



Department for Transport

Electric Vehicle Charging Device Statistics

October 2020

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 February 2021.

In this publication

Regional distribution of charging devices [p2](#)

Background notes and limitations of the data [p4](#)

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 1 October 2020, there were 19,487 public electric vehicle charging devices available in the UK. Of these, 3,530 were rapid devices.
- Since 2015, the number of public charging devices has grown rapidly to October 2020, with an 18% increase in the year to date. Rapid charging devices have also grown quickly, increasing by nearly ten times since 2015.
- In the third quarter of 2020, 1,222 more devices were available in total, up 7% on the previous quarter. 324 of these were rapid devices.

Chart 1 Growth in UK public charging devices since 2015 ([table EVCD 02](#))

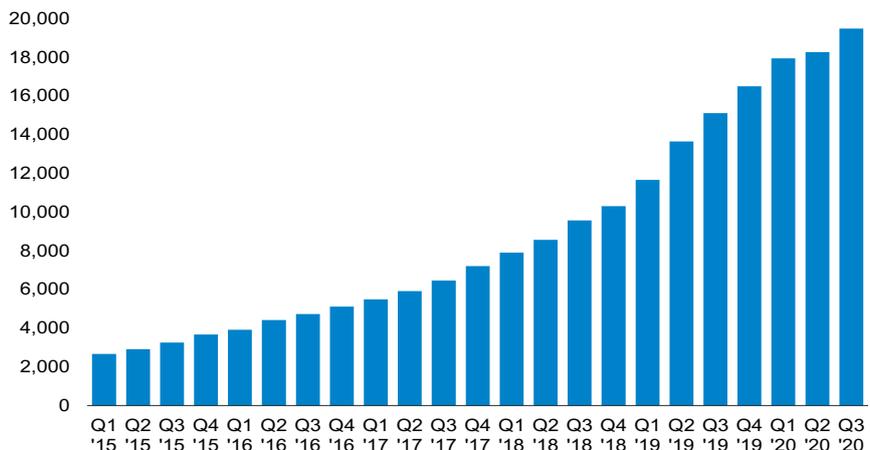
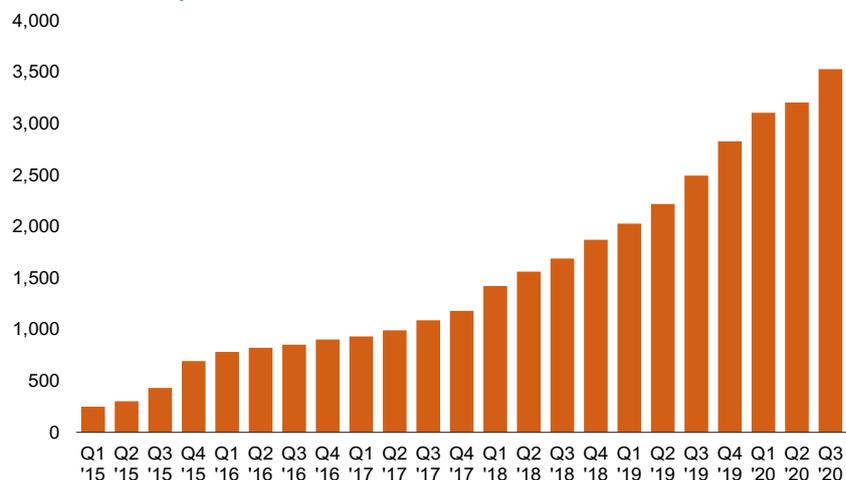


Chart 2 Growth in UK public rapid charging devices since 2015 ([table EVCD 02](#))



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 2 and 3 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_01](#))

