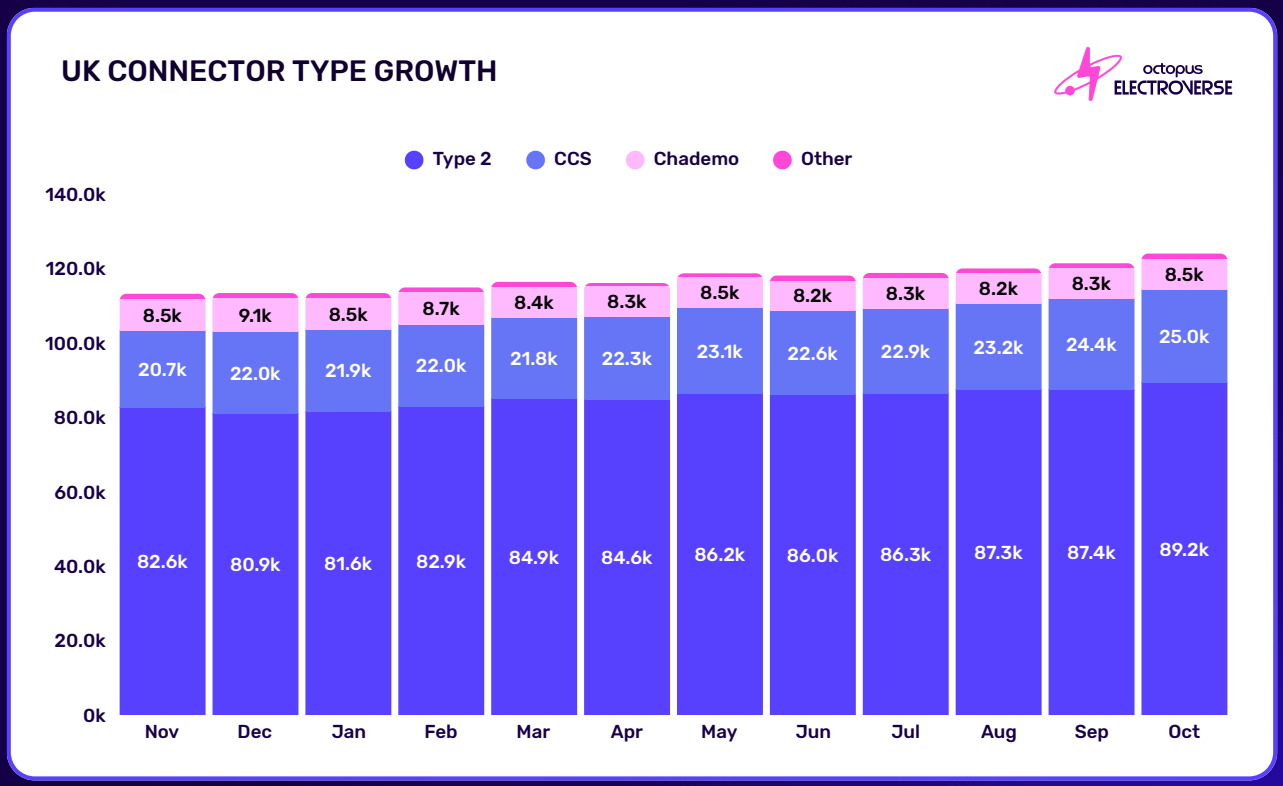




STANDARD TYPE

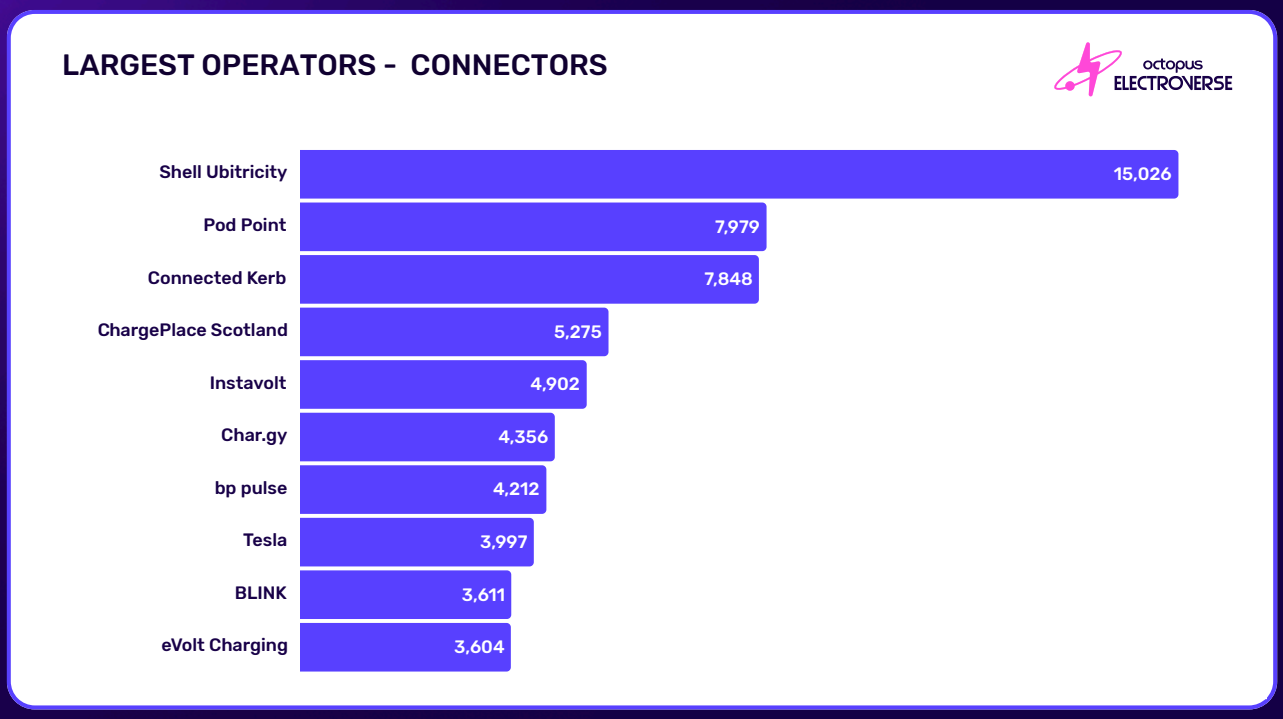
Type 2 and CCS connectors are both rapidly expanding across the UK, highlighting strong growth in both Slow and Fast charging for Type 2, and Rapid and Ultra-Rapid charging for CCS. In the last 12 months there has been an almost 25% increase in the number of CCS connectors across the UK, providing drivers with many more options for rapid charing on the go.



