EXECUTIVE INSIGHTS

Unique Insights into the Future of Mobility: Shifting Attitudes to Travel

8th Annual Global Mobility Study

Key takeaways

1. Electric vehicles (EVs) are showing signs of strong stickiness. While 15%-25% of respondents across the countries polled (excluding China) intend to make an EV their next car purchase, 70%-90% of existing owners say they will stick with EVs for their next purchase.

2. The consumers we identified as Environmental Techies are significantly more likely to purchase an EV than those who are Neutral. Neutrals are the largest segment in our study and the most important target for EV OEMs (Original Equipment Manufacturer) looking to increase sales. Meanwhile, Mobility Traditionalists seem immune to the charms of EVs in every country except for China.

3. For the first time since we launched the study, purchase cost is no longer the number one barrier to EV adoption in the UK, US, and Australia, having been overtaken by concerns around access to charging, battery life, and the expense of battery replacement.

4. One of the significant changes since 2022's study is the coming to the fore of concerns around EV usage and end-of-life financial implications. Range, lack of charging stations, battery life, uncertain resale value, and battery replacement costs all figure prominently in our latest study. This signals an evolution from consumers rejecting EVs on cost and/or performance, to a potential new reality where the switch to EVs is seen as inevitable.

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Now in its eighth year, L.E.K. Consulting's 2023 study of global mobility trends shows a world returning to travel, though levels are yet to match pre-pandemic highs. While the penetration of transport modes appears to have mostly recovered to pre-COVID levels, lifting the lid on suppressed levels of travel, the key question remains, is this sustainable in the face of changing attitudes and new technologies?

Green and healthy are important, with green modes of transport such as electric vehicles (EVs), micro mobility, and healthy options such as cycling and walking, being key winners.

Importantly, there has been a significant shift in barriers to EV adoption, as cost continues to decrease, and technology continues to improve. A good example is that top-of-the-range EVs available today have range specifications that meet the needs of 70%-80% of respondents. This change sees cost no longer the number one barrier to EV adoption in UK, US, and AUS, for the first time since we launched the study. Replacing price worries are anxieties around access to charging and battery life/replacement.

Despite recent sales blips, lower cost EVs entering the market and improvements in charging networks point towards the potential for a near-term acceleration in EV adoption. We set out to better understand the consumers who can drive this trend.

We identified three self-reported categories of mobility personalities: 'Mobility Traditionalists', 'Environmental Techies', and 'Neutral'. Each have different attitudes to travel, likelihood of EV adoption, perceived barriers to adoption, and key purchasing criteria. A fluent understanding of the nuances of these mobility personalities will be key to creating a thoughtful EV strategy, and navigating the ever-changing EV landscape.

Our study reveals plenty of reasons to be cheerful, with respondents overall appearing more optimistic about the future than pessimistic, a strong suggestion that they are happy with the current pace of mobility innovation and enjoying positive exposure to EVs and ride-sharing. A future with personal BEVs (Battery Electric Vehicles), autonomous taxis, and eVTOLs (electric Vertical Take-off and Landing) was considered the most likely scenario for 2040. With most of those surveyed rejecting the idea of a future of less affordable private vehicle ownership and a reliance on micro-mobility and autonomous fleets. But not all demographics are created equal, and it's 25–45-year-olds in the West that are most likely to be pessimistic about the future.

Key mobility issues are changing

The main issues affecting mobility have changed in recent years. 2019 saw increasing environmental concern, new regulation, and an interest in renewable energy and shared mobility on the rise. But the 2020 Covid pandemic decreased mobility and the start of the energy transition journey – fuelled by a growing recognition of the environmental issues we face on a global basis – brought further change.

