

The electric shift: What’s powering your next car purchase?

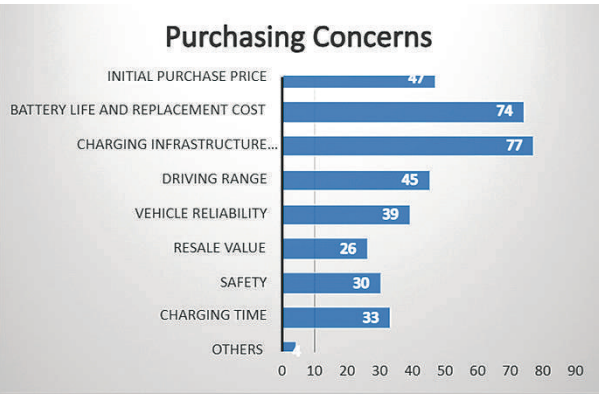
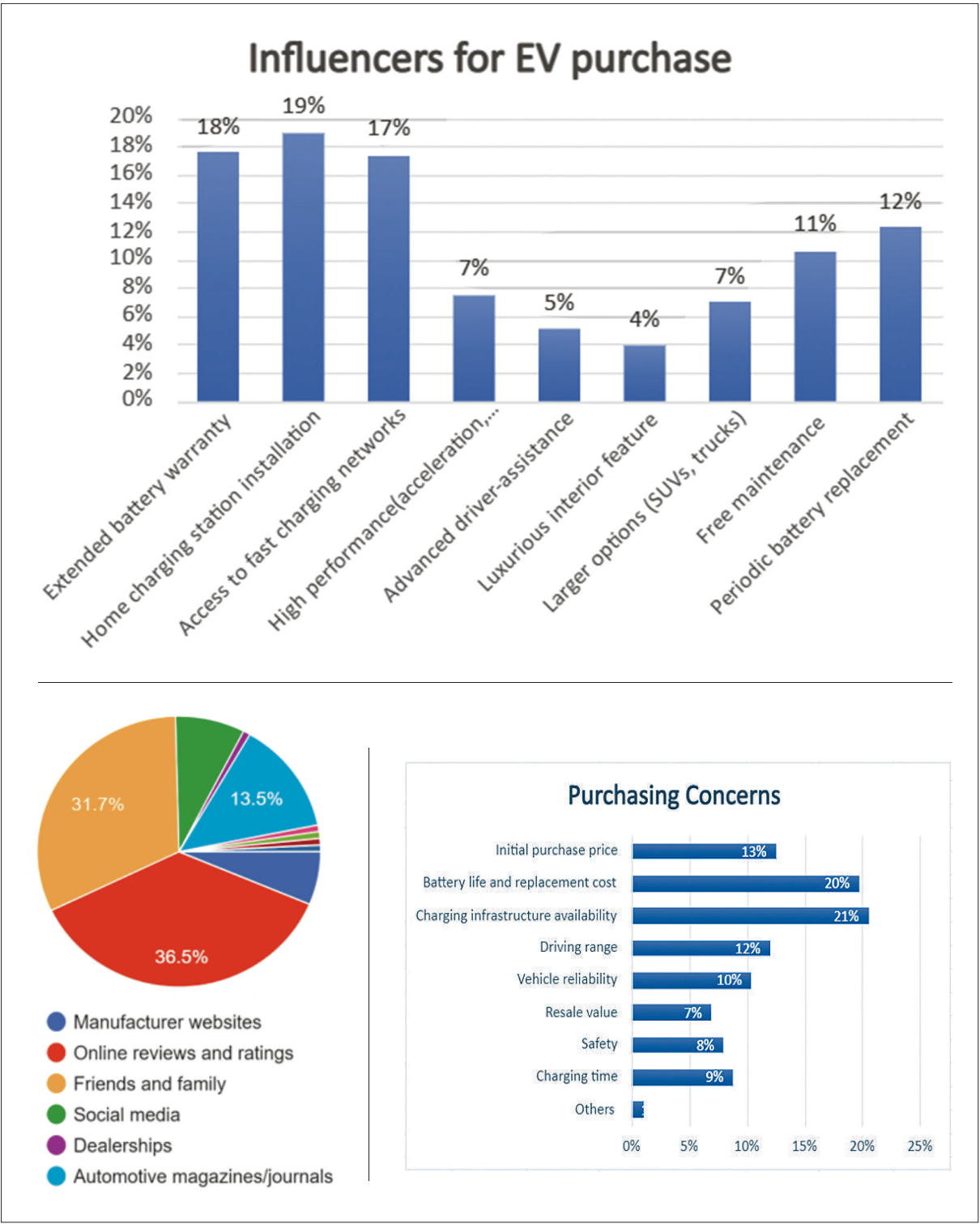
What is driving the rising consumer interest towards EVs—is it the promise of zero emissions, the sleek tech, or perhaps the long-term savings on fuel?