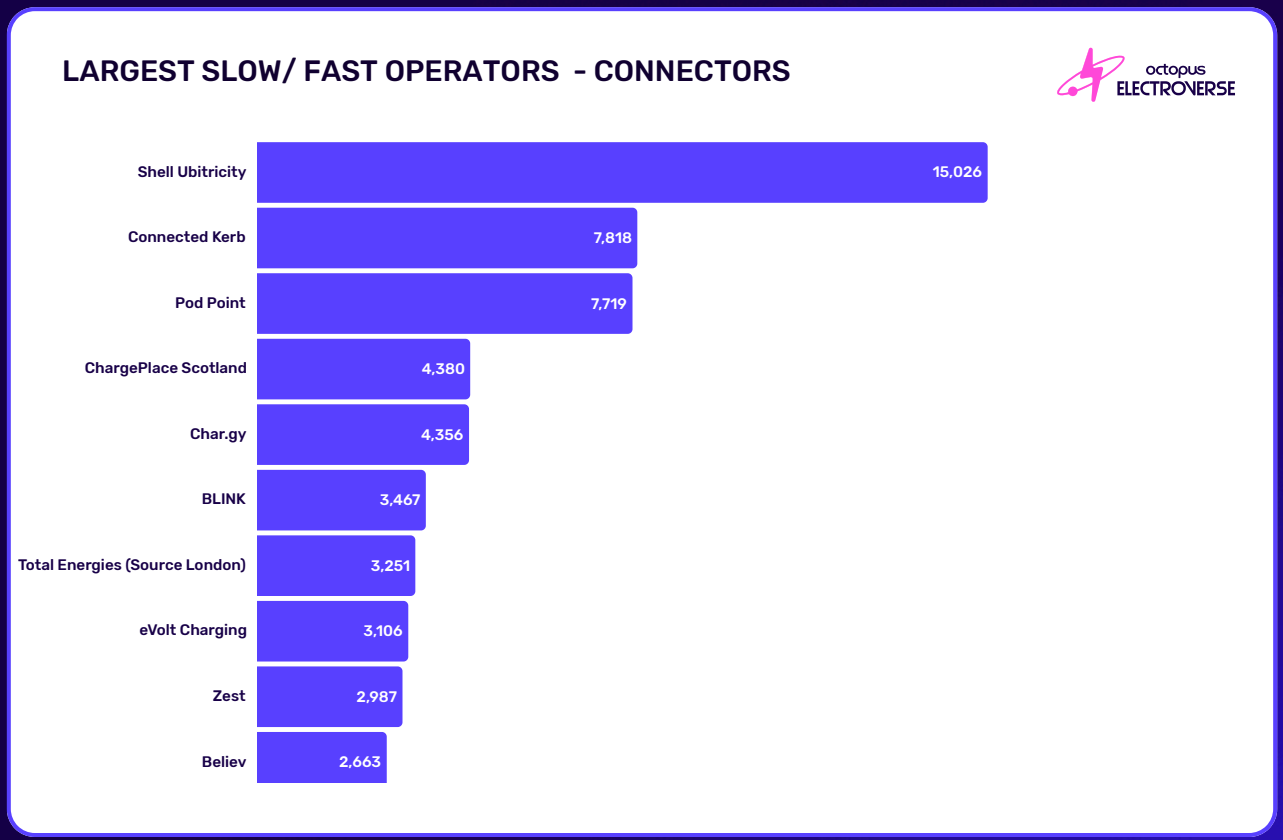


CHARGE POINT OPERATORS

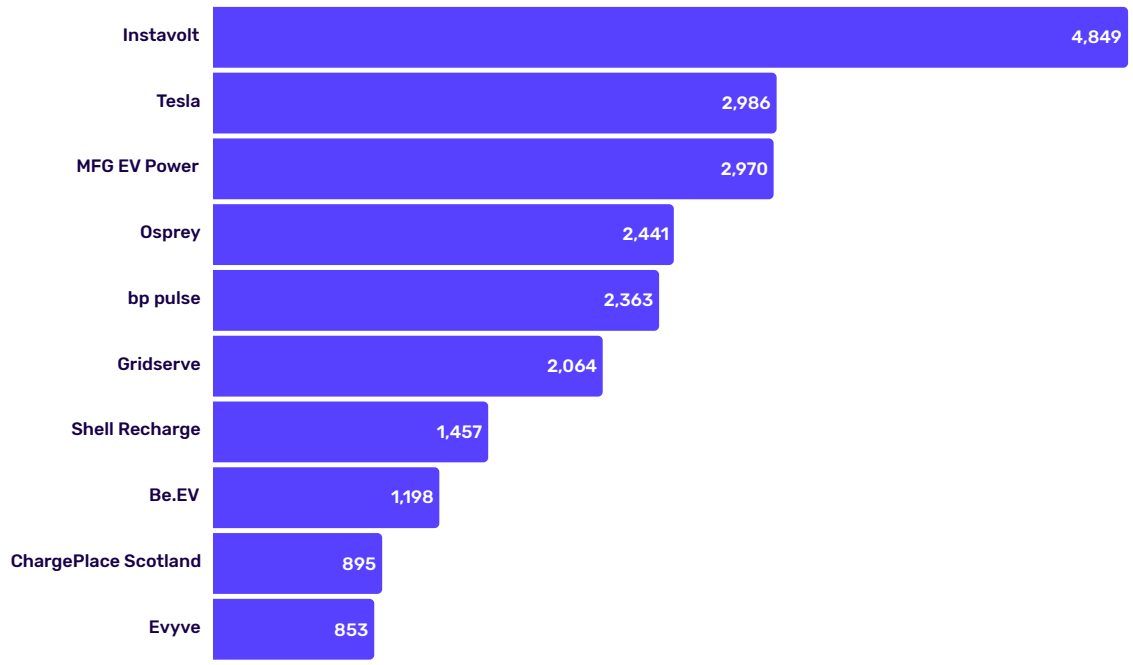
This graph details the largest operators by number of connectors across the UK. Operators, colloquially known as charging networks or ‘CPOs’, run and maintain the charge points on their network.



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



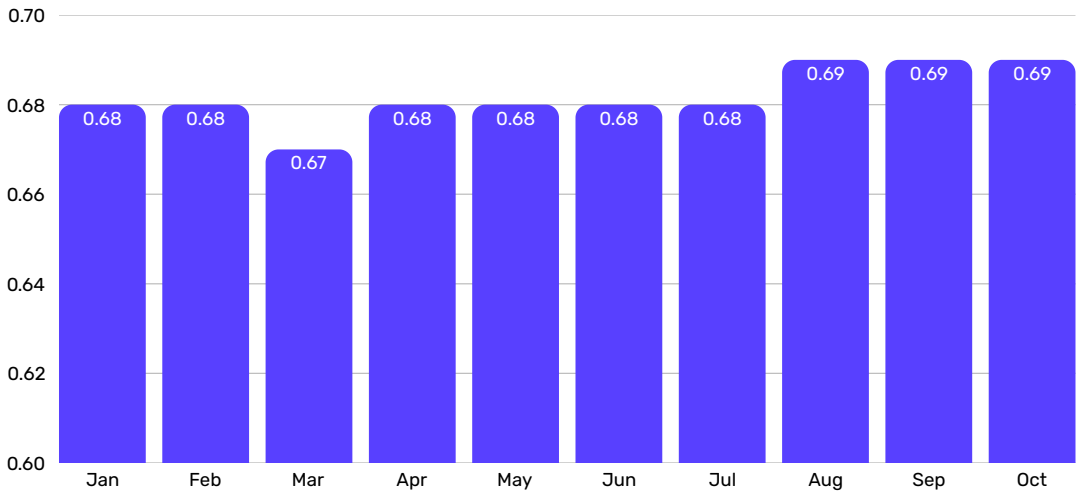
LARGEST RAPID/ ULTRA OPERATORS - CONNECTORS



PRICE OF A CHARGE PER KWH

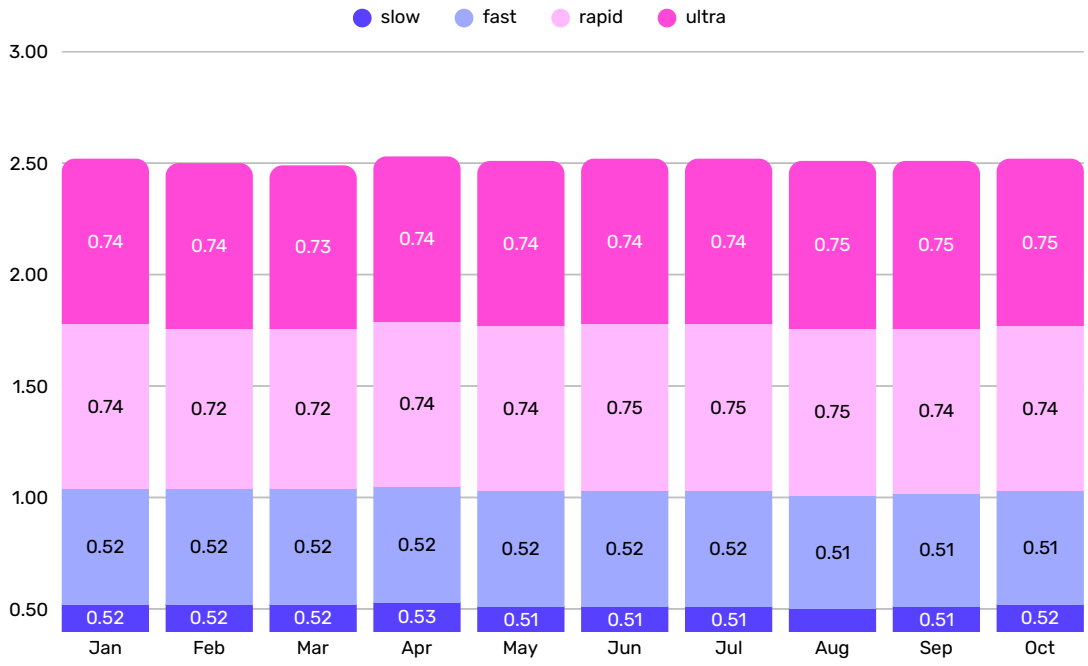
This section looks at the analysis of charging costs across the network, tracking the average price per kWh and how rates fluctuate based on charging speed.

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 69p in August, where it has again held steady. This increase has been primarily driven by ultra-rapid charging costs increasing slightly to 75p per kWh. Crucially for budget-conscious drivers, slow and fast charging rates have remained stable at ~52p per kWh.

