



# The Electric Opportunity

Mapping the habits, preferences,  
and needs of electric vehicle drivers

March 21



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# Foreword



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# Foreword

The rise in electric vehicle (EV) ownership is set to profoundly change the relationship between customers and retailers and spark new expectations that businesses must be aware of. At the forefront of those expectations is refueling.

EVs are set to change when, where, and how owners refuel. But there are vital questions yet to be answered: will people prefer to charge their EVs at home, or out and about? How often will people feel the need to charge their EVs? Will this behavior change as people own an EV for longer?

Importantly, what will people do while they wait for their EVs to charge? Refueling an EV isn't like refueling a traditional vehicle — it can take significantly longer. Is there an opportunity for retailers to offer customers new experiences while they wait?

Retailers know EV adoption is increasing, but without clarity of what the future will look like, many are are hesitant to accelerate their plans for the future.

Retailers know EV adoption is increasing, but without clarity of what the future will look like, many are hesitant to accelerate their plans for the future.

That's why we created this report. We surveyed retailers, asking them their thoughts about their EV strategy, EV drivers, and their own EV charging strategy. We also surveyed EV owners to find out their motivations for buying, their refueling habits, and their expectations from retailers.

The future is uncertain. But if there's one thing that's clear, it's that now is the time to examine the EV charging opportunity, and to lay down plans to embrace it.

**Oliver Shaw**  
Chief Executive Officer, Kalibrate



02

# Executive summary



02

# Executive summary

The adoption rate of EVs continues to multiply. Spurred on by concerns such as sustainability and good value motoring, more people than ever are opting to invest in an EV.

Yet retailers are unsure about the future. With the exact shape of things to come still uncertain, many feel they are not ready to take the plunge and start adapting their business to suit the needs of tomorrow's electric drivers.

To shed light on this accelerating market, we conducted a survey of 1,433 consumers and 520 retail business stakeholders over ten countries. The insights from the survey reveal several key takeaways that'll be invaluable for retailers looking to prepare for increased EV adoption:

## The EV market is full of opportunities, but retailers are yet to tap into them

86% of retailers say EVs and EV charging will be a future revenue-driver for their business. Yet 55% think the market is too unpredictable for them to make concrete plans, and 52% have not yet begun developing an EV strategy.

## Charging is a key issue for EV drivers, yet in reality it doesn't stop them taking substantial journeys

57% of EV drivers are sometimes nervous about running out of charge, and 65% plan where they will recharge ahead of time. Yet 66% of drivers still use their EVs for a long journey of between 90 minutes and three hours at least once a week, and over half (52%) use their EVs for a long journey of over three hours at least once a week.

## Anticipating future trends is key — but with the market still evolving, it's hard to do

66% of drivers state they are always looking out for new places to charge their EVs. This creates a challenge where 57% of retailers find it difficult to anticipate where EV charger infrastructure would be most useful.

## Cheaper motoring is a key consideration for EV adoption...

Just over half (52%) of drivers said that saving money on refueling was one of the most important reasons for purchasing an EV.

## ... but by far the biggest motivator is sustainability

60% of drivers say that reducing their carbon footprint was one of the most important reasons for purchasing an EV. Furthermore, 67% say that mass EV adoption is essential for developing a more sustainable way of life.

## Move early, reap the rewards

Retailers know EVs are the future of transport, and that charging represents a big opportunity. Yet the uncertainty over the future is stopping them fully embracing the market. Inevitably, it's the early adopters that will reap the biggest rewards.

Retailers need to act now, using data-driven insights to anticipate the future and develop their EV strategy.



03

# Introduction





03

## Introduction

EVs are the future of transport — that's for certain. But questions still remain: what infrastructure do we need as drivers switch to electric vehicles? How will refueling habits change? What exactly do EV drivers look like today, and how will that change in the future?

These questions are essential for a number of industries, but particularly those in the business of refueling — either directly or indirectly.

Hesitation is understandable in the current climate. That's why we have conducted research to plot the route ahead and understand how retailers can start to explore the EV charging market and how to take advantage of its opportunities.

We spoke with two groups: 520 retailer stakeholders in EV development and charger placement in the UK, North America, Germany, Nordics, and India; and 1,433 EV owners and people considering buying an EV (976 owners, 451 considerers) in those same markets.

