

# Accelerating EV Adoption: A Customer-Centric View

## Global Teaser

February 2023 | Confidential



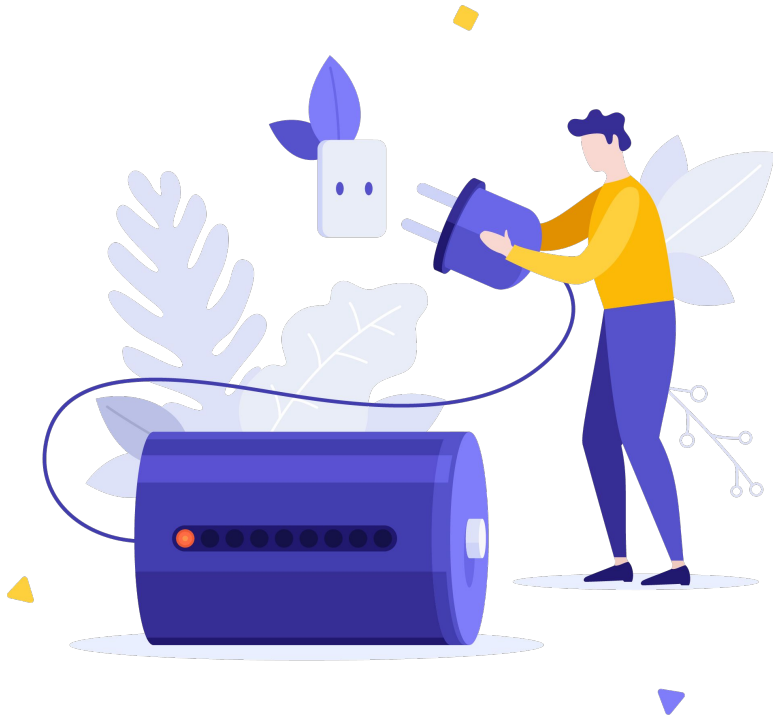
**SKIM**

decision behavior experts

Most of the time humans are entrenched in a habitual patterns. We don't like change.

Driving is no different. We are used to getting in our cars, enjoying the freedom they provide, and filling them up at the pump when we run low.





This presents a challenge when climate change demands that we electrify the automotive sector in record-breaking time.

The technology is readily available. All major brands have a range of EVs in market, but they are not selling at a rate that will enable us to meet our shared net-zero commitments.

So what can we do to speed things up?

SKIM's research we can create immediate change by adopting a customer-centric approach to solving this problem.

We can do more, right now, to help people who need to drive select an EV as their next car.



As decision-behaviour consultants, behavioural scientists and marketers, we focus on questions such as:

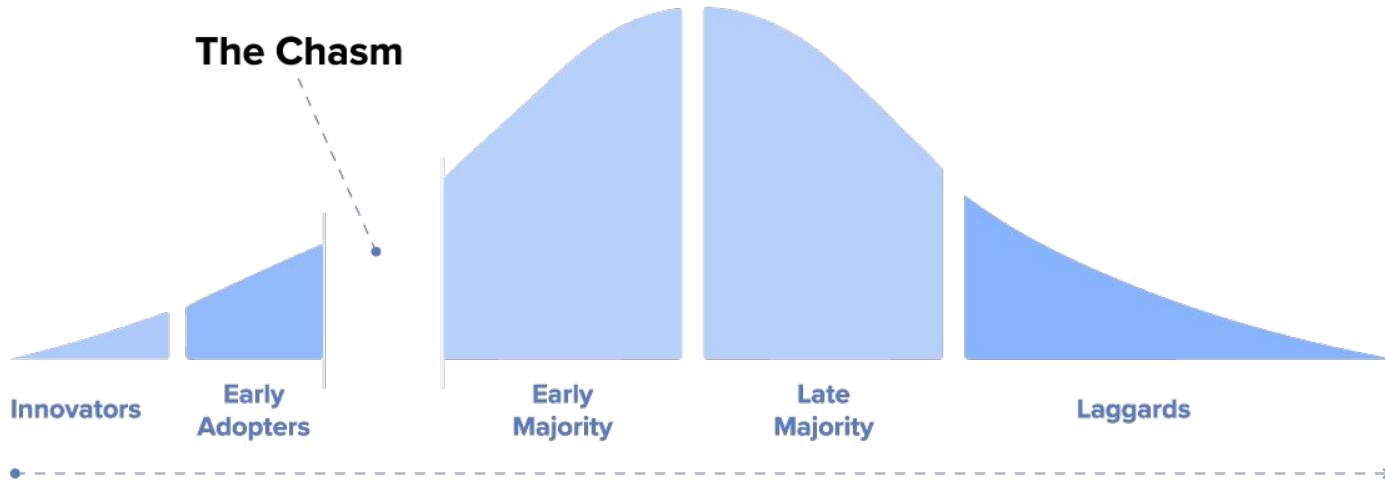
- *What incentives do people need to help change their behaviour?*
- *Are there rational (or irrational) concerns and fears in their way?*
- *What are the social norms and ideas prevalent that enable or prevent change?*



