

УДК 62-1

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ADVANTAGES AND DISADVANTAGES OF TESLA OVER CONVENTIONAL VEHICLES

Tesla, Inc. is an American electric vehicle and clean energy company based in Palo Alto, California. Tesla's current products include electric cars, battery energy storage from home to grid scale, solar panels and solar roof tiles, as well as other related products and services.

Founded in July 2003 as Tesla Motors, the company's name is a tribute to inventor and electrical engineer Nikola Tesla. Elon Musk, who contributed most of the funding in the early days, has served as CEO since 2008. According to Musk, the purpose of Tesla is to help expedite the move to sustainable transport and energy, obtained through electric vehicles and solar power. Tesla began production of their first car model, the Roadster, in 2009.

Tesla reported 2020 vehicle deliveries of 499,550, which was better than analysts' estimates but falling short of the company's goal of 500,000. Tesla is ranked as the world's best-selling plug-in and battery electric passenger car manufacturer, with a market share of 16% of the plug-in segment and 23% of the battery electric segment 2020 sales. In 2020, Tesla accounted for nearly 80% of all battery electric car registrations in the U.S. At the end of 2020, Tesla's global sales since 2012 totaled over 1.4 million units.

But what makes Tesla so popular? What are the advantages of electric vehicles over other cars and what can be the disadvantages?

The electric car appeared before the internal combustion engine. Back in 1828, the Hungarian inventor Anjos Jedlik made an electrically powered cart that looked more like a skateboard than a car. However, the invention of Jedlik served as a powerful impetus in the development of this direction of engineering. The first electric car in the form of a cart with an electric motor was created in 1841.

However, the Tesla company brought wide development to electric vehicles in the 21st century, in 2009 releasing the Tesla Roadster sports electric car, which was not inferior in driving performance (acceleration dynamics and maximum speed) to ordinary cars.

One of the most important advantages of electric vehicles is their environmental friendliness. It does not need gasoline, which then emits pollution into the atmosphere, because it runs on electric energy. This means that the level of gas emissions into the atmosphere is much lower than that of diesel cars.

The vehicles are easier to maintain, do not need to change engine oil and spark plugs.

Electric cars are available at a cost, they are cheaper to maintain and service.

Fashion is also an indisputable advantage. More and more celebrities prefer them, many people want to buy this car and it has become a trend.

But what about the disadvantages? There are still not enough stations for recharging such cars. Over time, this problem will be solved, but so far it has difficulties in everyday use.

Electric cars take a long time to charge, about 8-10 hours. It takes effort in planning your day and travel.

At the moment, the range of electric cars is much smaller than that of diesel or gasoline cars.

Electric cars are mostly compact cars and are not suitable for transporting a group of people.

They also have a smaller power reserve. Motors can overheat or overcool, which will shorten their service life.

Today, the cost of such vehicles is more expensive than the cost of diesel or gasoline vehicles.

And although electric cars are more environmentally friendly in everyday life, they emit more pollution during their production than in the production of diesel cars.

In conclusion, at the moment, electric cars cannot completely replace diesel cars, as they have many disadvantages and problems. But the trend shows that soon they will be on the same line with other cars or even better than them. Tesla is already developing more and more interesting models that can change our lives and make it easier, safer and more environmentally friendly.