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NATURE- BASED SOLUTIONS FOR CITIES

in legislation, strategies, policies and action plans at the national, regional and local levels in Ukraine

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LIST OF ABBREVIATIONS

NbS	Nature-based solutions
SCN	State construction standards
SSRR	State sanitary rules and regulations
EU	European Union
CMU	Cabinet of Ministers of Ukraine
MEPNR	Ministry of Environmental Protection and Natural Resources of Ukraine
Minregion	Ministry for Communities and Territories Development of Ukraine
NbS	Nature-based solutions
UNDP	United Nations Development Programme
SEA	Strategic environmental assessment

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4 NATURE-BASED SOLUTIONS FOR CITIES
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INTRODUCTION

During June-July 2021, UNDP Ukraine conducted a study “Nature-based solutions for cities¹ in legislation, strategies, policies and action plans at the national, regional and local levels in Ukraine.”

This work focuses on identifying in the state planning documents² of different levels and in other legislative acts of Ukraine both in the field of environmental protection and in related areas (urban planning, energy policy, etc.) of conceptual legal framework for the development of a concept of nature-based solutions for cities.

The study analyses the main strategies, plans, programs, etc., as well as the basic laws of Ukraine and other regulations in the field of environmental protection, urban planning and other related areas that have been adopted and operate at the national, regional and local levels.

The research topic is relevant due to the international processes of formation, development and implementation of the concept of nature-based solutions, which is important not only in the context of sustainable development of individual states and their territories (e.g. cities or other settlements), but also in the context of solving individual environmental, economic and social issues (climate change, biodiversity conservation, public health, protection of the population from natural disasters, energy efficiency, etc.).

Therefore, it is important that the concept of NbS is recognized by Ukraine in the first place in state planning documents (strategies, plans, programs, etc.) and in other fundamental special instruments of legislation in relevant areas. And these strategic political and legislative guidelines became the basis for the implementation and development of a concept of NbS in Ukraine by introducing the concept of NbS into legislation, creating clear and direct requirements and standards for NbS in various areas (e.g., environmental, urban-planning, energy policy) and at different levels (national, regional, local). And the effective implementation of such legal requirements, in turn, will also require adequate staffing (especially in government authorities and local self-government bodies; certified/experienced on these issues) and adequate funding (budgetary and extrabudgetary).

This work may be of interest to government authorities, local self-government bodies, scientists and educational institutions, business representatives, the public, as well as all those interested in current issues of sustainable development of cities and other territories, urban development, environmental protection and public health, including through the introduction of NbS.

NATURE-BASED SOLUTIONS FOR CITIES AS A PRIORITY TODAY



1 Nature-based solutions for cities as a priority today

The need to implement natural solutions (природничих рішень)⁴ or nature-based solutions (природоорієнтованих рішень) (NbS)⁵ in cities is discussed in a number of international legal acts in the field of environmental protection: positional and other international documents to the UN Framework Convention on Climate Change⁶ and the Paris Agreement thereto⁷, the EU's Biodiversity Strategy for 2030^{8, 9}, the European Green Deal¹⁰, etc. Ukraine is a participant in these international processes, including in the framework of the implementation of the Association Agreement between Ukraine and the EU¹¹, and must fulfil the obligations and recommendations provided for in them, in particular in terms of the development and implementation of the NbS.

The need to implement NbS is also caused by objective factors. Biodiversity loss, climate change and the current COVID-19 pandemic are interrelated phenomena that exacerbate poverty and inequality, undermine food security. In turn, this poses risks to human well-being and removes the prospect of a sustainable society, which is the goal of the Sustainable Development Goals until 2030. For the most vulnerable, the burden is the heaviest, but everyone is already feeling the effects - changing weather conditions, economic uncertainty, and increasing risks of serious illness or even loss of life. However, nature also offers solutions. It is the foundation for health and well-being. Protecting and restoring biodiversity and well-functioning ecosystems is a key to boost our resilience and prevent the emergence and spread of future diseases¹².

According to the definition proposed by the International Union for Conservation of Nature and Natural Resources (IUCN), *nature-based Solutions (NbS) are actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-be-*

ing and biodiversity benefits. They are underpinned by benefits that flow from healthy ecosystems and target major challenges like climate change, disaster risk reduction, food and water security, health and are critical to economic development.^{13, 14}

NbS use the power of functioning ecosystems as infrastructure to provide natural services to benefit society and the environment¹⁵.

The IUCN Global Standard for Nature-based Solutions, adopted in 2020 (first edition), serves as a guide for the planning and implementation of nature-based solutions¹⁶.

For information

IUCN emphasizes that POPs must be distinguished from nature-inspired solutions and from nature-derived solutions.

Nature inspired solutions. Innovative design and production of materials, structures, and systems that are modelled on biological processes are nature-inspired. For example, biomimicry is a practice that learns from and mimics the strategies found in nature to solve challenges. These designs take inspiration from nature – such as specially made sticky gloves that mimic the wall climbing adaptations of geckos. They are not based on functioning ecosystems.

Nature derived solutions. Wind, wave and solar energy are derived from nature. In this case, they are solutions to help fulfil our low carbon energy needs through production methods deriving from natural sources. These energy sources come from the natural world but are not directly based on functioning ecosystems.³

Practices of NbS for cities include: green roofs, rainwater harvesting, permeable surfaces (porous pavements, permeable pavements)¹⁷, swales¹⁸, channels and rills¹⁹, filter strips²⁰, soakaways, infiltration trenches²¹ and basins²², rain gardens, detention basins, retention ponds, buffer strips and hedges, forest riparian buffers, urban forest parks, trees in urban areas, wetland restoration and management²³, preservation of pollinating insects, composting of household waste, etc.

NbS do not include pseudo-ecological solutions, such as the planting of forest pure crops (i.e., the replacement of natural forests with commercial plantations), the artificial transformation of natural meadows into forest landscapes (afforestation), the spread of invasive species of flora and fauna, etc.

The implementation and development of NbS should be integrated and is particularly important in areas that are close-

ly related to the use of natural resources (forestry and fisheries, food and agro-industry, mining, energy), as well as in the areas of urban planning and infrastructure development.

Effective implementation of NbS and dissemination of NbS practices in Ukraine is not possible without proper educational work to raise public awareness of nature-based solutions and their benefits to encourage their implementation.

Proper implementation of NbS also depends on whether they are enshrined in and regulated by legislation, including but not limited to recognition of their priority role in strategic documents (strategies, plans, programs, etc.) at the state, regional and local levels.

In addition, the development and provision of the institutional, human and financial components is important for the implementation of NbS in Ukraine.

From an environmental perspective NbS in cities, inter alia:



prevent the reduction and degradation of natural habitats, green areas in cities and suburbs (artificial and natural);



protect and preserve ecosystems, including biodiversity;



retain carbon and reduce its emissions into the atmosphere, respectively, are climate change mitigation and adaptation measures;



reduce the level of noise, the level of pollution and dusting of the atmosphere, the level of pollution of water resources and promote their recovery;



solve the problems of household waste, crop and animal waste;



prevent negative natural phenomena (strong, abnormal heat, excessive rainfall, etc.) and emergencies;



restore human connection with nature, have a positive effect on the physical and emotional health of the population.