We asked both groups about their thoughts on EVs, EV charging, if and how they're preparing, and what they thought was the future of motoring.



We have conducted research to plot the route ahead and understand how retailers can start to explore the EV charging market





04

# Predicting the road ahead

EV adoption is growing — and retailers need to get ready



04

# Predicting the road ahead

Retailers see significant opportunities in the EV market ahead and predict that it will have a major impact on how they operate.

86% consider EVs and EV charging to be a future revenue driver for their organization. In fact, over half (53%) think EVs and EV charging will bring between 31-50% more revenue into their business.

However, despite recognizing the impact EVs will have, retailers are struggling to put in place a strategy.

Over half (55%) think the EV market is too unpredictable for them to make concrete plans, and 52% have not even begun developing their EV strategy. There seems to be a gap between retailers' market insight into EV, and their ability to act on that insight.

Overall, while businesses are yet to respond with concrete plans, there are some encouraging signs. 57% of businesses agree they'd like to better understand the characteristics and behaviors of EV drivers, and 64% think their EV strategy is likely to change over the next three years.

If we look to the EV owners we asked, many only recently made their purchase — while many prospective owners are intending to buy soon.

83% of current EV drivers purchased their vehicles within the last two years, and 54% of those considering buying an EV intend to buy within the next two years. An additional 28% of prospective buyers intend to buy within the next five years.

Will this be fast enough? Only time will tell.



**86%**  
consider EVs and EV charging to be a future revenue driver for their organization



05

# Charging challenges

Why charging continues to be a key challenge  
for new and existing EV owners



05

# Charging challenges



The biggest barriers to EV adoption is charging and range anxiety.

There are preconceptions that EVs quickly run out of charge. Adding to this, charging stations are not as common as refueling stations, which inevitably means consumers are nervous about making longer journeys.

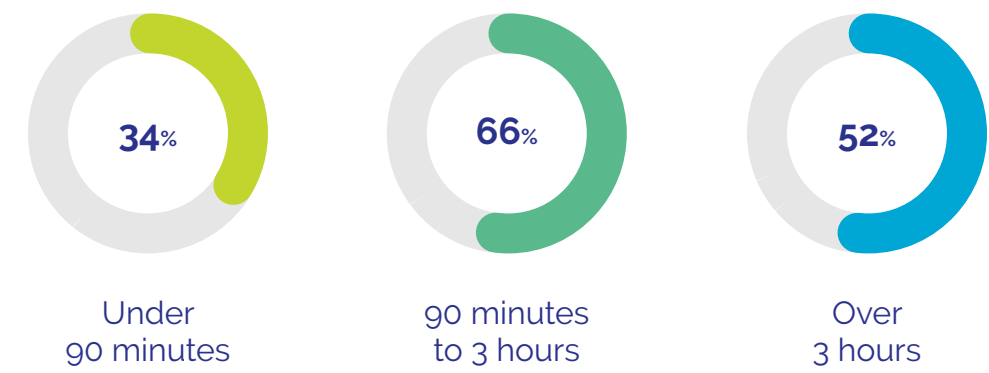
This is reflected in our research. 57% of EV drivers worry about running out of charge, while 65% always plan where they will recharge their EV ahead of time.

Price was the biggest barrier for prospective EV buyers (54%), with many worrying an EV would cost them more than a traditional vehicle. However, range anxiety (27%), and worries around the complexity of refueling compared to traditional vehicles (27%) are also significant factors. Customer concerns over EV range and charging should therefore not be underestimated.

While two-thirds (66%) of drivers use their EVs for a long journey of between 90 minutes and three hours at least once a week, 34% still do not make these longer journeys. Furthermore, only half (52%) of drivers use their EVs for a long journey of over three hours at least once a week. In the wider context of this report, these stats point to many drivers' anxieties around range and available charging.

Ultimately, charging is a key issue. Retailers looking to capitalize on EV need to understand customer concerns, and how their business can address them.