We are bridging a somewhat different “Chasm” than Moore was talking about in relation to technology startups in the 90’s.

Nevertheless, the same fundamental lesson holds:

**Innovators and Early Adopters have different needs and behave very differently from Early Majority mainstream market.**





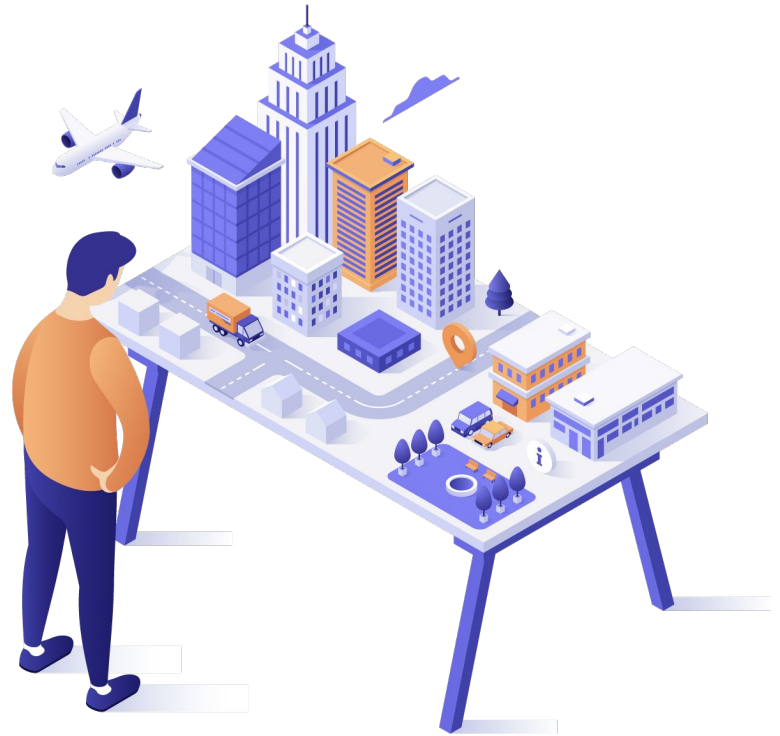
As EVs enter the mainstream market (albeit at an unsustainably slow pace), it is the attitudes and needs of the **Early Majority customers** that we need to better understand and focus our attention towards to increase EV adoption.

# Bridging the Gaps

What we have found is that there are significant attitudinal, emotional and informational **barriers to EV adoption** still today. **We call them our gaps.**

The good news is that with insight into these barriers, we can create better policy, incentives, and communications to **bridge these gaps and help accelerate adoption of EVs.**

It's not easy, but it's a lot simpler than solid state battery science.





GLOBAL



## The Experience Gap

The more information and experience people have with electric cars, the more likely they are to want to buy one.

It might sound simple, but we need to be realistic about what the level is in the world today.



# 67%

of people in the market for a new car **have never driven an electric car.**

Those who have driven an EV are twice as likely to consider one for their next car.