Nature-based solutions for cities
as a priority today

Nature-based solutions for
cities: the state of reflection in
legislation, strategies, policies
and action plans at the state level

Nature-based solutions for cities:
the state of reflection in legislation,
strategies, policies and action
plans at the regional and local
levels

State planning documents in the
field of urban planning, planning
and development of cities and
other territories and NbS

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NATURE-BASED SOLUTIONS FOR CITIES:

the state of reflection in legislation,
strategies, policies and action
plans at the state level

2 Nature-based solutions for cities: the state of reflection in legislation, strategies, policies and action plans at the state level.

An important role in environment protection is played by strategic documents (strategies, plans, programs, etc.) at the state level, which lay down the political and/or programmatic principles of sustainable use, protection and reproduction of the environment and its components.

The need to develop relevant strategic documents is provided for in the national legislation and in the relevant international treaties, the consent to be bound by which is given by Ukraine. For example:

- in the Constitution of Ukraine, which provides that the powers of the Verkhovna Rada of Ukraine include approval of the national programs of economic, scientific and technical, social, national and cultural development, environment protection (item 6, page 85)²⁴;
- in the Law of Ukraine "On Environment Protection", which states that in order to conduct effective and purposeful activities of Ukraine to organize and coordinate measures for environment protection, environmental safety, rational use and reproduction of natural resources - state target programs shall be developed and adopted for the future (part 1 of Article 6)²⁵;
- in the Forest Code of Ukraine, which provides that the Verkhovna Rada of Ukraine in the field of forest relations shall: (a) determine the principles of state policy in the field of forest relations (item 1 of part 1 of Article 26); (b) approve national programs for the protection, conservation, use and reproduction of forests (item 3 of part 1 of Article 26);
- in the Convention on Biological Diversity of 1992²⁶ (ratified by Law of Ukraine No. 257/94-VT²⁷ dated November 29, 1994), which declares that each Contracting Party shall, in accordance with its particular conditions and capabilities, develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned (Article 6, paragraph 1(a)).

In Ukraine, a fundamental strategic document on the state environmental policy of a general nature is called **Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period until 2030, approved by the Law of Ukraine No. 2697-VIII dated February 28, 2019** (hereinafter the State Environmental Policy until 2030)²⁸.

This Strategy defines, inter alia:

- the goal of the State Environmental Policy until 2030 is to achieve good environmental status by introducing an ecosystem-based approach to all areas of socio-economic development of Ukraine with the aim of ensuring the constitutional right of every citizen of Ukraine to a clean and safe environment, introducing a balanced use of nature and preserving and restoring natural ecosystems;
- strategic objectives and tasks of the State Environmental Policy until 2030 (5 in total): 1) formation of environmental values and principles of sustainable consumption and production in society; 2) ensuring sustainable development of Ukraine's natural resource potential; 3) ensuring the integration of environmental policy into the decision-making process regarding the socio-economic development of Ukraine; 4) reducing environmental risks in order to minimize their impact on ecosystems, socio-economic development and public health; 5) improvement and development of the state system of environmental management;
- two stages of implementation of the State Environmental Policy: the first stage - until 2025, the second stage - until 2030.

To implement the Strategy, the CMU is required, within 6 months from the effective date of the Law approving the Strategy, to develop and approve the National Environment Protection Action Plan. *Such National Action Plan, however, is not yet adopted, which is a shortcoming and an obstacle to the effective implementation of this strategic document - the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period up to 2030.*

This problem and the need for immediate development and approval by the Government of Ukraine of such a National Plan for 2021-2025 is stated in the Resolution of the National Security and Defence Council of Ukraine dated March 23, 2021 "On challenges and threats to the national security of Ukraine in the environmental sphere and priority measures to neutralize them"²⁹.



The text of the Strategy contains no direct reference to the NbS, their priority role, including for resolving problems of cities.

At the same time, the tasks to achieve Objective No. 2 "Ensuring sustainable development of Ukraine's natural resource potential" include the task of reducing the negative impact of urbanization on the environment, stopping the destruction of the environment within cities, in particular, preventing the unjustified destruction of green spaces within cities during construction or other works, illegal allocation of land occupied by green planting for construction.

And the expected results of the State Environmental Policy stipulate that territorial expansion of cities and other settlements will only be possible on condition of preservation, creation and restoration of recreational, nature protection, health-improving territories and objects, landscapes, forests, parks, squares, separate green areas, and their development will more closely meet the requirements of adaptation to climate changes.

The Strategy also addresses the need to take a number of measures that are relevant to the cities of Ukraine and are relevant to the NbS, namely: climate change prevention and adaptation; improvement of air quality; improvement of water quality and economical use of water resources; expansion of the nature reserve fund of Ukraine; increase of the forest cover of the country; biodiversity restoration; introduction of energy saving and energy efficiency technologies; introduction of modern construction technologies for heat and energy saving, which will significantly reduce emissions of greenhouse gases and pollutants into the atmosphere, as well as the discharge of pollutants into water bodies, etc.

That is, the Strategy does not use wordings containing the words "nature-based solutions". This document only identifies the legal framework that can be the basis for the development of a concept of NbS in Ukraine, including for cities. But very general legal principles cannot replace the direct clear enshrinement in the legislation of the rules on NbS, including their recognition as a possible or mandatory component of the state environmental policy.

**Decree of the President of Ukraine
“On Sustainable Development
Goals of Ukraine until 2030”³⁰
No. 722 dated September 30, 2019.**

This Presidential Decree emphasizes the need to ensure compliance with the Sustainable Development Goals of Ukraine until 2030, including: (a) ensuring the openness, security, viability and environmental sustainability of cities and other settlements (sub-item 11 of item 1); and (b) taking urgent action to combat climate change and its effects (sub-item 13 of item 1); conservation and rational use of oceans, seas and marine resources in the interests of sustainable development (sub-item 14 of item 1); protection and restoration of terrestrial ecosystems and promotion of their rational use, rational forest use, combating desertification, stopping and reversing the process of land degradation and stopping the process of biodiversity loss (sub-item 15 of item 1); creation of sustainable infrastructure, promotion of comprehensive and sustainable industrialization and innovation (sub-item 9 of item 1); ensuring accessibility and sustainable management of water resources and sanitation (sub-item 6 of item 1).

The Presidential Decree stipulates that Sustainable Development Goals of Ukraine for the period up to 2030 are guidelines for the development of draft forecast and program documents, draft regulations to ensure balanced economic, social and environmental dimensions of sustainable development of Ukraine.



The text of the Presidential Decree contains no direct reference to the NbS, including for cities.

That is, the Presidential Decree does not use wordings containing the words “nature-based solutions”. This document only defines the legal framework that can be the basis for the development of a concept of NbS in Ukraine, including for cities.

**Concept of Implementation of the
State Climate Change Policy for
the period up to 2030, approved
by Ordinance of the Cabinet of
Ministers of Ukraine No. 932-p dated
December 07, 2016³¹.**

The Concept provides that development and subsequent implementation of a comprehensive state climate change policy harmonized with the international legislation *is a complex task due to multidisciplinary nature of the problem*. Politically, economically, and scientifically substantiated decisions on climate change should be made for all economy sectors, including *energy, industry, agribusiness, transport, water economy, forestry, and housing and communal services, land use, as well as healthcare, and preservation and regeneration of ecosystems*.

