energy saving trust

Making Mobility Accessible

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12.12.24

Agenda

- Introduction to accessibility and PAS 1899
- Background and guidance, for those new to the meetings
- Discussion

This webinar is being recorded

Afterwards the slide deck will be circulated

Future Webinars

Register via our website

Making EV chargepoints accessible - Energy Saving Trust

https://energysavingtrust.org.uk/event/making-ev-chargepoints-accessible-local-authorities/

- Thursday 16 January 2025 at 2pm to 3pm
- Thursday 20 February 2025 at 3pm to 3pm
- Thursday 20 March 2025 at 2pm to 3pm
- Additional dates for 2025 coming soon.

Guest speakers

- BSI
- AccessAble
- Disability Inclusion Groups
- ChargeSafe

Introduction

Transport Accessibility Gap

The transport accessibility gap currently stands at 38%, which means that disabled people take 38% fewer trips than those without disabilities. This is a figure which has not changed for over a decade.

Socio-economic opportunity

Analysis by the Motability Foundation estimates that the annual socio-economic benefit of closing the entire transport accessibility gap for disabled people in the UK would deliver benefits in the region of £72.4 billion annually to the UK economy.

Autumn Budget

- **£120 million in 2025-26 for new electric vans via the plug-in vehicle grant, which includes wheelchair accessible EVs**

- **£200 million in 2025-26 to accelerate the rollout of electric vehicle charging infrastructure, including funding to support local authorities for on-street charge points in England.**

What do people want to see? *

Working Condition - People want to know before they arrive that the charge point is working

Physical Accessibility

- Size of Parking Bays
- Weight of cables
- Height of payment screen
- Step free access
- Dropped kerbs (where necessary)
- Accessible toilet availability
- Proximity to other facilities – walking / wheeling distance

(* Themes taken from PAS 1899)

What do people want to see?

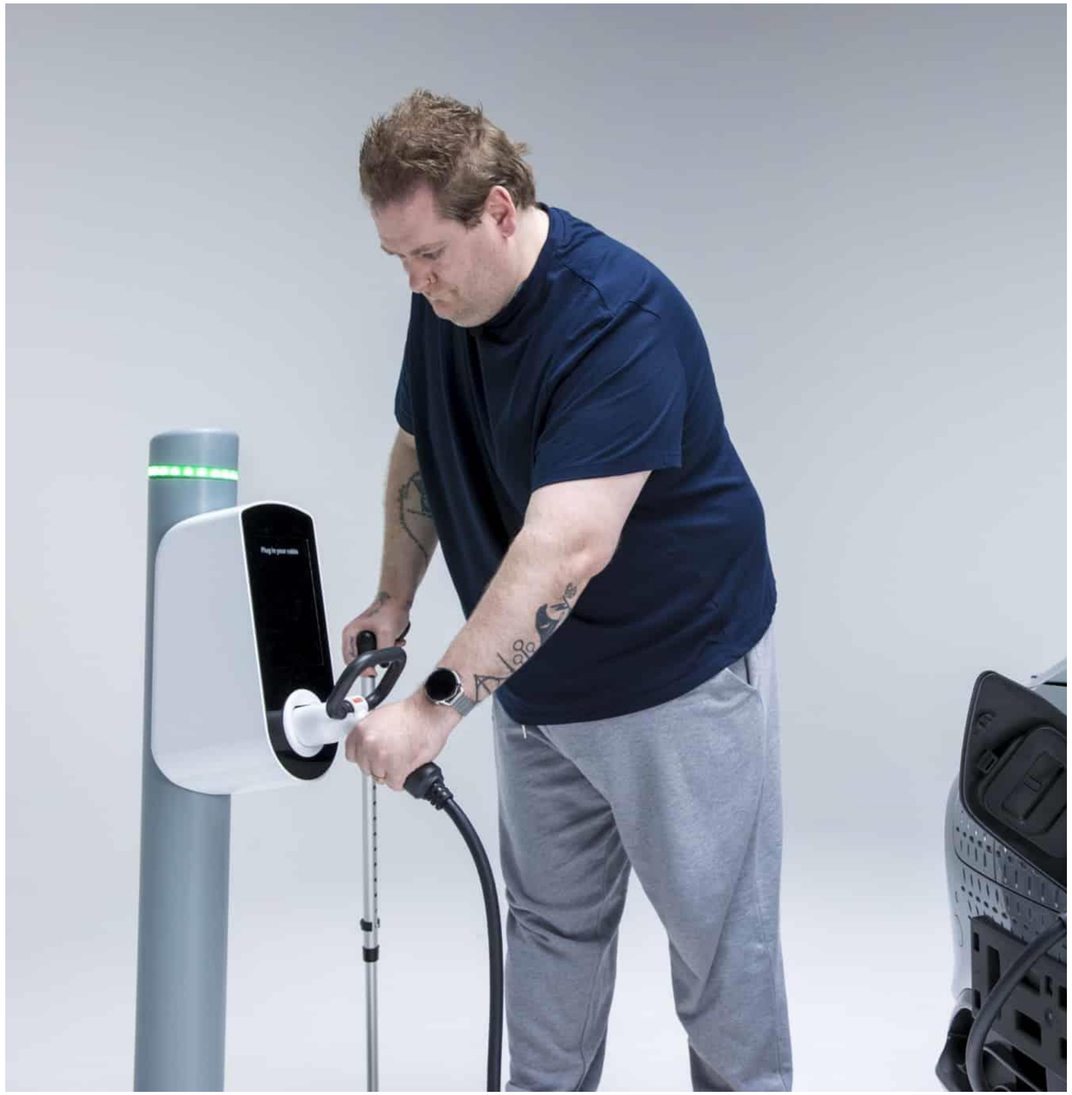
Availability Status - Real time information on whether a charge point is in use or available

