







## **Project «Supporting Green Urban Development** in Small and Medium-Sized Cities in Belarus» / **GREEN CITIES**



















#### Development and adoption of green urban development plans



- An integrated approach to urban planning: energy efficiency, mobility, built environment and public realm, waste management, water consumption. renewable energy, smart technologies, biological diversity, adaptation to climate change, etc. - everything is combined in synergetic way with participation of locals and all stakeholders in planning and decision making
- Sustainable development of regions, including development of tourism
- Improving the quality of life and modern architectural image of cities
- · Low carbon technology
- New economic and social prospects for citizens, cultural and civic initiatives, for small businesses and startups
- Introduction of "green" mechanisms ("green" procurement and investment)
- Tools for monitoring the effectiveness of urban development
- Common sustainable urban mobility plan optimizes the movement of people and goods in urban space
- Sustainable public transport is competitive with private cars: speed, comfort, affordability and convenience
- Reduction of harmful emissions positively affects the environment
- Public transport services are available to all citizens, including the disabled and the elderly
- Sustainable transport drives tourism sector development
- Changing conditions of mobility of cities increases their attractiveness for new enterprises (businesses)
- Bicycle in a green city means mobility, safety, a healthy lifestyle and friendly environment
  • Pedestrian areas are full of activity and life and provide
- a comfortable environment

**Development of pilots** on sustainable urban transport in Polatsk and Navapolatsk





- The use of energy-saving technologies is cost-effective
- Installation of LED "smart" street lighting leads to lower costs and greenhouse gas emissions
- Improved lighting reduces injuries
- Improved lighting enhances overall safety
- Expert support in the development of the Sustainable Energy and Climate Action Plans (SECAP): Baranavičy, Pružany, Liozna, Mscislaŭ, Slaŭharad
- Expert support for the development of Green Urban Development (GUD) Plans Haradok, Zeĺva, Karma, Kryčaŭ
- Support in the development of the "SymbioCity-Brest-2050" concept
- Green Urban Development Web Portal

**Replication mechanisms** for green urban development in Belarus



## **GEF** Implementing agency: **UNDP**

**Project goal:** 

Promotion of green urban development plans and pilot

green urban development

initiatives related to energy

efficiency and sustainable

transport in small and medium cities in Belarus

**National executing entity:** 

Ministry of Natural Resources

and Environmental Protection

of the Republic of Belarus

Donor:

**Budget:** \$3 091 000

**Duration:** 2016-2021





### **Project territory:**

- Polack,
- Navapolack,
- Navahrudak,

Brest, Baranavičy, Pružany, Liozna, Mscislaŭ, Slaŭharad, Haradok, Zeĺva, Karma, Kryčaŭ



# IMPLEMENTATION OF A SMART STREET LED LIGHTING SYSTEM IN NAVAHRUDAK

400 LED lights and 25 control panels installed

Possible energy savings of 30-40%

Expected economic effect — 146 thousand kWh per year

# DEVELOPMENT OF PILOTS ON SUSTAINABLE URBAN TRANSPORT IN POLATSK AND NAVAPOLATSK

- Expansion of the bicycle network and bicycle infrastructure
- · Allocation of lanes for public transport
- Installation of modern public transport stops and information boards
- Optimization of traffic, introduction of the "green" wave, automated coordination of traffic lights
- Measures to limit the movement of cars and control traffic

#### INSTALLATION OF SMART-METERS FOR ACCOUNTING OF CONSUMED RESOURCES IN A RESIDENTIAL BUILDING IN NAVAHRUDAK

Smart meters save up to 5-10% of resource consumption for households

**PROJECT OUTCOMES** 

# TRANSFORMATION OF DISTRICTS IN POLACK, NAVAPOLACK, NAVAHRUDAK

in accordance with the Green Urban Development Plans objectives

#### **CREATION OF OPEN CARTOGRAPHIC MATERIALS**

(20 electronic maps for each pilot city), which include data on the state of the housing stock, quality of development, distribution of population density (for the first time for cities of Belarus), green areas, accessibility of public transport stops and other urban infrastructure

### 91.1 thousand tons of CO<sub>2</sub> -

the total direct reduction in CO2 emissions resulting from the implementation of pilot initiatives and the replication of experience gained