



Training workshop: "Studying international practices in implementation of innovative energy efficiency technologies in the electric power industry. Methodology, goal and objectives of electricity and heat consumers energy survey"

SEIT building, 62 Bayram Khan str, Mary, 13-19 March 2024

Tajikistan's experience in improving energy efficiency in the transport sector. Country's policy and strategy in the development of E-mobility

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#### Challenges at the national level

Tajikistan does not have oil and gas reserves in production quantities.

Tajikistan imports more than millions of tons of fuel annually, using up a significant amount of its limited reserves of foreign exchange resources.

Car fuel prices are the highest in the region, on average 2-3 times higher than in neighboring countries, and almost 10 times higher than the cost in Turkmenistan.

The share of transport expenses in the consumer basket is the highest in the region.

The need to improve the environmental conditions in the city of Dushanbe.

According to the Committee for Environmental protection of the Republic of Tajikistan, previously emissions in the city were greater in the industrial sector than in others; now 60 percent of emissions into the atmospheric air in Dushanbe are "exhaust gases from cars and motorcycles."





#### Opportunities at the national level

Tajikistan generates more than 90% of its own electricity from water resources.

Currently, Tajikistan is only using 4% of its hydro potential.

According to the National Development Strategy, by 2030, electricity generation is expected to double, mainly from hydro resources, and to reach 10,000 MW of installed capacity.

There is a need for the market to sell generated green electricity, including the domestic market - the transport sector, one of the drivers of Tajik economy, and is considered as one of the main segments of electricity sales.

Under the conditions of Tajikistan, electric vehicles can reduce fuel costs for drivers from 40% to 70% In Tajikistan, there are favorable conditions for the development of electric vehicles





# Program for the development of electric transport in the Republic of Tajikistan for 2023-2028

Objectives within the framework of strategic documents on the development of electric vehicles in Tajikistan:

- **\*** Creating a set of measures to stimulate the development of electric vehicles
- **\*** Creating charging points and service stations for electric vehicles in the Republic of Tajikistan
- **\*** Creating favorable conditions for recycling electric vehicle batteries
- **Creating a base for the production of electric vehicles and their components**





# Indicators under the Green Energy Strategy of Tajikistan: share of electric vehicles in the total volume of vehicles in %

2021	2023	2027	2032	2037
1%	10%	25%	40%	55%

In 2023, only 0.5% of cars were electric vehicles





### Set of measures to stimulate the development of electric vehicles

- According to the Decree of the President of the Republic of Tajikistan, from 2022, import of electric vehicles will be exempt from customs and tax duties (for a period of 10 years)
- -During the period from January to June 2023, Tajikistan imported 709 electric vehicles. The half-year figure is almost equal to last year's, amounting to 767 electric vehicles.
- Since 2021, the country has imported over 1.4 thousand electric vehicles, with a total number of 1,600 by August 2023.
- Increasing the cost of customs clearance for cars with internal combustion engines.
- Ban on car imports until 2013 also affects the import of electric vehicles: since the cost of cars will jump, this will actually eliminates one of the main barriers the high cost of electric vehicles.





#### Set of measures to stimulate the development of electric vehicles

As part of the Green City program, Dushanbe authorities purchased 104 wireless trolleybuses and several electric buses.

The Dushanbe city administration has decided to replace 500 regular buses with electric buses by 2028, updating all public transport in the capital.

Akita Avesto is a joint Tajik-Turkish venture to assemble electric buses in Tajikistan with the aim of entering the Central Asian and South Asian markets

EBRD allocated \$4.5 million to Tajik taxi companies to purchase taxis and install stations





### Creating charging points and service stations for electric vehicles in the Republic of Tajikistan

creation of high-power charging infrastructure (more than 22 kW, charging time up to 80 percent in 20-30 minutes) - at least 40 pcs.;

ADB is currently considering the possibility of pilot financing of charging stations up to 400 kW in the regions

creation of medium-power charging infrastructure (up to 22 kW, charging time up to 80 percent in 2-10 hours) - at least 850 pcs.

Ordinary charging stations in single-family houses are usually rated at 3.7 kW at a rated current of 16A (they take up to 6-8 hours to charge)

If necessary, strengthening distribution networks located at gas stations and in public places.

It would be advisable to accompany the emergence of a massive fleet of electric vehicles with using tariffs based on the time of day. Charging cars immediately after the end of the working day, and not at night, will aggravate the problems of passing the peak load, especially in winter.

The cost of a full charge (300 km) is currently around \$1.5 (at homes).

The cost of charging at stations is about 4 dollars for a full charge (300 km).





#### Creating a base for the production of electric vehicles and their components

In March 2023, the JAC-Motors car dealership opened in Dushanbe, the company's first representative office in Tajikistan, selling electric cars to the public with a warranty and dealer service.

In April 2023, within the framework of the first meeting of ministers responsible for foreign economic and foreign trade activities "China and Central Asian countries", the Ministry of Economic Development and Trade of Tajikistan discussed the construction of a plant for the assembly of electric vehicles in Tajikistan in the shortest possible time

The need to implement Battery Waste Management Rules based on extended producer responsibility is being discussed.





Make a clear definition of "electric vehicles" and "hybrid vehicles" in legislative norms, in particular in the Law on Energy, in the Law on Transport and in the Traffic Rules of Tajikistan

Amend the Customs and Tax Codes to exempt only those electric vehicles that are not older than three years from customs duties, excise taxes and VAT.

Exemption from VAT for five years for enterprises engaged in the environmental recycling of batteries from electric vehicle batteries

Provide tax incentives to factories producing electric vehicles. Including the production of small-sized electric vehicles

Include a term "individual consumer - an electric car" in the Government Decree "On Tariffs for Electricity and Heat Energy"

Differentiation of electricity supply tariffs for electric vehicles by time of day





Introduce amendments to regulations, including the Civil Code, regulating the resale of electricity by stations, upon receipt of the appropriate license from the authorized state body in the field of energy and Technical Conditions for connection from Shabakahoi Taximoti Bark OJSC.

Amend the regulations to make it mandatory for gas stations that sell electricity to obtain technical specifications and licenses.

It is recommended to make appropriate changes to the regulations governing public procurement, so that public procurement is exclusively or predominantly in favor of electric vehicles.

Make changes to SNIP for apartment buildings (regarding the mandatory installation of charging points in basement garages when agreeing on additional load with Shabakahoi Taximoti Bark)

Make appropriate changes to the Fire Safety Regulations, especially for charging settings inside the building.





- Electrical Installation Rules-to make appropriate changes in terms of technical conditions for connecting charging stations
- Regulations on the State Energy Supervision Service (regarding the safety of operation of charging stations and points, training of technical personnel)
- Exempt from export customs duties those manufacturers/companies that export old batteries for recycling outside of Tajikistan.
- It is necessary to introduce requirements for a mandatory passport for electric vehicle batteries, which would contain all data on manufacturers and supply chains for transparency, in case of replacement and import of new batteries
- Require manufacturers and importers of electric vehicles to collect, safely transport, recycle, remanufacture or dispose of batteries
- Introduce a one-time tax for electric vehicle holders to recycle electric vehicle batteries





Recommendations for installing fast charging gas stations in public places - airports, railway stations, markets, etc.

Granting the exclusive right to electric taxis to pick up passengers at airports.

Consider the economic and technical potential of using batteries from electric vehicles for the use for solar panels.

Exemption from toll plazas on the Dushanbe - Khujand - border of the Republic of Uzbekistan section.

Sell vanity license plates only to electric car holders.

Allow full tinting of windows only to owners of electric vehicles.



