What sustainable drivers want

Busting the myths of sustainability: A wake-up call for automakers
Executive summary

Automotive sustainability: Separating fact from fiction

Myth #1
Only a small group of drivers is concerned about the sustainability of the vehicles they buy and drive.

Myth #2
Vehicles with internal combustion engines will remain an important revenue source until governmental regulations become stricter.

Myth #3
Drivers won't pay extra for sustainable vehicles.

Myth #4
Drivers are more concerned about digital experiences and convenience than about environmental impacts.

Myth #5
Tesla is the de facto leader in sustainability.

The road forward

About the research
Executive summary

The automotive industry is facing disruption on numerous fronts—driven by factors including connectivity, autonomous driving, the sharing economy and electrification—which is having a huge impact on automakers’ traditional business model. In addition, new government regulations related to fuel-efficiency and CO₂-emissions standards are forcing automakers to accelerate plans for more energy-efficient and sustainable vehicles and offerings.

To remain competitive in this environment, automakers must understand the implications of changing customer preferences toward sustainability in vehicle sales and in their service and repair business. Our survey of 8,500 customers from seven countries around the world indicates:

• Nearly two-thirds (64%) of drivers are very or extremely environmentally concerned, and this concern will likely affect their future buying decisions—both for new vehicles and for service and repairs. Further, these “sustainability-minded drivers” span all age groups, all types of population area, and all income levels.

• Most drivers (66%), even those who are not very sustainability-minded, are considering switching to a new-energy vehicle (NEV)—i.e., one without an internal combustion engine as its primary drive train—for their next purchase.

• Sustainability-minded drivers are not only willing to switch to NEVs, but most would accept a range of trade-offs—including higher prices (64%) and reduced performance (62%)—for a sustainable vehicle.

• Despite Tesla’s brand recognition, no automaker is perceived as the undisputed global leader for the best sustainability concept for vehicles—leaving the playing field open for others to make their mark.

In a market in which sustainability will play a much greater role, automakers must take a variety of steps to remain competitive. Based on our research, we recommend the following, among others:

• Evolving their product portfolios toward NEVs as well as designing internal operations to be more sustainable to meet the radical shift in drivers’ preference for sustainable vehicles.

• Having a clear understanding of price elasticities for NEVs and considering value-based pricing while taking state subsidies into account to fully leverage the additional margin potential from NEVs and after-sales parts and services.

• Investing in and building a seamless end-to-end customer experience based on customer preferences and expectations, especially those of sustainability-minded drivers.

• Being part of the broader ecosystem by integrating and collaborating with a diverse group of players (e.g., utilities, charging infrastructure owners and mobility providers) to realize the full potential of sustainability.

Only those who are able to quickly understand and serve drivers’ preferences will be successful.
What sustainable drivers want
The global automotive industry is in the midst of tremendous disruption, with four megatrends—connectivity, autonomous driving, the sharing economy, and electrification—completely changing the existing business model of automakers.

Yet while the importance to drivers of digital experiences, alternative mobility solutions and hassle-free processes for convenience has been known for years, it hasn’t been clear how and to what extent the growing issue of sustainability is affecting their buying decisions for new vehicles and for service and repairs (commonly known as “after-sales”).

In addition, new regulations from the European Union and national governments have the potential to influence automobile customers’ choices to an even greater extent. Norway, for instance, is leading the way with a planned ban on the sale of new vehicles with internal combustion engines (ICEs) beginning in 2025, and the EU has proposed a similar ban by 2035 to dramatically reduce CO₂ emissions across the region.

At the same time, governments are urging automakers to accelerate the transformation of their product portfolios to alternative and more-sustainable drive types such as electric or plug-in hybrid vehicles—so-called new-energy vehicles (NEVs). One way they are doing this is through comprehensive subsidy programs, which in some cases could save customers 20% or more on the list price of a new vehicle, thereby leading to high sales growth in all core automotive markets.

What is a “sustainability-minded driver”?

For the purpose of this report, the term “sustainability-minded drivers” refers to car owners and drivers who, when asked to define themselves with respect to sustainability, rated themselves as either an eight, nine or ten on a scale in which ten = “extremely environmentally concerned” and one = “not at all environmentally concerned.” This group accounts for 64% of the respondents, with the other respondents described as “less-sustainability-minded drivers.”
To remain competitive and maintain their market position, it is not sufficient to follow governmental ruling. Instead automakers need to understand the implications of changing customer preferences toward sustainability—not only in vehicle sales but also in their service and repair businesses and with connected services.

Therefore, to help automakers address this issue, we conducted a comprehensive survey of 8,500 licensed drivers across seven core automotive markets—China, U.S., Germany, U.K., France, Italy and Norway—focusing on five common misconceptions, or myths, that are often input factors for automakers’ decision-making processes:

**Myth #1:** Only a small group of drivers is concerned about the sustainability of the vehicles they buy and drive.

**Myth #2:** Vehicles with internal combustion engines will remain an important revenue source until governmental regulations become stricter.

**Myth #3:** Drivers won’t pay extra for sustainable vehicles.

**Myth #4:** Drivers are more concerned about digital experiences and convenience than about environmental impacts.

**Myth #5:** Tesla is the de facto leader in sustainability.

Leveraging the insights from our analysis and evaluation, we refute these myths and suggest actions to help automakers better understand evolving customer preferences and take the necessary steps to align their businesses for continued success.