Type of Charger – is it Rapid? Fast? Standard? Clear, concise, simple information

Location Details – Is it publicly available 24/7/365? Where exactly is it?

Payment Options – How to pay? Can you use contactless? Is it on a roaming scheme? Do you need an app?

Pricing Information – Where is the price displayed? Is it visible before using the charge point?



PAS 1899:2022 EV accessible charging overview

Charge point design

Provide for a range of needs of users, including disabled people, to achieve inclusive design

Charge point placement and positioning

Must be easily viewed, reached, and operated from a seated or fully standing position

Streetscape and public realm

The built environment around a public EVCP: accessible to all users

Digital platforms and information provision

Using EVCPs is often via smartphone apps – these must be designed for accessibility

https://designability.org.uk/

PAS 1899:2022 Minimum standard

PAS1899 is a non-mandatory standard, with two levels: (1) minimum standard (2) best practice

Minimum Standard

Clause 5
Physical charge point design

- Height of components
- Cables
- Force to use
- Screen/ visual interface

(some charging units on the market do not comply with all parts of this element)

Clause 6
Charge point placement

- Position & orientation
- Smooth, stable ground
- No low-level obstacles
- Bollards/ impact barriers

(this element requires good joint working between the LA, CPO and residents)

Clause 7
Streetscape and public realm around the charge point

- Street furniture
- Level access/ dropped kerb
- Close to amenities/ venues
- Additional assistance

(this element requires good joint working between the LA, CPO and residents)

Clause 8
Digital platforms and information provision for charge points

- Remote digital platform
- Design, contents, composition
- Providing data & information

(some digital platforms & information provision on the market may not comply with all parts of this element)

PAS 1899:2022 Best practice

ANNEX A
Establishing an inclusive & safe environment around public charge points

- Lighting
- Security cameras
- Signage
- Positive feedbacks during charging

ANNEX B
Designated accessible parking bays (OFF-STREET)

Placement of charge points & surrounding environment

- Surface gradient
- Reach distance
- Space in front of EVCP/around EVs
- Wheel stops
- Distance to dropped kerb/level access
- Bays for larger EVs (WAVs, minibuses)

Establishing an inclusive environment

- Overhead weatherproofing
- Road markings
- Signage
- Distance to amenities/ venues

ANNEX C
Designated accessible parking bays (ON-STREET)