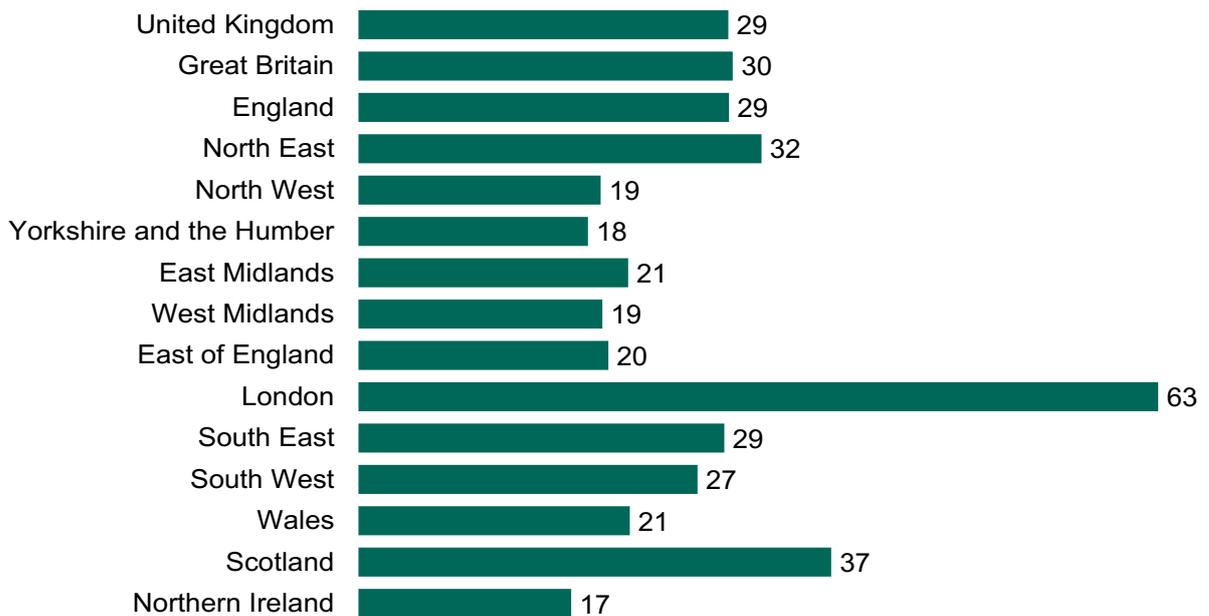
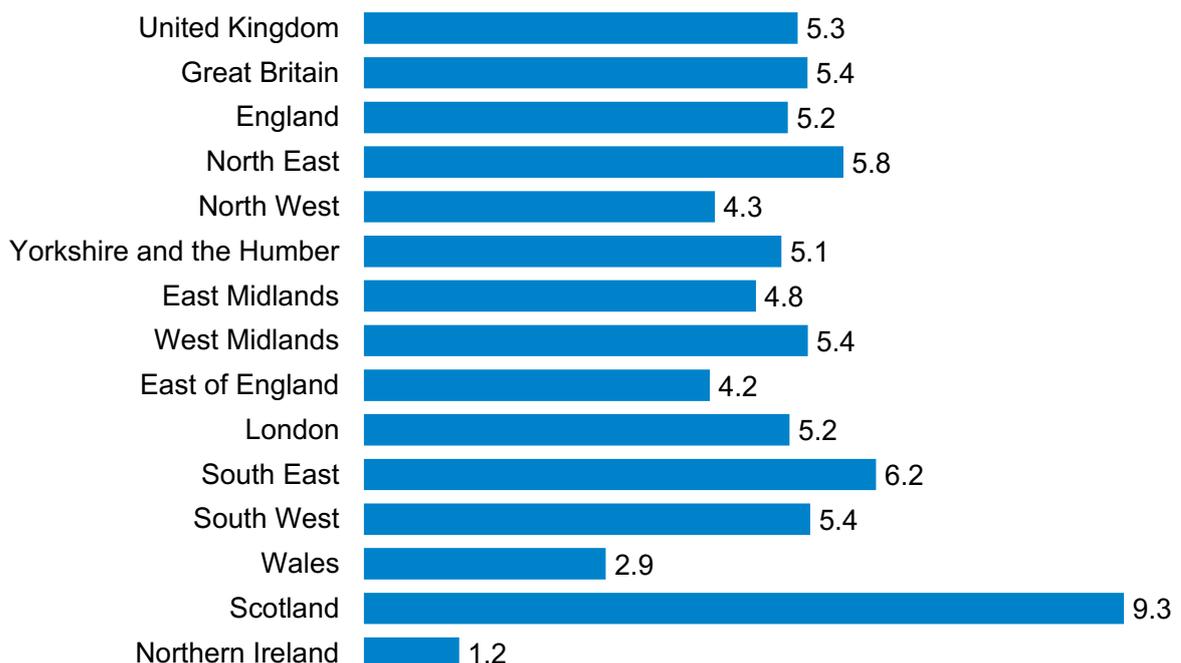
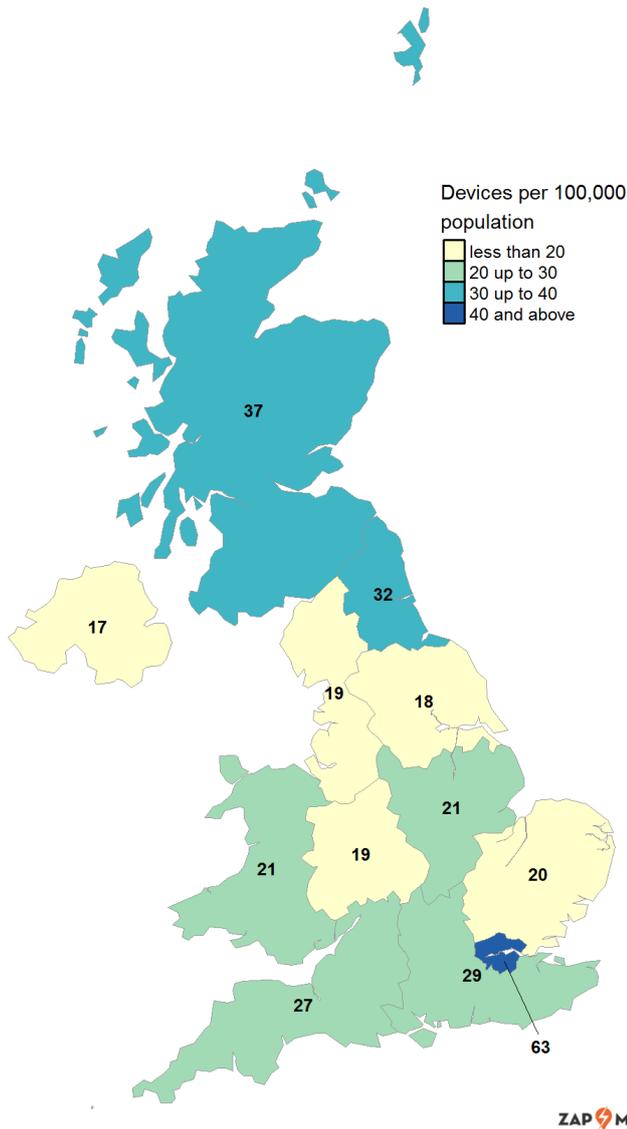


