

Summary: barriers and solutions for disabled consumers getting and using electric vehicles

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Introduction

The phase-out of sales of new petrol and diesel cars and vans in 2030 means that a significant number of UK consumers will be switching to electric vehicles (EVs) within a decade. It is important that we assess how all road users can make the transition to electric vehicles (EVs). This includes ensuring EVs are accessible for disabled consumers.

This Energy Saving Trust project's aim is to help facilitate an equitable transition by understanding the barriers that disabled consumers and relevant industries face in transitioning to EVs, to discover what work is being done to overcome these barriers, and to highlight where further work is required.

Energy Saving Trust reviewed existing literature and ran three workshops to better understand the challenges all relevant stakeholders faced.

Information about disabled consumers

In the UK, there are 14 million (21% of the population) (Scope, 2021) people living with a limiting long-term illness, impairment, or disability, with the most common being disabilities that affect mobility, lifting or carrying. Other key considerations for disabled consumers include:

- Over 25% of disabled people say that they do not frequently have choice and control over their daily lives. (ONS, 2011)
- 21% of children in families with at least one disabled member are in poverty, a significantly higher proportion than the 16% of children in families with no disabled member. (Scope, 2019)
- Life costs £583 more on average a month if you're disabled. (Scope, 2019)
- Families of disabled children on average, face extra costs of £581 a month. (Scope, 2019)
- For almost a quarter (24%) of families with disabled children, extra costs amount to over £1,000 a month. (Scope, 2019)

These points are particularly relevant for some of the considerations disabled consumers need to make when switching to an EV. For example, currently, EVs generally have higher upfront costs than their petrol or diesel equivalent models. This can make EVs less accessible for disabled consumers financially, especially if additional vehicle modifications or adaptations are needed.

Key findings: getting and using an EV

When **getting** an EV, the main barriers for disabled consumers included:

- Lack of knowledge on EVs
- Inadequate range of vehicles
- Reliance, or partial reliance, on the public charging network
- Suitability and availability of vehicles
- High upfront costs of purchase or lease of an EV

Disabled consumers will be disproportionately affected by the transition to EVs. Especially those who require vehicle modifications such as wheelchair access. This is due to the complex regulatory and technical challenges the automotive industry face when developing electric wheelchair accessible vehicles (WAVs). Solutions to these barriers are:

- Getting them the right information to allow them to make an informed decision.
- Use the proposed government mandate for EV manufacturers to enhance the supply of vehicle types for wheelchair accessible vehicles (WAVs).
- Consult with, and support, the professional bodies, and associations responsible for the modification and conversion of accessible vehicles.
- Consideration of regulatory and legislative exemptions for certain processes that are inhibiting the development of electric WAVs and certain vehicle adaptations.
- Subsidising costs for consumers who are impacted by lack of suitable vehicles, via a modified mobility allowance or the support of vehicle converters to reduce vehicle cost.

Disabled consumers can also be negatively impacted when **using** an EV, notably when charging their vehicles, with the main barriers being:

- Scarcity of chargepoints
- Chargepoint accessibility issues

Consumers with mobility and dexterity disabilities, again, seem to be the most impacted by using chargepoints due to lack of consideration in the design of both chargepoints and their surrounding environment. This means that consumers who qualify for the blue badge scheme (2.35 million) are more likely to be impacted by using chargepoints than those who do not. Other disabled consumers can be impacted, notably those with sight disabilities or who have learning difficulties.

Chargepoint operators have their own set of challenges that contribute to inaccessible infrastructure, such as restrictions in site modification and planning complexities.

To create a more accessible charging experience for disabled consumers, there are actions required for stakeholders including local authorities, chargepoint operators, distribution network operators, and central government. These include:

- Increasing the number of all chargepoints across the UK to give more options for all consumers to use, including disabled consumers (with disabled bays).
- Ensuring local authorities have disabled consumers as part of their infrastructure planning.
- Implement the forthcoming BSI accessible charging standards, consult with all stakeholders throughout the development process, and support the implementation of them.
- Engage with private landowners to ensure that accessibility considerations are taken in the private sectors' implementation of infrastructure.
- Consideration of support services such as chargepoint assistants or clerks at petrol station forecourts, or roaming charging services like Charge Fairy.
- Support the development and marketing of tools and services to make finding chargepoints easier, such as chargepoint booking or journey planning technologies.

Conclusion

Currently, disabled consumers who have mobility and dexterity disabilities face considerable additional barriers in both the processes of getting and using EVs, especially if that consumer is reliant on public infrastructure and cannot park off-street. However, there are other disabled consumers that will also be impacted, for example those with sight impairments or learning disabilities, who may struggle to operate certain types of chargepoint interfaces. All these groups will need additional support compared to other consumers to transition to EVs.

You can read the full 44 page report [here](#).