

September 2023

The automotive industry has experienced tremendous changes over the past few years, evolving towards sustainable solutions impacting global supply chain networks and consumer habits. This report showcases results from a PwC Indonesia survey of electric vehicles currently on the market, key drivers, and future expectations for growth and development in the industry.



Welcome letter

PwC undertook this survey to offer our audience insight into Indonesia's readiness for electric vehicles (EVs) and shed light on where the industry is moving towards in the future. We understand how important it is for industry stakeholders to have a reliable understanding of the factors impacting current and potential consumers during this transformative period in which consumer awareness of greener personal transport options is increasing.

This report aims to offer readers an overview of how Indonesian consumers feel about adopting EVs into their everyday lives.

The data collected revealed an industry shift to accommodate new sustainable demands in the face of these extraordinary times, from combating climate change to adopting technological advances in artificial intelligence (AI) to enjoying socioeconomic shifts, with Indonesians having higher personal spending power than



Hendra Lie Automotive Leader PwC Indonesia

ever before. The EV market is expected to grow over the next few years due to consumer awareness of ecofriendly vehicles and government incentives, and we will begin to see an expansion of demand. This shift to EVs will eventually require part suppliers to accommodate the newfound appeal. However, in Indonesia, the adoption of EVs has been slower than in other global markets. Nonetheless, key industry leaders and political figures are preparing for a future where these eco-friendly vehicles play a starring role in the market.

Adopting innovative technologies, including smart, digitalised factory solutions, educational tools, and big data, will help critical players obtain advantages that will give them a fundamental competitive edge to continue unlocking the sustainable automotive industry. The shifting dynamics of personal wealth will be something to consider and will require a concerted effort to prepare Indonesians to adopt EVs. Our survey found that the majority of participants receive their news and information directly from automotive websites, closely followed by online video streaming. The automotive companies and influences from social and political realms are crucial in the push for the adoption of electric and hybrid vehicles. The availability of EVs have expanded nationwide, along with the most significant industry-wide push to launch to date, leaving consumers increasingly interested in the benefits of changing from fossil fuel-based to hybrid or electric options.

Despite all the positive environmental changes that accompany consumers switching from fossil fuel-based vehicles to eco-friendly options, there are still lingering doubts that leave consumers needing to be convinced. Respondents vastly underestimated the distance an EV can travel on full charge, with most answering 100km when, in reality, it is at least double. Following concerns about the distance, over half of the participants were also concerned about finding a charging station (particularly in remote areas), the amount of time which it takes to charge the batteries, and the costs associated with replacing specific parts.

Adapting operations to boost value proposition to new consumers while strategically educating the population about the benefits of EV options will increase collective competitive advantages and reduce Indonesian fossil fuel-based emissions. Having a product or service portfolio that is market-ready, flexible, innovative, and able to meet consumer needs will be increasingly important. The main thread in the survey is that respondents are curious about EVs and plan to transition to an electric car or electric motorcycle in the future. Still, more outside influences and tools are needed to educate consumers to separate facts from perceptions. Few, if any, respondents stated that they are unlikely to contribute to Indonesia's readiness for EVs, while most expressed their willingness to move towards greener personal transport options.

The PwC team wishes to express its gratitude to all the members who participated in this report. We are thankful to witness an industry where stakeholders can gain valuable insight into factors affecting the market that, in turn, creates a shared vision that benefits all stakeholders. This shared vision is bright and one that PwC is proud to be a part of. Here, we embrace our role as an industry enabler. We will continue to support Indonesian automotive companies and other stakeholders.

Executive summary

All stakeholders can be proud of the evolution, reach, and technological advances of Indonesia's automotive industry. PwC has paid close attention to global calls for consumer readiness for sustainable solutions, with no better place to begin than with personal transport methods. To understand the enthusiasm and perception of the Indonesian population for eventual electric vehicle adoption, we are pleased to support any stakeholders of the EV industry. Analysing this survey provides valuable knowledge into individuals' awareness, perceptions, and preferences regarding EVs and shines a light on the potential areas of focus for EV players, policymakers, and other stakeholders in the industry. These findings show us what work needs to be done to influence the public towards adopting a more sustainable way of transportation to meet Indonesia's Sustainable Development Goals (SDGs) and lower our emissions by understanding their current points of view, perceived benefits, and concerns. We have seen how the automotive industry has developed and been at the forefront of changes to transform itself into an eco-friendly competitive sector to meet consumer demands.

How industry players are capable of adapting to evolving market demands and welcoming cutting-edge technologies magnifies the competitive nature of this industry for Indonesia. Several neighbouring countries, as well as Indonesia, are offering financial incentives for their populations to convert from fossil fuel-based vehicles to EVs for a better tomorrow, and consumers are positively responding to the new alternatives for the benefit of the future. Thanks to the abundance of nickel, we are able to continuously manufacture these planet-saving cars and motorcycles to make Indonesia a leading green destination for the ASEAN region and, eventually, the world. Consumer readiness and adoption will take time, along with implementing crucial structures such as charging ports, but the industry will continue to adapt and reach goals.