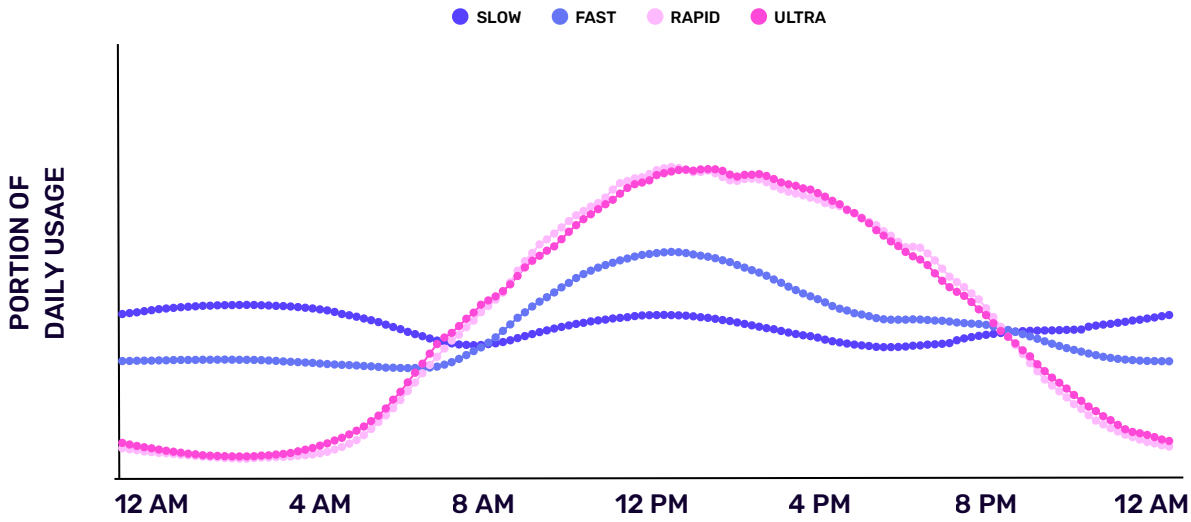
AVERAGE PRICE PER KWH BY SPEED



USAGE PROFILES

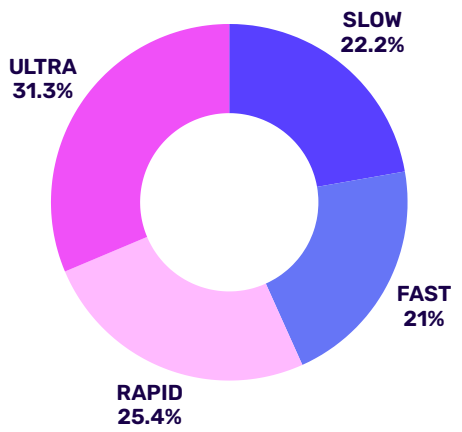
Daily usage curves illustrate how EV drivers interact with EV charging infrastructure. Rapid and Ultra usage peaks during the daytime when drivers are charging on the go. In contrast, slow charger utilisation remains relatively steady, with an uptick overnight as drivers use cheaper, slower speeds as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

CUSTOMER CHARGING PROFILES BY TIME OF DAY



Based on Octopus Electroverse consumption data from the last 12 months

CONSUMPTION BY SPEED



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

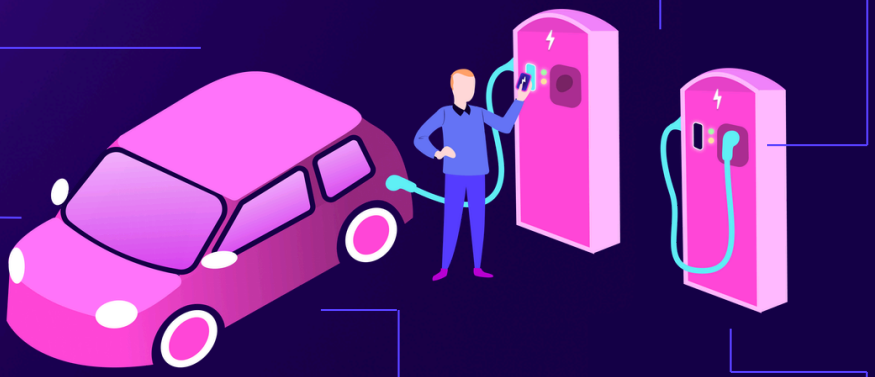
When we look at the distribution of Consumption by Speed, nearly **57%** of the total kWh volume consumed by Electroverse drivers is via ultra-rapid & rapid chargers, despite these only accounting for around **12%** and **14%** of total connectors, respectively. This is partly because these connectors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

EUROPEAN HEADLINE STATISTICS

28 MINUTES
Average charge time*

404k
Locations

1.46 M
Connectors

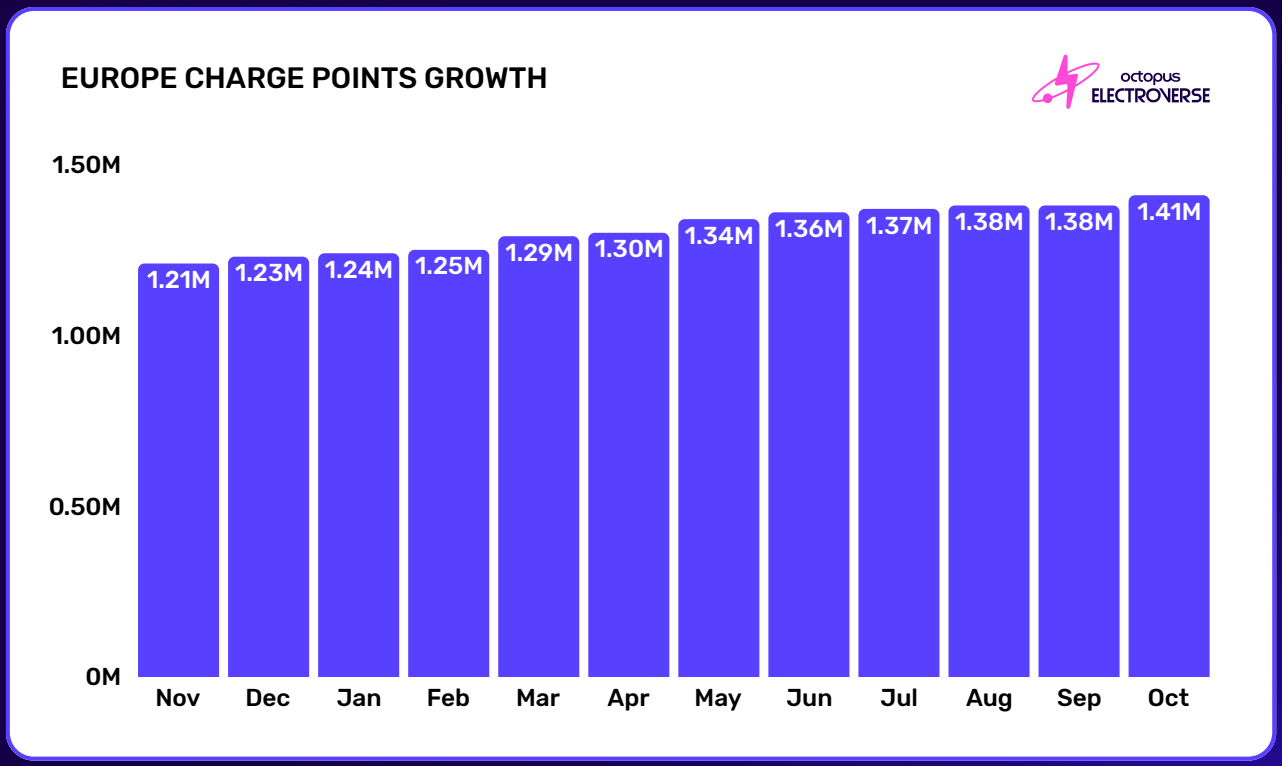


15.2 MILLION
Electric Vehicles

29 kWh
Average consumption per charge*

1.41 M
Charge Points

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



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

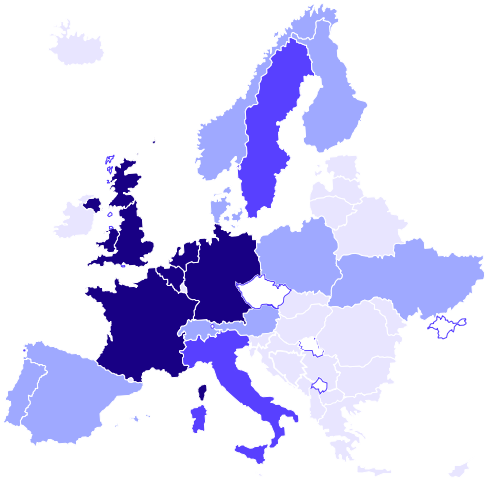
The graphs on the following pages show the mechanisms for achieving this growth vary widely across European markets, both in terms of charging speeds and speed of rollout.

