

**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/)

<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?

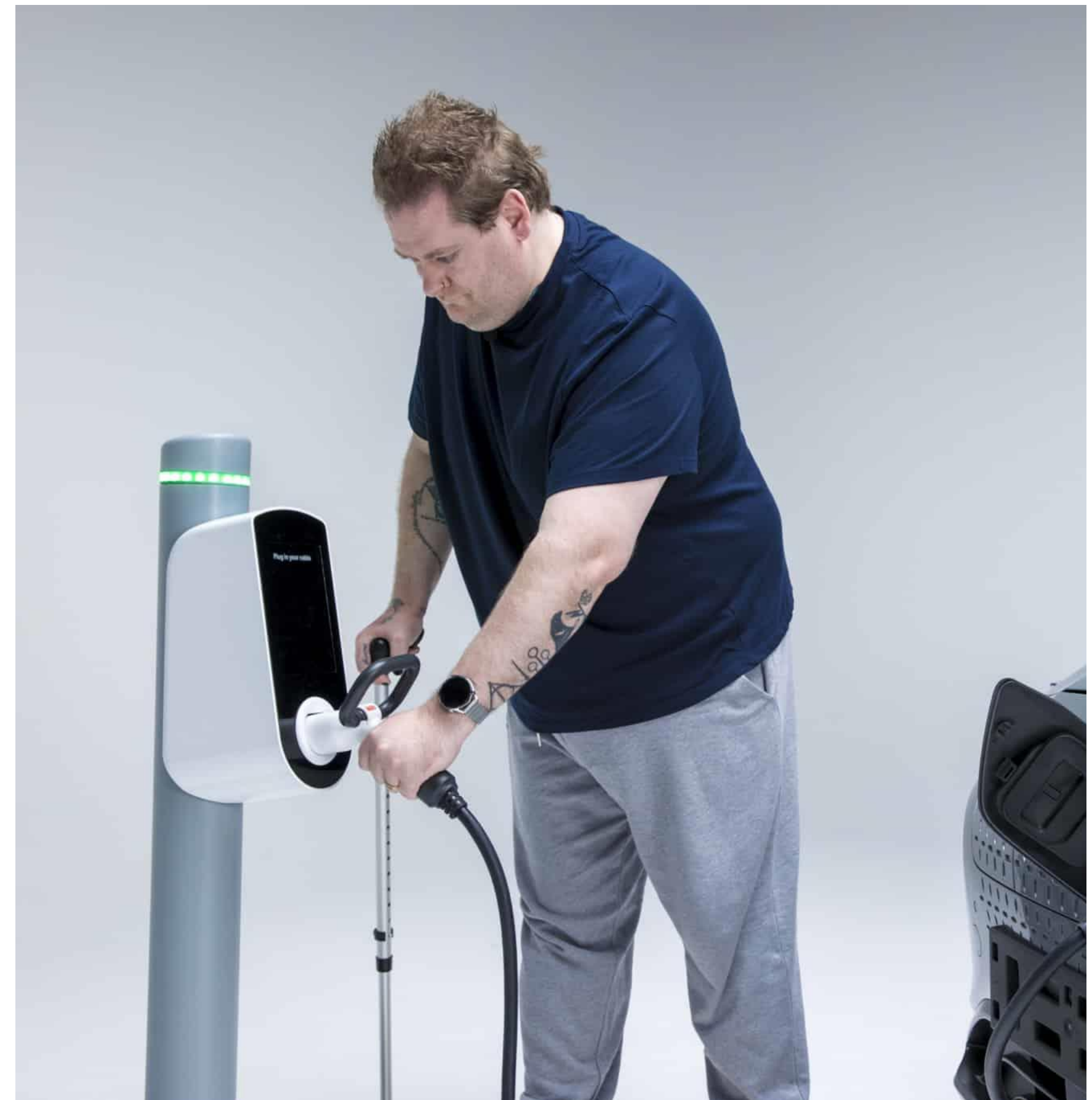
Availability Status – Real time information on whether a charge point is in use or available

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)