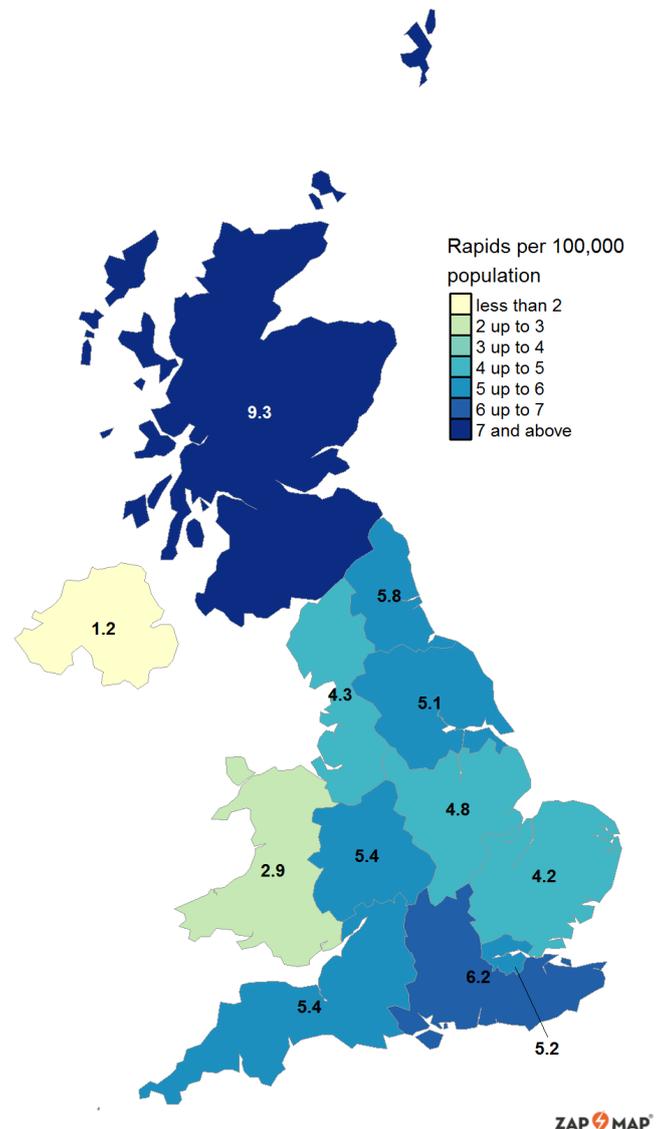
Chart 4 Public rapid charging devices per 100,000 of population by UK country and region ([table ECVD_01](#))