This Concept defines, inter alia:

- the Concept goal - to improve the state climate change policy in order to achieve the country’s sustainable development, create the legislative and institutional prerequisites for ensuring a gradual transition to low-carbon development with economical, energy, and environmental security and improved well-being of citizens;
- the main areas of implementation of the Concept that include: ensuring coordination of the state climate change policy with the legal acts and reg-

ulations, which set forth the strategic decisions for achieving country's sustainable development, development of the energy sector, industry, housing and communal services, and other sectors of the economy, and increasing the energy efficiency and use of renewable energy sources;

- the Concept delivery time - until 2030.



The text of the Concept contains no direct reference to the NbS, including for cities.

That is, the Concept does not use wordings containing the words "nature-based solutions". This document only defines the legal framework that can be the basis for the development of a concept of NbS in Ukraine, including for cities.

To implement the Concept in 2017, the CMU approved by its ordinance the **Plan of Actions for the Implementation of the Concept**³². In the context of the development of NbS, interesting is the provision of this plan providing for the approval by 2020 of the Strategy of Climate Change Adaptation of Ukraine for the period up to 2030.

This Climate Change Adaptation Strategy is not yet adopted. However, on March 01, 2021 the MEPNR published on its web-site a notice of promulgation of the **Draft Ordinance of the CMU "On Approval of the Strategy of Environmental Safety and Climate Change Adaptation until 2030"** and the text of this document³³.



Interesting is the fact that the draft of this Strategy mentions for the first time at the legislative level the need to implement the NbS.

In particular, this is done in the following formulations:

- this Strategy is based on such basic principles as, inter alia, the application of the nature-based (ecosystem) approach to adaptation;
- as a result of implementation of the Strategy, the use of adaptation to climate change through ecosystem-based and nature-based solutions is expected, inter alia.
- Thus, the adoption of this Strategy will introduce into the national legislation the concept of nature-based solutions and will determine the need for their implementation, in particular, in terms of addressing the issue of adaptation to climate change.

Energy Strategy of Ukraine until 2035 "Security, Energy Efficiency, Competitiveness", approved by Ordinance of the Cabinet of Ministers of Ukraine No. 605-p dated August 18, 2017³⁴.

This Strategy defines, inter alia:

- the goal of the Strategy - to address the needs of society and economy for fuel and energy in a technically-reliable, safe, economically efficient and environmentally-friendly way, in order to guarantee the improvement of social well-being;
- the priorities of the Strategy, which include, for example, the application, in the context of ensuring energy independence, of best practices in envi-

ronment protection; at the same time, it is planned that among the main areas of improving the energy efficiency of Ukraine's economy should be reducing energy consumption of households, commercial and communal sectors for heating by improving the energy efficiency of residential and public buildings, as well as energy efficiency of heating appliances; in addition, in the field of energy efficiency and environment protection, the introduction of a "passive house" construction standards is envisaged;

- the Strategy delivery time - until 2035 (1st stage "Reforming the energy sector" - until 2020, 2nd stage "Optimization and innovative development of infrastructure" - until 2025, 3rd stage - "Ensuring sustainable development" - until 2035).

In order to implement the Strategy, the Ministry of Energy and Coal Industry, together with other central executive authorities, shall within four months submit a draft action plan for the implementation of the Strategy to the Cabinet of Ministers. *Such Action Plan, however, is not yet adopted, which is a shortcoming and an obstacle to the effective implementation of this strategic document - Energy Strategy of Ukraine until 2035.*



The text of the Strategy contains no direct reference to the NbS, including for cities.

That is, the Strategy does not use wordings containing the words "nature-based solutions". This document only defines the legal framework that can be the basis for the development of a concept of NbS in Ukraine, including for cities.

National Target Program for the Development of the Water Management and Environmental Recovery of the Dnieper River Basin until 2021", approved by the Law of Ukraine No. 4836-VI dated May 24, 2012³⁵.

This National Target Program defines, inter alia:

- the goal of the Program - to identify the main areas of the state policy in the field of water management in order to meet the needs of the population and sectors of the national economy for water resources, preservation and reproduction of water resources, implementation of the integrated water resources management system based on river basins, restoration of the role of reclaimed land in the food and resource provision of the state, optimization of water consumption, prevention and elimination of harmful effects of water;
- tasks of the Program, including, for example, in the field of ecological rehabilitation of the Dnieper river basin and improvement of drinking water quality: (a) arrangement of sewerage facilities in housing and communal services, economic facilities and urban areas; (b) creation of cleaner production, closed (drainless) industrial water supply systems, introduction of low and waterless technologies, ensuring reuse of sewage; (c) revival and maintenance of favourable hydrological condition of rivers and elimination of the consequences of harmful effects of water;

- the Program delivery time: 2021 (1st stage – 2013-2016; 2nd stage – 2017-2021).

In order to implement the Program Tasks and Measures for the Implementation thereof were approved in addition thereto (Annex 2). These measures include, inter alia, the development of action plans for local executive authorities to rehabilitate water bodies.



The text of the Program contains no direct reference to the NbS, including for cities.

That is, the Program does not use wordings containing the words “nature-based solutions”. This document only defines the legal framework that can be the basis for the development of a concept of NbS in Ukraine, including for cities.

National Action Plan to Combat Land Degradation and Desertification approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 271-p dated March 30, 2016³⁶.

This plan contains a list of measures to combat land degradation and desertification. In particular, such measures provide: (a) development of a draft Law of Ukraine on Soil Conservation and Protection of Fertility; (b) development of orders of the MEPNR: determining the standards for the creation of protective forest plantations, taking into account the types of soils and natural areas; creation, restoration and protection of forests, including field protective forest strips and other protective plantations, in accordance with scientifically substantiated indicators taking into account regional features and natural and climatic conditions, ensuring forest management, inventorying, survey, monitoring and accounting; creation (announcement) of new and expansion of the existing territories and objects of the nature reserve fund, etc.



The text of the National Action Plan contains no direct reference to the NbS, including for cities.

That is, the National Action Plan does not use wordings containing the words “nature-based solutions”. This document only defines the legal framework that can be the basis for the development of a concept of NbS in Ukraine, including for cities.

National Waste Management Strategy of Ukraine until 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 820-p dated November 08, 2017³⁷.

This Strategy defines, inter alia:

- the goal of the Strategy - to create conditions for raising living standards by introducing a systematic approach to waste management at the state and regional levels, reducing waste generation and increasing the volume of its recycling and re-use;
- the objectives of the Strategy that include: (a) Identification and solution of key problems of waste management development in Ukraine on an innovative basis; (b) determination of the priority areas for operation of central

and local executive authorities and local self-government bodies, organizations, institutions, enterprises, public organizations and society as a whole in the transition of the waste management system to an innovation model; (c) determination of the ways and methods for improvement of the existing waste management infrastructure that do not contradict the innovation model; (d) assurance of sustainable development of Ukraine through the implementation of tasks aimed at environmental and resource security;

- the tasks of the Strategy, which include, inter alia, significant increase in the role of regions and civil society in reforming waste management;
- the Strategy delivery time – 2030 (1st stage - 2017-2018, 2nd stage - 2019-2023, 3rd stage - 2024-2030).