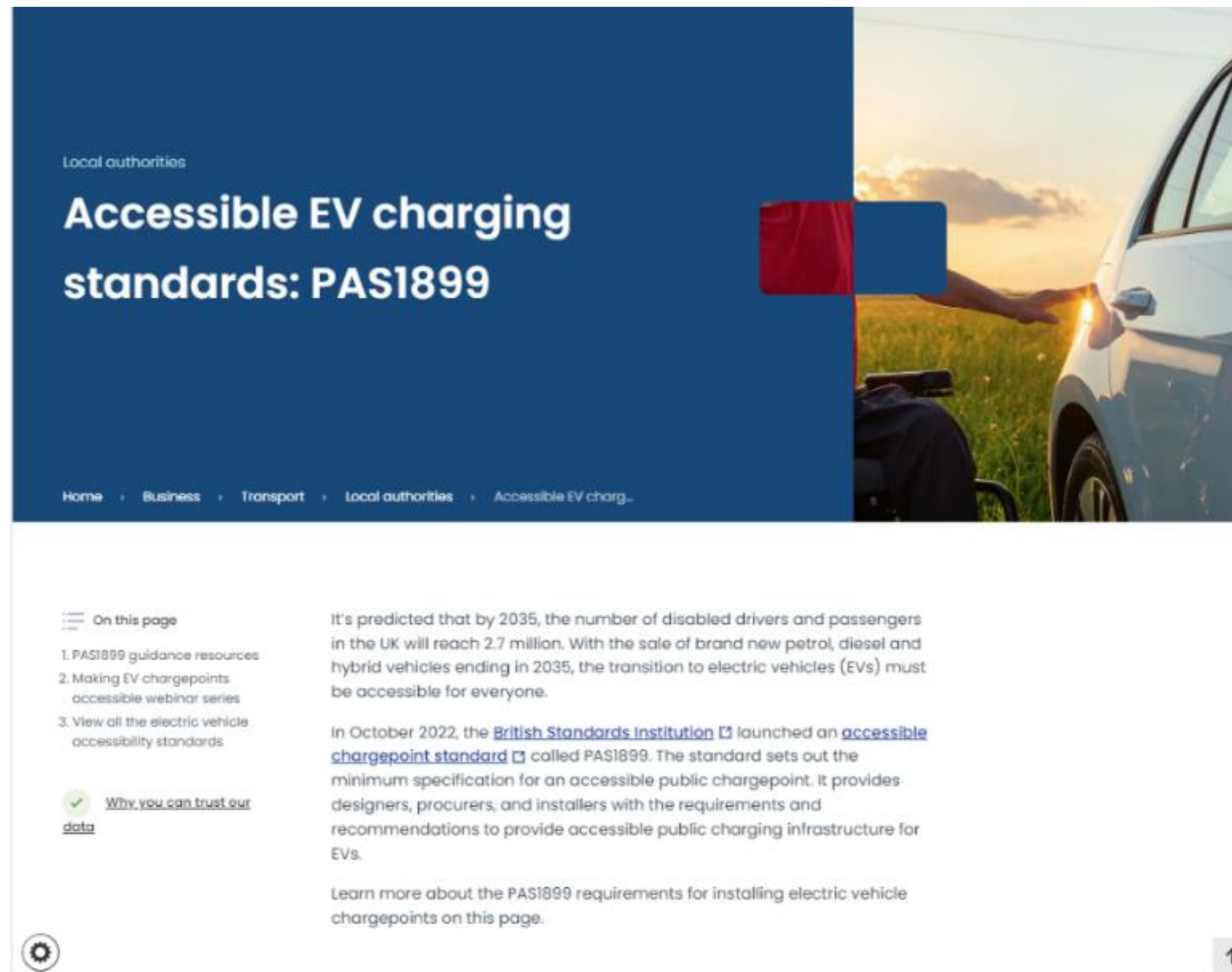
Placement of charge points & surrounding built environment

- 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




Local authorities

Accessible EV charging standards: PAS1899

Home · Business · Transport · Local authorities · Accessible EV charg...