## The duration that EV drivers will travel for at least once a week:



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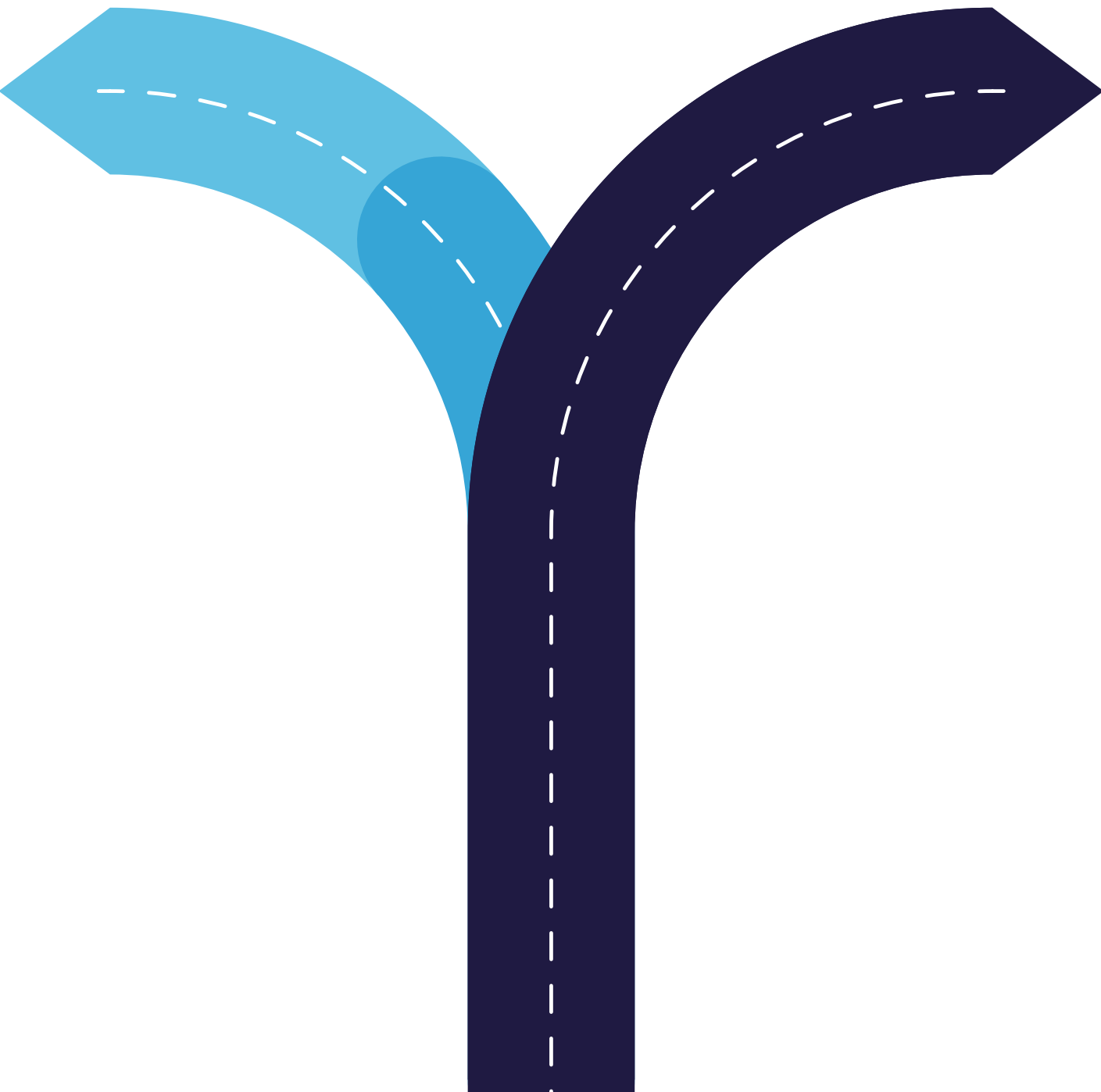
# A change of direction

Why retailers need to understand EV owners' expectations and behaviors



06

# A change of direction



It's clear that retailers can't simply transpose the habits and preferences of fuel drivers onto an EV driver audience. To make the most of the opportunity, businesses need to really understand EV customers' behavior.

58% of drivers often visit shops or businesses that offer EV charging, even if they're not actively looking to charge their car. Some 59% of drivers tend to spend more at shops or businesses that offer EV charging, and 67% of drivers would think more positively of a shop that offers it.