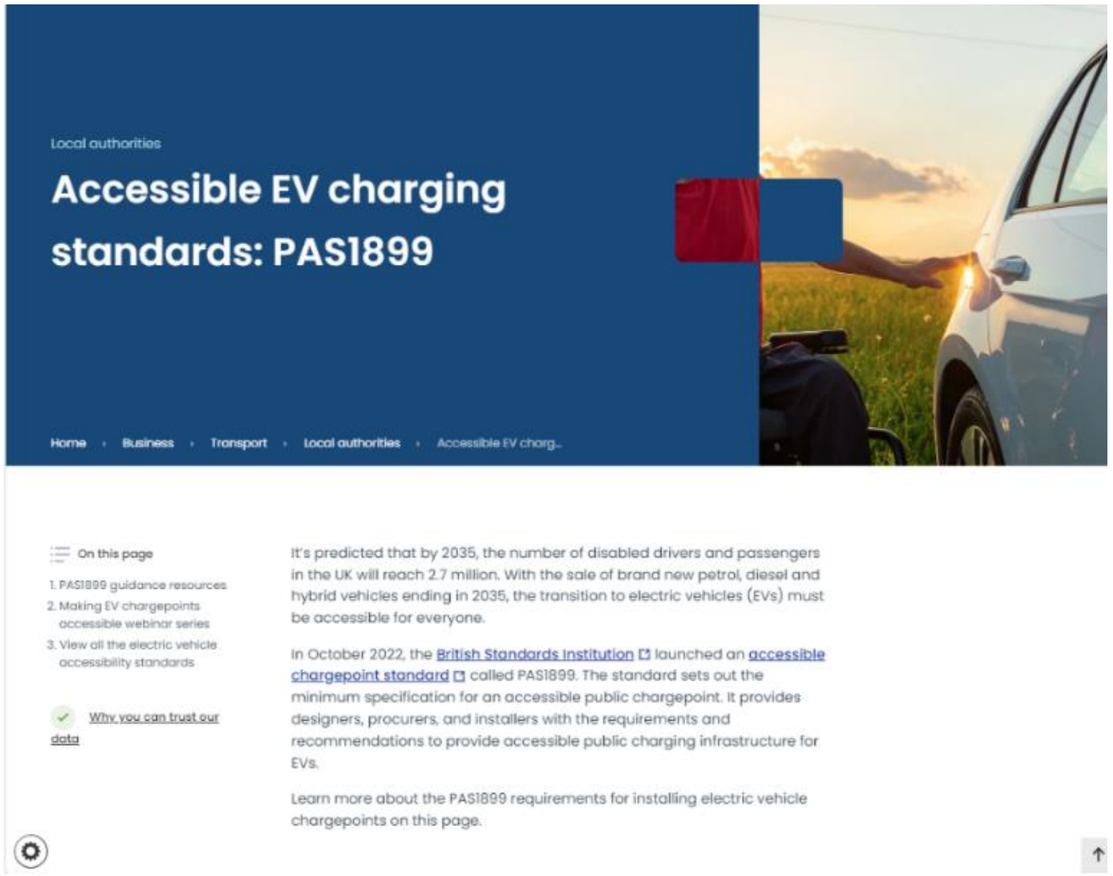
Placement of charge points & surrounding built environment

- Surface gradient
- Reach distance
- Space in front of EVCP/around EVs
- Distance to level access/ dropped kerb

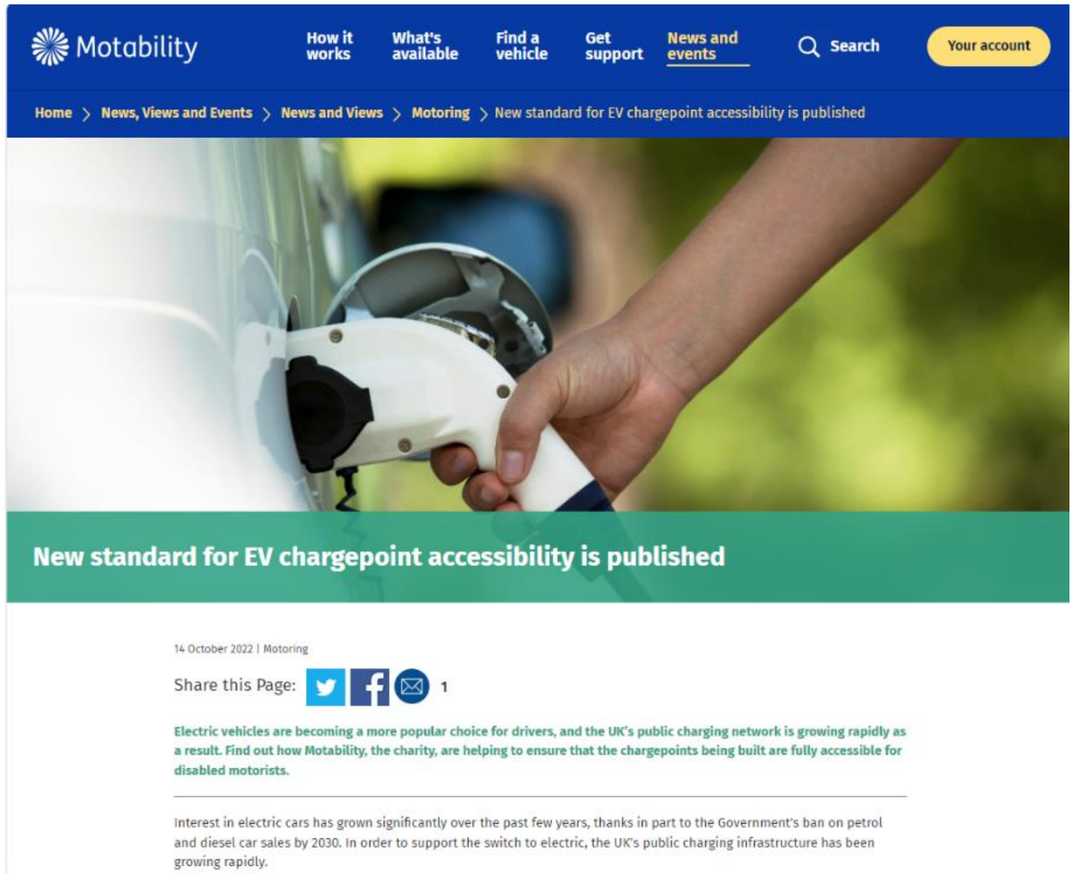
Establishing an inclusive environment

- Road markings
- Distance to amenities/ venues

Useful Pointers



https://energysavingtrust.org.uk/service/electric-vehicle-accessibility-for-disabled-drivers-and-passengers/



https://news.motability.co.uk/motoring/bsi-electric-charging-accessibility-standards/