The Strategy special measures include the development of the direction of composting of the organic component of household waste, namely it is established that: (a) in the field of household waste, legal acts and regulations should be adopted to introduce the organic component of household waste in private households in rural areas as well as in suburban urban areas; (b) in the field of agricultural waste, the introduction of composting of waste generated by small farms should be encouraged (with regard to the composting of vegetable waste, it requires, in particular: development of regulatory documents concerning the quality of compost and the quality of raw materials for composting; development and establishment of requirements for the introduction of compost into the soil, including the implementation of soil quality control; in terms of composting of agricultural waste of animal origin - stimulating the composting of waste generated in small farms and rural settlements, by disseminating knowledge and relevant information; development of quality requirements for raw materials for composting; development and establishment of requirements for the introduction of compost into the soil, including the implementation of soil quality control; in terms of processing animal excrement - organization of collection of surplus animal excrement in places of their formation with redistribution in places of shortage of fertilizers or at the facility for composting and anaerobic fermentation; determination of the mechanism of stimulation of use of animal excrements as raw materials for breeding and anaerobic fermentation, where direct introduction into the soil is not possible and/or admissible.

To implement the Strategy in 2019, the CMU approved by its ordinance the **National Waste Management Plan until 2030³⁸**.



The text of the Strategy and the National Plan thereto contains no direct reference to the NbS, including for cities or other urban and rural settlements.

That is, the Strategy and the National Plan do not use wordings containing the words “nature-based solutions”. These documents only define the legal framework that can be the basis for the development of a concept of NbS in Ukraine, including for cities.

Much of the strategic documents in the field of environment protection and related areas are not covered by this work due to the fact that they had a deadline of 2020. That is, now their implementation period has expired, and new documents for their replacement and/or extension have not been adopted. Including: Strategy of Sustainable Development “Ukraine-2020”³⁹ 40; National Energy Efficiency Plan until 2020⁴¹ and the Action Plan for the Implementation thereof⁴²; Concept of the State Target Program of Land Relations Development in Ukraine until 2020⁴³; Strategy of Development of the Agricultural Sector of Economy until 2020⁴⁴ and others.

A number of strategic documents in the field of environment protection and related areas are currently simply do not exist (although in some cases drafts of these documents have been prepared). They include: draft State Forest Management Strategy of Ukraine until 2035⁴⁵; Biodiversity Conservation Strategy until 2030 (now only the structure of the Strategy is approved)⁴⁶; draft Water Policy Development Strategy of Ukraine - Water Strategy of Ukraine⁴⁷; draft Marine Environment Protection Strategy of Ukraine⁴⁸; draft State Target Program of Development of Land Relations and the National Infrastructure of Geospatial Data in Ukraine until 2030⁴⁹; draft Low Carbon Development of Ukraine until 2050⁵⁰; strategic document on the development of nature reserve fund and/or environmental network (none) etc.

According to the **Resolution of the National Security and Defence Council of Ukraine dated March 23, 2021 “On challenges and threats to the national security of Ukraine in the environmental sphere and priority measures to neutralize them” enacted by the Decree of the President of Ukraine No. 111/2021 dated March 23, 2021**, the CMU is required, inter alia:

- within six months: (a) to prepare and approve the Water Strategy of Ukraine until 2050, (b) the Marine Environmental Strategy of Ukraine, (c) the Concept of the State Land Use and Protection Program; (d) the State Forest Management Strategy of Ukraine until 2035, (e) the Basic Principles (Strategy) of the State Policy in the Field of Forest Relations; (f) to submit to the Verkhovna Rada of Ukraine a draft law on sewage disposal in settlements; (g) for the climate change prevention and adaptation, to submit to the Verkhovna Rada of Ukraine a draft law on the Low-Carbon Development Strategy of Ukraine until 2050; (h) to develop and approve a National Plan for Energy and Climate Change until 2030; (i) to develop and approve a National Action Plan for Energy Efficiency until 2030;
- within three months: (a) to work out issues concerning the determination of priorities for the formation of the national environmental network in the General Land Planning Scheme of Ukraine; (b) to ensure the development and approval of standards for the minimum required forest cover for natural and climatic zones of Ukraine; (c) to solve environmental problems, restore and preserve the natural environment of Donbass, develop and approve the concept of stabilization of the environmental situation and ensuring environmental safety in Donetsk and Luhansk oblasts.

State Regional Development Strategy for 2021-2027, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 695 dated August 08, 2020⁵¹.

This situation, on the one hand, is a problem for Ukraine in terms of proper strategy, and on the other, in the context of this work, provides opportunities for proposals to include relevant provisions on the priority role of NbS in the draft texts of these policies, strategies, plans and programs., i.e., from the very beginning before their adoption.

This Strategy is the main planning document for the implementation of sectoral development strategies, coordination of the state policy in various fields, achievement of efficient use of state resources in territorial communities and regions in the interests of human, state unity,... preservation of the environment and sustainable use of natural resources for current and future generations of Ukrainians.

The strategy defines the general vector of sustainable development of the regions and is developed in accordance with the Sustainable Development Goals of Ukraine until 2030 approved by the Decree of the President of Ukraine No. 722 dated September 30, 2019.

The Strategy defines, inter alia:

- the strategic goal of the State Regional Policy until 2027 as people-oriented development and unity - a dignified life in a cohesive, decentralized, competitive and democratic Ukraine, ensuring effective use of the internal potential of territories and their specialization to achieve sustainable development of the country, which creates conditions for improving the standard of living and increasing the income of citizens while achieving cohesion in social, humanitarian, economic, environmental and spatial dimensions;
- three strategic objectives (through which the strategic objective is achieved: (1) to form a cohesive state in the social, humanitarian, economic, environmental, security and spatial aspects; (2) to increase the level of competitiveness in the regions; (3) to build an effective multilevel governance;
- operational goals and main tasks, including, for example, tasks in the area of “Strengthening the use of development potential of medium and small cities” such as: (a) to ensure the modernization of urban infrastructure, which will reduce the need for non-renewable resources, create resilience to them and man-made disasters, adapt the urban network to climate change; (b) to promote the expansion of green areas, etc.;
- regional development priorities until 2027, including: accelerating the economic growth of regions and territories with a low level of socio-economic development while ensuring the improvement of the environment and the inexhaustible use of natural resources;

- stages of implementation of the Strategy (1st stage - 2021-2023; 2nd stage - 2024-2027).

The Strategy stipulates that the new development policy is based on mainstreaming key challenges affecting people, infrastructure, economy and the environment into the strategic and spatial planning, and will include building a culture of partnership and cooperation focused on the interaction between citizens and public institutions with respect to the development.

In terms of spatial planning, which is especially relevant for urban development, declared mandatory mainstreaming of the requirements of urban planning documentation (General Land Planning Scheme of Ukraine, land planning schemes at the national level, general plans of settlements, etc.) during the implementation of public investment programs/measures.