Led by dealerships, the entire ecosystem has an opportunity to increase familiarity with EVs

## The Driving Gap



Have never driven an electric car.



82%



63%



83%



44%

## The Driving Gap



Particularly in the **US and UK** there is only a small number of people who have driven an EV before

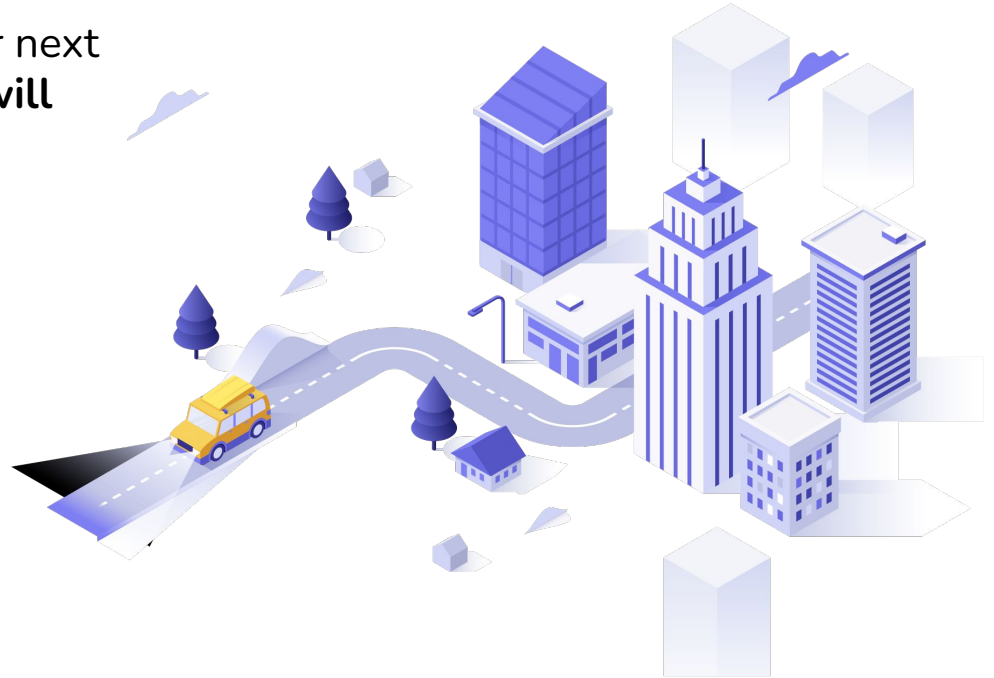
## Range Anxiety No More

# 94%

of those considering an EV for their next car think that **300 miles of range will fully meet their needs.**

With many new EVs achieving this today, doubts about range should be a thing of the past.

But that does not mean that new car buyers in the UK are aware of this.





## The Range Gap

Despite many new EVs matching customers needs, Early Majority considerers **have an outdated view of EV range.**

**Only 10% of UK EV considerers think that a range of 300 miles is realistic,** and a majority don't even believe that new EVs can do more than 185 miles, (far below the average range of a new EV in 2022).

# 94%

of new car buyers overestimate the time it take to **rapid-charge an new EV** from a typical 20-80%.

When rapid-charging typically takes less than 30 min, this is far from common knowledge.

Over half of respondents in the 4 markets think that it takes **at least an hour**, increasing scepticism of the ease of longer journeys.

## The Charge Speed Gap



## The Charge Speed Gap



96%



93%



91%



94%



...



## Faster Than You Think



# 46%

of EV considerers say that charge time is a key concern for them in deciding whether to go for an EV.

This the 2nd biggest barrier, just behind lack of public charging.

As we have seen, this is a barrier that is mainly based on a lack of experience and information. EV owners love waking up to a car that is fully charged every morning.

