



Department for Transport

Electric Vehicle Charging Device Statistics

January 2021

About this release

This release presents experimental statistics on the number of publicly available electric vehicle charging devices in the UK, broken down by Local Authority. Data is provided by the electric vehicle and charging point platform [Zap-Map](#).

The coronavirus pandemic is likely to have had a small impact on figures where data coincides with various restrictions.

The next quarterly report is scheduled for release in May 2021.

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Charging devices and chargepoints

A charging device is a unit capable of charging the batteries of plug-in electric vehicles. Devices are classified by their power output, and each device may offer one or more connecting points. The term 'chargepoint' is also sometimes used, including in previous statistical publications from DfT. This may refer to either a single device or a number of connectors on a device which can be used simultaneously.

Key findings

- At 4 January 2021, there were 20,775 public electric vehicle charging devices available in the UK. Of these, 3,880 were rapid devices.
- Since 2015, the number of public charging devices has grown rapidly, with devices increasing by a quarter in 2020 alone. Rapid charging devices have also grown quickly, increasing by 37% in the last year.
- In the fourth quarter of 2020, 1,288 more devices were available in total, up 7% on the previous quarter. 350 of these were rapid devices.

Chart 1 Growth in UK public charging devices since 2015 ([table EVCD_02](#))

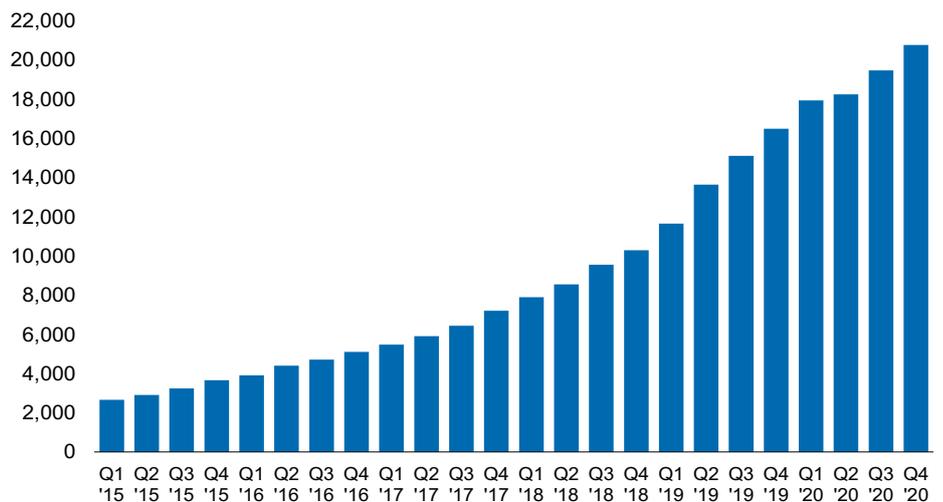
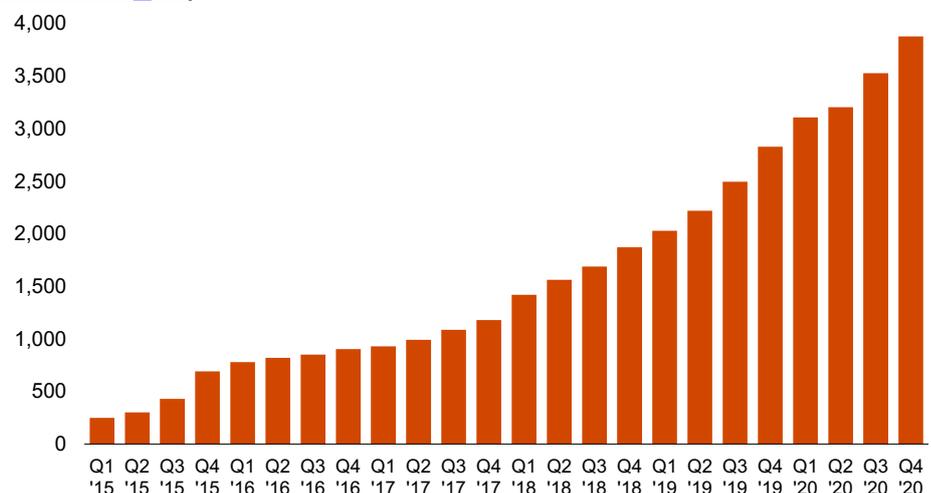