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**What are new-energy vehicles (NEVs)?**

New-energy vehicles is the umbrella term for cars with alternative drive types—i.e., drive types other than the widely established internal combustion engines (ICEs). These include, among others, battery electric vehicles (BEVs), hybrid electric vehicles (HEVs), natural gas vehicles (NGVs), plug-in hybrid electric vehicles (PHEVs), flexible fuel vehicles (FFVs), and fuel cell electric vehicles (FCEVs).
Myth #1
Only a small group of drivers is concerned about the sustainability of the vehicles they buy and drive.
Reality

Most car buyers are concerned about the environmental impact of their vehicles—which could affect their purchasing decisions.

Many business-to-consumer industries provide excellent examples of how sustainability considerations can determine customer preferences and expectations. In the consumer goods industry, for instance, more and more customers are buying items that last longer or are considering products that are environmentally friendly with regard to materials and the manufacturing process. However, most automakers believe that only a small group of drivers is concerned about the sustainability of vehicles they plan to purchase.

Our research found that this isn’t true: Sustainability is no longer a side issue for car buyers and drivers, as the majority (64%) of the 8,500 respondents in our study are “sustainability-minded drivers,” as defined earlier. Undoubtedly, the sustainability-minded driver is now the rule, not the exception—so automakers must fully understand their characteristics and preferences and target them as their primary customers.

Almost two-thirds (64%) of respondents in our study are “sustainability-minded drivers”—rating themselves as very or extremely environmentally concerned.

Sustainability-minded drivers span all age groups, all types of population areas and all income levels

In addition, our research found that a sustainability mindset is not a question of age, type of population area, or income. For instance, no single age group accounts for a significantly large share of sustainability-minded drivers. While respondents in the 50-59 age group comprise the highest share (24%), the differences with younger and older respondents are only marginal, with all four of the other age groups—18-29; 30-39; 40-49; and 60-69—each accounting for at least 17% of the total number of sustainability-minded drivers (see Figure 1).

One-quarter of sustainability-minded drivers have a monthly net income below US$2,500.

What sustainable drivers want
The point of all this was, and remains, accelerating the advent of sustainable energy, so that we can imagine far into the future and life is still good. That’s what ‘sustainable’ means. It’s not some silly, hippy thing — it matters for everyone." \(^1\)

Elon Musk, CEO, Tesla

Nor is type of population area an indicator for the presence of sustainability-minded drivers. While the smallest number of respondents overall, 13%, live in rural areas (i.e., those with fewer than 10,000 people), the largest number of respondents (26%) live in the next-smallest type of population center—small to medium cities, with between 10,000 and 500,000 people (see Figure 2).

And more respondents live in large cities—with between 1 million and 5 million people—than live in either a metropolis (more than 5 million people) or a medium to large city (between 500,000 and 1 million people). So it’s clear that sustainability-minded drivers are found in all types of population areas.

Even more surprising is the finding regarding the net income level of sustainability-minded drivers—considered an essential factor for their buying power. While one might assume that social and environmental concerns about purchase decisions are reserved mainly for wealthy households from prosperous regions, this is not the case. In fact, while there are variations between respondents from different countries, the majority of sustainability-minded drivers overall are from low- and middle-income households, with 25% having a monthly net household income of even less than US$2,500 (see Figure 3).

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"The point of all this was, and remains, accelerating the advent of sustainable energy, so that we can imagine far into the future and life is still good. That's what 'sustainable' means. It’s not some silly, hippy thing — it matters for everyone." \(^1\)

Elon Musk, CEO, Tesla
How automakers should respond

Clearly, sustainability is top of mind for a far greater number of drivers than automakers might believe. Given this fact, what should automakers do?

First, they must acknowledge that the customer mindset is shifting—and then see this as an opportunity by ensuring that their brand perception reflects customers’ changing preferences toward greater sustainability.

We recommend that automakers take the following steps:
• Counteract the customer “execution gap” (i.e. saying you’re sustainability-minded but acting contrarily to that) by making each customer’s choice toward sustainability visible to their environment—for example, through a new vehicle design that promotes sustainable features or community-based gamification of sustainable driving behavior.

• Label and communicate to customers the vehicle’s sustainability level, including its environmental impact, in an easy-to-understand way. This could include, for example, supply-chain-related information regarding material sourcing locations. Use precise numbers that customers can easily understand (e.g., reduced CO₂ emissions per year in tons) and put such numbers into context (e.g., reduced CO₂ emissions per vehicle sold).

• Be clear, direct, and honest (i.e., accurate) when communicating the company’s achievements related to sustainability, whether regarding individual vehicles, the vehicle portfolio, or other company processes and operations. Make sure to tailor the stories to different channels and target audiences—for instance, driver testimonials in social media for (potential) customers; educational information for dealers and partners; and bold success stories for large-scale sponsoring programs. The goal should be to reach as many people as possible through their preferred channels, build a community, and start dialogues.

