

Charged for success

New competencies in the creation of electric transport have been developed in Belarus

The first five prototypes of Belarusian electric cars are undergoing technical testing and receiving commercial evaluations. The next step will be to launch the vehicle into mass production. This is perhaps the most critical time, as the project is significant for the country. Not only because it is being implemented at the behest of the Head of State, but also because it is a collaborative effort between the scientists and practitioners of Belarus. The first and foremost point that specialists highlight is that new competencies have been developed in the creation of electric transport. There is no doubt that our electric vehicle will become yet another source of pride and a demonstration of the growing potential of the republic.

The President of Belarus,

Aleksandr Lukashenko,

"It is the future. We should not fall behind. With our competencies and scientific expertise, we cannot lag at the back. No one in the near future will be buying cars with internal combustion engines like hot cakes as before."

At a meeting on the development of Belarusian automotive engineering, on August 31st, 2017

Domestic component base

Today, Belarusian goods — from dairy products to large machinery — are associated with high quality. That is why economists and scientists refer to the complex realities faced due to turbulence in the global economy as a time of opportunities. Thus, why not delve deeper and expand the possibilities of the domestic automotive industry, starting with the import substitution of the component base that has left the market and culminating in our own passenger electric vehicle?

Batteries, headlights, power electronics, and much more are already within the capabilities of Belarusians. For instance, not long ago, silicone hoses — important components for cooling and exhaust gas discharge — began to be manufactured at the Brestmash enterprise in Brest. Previously, these were sourced from abroad. They are in demand for the production of tractors, freight, public, and agricultural transport, and are supplied to MAZ, MTZ, BELAZ, Gomselmash, and other automotive giants.

Belarusian prototype electric vehicles also have a high degree of localisation since traction electric motors are produced by the Mogilevliftmash plant, inverters by the Izmeritel plant based in Novopolotsk, and batteries by Pervaya Akkumulyatornaya Kompaniya (First Battery Company) from Brest. Experts are convinced that these are just the first steps.

As noted by BelGee Director General Gennady Svidersky, BelGee has generally taken a course towards the localisation of the component base — Belarusian suppliers of dozens of components and materials have already been found. However, according to the director, it is important that the quality and the buyer's wallet are not compromised during the import substitution process. Therefore, they approach this process with particular responsibility.

Nevertheless, having studied the situation in the electric vehicle market in Belarus, they strongly believe that the existing competencies will allow for the creation of a worthy car. It is worth noting that a Belarusian electric vehicle is based on an internal combustion engine analogue, which significantly reduces costs and accelerates the project's implementation. The creators hope that this will mark the beginning of an era of domestically produced electric vehicles in the country.

According to Aleksandr Belevich, Deputy General Director for Highly Automated Electric Transport at the Joint Institute of Mechanical Engineering under Belarus' National Academy of Sciences, among the components that contribute the most to the scientific complexity and cost of this vehicle are the electric battery and traction electric drive. He also drew attention to the fact that our country did not have the competencies for producing such products until now, "All design documentation, all software, and power electronics are developments from our institute. Another important point is that this vehicle will be adapted to the harsh climatic conditions of Belarus."

Timely emergence

The timely emergence of Belarusian-made electric cars is evidenced by the growing demand for electric vehicles. This is not just about global trends. According to data from the Belarusian Automobile Association (BAA), there was a surge in demand for electric cars in our country last December, exceeding 40 percent.

Overall, experts predict an increase in demand for electric cars in Belarus in 2025. While last year's statistics showed around 3,000 new electric vehicle sales, it is expected that the figure will quadruple this year, making up approximately 25 percent of the total market share. Andrei Tkachev

The overall numbers are much higher, though. After all, many consumers are purchasing or have already bought used vehicles. As pointed out by Andrei Tkachev, Deputy Chairman of the BAA Board, already in 2022 — following the introduction of legislation promoting the use of electric vehicles — the country's electric fleet grew to 4,000 cars. This growth was primarily driven by enthusiastic drivers who took the risk of acquiring such electric cars without service and warranty. Yet, in 2023, with the arrival of new high-tech Chinese brands, mass deliveries of green vehicles began. Consequently, the number of electric cars rose to 10,000, and in 2024, this figure effectively doubled.

Andrei Tkachev reminded us that such results would not have been achievable without the strong support provided by the Belarusian government to the electric vehicle sector. He highlighted that the decisive influence on the situation was exerted by Decree No. 92 On Stimulating the Use of Electric Vehicles, as well as Decree No. 447, which introduced additional benefits for legal entities, exempting them from customs duties when importing electric vehicles, "Thus, our government has legislatively ensured that the purchase and ownership of electric vehicles in the country is as advantageous as possible for Belarusians."

You could sit behind the wheel of Belarusian electric car by visiting unique exhibition My Belarus, which took place at Minsk International Exhibition Centre Ilya Shvedko

Benefits for economy and environment

The emergence of a domestic electric vehicle is likely to be timely, particularly because the infrastructure for this type of transport has been established. This includes, importantly, service maintenance, as well as charging stations.

According to the Belarusneft republican unitary enterprise, the current charging network Malanka (Lightning) comprises over 700 charging stations of various capacities, including four super-fast charging complexes with a power of 350 kilowatts. "Our network provides around 100,000 charging sessions per month. Approximately 26–28 percent of the services for charging vehicles are provided to legal entities, and in addition to our charging stations, around twenty partners are integrated into our network. If we look at the development trends, we can observe a nearly threefold increase in the consumption of charging services over the past year. This indicates that increasingly more consumers are opting for electric vehicles. These are individuals living in apartment buildings who utilise the public charging network to charge their vehicles," the company representatives stated.

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If trends continue, experts believe that Belarus could expect to see around 300,000 electric vehicles by 2030, which would add 1.7bn kilowatt-hours to the country's electricity consumption. Anyway, even with a more pessimistic forecast — with an increase in the number of electric vehicles to 70,000–80,000 units — electricity consumption would still reach approximately 200–400m kilowatt-hours.

One can hope that many people are already aware of all the benefits of battery-powered vehicles, particularly for the economy and ecology of the republic. After all, even 20,000 electric vehicles could save around 40,000 tonnes of oil and prevent around 45,000 tonnes of CO₂ from being released into the atmosphere of Belarus.