CHARGING INFRASTRUCTURE ACROSS EUROPE

CHARGE POINTS BY COUNTRY

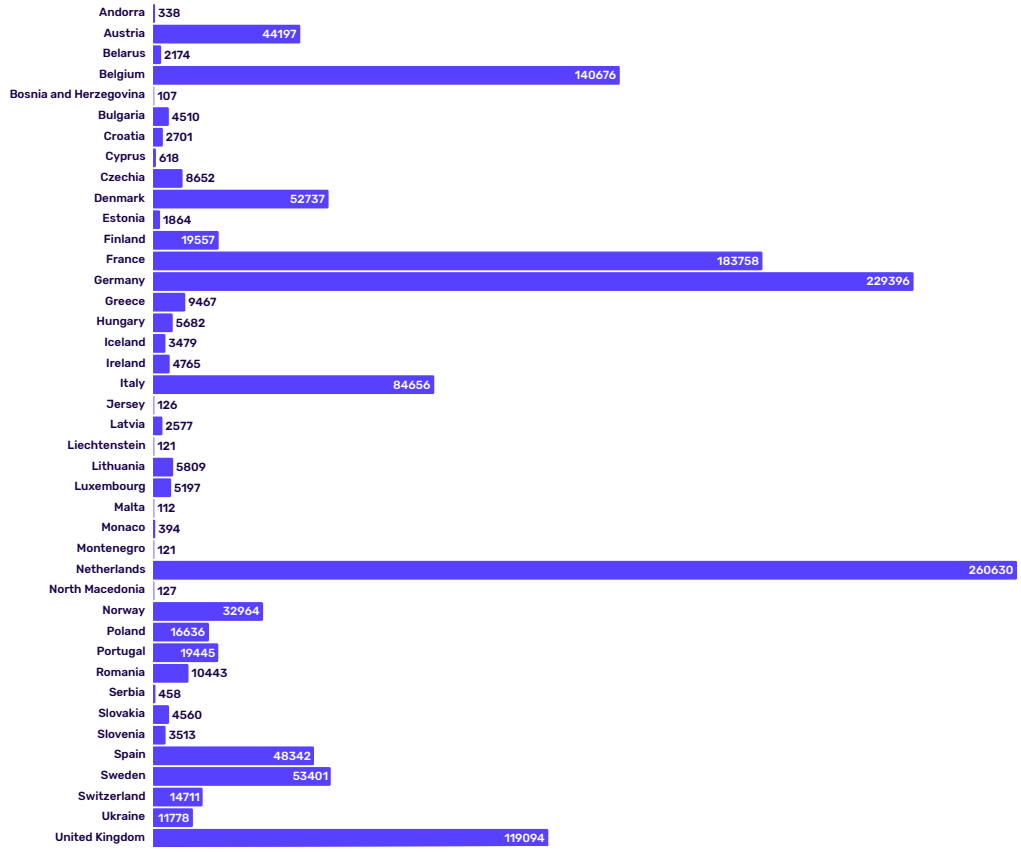
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- < 10,000
- 10,000 - 49,000
- 50,000 - 99,000
- 100,000+



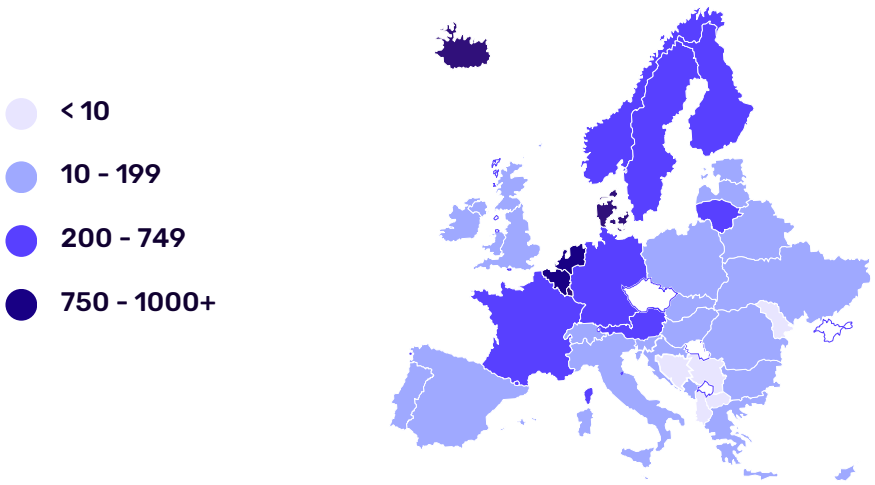
CHARGE POINTS BY COUNTRY

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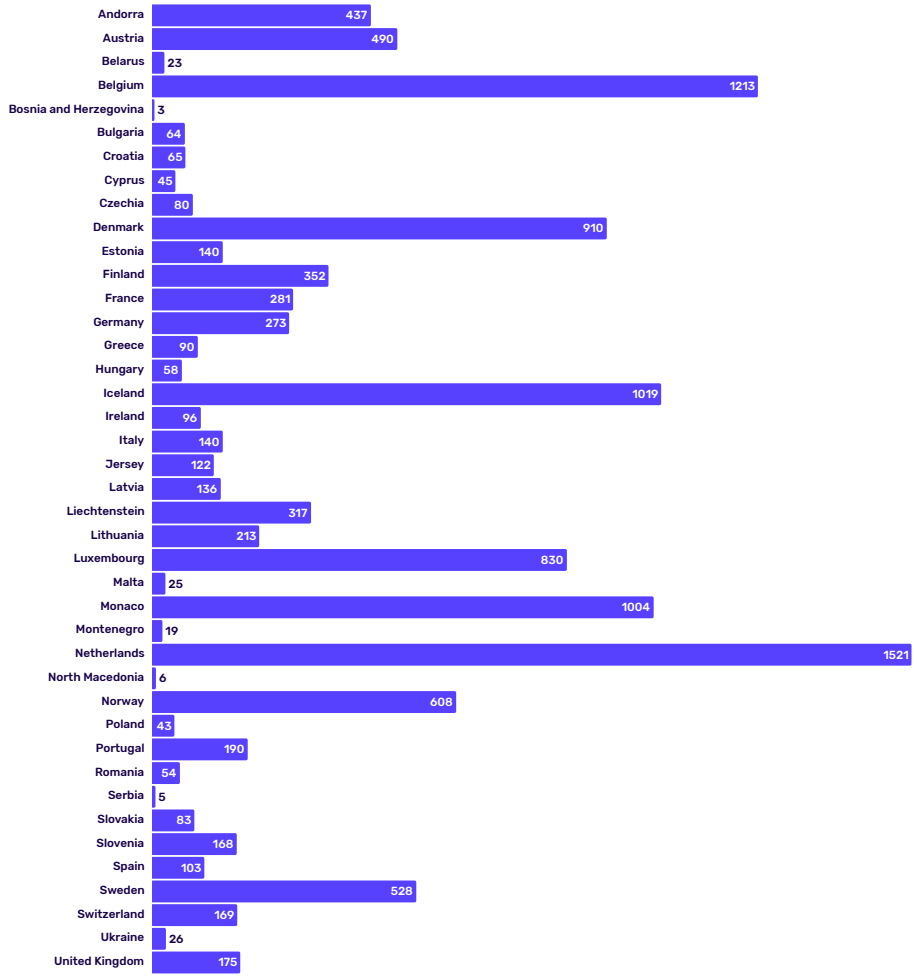
CHARGE POINTS PER 100K INHABITANTS

