**Department for Transport**

# Electric vehicle charging device statistics

# October 2019

## Key findings

- At 1 October 2019, there were 15,116 public electric vehicle charging devices available in the UK. Of these, 2,495 were rapid devices.

### Chart 1 Growth in UK public charging devices since 2015
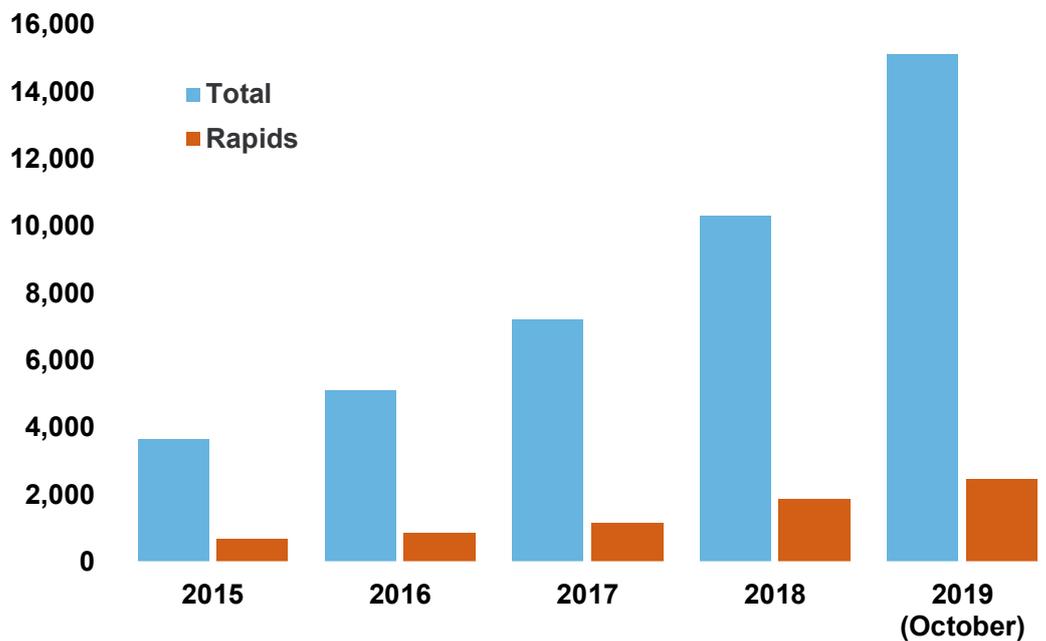


- Since 2015, the number of public charging devices has grown by 312%. Rapid charging devices have also grown quickly, increasing by 260% in the same period. There are signs that growth in 2019 is accelerating, with a 47% growth in total devices during the first nine months of 2019.