In a world where fuel prices fluctuate like the stock market and environmental concerns are rising with more and more consumers asking themselves: Is my next car going to be electric? Once a niche option for the eco-conscious, electric vehicles (EVs) have now zoomed into the mainstream. But what's really driving this change? Is it the promise of zero emissions, the sleek tech, or perhaps the long-term savings on fuel?

I conducted a research to understand the attitude of the Indian consumer towards EVs. The study, which was conducted among a sample of 150 respondents, employed a mixed-methods approach, combining both quantitative and qualitative data collection and analysis methods. The sample was drawn from tier 1 and tier 2 cities. Here's what I found:

- Despite growing environmental concerns, a significant portion of survey respondents exhibited a preference for Internal Combustion Engine (ICE) vehicles over EVs, citing several concerns that hinder their adoption of EV technology. The survey findings reveal that concerns about battery life and maintenance costs are significant deterrents to EV adoption, with respondents expressing worries about the reliability and durability of EV batteries.
- Furthermore, the lack of a comprehensive and accessible charging infrastructure is a major concern, with respondents citing the need for more public charging stations and faster charging options. The higher upfront cost of EVs compared to ICE vehicles is also a significant barrier to EV adoption, as respondents assert that the current price premium is not justified by the perceived



benefits of EVs.

3. Notably, the survey respondents were aware of the positive efforts and initiatives of the Indian centre and state governments to promote EV adoption through GST reduction, road tax exemptions, and income tax benefits. Despite these incentives, respondents indicate that these measures are not sufficient to overcome their concerns about EVs. While consumers are increasingly aware of the environmental benefits of EVs, this awareness alone is not driving purchase decisions. Interestingly, a few respondents were concerned about the behaviour of the lithium battery in summer temperatures of 51 degrees, and some regarded the disposal of the battery as an eco-hazard.

4. Remarkably, online reviews, personal recommendations, and social media—totalling 76%—are the dominant sources of information guiding vehicle purchases. In contrast, manufacturer websites and dealerships play secondary roles, while magazines exert minimal influence. This suggests that consumers are increasingly relying on user experience and personal sources of information rather than company-controlled narratives.

In conclusion, the survey underscores the importance of a comprehensive strategy to accelerate the adoption of EVs in India. It is evident that tackling key challenges—such as battery longevity, the availability of charging infrastructure, and affordability—will be crucial in encouraging wider acceptance among consumers.

Manufacturers, in collaboration with policymakers, must take a proactive role in addressing these concerns by developing innovative solutions and launching public awareness campaigns. By fostering a deeper understanding of the advantages EVs provide, India can position itself to not only embrace this green technology but also drive significant growth in its EV market.

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Nearly everyone in the world breathes bad air. This is what you can do to lower your risk

HANOI, VIETNAM: Everyone loves a breath of fresh air. Unfortunately, too often our air is anything but fresh. While air quality varies dramatically from place to place and day to day, nearly the entire world — about 99% of the global population — is exposed to air at some point that doesn't meet the strict standards set by the World Health Organisation, the agency has reported.