Industry Spotlight

Tesla significantly outperformed traditional premium automakers over the past three years

The stock price of all-electric automaker Tesla increased by more than 900% between July 2018 and July 2021—far above that of any traditional automaker. With sustainability at the core, Tesla shows how valuable designing green end-to-end solutions can be.²
Myth #2

Vehicles with internal combustion engines will remain an important revenue source until governmental regulations become stricter.
Until fairly recently, most automakers hesitated to radically transform their product portfolios by replacing ICE models with NEVs. The thinking was that ICE models will remain a cash cow until EU and other national regulations regarding emissions and/or fuel efficiency become even stricter; those that have moved more quickly were often motivated mostly by such legislation.

Our study indicates that by following this approach, automakers are missing out on a great opportunity.

Why? Because the majority of drivers we surveyed said they would prefer an NEV for their next car purchase.

Nearly three-quarters of sustainability-minded drivers—and more than half of less-sustainability-minded drivers—prefer an NEV for their next vehicle.

It’s not just sustainability-minded drivers who prefer an NEV for their next vehicle purchase

It’s no surprise that the share of NEVs today is still rather small among the sustainability-minded drivers we surveyed, with the majority still driving ICE vehicles (see Figure 4). However, nearly three-quarters (73%) of sustainability-minded drivers prefer an NEV for their next vehicle, with a hybrid electric vehicle being the most-preferred type, cited by more than one-third of those preferring an NEV (see Figure 5). The growing interest in NEVs could be linked to the large subsidy programs from governments, which create very attractive price points for car buyers.
Just as important, however, is that the growing preference toward NEVs over ICE vehicles is not limited to sustainability-minded drivers. Specifically, while two-thirds (67%) of less-sustainability-minded drivers currently drive an ICE vehicle, more than half (53%) plan to purchase an NEV as their next vehicle (see Figure 4 and Figure 5).

As with sustainability-minded drivers, hybrid electric vehicles top the list, cited by more than two-thirds of the less-sustainability-minded drivers who prefer that their next vehicle be an NEV.

“We have to adopt a more holistic approach regarding how we think about topics, which includes placing greater importance on ecosystems. Electromobility is an excellent example: The energy and transport transition must go hand in hand in order to achieve the climate targets.”

Ralf Pfitzner, Head of Sustainability, Volkswagen Group
What’s driving the interest in NEVs?

According to our research, the factor driving the greatest interest in NEVs is protection of the environment, cited by one-quarter (25%) of sustainability-minded drivers (see Figure 6). This is followed by lower running costs (17%) due to, for instance, less required maintenance or lower energy/fuel costs; the desire to support the technological advancement of NEVs (15%); and better performance figures, such as acceleration (12%). Interestingly, only one in eight sustainability-minded drivers (12%) cited attractive purchase price as a reason for buying an NEV.

Like sustainability-minded drivers, less-sustainability-minded drivers cited protection of the environment as the most important reason to buy an NEV—and also cited lower running costs due to less required maintenance as another reason.

However, monetary incentives in the form of attractive purchase conditions play a more important role for less-sustainability-minded drivers, 15% of whom consider price a key reason to buy an NEV today, compared with 12% of sustainability-minded drivers.

One in four sustainability-minded drivers cites protecting the environment as a reason to purchase an NEV.

Figure 6: Reasons to purchase an NEV

### Sustainability-minded drivers

- **Environmental protection**: 25%
- **Lower running costs**: 17%
- **Tech. advancement support**: 15%
- **Performance figures**: 12%
- **Attractive purchase price**: 12%
- **Traffic noise protection**: 12%
- **Status symbol/prestige**: 5%
- **I have no reason**: 4%
- **Other**: 1%

### Less sustainability-minded drivers

- **Environmental protection**: 23%
- **Lower running costs**: 22%
- **Attractive purchase price**: 15%
- **Tech. advancement support**: 11%
- **Performance figures**: 10%
- **Traffic noise protection**: 9%
- **I have no reason**: 4%
- **Status symbol/prestige**: 3%
- **Other**: 3%
The research also identified a difference in the preferences of sustainability-minded and less-sustainability-minded drivers for new cars versus used cars (see Figure 7). Specifically, 82% of sustainability-minded drivers would buy a new vehicle as their next purchase, compared with only 62% of less-sustainability-minded drivers. Although this might seem counter-intuitive—as buying a new car is typically considered less environmentally friendly than buying a used car—sustainability-minded drivers are more likely than other drivers to buy an NEV. Part of the reason for the interest in purchasing a new vehicle could be the low availability of used NEVs currently in stock.

So, given that both sustainability-minded and less-sustainability-minded drivers alike are considering an NEV for their next vehicle purchase, what steps should automakers be taking?

More than four in five sustainability-minded drivers prefer a new car instead of a used car for their next purchase.

### Industry Spotlight

**Audi will not introduce any new ICE models after 2026**

Already in 2021, Audi has released more models with an electric drivetrain than with a combustion engine. Further, the company’s CEO, Markus Duesmann, has said that Audi will introduce its last new ICE model by 2026 (with a production run of no more than seven years). Thereafter, Audi will only introduce new vehicles that have electric drivetrains—including its R and RS performance models."
How automakers should respond

Automakers need to prepare for a potential decline in sales from ICE models and the corresponding implication for profitability. At the same time, they must position themselves to benefit from the shift toward NEVs among sustainability-minded and less-sustainability-minded drivers alike.