EVA England
The Great EV Charging Report 2024

Carried out in August / September this year

1700 respondents

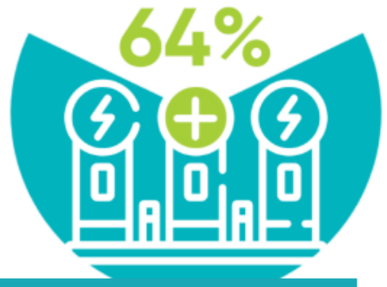
It's an annual survey, allowing them to see behavioural change over time

Source: https://www.evaengland.org.uk/wp-content/uploads/2024/09/EV-Charging-Survey-Report-2024.pdf

Key Stats

91% of EV drivers would not go back to petrol and diesel

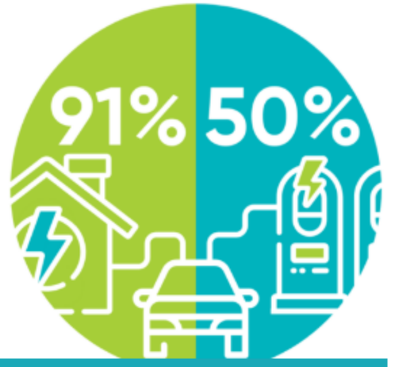
86% find EVs cheaper to run compared to a petrol or diesel car



64% feel the public charging network has improved over the past 12 months

Over half of those without driveways do all their charging via the public network

More than half of new EV drivers are now switching for cost reasons

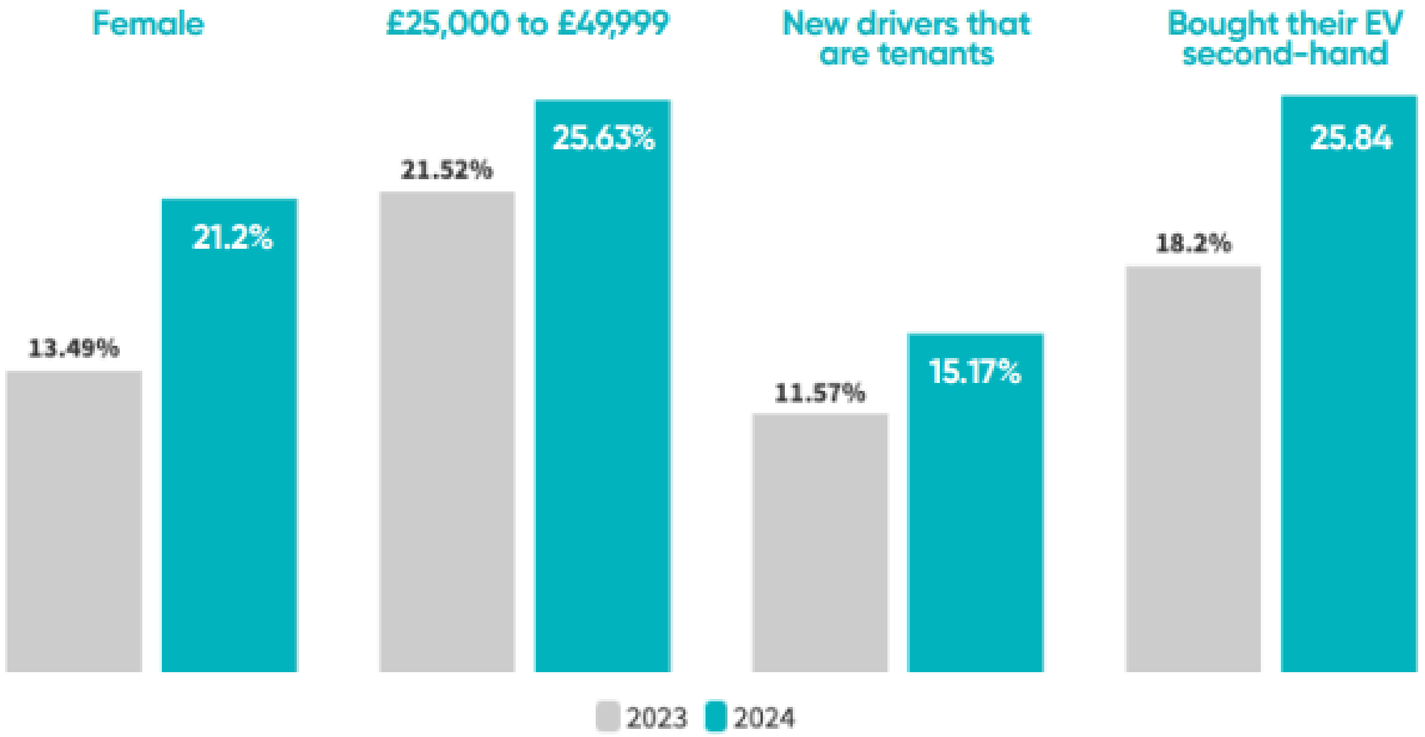


Charging divide: 9 in 10 drivers with home chargers find EVs cheaper - Only 5 in 10 for those using public charging only

New Demographics

A key point to note from this year's survey is that the profile of respondents has noticeably changed from a year ago, where 85% of respondents were male and the most represented household income bracket was 50k-75k per year.

