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Electric Transport Is the Near Future

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The trend towards decarbonization is taking over the world: the US, European and Asian countries have announced plans to reduce CO₂ emissions. An important milestone was the adoption of the Paris Agreement in 2015 — it gave rise to the movement for carbon neutrality.

The European Union was one of the first to announce plans to reduce emissions and presented a "road map" — the "Green Pact for the EU" (EU Green Deal).

If we talk about zero-carbon transport, then the attention of the world community is focused on electric transport. Some European countries regulate the development of the electric vehicle market at the legislative level: for example, the Norwegian authorities plan to stop selling cars with internal combustion engines by 2025. In 2021, electric cars accounted for 65% (114.5 thousand units) of all car sales [1].

The world's largest automakers announce the transition to the production of electric vehicles in the next 10-20 years. For example, General Motors plans to show 30 new electric cars by 2025. It is assumed that by this time they will occupy up to 40% of the entire model range.

At the same time, European countries are engaged in infrastructure development: 1 million charging stations for electric vehicles are planned to be built in the EU by 2025 and 3 million by 2035. Within 10 years, it is planned to invest about 50 billion euros in this industry at the expense of public and private investments [1].

The production technologies of electric cars are sufficiently mastered to launch mass production. There are a large number of component suppliers, and it is also possible to make a specific forecast of the cost of an electric car.

In addition, the operation and maintenance of an electric car is much cheaper than any other transport, including diesel or gasoline. The savings are due to the cheapness of electricity, as well as the absence of components that need maintenance – no replacement of oil, filters, spark plugs and other things is required.

However, it should be noted that the infrastructure is still not sufficiently developed, which makes the use of an electric car comfortable only in large cities – where there is a network of charging stations.

Operating an electric vehicle also changes the user experience. The electric car should be put on recharging more often – to be connected to the power grid when it is not in motion, if fast charging stations are not used.

Thus, an electric car as a mode of transport with zero emissions has a number of features, but thanks to the advantages it gradually occupies its niche. At the moment, this is the most environmentally friendly mode of transport, and not only because of zero CO₂ emissions: electric car batteries can already be recycled, for example, up to 96% of lithium can be reused in new batteries [1].

Technologies are developing rapidly, battery capacity is increasing, and the price of electric vehicles is decreasing – according to forecasts, by the end of the decade the number of electric vehicles will be 25-30% of the total.

References:

1. Alternative fuel: what cars of the future will drive [Electronic resource]. – Mode of access: <https://rb.ru/opinion/alt-fuel/>. – Date of access: 10.04.2022.