## 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.
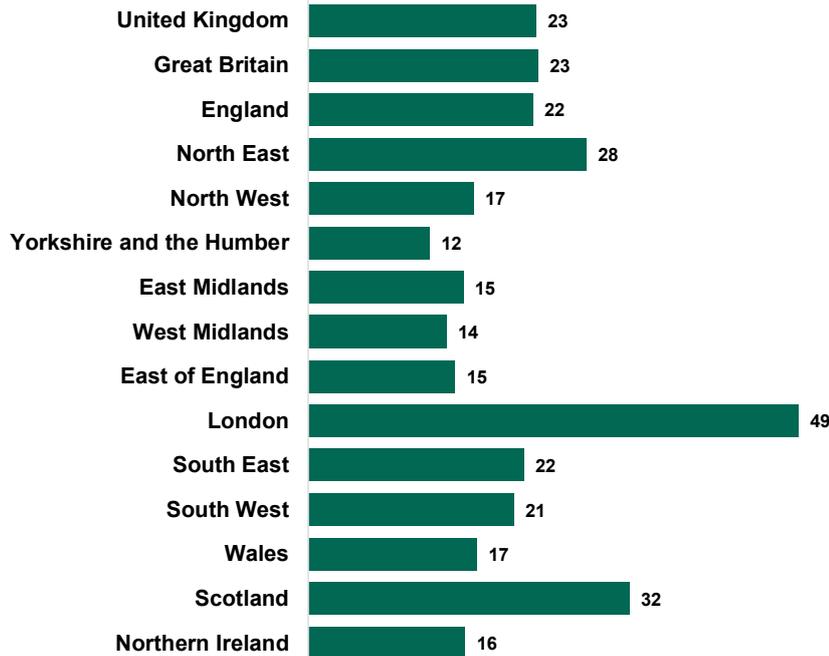
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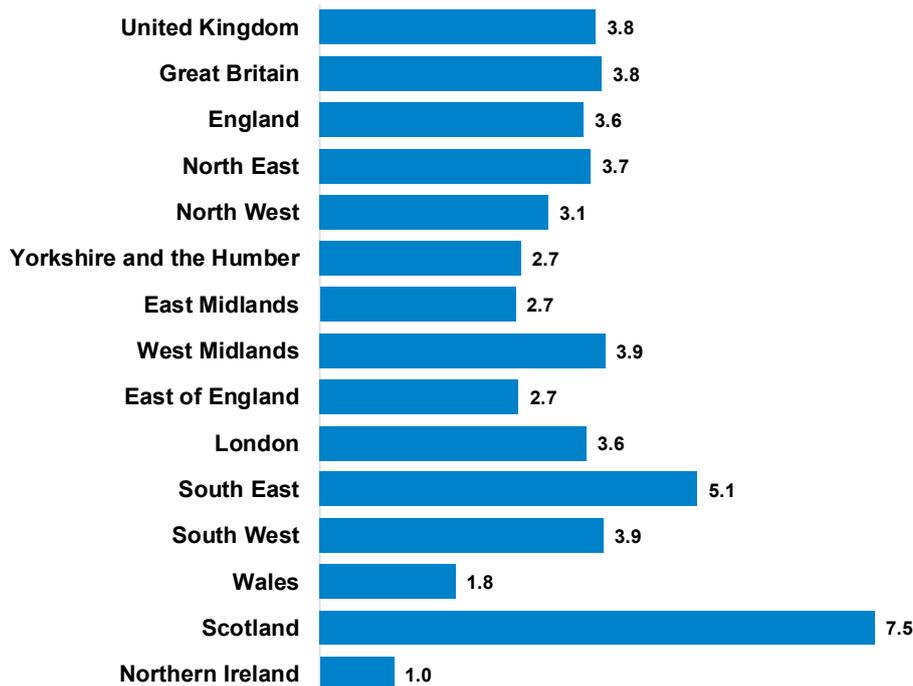
# Regional distribution of charging devices

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 2 and 3 show that London has the highest level of charging device provision per 100,000 of population, however it is 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.
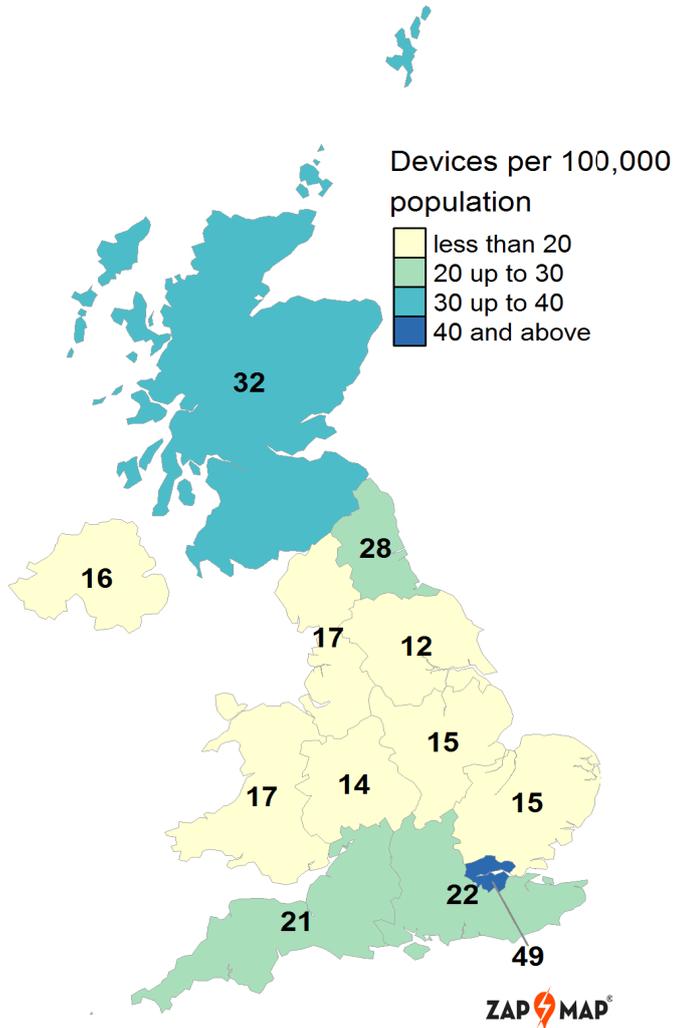
## Chart 2 Public charging devices per 100,000 of population by UK country and region

| Region | Value |
|--------|-------|
| United Kingdom | 23 |
| Great Britain | 23 |
| England | 22 |
| North East | 28 |
| North West | 17 |
| Yorkshire and the Humber | 12 |
| East Midlands | 15 |
| West Midlands | 14 |
| East of England | 15 |
| London | 49 |
| South East | 22 |
| South West | 21 |
| Wales | 17 |
| Scotland | 32 |
| Northern Ireland | 16 |