The coming years will see this trend continue, with governments calling on vehicle manufacturers to produce more EVs and assist with educating consumers about these modern and progressive methods of transportation that are gradually affordable and easy to access. While Indonesia is still at the beginning of the EV era, Indonesia's rising middle class will continue to expand, along with newly revived consumer spending power. This will drive automotive players and political leaders to be ready to respond to lingering questions to meet these emerging market curiosities and demands.

A solid community that provides concrete answers quickly and effectively is a crucial element to understanding and supporting consumers concerning their readiness for EV adoption. The battle against climate change has forced governments to get creative to entice consumers to switch from fossil fuel-based vehicles to electric or hybrid options that may have more up-front costs, while encouraging consumers to remain open-minded regarding eco-friendly solutions. By genuinely listening to the Indonesian population from every demographic, hearing their concerns, and offering solid solutions and education, Indonesia can emerge as a key player in EV-related manufacturing and adoption.

This survey reveals how industry players, stakeholders, and governments can penetrate the EV consumer education market by investing in attractive knowledge-based campaigns and creating a new high level of sustainable knowledge among the population. It also shows that global investor sentiments concerning sustainability issues are seeping into the forefront of the automotive consumer mindset, with most acknowledging the necessity for products and solutions that consider long-term, greener solutions.

We trust this report can serve as a helpful resource for stakeholders aiming to understand the Indonesian EV market and consumer readiness and approach. It tells the story of an industry that will continue to grow and adapt well into the next era of sustainable development.

Contents

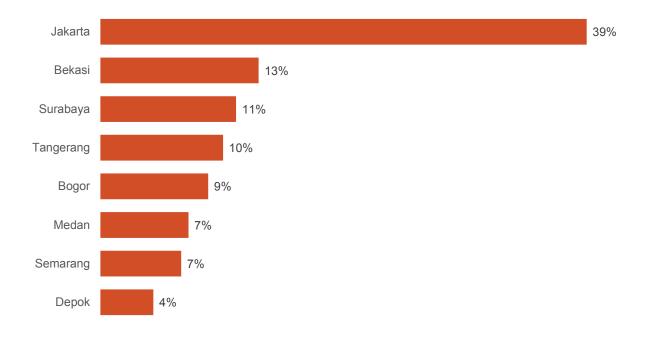
Welcome letter	02	
Executive summary	03	
Demographics	05	k
General outline	08	1
Interest and preference	10	1
Awareness and knowledge	16	
Perception	19	
Government incentives	22	



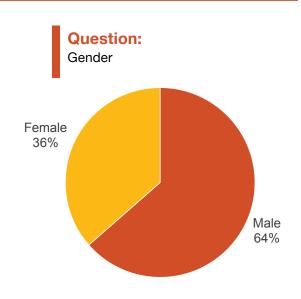


To begin the survey, understanding the location of the participants was crucial because the geographical location of respondents can heavily influence their perceptions of EVs. Urban residents might have different concerns and priorities compared to those residing in suburban areas. With better access to charging infrastructure and more exposure to technological trends, urban residents might be more inclined towards EV adoption. However, suburban residents may consider the accessibility of charging infrastructure and vehicle ranges. The majority of participants live in metropolis cities such as Jakarta (39%), followed by big cities like Bekasi (13%), Surabaya (11%), and Tangerang (10%). An EV is particularly efficient for shorter journeys within the city due to the close proximity of destinations, but it is practical for those who still require the need for a personal vehicle to travel longer distances and make such journeys. In comparison to an EV, a traditional fossil fuel-based vehicle loses roughly 60% of its efficiency on heat and friction.

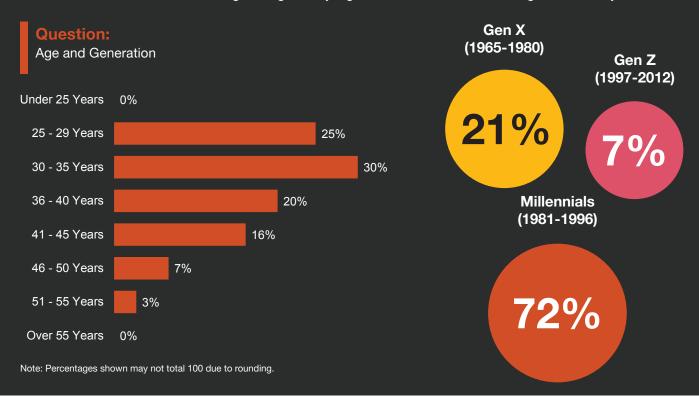
Question: Where do you currently live?



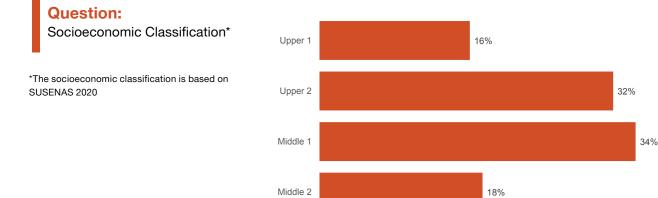
Gender dynamics can play a role in vehicle preferences, concerns, and purchasing decisions. Understanding gender-based trends can help in tailoring marketing and awareness campaigns. In this survey, men made up 64% of participants, while women made up 36%. The male population may prioritise technical aspects like vehicle performance, battery life, and technological features. In contrast, females also consider technical aspects but might give more importance to safety features, aesthetics, and environmental impact.