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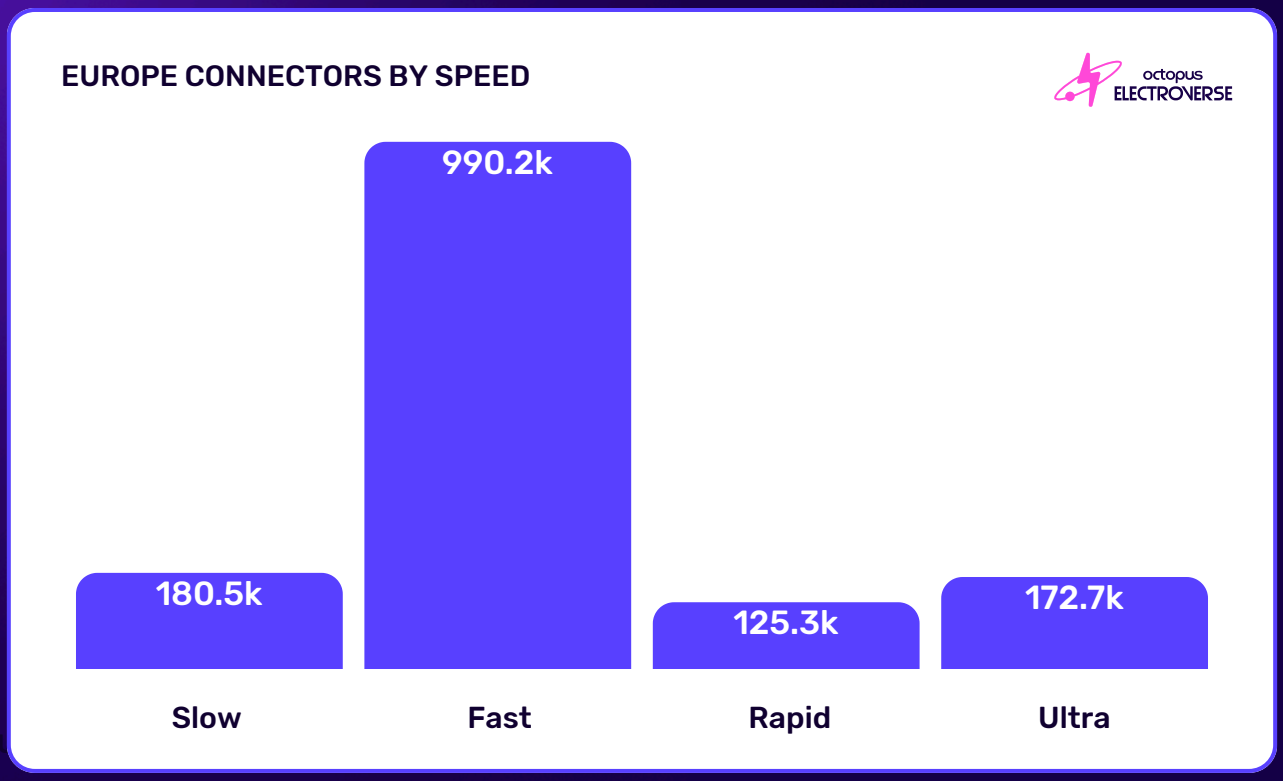


CHARGE POINTS PER 100K INHABITANTS

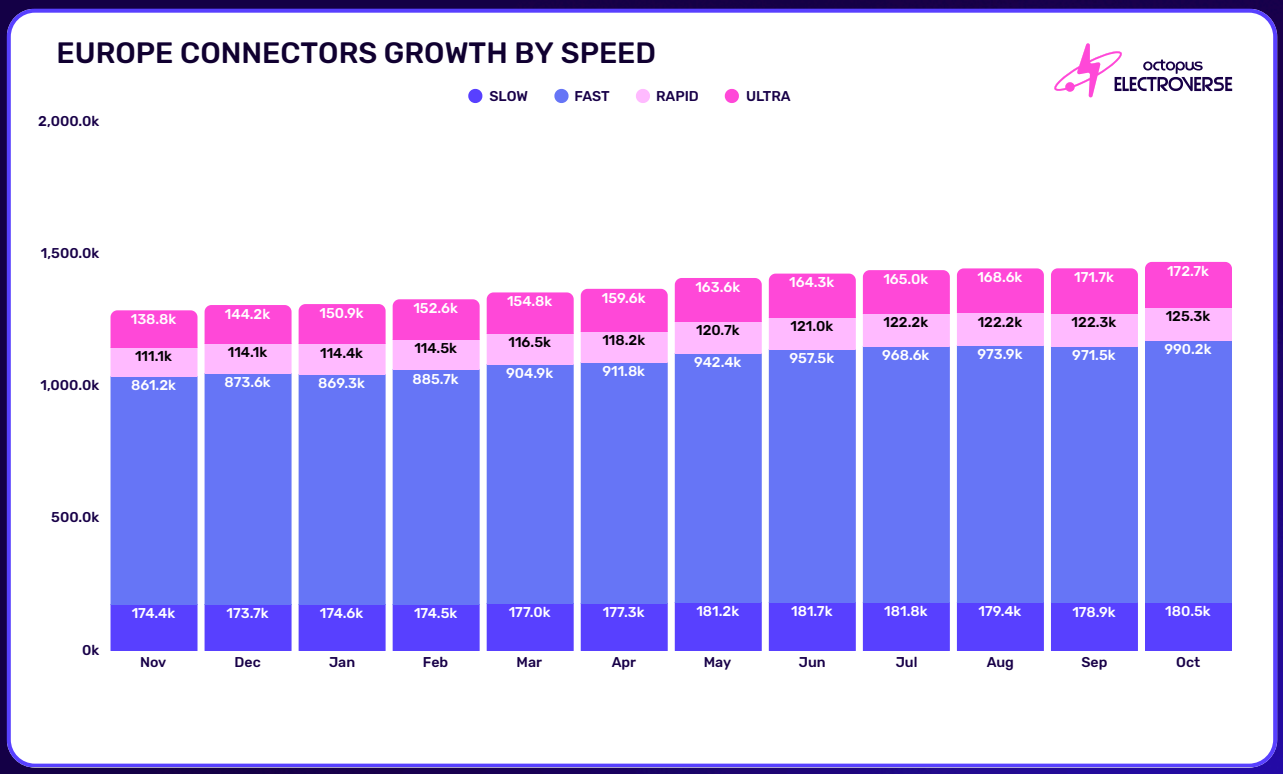
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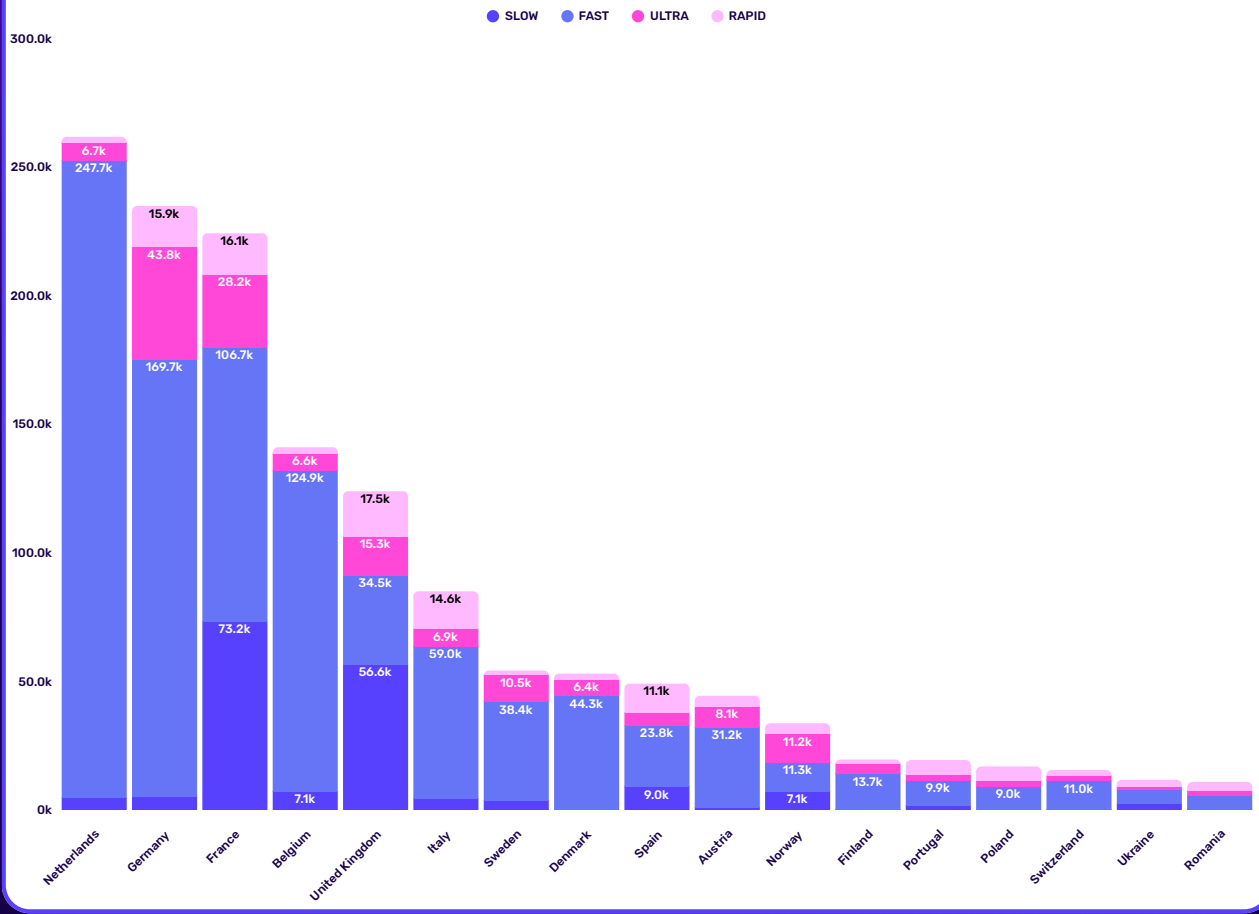
SPEED