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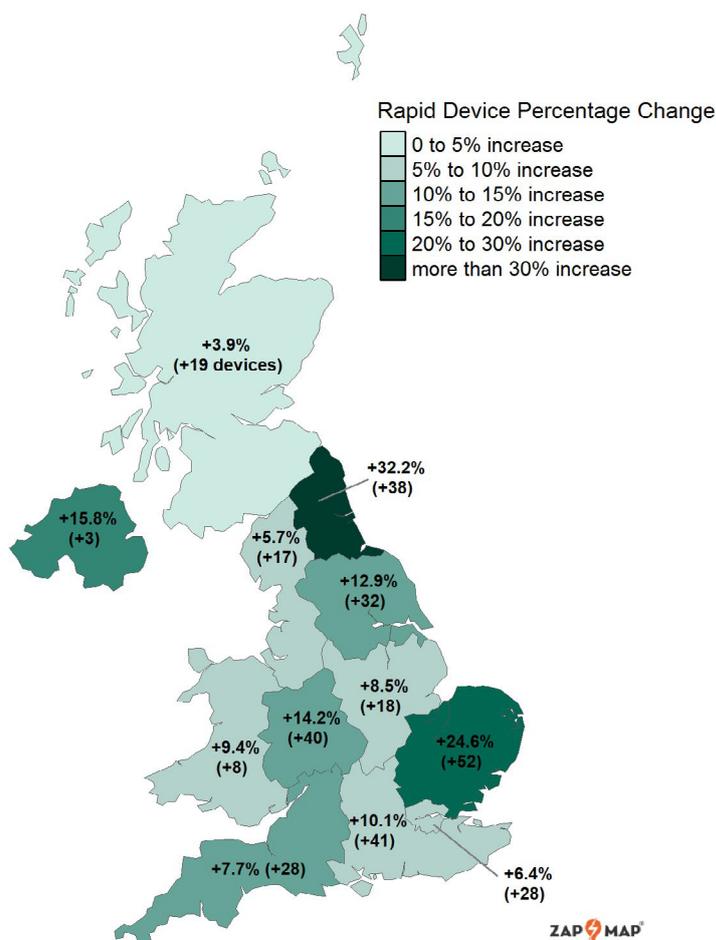
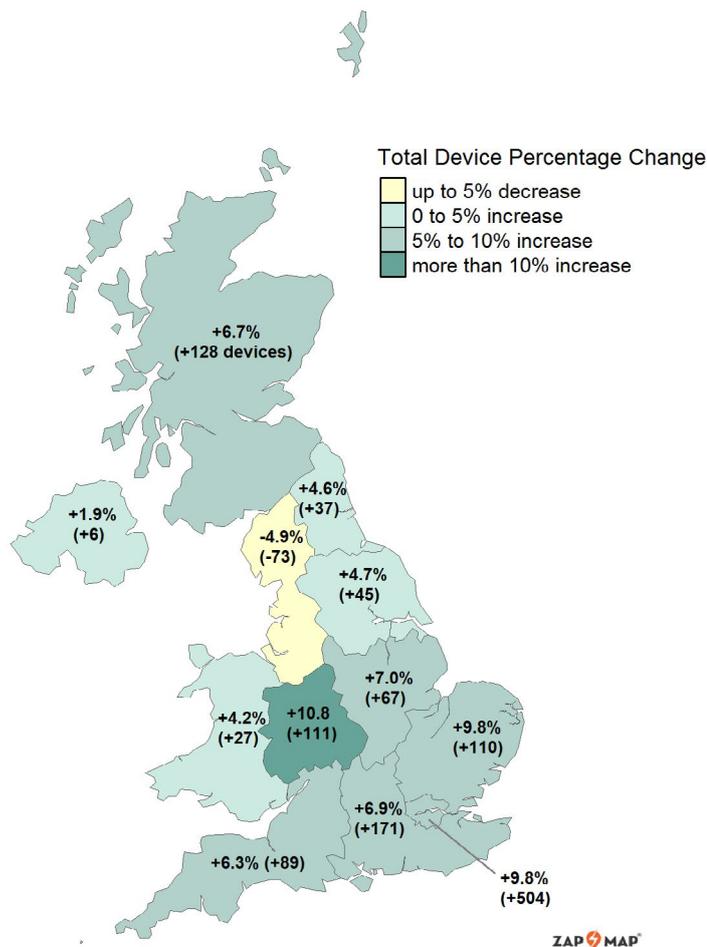
Charging devices have largely been funded by private sector investment, however a number of the devices have been Government funded via a number of grant schemes operated by the Office for Low Emission Vehicles (OLEV). OLEV also provides grant funding for private domestic charging and workplace charging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

[Table EVCD 01](#) 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



In the North West, the number of total devices available decreased by 4.9% over the quarter, predominantly in the Greater Manchester area. However, total rapid devices in that region increased by 5.7%. 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.

In every other region, the number of charging devices increased across the quarter to October 2020. The West Midlands saw the largest percentage change but London saw the largest absolute increase of 504 devices which accounted for 41% of all new available devices, further increasing the unequal geographical distribution in the UK.

Rapid devices increased in each region across the quarter with the smallest percentage increase in Scotland. Despite this, Scotland still has the highest number of rapid chargers per 100,000.

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, 1 October 2020. 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 30 October 2020, the [National Chargepoint Registry](#) (NCR) covers 12,273 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. ‘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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