Different age groups might have varying levels of familiarity with EV technology. Younger generations tend to be more tech-savvy and environmentally conscious, and they might prioritise sustainability and be more open to adopting new technologies like EVs. Social trends and peer opinions might also influence their purchasing decisions. Gen X populations are likely to balance environmental concerns with practical considerations like family needs, vehicle performance, and cost. They might be more interested in larger EVs suitable for families. On the other hand, those perhaps 50 years old and older might prioritise reliability and have well-established purchasing habits. Millennials born between 1981 and 1996 dominate, with 72% of respondents belonging to that age generation, followed by Gen X (1965 – 1980) at 21%, and rounding out with 7% from the Gen Z period, born between 1997 and 2012. Understanding the age of the respondents is crucial because different studies have shown that millennials are the most eager to go electric, likely due to their awareness of the benefits thanks to social media usage and generally higher levels of education among Indonesia's youth.



Measuring socioeconomics (SEC) is a significant indicator of the quality of life. Naturally, individuals of higher SEC status generally enjoy a better quality of life due to the higher spending power at their disposal. Indonesia has one of the fastest-increasing personal spending rates in the world and a consistently growing middle class due to government and economic success stories in eradicating poverty and continuing on the country's path towards becoming a high-income, prosperous nation. The middle class was represented by 52% of respondents, while the upper class represented by 48%.

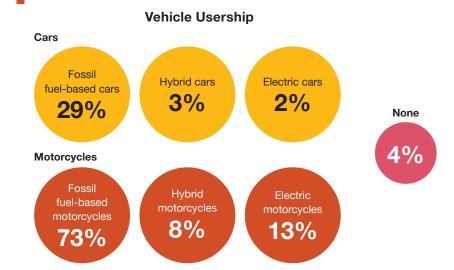




We noticed the popularity of motorcycles during this particular question, as we had almost double the responses for motorcycles instead of cars. Regarding the popularity of fossil fuel-based vehicles in Indonesia, concerning cars, 29% of participants prefer fossil fuel-based vehicles, while only 5% use electric or hybrid vehicles. On the other hand, 73% responded that they use a fossil fuel-based motorcycle option, with only 21% utilising electric or hybrid technologies.

Question:

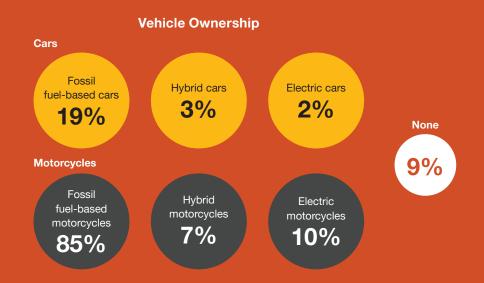
Regardless of whether you own a vehicle or not, which alternative do you often use, at least once every month?