To meet rapidly growing demand for NEVs, automakers will need to provide the right products, in the right volume, at the right time.

**To respond to this challenge, we recommend that automakers take the following actions:**

- Develop a holistic approach for new and used car sales as well as service and repairs that takes into consideration customers’ growing preference for NEVs. However, do not forget to manage the transition: Used cars with ICEs still need to be marketed effectively.

- Start building a new market for used NEVs that will be increasingly relevant in the coming years. Here, convincing customers of the value of used NEVs is essential. Developing a warranty program and/or a certification for used NEVs’ battery condition will help reduce uncertainty among customers, increase satisfaction and ultimately strengthen brand awareness.

- Safeguard revenues and profitability in the parts business during the transition from ICE vehicles to NEVs. This can be done through a multi-pronged approach:
  - Strengthen customer loyalty (e.g., through attractive and suitable offers including battery maintenance or software updates).
  - Optimize pricing (e.g., through new price points for captive parts with high margins or creating monthly recurring revenues via subscription models).
  - Enhance workshop efficiency (e.g., through online booking services or enablement of workshops to leverage vehicle data).
Myth #3
Drivers won’t pay extra for sustainable vehicles.
A common belief among automakers is that most customers are very price-sensitive and that any price increases to cover the cost of new sustainability features might push potential buyers away.

Our findings show that this belief is misguided. Sustainability-minded drivers are not only willing to switch to NEVs, as shown earlier, but a majority of them would accept a range of trade-offs—including higher prices—for a "sustainable vehicle."

For instance, as Figure 8 shows, 30% of sustainability-minded drivers globally are willing to pay 1-5% more (i.e., above the current suggested purchase price) for a sustainable vehicle, with another 61% willing to pay at least 6% more—including 4% who, surprisingly, would pay 25% more. With the average price of most new automobiles today ranging anywhere from US$20,000 to US$60,000, an increase of even 5% would bring automakers at least an additional US$1,000—helping defray their costs to incorporate features and/or technologies that enhance sustainability (through lower emissions, better fuel economy, etc.). Sustainability-minded drivers are also willing to pay more for sustainable service and repairs (see Figure 9). For instance, nearly four in ten (38%) are willing to pay up to 5% more for sustainable service and repairs, another one-third (33%) are willing to pay up to 15% more, and an additional 10% are willing to pay as much as 25% more.

Nine in ten sustainability-minded drivers are generally willing to pay more for a more sustainable car—with six in ten willing to pay at least 6% more.

**Figure 8: Sustainability-minded drivers’ willingness to pay more for a sustainable vehicle**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Willingness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>9%</td>
</tr>
<tr>
<td>5-1%</td>
<td>30%</td>
</tr>
<tr>
<td>6-15%</td>
<td>44%</td>
</tr>
<tr>
<td>16-25%</td>
<td>13%</td>
</tr>
<tr>
<td>&gt;25%</td>
<td>4%</td>
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</table>

**Figure 9: Sustainability-minded drivers’ willingness to pay more for sustainable service & repairs**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Willingness</th>
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<tr>
<td>6-15%</td>
<td>33%</td>
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<tr>
<td>16-25%</td>
<td>10%</td>
</tr>
<tr>
<td>&gt;25%</td>
<td>3%</td>
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</table>
Sustainability-minded drivers accept trade-offs for greater sustainability

In addition to the higher prices, sustainability-minded drivers are also willing to accept certain other trade-offs for a sustainable vehicle (see Figure 10). Specifically, 63% would accept a car with a less-attractive, more-functional design; 62% would consider a car with reduced performance (such as lower horsepower and/or slower acceleration); and 59% would accept a charging infrastructure that is not expanded much beyond what exists today.

In other words, sustainability-minded drivers are willing to accept trade-offs on factors that many in the automotive industry believe are critical, non-negotiable purchase criteria.

These drivers are also willing to accept significant trade-offs for greater sustainability in automotive service and repairs (see Figure 11). Debunking the commonly held belief about impatient automotive customers, approximately half of the sustainability-minded drivers in our study said that in return for greater sustainability in service and repairs, they would: Travel farther to a specific service location (cited by 53%); accept lower availability of appointments (51%); and wait longer for completion of service/repairs (50%).

62% of sustainability-minded drivers are willing to accept lower performance for a more-sustainable vehicle.
Industry Spotlight

**NIO introduces battery-as-a-service to allow customers to pay for a valued sustainability vehicle feature**

Since August 2020, NIO, a China-based electric vehicle company, has been offering customers the option to lease their car’s battery rather than including it as part of the total vehicle sales price. Customers can choose different battery capacities, as well as additional bookable services like NIO’s Power Swap, adjustable on a monthly basis. With NIO’s vehicles still eligible for national subsidies and tax exemptions, their net cost to customers often drops below that of many comparable ICE vehicles, making the purchase decision much easier.\(^5\)
Perhaps even more surprising: Respondents across all income levels are willing to pay more for greater sustainability, albeit with variations by income level.

