

Evaluation of compliance of the Master Plan with the policy objectives

The level of compliance of the objectives of the Master Plan to the environmental goals, set up at the national and local levels, are indicated in the Table 5.1 .

Table 5.1 Compliance of the Master Plan with environmental policy objectives

Objectives of the national strategic documents	Objectives of the Strategy for the social-economic development of the Orhei city for 2014-2020 (nr 13.20 from 27.12.2013) and other documents	Objectives, stated in the draft Orhei Master Plan	Level of formal compliance (+) full (+/-) partial (-) Non-compliance
<p>Air</p> <p>Reduction of emissions of pollutants by 30% by 2023 and of greenhouse gases by at least 20% by 2020</p>	<p>Ensuring protection of natural environment. Reduction of pollution of environment. Promotion of advanced technologies related to extraction of mineral resources</p>	<p>Reduction of discharges of pollutants by means by closure of a number of enterprises, optimization of the transport schemes, development of territories and planning of trees and shrubs, and other measures</p>	<p>+</p>
<p>Enhancement of energy efficiency for the purpose of reducing by 2020 of energy consumption by 20%, achievement by 2020 of 20% of generation of energy from renewable energy sources, and 10% – from biofuel</p>	<p>Reduction of consumption of energy for heating and use of buildings (thermal insulation, installation of solar panels). Reduction of losses of electricity at the expense of replacement of spiral tungsten filament lamps with light LED strip lamps. Capacity building for obtaining energy from</p>	<p>These goals are not envisioned in the Master plan.</p>	<p>(-)</p>

	<p>alternative sources:</p> <ul style="list-style-type: none"> - use of wind potential; - acquisition and installation of solar panels 		
Construction, repair of public local motor highways -4900 km	Ensuring development of the infrastructure (repair of streets, pavements)	Reduction of pollution of environment, of noise emissions	+
Water resources			
Enhancement of the quality of at least 50% of surface waters	<p>Measures related to cleaning-up and protection of the Raut river</p> <p>Cleaning-up of the Orhei town lake</p>	Reduction of impact on water resources by means of development of sewage networks, liquidation of sources of pollution and other measures	+
Ensuring by 2023 of access to about 80% of the population of the republic to water supply systems and services, and to about 65% – to sewage systems and services;		Expansion of access of the population to systems of water supply and sewage	+
Construction and expansion of water supply and sewage systems in the city of Orhei	Modernization and expansion of water supply and sewage systems	Expansion of access of the population to systems of water supply and sewage	+
Reduction of risks and adjustment to climate changes in the sphere of water resources.		Reduction of risks of floods and under-floods in construction planning	+/-
Land resources			
Improvement of the state of eroded lands and of lands subjected to landslides;		Improvement of the state of urban land resources by means of engineering protection and development.	+
- determining by 2016, criteria for spatial planning;			+/-

Waste			
Reduction of the quantity of waste stored at landfills by 30% and increase of the share of processing by 20% by 2023;	Proper solid and liquid waste management and ensuring order in the sphere of protection of health of the population. Setting parameters for authorized landfills, setting indicators for their placement	Reduction of impact from appearance of waste by means of shutdown of the old landfill.	+
Promotion and implementation of the separate waste collection systems in all localities, both in the household and industrial sector, of the installations for waste separation	Organization of separate waste collection in the city	Ensuring separate waste collection by means of choosing locations for sorting of waste.	+/-
Improvement of the system of transportation of waste and development of transfer stations (4-7 stations in each district);	Organization of separate collection of waste in the city	Ensuring separate collection of waste by means of allocation of areas for temporary storage of waste.	+/-
Biodiversity			
-creation of 2 thousand ha of green zones in cities and villages by 2020.	Sustainable green plantation management with involvement of tenants.	Creation of favorable environment by means of creating a common urban green areas	+
- expansion of natural territories protected by the state by at least 1% of the total area of the country by 2018, and by 8% - by 2023;	Providing for functioning of the natural paleontological monument “Defileul Orhei”, which represents a natural territory protected by the state with the area of 100 ha Development of the landscape of the city of Orhei	Preservation of territories protected by the state, development of the unutilized part of the floodplain area of the Raut River in the western direction (e.g. avoiding the protected area)	+
- forestation of shoreland areas of water		Improvement of the quality of water	+

conservation zones of rivers and water bodies in the area of up to 30.400 ha by the end of 2018.		resources by means of creation of green zones in protected water shoreland areas	
Historical monuments			
Ensuring accounting, regulation and preservation of historical monuments	Restoration of protected areas in development of the historical part of the city. Taking physical inventory, evaluation and regulation of historical monuments	Providing for conferring a special status to the historical part of the city	+
Tourism			
Absorbing the national tourist potential and promotion of the image of the Republic of Moldova as a tourist destination country ; - regional tourism development;	Expansion and modernization of the infrastructure for accommodation and servicing tourists (hotels, restaurants, recreation places). Expansion of tourist walking routes, urban recreation places and creation / development of specific services.	Development of the touristic infrastructure of the city based on the existing historical and cultural sites	+/-
Health of the population			
Minimization of negative impact on human health of risks and emergency situations in the sphere of public health caused by natural, technology-related, man-induced, biological, radiological and social factors.	Providing for reduction of environment pollution	Enlargement of the recreation and sport areas; Change and reduce the impact of the transport; Reduce pollution from households by improving the access to sewage and waste collection networks	+

