

Forum ITU - UN Habitat - UNDP







FORUM ON SMART SUSTAINABLE CITIES: TECHNOLOGICAL TRENDS, SUCCESS STORIES AND FUTURE PROSPECTS

Session 1: Building smart sustainable cities – from vision to reality and future perspective

UNDP-GEF Project

Belarus: Supporting Green Urban Development in Small and Medium-Sized Cities in Belarus

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Project Belarus: Supporting Green Urban

Development in Small and

Medium-Sized Cities in Belarus

Implementation period: 2016 – 2021

Budget: \$ 3 091 000

Donor: Global Environment Facility

Performing Ministry of Natural Resources and

Environmental Protection

of the Republic of Belarus

Implementer: UNDP



















INTEGRATED APPROACH TO THE DEVELOPMENT OF A SMART SUSTAINABLE CITY



INTERNATIONAL EXPERIENCE IN IMPLEMENTING GREEN APPROACHES TO URBAN DEVELOPMENT

Accessibility improvement of green and public spaces

Traffic lanes allocation for priority types of transport (public, bicycle, electric, etc.) Formation of compactness by means of a rational increase in the intensity of land use

Priority development of cultivated areas instead of developing new ones

The formation of polycentric urban structures with diverse and complementary urban functions

Implementation of projects at key points in the primary need, local needs fulfillment Promotion of decentralization, multimodality of movements, connectivity of nodes

Entry restriction of vehicles with high emissions to areas of maximum air pollution localization

Involvement of civil initiatives and business, confidence building

Limiting access of private vehicles in the city center, pedestrian and public transport prioritization

Increasing the area of green space

Introduction of systems for rainwater collection, purification and use

INTEGRATED APPROACH TO URBAN DEVELOPMENT



Source: Sustainable Cities Planning: Strategy Directions, UN Habitat, 2009; Green urban development and urban infrastructure (Institute for Housing and Urban Development Studies, Erasmus University, Rotterdam) Four key components

Seven conditionally delimitated subject areas

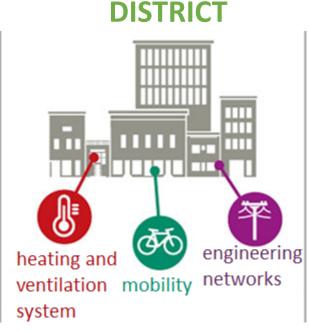
Drivers



IMPLEMENTATION SPACE LEVELS OF GREEN APPROACHES TO URBAN DEVELOPMENT

BUILDING energy production materials and constructios resource consumption

smart accounting





BENEFITS:

- resource usage efficiency
- resource consumption management
- cost reduction
- load reduction on the power grid
- load reduction on storm sewer system

BENEFITS:

- local management, production and storage of resources
- local fulfillment of demand
- resource distribution improvement
- Increasing of comfort living and climate resilience

BENEFITS:

- infrastructure maintenance costs reduction
- health care costs reduction
- service needs reduction
- energy consumption reduction by urban infrastructure and associated greenhouse gas emissions



1 GOAL x 2 WAYS x 1 VISION

Promote greenhouse gas emissions reduction

Project goal

Polotsk

Novopolotsk

Development of transport infrastructure efficiency (77.8 metric tons CO₂)

Novogrudok

Energy efficiency pilot projects (13.3 metric tons CO_2)





UNDP-GEF Project "Belarus: Supporting Green Urban Development in Small and Medium-Sized Cities in Belarus"













GREEN URBAN DEVELOPMENT PLANS for cities Polotsk / Novopolotsk / Novogrudok



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Green infrastructure development plan

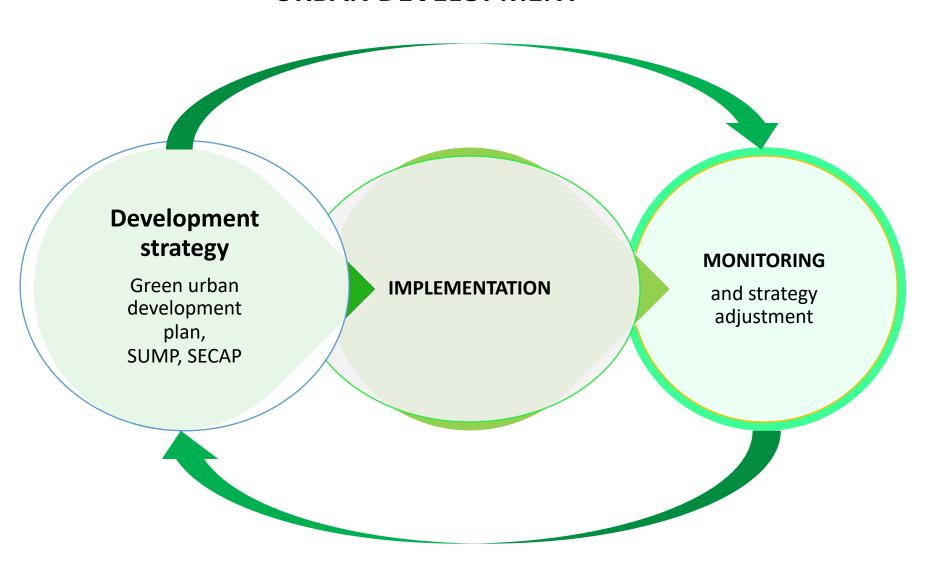
Waste management Plan / Strategy Air pollution reduction program

Local supply policy

Water resources management plan



URBAN DEVELOPMENT





PERSPECTIVE DIRECTIONS OF "GREEN" APPROACHES IMPLEMENTATION TO SUSTAINABLE URBAN DEVELOPMENT IN THE REPUBLIC OF BELARUS

INTEGRATED APPROACH



Introduction of common approaches to integrated territorial planning at the national level (SDG 11)

Integration of strategic documents of territorial development into short- and medium-term action plans of municipalities Formation of municipalities capacity building for continuous monitoring and adjustment of priority areas for sustainable territorial development

Sustainable energy







- Development of energy management and energy service
- · Energy efficient individual residential development
- Smart infrastructure (smart lighting, smart accounting, smart grid)
- Territorial energy security strategies

Sustainable transport



- Development of public and private electric transport
- Enhancing the role of inland waterway transport

Sustainable resource consumption





- Comprehensive territorial strategies for handling MSW
- Territorial water resources management strategies

Climate strategies





- Territorial low-carbon development strategies
- Improvement of agriculture resilience to the impacts of climate changes
- Complex territorial climate change adaptation strategies

Sustainable financing



- · Implementation of sustainable public procurement mechanisms
- Promotion of new financing mechanisms development for infrastructure projects



THANKS for attention!

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