The tools for the implementation of the Strategy are action plans for the Implementation of the Strategy for 2021-2023⁵² and 2024-2027, respectively; regional development programs and projects; regional development strategies and action plans for the implementation thereof; state programs on the development of cross-border cooperation, socio-economic development of certain territories, agreements on regional development, etc.



There is no direct reference to the NbS, including for cities, either in the text of the Strategy or in the action plan for the implementation thereof for 2021-2023.

That is, the Strategy and the Action Plan do not use wordings containing the words “nature-based solutions”. These documents only define the legal framework that can be the basis for the development of a concept of NbS in Ukraine, including for cities.

The main special Law of Ukraine in the field of environment protection is the **Law "On Environment Protection" No. 1264-XII dated June 25, 1991.**

It can also be called a “framework” law, i.e., one that aims to understand the full range of public relations with respect to environmental protection, rational use of natural resources and environmental safety, identifying the main areas that need further regulation in the current legislation of Ukraine⁵³.

The peculiarity and importance of this Law is that “in accordance with the basic provisions formulated in this Law, the entire system of environmental legislation is formed.”⁵⁴

The law establishes the principles of environmental and legal policy in Ukraine, determines the composition of legislation, tasks, basic principles, objects of legal protection, the rights of citizens of Ukraine and their guarantees, responsibilities of citizens; powers of councils and other governing bodies; basic rules for monitoring, forecasting, accounting and awareness raising; standardization and rationing; control and supervision; dispute resolution procedure; legal responsibility, basics of international relations - in the field of environment protection;

regulates the issue of ownership of natural resources and the rules of their use; as well as the issue of the economic mechanism for ensuring environmental protection; measures to ensure environmental safety, systems and types of natural areas and objects that are subject to special protection; issues related to environmental emergencies, etc.



The Law does not use the term “nature-based solutions” (or terms similar thereto).

As in the case of the above-mentioned strategic documents, this Law establishes provisions that may be the legal basis for the practical implementation of NbS.

For example, the preamble of the Law stipulates that the protection of environment, rational use of natural resources, ensuring the environmental safety of human life is an integral condition for sustainable economic and social development of Ukraine; to this end, Ukraine pursues on its territory an environmental policy aimed at preserving the safe for living and inanimate environment, protecting the life and health of the population from the negative effects of environmental pollution, achieving harmonious interaction between society and nature, protection, rational use and reproduction of natural resources.

The rules of the Law include also the following provisions:

- a. planning, location, construction and development of their points shall be carried out by resolution of local councils taking into account the environmental capacity of territories, compliance with environmental protection requirements, rational use of natural resources and environmental safety (Part 1 of Article 59);
- b. local councils, enterprises, institutions, organizations and citizens in carrying out their activities shall be required to take the necessary measures to prevent exceeding the established levels of acoustic, electromagnetic, ionizing and other harmful physical effects on the environment and human health in settlements, recreational and protected areas, as well as in places of mass concentration and reproduction of wild animals (Part 1 of Article 54);
- c. funds of local, Autonomous Republic of Crimea and State Environmental Protection Funds may only be used for financial support of environmental measures, including protection against harmful effects of waters of rural settlements and agricultural lands, resource-saving measures, including scientific research on these issues, maintaining the state cadastre of territories and objects of the nature reserve fund, as well as measures to reduce environmental pollution and compliance with environmental and environmental safety standards, to reduce the impact of environmental pollution on public health (Part 6 of Article 47), etc.

However, this cannot replace the direct enshrinement in the text of this Law of the very term “nature-based solutions” and the basic provisions for their application.

Moreover, given the role and significance of this Law, we can talk about the expediency of enshrining the relevant provisions on the NbS therein. That is, if we talk about the implementation and development of NbS in the legislation, we should first pay attention to making appropriate changes to the text of this Law.

According to Article 2 of the Law, relations in the field of environmental protection in Ukraine are regulated not only by this Law, but also by land, water, forest legislation, legislation on subsoil, protection of the atmosphere, protection and use of flora and fauna and other special legislation.

These legal acts include Forest Code⁵⁵, Land Code⁵⁶, Water Code of Ukraine⁵⁷, Subsoil Code of Ukraine⁵⁸, and Laws of Ukraine: “On the Plant Life”⁵⁹, “On the Animal Life”⁶⁰, “On the Protection of the Atmosphere”⁶¹, “On the Nature Reserve Fund of Ukraine”⁶², “On the Environmental Network of Ukraine”⁶³, “On Waste”⁶⁴ etc.

These codes and laws are special sectoral (some of them - resource-based) laws, which, taking into account the development of the Law of Ukraine “On Environment Protection” regulate a limited (special) sphere of public relations. They define the general legal basis of this special sphere: provide definitions of special terms, determine the legislation governing a particular sphere, establish the basic principles and features of the use and protection of natural resources or other environmental objects, etc. It is on the basis of and taking into account these laws that other legislation on this issue is being formed. Therefore, although these documents are not strategies, plans, programs, but they are of fundamental importance.