	<ul style="list-style-type: none"> - Creation of pedestrian zones; - creation of cycle lanes; - installation of ramps for access to transport for people with disabilities; - rehabilitation / construction / improvement of pedestrian crossings - Construction of the sports center "Avtodrom"; <p>Construction of sports and fitness center and training grounds, and a football club "Milsami". Development of the park "Ivanos" with „mounting bike" lanes</p>	Providing for development of recreation and pedestrian zones, placement of the cultural and health institutions	+
Socio-economic development			
Provision for sustainable economic development and, as a consequence, reduction of the poverty level.	<p>Development of the sustainable economy;</p> <ul style="list-style-type: none"> - promotion and support of small and medium businesses; <p>Creation of an industrial park; Creation of a business incubator; Reconstruction / modernization of the agricultural market; Building capacity for innovations and technological modernization</p>	Provision for placement of new enterprises	+
Increase of public investments in the national and local road infrastructure for the purpose of reducing transport costs and acceleration of access;	<p>Creation of favorable investment climate</p> <p>Provision for development of the infrastructure (repairs of streets, pavements)</p>	Provision for development of the urban infrastructure	+

As indicated in the table above, the Orhei Master Plan displays high level of formal compliance with the environmental policy objectives established on national and regional levels. The Master Plan takes into account most of them and presents measures aiming at their implementation.

Based on the analysis of these objectives, it may be noted that the goals in the field of atmospheric air protection, set up nationally, will be only partially implemented in the Master Plan of Orhei. The reduction of the emissions might be achieved due to the closure of stone mines that are located in the city and their operation release into the atmosphere large amounts of suspended solids; and by reducing emissions from freight transport, the movement of which will be organized on the bypass road. A slight decrease in emissions from urban road transport could be also achieved as a result of the construction and repairing of highways and intra-urban roads.

For the realization of the Energy Efficiency (EE) objectives and obtaining energy from renewable sources, certain actions will be undertaken at the level of the city through to a new support program in the field of EE, but these are not be reflected in the Master Plan, as the Program does not involve any construction and location of new facilities in this area.

In the area of water resources, a construction of water supply networks and sewage systems are specified in two national-level policy documents, with specific reference to Orhei among the priority cities, which should realize these goals in the short term. Improving the quality of surface waters could be achieved by preventing the discharge of contaminated water into the river Raut and the city lake, due to the construction of drainage system for rain water collection, expansion of sewerage network, construction of local industrial waste water treatment facilities, establishment and greening of protection zones for all water bodies. The master plan foresees a partial realization of the goals of reducing of risks and adaptation to climate change. Namely are envisaged measures to raise the level of the ground floor during the construction on flooded areas, the development of storm water collector etc.

In the area of land and soil resources the Master Plan provides for the creation of green zones in areas affected by erosion and landslides, and on the flooded areas, which fully complies with the national policy. Waste disposal is one of the most critical problems for Orhei. Construction of a new landfill for waste disposal could be addressed only at the regional level. At present time, the regional waste management strategy for the development region "Centre", which includes the town of Orhei has been developed and approved. However, its realization (including necessary investments) is questionable in the near future. The Master Plan however takes it into the consideration and provides for the selection of the area and placement of waste sorting and temporary storage of the remained waste, which will be shipped in the future to the regional landfill. These activities of the Master Plan will only partially solve the problem, and there is a need for a comprehensive approach at the regional level for the final solution.

In the field of biodiversity the Master Plan foresees the development of the schemes of green areas of the city and their enlarging and gradual integration in the National Park Orhei. The Plan includes forestation schemes for protection zones of water bodies. In the city area it is placed a natural, paleontological monument "Defileul Orhei", which is a natural area protected by the state, with an area of 100 hectares. The Master Plan does not indicate actions for further increase in the area of natural areas protected by the state.

In the field of historic monuments at the city level it is planned to carry out an inventory and assessment of historical sites. The Master Plan foresees the demarcation of the historical part of the city and granting to it of the status of a historically protected zone. In accordance with the Strategy of socio-economic development of the city the Master Plan included measures for the deployment of sites of socio-cultural significance for a tourism promotion.

In the field of public health, a number of measures towards minimizing the existing negative impacts on human health including a reduction of environmental pollution is planned. The Master Plan included development of the schemes of centralized water supply and sewerage, development of schemes of collection of rain waters and their cleaning, construction of bypass roads, city roads, expanding green areas of the city, all of which have potential to reduce existing environmental risks to public health. In addition, the Master Plan displays significant potential for the promotion of a healthy lifestyle by creation of the scheme of pedestrian paths, bicycle lanes, and construction of a sports complex.

In the area of economic development the objectives formulated in the Orhei Strategy of socio-economic development comply with the goals of economic development of the country and, basically, will be addressed by regulatory and administrative measures. The Master Plan contributes to their materialization through the optimization of transport network, municipal infrastructure, creating favorable spatial conditions for the economic development of city. The master plan included provisions for the extension of the existing industrial zone, which are sufficient for the further development of industrial potential.

In conclusion, the examination of the provisions of relevant policy documents and the content and maps of the Master Plan, indicates that objectives and activities stated in the Master Plan generally correspond to national and local environmental objectives. At the same time, it have to be emphasized, that a number identified environmental issues (e.g. sound waste management, transport-related impacts on air) have to be addressed at the regional or national level, as the Orhei city alone will not have enough technical or financial potential or decision making power to ensure achieving of all environmental objectives stipulated at regional/national level.