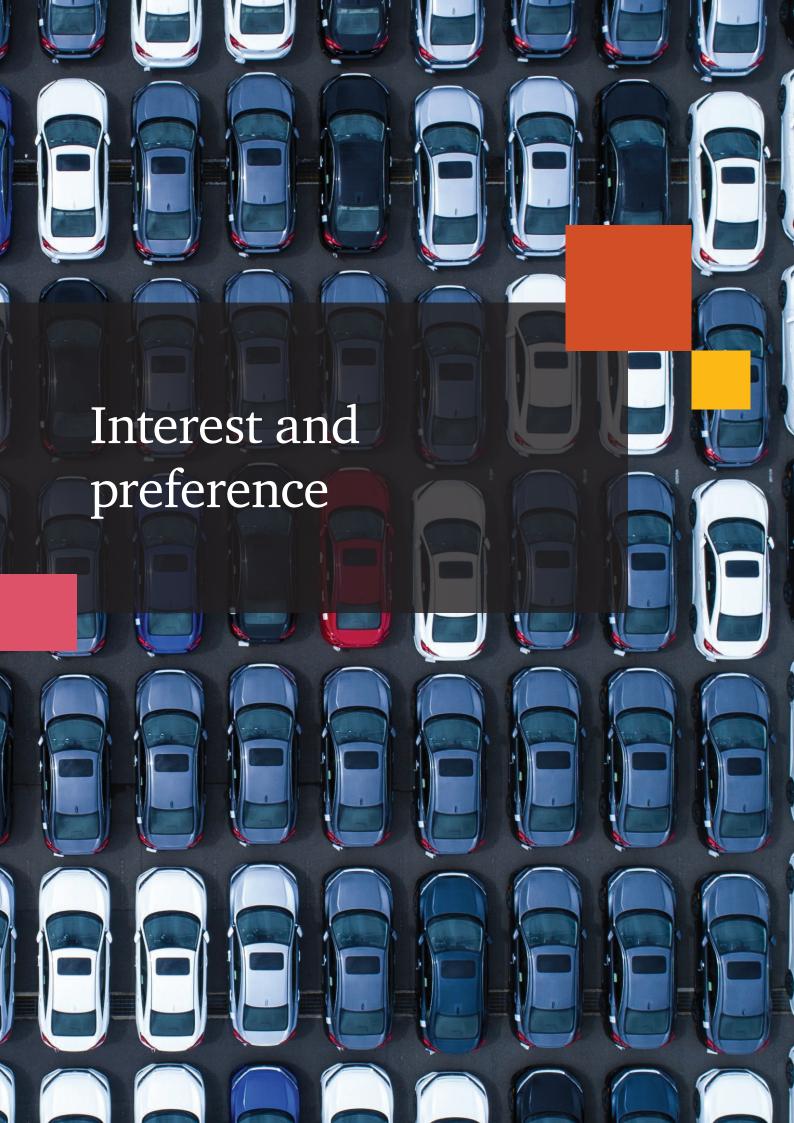


The decision to purchase an EV is influenced by a myriad of factors, from environmental concerns to economic considerations. Understanding how consumers view EVs in their vehicle ownership journey provides invaluable insights for EV players, policymakers, and other stakeholders. Understanding the different segments of buyers allows EV players to tailor their marketing strategies. This question can be divided into two parts, i.e., cars and motorcycles. Beginning with cars, 19% of respondents own fossil-fuel based vehicles, while 5% own hybrid or electric vehicles. Looking at the figures for motorcycles is already quite interesting as we have more data to utilise due to most participants owning this type of transportation. In contrast to the 17% of respondents who possess motorcycles that use hybrid or electric technology, 85% of respondents own motorcycles that run on fossil fuels.

Question:

Which type of vehicle do you currently own?





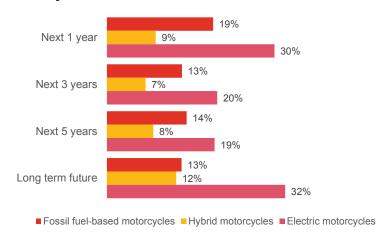
Reflecting on the data, the respondents' desire to continue using fossil fuelbased motorcycles seems to gradually decrease. For motorcycle options, there is more hope for adoption amongst the respondents, with between 30% hoping to purchase an electric motorcycle versus the 19% remaining with fossil fuelbased motorcycles in the next one year. This constancy can be seen in the long term as well.

Hybrid or electric car adoption may take longer due to between 33% of participants choosing to purchase cars in the future that utilise fossil fuels over the next one year, in comparison to 13% of consumers who are hoping to purchase a hybrid vehicle, or the 21% in the market for an electric car. Interestingly enough, in the long term, 45% of respondents stated that they hope to purchase an electric car in the future, compared to 34% still holding onto fossil fuel-based cars. The data here clearly shows us that plans to purchase electric motorcycles in the near future are higher than cars and demand for electric cars will begin gradually after the next five years.

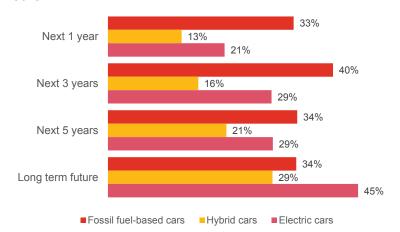
Question:

Which vehicle do you plan to buy within the next one, three, and five years? Which vehicle do you wish to buy in the long term future?

Motorcycles



Cars



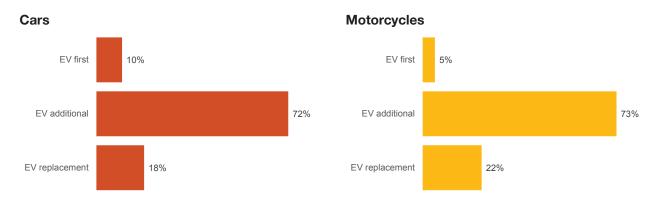


From the report, generally most Indonesian consumers refer to electric vehicles as their additional vehicles with 72% expressing interest in having electric cars and 73% in having electric motorcycles as their additional vehicle. This may be reflected as the result of the Indonesian consumers' concern toward station charging infrastructure availability which is currently limited in Indonesia, with only 18-22% of Indonesian respondents willing to replace or convert their fossil-based cars (18%) and fossil-based motorcycles (22%) to electric vehicles.

Question:

Will an electric car or motorcycle be your first vehicle? If you already own a vehicle, would you consider replacing it with an electric one or purchasing an additional electric vehicle?