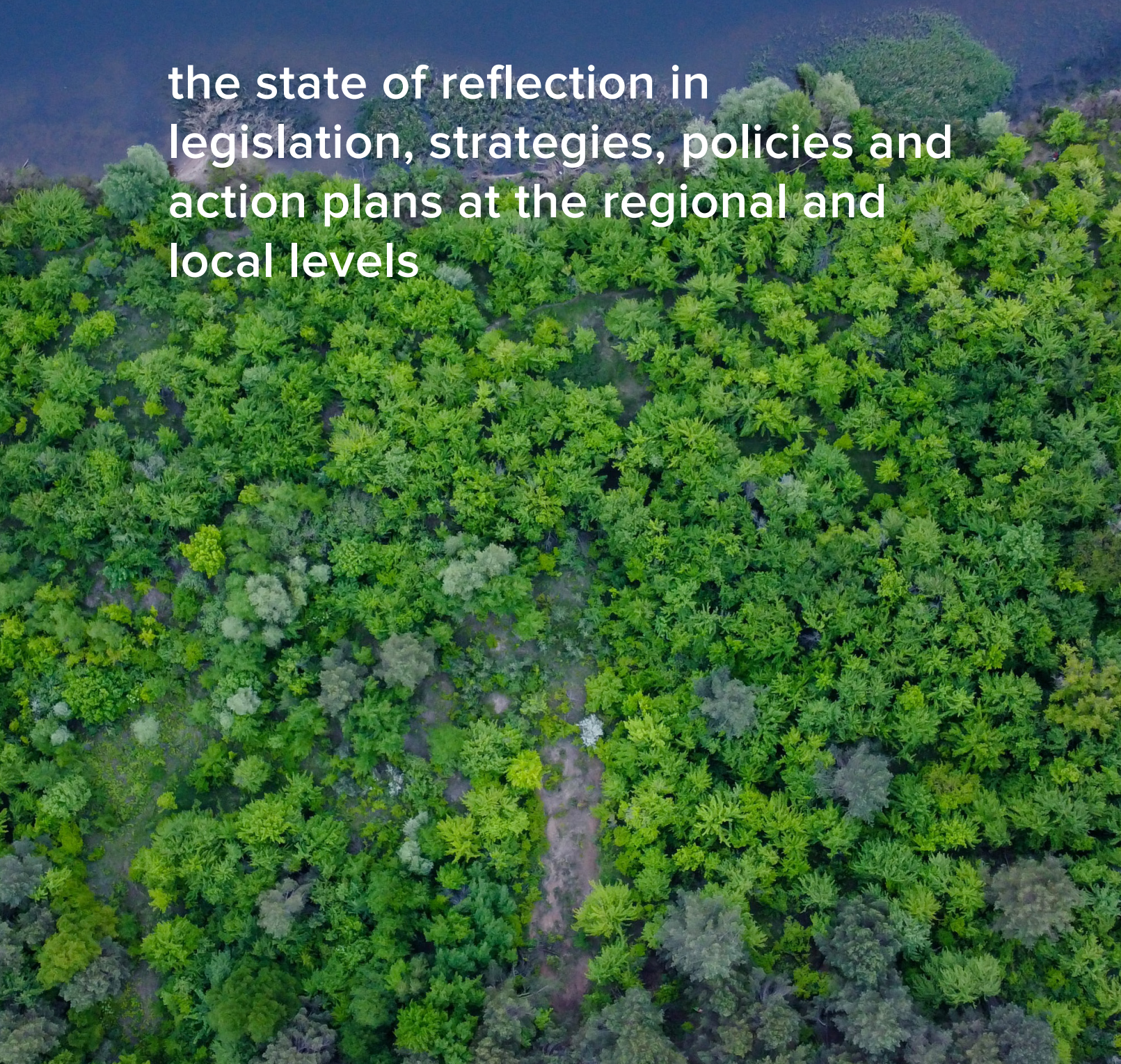


These Codes, Laws do not use the term “nature-based solutions” (or terms similar thereto).

As in the case of the above-mentioned strategic documents and the Law of Ukraine “On Environment Protection” (mentioned above), these legislative acts contain legal rules that may currently provide a legal basis for the practical implementation of NbS.

NATURE-BASED SOLUTIONS FOR CITIES:

the state of reflection in legislation, strategies, policies and action plans at the regional and local levels



3 Nature-based solutions for cities: the state of reflection in legislation, strategies, policies and action plans at the regional and local levels.

Strategies, plans, programs in various spheres at the regional and local levels have become especially relevant in connection with the current decentralization process, reforming the entire system of public administration, as well as reforming local self-government and territorial organization of power in Ukraine.

Adoption of such documents is a part of the state regional policy, which in accordance with item 1 of part 1 of Article 1 of the Law of Ukraine “On Fundamentals of the State Regional Policy” constitutes a system of goals, measures, means and concerted actions of central and local executive authorities, local self-government bodies and their officials to ensure a high standard of living for people throughout Ukraine, taking into account the natural, historical, environmental, economic, geographical, demographic and other peculiarities of the regions, their ethnic and cultural identity.⁶⁵

The objective preconditions of the state regional policy are the structural heterogeneity of the territory in natural-geographical, resource, economic, social, ethnic and political aspects.⁶⁶

At present, at the legislative level, the various strategic goals and objectives of the state regional policy of Ukraine include the protection of the environment and its components, ensuring favourable conditions for human life.

Strategic documents on regional and local development that are relevant in the context of the NbS implementation are:

1. regional development strategies (Strategies for the development of cities and other settlements) and action plans for their implementation (adopted in pursuance of the Law of Ukraine “On Fundamentals of the State Regional Policy”, the State Strategy for Regional Development for 2021-2027);
2. regional and local programs of economic and social development (adopted in pursuance of the Constitution of Ukraine, the Law of Ukraine “On the State Forecasting and Development of Programs of Economic and Social Development of Ukraine”⁶⁷, the Budget Code of Ukraine)⁶⁸;
3. regional, local programs and regional, local plans for environmental protection (adopted in pursuance of the Law of Ukraine “On Environment Protection”, the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period up to 2030);
4. regional and local strategic documents by sectors, including those related to the environmental sphere, for example, regional/local strategies, plans, programs: (a) on forest protection (such as the Oblast Target Program of the Integrated Forestry Development “Forests of the Poltava Region” for 2016-2025⁶⁹), (b) on waste management (such as the Waste Management Program in Khmelnytskyi oblast for 2018-2022⁷⁰), (c) on energy efficiency (such as the Program for Improvement of Energy Efficiency and Reduction of Energy Consumption in Vinnytsia region for 2017-2022⁷¹), (d) on landscaping (such as the Program for the Development and Preservation of Green Areas in the city of Kropyvnytskyi for 2018-2021⁷²) etc. (adopted in pursuance of the special codes/laws (such as the Forest Code of Ukraine, the Law of Ukraine “On Waste”, etc.), relevant sectoral strategic documents);
5. regional and local documents on spatial planning of regions, settlements (land planning schemes of the Autonomous Republic of Crimea, oblasts and districts, general plans of settlements, zoning plans, detailed plans of territories - see more details in the next subsection of this section).

For example, let's consider some of them in more detail.

According to the Ministry for Communities and Territories Development of Ukraine, Regional Development Strategies for the period up to 2027 have been adopted in the following oblasts⁷³:

(1) Mykolaiv⁷⁴, (2) Ternopil⁷⁵, (3) Sumy⁷⁶, (4) Dnipropetrovsk⁷⁷, (5) Kirovohrad⁷⁸, (6) Cherkasy⁷⁹, (7) Zhytomyr⁸⁰, (8) Kyiv⁸¹, (9) Lviv⁸², (10) Odesa⁸³, (11) Poltava⁸⁴, (12) Rivne⁸⁵, (13) Kharkiv⁸⁶, (14) Chernivtsi⁸⁷, (15) Chernihiv⁸⁸, (16) Khmelnytskyi⁸⁹, (17) Kherson⁹⁰, (18) Luhansk⁹¹, (19) Ivano-Frankivsk⁹², (20) Zaporizhzhia⁹³, (21) Zakarpattia⁹⁴, (22) Donetsk⁹⁵, (23) Volyn⁹⁶, (24) Vinnytsia⁹⁷ oblasts and (25) in the city of Kyiv (until 2025)⁹⁸.



These Strategies and plans thereto do not refer to the NbS.

As in the case of the above-mentioned state strategic documents, Regional Development Strategies until 2027 establish provisions that may be currently a legal basis for the practical implementation of NbS.

For example, the Strategy of Development of the City of Kyiv until 2025 (repeated), among the strategic objectives for the development of the capital of Ukraine, provides for increasing the comfort of life of Kyiv residents (which can be achieved through the NbS). And the operational goals of the development of the city of Kyiv in the sector "Ecopolitics and Environment Protection", which intersects with the NbS, proclaimed, for example, such goals as: ensuring environmental safety in the capital and reducing the negative impact on the environment; increasing the area of green areas for public use and green spaces (including through the cultivation of greenery in the adjacent areas of new buildings).

Interesting in the context of the introduction of the NbS at the local level is, for example, the **Strategy of Development of the City of Zaporizhzhia until 2028, approved by the Resolution of the City Council No. 57 dated December 20, 2017.**⁹⁹ It states that the goal of the Strategy is to resolve local development problems, first of all, to restore and preserve the city's safe environment, increase the competitiveness of the economy, develop tourism, improve the standard of living for residents, attract invest-

ment and unite the community around sustainable development. It is noted that the basis of the city development is the principles of sustainable development.