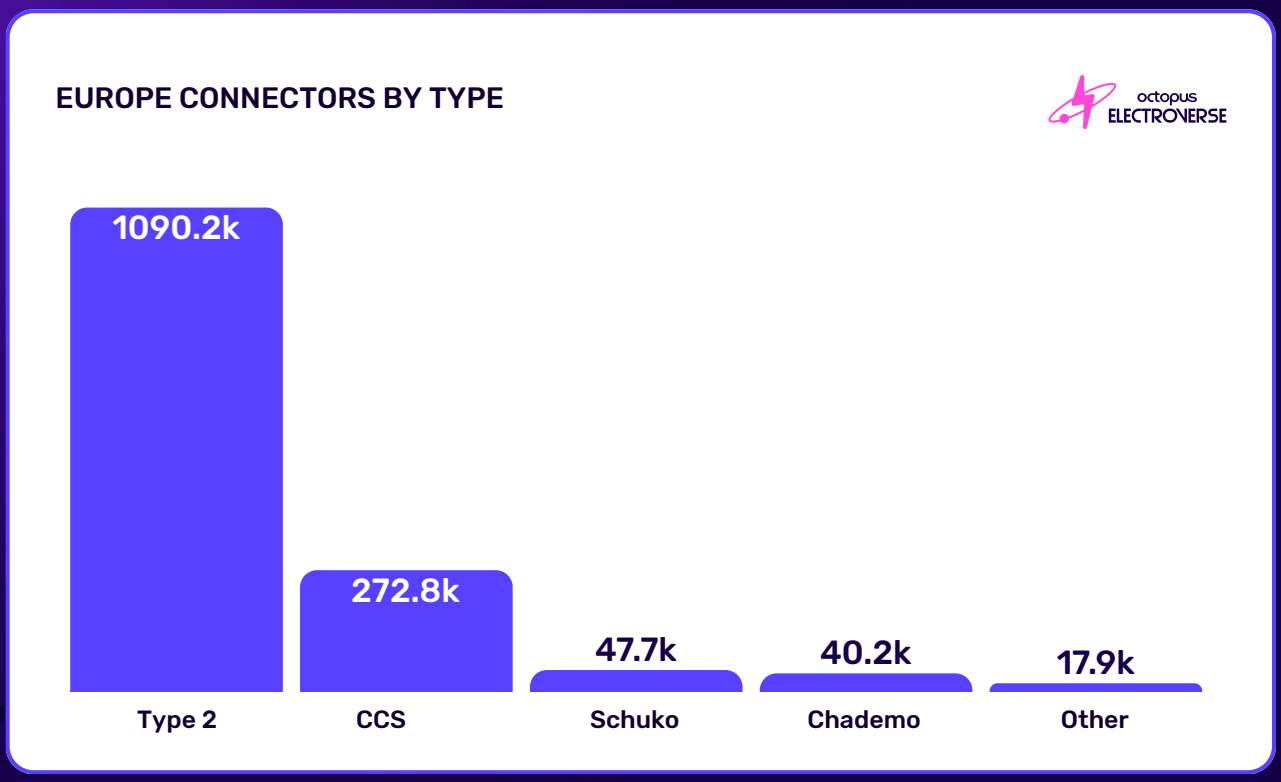
These graphs demonstrate the current state of charging speeds across Europe and offer insight into potential future trends. 8 - 50 kW fast charging speeds dominate Europe, contributing around **67%** of total connectors - comparatively, the UK has a greater number of slow charging connectors (**46%**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



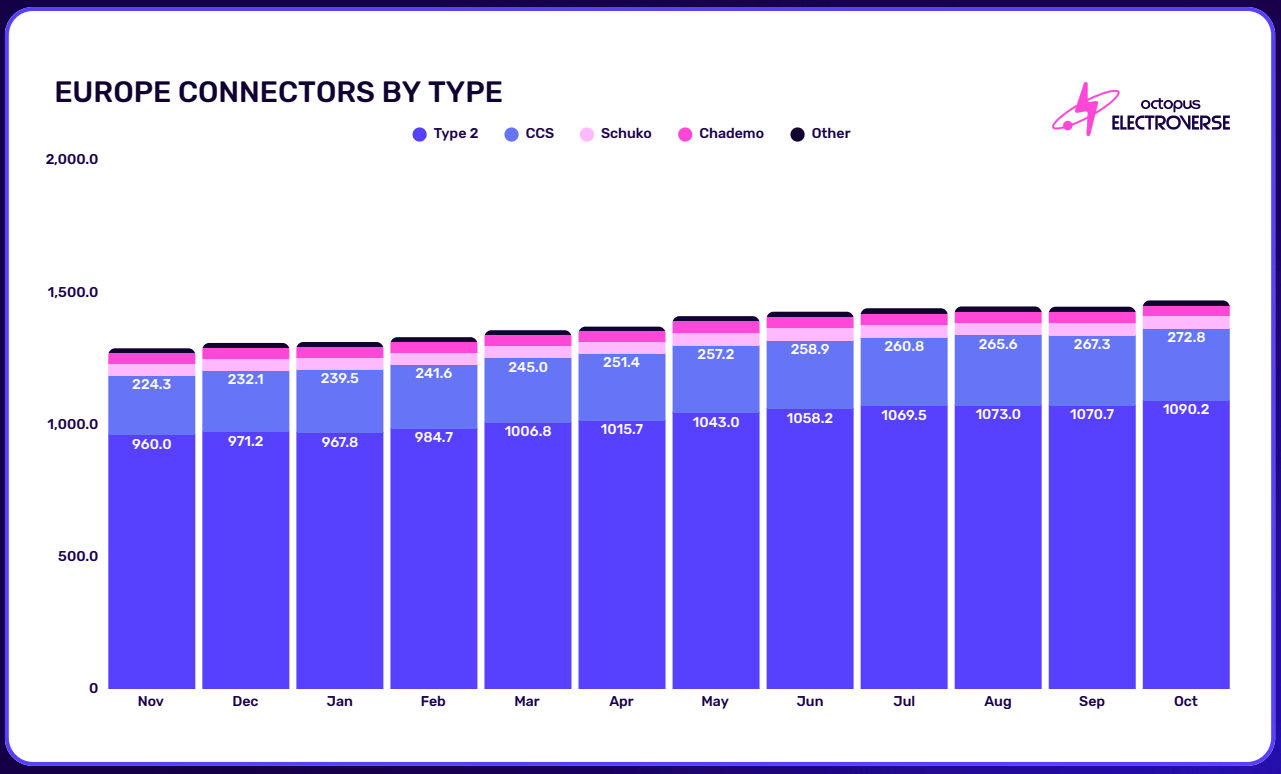
NUMBER OF CONNECTORS BY SPEED AND COUNTRY IN EUROPE (>10,000 CONNECTORS)



STANDARD TYPE

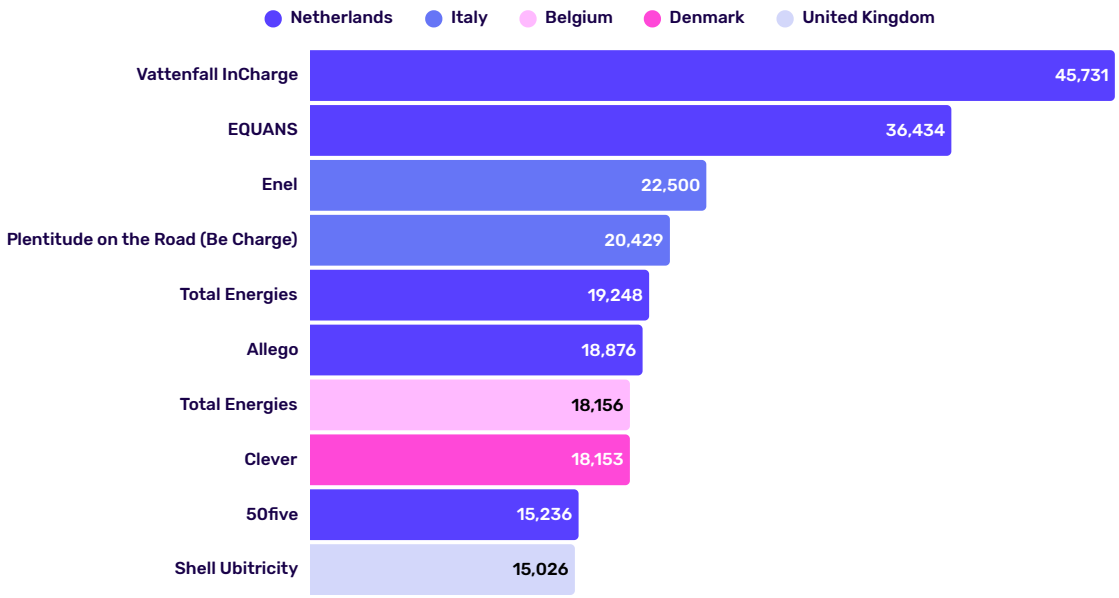


Connector trends across Europe closely mirror those seen in the UK. Market growth is being fuelled by the widespread rollout of Type 2 and CCS connectors, now standard on all new vehicle models. In contrast, CHAdeMO connector numbers have remained steady, continuing to support older vehicles still in 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.