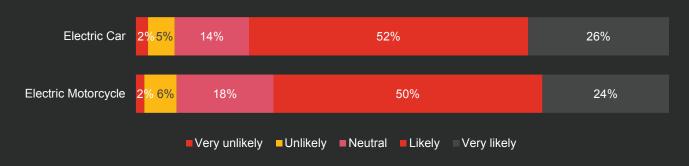




Following a global trend towards sustainable vehicles, an overwhelming majority of respondents, 78% to be exact, stated that they are likely to buy an electric car in the future, and 74% are likely to purchase an electric motorcycle. The Indonesian Government is currently working with global companies focusing on sustainability to meet the country's SDGs set in agreement with the United Nations organisation to become an eco-friendly nation and lower emissions. By 2030, Indonesia's EV market is predicted to surpass US\$20 billion, and consumers converting to these sustainable transport options count as a significant step in the right direction to meet their goals.

Question:

On the following scale of likelihood, how likely are you to buy an electric car or motorcycle in the future?

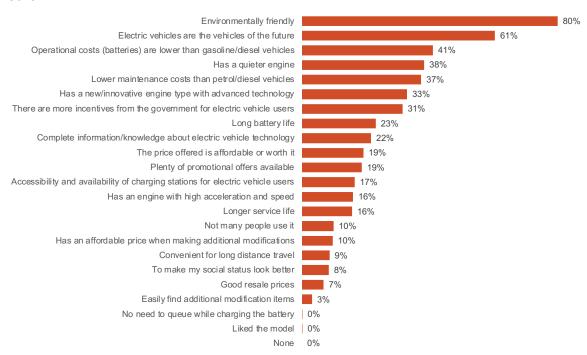


Most of our respondents agreed that being environmentally friendly is the most important aspect for intenders to purchase electric cars (80%) and electric motorcycles (75%). This is also followed by consumers positively perceived towards electric cars (61%) and electric motorcycles (57%) by saying that EVs are vehicles of the future. However, there is a difference in the top-third reasoning. Consumers prefer electric cars over fossil fuel-based cars due to cheaper cost (41%) while consumers opt for electric motorcycles because of a quieter engine (44%).

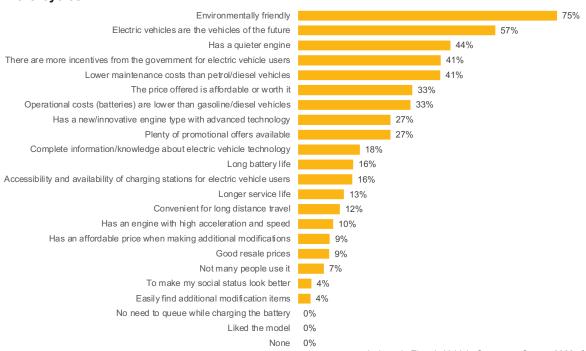
Question:

You previously stated that you are considering buying an electric car or motorcycle. What is the reason behind this?

Cars



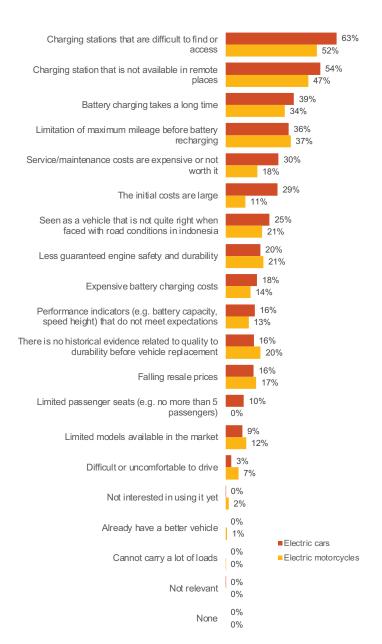
Motorcycles



As the global push towards sustainable transportation intensifies, the adoption rate of EVs becomes a focal point of interest. However, consumer concerns and apprehensions can significantly impact this rate. Addressing these worries is not just the responsibility of industry players but also policymakers, infrastructure developers, and awareness campaigns. The result from the survey shows highly similar numbers between respondents both for electric cars and motorcycles. This paragraph will use the percentages for electric cars as a representative of the survey's result. One of the primary concerns among respondents 63% was the difficulty in finding charging stations and highlighting the need for a robust charging infrastructure, especially in remote areas (54%). The time required for charging the vehicles was also an important factor (39%); consumers are accustomed to the quick refuelling process of traditional cars, and there is a perception that EVs take a long time to charge, which can deter potential buyers. When purchasing a vehicle, all owners look to ensure their investment will hold value, and respondents expressed concerns about the rapidly evolving nature of EV technology, which has led to fears about the falling resale prices of older electric or hybrid models (16%). As a solution, governments and private-sector players could create partnerships to expand charging infrastructures nationwide and initiate fast-charging stations alongside highways. Simultaneously, manufacturers should focus on improving battery technology to reduce charging times. Innovations like superchargers have already made significant strides in this direction. Finally, many of the concerns stem from an overall lack of knowledge. Comprehensive awareness campaigns highlighting the advancements in EV technology, the long-term cost benefits, and the positive environmental impact can shift perceptions. The transition to EVs is inevitable, but the pace of this transition hinges on addressing consumer concerns. Stakeholders can accelerate the global shift towards sustainable transportation by understanding these worries and proactively working to alleviate them.