It is also envisaged that the city environment is affected by man-made and anthropogenic factors, the levelling of which is possible through the introduction of innovative technologies at different levels in all areas of production and organization of urban space.

The Strategy has provisions that are essentially about the NbS, for example, these are provisions such as:

- it is expedient to involve scientists in the study and solution of water treatment issues in a natural way; emphasis is placed on the possibility of studying and applying local methods of water purification;
- ensuring equal competitive conditions for businesses with a high level of knowledge and the use of environmentally friendly technologies; reduction of harmful impact on the environment due to the increase of the green areas both in the territory of enterprises and on the lands specially allotted by the city.

Regional environmental protection programs approve priority environmental protection measures (for example, programs in Ivano-Frankivsk¹⁰⁰, Rivne¹⁰¹ oblasts, etc.), among which there are and potentially can be NbS, although such solutions are not directly called as nature-based in the program texts.

The goal of these programs is to improve the environment, living standards, environmental safety, sustainable development and more.



These strategies, plans, programs of regional and local levels do not use the term "nature-based solutions" (or terms similar thereto).

Although in isolated cases, as in the above Strategy of Development of the City of Zaporizhzhia until 2028, related terms such as "environmentally friendly technologies", "natural water treatment" are used.

However, despite such cases as in the situation with strategic documents and basic codes and laws (mentioned above), these acts of legislation are also currently dominated by legal norms, which can only be legal bases, the basis for the practical implementation of the NbS.

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State planning documents in the field of urban planning, planning and development of cities and other territories and NbS

STATE PLANNING DOCUMENTS

in the field of urban planning, planning and development of cities and other territories and NbS

4 State planning documents in the field of urban planning, planning and development of cities and other territories and NbS

4.1. General provisions on legislation, strategies, policies and action plans.

Legislation of Ukraine in the field of urban planning, planning and development of cities and other territories consists of the Constitution of Ukraine, Civil¹⁰², Commercial¹⁰³ and Land Codes of Ukraine, Laws of Ukraine “On Regulation of Urban Planning Activity”¹⁰⁴, “On the Fundamentals of Urban Planning”¹⁰⁵, “On the General Land Planning Scheme of Ukraine”¹⁰⁶, “On the Architecture Activities”¹⁰⁷, “On Settlements Improvement”¹⁰⁸, “On the Comprehensive Reconstruction of Quarters (Micro-districts) of the Obsolete Housing Stock”, “On Land Utilization”, other legal acts and regulations.

Important strategic legal acts and regulations in this sphere include the Concept of Sustainable Development of Settlements approved by the Resolution of the Verkhovna Rada of Ukraine No. 1359-XIV dated December 24, 1999.¹⁰⁹ This document is called the first so-called specialized strategic document of the independent Ukraine on sustainable de-

velopment of settlements. Below we will consider its provisions in more detail in the context of the NbS. Although we should note that based on the ambiguous wording of the Concept regarding its delivery time, it can be stated that the Concept delivery time has already expired (see more details below).

This sphere is also regulated taking into account the requirements of the *state*¹¹⁰ and industrial¹¹¹ construction¹¹² standards, state sanitary rules and regulations¹¹³, other rules and regulations which are binding (part 1 of Article 9 of the Law of Ukraine “On Regulation of Urban Planning Activity”, paragraph 8 of Article 8 of the Law of Ukraine “On Fundamentals of Urban Planning”, paragraphs 3, 5, 6 of part 1 of Article 11 of the Law of Ukraine “On Construction Standards”¹¹⁴, paragraph 10 of Article 1 of the Law of Ukraine “On Ensuring Sanitary and Epidemic Welfare of the Population”¹¹⁵).

4.2. Strategic documents in the field of urban planning, planning and development of cities and other territories.

4.2.1. Strategies, program plans in the field of urban planning, planning and development of cities and other territories.

As mentioned above (in sub-section 3.1 of Section 3 of the study), important strategic legal acts and regulations in this area include the Concept of Sustainable Development of Settlements approved by the Resolution of the Verkhovna Rada of Ukraine No. 1359-XIV dated December 24, 1999.

The Resolution approving the document stipulates that this Concept should be considered as a basis for the development of legal acts and regulations, programs and projects to regulate planning and development, stimulate investments, improve tax policy, fill and ensure rational use of local budgets to ensure socio-economic development of settlements. And the CMU, central and local executive authorities and local self-government bodies are recommended to be guided by this Concept when carrying out practical activities on

planning and development of territories, solving other issues of the development of settlements of Ukraine.

The Goal of the Concept (consonant and intersecting with the basic provisions of the NbS concept - note) - to ensure the way out of the crisis and create conditions for sustainable development of settlements in the period for which the Concept is designed (provisions of Section I).

And although the Concept states that it is designed for a long term, it ambiguously specifies that it is for a period of "15-20 years", namely states: "The concept is designed for a long term (15 - 20 years)". That is, we can conclude that this document delivery period could end in 2014-2019 (it is impossible to say clearly and unambiguously when exactly, which in itself is unacceptable in terms of formulating the requirements of legal acts or regulations). The ambiguous wording does not make it possible to draw an unambiguous conclusion as to whether this Convention should be implemented at present.

Sustainable development of settlements means socially, economically and ecologically balanced development of urban and rural settlements, aimed at creating their economic potential, full living environment for modern and future generations on the basis of rational use of resources (natural, labour, production, scientific and technical, intellectual, etc.), technological re-equipment and restructuring of enterprises, improvement of social, industrial, transport, communication and information, engineering, environmental infrastructure, improvement of living conditions, recreation and health, preservation and enrichment of biological diversity and cultural heritage (provisions of Section I).

Characterizing the state of settlements of Ukraine, the Concept, inter alia, states that due to the deterioration of all components of natural landscapes, violation of basic socio-economic functions of these landscapes, intensification of adverse natural and man-made processes and depletion of ecological capacity of natural landscapes as a whole, functioning of many settlements is compromised (provisions of Section II).

According to the Concept, certain measures are taken in the territories of settlements, some of which may be the basis for the implementation of the NbS, in particular:

- to ensure the rational use of recreational resources, for example: (a) the system of suburban protected areas with a dual function is being expanded: as lungs of cities and zones of short-term rest; (b) requirements and conditions for the development and protection of recreational resources are taken into account during the planning and development of settlements;
- to provide the population with housing, improve their living conditions and sustainable functioning of housing and communal services, for example: (a) progressive architectural planning, design and engineering solutions are implemented in the design of residential buildings in order to improve their performance; (b) structural alteration and reorientation of the production construction base to housing construction is carried out with the use of energy and resource-saving technologies, application of efficient constructions;
- for the formation of a full-fledged living environment in settlements, for example: (a) measures are taken to improve the ecological condition of settlements, protect their lands from erosion, mudslides, landslides, flooding, waterlogging, secondary salinization, pollution by industrial waste, chemicals, radioactive substances; (b) non-landscape complexes of cities and suburban territories are rationally used, works on their preservation and reproduction are carried out, arrangement and landscaping of streets, squares, public territories, housing is carried out.