Polluted air, laden with noxious gasses or tiny, invisible particles that burrow into human bodies, kills

seven million people prematurely every year, the UN health agency estimates. And for the millions living in some of the world's smoggiest cities — many of them in Asia like New Delhi; Dhaka, Bangladesh; Bangkok and Jakarta, Indonesia — bad air might seem inescapable. But there are things that people can do, starting with understanding that the air isn't only polluted when it looks smoggy, said Tanushree Ganguly of the Energy Policy Institute of Chicago in India. "Blue skies can't guarantee you clean air," she said. Ap

1. WHAT HEALTH PROBLEMS CAN AIR POLLUTION CAUSE?

Air pollution is the second-largest risk factor for early death globally, behind high blood pressure, according to a recent report by the Health Effects Institute. Short-term exposure can trigger asthma attacks and increase the risk of heart attacks and stroke, especially in the elderly or people with medical problems. Long-term exposure can cause serious heart and lung problems that can lead to death, including heart disease, chronic obstructive pulmonary disease and lung infections. A recent analysis by the UN Children's Agency found that more than 500 million children in East Asia and Pacific countries breathe unhealthy air and the pollution is linked to the deaths of 100 children under five every day. June Kunugi, UNICEF Regional Director for East Asia, said the polluted air compromises growth, harms lungs and impacts cognitive abilities. "Every breath matters, but for too many children every breath can bring harm," she said.

2. WHAT ARE THE MOST DANGEROUS KINDS OF AIR POLLUTANTS AND THEIR SOURCES?

Air pollutants often come from people burning things (like fuels such as coal, natural gas, diesel and gasoline for electricity and transportation; crops or trees for agricultural purposes or as a result of wildfires.) Fine, inhalable particles, known as particulate matter, are among the most dangerous. The tiniest of these — known as PM 2.5 because they are less than 2.5 microns in diameter — can get deep into human lungs and are mostly created by burning fuels. Coarser particles, known as PM 10, are linked to agriculture, roadways, mining or the wind-blowing eroded dust, according to the WHO. "Other dangerous pollutants include gases like nitrogen dioxide or sulfur dioxide, which are also produced from burning fuels," said Anumita Roychowdhury, an air pollution expert at the Centre for Science and Environment in New Delhi.

The sources and intensity of air pollution vary in different cities and seasons. For instance, old motorbikes and industrial boilers are major contributors to bad air in the Indonesian capital Jakarta while the burning of agricultural waste is a major reason for air pollution spikes in cities in Thailand and India. Brick kilns that burn coal add to pollution in Dhaka, Bangladesh's capital. Seasonal forest fires cause problems in Brazil and North America.

3. WHAT'S THE BEST WAY TO TELL IF AIR IS SAFE?

Over 6,000 cities in 117 countries now monitor air quality, and many weather mobile apps include air quality information. But trying to gauge how bad the air is by looking at these numbers can be confusing. To help people understand air quality levels more easily, many countries have adopted an air quality index or AQI (a numerical scale where larger numbers mean worse air.) They are also often assigned different colours to show whether the air is clean or not. However different countries have different air quality standards. For instance, India's daily PM 2.5 limit is more than 1.5 times higher than Thailand's limit and 4 times higher than WHO standards. This means that countries calculate AQIs differently and the numbers aren't comparable with each other. This is also why sometimes AQI scores by private companies using stricter standards may be different from those calculated by national regulators.



4. WHAT ARE THE BEST WAYS TO PROTECT YOURSELF FROM AIR POLLUTION?

The goal, of course, is to limit exposure when air quality is bad, by staying inside or wearing a mask. Staying inside, however, isn't always possible, especially for people who must live or work outside, noted Danny Djarum, an air quality researcher at World Resources Institute, an environmental advocacy group. "They can't afford not going out," he said. Pakaphol Asavakomolnant, an office worker in Bangkok, said that he wears a mask every day and avoids riding to work on a motorbike. "I get a sore throat when I come to work in the morning and I forget to wear a mask," he said. People also need to be aware of indoor air pollution which can often be caused by common household activities like cooking or even burning an incense stick.

5. WHAT ARE THE BENEFITS AND LIMITATIONS OF AIR PURIFIERS?

Air purifiers can help reduce indoor air pollution, but they have their limitations. They work by pulling air from a room and pushing it through a filter that traps pollutants before circulating it back. But they are most effective when used in small spaces and when people are nearby. Air purifiers can only clean a certain amount of air, said Rajasekhar Balasubramanian, who studies urban air quality at the National University of Singapore. "If we have a tiny air purifier in a large room it won't be effective," he said. Air purifiers are also too expensive for people in many developing countries. The majority of people who are affected by air pollution cannot often afford air purifiers.