## Faster Than You Think



34%



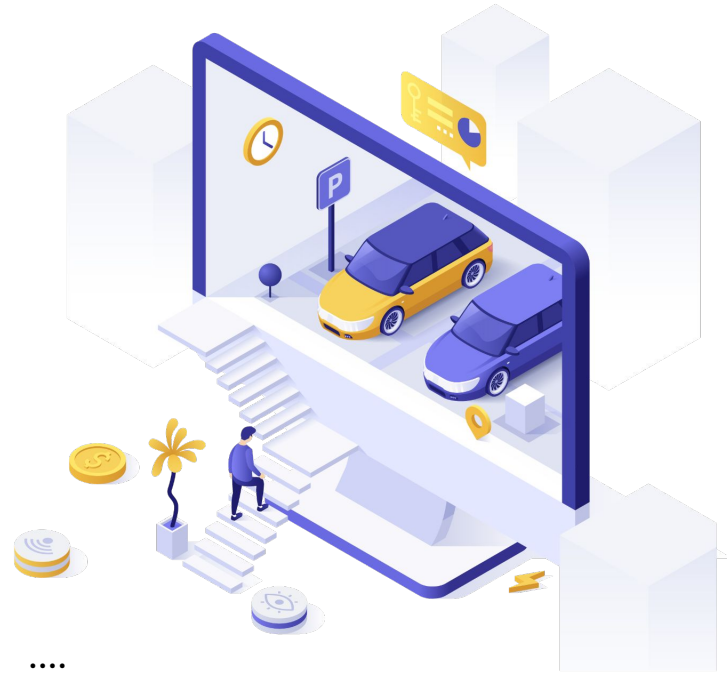
57%



43%



48%



# #1

Lack of public charging stations is **the top barrier** for those considering an EV.



## The Incentive Gap

We know that this is an area that needs much more infrastructure investment.

But meanwhile, better incentives would be those that for example provided discounted access to a charging network rather than merely provided a discount on the initial purchase.

## Faster Than You Think



44%



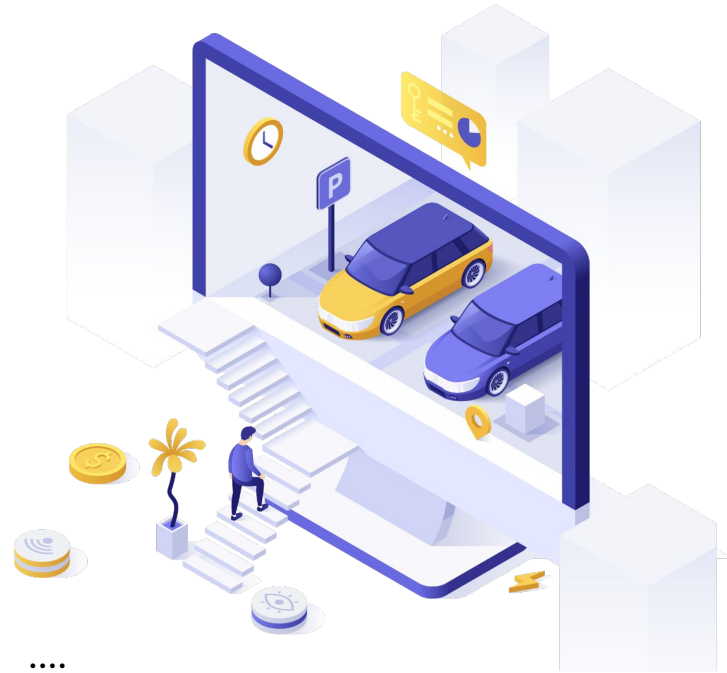
47%



55%



52%



## Charge up Motivation

#1 Free home charger

#2 Free charging at public points

#3 10% discount on home energy

#4 No road tax

Incentives around charging are more important to new car buyers than discount on purchase price.

A free home charger would give the most value, followed by free charging at public charge points, a discount of home energy and free road tax.



# 90%

of new car buyers are concerned about rising petrol prices.

However, while EV owners are highly motivated by the lower cost of ownership of their cars, the Early Majority does not yet have a clear understanding of the cost of ownership of an electric car.