The profile of respondents this year, however, would suggest the 'typical' EV driver is now more diverse, and more representative of the average consumer:



What drivers are calling for next

The survey identified 4 key areas in which policy focus is needed to address barriers to charging barriers:

- Concerted push on public charging
- Accessibility
- Address high public charging costs
- Grant drivers the Right to Charge

Source: https://www.evaengland.org.uk/wp-content/uploads/2024/09/EV-Charging-Survey-Report-2024.pdf

What drivers are calling for next

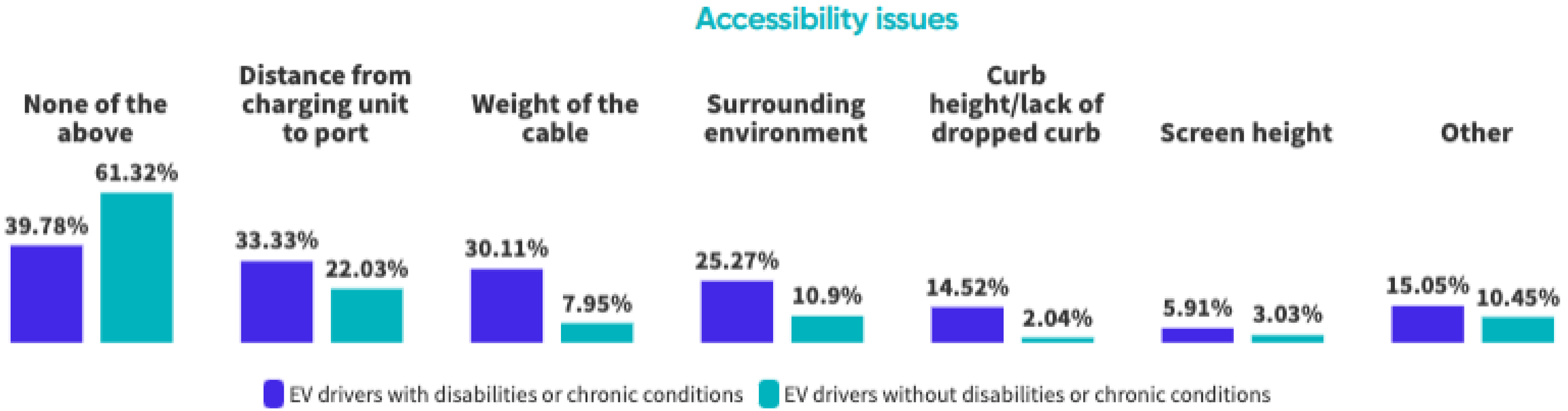
> “ Accessibility: The charging network remains woefully maladapted for disabled drivers, with 60% reporting at least one issue when using a public charger. New installations should be mandated to comply with accessibility requirements – already clearly defined under the PAS 1899 framework. “

Source: https://www.evaengland.org.uk/wp-content/uploads/2024/09/EV-Charging-Survey-Report-2024.pdf

What drivers are calling for next

2. Accessibility

An ongoing major concern for our current national infrastructure is found in its near complete inability to consistently meet the needs of disabled drivers. Currently, just 2.3% of public charge points in the UK are considered fully accessible[11].



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What drivers are calling for next

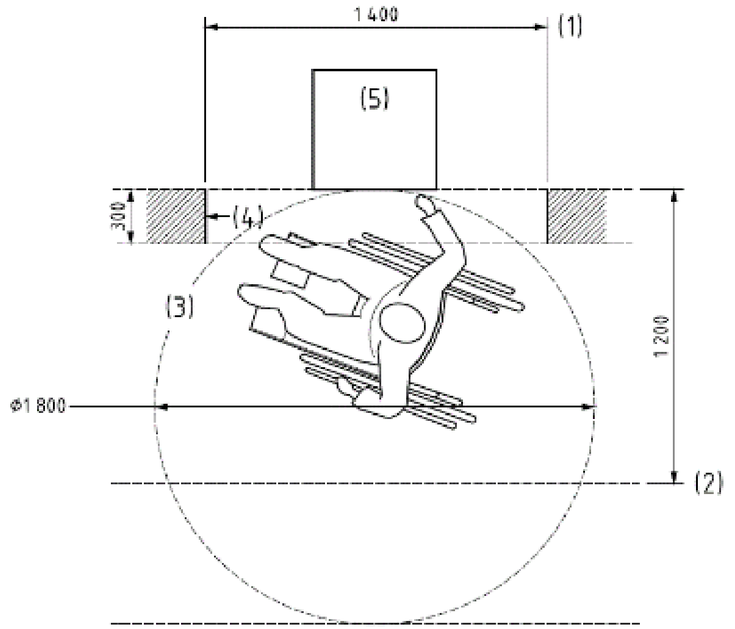
In our survey, 13% of respondents identified as disabled. Of them, 60% reported encountering at least one issue when using a public charger, with 33% identifying the distance from charging unit to port as a key problem when using a public station. Additional, 7% of disabled drivers reported having to leave a charging point due to accessibility issues in the last three months.