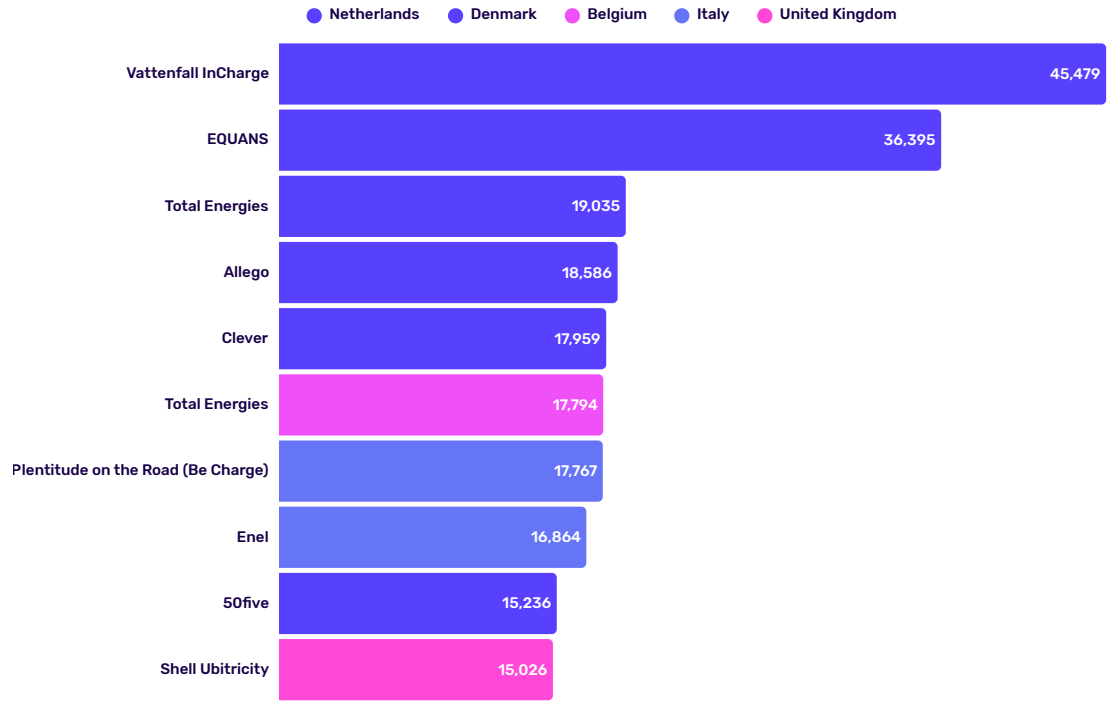


CHARGE POINT OPERATORS

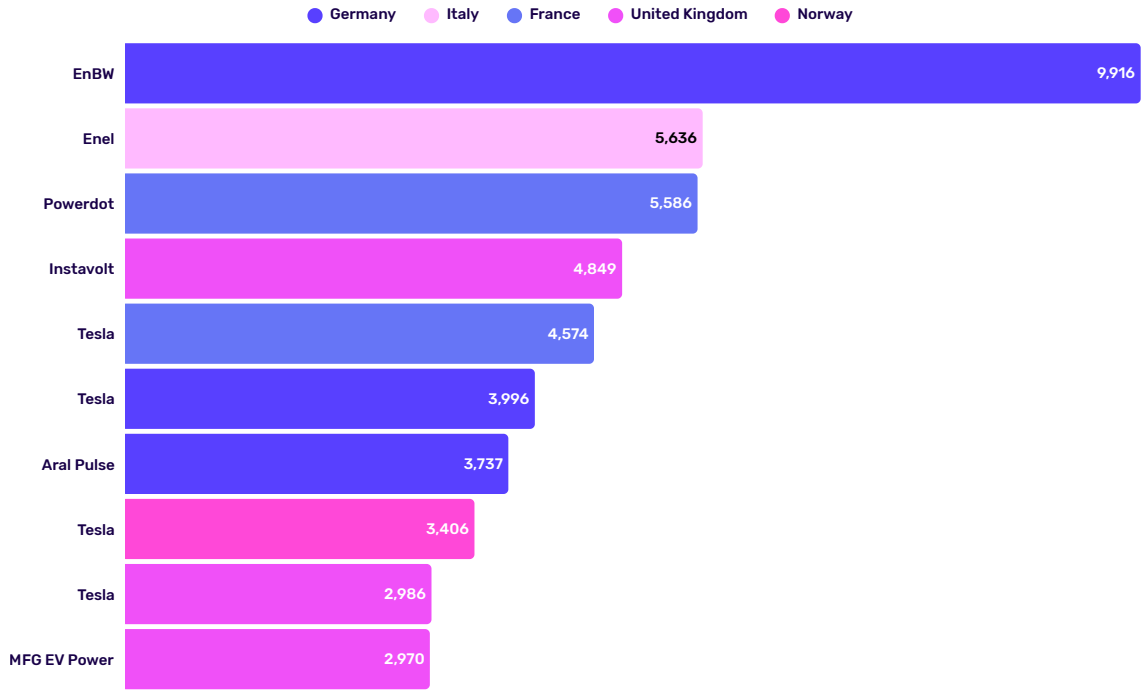
LARGEST OPERATORS IN EUROPE - CONNECTORS



LARGEST SLOW/FAST OPERATORS - CONNECTORS



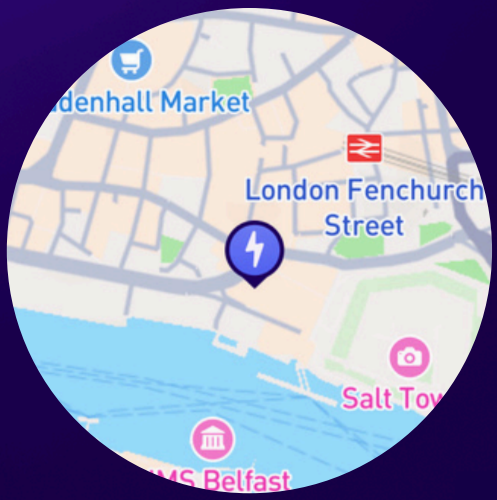
LARGEST RAPID/ULTRA OPERATORS - CONNECTORS



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).