Retailers also should understand where and how often EV drivers refuel.

51% of EV drivers charge their EV at least once a day. When it comes to where they'd like to see charging points, 61% of EV drivers would like to see them at their place of work, followed by 57% at shopping venues, 43% at hospitality venues, 42% at motorway service stations, and 41% at existing fuel stations.

However, behaviors in this evolving market are not yet established.

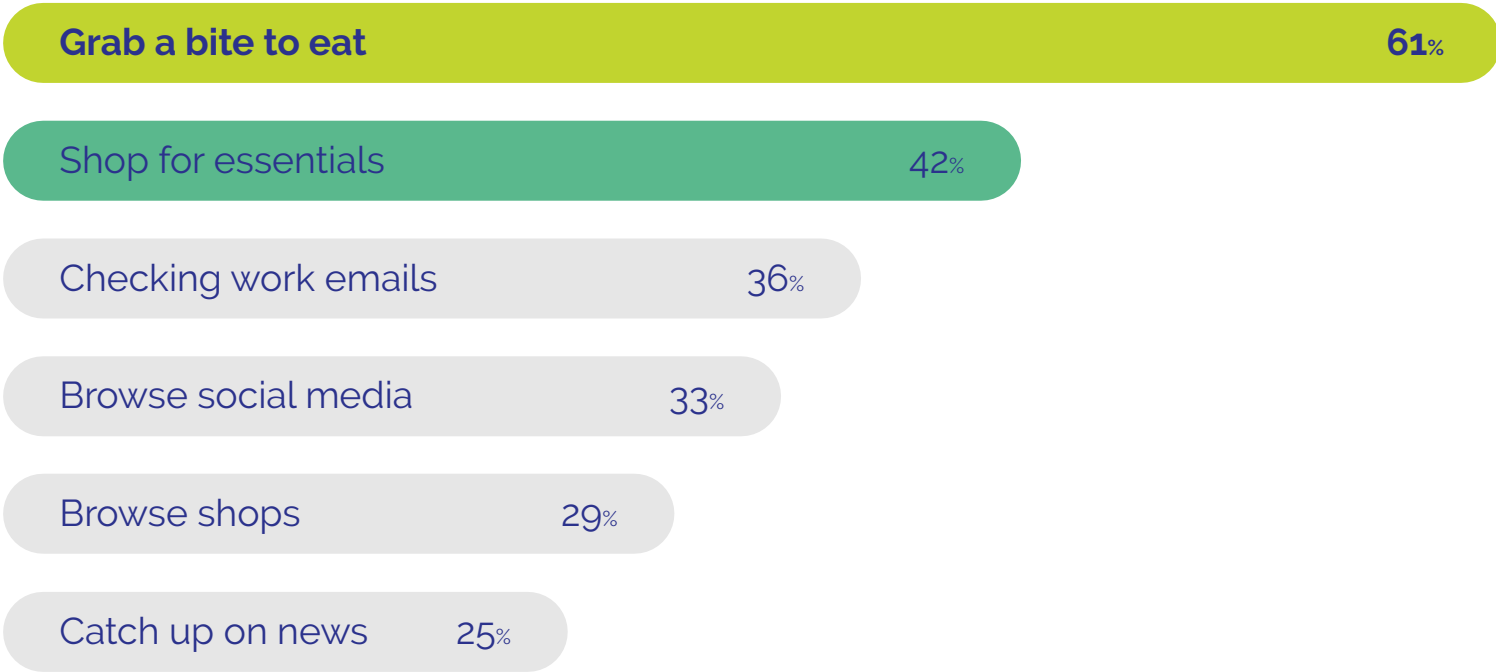
66% of drivers state they are always looking out for new places to charge their EVs. It is understandable then that 57% of businesses find it difficult to anticipate where EV charger infrastructure would be most useful.

An interesting point to consider is the majority of our respondents are likely to shop and spend money when taking a 30-minute break to charge their EVs on a journey — suggesting providers of charge points could profitably invest in grocery and other offerings.

For example, 60% would grab a drink or a bite to eat, 42% would shop for essentials like groceries, and 29% would shop or browse shops to pass the time. By comparison, most of these activities come in higher than checking work emails (36%), browsing social media (33%), or catching up on the news (25%).

