

Used EV Market: The Key to Unlocking Net Zero

Addressing barriers to unlock the UK's used EV market

Laden met de standaard
1. Start laden: steek stekker van
laadkabel in laadpunt en voertuig
2. Houd laadpas voor ronde
kaartlezer. Als LED ring blauw
kleurt, start het laden
3. Stop laden: houd laadpas eerst
voor ronde kaartlezer en vervolgens
daarna steekker van laadkabel
uit laadpunt en voertuig

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3. Maak je aan
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A message from Lauren Pamma, Transport Programmes Director.



With transportation responsible for 24% of domestic greenhouse gas emissions, and road transport alone contributing 55% of this total, it is clear that to hit net zero, we need a system-wide shift in mobility patterns. With more than 42.7 million drivers on UK roads, improving access to and uptake of electric vehicles (EVs) is critical to decarbonise road transport. To deliver this change, the EV transition must be accessible and affordable to all.

While EV market penetration is increasing year-on-year, the upfront costs of a new EV remain high compared to internal combustion engine (ICE) vehicles. This makes the transition inaccessible for many households across the UK, despite the total cost of ownership often being lower for EVs. In this context, the used EV market is critical to democratise the net zero transport transition, with the lower prices for used vehicles making the shift more affordable.

The Green Finance Institute has undertaken qualitative and quantitative research to explore the used EV market in the UK. Our research has found that amongst those who would be willing to buy an EV, 73% would buy a used one, demonstrating the opportunity to scale EV uptake across the country.

This work also highlighted that for drivers who are still hesitant about used EVs, their primary concerns are around battery longevity, affordability, and the availability of charging infrastructure. But for many, these concerns would be quelled through solutions such as battery health certificates, access to salary sacrifice schemes, and total cost of ownership calculators. The support for these solutions demonstrates that if we can boost consumer confidence, we can accelerate the EV transition through the used market.

If we are going to reach net zero on our roads, a thriving used market for EVs is a critical piece of the puzzle for a just transition.

Introduction.

Research commissioned by the Green Finance Institute (GFI), and conducted by Opinium, surveyed **over two thousand UK drivers** to gain insight into the current state of the second-hand electric vehicle (EV) market, its role in the UK's EV transition, and what is required to accelerate the market to deliver on the UK's climate goals.

Supplemented by contributions from **35 leading organisations**, including car dealerships, car finance lenders, and lease companies, the findings clearly demonstrate strong demand for EVs, with 61% of non-EV drivers – over **25 million UK drivers**¹ – indicating they would buy an EV today.

Of these drivers, almost three-quarters of them (73%) – some 18.3 million UK drivers – would buy a used EV², showing massive demand for the growing used market. However, for the other 27% – **equivalent to 6.75 million UK drivers**³ – more work needs to be done. Key barriers and knowledge gaps need to be addressed to convince them that switching to a used EV is in their interest.

“Once you're driving an EV, you see so many more benefits. It's not just about the carbon savings, or even cost. It's reliability, they don't break down as often. And even the comfort, they are smoother, they are quieter.”
– **James Court, EVA England**

Our research indicates a number of measures that can be taken to improve consumer confidence in used EVs and develop the used market:

- 1 Improve confidence around battery health, through certificates and guarantees.**
- 2 Make sure used EVs are affordable at the point of sale through financial products, as well as when considering total cost of ownership.**
- 3 Deliver charging infrastructure across the country.**
- 4 Ensure access to reliable information about both new and used EVs.**

Addressing these barriers will democratise EV ownership by improving confidence in the used market, opening EV ownership up to a greater swathe of the population who may be hesitant.

These measures could help both those who want to go electric today but are reluctant to buy a used EV, and also the 25% of drivers who currently have no plans to buy an EV – **a potential combined market of almost 17 million UK drivers**⁴.

With thanks to all the contributors to this report:



Better battery transparency could alleviate drivers' reliability concerns.

Challenge

Fear of poor battery health is the single biggest barrier preventing the used EV market from taking off.