On this page

1. PAS1899 guidance resources
2. Making EV chargepoints accessible webinar series
3. View all the electric vehicle accessibility standards

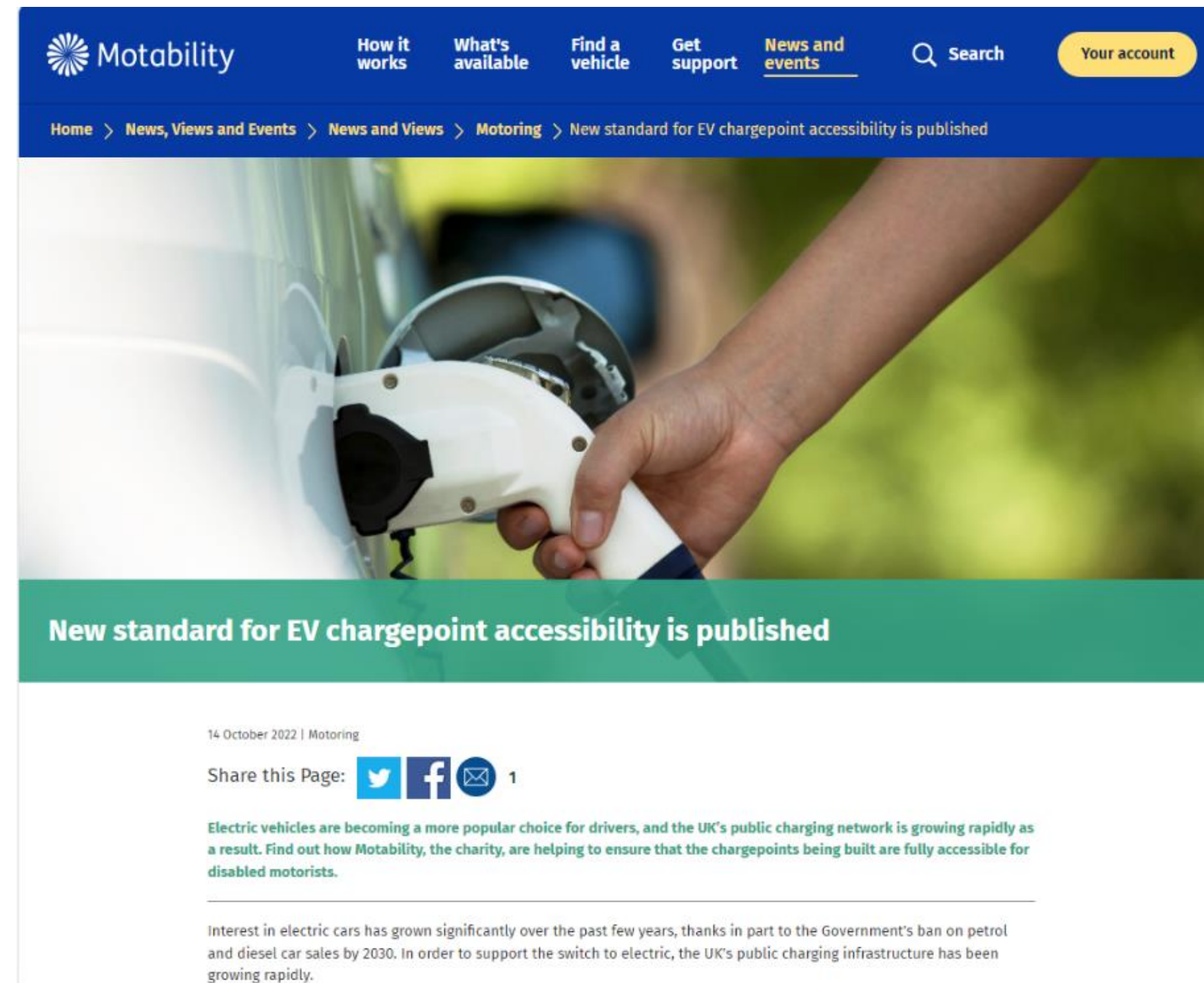
 [Why you can trust our data](#)

It's predicted that by 2035, the number of disabled drivers and passengers in the UK will reach 2.7 million. With the sale of brand new petrol, diesel and hybrid vehicles ending in 2035, the transition to electric vehicles (EVs) must be accessible for everyone.

In October 2022, the [British Standards Institution](#) launched an [accessible chargepoint standard](#) called PAS1899. The standard sets out the minimum specification for an accessible public chargepoint. It provides designers, procurers, and installers with the requirements and recommendations to provide accessible public charging infrastructure for EVs.

Learn more about the PAS1899 requirements for installing electric vehicle chargepoints on this page.