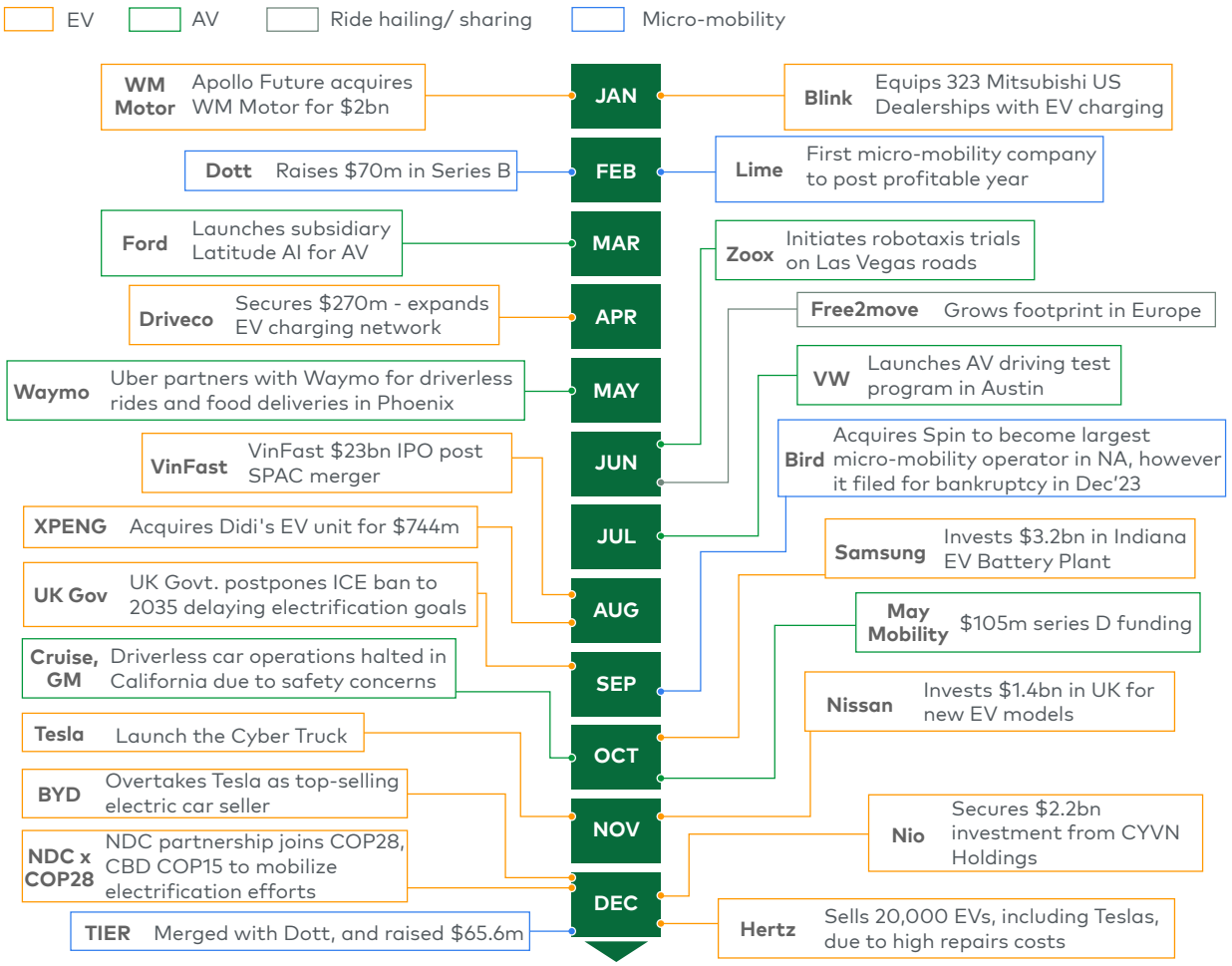
2021 saw EVs beginning to gain prominence, but 2022 brought the cost-of-living-crisis, putting the brakes on EV purchase for many, but not stopping the rapid evolution of EV infrastructure.

Fast forward to 2023 and the world has returned to travel and EV concerns are shifting. The year saw ambitious new mobility projects test their mettle, such as Lime becoming the very first micro-mobility company to post a profit in January, and the $65.6m funds raised in December by TIER on their merger with Dott. A glance at the chart below demonstrates just some of the activity that has pushed mobility forward (see Figure 1).

Figure 1

Key mobility issues are changing

2023 has seen ambitious new mobility projects test their mettle against the realities of changing mobility



Source: L.E.K. research and analysis

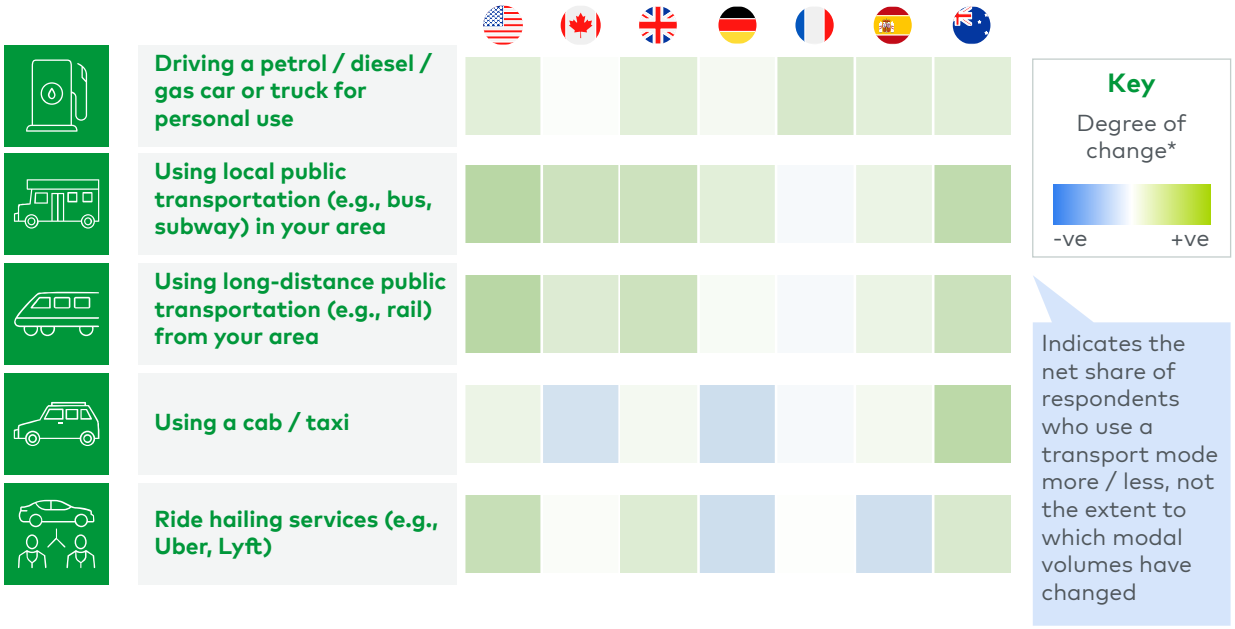
Shifting attitudes to travel

2023 proved to be a year of increased mobility in most transport modes and across the majority of countries surveyed. While driving petrol and diesel cars for personal use is in moderate decline across most geographies, local public transportation such as bus and underground/subways is on the rise (see Figure 2). An examination of changes in the uptake of taxis and ride hailing show much variation from country to country.