62%

of those who said they wouldn't buy a used EV cite battery lifespan as a reason why.

Traditional concerns, such as cost and access to charging infrastructure, ranked significantly lower. But there is growing evidence that EV batteries maintain good health over far longer periods of time and mileage than this⁵. This is very different to consumers' experience with other battery products such as smart phones.

On average, EV manufacturers guarantee their batteries for 103,000 miles or eight years⁶, whichever comes first.

These consumer concerns were echoed by industry experts. According to the dealerships involved in this research, battery lifespan is consistently found to be the top concern amongst consumers in the context of used EVs. The vast majority of dealers said they need more information on battery degradation so they can give customers more complete and reliable information about batteries.

"Battery life is quite a big issue when selling a used EV, but not a problem with new EVs." – Dealer, South West England

Solutions



Battery Health Certificates & Battery Value Guarantees

Battery Health Certificates (a standardised battery health certification scheme for used vehicles) or an extended Battery Value Guarantee (a mechanism for the battery within an EV to have a guaranteed end-of-life value) were ranked the top two solutions that would encourage drivers to buy a used EV (31% and 30% respectively). A Battery Passport system – which would give second-hand buyers accurate knowledge of their prospective battery's life to date – has also started to gain some support (13%) amongst drivers.

"Having some kind of paperwork that a professional has looked at and confirmed that the battery doesn't have a problem would be great." – Fiona Love, EV Driver

Such products – already being developed by the GFI in partnership with the public and private sectors – are equally as important for dealerships. All of the 21 dealerships that contributed to this report agreed that a Battery Health Certificate or Battery Value Guarantee would provide confidence that the remaining battery health is adequate when selling a used EV.

"There needs to be greater consumer education and initiatives to support consumer confidence, including Battery Health Certification." – Lee Hamlett, KINTO UK Limited

This, coupled with education on the quality and longevity of EV batteries, could provide a significant boost to demand in the used EV market.

Reconceptualising the cost of EVs.

Challenge

Much like internal combustion engine (ICE) vehicles, the overall running costs of EVs can vary. However, EVs are likely to cost drivers less over its lifetime and the course of ownership. Typically, the cost of electricity is less than that of petrol or diesel, and EVs require less maintenance than ICE counterparts⁷.

Despite this,

27%

of drivers who said they wouldn't buy a used EV cited cost as a major factor, and an additional 27% cited the cost of maintenance.

This represents a disconnect between drivers' perception and the realistic costs of running an EV – understandable at a time of rapidly increasing living costs.

"Even with the cost-of-living crisis and the price of energy going up, we have saved money. On my app, I charge the car overnight between 2am-7am, when it's cheaper to charge the car, and sometimes it doesn't cost anything to charge the car up."

– **Fiona Love, EV Driver**

Tackling this barrier is crucial to scale and promote the used EV market and ensure electric transport is affordable and accessible to all.

It's true that upfront costs do remain higher for used EVs than their used petrol or diesel counterparts. Consumers focus on the purchase cost, while overall ownership costs – which are typically lower – are forgotten or not taken into account when purchasing decisions are made.

'Transition costs' – hidden one-off costs associated with switching to an EV for the first time (e.g. installing a home charger) – also act as a deterrent. Over a fifth (21%) of drivers indicated that the ability to finance a home charger would encourage them to switch to an EV.

"The biggest barrier to used EV adoption is probably affordability. For so long, the focus has really been on subsidising and incentivising new car EV purchases, and that's made it quite a challenge for consumers in the used EV space for adoption."

– **Katie Hayes, Evolution Funding**

One under-appreciated saving is on maintenance.

Of the drivers considering making the switch to an EV:

27%

of drivers still worry about maintenance costs



37%

of drivers would like to have maintenance included in their monthly leasing cost



43%

Despite these concerns, overall average maintenance bills (including MOT tests, servicing and repairs) cost up to 43% less for EVs compared to other fuel types⁸. This is due in part to the fact that EVs have fewer moving parts than their ICE comparators, and therefore, lower maintenance costs.