As an immediate step, the Government should consider mandating that all new charging installations adhere to PAS 1899 guidelines, the extensive and robust standard introduced in 2022 that would ensure charging points are accessible to all, yet is current scarcely being following owing to its voluntary basis[12].

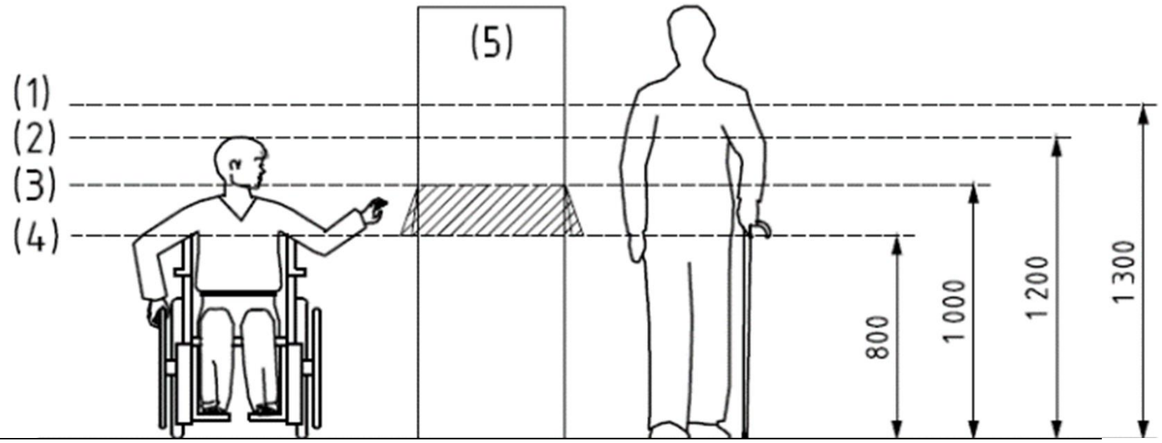
Source: https://www.evaengland.org.uk/wp-content/uploads/2024/09/EV-Charging-Survey-Report-2024.pdf

We need accessible charge points

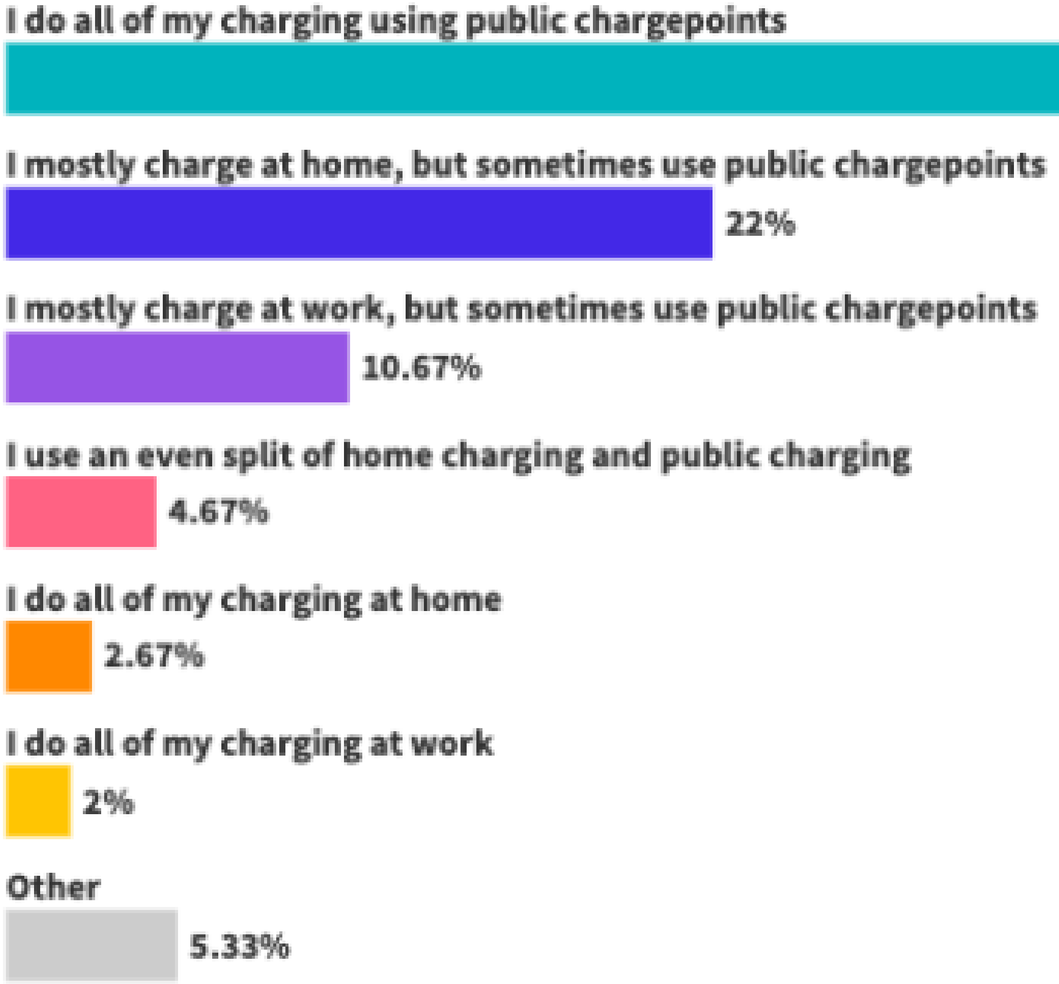
- 1 in 5 people in the UK report living with a disability
- Car travel remains the most popular form of transport among disabled adults.
- Disabled drivers represent five per cent of the driving population, which is around two million people.