Chart 2 Growth in UK public rapid charging devices since 2015 ([table EVCD_02](#))



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Regional distribution of charging devices

There is uneven geographical distribution of charging devices within the UK. Some UK local authorities have bid for UK Government funding for charging devices, and others have not. Most of the provision of this infrastructure has been market-led, with individual charging networks and other businesses (such as hotels) choosing where to install devices.

Charts 3 and 4 show that London has the highest level of charging device provision per 100,000 of population but is slightly below average in terms of rapid charging device provision. Scotland is above average in total devices per 100,000 and has the highest level of rapid device provision.

Chart 3 Public charging devices per 100,000 of population by UK country and region ([table ECVD_01a](#))

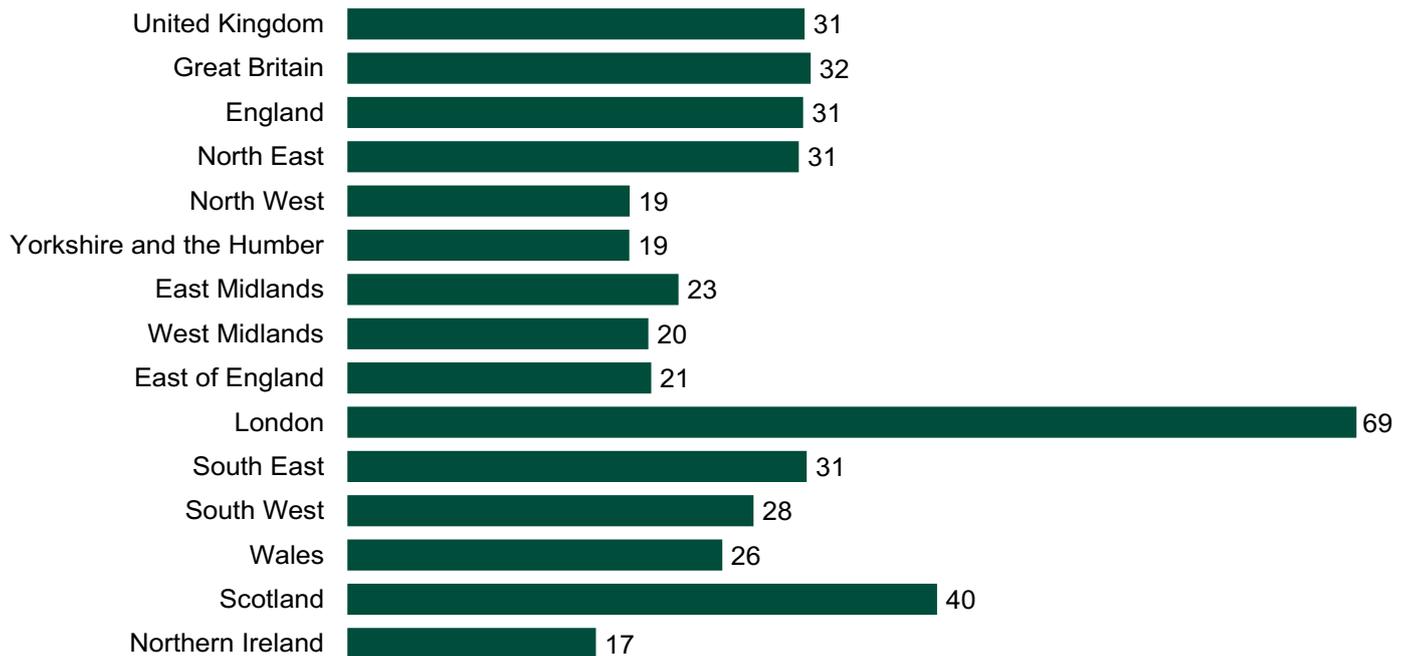
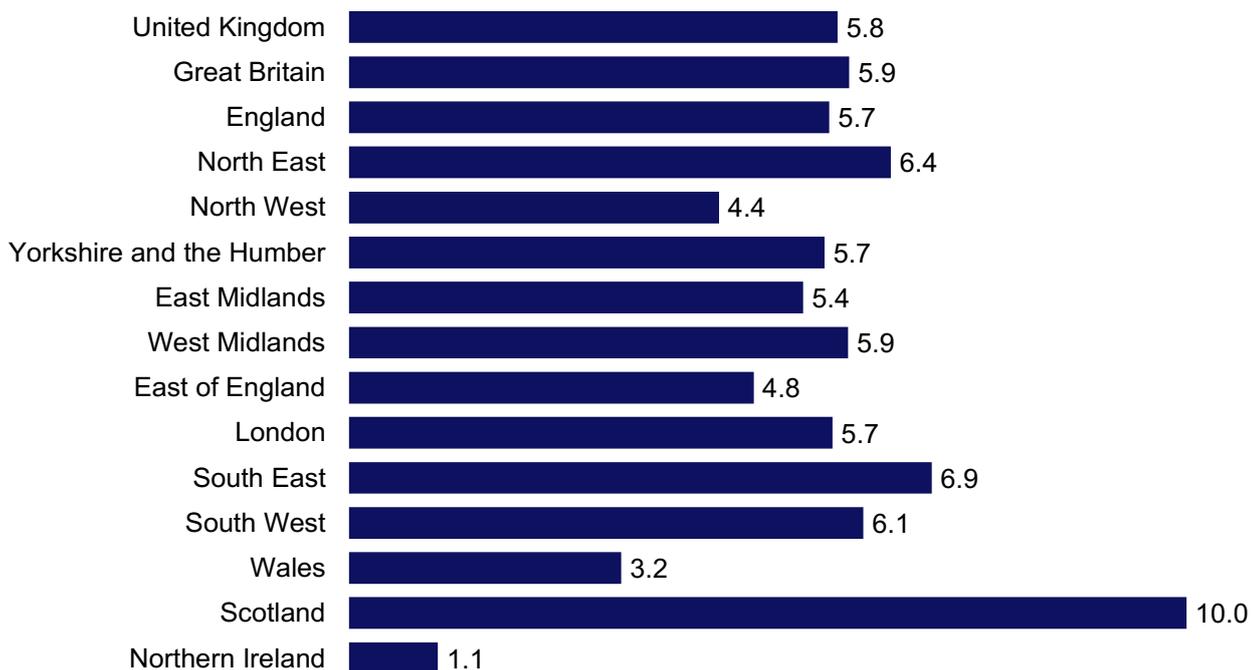
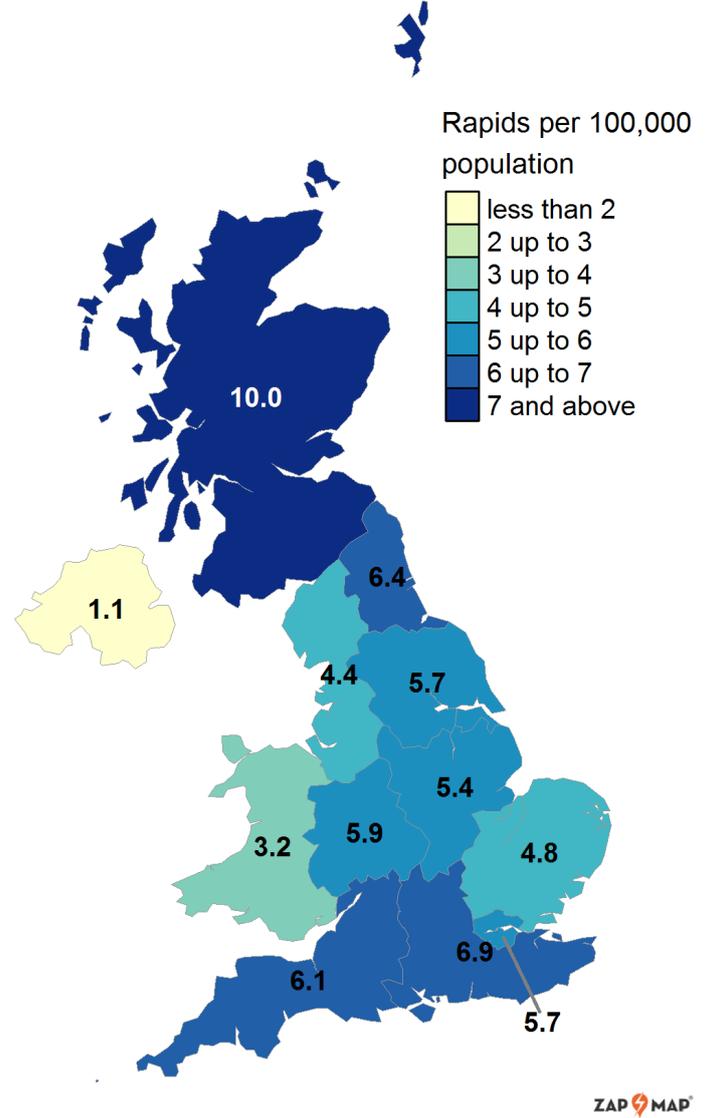
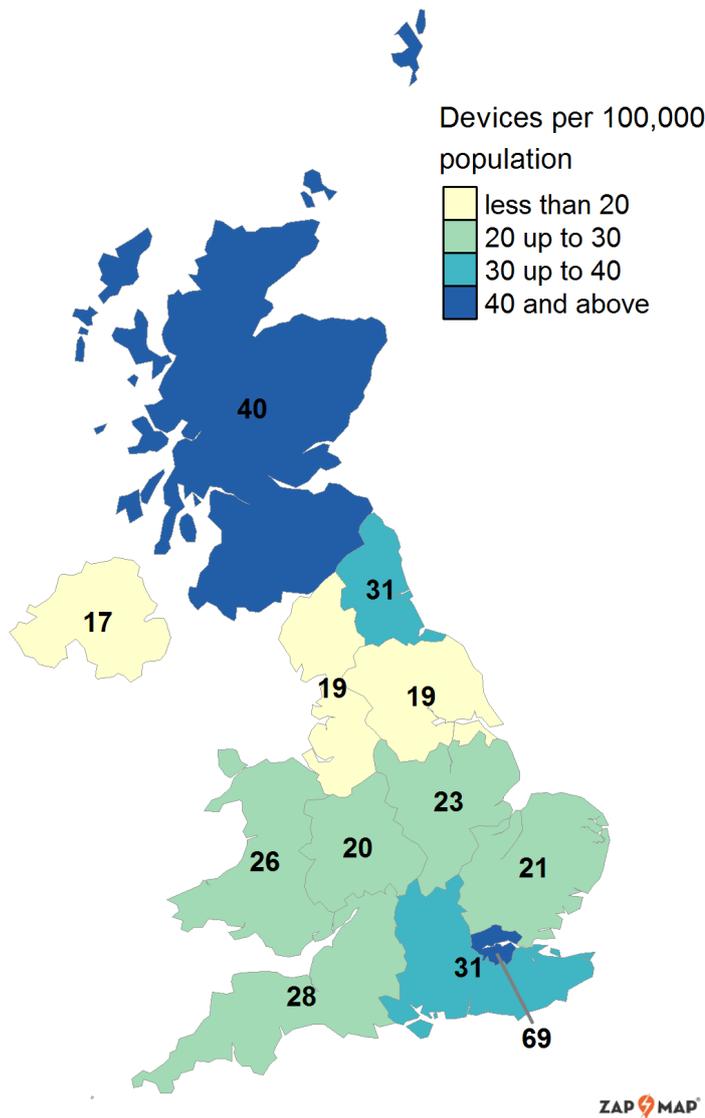