Solutions

GFI has identified a number of market interventions that can tackle the perceived barriers of purchasing costs, maintenance and running expenses.

"There's more to the cost of the vehicle than upfront cost, and that total cost of ownership has lots of elements to it that we really enjoy explaining to the customer because when you do that zoomed out view of overall cost, they are cheaper, by far, than a comparable ICE vehicle." – Oliver Boots, Octopus EV

Total Cost of Ownership Calculator

Central to overcoming the challenges associated with price competitiveness are (1) addressing the knowledge gaps around the cost of EVs and (2) shifting consumer focus to a holistic, cost-over lifetime view, rather than just upfront cost.

Total Cost of Ownership Calculators exist in the market, offered by organisations such as [AutoTrader](#) and [New Automotive](#)⁹. These calculators show the all encompassing costs of owning each vehicle with everything included, from running and maintenance costs, to charging or refuelling costs, to the cost of financing, and can even include transition and tax costs.

They enable consumers to adopt this holistic approach to evaluating the cost of driving an EV, unlocking calculations that account for purchase costs, maintenance and other running costs such as fuel versus electricity prices. They are incredibly useful tools to help make clear that EVs are cost competitive, and often even cheaper, than ICE vehicles.

However, there isn't a standardised way of calculating the total cost of ownership, making it difficult for consumers to trust the calculations across metrics and calculators. To boost consumer confidence and paint a clear picture of the total cost of ownership, we need agreed definitions and standardisation of metrics to enable real comparisons.

Salary sacrifice

Salary sacrifice can save drivers up to 40% on the monthly cost of an EV¹⁰ by allowing drivers to save on tax and national insurance. These schemes require collaboration with employers, through whom such measures are provided.

Our survey shows that

54%

of drivers aren't offered salary sacrifice through their workplace, 19% of those who are offered it don't use it, and 14% don't know if their employer offers it.

Improving awareness and availability of salary sacrifice schemes can contribute to lowering the monthly costs to transition to an EV, making the switch more financially viable for a larger number of drivers.

Multiple products in one monthly payment

The higher purchase cost of EVs, alongside the general trend of usership over ownership, is pushing more and more drivers to lease or use finance to access a car. Over 83% of drivers in total are now using a form of finance to buy their vehicle¹¹. At the same time, the need for a good overview of total ownership cost and 'transition costs' of accessories such as home charging, are driving consumers to look for finance packages that include multiple products in one simple monthly payment.

"Not everybody has the time or knows where to look for the right information. If it came as a package, I certainly think that would be useful. Had that been in place, we would have looked at it for sure." – Fiona Love, EV Driver

Our survey shows that 76% of drivers would want to have additional services and products included in their monthly payments, with 43% wanting home charging installation specifically included. Innovative financial products for second-hand EVs can reduce cost as a barrier to adoption and facilitate the transition by simplifying the customer journey.

Increasing public charging infrastructure and transparency around charging costs would boost EV uptake.

Challenge

The number of public charge points has grown by 523% to over 40,000 chargers in the last six years alone¹², with the government targeting 300,000 available chargers across the UK by 2030¹³.

Despite this, over a third of drivers (34%) still see access to charging infrastructure in areas where they live and drive as a barrier, calling for more charging infrastructure before they make the switch.

"UK EV infrastructure is still a significant customer concern and is putting off the switch." – Captive Finance Lender

There also remains clear information gaps on the understanding of the cost of electricity at public charging networks compared to that of petrol or diesel, and how this translates to a comparable pence per mile driven. 43% of drivers surveyed said a better understanding of the cost of public charging would encourage them to make the switch to an electric vehicle.

"One of the biggest issues currently is the cost of electricity versus petrol and diesel. This is especially noticeable if charging away from home." – Dealer, South West England

Dealers also require more information on charging costs, with 10 out of the 21 dealerships involved in the research saying they need more information to suitably advise their customers on how to charge their vehicles, and what the associated costs are. While challenges with charging infrastructure are not unique to used EVs, it remains one of the top barriers to EV uptake on the whole.