Bearing all this in mind, it's easy to see why some retailers still have questions before launching their EV strategy. The market is evolving fast, and norms are yet to be fixed. Any investment at this point requires both keen insight and confidence in the future of the industry.

## What EV drivers are most likely to do while at charging stations





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# Buyer maturity

How does length of EV ownership affect driver behavior?



07

# Buyer maturity



Overall, we spoke to 950 EV drivers. Of this sample, 135 first purchased an EV between two and three years ago, and 381 purchased in the last 12 months — showing that, in our sample at least, adoption rates have increased.

The longer drivers have owned an EV, the easier it is for them to find a place to recharge when away from home. 63% of people who have owned their EVs for between two and three years agreed that this was the case, compared to 55% of those who have owned theirs for less than a year. This points to an increasing awareness of where to charge once individuals own an EV.

Furthermore, 61% of those who bought their EV under a year ago specifically visit certain destinations to access charging facilities, rising to 64% of those who have owned their EVs for between one and two years and 65% of those who have owned their EVs for between two and three years.

Surprisingly though, while 54% of people who have owned their EV for under a year get anxious about their EV running out of charge, this number rises to 58% of those who have owned their EVs for between one and two years and to 62% for those who have owned their EVs for between two and three years.

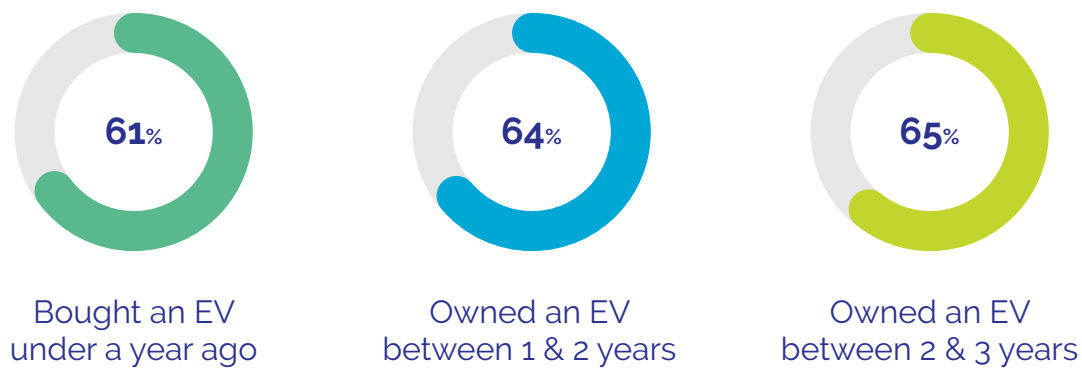
On the surface it seems that the longer an EV is owned, the more nervous the driver is about it running out of charge — although this seems to be because they are travelling longer distances, which naturally leads to charging concerns.

Looking at where drivers like to charge their vehicles, most consider their place of work to be one of the most useful locations. Yet this falls from 52% for those who have owned

their EV for under a year to 41% for those who have owned their EVs for between one and two years.

Simply put, those who have owned their EVs for longer don't feel the need to charge at the office — possibly because they are less anxious about shorter trips compared to new owners.

## EV drivers visiting destinations specifically to access charging facilities



Furthermore, almost one in five (18%) of those who have owned their EVs for between two and three years would select leisure venues like cinemas as one of their top three locations for charging facilities — this falls to 12% for those who have owned their EV for less than a year.

The data suggests that the longer a driver owns an EV, the more they encounter new places to charge, and the more they will diverge from traditional charge spots. Over time, it's clear that the opportunity for EV charging beyond the forecourt will steadily grow.



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# Saving money

Owning an EV - the economic view



08

## Saving money



Aside from sustainability, the potential to save money on fuel is another enticing aspect of EVs. 52% of EV owners say that this is the most important reason for purchasing an EV — second only to reducing their carbon footprint (60%).

Furthermore, 64% of prospective owners say this cost-saving is the most important reason for purchasing an EV — again, second only to reducing their carbon footprint (68%).

Unsurprisingly, 63% of EV drivers say that owning and driving an EV has delivered value for money and moreover, 60% say price is an important factor when they choose how and where to charge their EV. Furthermore, for non-owners, price and value-for-money are the primary reason that they have not yet purchased an EV.