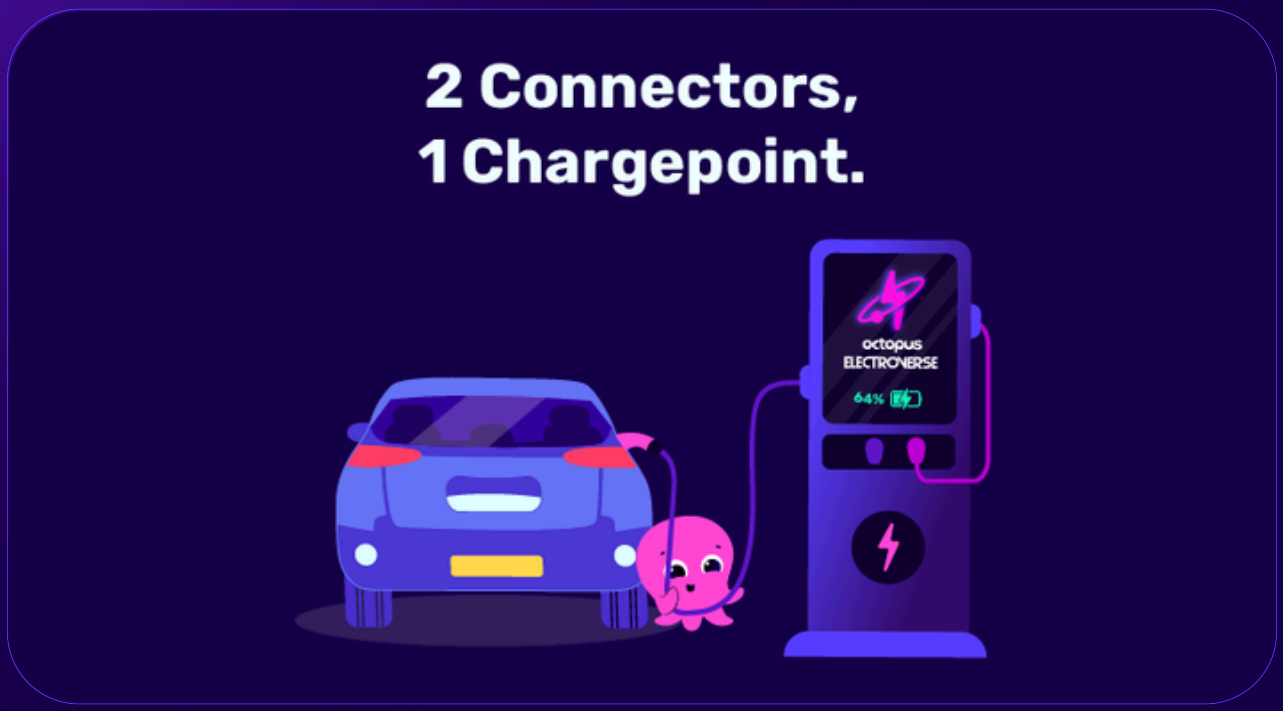


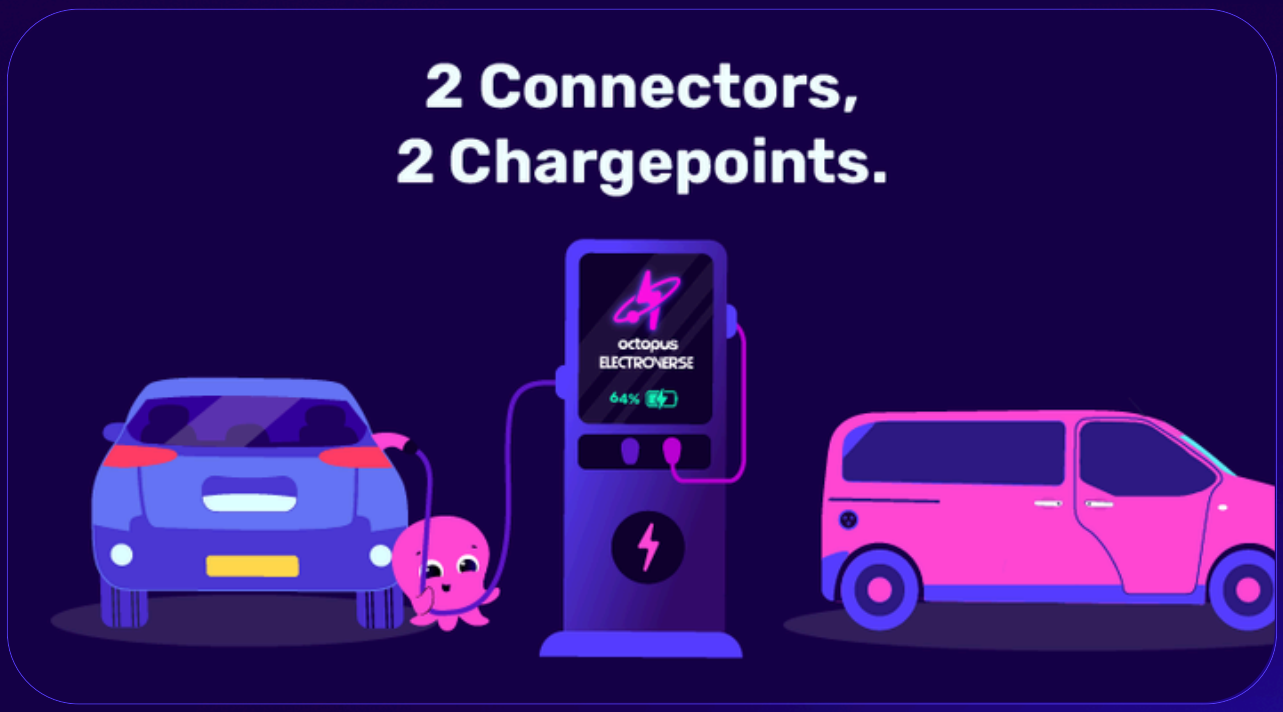
A **location** is a physical site where there are one or more charge points. Think of a location as a single pin on the Octopus Electroverse map!

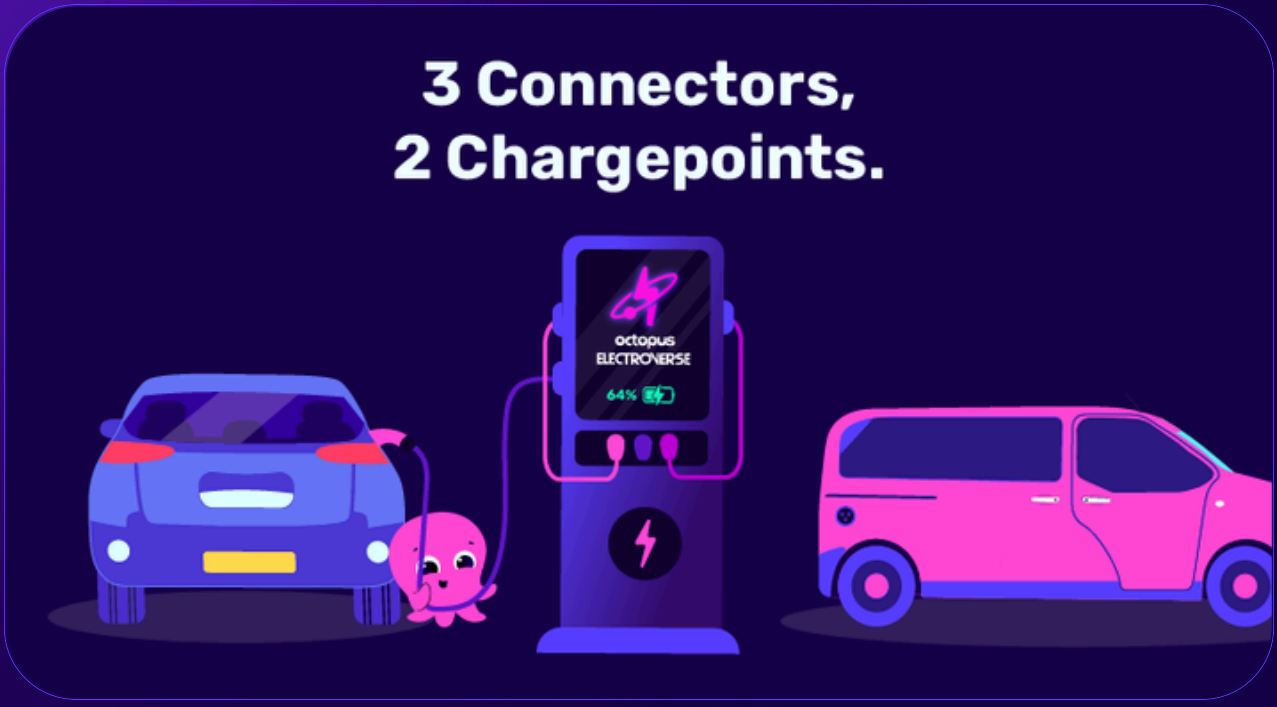
The EVSE hardware inside each charging unit determines how many vehicles can simultaneously charge at the same unit. A basic charge point has **one connector** and therefore **one charge point** that can be used to **charge one vehicle** independently.



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:

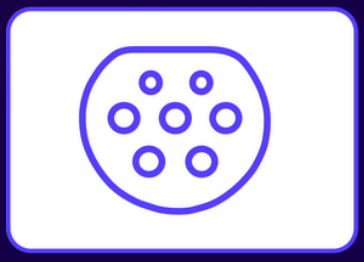






VISUALS OF CHARGING SOCKET TYPES

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



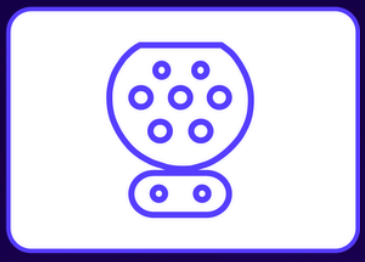
TYPE 2

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