Figure 2

Mobility activity – How usage of transport has changed relative to last year, by mode and country (Dec 23)

2023 appears to have been a year of increased mobility in most modes and countries



Note: *Not representative of the extent to which modal volumes have changed. The maximum change on scale represents +50%, and minimum change on scale represents -50%
Source: Annual Global Mobility Study 2023

One factor driving this change is the continuing gradual return to the office, with all countries working from home less in 2022 and 2023 except for Germany and China. However, only the US has experienced a return to pre-pandemic levels of travel, with pressure on cost of living, along with a persistence in working from home behaviours the likely driver in other countries. Interest in environmentally friendly transport remained strong in 2023, increasing from 2022 in all countries surveyed except the US and UK and Spain and China leading the field. Negative sentiment around car ownership had been a trend in the US and this has slightly unwound, a likely result of the return to work, along with a growing prevalence of EVs.

Across the countries involved in our study the use of green modes of transport have increased in the past year. These include electric cars and vans, electric scooters and bicycles either as part of a share scheme or personally owned. Walking is on the rise too, particularly in Australia, as well as the US and UK.

In the US the slow return to the office is continuing to impact both personal vehicle and public transport usage, with data falling short of pre-pandemic levels. But all other forms of transport, from air travel to ride hailing appear to have surpasses pre-pandemic levels. Meanwhile, in Europe our data from 2023 shows take up levels equal to or greater than pre-pandemic levels for all modes of transport.

Likely explanations for the robust usage figures for some key modes of transport can be found in both the changing cost of mobility, and a growing interest among individuals around reducing personal environmental impact – an encouraging shift from sentiment to behaviour.

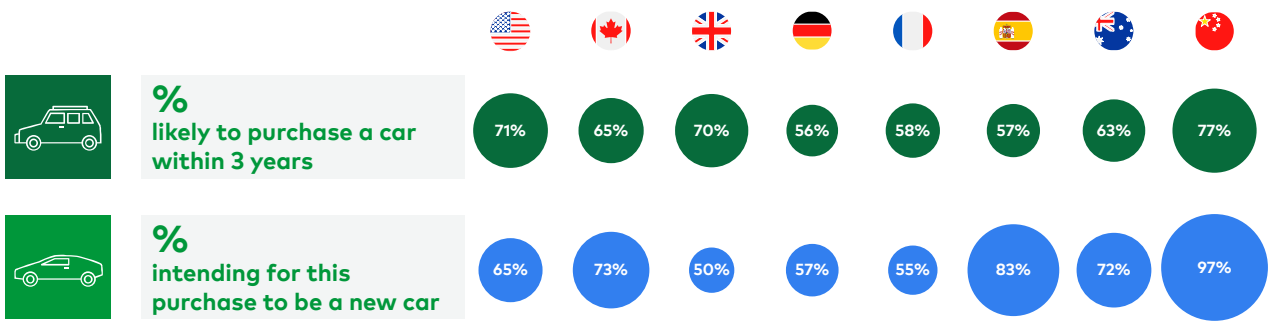
Making the change to EV

EV adoption is an important bellwether for mobility trends, and our latest study looked at the number of people expecting to purchase vehicles in the next three years and identified a percentage of those planning for this to be an electric vehicle. While 15-25% of respondents have their sights set on an EV in most countries, China leads the field with levels more than double this (see Figure 3).

Figure 3

Making the change to EV

55-80% of respondents expect to purchase a private vehicle within the next 3-years, with the majority of respondents expecting this purchase to be a new car