Going back to retailers, 53% say that pricing their EV charging offering is difficult. The same number also agree building a business model is a challenge.

Clearly, retailers are finding pricing difficult, but there are also some interesting regional variations. Relatively less mature markets such as US & Canada (81%) and India (61%) report pricing difficulties. But so too do the more developed markets in the Nordics (60%). However, this is much lower in other countries, such as the UK (38%) and Germany (35%). While the nature of the pricing challenge might be different in these regions, it's clear this is a major hurdle for businesses to overcome.

Overall, price is somewhat of a double-edged sword, being both a blocker and a catalyst for consumer EV adoption. Consumers are indeed driven by their pockets and potential savings. However, price sensitivity is not necessarily the deciding factor.

While it is important for retailers to consider price and how they want to position themselves, the real challenge is working out how to bring consumers to their locations in the first place.



63%

of EV drivers say that owning and driving an EV has delivered value for money.



09

# The green option

Exploring the impact of sustainability on the decision to go EV





09

## The green option



**The Electric Opportunity:** Mapping the habits, preferences, and needs of electric vehicle drivers

Finally, the primary reason people buy EVs is to reduce their carbon emissions.

60% of existing drivers say that reducing their carbon footprint was the most important reason for purchasing an EV. Furthermore, 68% of prospective drivers say that reducing their carbon footprint is their biggest motivator for making the switch.

Both existing and prospective drivers are confident EVs are the way the motoring world is heading. 66% think that by 2030, more people will drive an EV than a conventional vehicle. In addition, 67% say that mass EV adoption is essential for developing a more sustainable way of life, and 66% say that the world would overall be a better place in terms of sustainability if more people drove EVs.

There is however disagreement on whether governments are currently doing enough to direct us towards this future.

52% say that governments are doing enough to push businesses and consumers towards a more sustainable way of living. The remaining 48% either aren't sure or disagree — showing there are mixed opinions on this issue.

### The green option

The one area where there is consensus is that more should be done. Two thirds (66%) of people say that both businesses and governments should be held accountable for hitting global sustainability targets.

The world is likely to become even more climate-focused in the coming years, so retailers must remain attuned to government regulation, and the impact this will have on EV adoption in their market.



# 52%

say that governments are doing enough to push businesses and consumers towards a more sustainable way of living.