For instance, more than four in ten (44%) of those at the highest income bracket—i.e., net monthly household income greater than US$7,500—are willing to pay up to 15% more for a sustainable vehicle, with another one in five (20%) willing to pay up to 25% more (see Figure 12). Even at the lowest income bracket—less than US$2,500 in net monthly household income—more than one-third (35%) of respondents are willing to pay up to 15% more for a sustainable vehicle, with nearly one in ten more (9%) willing to pay up to 25% more. A similar pattern holds true for respondents’ willingness to pay more for greater sustainability in service and repairs (see Figure 13).

The fact that sustainability-minded drivers strongly value and are willing to pay more—and accept other trade-offs—for greater sustainability opens the door to new margin potentials for automakers.

**Figure 12: Sustainability-minded drivers’ willingness to pay more for a sustainable vehicle, per net household income (US$/month)**

<table>
<thead>
<tr>
<th>Income Bracket</th>
<th>0%</th>
<th>1-5%</th>
<th>6-15%</th>
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<td>&gt;7,500 US$</td>
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<td>12%</td>
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<td>5%</td>
<td>20%</td>
<td>52%</td>
<td>19%</td>
<td>4%</td>
</tr>
<tr>
<td>2,500–4,999 US$</td>
<td>8%</td>
<td>30%</td>
<td>47%</td>
<td>13%</td>
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<td>&lt;2,500 US$</td>
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<td>39%</td>
<td>35%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>No disclosure</td>
<td>15%</td>
<td>38%</td>
<td>34%</td>
<td>9%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Figure 13: Sustainability-minded drivers’ willingness to pay more for more-sustainable service & repairs, per net household income (US$/month)**

<table>
<thead>
<tr>
<th>Income Bracket</th>
<th>0%</th>
<th>1-5%</th>
<th>6-15%</th>
<th>16-25%</th>
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<td>27%</td>
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<td>28%</td>
<td>35%</td>
<td>26%</td>
<td>8%</td>
<td>3%</td>
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How automakers should respond

Our research clearly debunks some beliefs surrounding auto customers’ price sensitivities and willingness to accept trade-offs for sustainable vehicles. As a result, there is a large discrepancy between current vehicle prices (including subsidies) and the actual willingness of sustainability-minded drivers to pay for sustainable vehicles.

Automakers must take action to secure their share of the existing margin potentials in vehicle sales and their service and repair operations. Given that setting the right price points in a highly competitive market is a complex challenge for automakers, we suggest that they start by rethinking their current pricing strategies.

We recommend the following measures:

• Clearly understand which aspects or sub-elements are sustainability value drivers for customers, e.g., sustainability-related features of NEVs, elements of sustainable service and repairs or even a sustainable supply chain.

• Analyze the willingness-to-pay for the identified value drivers by leveraging advanced analytics based on forward-looking data (e.g. from sentiment analyses in target customer segments) to validate traditional methodologies such as conjoint analyses.

• Based on the in-depth understanding of customer preferences, rethink the existing pricing strategy and approach of price setting, while taking state subsidies into consideration. Define new price setting rules based on the perceived value of sustainability features and test for selected NEVs and target customers segments—in other words, switch from a competitive to a value-based approach.

• Ensure clear and customer-friendly price education and communication. Make sure that customers understand exactly what they are getting for the price they pay, for instance, by outlining specific sustainability-related features of a NEV in sales information (e.g., low emission during car usage). Additionally, in the B2B do not disregard the growing demand in the fleet segment to transform the company car park toward NEVs to improve the company’s overall sustainability standing.

• For the service and repair segment, think about how to create new service bundle offerings tailored to customers’ sustainability demands and leverage new innovative price models (e.g., sustainability package including battery maintenance and regular software updates via annual subscription model).
Myth #4
Drivers are more concerned about digital experiences and convenience than about environmental impacts.
Automotive customers actively look for and enjoy digital experiences and seamless interaction with automakers across multiple touch points—both online and offline—seeking the maximum level of convenience. Yet it is often assumed that these preferences and expectations are not compatible with a concern for sustainability.

Our research found otherwise: Sustainability-minded drivers prefer digital experiences, including seamless and hassle-free processes, even more than less-sustainability-minded drivers do.

For instance, one-quarter (26%) of sustainability-minded drivers have bought a new vehicle entirely online, compared with only one-fifth (21%) of less-sustainability-minded drivers.

Sustainability-minded drivers were approximately 25% more likely than less-sustainability-minded drivers to have purchased a new vehicle online.

A significant number of sustainability-minded drivers are accustomed to conducting most activities along the sales journey online. While buying tires is the activity most-often conducted online, cited by 36% of these drivers, 30% also booked a test drive online, 30% negotiated the purchase price online and 26% completed the vehicle purchase online (see Figure 14).

