Choose a traditional fuel car or an electric car?

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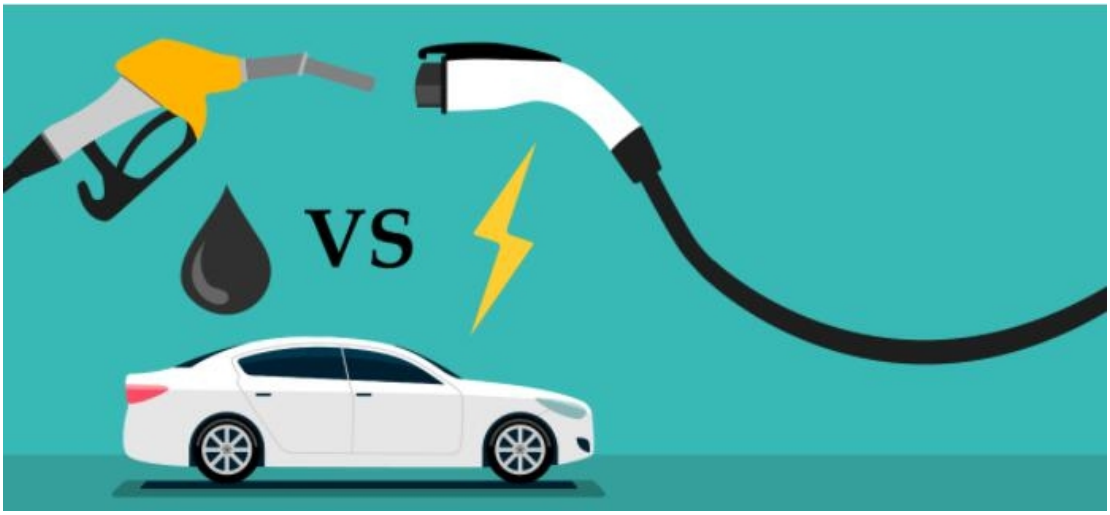
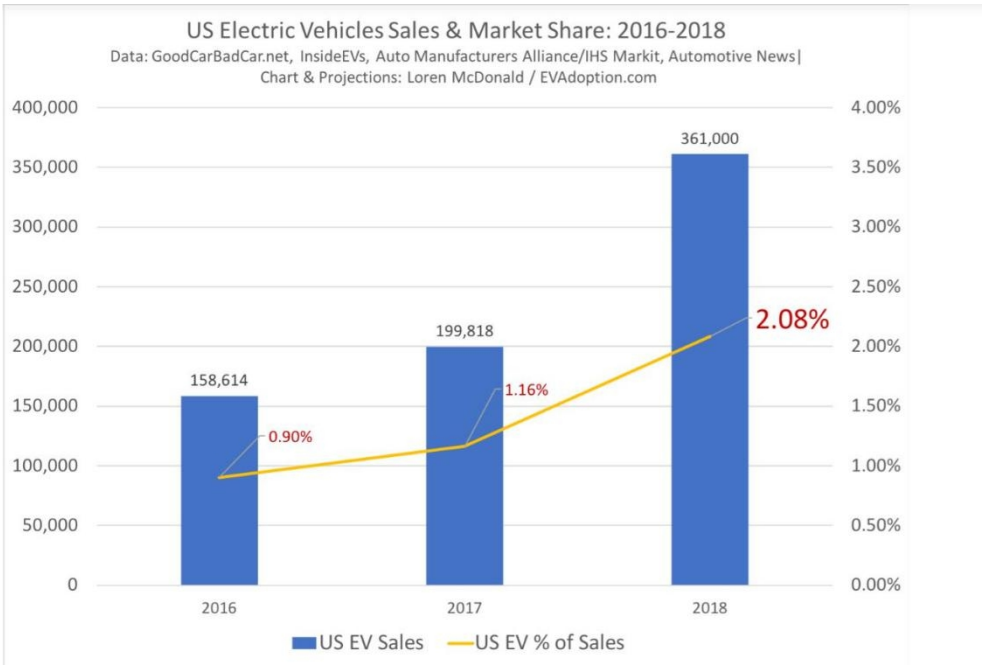