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






Motability

How it works What's available Find a vehicle Get support **News and events** Search Your account

Home > News, Views and Events > News and Views > Motoring > New standard for EV chargepoint accessibility is published

New standard for EV chargepoint accessibility is published

14 October 2022 | Motoring

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Electric vehicles are becoming a more popular choice for drivers, and the UK's public charging network is growing rapidly as a result. Find out how Motability, the charity, are helping to ensure that the chargepoints being built are fully accessible for disabled motorists.

Interest in electric cars has grown significantly over the past few years, thanks in part to the Government's ban on petrol and diesel car sales by 2030. In order to support the switch to electric, the UK's public charging infrastructure has been growing rapidly.

<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>

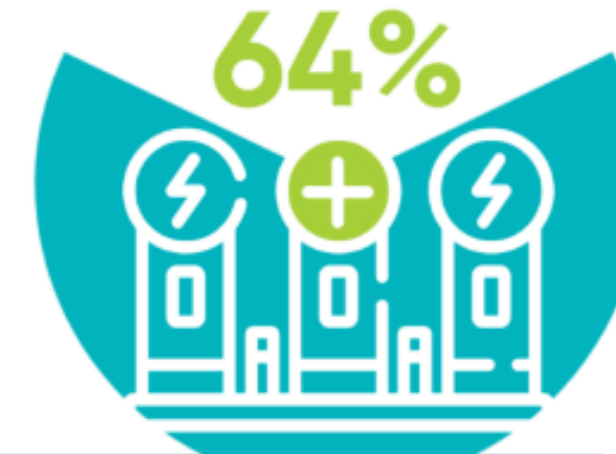
Key Stats



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

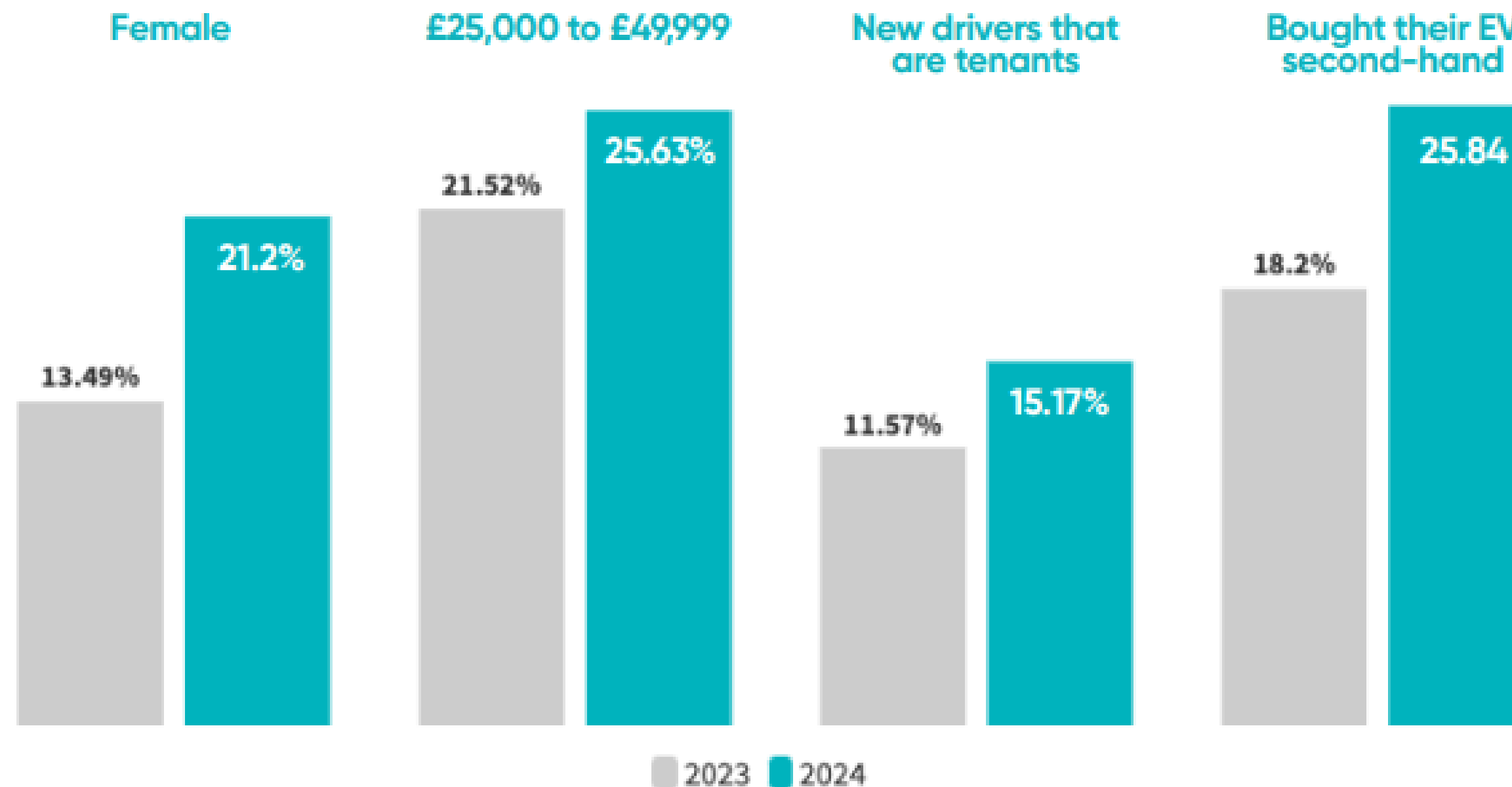


Charging divide: 9 in 10 drivers with home chargers find EVs cheaper - Only 5 in 10 for those using public charging only

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. “

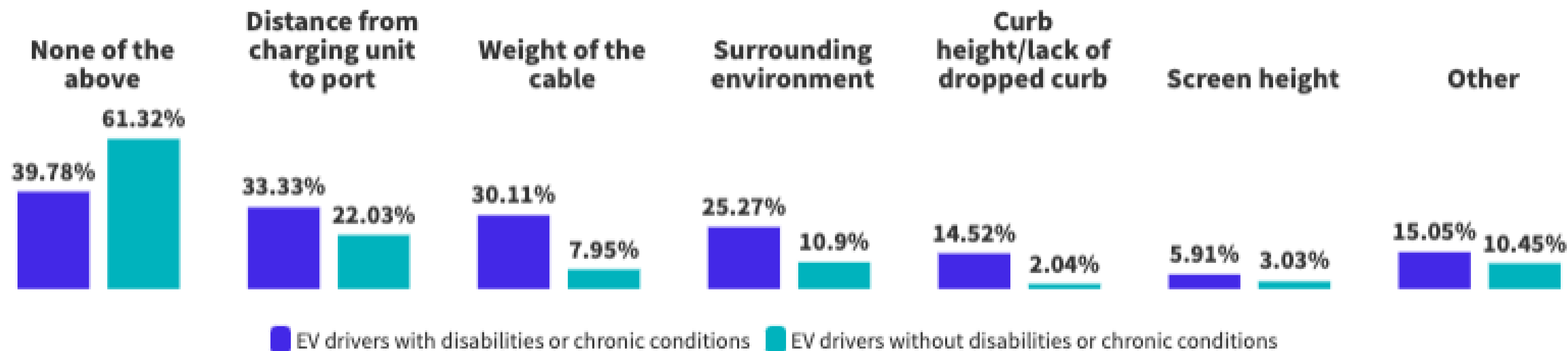
Source: <https://www.evaengland.org.uk/wp-content/uploads/2024/09/EV-Charging-Survey-Report-2024.pdf>

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 accessible¹¹.

Accessibility issues



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

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 basis¹².

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

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- Technical drawing of a hand truck (1) with dimensions and labels:
- (1) Hand truck
 - (2) Total height: 1 200
 - (3) Wheel diameter: $\varnothing 1\ 800$
 - (4) Wheel width: 300
 - (5) Platform width: 1 400

-
- Figure 1 is a diagram illustrating the height of the upper part of the control panel for wheelchair and standing users. It shows a side profile of a person in a wheelchair on the left and a standing person on the right. A vertical line represents the control panel, with a rectangular section at the top labeled (5). Four horizontal dashed lines are labeled (1), (2), (3), and (4) from top to bottom. Vertical dimension lines on the right indicate the following heights:
- 800: From the floor to line (4).
 - 1000: From the floor to line (3).
 - 1200: From the floor to line (2).
 - 1300: From the floor to line (1).
- A hatched rectangular area is shown between lines (3) and (4), representing the control panel for wheelchair users.

