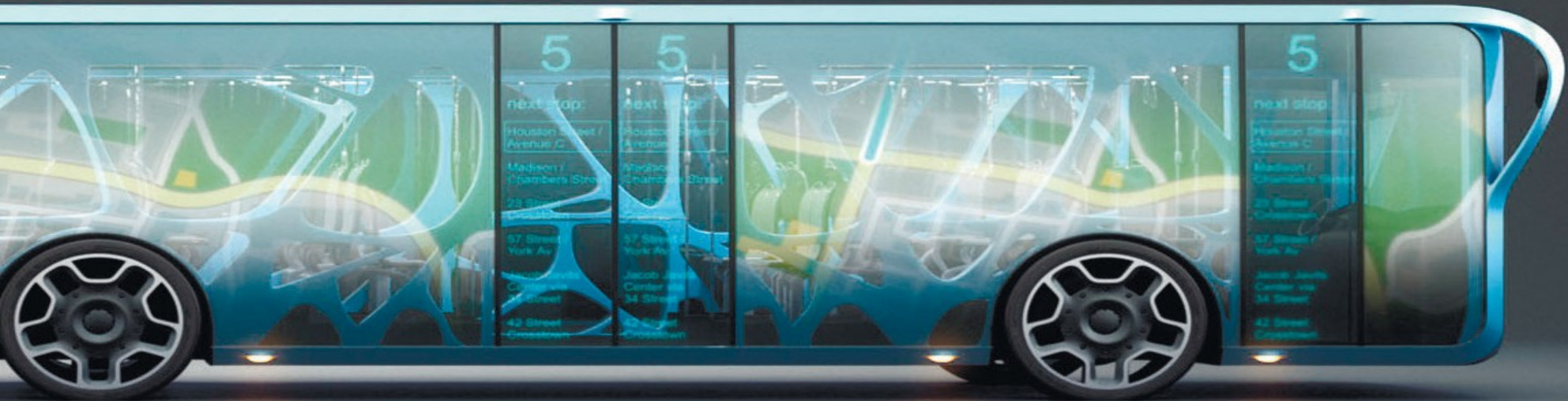




# MINISTRY OF INFRASTRUCTURE OF UKRAINE



Opportunities in and challenges for  
development of sustainable transport  
policies in Ukraine

Transport safety, energy consumption and transport impact on the environment in Ukraine do not comply with modern requirements. In recent decades, there has been a rapid increase in the number of vehicles and traffic load in the world, leading to increase in the number of traffic accidents and negative consequences.

Between 2012 and 2017, about 26,700 people died in road traffic accidents in Ukraine and in 43.7% of the cases the victims were pedestrians and cyclists. According to the World Bank, annual losses resulting from traffic accidents in Ukraine make up to about 4-5 billion USD. Thus, in 2016, almost 3,400 people died on the Ukrainian roads, and 33,600 people were injured.



90-95% of pollutant emissions into the urban air in crowded locations account for the road transport. The EU Transport Policy sets up a task to reduce by half the use of cars using «traditional fuels» in the cities by 2030 and completely abandon their use by 2050.

In order to fulfil its international obligations under conventions of the International Maritime Organization, the UN Convention on Biological Diversity, ratified by the Law of Ukraine No. 257/94-VR dd. November 29, 1994, and the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/ or Desertification, Particularly in Africa, to which Ukraine became a party in accordance with the Law of Ukraine No. 61-IV dd. July 04, 2002, it is necessary to use technologies that minimize industrial impact on wildlife and land, contribute to the conservation of seas biological diversity, taking into account the environmental protection needs, conservation of land, water bodies, bioregulation while developing the transport infrastructure

# SAFE, CLEAN AND ENERGY-EFFICIENT TRANSPORT

## Common problems requiring solutions:



- unsatisfactory technical condition of a large number of vehicles and lack of the system to control over the safety of vehicles during their operation;
- poor implementation and practical application of new technologies and technical means of traffic management, automated systems for traffic control and regulation;
- poor control of transport safety, in particular with regard to protection of environment, avoidance of liability for violation of Ukrainian legislation on protection of environment and low public awareness regarding environmental protection measures;
- no incentives for use of power storage alternative sources in transport infrastructure facilities;
- increasing human pressure on the environment, high level of air pollution and noise caused by road vehicles in the areas of human activity;
- unresolved problem of used tires, waste oils, and vehicles recycling;
- significant impact of road transport on global climate change;
- lack of implementation of energy saving technologies;
- unsatisfactory condition of preservation of the most valuable river ecosystems, habitats, species of plants and animals protected in accordance with the Ukrainian legislation while developing plans for river infrastructure development and dredging works;
- lack of bicycle lanes and pedestrian zones in cities.