Chart 4 Public rapid charging devices per 100,000 of population by UK country and region ([table ECVD_01b](#))



Map 1 Public charging devices per 100,000 of population by UK region

Map 2 Public rapid charging devices per 100,000 of population by UK region



Source: Zap-Map, Office for National Statistics licensed under the Open Government Licence v.3.0

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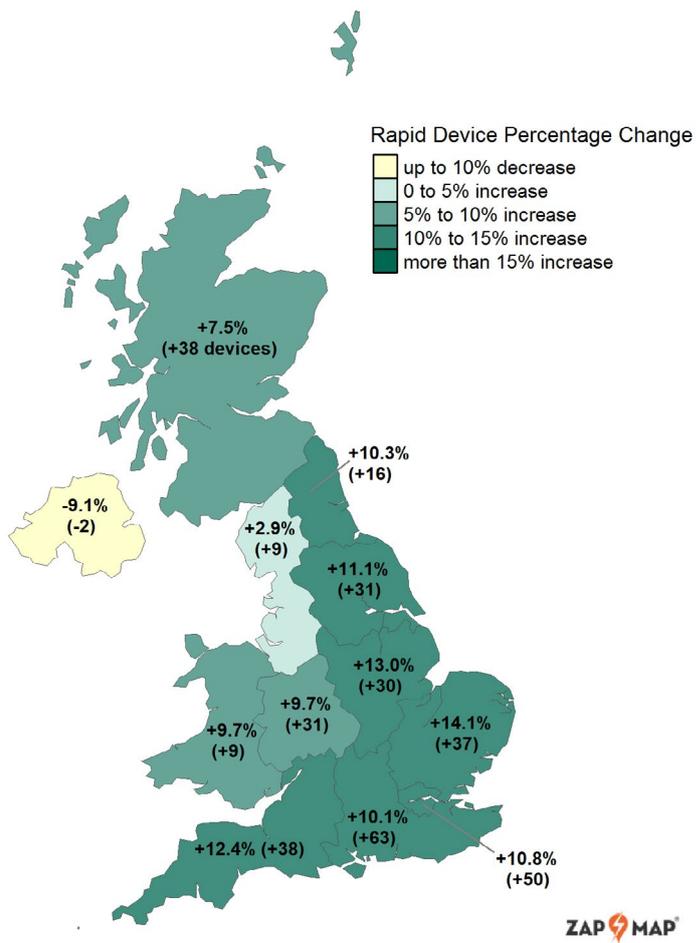
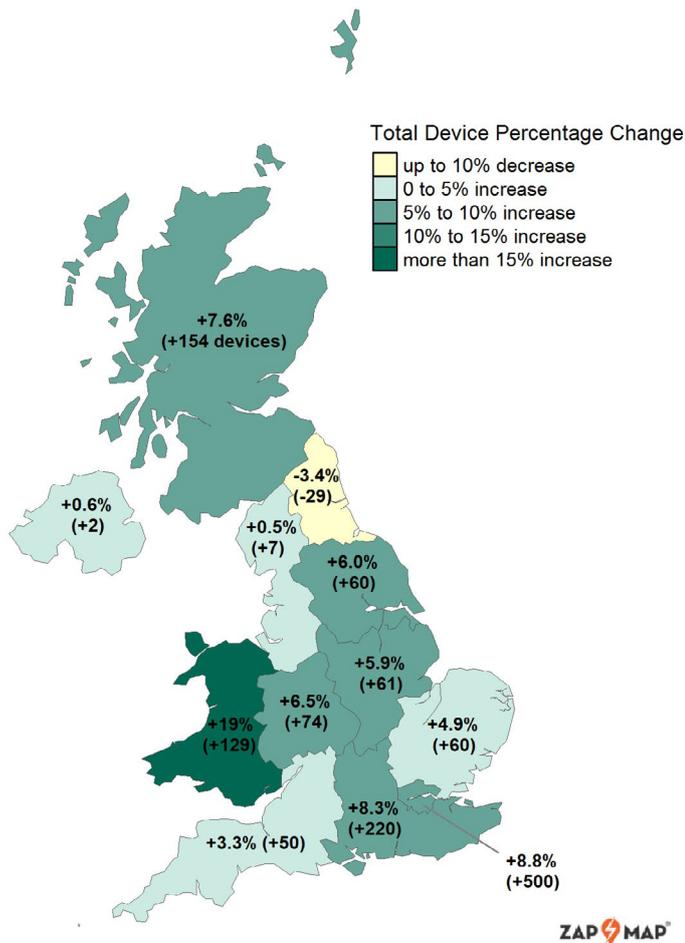
Charging devices have largely been funded by private sector investment, however a number of the devices have been Government funded via grant schemes operated by the Office for Zero Emission Vehicles (OZEV). OZEV also provides grant funding for private domestic charging and workplace charging devices, however these types of devices are not included within these statistics as they are not necessarily available to the general public.