Drivers without off-street parking

I do all of my charging using public chargepoints



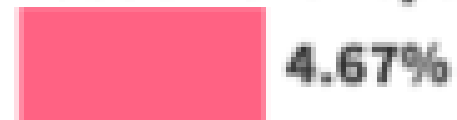
I mostly charge at home, but sometimes use public chargepoints



I mostly charge at work, but sometimes use public chargepoints



I use an even split of home charging and public charging



I do all of my charging at home



I do all of my charging at work



Other



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.

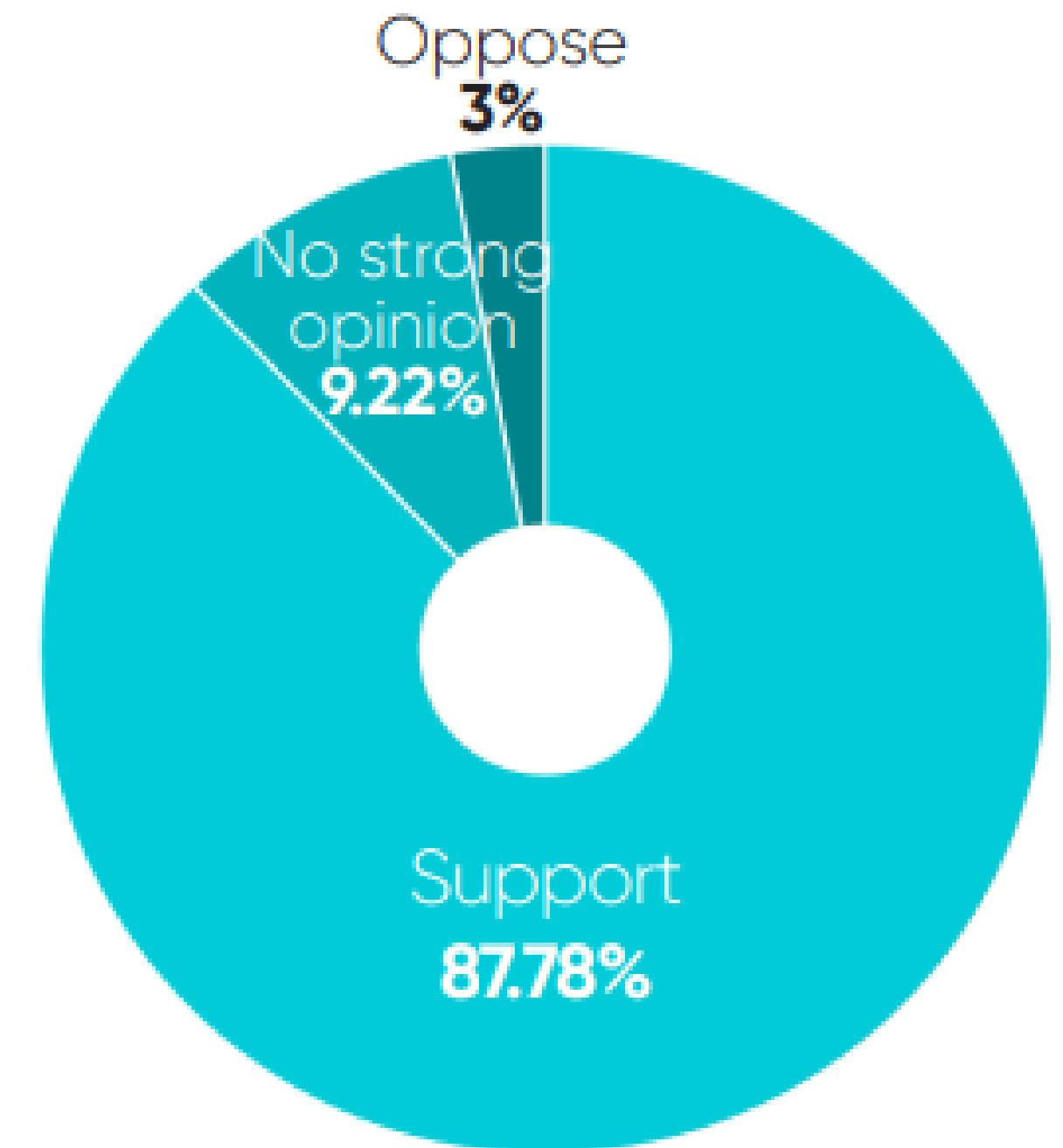
This will put further pressure on the public charging network, meaning a broader mix of charging solutions are needed beyond public offerings.