# Problems addressed

## by accomplishing the following tasks:

- ensuring priority of environmental safety requirements, mandatory nature of compliance with environmental standards, regulations and limits for use of natural resources while carrying out economic, administrative and other activities;
- implementation of preventive measures in the transport associated with the environment protection in the transport industry and development of a mechanism to cover incurred damages;
- ensuring environmental impact assessment at the stage of designing and developing plans and programs for the transport sector development, in particular providing for alternative options to prevent or mitigate negative environmental impact, preservation of forests, natural reserve fund territories and facilities, including construction of special passages and protective barriers in places of wild life migration while planning, designing and constructing transport infrastructure facilities;
- installation of noise-reducing structures/noise barriers (in places where settlements are located near highways) in cities with population of more than 250,000 inhabitants;
- introduction of a mechanism of economic incentives for transition of the cargo and passenger transport to more environment friendly modes of transport such as railway and water transport;



- incentives to use alternative energy sources, as well as to use environmentally friendly modes of transport and special-purpose vehicles;
- incentives to use more eco-friendly materials in manufacturing mixtures for roads construction and transport infrastructure;
- implementation of regulatory and fiscal measures, including implementation of international environmental standards for vehicles, promotion of alternative motor fuels usage, economic incentives for putting in operation of vehicles having higher environmental standards;
- international cooperation while solving issues in the field of environmental protection;
- increase of responsibility of vehicle owners for accidents, timely notification on accidents and liquidation of their consequences.

# Problems of the development of the system of urban transport

The development of urban transport is aimed at transporting the planned territorial development of the city, including the development of new residential areas on its periphery and remote areas. The formation of the system is influenced by demographic, economic, natural, technical, architectural and planning factors. The system of urban transport, in turn, is a set of interconnected different types of urban passenger transport, which should maximally meet the needs of all participants in the transport process.

The main problems of the development of the system of urban transport can be attributed to:

- conflict of interests of participants in the transport process;
- inefficient system management;
- inappropriate and ineffective use of state and municipal subsidies and subventions;
- insufficiently developed transport infrastructure;
- insufficiently developed regulatory framework;
- lack of clear definition of development priorities.



# Priorities of urban transport development



## 1. Ensuring the development of public transport:

- updating and modernizing rolling stock;
- promotion of the development of ecological modes of transport (tram, high-speed tram, trolleybus, metro, electric bus);
- construction of parking lots and car parkings;
- the allocation on separate sections of the streets lanes for transport and creation of bicycle tracks;
- Improvement of the system of payment for travel in urban transport.

## 2. Long-term planning of urban and suburban transport network development:

- developing transport networks;
- increase of the capacity of the road traffic;
- formation of centers for regulation of urban transport;
- development of programs for increasing the safety of traffic in urban transport.

The main expected results from the implementation of this strategy:

- modernization of the transport system and increase the efficiency of its operation;
- meeting the needs of the national economy and the population in transportation and improving the quality and accessibility of transport services;
- improvement of the management system of the transport sector;
- increasing the transport capacity of the transport network;
- raising the level of safety;
- reduction of emissions of harmful substances;
- accelerating the pace of integration national transport system to European and world transport systems.

# Evolution of municipal transport in Kiev



Over the past few years, has purchased 121 new trolleybuses, 63 trams, 100 new buses in Kyiv.

Single-span modular tram carriages. Single space with low floor position (low level is 100%). All new transport are equipped with a ramp to provide access to the passenger compartment in wheelchairs. All parts of the cabin are made of modern materials, Over the past few years, the capital has purchased 121 new trolleybuses, 63 trams, 100 new buses.

All new transport are equipped with a ramp to provide access to the passenger compartment in wheelchairs. All parts of the cabin are made of modern materials, staded electronic information systems, external and internal camcorders, heating and air conditioning systems both passenger and passenger cabins.

At the moment, the renovation of the transport park is one of the most important tasks for the municipal enterprise and the city.


In 2018, in the city of Kyiv, the municipal enterprise "Kyivpastrans" purchased 5 tram cars "Electron T5V641" Ukrainian production and 12 tram cars PESA 71-714K of Polish production.

In 2018, the installation of 63 stop pavilions of the modern type was completed. Altogether, 175 such buildings have been rebuilt. In accordance with the updated Road Rules along with road services of the city, a complex replacement of information signs and road markings, which indicate the boundaries of public transport stop, has been started.

An electronic ticket (E-ticket) is introduced in Kyiv - it's the travel document in public transport in the city of Kyiv, which, after registration, gives the passenger the right to receive transport services.

Transport Terminal - a specialized equipment kit (including validators), which is intended for registration of an electronic ticket, checking of a transport resource and payment of a fare, is installed in a mobile warehouse of a ground vehicle or integrated with a turnstile.

E-ticket will apply to all types of public transport on the basis of contactless electronic plastic card (transport card)



Thank you for your attention

Make the world green

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