Figure 14: Activities already conducted online

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bought tires &amp; organized fitting</td>
<td>36%</td>
</tr>
<tr>
<td>Booked a test drive</td>
<td>31%</td>
</tr>
<tr>
<td>Paid for vehicle service</td>
<td>30%</td>
</tr>
<tr>
<td>Negotiated price</td>
<td>29%</td>
</tr>
<tr>
<td>Booked a vehicle service</td>
<td>28%</td>
</tr>
<tr>
<td>Bought a new vehicle</td>
<td>26%</td>
</tr>
<tr>
<td>Organized financing</td>
<td>21%</td>
</tr>
<tr>
<td>Organized a pick-up</td>
<td>20%</td>
</tr>
<tr>
<td>Traded-in an old vehicle</td>
<td>18%</td>
</tr>
</tbody>
</table>
However, sustainability-minded drivers also experience frustration with some of their digital experiences (see Figure 15). Accessing relevant price information and agreeing on a final sales price is the biggest weak spot, cited by 22% of these drivers, followed by the availability of pre-sales information on websites and the advice they receive from sales associates online (16% each). In addition, 15% of sustainability-minded drivers noted model-specific details as a perceived pain point, which indicates a need for more information—especially about NEVs.

Figure 15: Weakest spots in digital experience [%]

<table>
<thead>
<tr>
<th>Pricing</th>
<th>22%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-sales advice from online sales associates</td>
<td>16%</td>
</tr>
<tr>
<td>Pre-sales online information</td>
<td>16%</td>
</tr>
<tr>
<td>Model-specific details</td>
<td>15%</td>
</tr>
<tr>
<td>Trade-in value of current vehicle</td>
<td>13%</td>
</tr>
<tr>
<td>Finance options</td>
<td>10%</td>
</tr>
<tr>
<td>Usage &amp; customer support</td>
<td>8%</td>
</tr>
</tbody>
</table>

Sustainability-minded drivers value convenience and proactive service offers

The research also found that sustainability-minded drivers have a strong preference for convenience-based services. For instance, when getting their vehicle serviced, 43% of them prefer a hassle-free and easy-to-use pick-up and hand-over service—known as an “invisible” service—over an independent physical drop-off (see Figure 16).

Among the notable differences by geography: Respondents in China were far more likely than those in other countries to prefer this invisible service over a physical drop-off. One possible reason for this is the high adoption rate of convenience services in many areas of Chinese respondents’ daily lives (e.g., home delivery of groceries). Interestingly, respondents in Italy and the U.S. showed the least interest for invisible service. Furthermore, three-quarters (74%) of sustainability-minded drivers, on average, would appreciate automakers providing proactive service offers based on real-time vehicle data (see Figure 17). This could include discounts on maintenance and spare parts, as well as an available appointment at the closest service location.

Three-quarters (74%) of sustainability-minded drivers would like automakers to provide proactive offers based on real-time vehicle monitoring to identify service and repair needs.
Sustainability-minded drivers consider connected services for sustainability important

In general, sustainability-minded drivers consider connected services important, with in-vehicle applications related to safety and navigation cited the most important, by 20% of respondents (see Figure 18). They also actively use connected services to improve their vehicle’s sustainability performance. Those cited as most important were services to help locate charging stations and to provide eco-drive (energy-efficient driving) assistance (see Figure 19).

“One-third (34%) of sustainability-minded drivers are not satisfied with the connected services they currently have in their vehicles.

“Digital features and automated driving functions are increasingly becoming a crucial factor in competition. I see enormous potential here. We will consistently exploit data as a business on the used car segments. We will do our homework, invest in loyalty, guarantees, service packages.”

Markus Duesmann, Chairman of the Board of Management and Board of Management Member for Product Lines, Audi AG
Figure 18: Most important connected services

- Safety: 20%
- Navigation: 20%
- Remote: 13%
- Parking: 10%
- Entertainment: 10%
- Smartphone integration: 8%
- Lifestyle & comfort: 8%
- Infotainment: 6%
- Messaging: 5%

Figure 19: Most important connected services for sustainability

- Charging station locator: 31%
- Eco-drive assistance: 21%
- Real-time consumption reporting: 16%
- Eco-routing: 15%
- Alternative engine type trainer: 12%
- Remote handling for charging: 4%
- Other: 1%

Industry Spotlight

**Mercedes-Benz expands in-vehicle digital services**

Appealing to the next generation of drivers, Mercedes-Benz places its focus on creating an unmatched user experience, especially in its electric models. Connectivity, customizability, and digital features are at the heart of the company’s new “Just like you” campaign, which targets the young urban generation. Typical for Mercedes-Benz, the campaign also highlights safety features, like an automatic braking assistant.7
How automakers should respond

Our research shows that the sustainability-minded driver enjoys digital experiences, has a strong preference for convenience, is open to “invisible” service and expects automakers to provide proactive offers.

In response, automakers must improve the digital customer journey and, at the same time, embed corresponding highly mature and user-centric connected services in their vehicles—making them, in essence, smartphones on wheels.

Among the actions automakers should take:

• Leveraging a deep understanding of customer preferences and expectations, create seamless end-to-end experiences that provide drivers with “wow” moments. But, most importantly, focus on the three core demands of digital elements, sustainability and convenience:

  – **Digital.** Develop services and features that seamlessly embed themselves into the driving experience while creating “wow” moments for the driver—such as natural voice control, smart-light interactions and integration of innovative services from third parties. Ultimately, this will create a much stronger bond between the driver and the car brand.

  – **Sustainability.** Increase sustainability-focused connected services and include sustainability key performance indicators wherever possible. Make such services even more appealing for drivers through gamification, ultimately changing customers’ driving behavior and optimizing NEV usage to reduce energy consumption.