Question:

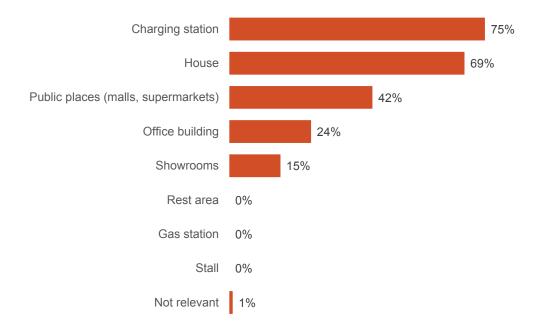
You previously stated that you are not considering buying an electric car or motorcycle. What are some barriers that refrain you from doing so?



While the allure of EVs is undeniable, consumers' concerns can significantly influence their adoption rate. A deeper understanding of these worries is essential for EV players, policymakers, and other stakeholders to address them effectively. Charging is one of consumers' most significant concerns when considering an EV for the first time as most respondents prefer to look for a charging station facility (75%), followed by charging installation at home (69%) and public places (42%).

Question

Assuming you own an EV, where would you prefer to recharge your vehicle's battery?



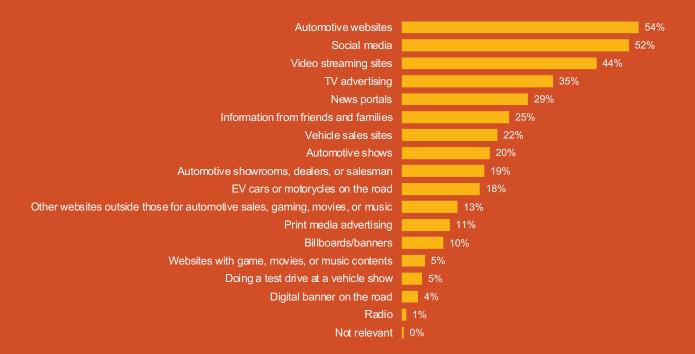




In this age of digitalisation, spreading accurate information to reach as many consumers as possible is the primary goal. There are endless examples of campaigns or collaborations between social media influencers, companies, and governments that have allowed people to educate themselves about EVs. Among the respondents, 54% learn about EVs from automotive websites, 52% from social media, 44% from online video services, and 35% from TV commercials. There is an extensive opportunity from the previously discovered findings to fill the knowledge gap to educate Indonesians on the true benefits of switching from fossil fuel-based vehicles to eco-friendly options. In Indonesian culture, word of mouth counts. Twenty five percent of respondents stated that they obtain information about EVs from communication with friends and family, presenting an opportunity to create a community.

Question:

Where do you obtain information about EVs?

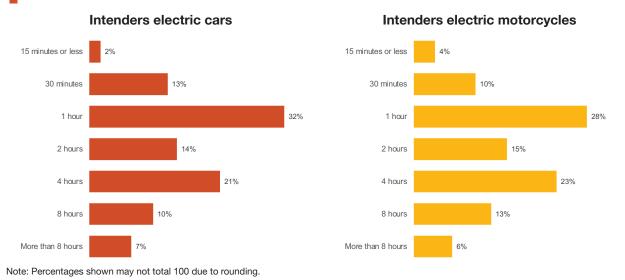




To understand the respondents' knowledge of the battery life of an EV, we found there to be a rather large gap in general knowledge concerning recharging an EV, both for cars and motorcycles. Nearly 70% of the intenders EV assumed one to four hours to fully charge the battery, while approximately 18% predicted at least eight hours or more. Thanks to the quick refuelling time of fossil fuel-based vehicles, a specific benchmark has been set, and consumers may be wary of long charging times, especially during longer trips. Technology has paved the way for superchargers and rapid charging stations that can charge cars fully in under an hour to alleviate the inconvenience of waiting.

Question:

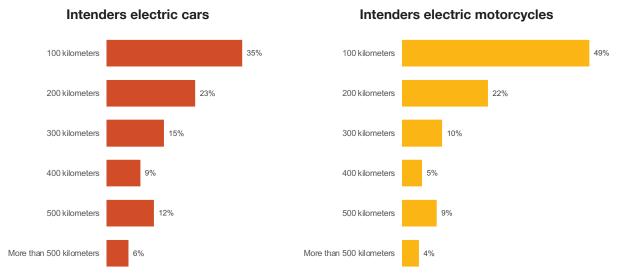
In your opinion, how long does it take to fully recharge an EV's battery?



Concerning this aspect of an EV is crucial for consumer knowledge. Whether on a short or long journey, driving an EV should be easy and secure, and this relies on battery performance. Nearly half of intender electric motorcycle respondents (49%) believed that a fully charged electric motorcycle can only travel 100km. Meanwhile, 73% of intenders for electric cars predicted a range of 100km to 300km and the remainder (27%) believed it can drive at least 400km or more. One of the prevalent worries among first-time EV owners is the fear of running out of battery mid-journey. Of course, the concern is valid, but with public awareness campaigns debunking the myths and providing facts along with collaborative infrastructure development to develop expansive charging infrastructures, this fear will become less present as the adoption of EVs continues.