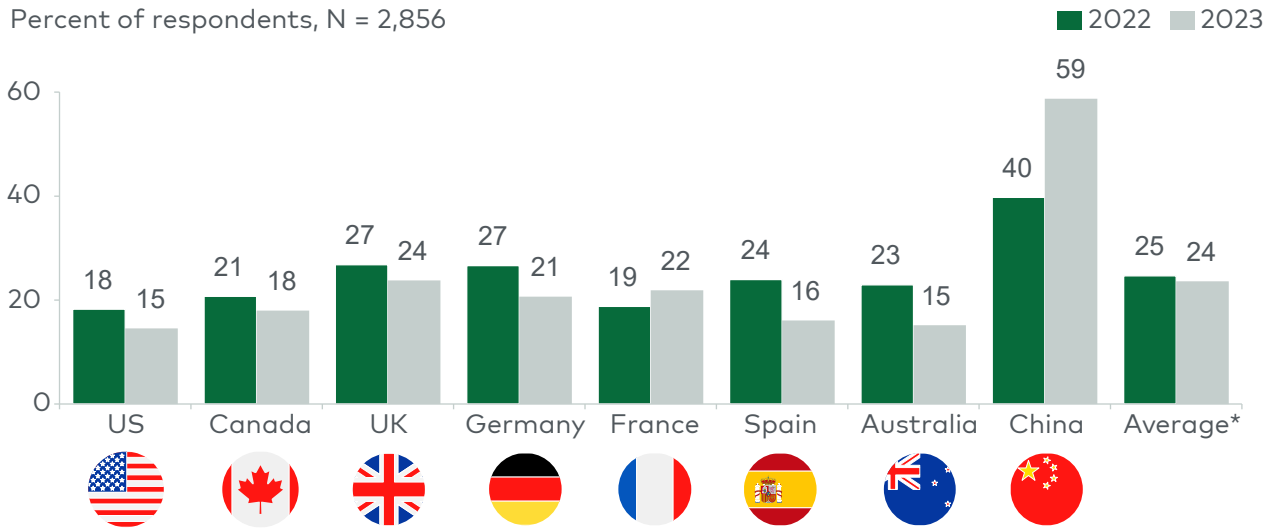
Note: *All countries weighted equally
Source: Annual Global Mobility Study 2023

Among existing EV owners, our study shows that between 70% and 90% are likely to repurchase an EV when a replacement is called for. Germany has the strongest level, closely followed by France and then China. Overall, this points towards a positive ownership experience for those who have embraced the electric car trend (see Figure 4).

Figure 4

Share of respondents intending to purchase a BEV as their next car purchase (Dec 23)

While intent to purchase a BEV has softened compared to last year, EV interest remains high with 15-25% of respondents indicating that they will purchase a BEV as their next car purchase



Note: *All countries weighted equally
Source: Annual Global Mobility Studies 2022-23

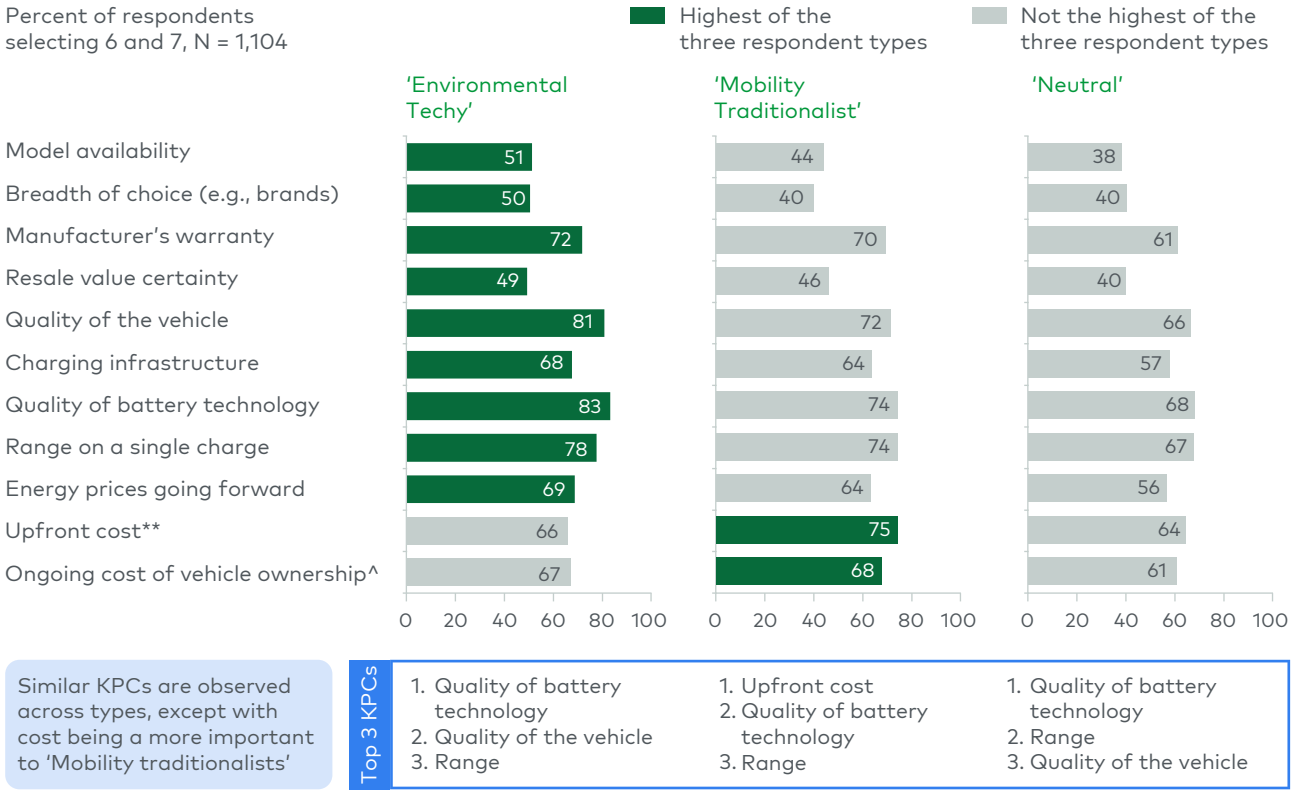
Understanding consumer mindsets

Understanding attitudes to EVs is an important part of our work. To help gauge these we created three mobility personalities based on views towards the environment, technology, and driving (see Figure 5).