Picture From acko

Compared with traditional fuel vehicles, the most significant advantage of new energy vehicles (electric vehicles) is that the motor can bring consumers a faster and smoother acceleration experience as the power drive unit. As an alternative energy source, electricity also has a huge advantage in price and cost, which greatly reduces the cost of consumers using electric cars. Of course, the promotion of electric vehicles at this stage still faces some difficulties. Mainly focus on the convenience of charging and the anxiety of cruising range. However, as a number of industry-leading car manufacturers continue to introduce revolutionary electrification platforms, such as Tesla's pure electric platform and Volkswagen's MEB pure electric platform, the range of electric vehicles is getting higher, and the charging speed is also increasing. Simultaneously, the infrastructure for charging or battery replacement is becoming perfect, and the disadvantages of the former electric vehicles are gradually being made up. With the continuous development of the industry and the continuous establishment of electric vehicle standards, the problems of mileage anxiety and charging difficulties of electric vehicles will continue to be solved. Relying on the advantages of good power experience, high degree of intelligence and humanized service, they will continue to favour more consumers. Some people may ask since current electric vehicles still have mileage and charging problems, does that mean that electric vehicles are not suitable for everyone? That's right, and this is the question to be said next.



Data From CleanTechnica

To buy traditional vehicles or new energy vehicles, the situation may be different for each person, but from the performance of electric vehicle sales, more and more consumers have begun to recognize and buy new energy vehicles.

What kind of people are most suitable to buy electric cars?

Veronica, a student who studies at the University of Ottawa, has shared the experience of driving an electric car; the most uncomfortable part is the uncertainty of charging. She once walked through 3 different parking lots with only 40km left, all of which failed to charge for various reasons. Some were occupied by fuel trucks, some refused to enter when the parking lot was full, and some charging piles were broken. People were really very anxious at that time, feeling that even with a 600-700km range, they could not stop getting anxious. So the first point to buy an electric car is the certainty of charging. What I'm talking about here are consumers who have their own fixed charging locations. This fixed charging spot can be at home, at the workplace, or a relatively certain public place nearby. It's a much more convenient experience than driving to the gas station and waiting in line for gas. Of course, even if people have their own charging pile, they still can not extend the car's actual range. Therefore, the second point is that consumers who drive for short-distance travel within 200km or within the city are more suitable to buy electric vehicles. For consumers who often travel to other towns and drive hundreds of kilometres a day, charging outside will face some uncertainty risk. Thirdly, consider your willingness to embrace new technology. Electric vehicles are more like electronic products, which break many traditional usage habits and have a particular learning cost. For example, the use of vehicles and automatic driving assistance systems need to be learned at the beginning. Therefore, consumers also have to judge whether they are willing to try and accept

new technologies. To sum up, the certainty of charging, medium and short distance travel, and acceptance of new technology are the core three prerequisites for consumers to choose electric vehicles. If two or three of them are satisfied, it is very suitable for consumers to buy electric cars.

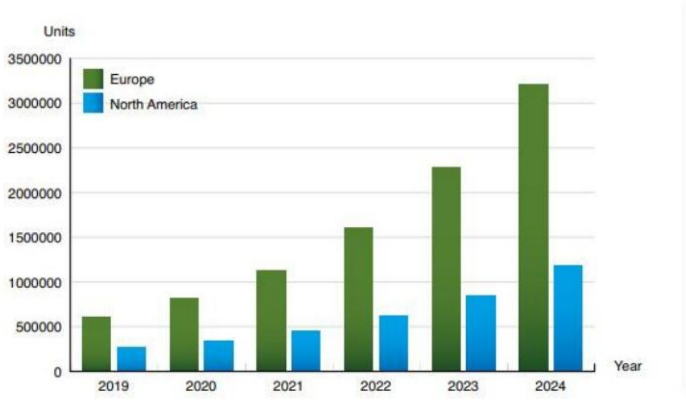
Can Electric Vehicles Replace Fuel Vehicles?

First of all, I don't think electric cars can completely replace gasoline cars in the short term, for the following reasons. At the beginning of 2020, the COVID-19 epidemic brought a massive challenge to the entire automobile industry. After the sales volume fell sharply in the first quarter, the sales volume rebounded in April. However, it is difficult to predict whether the sales volume can go against the trend in 2020 and the next ten years.