  – **Convenience.** Reinvent the service concept for after-sales, including invisible services, providing convenience for the driver all around. This will require integrating all touchpoints (online and offline) for continuous customer engagement regardless of the customer’s location, with additional revenue potential from convenient after-sales services. Leveraging predictive maintenance is one way to offer proactive after-sales services—while simultaneously increasing customer loyalty.

• Leverage the emerging convergence of the broader ecosystem to integrate and collaborate with a diverse group of players from within and outside the industry—e.g., utilities, charging infrastructure owners and mobility providers—to realize the full potential of sustainability.
Myth #5

Tesla is the de facto leader in sustainability.
Reality

The race for future customers is still open, as no single automaker is perceived as the sustainability champion.

Common wisdom says that the future of the industry belongs to new automakers with a clear focus on NEVs—e.g., Tesla, NIO and Polestar—as customers associate these brands and their cars with a high level of sustainability. In this context, Tesla is often perceived as the gold standard. But our study paints a different picture. Globally, no brand is perceived as the undisputed leader for the best sustainability concept for vehicles (see Figure 20). In fact, not only do just 12% of the sustainability-minded drivers consider Tesla the leading brand in terms of sustainability, but nearly as many consider BMW or Audi as having the best sustainability concept (11% each).

Some sustainability-minded drivers do not have a specific brand in mind with regards to the best sustainability concept

Further, and perhaps more important, 13% of sustainability-minded drivers don’t have a specific automaker in mind when it comes to sustainability. In many cases, respondents were more likely to pick automakers based in their home markets as having one of the best sustainability concepts. Respondents in the U.S., for example, selected Ford as among the leading brands in terms of sustainability, and those in France selected Renault and Peugeot.

Even in service and repairs, more than one-quarter (28%) of sustainability-minded drivers don’t have a clear preference for a brand with the best sustainability concept (see Figure 21). Those who do cited BMW most often (12%), followed by Audi (10%); only 6% mentioned Tesla.

When respondents were asked what brand(s) had the best sustainability concept, no single brand was cited by more than 12% of sustainability-minded drivers—whether for vehicle or for service and repairs—and an even greater number of drivers didn’t cite any brand.

As a premium car company, it is our ambition to lead the way in sustainability. That is why we are taking responsibility here and now and making these issues central to our future strategic direction.”

Oliver Zipse, CEO, BMW
Our research also found that only very few sustainability-minded drivers are committed to a particular brand, with 97% willing to change brands for a vehicle with a better sustainability concept (see Figure 22). For instance, 22% said they would change brands for eco-friendly operations, and the same number said they would change to brands that produce vehicles in environmentally optimized factories (22%) and that use low-emission modes to transport components to plants and to dealers/customers (22%).

In addition, 99% of respondents would change brands for greater sustainability in service and repairs (see Figure 23). Of those, the greatest number would change brands for eco-friendly operations (29%), for eco-friendly products (27%), and for eco-friendly or even zero-emission logistics (22%).

What does this all mean? In short, that there is no de facto leader in sustainability—and that the playing field is open to other automakers to make their mark.

Nearly all sustainability-minded drivers—97%—would switch brands for a more-sustainable vehicle.

“Supporting our customers in helping them reach their own sustainability goals is also a real priority for us. How we operate and manage our own operations to minimize our impact on the environment [...].”

Beda Bolzenius, President and CEO, MARELLI
Figure 22: Sustainability-minded drivers’ willingness to change brands for a vehicle with a better sustainability concept

- Yes, if materials come from suppliers adhering to high environmental standards and treating their workforce fairly: 22%
- Yes, for brands that produce vehicles in environmentally optimized factories: 22%
- Yes, for brands that use low emission modes to transport components to plants and to dealer/customer: 22%
- Yes, for brands that produce cars with low emissions: 16%
- Yes, for brands that ensure environmentally-friendly recycling of car and parts avoiding to harm workers: 15%
- No, I would not change brands: 3%

Figure 23: Sustainability-minded drivers’ willingness to change brands for greater sustainability in service & repairs

- I would change brands for eco-friendly operations: 29%
- I would change brands for eco-friendly products: 27%
- I would change brands for eco-friendly or even zero-emission logistics: 22%
- I would change brands for eco-friendly courtesy vehicles: 12%
- I would not change brands: 9%
- I would change brands for environmentally friendly recycling: 1%
But what exactly are the factors that sustainability-minded drivers associate with a leading sustainability concept for vehicles? Our research found that it’s more than just lower emissions, which was cited by 22% of respondents (see Figure 24).

In fact, the same number of respondents cited sourcing materials from suppliers adhering to ethical and environment standards, and nearly the same number (20%) cited environmentally optimized production factories (i.e., manufacturing) and environmentally responsible vehicle recycling.

In terms of service and repairs, the factor that sustainable drivers consider most important in terms of sustainability is eco-friendly products, cited by 38% of drivers, followed by eco-friendly service operations (27%) and waste recycling (25%) (see Figure 25).

The key takeaway here is that automakers must find a way to compete for the hearts and minds of sustainability-minded drivers. Failing to do so—i.e., not making the necessary sustainability investments—will result in customers flocking to competitors who have shown a stronger focus on and commitment to sustainability.