Figure 5

How important are the following criteria to you when determining whether or not to purchase a fully-electric vehicle? (Dec 23)

'Mobility traditionalists' are more cost sensitive than 'Environmental techies' and 'Neutral' respondents; 'Environmental techies' are more enthusiastic about all other KPCs than other respondent types



Note: * All countries weighted equally; ** E.g., Ticket price, at-home charging infrastructure, etc., ^ E.g., Cost of electricity, maintenance, etc.
Source: Annual Global Mobility Study 2023

Environmental Techies are interested in protecting the environment and are usually early adopters of nascent technologies. 65%-70% are more willing to put their money where their mouth is and pay an EV premium – more than both traditionalists at 45%-36%, and neutrals at around 50%. The differences between the US and Europe make for interesting comparison, with Spain home to the largest percentage willing to pay a significant premium.

Mobility Traditionalists love driving for fun and enjoy the sound and smell of conventional internal combustion engines. The US and Australia are home to the largest number of traditionalists, with Germany and China showing the lowest number. They tend to be more price-sensitive than either Environmental Techies or Neutrals and are more enthusiastic about all the other key purchasing criteria than the other groups.

Neutrals lack the passion of the other two groups. They think they care about the environment and enjoy technology, but don't feel too strongly either way.

EV adoption concerns under the microscope

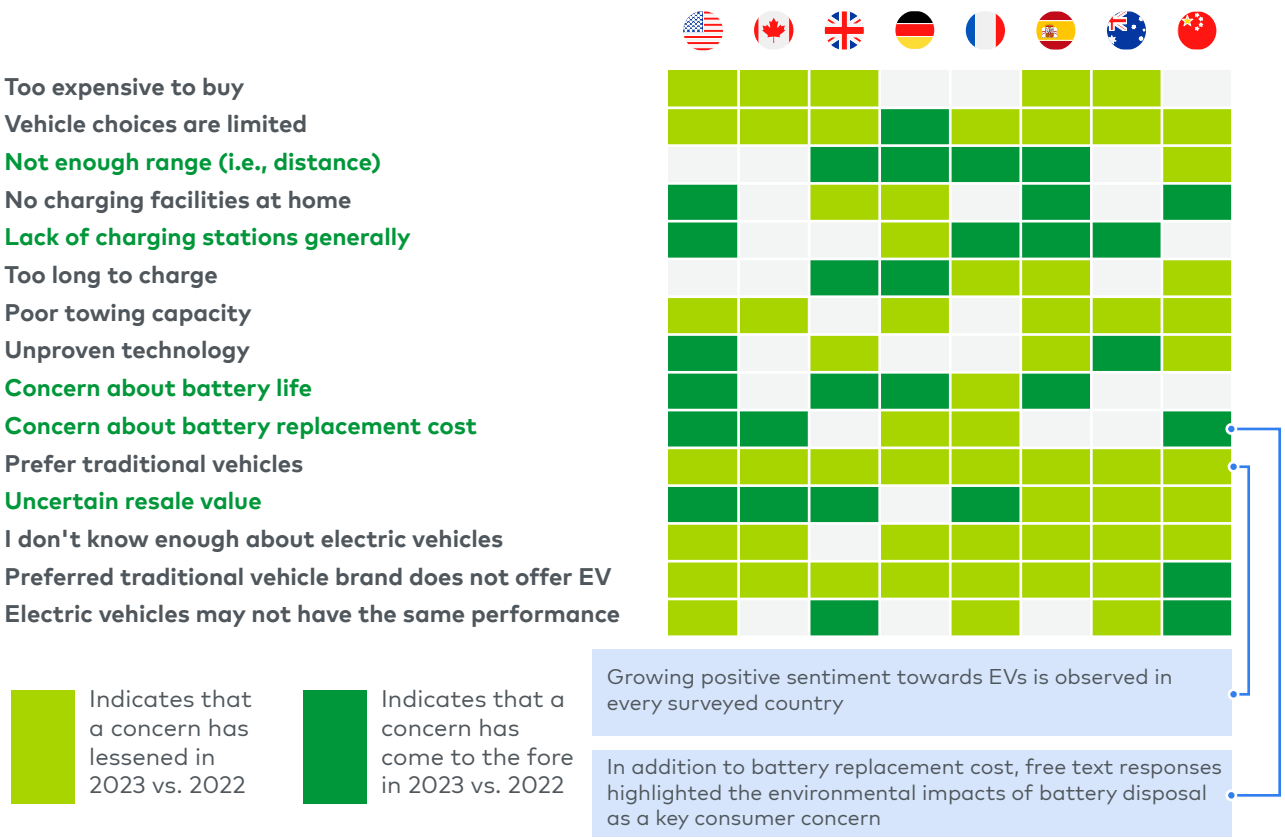
Total varying cost of ownership does impact this decision making, but our analysis suggests that for some vehicle categories, we could approach price parity in the near term.

Usage concerns are major factors too, with perceived issues such as range, lack of charging stations, and poor battery life remaining, and new concerns emerging around uncertain resale value and battery replacement costs making their presence felt (see Figure 6).