## Cheaper Than You Think





92%



89%

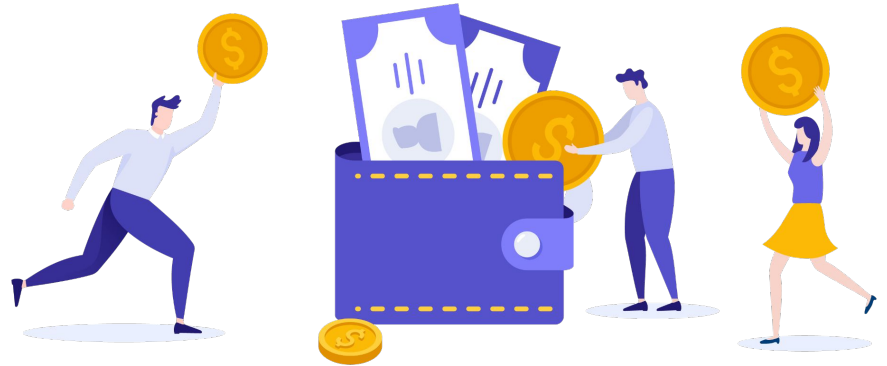


93%



86%

## Cheaper Than You Think



## The Longevity Gap



# 92%

of new car buyers underestimate the longevity of EV batteries and believe that they will have to be replaced within a decade.

Nearly 70% of people believe that they will last less than 5 years.

Any calculation involving a pricey battery change will be off-putting. We need dispel this misconception to remove another barrier to EV adoption.



Believes battery needs to be changed within 10 years



91%



93%



88%



96%

## The Longevity Gap



The life expectancy of an EV battery last 15-20 years. Technology and innovations should excite the public awareness more.

# 7 of 10

Early Majority customers are unaware that EVs are cheaper to maintain than fossil cars.

This makes the increased purchase price much harder to swallow.