- Motability research with Ricardo estimate there will be 2.7 million UK drivers or passengers with a disability by 2035
- Over half of those will be reliant on public charging.



Drivers without off-street parking



53% of drivers who do not own driveways do all of their charging using the public network, compared to just 8% among wider respondents.

As EVs continue taking up a larger section of the car market, the proportion of drivers without access to a private driveway and, therefore, with fewer options to charge at home, will increase.

This will put further pressure on the public charging network, meaning a broader mix of charging solutions are needed beyond public offerings.

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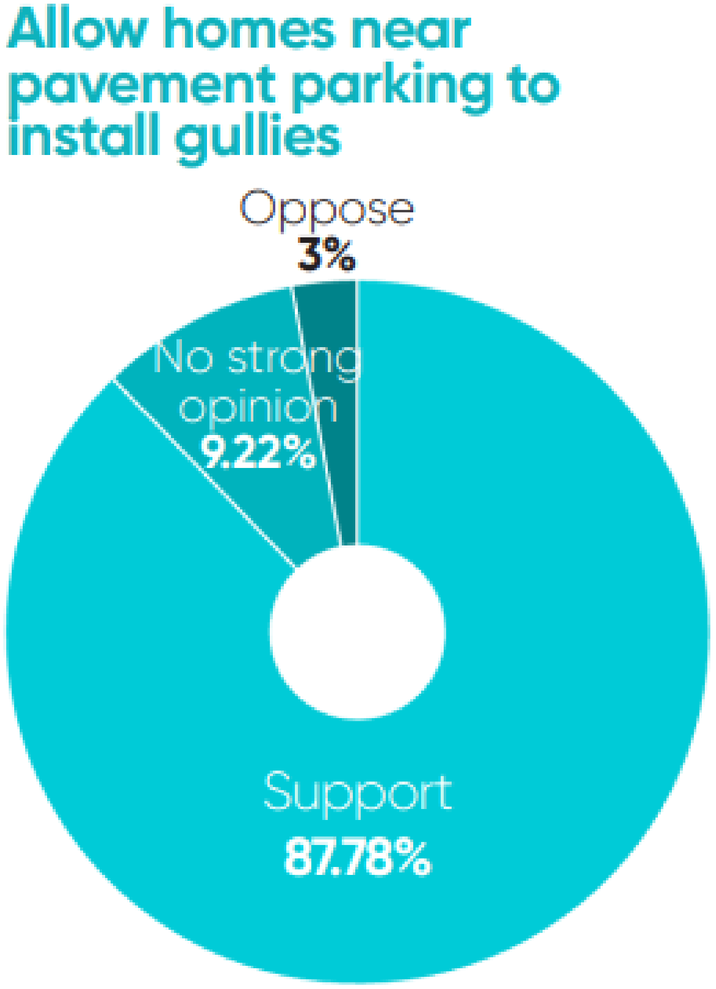
Drivers without off-street parking

Home charging 88% of respondents are in favour of removing regulatory restrictions around gully installations.