Figure 6

Top 15 concerns with regards to buying/leasing a fully electric vehicle, by country (2022-23)

EV usage concerns (e.g., range, lack of charging stations, battery life) and end-of-life financial concerns (e.g., uncertain resale value, battery replacement costs) have come to the fore in 2023 vs. 2022



Note: * Degree of change calculated as difference of 2023 ranking and 2022 ranking
Source: Annual Global Mobility Studies 2022-23

We found that the top five concerns are shared across all three respondent types, thought the order varies from group to group (see Figure 7).

Figure 7

Top 5 concerns when purchasing an EV

Top 5 concerns regarding EV purchases are shared across respondent types. The order of these 5 concerns varies, with 'Environmental techies' relatively less concerned around cost and range

	Environmental Techy	Mobility Traditionalist	Neutral
1st concern	Concern about battery life	Concern about battery life	Too expensive to buy
2nd concern	Concern about battery replacement cost	Too expensive to buy	Concern about battery life
3rd concern	Lack of charging stations generally	Not enough range (i.e., distance)	Lack of charging stations generally
4th concern	Too expensive to buy	Lack of charging stations generally	Concern about battery replacement cost
5th concern	Not enough range (i.e., distance)	Concern about battery replacement cost	Not enough range (i.e., distance)

Note: Battery life refers to the useable life of the battery, not range
Source: Annual Global Mobility Study 2023

The industry is doing much to assuage the concerns of consumers, with range improving to a point where it meets the stated requirements of most consumers and potentially removing an important barrier to EV uptake.

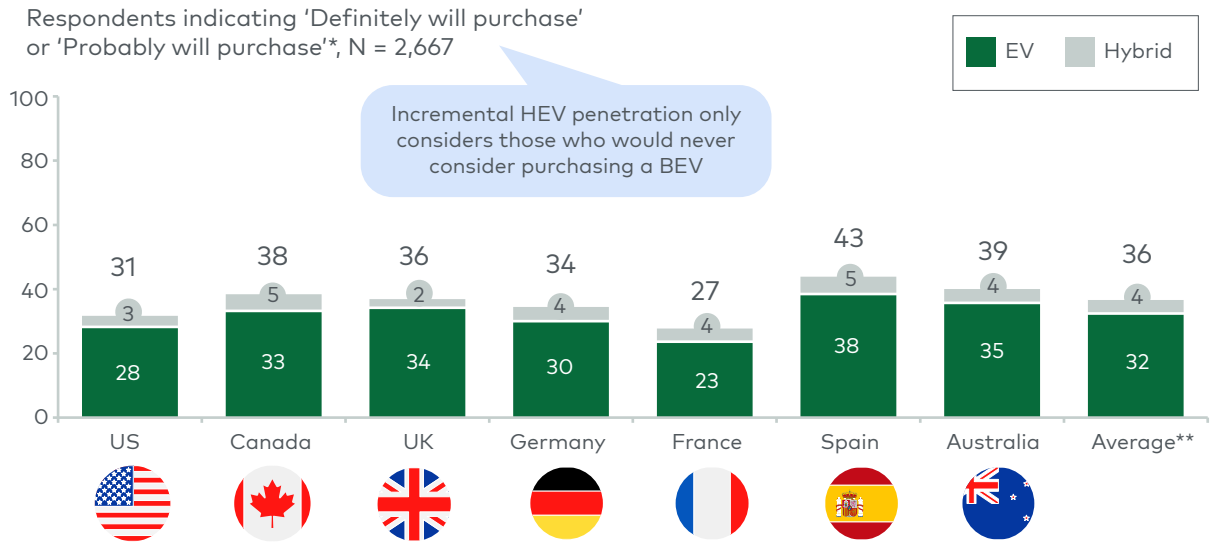
When it comes to charging, the focus is on the twin issues of cost and safety for consumers, with concern about the size of home energy bills and the cost to install home-charging facilities leading across Europe and North America, while in China consumers report anxiety about fire risks as a barrier to EV ownership.

A small percentage of between three and four percent worldwide would purchase a hybrid vehicle (HEV) ahead of an EV. For those surveyed the familiar issues of purchase cost, battery life, and battery replacement cost are all barriers to HEV uptake (see Figure 8).

Figure 8

Likelihood to purchase EV and HEV in the future (Dec 23)

A small percentage of respondents would incrementally purchase a HEV beyond those considering to purchase an EV, suggesting HEVs present a lower barrier



Note: * Based on responses to "How likely are you to purchase a hybrid vehicle in the future?" from respondents unlikely to purchase a BEV; ** All countries weighted equally
Source: Annual Global Mobility Study 2023

Looking to the future

While our work brings clarity to the near future of mobility, we have identified four broad themes that have the potential to bring new upheaval.

Environmental
The rapid shift to renewable energy continues as oil reserves face running dry. But access to the rare earths needed for battery production is a growing issue too.

Economic
Supply chain fragility has had a significant impact across many economies, with stagnating populations adding to many countries' woes. Asia's rise signals an important shift in the world's economic hierarchy.

Technological
Growing digitalisation and the rapid acceleration of both AI and battery technologies are important factors to watch. And issues with the production of microchips have already impacted many sectors.