**Figure 24: Elements of a sustainable vehicle concept as identified by sustainability-minded drivers**

- Low emissions during car usage: 22%
- Sourcing materials from suppliers adhering to ethical & environmental standard: 22%
- Environmentally optimized production factories: 20%
- Environmentally responsible vehicle recycling: 20%
- Low emission component transport: 16%

**Figure 25: Elements of a sustainable service & repairs concept as identified by sustainability-minded drivers**

- Eco-friendly products: 39%
- Eco-friendly service operations: 27%
- Eco-friendly recycling: 25%
- Eco-friendly or even zero emission logistics: 6%
- Eco-friendly courtesy vehicle: 3%
How automakers should respond

Clearly, the time for automakers to start creating true loyalty among current customers and win over new ones is now. Those that hesitate will find competitors establishing themselves as the industry’s leading sustainability brands.

We recommend that automakers take the following actions:
• Move fast to inspire customers. The race for sustainability-minded customers is still wide open. Acknowledge the urgency - do not wait for governmental regulation - and decide on a suitable brand positioning that builds on existing strengths related to sustainability—such as “all-electric” or “sustainable sourcing.”

• With the understanding that sustainability is an essential driver of brand awareness and customer loyalty, develop a holistic sustainability concept for vehicles across the entire vehicle lifecycle as well as for after-sales services, combined with subscription or new access models.

• Consider all three ESG elements—Environmental, Social and Governance—when developing a holistic approach to sustainability, as it’s not enough to just reduce CO₂ emissions and/or have a portfolio of NEVs. And it’s not just customers who will value this, but the capital markets as well, as sustainability has become a large driver in corporate equity performance.

• Establish a circular economy, a regenerative system of resources, waste, energy and emissions, and make sure to integrate existing and new partners, suppliers, competitors and other mobility providers along the way. Partnering with other players will enable automakers to leverage additional capabilities and create entire ecosystems, which will satisfy the changing customer demands for more sustainability.

Industry Spotlight

Hyundai launching new brand IONIQ to capture “Sustainable Socials”
With its “I’m in Charge” film airing in short ad-segments on news networks in the U.S., the U.K. and Korea, Hyundai launched its new full-electric brand IONIQ to appeal to a younger, sustainably focused audience—a group that is socially conscious and sees itself leading the way to a sustainable, progressive world. At the heart of these beliefs stands innovation as an enabler for change.¹°
The road forward

Automakers’ myths about customers preferences must be replaced by facts
Sustainability-minded drivers are here. They want NEVs, are willing to pay more for sustainable vehicles as well as service and repairs, enjoy digital experiences and convenience, and—quite significantly—demonstrate little brand loyalty. And they’re not just a small select group of wealthier, cosmopolitan customers, but the majority of drivers—spanning all age groups, population areas and income levels.

**Automakers must therefore rethink their go-to-market approach from a sustainability perspective—end to-end:**
- They must move quickly to embed sustainability into-and communicate it broadly across-their brands.
- They must not only develop more sustainable vehicles, but also develop a holistic approach for new and used car sales as well as service and repairs.
- They must rethink the existing pricing strategy and approach for price setting based on an understanding for customer preferences and their willingness-to-pay.
- They must invest in and build a seamless end-to-end customer experience across all points of the sales and ownership journeys, based on customer preferences and expectations.
- And they must establish or join a broader ecosystem with a diverse group of players to realize the full potential of sustainability.

One thing is abundantly clear: Automakers can’t afford to be reactive, letting government regulations dictate the speed of their sustainability journeys. Rather, they must listen to and focus on what customers want—and act now.

And while Tesla has long been believed to be the sustainability leader, our research shows that the road for sustainability recognition and dominance is still wide open—with not just other EV startups, but many long-established traditional automakers as well making significant headway.

Automakers that can pivot and quickly seize the opportunity will be well-positioned to cross the finish line. Those that hesitate will be left at the starting gate.
About the research
This research is part of Accenture’s “What digital drivers want” series covering the latest customer trends in the automotive industry.

For this study, Accenture surveyed a diverse and randomized group of 8,500 customers from seven countries: China (2,500), the U.S. (1,000), Germany (1,000), the U.K. (1,000), France (1,000), Italy (1,000) and Norway (1,000). The online survey was structured, conducted and analyzed along the dimensions of (1) demographics; (2) vehicle sales; (3) vehicle service and repairs; and (4) connected services.

In this regard, the group of sustainability-minded drivers with significantly more concern for environmental standards could be identified and separated from the “less sustainability-oriented” drivers.

We also integrated our automotive industry expertise and project experience to introduce case studies of leading automakers that, in our view, can be considered best practices for certain aspects related to sustainability.
About Accenture

Accenture is a global professional services company with leading capabilities in digital, cloud and security. Combining unmatched experience and specialized skills across more than 40 industries, we offer Strategy and Consulting, Interactive, Technology and Operations services—all powered by the world’s largest network of Advanced Technology and Intelligent Operations centers. Our 569,000 people deliver on the promise of technology and human ingenuity every day, serving clients in more than 120 countries. We embrace the power of change to create value and shared success for our clients, people, shareholders, partners and communities.


Sources


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