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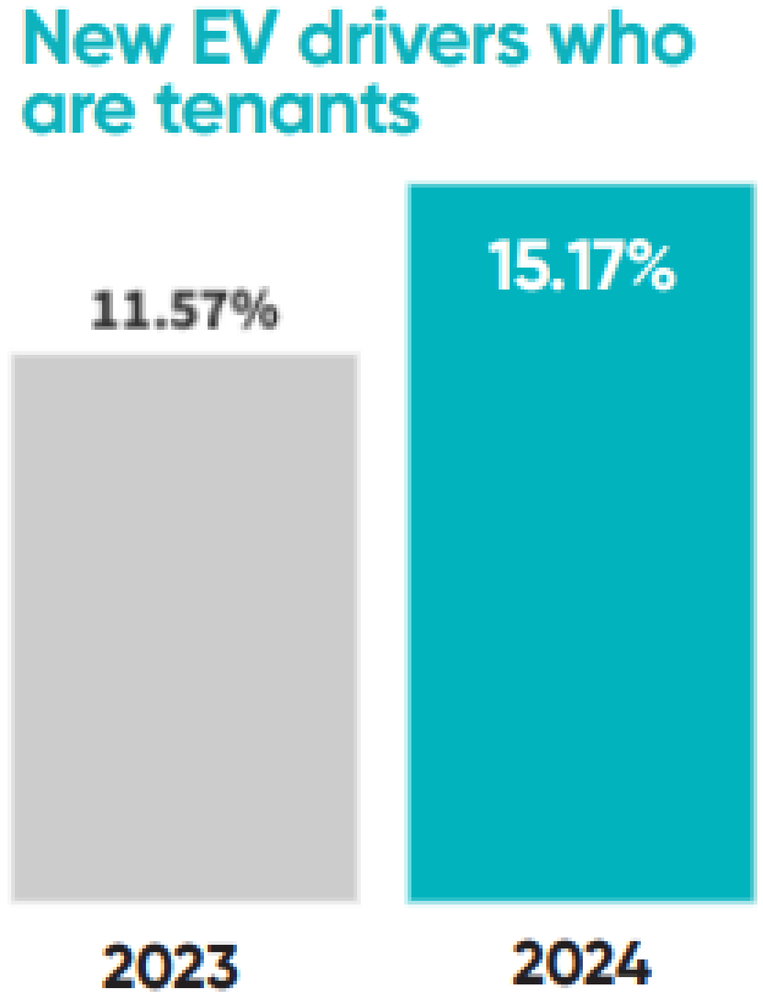
Renters' rights: Support the growing number of EV drivers who rent their property



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Drivers without off-street parking

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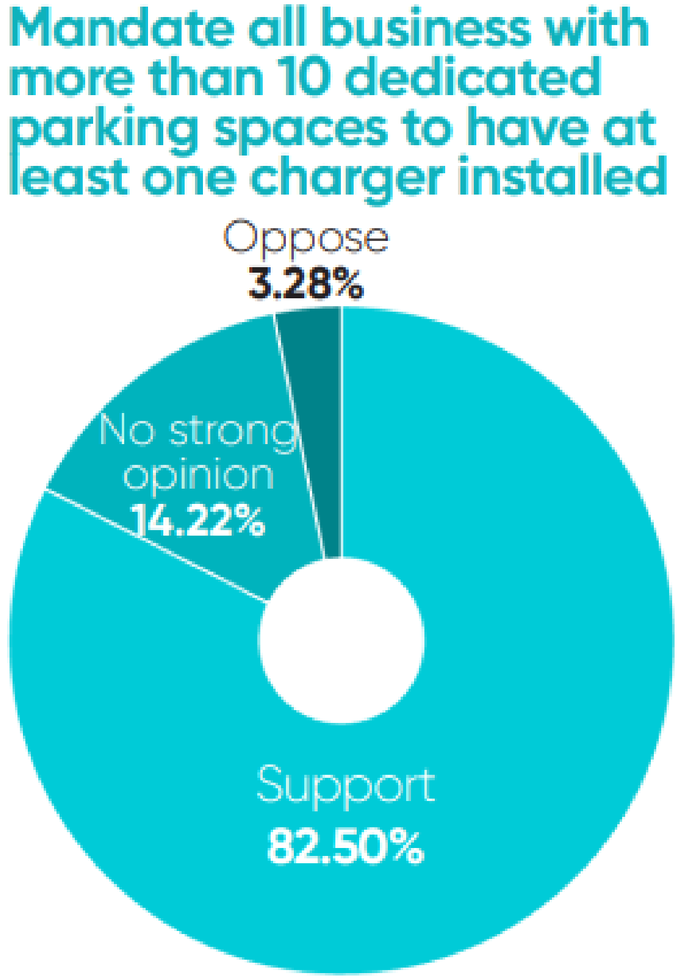
Renters' rights: Support the growing number of EV drivers who rent their property

Workplace Charging: Mandate larger businesses with 10 or more existing parking spaces to provide at least one EV charger



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If you have trouble registering for the Microsoft Teams link, please try using a different browser.

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Thank you

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