



MINISTRY OF TRANSPORT OF THE RUSSIAN FEDERATION



Interregional Workshop on Electrification of Urban Mobility (WP.5 35th session)

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Dmitry Shiyan
Deputy Director,
International Cooperation Department



TRANSPORT STRATEGY OF THE RUSSIAN FEDERATION UP TO 2035

- use of new energy-efficient vehicles and hybrid energy storage systems
- transition to electric and gas-fueled public transport
- development of charging infrastructure for electric vehicles (including electric buses)

-70%

reduction of carbon footprint
made by public transport

by 2035

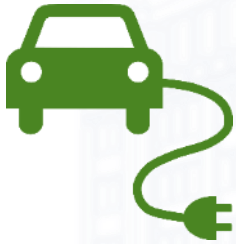
80%

share of electric transport in the purchase
of new public transport rolling stock

Implementation - renewal of urban transport rolling stock with priority improvement of environmental class and (or) electrification



CONCEPT FOR THE DEVELOPMENT OF ELECTRIC TRANSPORT IN RUSSIA UP TO 2030



2025
(I stage)

25.000

9.400

2030

10%

of all cars to
be produced

72.000

Implementation – demand support programs

- preferential leasing
- favorable loans
- transportation tax relief
- free use of toll roads



URBAN ELECTRIC TRANSPORT DEVELOPMENT PROGRAM

Projects in 10 cities for next 5 years

477



97



510_{km}



Integrated digital platform
for public transport management

- Planning routes
- Monitoring and traffic control
- Real-time passenger information

Domestic production of rolling stock
and infrastructure

Federal budget subsidies
65.9 bln roubles (~1.1 bln USD)








NATIONAL PROJECT “SAFE AND QUALITY ROADS”

Purchase by regional authorities
of new buses, trolleybuses and trams
Government support - leasing terms
at a **60% discount**

Selecting cities on a competitive basis
Operation of new vehicles on key routes
with high frequency and quality of service



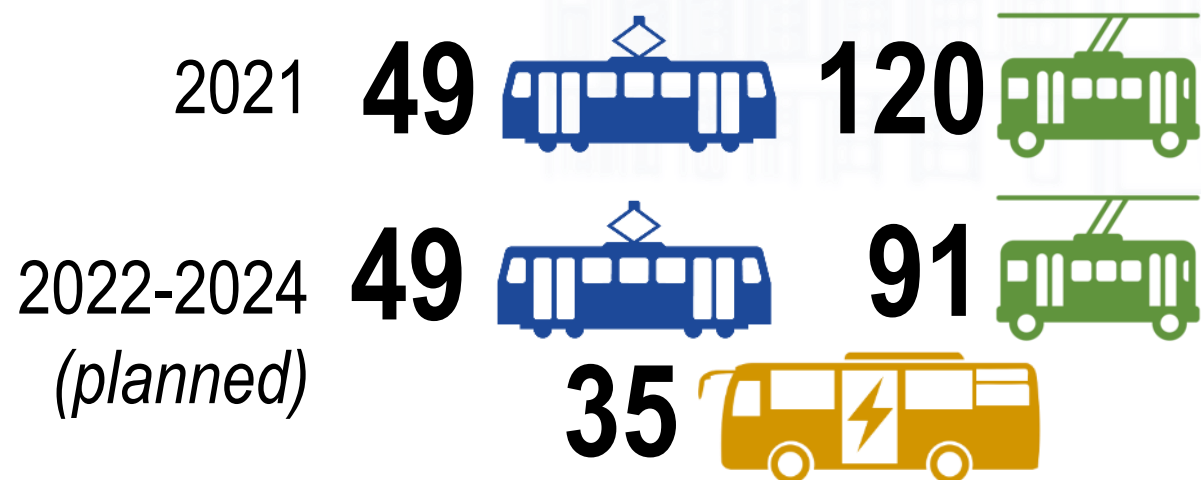
2020	64 	43 
2021	153 	
2022-2024 (planned)	27 	200 



NATIONAL PROJECT “CLEAN AIR”

Industrial cities with high level of pollution and GHG emissions receive direct funds from the Government to purchase new electric transport and modernize tram and trolleybus infrastructure

Goal – reduction of emissions in major industrial centers by **at least 20%**





DIFFERENT CITY-LEVEL APPROACHES TO URBAN ELECTRIC PUBLIC TRANSPORT DEVELOPMENT

Moscow Replacement of trolleybuses and diesel buses
by electric buses
Modernization of existing tram network and urban rail

Saint-Petersburg Use of trolleybuses with traction batteries
for autonomous running up to 20 km
New tram lines construction under concession contracts

Other cities Modernization of existing tram and trolleybus networks
Construction of new tram lines in several cities
Funding by federal subsidies and national projects



CASE: MOSCOW

600 new low-floor trams since 2014
+ 150 more to come



Separation of tracks with markings and stone barriers
Construction of tram platforms at the same level
with tram floor

1000+ electric buses since 2018
+ 1300 more in next 2.5 years



40-50 km of range after 8-10 minutes charging at terminus
200 charging stations now working + 200 more by 2024
The largest electric bus depot in Europe for 300 vehicles



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CASE: MOSCOW

900 electric sharing bicycles
New sharing stations only for e-bikes

100+ stations for charge of electric cars
Parking places only for electric cars



40.000 e-scooters by sharing services
GPS-based slow zones (5-15 km/h)
in parks and crowded places for safety of pedestrians



CASE: SAINT-PETERSBURG

160+ trolleybuses with traction batteries (the largest fleet in Russia)

Extension of existing trolleybus routes (up to 20 km without overhead wire) with minimal investments to provide more access and better connections

Use of electric buses with night charging in depot (up to 240 km of range)

Electric bus depot for 400 vehicles planned for 2024
550 electric buses planned for 2026



CONCESSION PROJECTS IN URBAN ELECTRIC TRANSPORT



Saint-Petersburg - “Chizhik” tram network

Investments: USD 235 mln

Concession period: 30 years

23 new modern trams, 38 km of “silent” tracks, automated control system

Taganrog – full reconstruction of tram network

Investments: USD 195 mln

Concession period: 30 years

45 km of tracks, 60 new trams,
80 modern stops, new tram depot





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THANK YOU FOR YOUR ATTENTION!