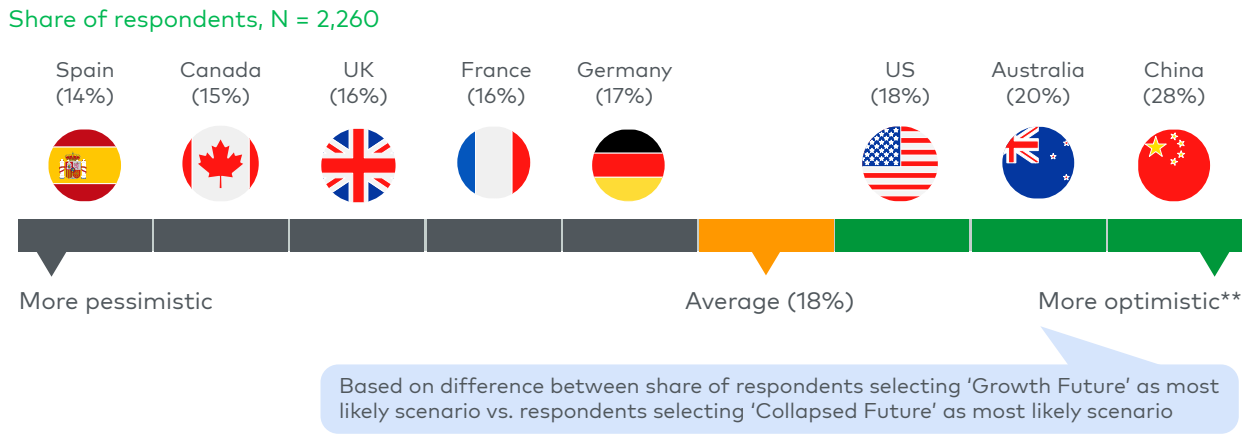
Political
Decarbonisation regulation is growing worldwide, but the balance of global wealth and power is shifting, bringing increasingly polarised societies and accelerating levels of conflict.

To help gauge consumer reaction to our rapidly changing future, we looked ahead to 2040 and designed three potential mobility scenarios: Collapsed future; Continue on Trend; and Growth Future. It's the last scenario that most respondents optimistically predict at around 50%. China leads the pack at 54%, while other countries surveyed settled at between 41% and 46% (see Figure 9).

Figure 9

Most likely scenario becoming reality in next 10-15 years (2023)

Respondents in Spain and Canada appear to be most pessimistic, while respondents in Australia and China appear to be most optimistic



Note: * Based on the question: 'Overall, how likely do you think this future scenario is to become reality in the next 10-15 years, where '1' means 'very unlikely' and '10' means 'very likely'?'; ** Based on difference between share of respondents selecting 'Collapsed Future' vs. 'Growth Future'
Source: Annual Global Mobility Study 2023

Overall, our respondents preferred future mobility scenarios that are good for the environment and high-tech. But they want these to be based on proven technologies and to not restrict their convenience of movement – a clear case of wanting to have your cake and eat it (see Figure 10).

Figure 10

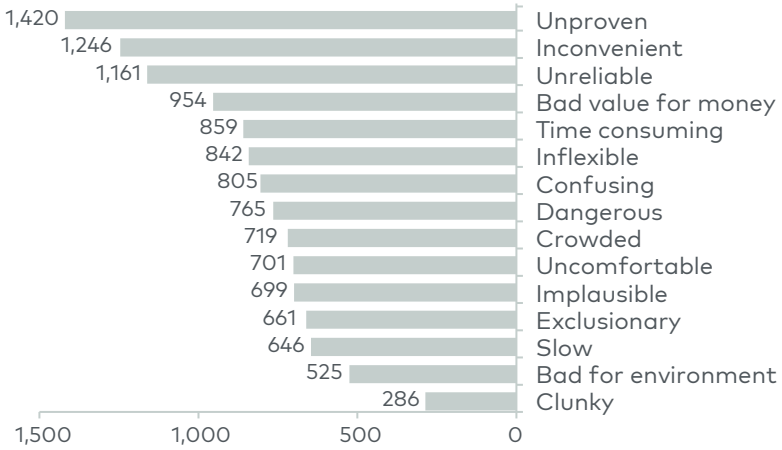
Most positive and negative sentiments across all scenarios (2023)

Respondents prefer future mobility scenarios that are good for environment and high-tech, and are based on proven technologies that do not restrict convenience of movement

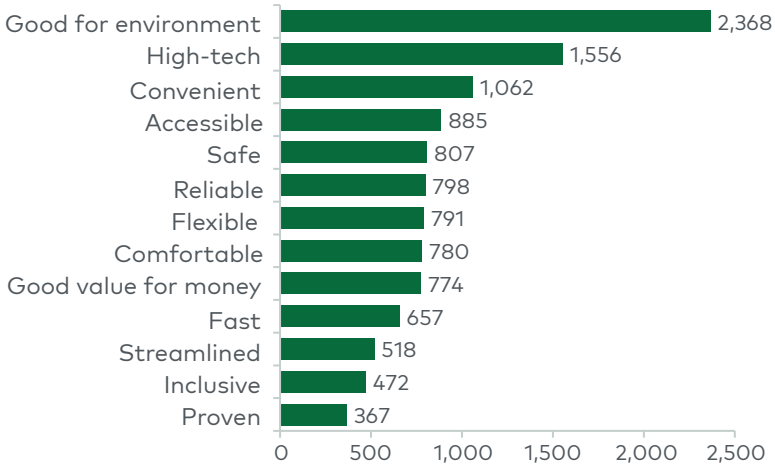
Most common negative sentiment across all scenarios (2023)