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

Drivers without off-street parking

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

Allow homes near pavement parking to install gullies



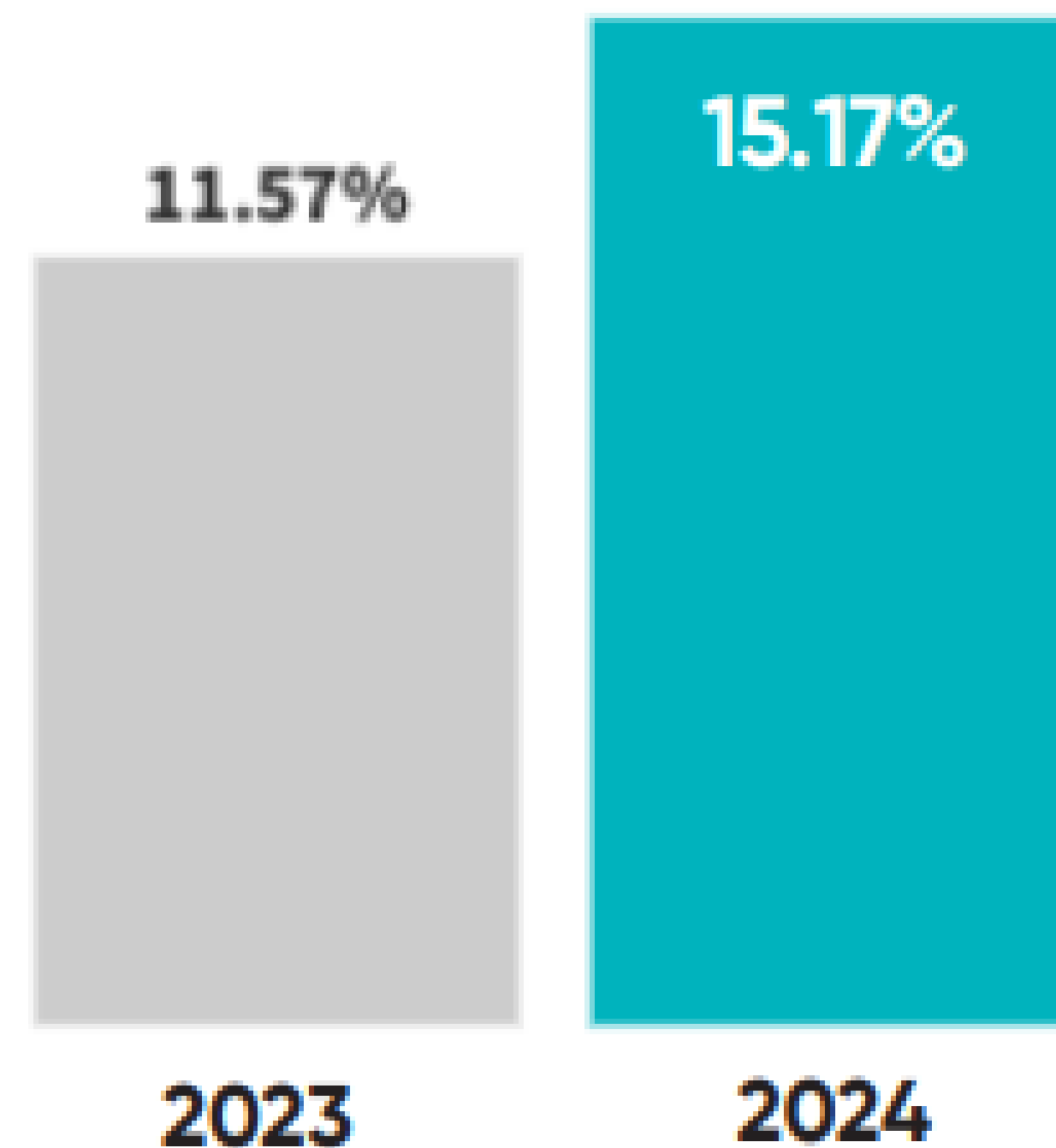
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Drivers without off-street parking