Question:

In your opinion, how many kilometers can an electric vehicle go if it's fully charged?





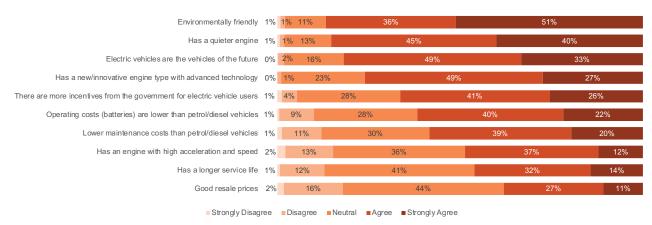


The transition to an EV is not just an economic or technological shift for the better; it is fundamentally an environmental imperative. As concerns about climate change and ecological degradation intensify, the role of EVs in mitigating these challenges becomes paramount and an added sales benefit. At least 87% of respondents agreed that EVs are environmentally friendly. Most respondents also agreed that these are the vehicles of the future, especially now as concerns about climate change grow and EV technology is becoming more accessible. A quieter engine, innovative technology, and never-experienced-before aspects proved exciting, as 76 – 85% of respondents agreed or strongly agreed on highlighting the technical features of EVs that cannot be replicated in fossil fuel-based vehicles. Unlike traditional cars that emit greenhouse gases during operation, EVs produce zero tailpipe emissions and can significantly reduce the carbon footprint of transportation, especially in urban areas. Improving air quality is on everyone's minds, especially those in government positions, as cities worldwide grapple with air pollution, much of which is attributed to vehicular emissions. By adopting EVs, cities can improve air quality, benefiting public health and the environment. While EVs have lower operational emissions, it is essential to consider the entire lifecycle. This includes emissions from manufacturing and, crucially, electricity generation. As the energy grid becomes greener, the lifecycle emissions of EVs will further decrease. What respondents saw as the least beneficial option on the survey pertained to the resale price of the EV, with only 38% agreeing that it would resell for a reasonable price. Depending on the model, it is valid to the extent that EVs may not hold their value, but this principle can also be applied to fossil fuel-based vehicles and market behaviour.

Question:

From a scale of 1 - 5, where 1 means "Strongly Disagree" and 5 means "Strongly Agree", how much do you agree with the following statements?

EV Benefit



Naturally, when trying something new, there will always be specific concerns that need to be addressed. The EV ecosystem is complex, encompassing industry players, consumers, policymakers, and technology providers. While the industry faces numerous challenges, these also present opportunities for innovation and growth. The survey showed that most respondents were primarily concerned with finding and accessing a place to recharge the vehicle (60%) and how long it would take (58%). Current battery technologies, while advanced, still have limitations in terms of range, charging times, and lifespan.

In contrast, likely in correlation with the perception that EVs cost significantly more than fossil fuel-based vehicles, 51% disagreed, and 38% were neutral when asked if they agreed or disagreed with the comfort or difficulty of driving or riding in the vehicle. Misconceptions and lack of awareness about the performance, maintenance, and benefits of EVs can influence consumer decisions, and the initial costs can deter many potential buyers. EV players and stakeholders can navigate these consumer concerns and create opportunities for a prosperous electric and hybrid automotive future by investing in research and development and engaging regularly with consumers, policymakers, and industry experts to provide valuable feedback and insights. These forefront figures can also promote inclusivity to ensure that the transition to EVs caters to diverse demographics and economic segments and will keep sustainability at the centre of focus.

Question:

From a scale of 1 - 5, where 1 means "Strongly Disagree" and 5 means "Strongly Agree", how much do you agree with the following statements?

Charging stations that are difficult to find or access The price of charging batteries at stations that are expensive or not worth it Battery installation is technically complicated The maintenance is difficult and cumbersome Difficult or uncomfortable to ride To Prone to damage and problems The price of charging batteries at stations that are expensive or not worth it The maintenance is difficult and cumbersome Battery installation is technically complicated The maintenance is difficult and cumbersome Bittery installation is technically complicated of the same and problems are expensive or not worth it of the same and problems are expensive or not wort

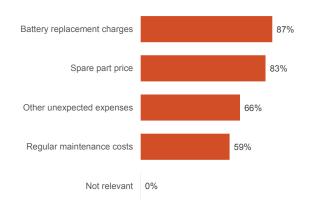
■Strongly Disagree ■Disagree ■Neutral ■Agree ■Strongly Agree

Note: Percentages shown may not total 100 due to rounding.

The EV ecosystem is an entire world for consumers to explore, presenting significant opportunities for those willing to innovate and adapt. With any changes come valid concerns and, in our case, maintenance expenses that can prove to become costly in the long run. Battery replacement prices were the respondents' top concern (87%), followed by the cost of replacement parts (83%), unforeseen costs (66%), and regular maintenance costs (59%). The race to develop cutting-edge solutions that address current challenges and enhance user experience intensifies as the world shifts towards sustainable transportation. Solid-state batteries are being developed to provide consumers with more extended driving ranges, faster recharge times, and increased safety, along with innovations in wireless charging to promote flexibility. These cutting-edge advancements, especially in battery technology and overall efficiency, can lead to reduced maintenance costs and longer vehicle lifespans.