Number of respondents*, N = 2,260

The most common negative sentiment for Collapsed Future was **'inconvenient',** and for Growth Future was **'unproven'**



Most common positive sentiment across all scenarios (2023)



The most common positive sentiment for both Collapsed Future and Growth Future was **'good for environment'**

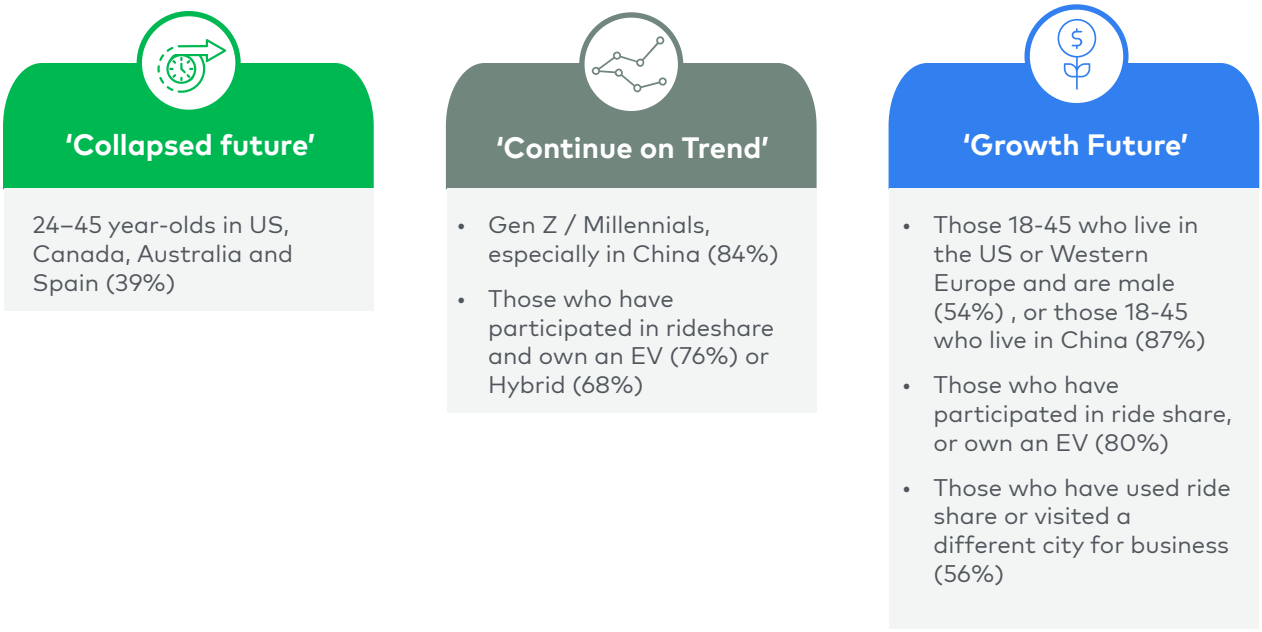
Note: *Each respondent selected up to three options
Source: Annual Global Mobility Study 2023

As expected, issues around inconvenience, up-front costs, and lack of track record for technologies drove the most negative reactions to the Continue on Trend scenario. And it's the 25-45 demographic in the West who are most pessimistic in general but keenest on EVs and ride sharing as potential solutions to future mobility issues (see Figure 11).

Figure 11

Generational attitudes towards mobility

25-45 year olds in the West are most likely to be pessimistic about the future, and exposure to ride share / EVs is associated with more optimistic attitudes



Note: *Based on the question: 'Overall, how likely do you think this future scenario is to become reality in the next 10-15 years, where '1' means 'very unlikely' and '10' means 'very likely'?'
Source: Annual Global Mobility Study 2023; Adobe Firefly

How L.E.K. can help

Our eight-year global study of emerging mobility trends offers unrivalled insight into this rapidly shifting sector. Our insights and experience are helping mobility companies, and their investors better understand the changing regulation and evolving consumer sentiment that are shaping future mobility. To hear more about our latest Annual Global Mobility Study, register for our webinar, or to tell us about your mobility sector ambitions, please contact Becrom Basu.

About the study

L.E.K. Consulting has collaborated with Vision Mobility and CuriosityCX on the 8th Annual Global Mobility Study. Building on prior years, this year's sample includes 3,163 respondents across the US (31k), Canada (10k), UK (7k), France (7k), Spain (7k), Germany (8k), China (5k) and Australia (7k).

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About L.E.K. Consulting
We're L.E.K. Consulting, a global strategy consultancy working with business leaders to seize competitive advantage and amplify growth. Our insights are catalysts that reshape the trajectory of our clients' businesses, uncovering opportunities and empowering them to master their moments of truth. Since 1983, our worldwide practice — spanning the Americas, Asia-Pacific and Europe — has guided leaders across all industries, from global corporations to emerging entrepreneurial businesses and private equity investors. Looking for more? Visit **lek.com**.