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

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

New EV drivers who are tenants



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

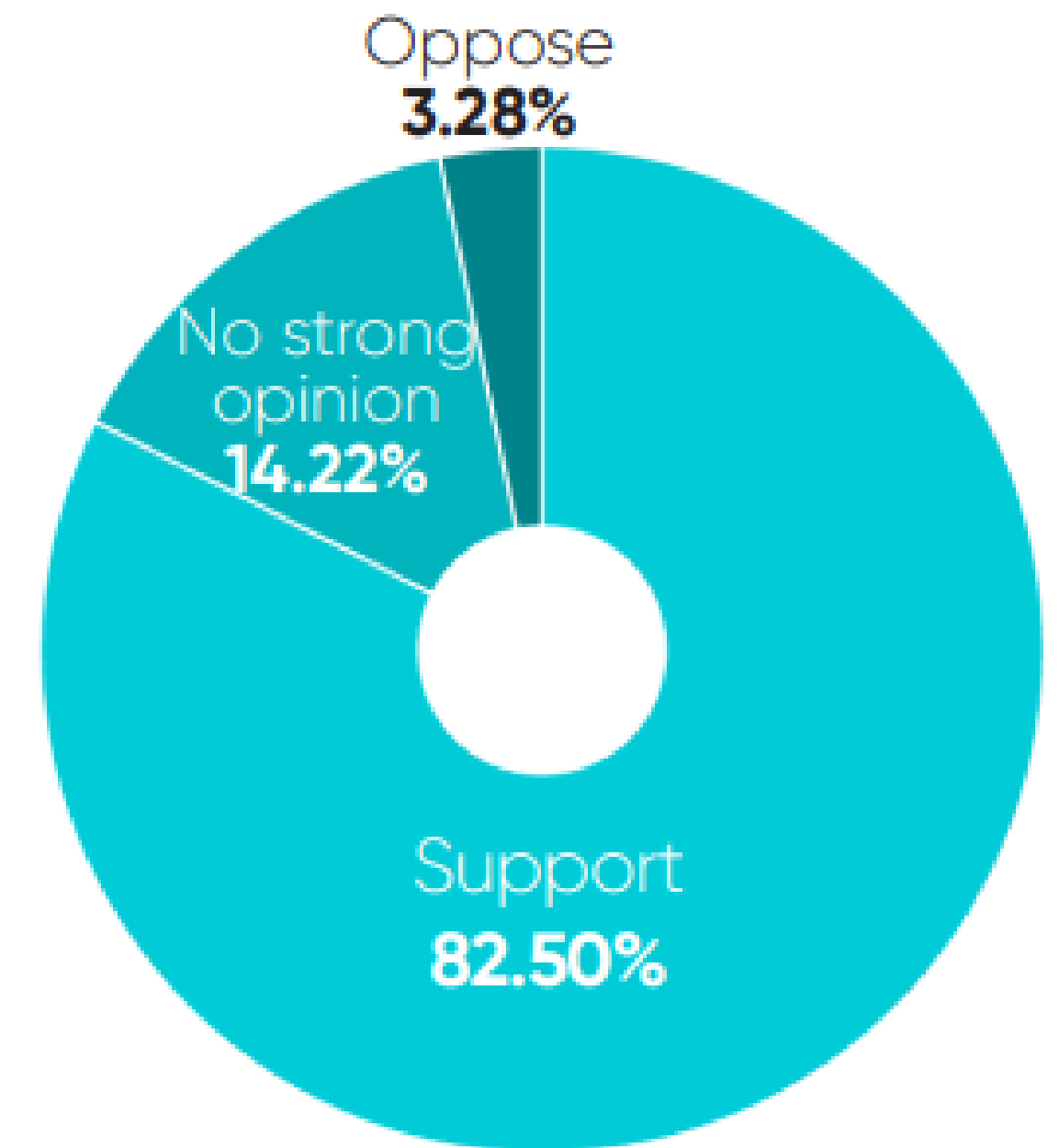
Drivers without off-street parking

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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

Mandate all business with more than 10 dedicated parking spaces to have at least one charger installed



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

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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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