[Table EVCD_01a](#) and [Table EVCD_01b](#) provides a breakdown of public charging devices in each local authority in the UK whilst [Table EVCD_02](#) shows the change in the number of devices since 2015. These tables are published alongside this report.

An interactive map of this data is available at: maps.dft.gov.uk/ev-charging-map

Map 3 Quarterly change in public charging devices per region

Map 4 Quarterly change in public rapid charging devices per region



The number of available devices can fluctuate for a range of reasons. Owners and operators can choose to temporarily or permanently decommission or replace devices, or they can be unavailable due to faults, maintenance or other restrictions in the area where they are located. This could be the case in the North East, where the number of total devices available decreased by 3.4% over the quarter despite total rapid devices increasing by 10.3%.

In every other region, the number of total charging devices increased across the quarter to January 2021. Wales saw the largest percentage increase of 19% but London had the largest absolute increase with 500 new devices. This accounted for 39% of all new available devices in Q4 2020, further increasing the unequal geographical distribution in the UK.

In Northern Ireland, the number of rapid devices decreased by 2. However, in every other region, rapid devices increased across the quarter with the largest percentage increase in the East of England.

Background notes and limitations of data

This is a quarterly statistical release on electric vehicle charging devices. We would welcome feedback from users of the statistics. This can be provided via environment.stats@dft.gov.uk.

Charging device location data is sourced from the electric vehicle charging platform [Zap-Map](https://zap-map.com) and represents devices reported as operational at midnight, 4 January 2021. Zap-Map reports that they cover 95% of publicly accessible devices. True counts are therefore likely to be higher and we

have no way of assessing whether data coverage is better in some geographical areas than others.

There are no other sources with such comprehensive coverage against which we could verify the Zap-Map devices. As of 26 January 2021, the [National Chargepoint Registry](#) (NCR) covers 13,297 devices so cannot be used to verify the Zap-Map counts. The NCR, whilst covering fewer devices, does contain more detailed information on each charging device including the exact location and number of connectors.

‘Total devices’ represent publicly available charging devices at all speeds, including: slow, fast, rapid and ultra-rapid devices. ‘Rapid devices’ are those whose fastest connector is rated at 43kW and above. A device can have a number of connectors of varying types and speeds. Some devices can charge only one car at a time, and some can charge more than one simultaneously. The Zap-Map data does not indicate how many cars can be charged by a single device, therefore the statistics count the device itself. There is often more than one device at a location. Charging capability in any given location (the number of cars able to be charged at the same time) will be higher than the number of devices.

Population figures by Local Authority are sourced from the Office for National Statistics Population Mid Year Estimates for 2019. The Local Authority administrative geographies are from April 2020, available from the ONS Geography Portal.

Data after Q3 2019 reflects charging devices which were available at the end of each quarter. Data previous to this uses charging devices which were available at Q3 2019, but were installed in previous quarters before this. Subsequently, these figures do not include any devices installed before Q3 2019 that were decommissioned or unavailable at the time.

Experimental Statistics. These quarterly statistics are badged as Experimental Statistics. Users should be aware of the status and cautions of these series, which will vary for each statistic and will be explained within each publication. The statistics are new but still subject to testing in terms of their volatility and ability to meet customer needs. They do not meet the rigorous quality standards of National Statistics, for example with respect to partial coverage. Further details on the limitations of Experimental Statistics can be found at: <https://www.ons.gov.uk/methodology/odologytopicsandstatisticalconcepts/guidetoexperimentalstatistics>.

This quarterly statistical series complements three earlier releases presenting statistics on observed usage and charging patterns for electric vehicle charging devices funded under various OLEV schemes: [Local authority rapids](#); [Public sector fasts](#); and [Domestics](#).



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