## Chart 3 Public rapid charging devices per 100,000 of population by UK country and region

| Region | Value |
|--------|-------|
| United Kingdom | 3.8 |
| Great Britain | 3.8 |
| England | 3.6 |
| North East | 3.7 |
| North West | 3.1 |
| Yorkshire and the Humber | 2.7 |
| East Midlands | 2.7 |
| West Midlands | 3.9 |
| East of England | 2.7 |
| London | 3.6 |
| South East | 5.1 |
| South West | 3.9 |
| Wales | 1.8 |
| Scotland | 7.5 |
| Northern Ireland | 1.0 |

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

Devices per 100,000 population

- less than 20
- 20 up to 30
- 30 up to 40
- 40 and above

32

16

28

17    12

15

17    14    15

22

21    49

ZAP MAP

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

Rapids per 100,000 population

- less than 2
- 2 up to 3
- 3 up to 4
- 4 up to 5
- 5 up to 6
- 6 up to 7
- 7 and above

7.5

1.0

3.7

3.1    2.7

2.7

1.8    3.9    2.7

5.1

3.9    3.6
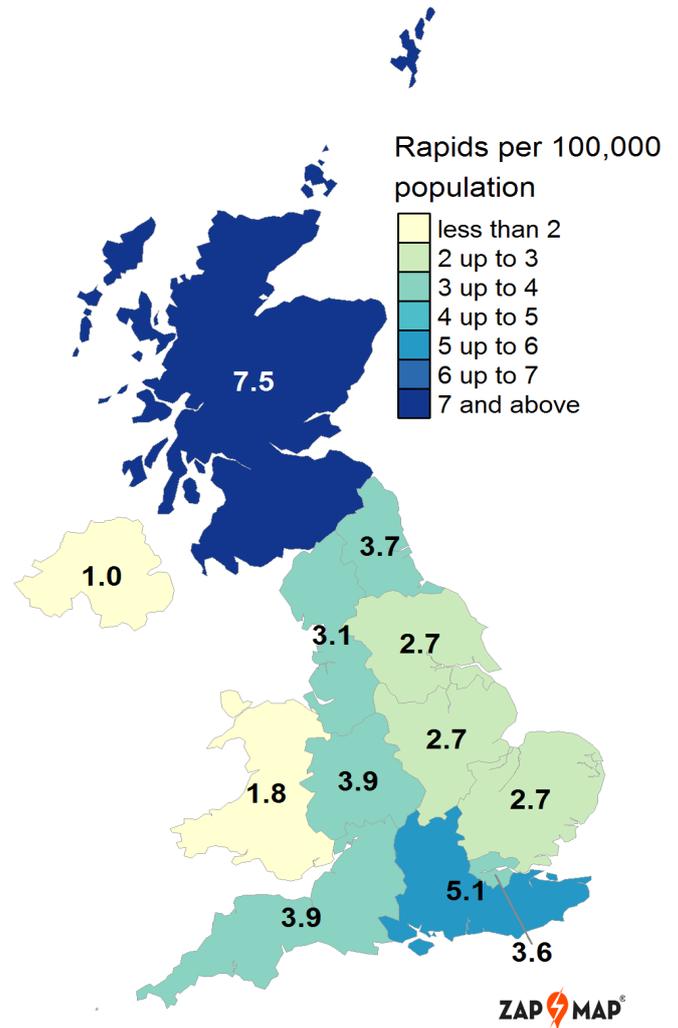
ZAP MAP

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.

A table providing a breakdown of public charging devices in each local authority in the UK is published alongside this report.

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

# Background notes and limitations of data

This is an ad-hoc 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 and represents devices reported as operational at midnight, 1 October 2019. 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 27 September 2019, the National Chargepoint Registry covers 3,875 devices so cannot be used to verify the Zap-Map counts.

'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 Estimates for 2018. The Local Authority administrative geographies are the latest available geographies released on the ONS Geography Portal in June 2019.

This release 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
* Domestics

**Experimental Statistics.** These 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.

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