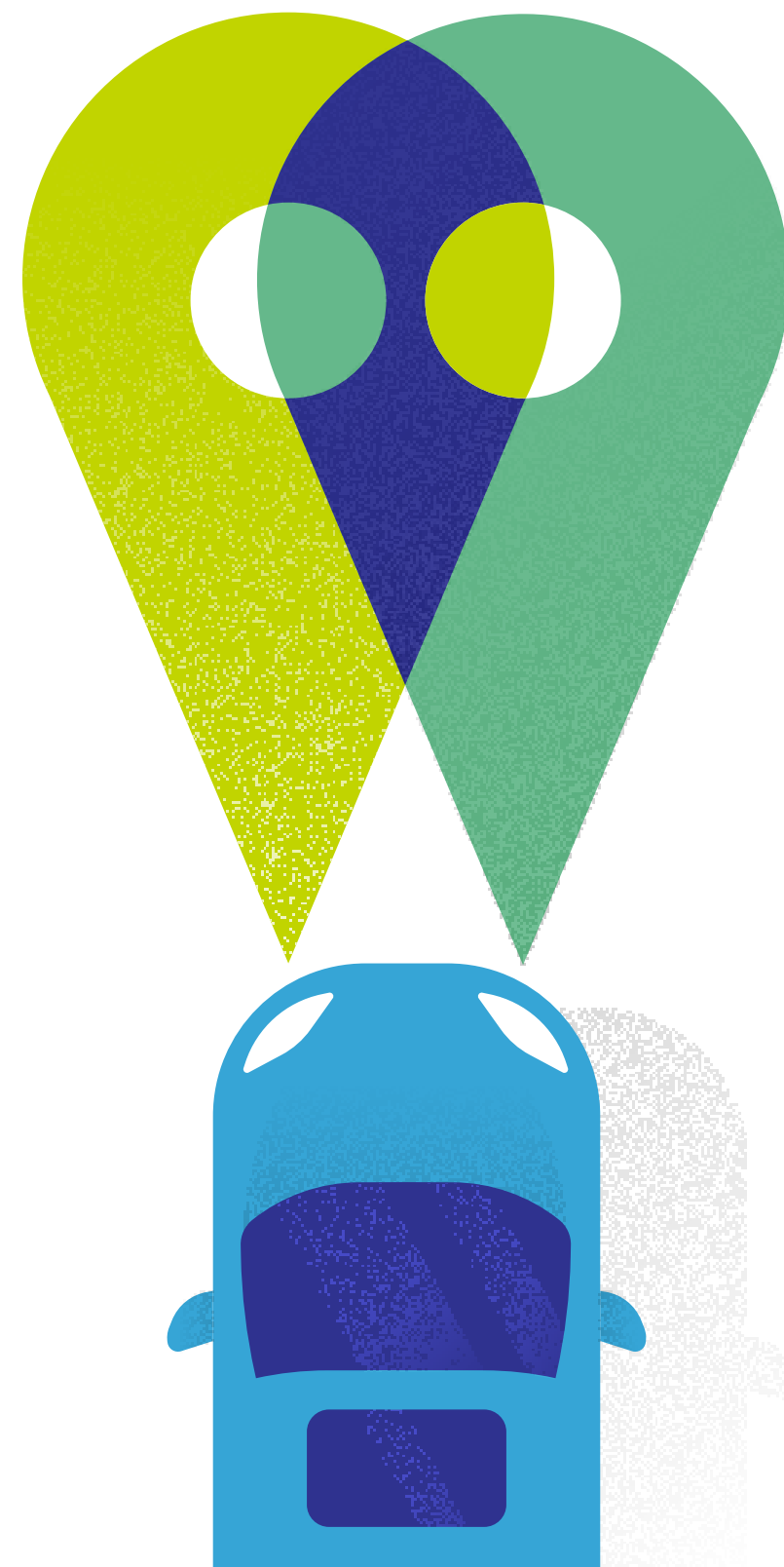
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# Conclusion



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## Conclusion



There's no doubt that EVs will play a pivotal role as we move towards a more sustainable future. And that retailers will have an important part to play.

Our research shows that charging is one of the biggest barriers to purchase for potential EV buyers. Retailers that offer EV charging won't just be making a savvy business move: they'll also be laying down the infrastructure that'll enable this transition to take place.

Of course, there are still many uncertainties. No one knows exactly how the future will play out. Even if there is some consensus about what kinds of EVs people buy, how buyers use their vehicles, and where they prefer to charge, there will continue to be major regional variation that businesses need to take note of or adapt to.

And it's because of these uncertainties that retailers are hesitant to lay down concrete plans — despite knowing that EVs are the future.

It's clear that the market is changing. EV owners represent a different kind of customer that expect a different kind of experience. Retailers must start to understand what customers will expect of them in the future, and ask questions about the infrastructure they'll put down: how many refueling stations are needed? Where should they be? And how can they reimagine their business model to engage customers waiting for their EVs to charge?

By using data-backed insights to answer these questions, retailers can at last start forming their strategy, and begin their journey into an EV future.

Retailers that offer EV charging won't just be making a savvy business move: they'll also be laying down the infrastructure that'll enable this transition to take place.



Kalibrate has been helping businesses make better decisions for over 50 years.

If you're ready to start your EV journey, we can support you in;

- Defining the business case for EV
- Determining optimal locations for charger placement
- Developing the right offer and experience for the EV consumer

For more information contact your Kalibrate account manager, email [ev@kalibrate.com](mailto:ev@kalibrate.com) or visit [kalibrate.com](https://kalibrate.com)

### About Kalibrate

Kalibrate's decision-making software empowers fuel and convenience retailers across the globe with the market intelligence, micro-local data, and precision pricing and planning tools they need to gain real competitive advantage. For over 25 years, Kalibrate has been the chosen decision-making partner of 300+ fuel and convenience retailers in over 70 countries. The firm is headquartered in Manchester UK, with local offices in the USA, Canada, India, China, Australia, and Japan.

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