## The Cost of Running Gap



Believes EV have high maintenance costs



81%



68%



71%



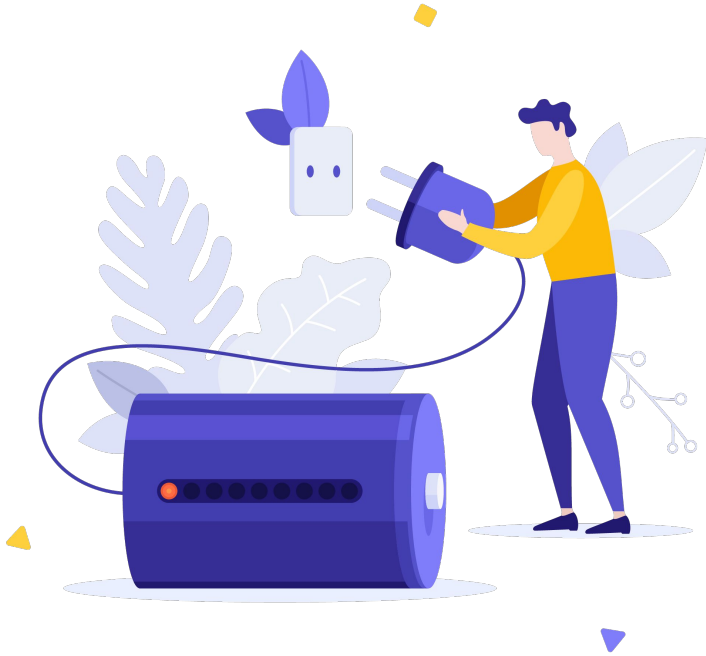
64%

## The Cost of Running Gap



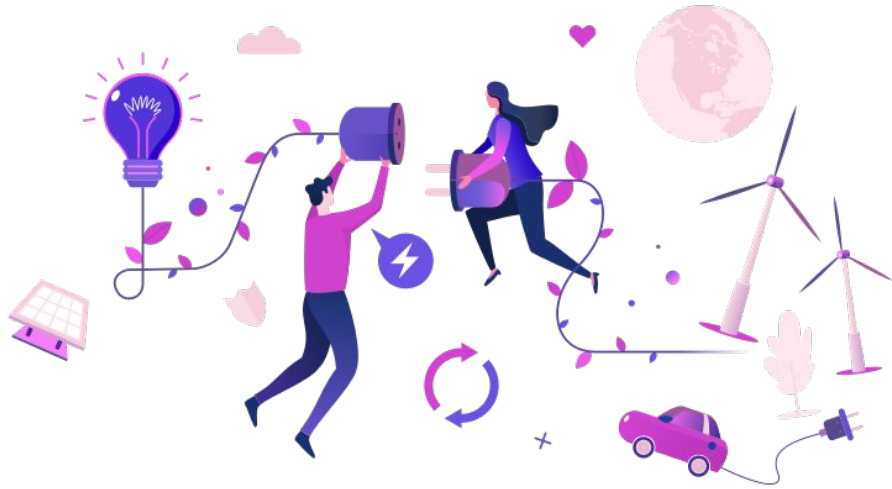
The perception and trust in durability of technology and electricity is quite low.

# The Parking Gap



2x

Inability to charge at home is a major obstacle to EV consideration and needs to be addressed. Those with off-street parking are more than twice as likely to consider an EV



# 75%

of the Early Majority for EVs are very worried about climate change. Most people also feel a personal responsibility to do something about it.

## Worries about climate change



72%



74%



68%



85%

## Worried about climate change

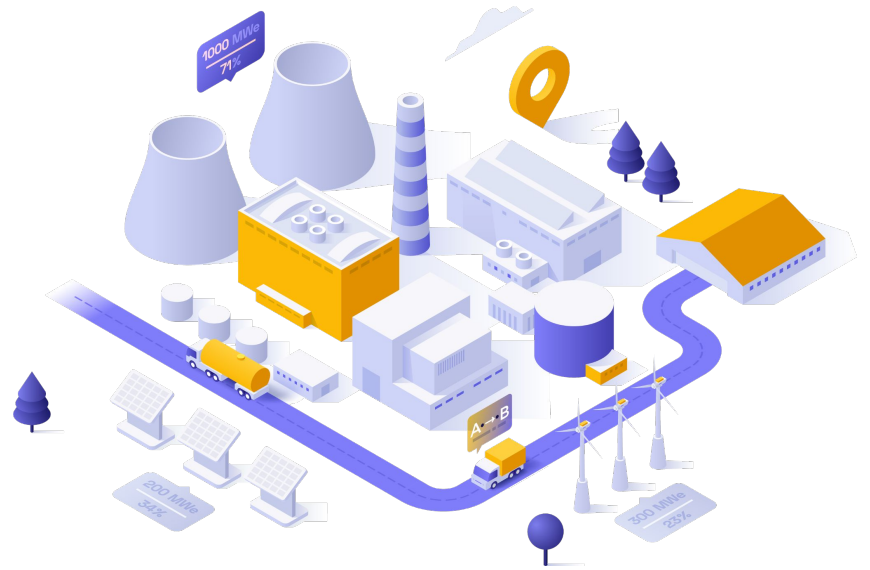


The impact of climate change gets more pronounced in the news and even experiencing it their daily life.

# 60%

Worryingly, more than half of them are not sure that EVs are better for the planet when manufacturing is included in the equation

## The Sustainability Gap



Believes EVs are not necessarily better for the world



65%



78%



55%



46%

## The Sustainability Gap



Germans are rather skeptical about the sustainable aspects of an EV.



## The Recyclability Gap

68%

of people are also not sure whether EV batteries are recyclable or whether they end up in landfills.



## Are unsure about the recyclability of EVs



81%



69%



69%



58%

## The Recyclability Gap



# Methodology

This research was conducted by SKIM in 2022 through an online survey with a sample of n=2,373 respondents.

We interviewed people who are in the market for a new car in the UK (n=511), US (n=548), Germany (n=532), Norway (n=269) and China (n=514).

SKIM is a global decision-behaviour consultancy. We advise some of the world leading organisations. For more information please visit <https://skimgroup.com>





For more information

**David Voxlin**

Director, Sustainability &  
Behaviour Change

[d.voxlin@skimgroup.com](mailto:d.voxlin@skimgroup.com)

February 2023 | Confidential