Question

Which of the following types of maintenance costs are you most concerned about?

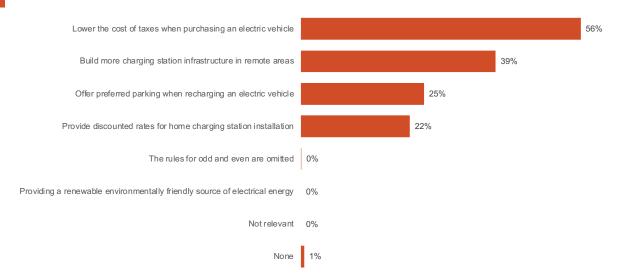




Government incentives are pivotal in shaping the trajectory of EV adoption. As nations grapple with environmental challenges, promoting sustainable transportation becomes imperative. Incentives and subsidies or rebates can significantly influence consumer decisions, making them a vital tool in pushing towards a greener future. Countries globally have introduced incentives for consumers to purchase an EV, such as no tax on their vehicle purchase, free parking, and discounted electricity bills for those recharging their vehicles in their homes. In 2023, Indonesia launched a list of incentives for consumers and businesses to purchase electric cars and buses to expedite the shift from fossil fuel-based energy to electric energy. They offered cash benefits to consumers who purchased electric motorcycles made in Indonesia, along with several other attractive offers. Most respondents (56%) were primarily aware of the lower taxes offered upon purchasing an EV, followed by 39% of the plan to build charging stations in remote areas.

Question:

Which of the following government incentive programs listed below have you heard of that already been applied in Indonesia?



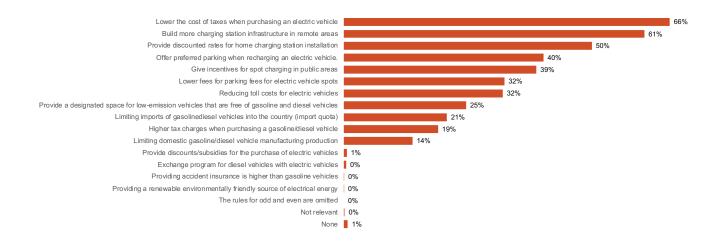




From local leaders to global governments, these figures have recognised the need to spearhead the adoption of EVs to reduce local and global carbon emissions and have introduced a variety of incentives to make hybrid or electric vehicles affordable. The International Energy Agency actively participates in thorough consumer and high-tech research to aid governments in creating sustainable incentives. The respondents were asked what would most likely motivate them to purchase an EV. According to the survey, 66% of respondents preferred to lower the cost of taxes when buying an electric vehicle, 61% preferred to construct more infrastructure for charging stations in distant locations, and 50% preferred to offer reduced prices for home charging station installation. Tax credits and subsidies or rebates can reduce the upfront cost of EVs, making them more competitive with traditional vehicles. The initial cost is a significant barrier for many consumers, and financial incentives can effectively address this concern. Concerning infrastructure, government funding can accelerate the development of charging infrastructure by ensuring that charging stations are widespread and accessible. Incentives are not just financial. Governments can spearhead awareness campaigns to educate the public about the benefits of EVs, dispelling myths and addressing concerns.

Question:

Which of the following government initiatives, if implemented, would most encourage you to purchase an electric vehicle?



Contact us for more information



Hendra LiePartner
hendra.lie@pwc.com



Lukmanul ArsyadPartner
lukmanul.arsyad@pwc.com



PwC Indonesia Jakarta WTC 3

Jl. Jend. Sudirman Kav. 29-31 Jakarta 12920 - Indonesia

Telp: +62 21 5099 2901 / 3119 2901 Fax: +62 21 5290 5555 / 5290 5050 Surabaya

Pakuwon Tower Tunjungan Plaza 6, 50th Floor, Unit 02-06 Jl. Embong Malang No. 21-31 Surabaya 60261 - Indonesia

Telp: +62 31 9924 5759

Email: id_contactus@pwc.com

www.pwc.com/id



PwC Indonesia



@PwC_Indonesia

This document has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in the document without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this document, and, to the extent permitted by law, PwC Indonesia, its members, employees and agents accept no liability, and disclaim all responsibility, for the consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this document or for any decision based on it.

The documents, or information obtained from PwC, must not be made available or copied, in whole or in part, to any other persons/parties without our prior written permission which we may, at our discretion, grant, withhold or grant subject to conditions (including conditions as to legal responsibility or absence thereof).

PwC Indonesia is comprised of KAP Tanudiredja, Wibisana, Rintis & Rekan, PT Prima Wahana Caraka, PT PricewaterhouseCoopers Indonesia Advisory, PT PricewaterhouseCoopers Consulting Indonesia, and PwC Legal Indonesia, each of which is a separate legal entity and all of which together constitute the Indonesian member firm of the PwC global network, which is collectively referred to as PwC Indonesia.

© 2023 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see http://www.pwc.com/structure for further details.