"Charging points and range are the biggest issues for customers. We only sell and drive Tesla vehicles as they are the only manufacturer we have confidence in."
– Gavin Leach, BFC Motor Group, Financial Services

Solutions

A recent survey by Zap-Map showed that

90%

of EV drivers make use of public charging infrastructure¹⁴. The current rate of VAT on public charging (20%) – the so-called 'pavement tax' – is four times that of home charging (5%).

Cutting the rate of VAT on public charging to match that of home charging will be central to driving costs down for those reliant on the public charging network and so ensuring that all drivers can make the switch to an EV, an argument recently laid out in full by FairCharge in their [letter to government](#)¹⁵.

As government grants for the installation of home chargers are now limited to those living in flats or a rental property, **the average cost of installing a home charging unit lies anywhere between £800–£1,500**¹⁶.

Consumers today are therefore interested in spreading out the cost of charging installation, rather than paying the cost upfront. Offering a combined monthly package, inclusive of both vehicle and home charging installation, will ensure that drivers can easily and affordably install chargers at home where possible. This will be key to building consumer confidence in the affordability of driving an EV.

More broadly, drivers are reliant on charge point operators, government and the finance community to ensure public charging keeps pace with EV uptake and is available for potential EV drivers wherever the need is. The GFI outlined a number of interventions that could supercharge this rollout in our ['Road to Zero'](#) report¹⁷ – from Utilisation Linked Loans and Demand Aggregation Finance, to Local Climate Bonds.

Education, Education, Education.

Many of the barriers to a thriving second-hand EV market mentioned in this report stem from a disconnect between perceptions about EV costs, reliability, accessibility, and the reality.

Whether it's the perceived unreliability of long-term battery life compared to their real-world longevity, or the lack of understanding of the total cost of ownership; many of these challenges can be overcome with wider access to reliable information.

For all these challenges – batteries, charging, cost, reliability – one actor stands out as having the greatest potential to address education gaps – dealerships. Outside of personal research and family & friends, dealerships are the most trusted source of information on EVs (27%). They also act as the intermediaries between lenders and drivers, with dealerships being the most common source for information on financing options for car purchases (33%).

By recognising the unique and trusted position of dealerships on the front line of the used EV market – and by empowering them to educate the public, bust the damaging myths surrounding EVs' total costs, and drive the change of mindset towards calculating costs holistically at the point of purchase – the second-hand EV market can thrive.

However, dealerships are also in need of more information on electric vehicles. Just two out of the 21 dealers involved in this research felt they had enough data on battery degradation, with the rest in need of more information. Other areas where dealers identified more information would be useful include charging costs (including smart charging), maintenance and repair, and location of charge points. Ensuring that such information is made widely available amongst dealerships will be key to giving confidence to both dealers and consumers in the second-hand EV market.

This report has outlined some of the tools – for example a Total Cost of Ownership Calculator – that can help empower dealerships to champion the benefits of used EVs. Additionally, earlier this year the GFI produced a [Guide to Electric Vehicle Infrastructure](#)¹⁸ – a need-to-know guide on all things EV charging.

The GFI invites dealerships, lenders and other industry players to get in touch to help advance these solutions and grow the used EV market – a feat that could see an additional

17 million
UK drivers make the transition to electric road transport⁴.



More EV charge points nearer people's homes



Financial Support



Battery Health Certificate/Battery Value Guarantee



Total Cost of Ownership

Sources

- ¹ Extrapolated from survey results, DVA and DVLA data. Calculations available on request.
- ² Extrapolated from survey results, DVA and DVLA data. Calculations available on request.
- ³ Extrapolated from survey results, DVA and DVLA data. Calculations available on request.
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- ¹⁵ FairCharge (2023) MPs support axing Pavement Tax <https://www.faircharge.co.uk/post/our-call-to-axethepavementtax>
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