- Difficulty 1: Market orientation is difficult. Can pure electric vehicles continue to advance without a market-driven by subsidies? Low consumer confidence, high costs and technical bottlenecks still have a long way to go.

- Difficulty 2: technical bottlenecks. Although ternary lithium batteries occupy a large share in the current market, their energy density is relatively low, the cost is high, the life is short and the stability is not good. Can the battery industry break through the technical bottlenecks or find cost-effective alternatives?

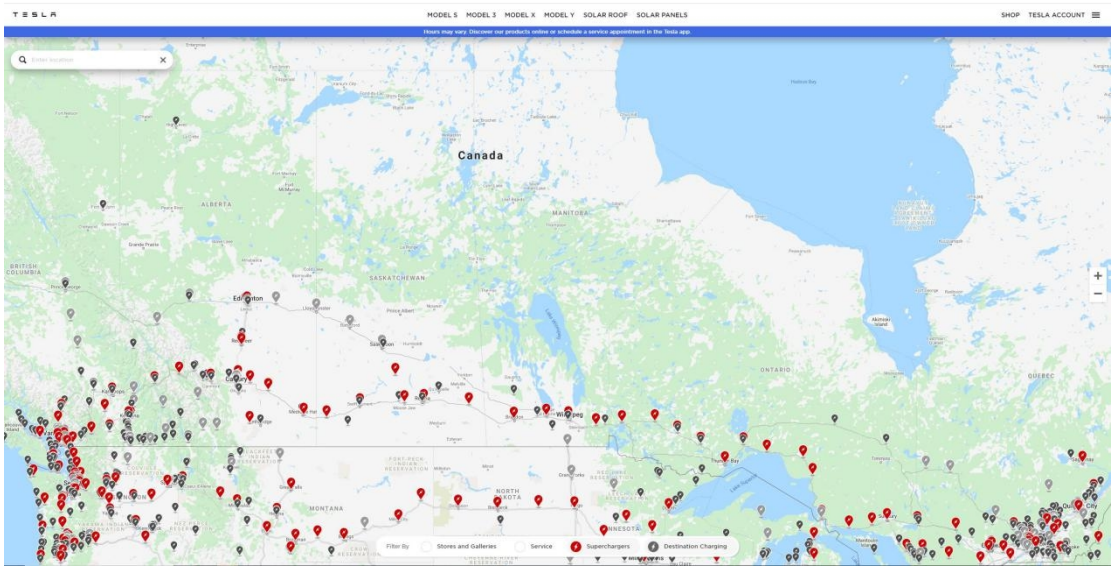
- Difficulty 3: The construction of charging infrastructure is not perfect. At present, the pile ratio of electric vehicles in Canada is much lower than the other country. Slow and challenging charging has become a significant problem for users to reduce their confidence. The acceleration of charging piles for new energy vehicles proposed by the new infrastructure will gradually improve the charging facilities. Compared with other points, this issue is easy to solve, speeding up the construction and improving charging infrastructure.



The number of connected charging points (Europe and North America 2019–2024)

Picture From IoT Bussiness News

- Difficulty 4: Vastness land. North America has a vast territory, with a broad east-west direction and a vast north-south span. For developed regions and cities, such as the New York and Toronto, pure electric vehicles are developing relatively fast. However, a network's construction in remote areas is characterized by high investment, low benefit, and complex layout of charging piles. Meanwhile, the charging and discharging performance of batteries in extremely cold regions is significantly reduced.



Screenshot of Tesla charging station

- Difficulty 5: Difficulty in recycling. At present, the battery is difficult to recycle. If it is disposed of in the way of waste, the lithium, cobalt, manganese, and other battery elements will cause massive pollution to the soil and water. However, the current battery recycling market has not been substantially solved by technology and solutions, and most batteries are directly dismantled and scrapped. In the face of the coming wave of battery obsolescence, solving recycling is both a difficulty and an opportunity.

Picture From ICE

In summary, electric cars are still unable to replace gas-powered cars. But it has its special advantage and has a great potential to develop in the future. At the same time, a variety of high-tech cars also attract our attention. If you have more ideas about electric vehicles, you are welcome to contact us, and we will share your views with others.

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