4.2.2. Basic national laws of a strategic nature¹¹⁶ in the field of urban planning, planning and development of cities and other territories.

Basic special laws of Ukraine in the field of urban planning determining strategic priorities include the **Law of Ukraine "On Regulation of Urban Planning Activities" No. 3038-VI dated February 17, 2011.**

This Law establishes the legal and organizational basis of urban planning activities and is aimed at ensuring the sustainable development of territories, taking into account state, public and private interests (preamble to the Law).



The text of the Law contains no direct reference to the NbS, including for cities.

However, there are provisions that currently can only be a legal basis for the implementation of the NbS, for example: planning and development of territories is the activity of government authorities, local self-government bodies, legal entities and individuals, which, inter alia, provides for: (a) determination and rational mutual location of residential and public construction zones, industrial, recreational, security, health, historical and cultural and other zones and facilities (item 5 of part 1 of Article 2 of the Law); (b) preservation, creation and restoration of recreational, protection, health-improving territories and objects, landscapes, forests,

parks, squares, separate green areas (item 9 of part 1 of Article 2 of the Law).

An important role in urban planning activities is played by urban planning *documentation*¹¹⁷, which belongs to the “state planning documents” (i.e., strategic documents) and is a tool of state regulation of spatial planning (part 2 of Article 2). Such documentation is approved by the government authorities and local self-government bodies (item 3 of part 1 of Article 1). It sets out the requirements that are binding on all urban planning entities (according to part 2 of Article 5 of the Law).

The Law “On Regulation of Urban Planning Activities” stipulates that urban planning documentation (which must be developed in Ukraine) includes:

At the state level

- a. General Land Planning Scheme of Ukraine (currently approved by the Law of Ukraine No. 3059-III dated February 07, 2001) - developed in accordance with the laws of Ukraine and other regulations on the use of territories taking into account economic, geographical, historical, environmental, demographic features of regions¹¹⁸; determines the conceptual solutions of planning and use of the territory of Ukraine (part 1 of Article 11, item 1-1 of part 1 of Article 1),
- b. schemes of planning of separate parts of the territory of Ukraine - are developed in development of the General Land Planning Scheme of Ukraine (part 1 of Article 11, item 12 of part 1 of Article 1),

and amendments thereto (par 1 of Article 11);

At the regional level

Land planning schemes for the Autonomous Republic of Crimea, regions and districts (part 1 of Article 13);

At the local level

- a. general plans of settlements mean the main type of urban planning documentation at the local level, designed to justify the long-term strategy of planning and development of the territory of the settlement (part 1 of Article 17),
- b. zoning plans are developed on the basis of the general plan of settlements: as part of the general plan of settlements or as a separate urban planning documentation after approval of the general plan (para. 4 of part 1 of Article 17, part 1 of Article 18),
- c. detailed plans of territories are developed according to the planning scheme of the territory (part of the territory) of the district and/or region (part 2 of Article 19), and within the settlement specify provisions of the general plan of the settlement (part 1 of Article 19);

as well as updating and amending thereof (part 1 of Article 16).

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Construction and placement of any facilities, development of design documentation for their construction, adoption of any resolutions about them - should be carried out taking into account the requirements of the above urban planning documentation and in compliance with legislation, construction standards, sanitary and other rules and regulations.

In addition, the Law on the territory zoning plan separately enshrines the provisions that intersect with the tasks of the NbS, namely: zoning plan is developed to create favourable conditions for human life, to protect territories from emergencies of man-made and other nature, to prevent excessive concentration of population and production facilities, reduce environmental pollution, protect and use areas with special status, including landscapes, objects of historical and cultural heritage, as well as agricultural lands and forests (para. 3 of part 1 of Article 18).

The law stipulates that in the process of developing this documentation (before its submission for approval) it is mandatory to carry out a strategic environmental assessment (SEA) (part 4 of Article 2, part 2 of Article 11, part 4 of

Article 14, para. 3 of part 1 of Article 18, para. 2 of part 1 of Article 19). According to another law i.e., the Law of Ukraine “On Strategic Environmental Assessment”¹¹⁹, the goal of the SEA is to promote sustainable development by ensuring environmental protection, safety of life and health, integration of environmental requirements during the development and approval of state planning documents (part 1 of Article 3). The SEA Law contain no direct reference to the NbS, though the Law has the same goals as the NbS.

Law “On the Foundations of Urban Planning” No. 2780-XII dated November 16, 1992.

According to the preamble, this Law defines the legal, economic, social and organizational principles of urban planning in Ukraine and is aimed at creating a full living environment, while ensuring the environment protection, rational use of natural resources and preservation of cultural heritage.

The law provides a definition of urban planning (urban planning activities) that is important from the NbS perspective as a purposeful activity of government authorities,

local self-government bodies, enterprises, institutions, organizations, citizens, associations of citizens to create and maintain a full living environment, which includes forecasting the development of settlements and territories, planning, construction and other use of territories, design, construction of urban planning property, construction of other property, reconstruction of historic settlements while preserving the traditional nature of the environment, restoration and rehabilitation of cultural heritage sites, creation of engineering and transport infrastructure (Article 1).

The main areas of urban planning activity, include the protection of life and environment from the harmful effects of man-made and social factors, dangerous natural phenomena (para. 9 of Article 2).

The Law enshrines a separate article on ensuring sustainable development of settlements and environmental safety of territories in the implementation of planning and development of territories. Thus, in accordance with the requirements of this article in the development and implementation of urban documentation, the subjects of urban activity are required to comply with the main tasks and measures to ensure sustainable development of settlements and environmental safety (part 1 of Article 19). Further the article detailed that: (a) sustainable development of settlements involves socially, economically and environmentally balanced development thereof, aimed at creating economic potential, a full living environment for modern and future generations through the rational use of resources, technological re-equipment and restructuring of enterprises, improving social, industrial, transport, communication and information, engineering infrastructure; (b) and the ecological safety of the territories presupposes compliance with the requirements established by environmental legislation for the protection of the environment, conservation and rational use of natural resources, sanitary and hygienic requirements for human health, implementation of measures to neutralize, dispose of, destroy or recycle all harmful substances and waste.

 The text of the Law contains no direct reference to the NbS, including for cities.

That is, the Law does not use wordings containing the words “nature-based solutions”. This document only defines the legal framework that can be currently the basis for

the development of a concept of NbS in Ukraine, including for cities.

Law of Ukraine “On the Architecture Activities” No. 687-XIV dated May 20, 1999.

This Law defines the legal and organizational principles of architecture activities and is aimed at creating a favourable living environment, achieving aesthetic expressiveness, economic feasibility and reliability of buildings, structures and their complexes (preamble).

Important in the context of the development of NbS is the provision of para. 11 pf part 1 of Article 2 of the Law, which states that the state shall provide conditions for the implementation of architecture activities also by: ensuring the safety of construction, durability of buildings and structures, stimulating measures to save energy, protect the environment...

 The text of the Law contains no direct reference to the NbS, including for cities.

That is, the Law does not use wordings containing the words “nature-based solutions”. This document only defines the legal framework that can be currently the basis for the development of a concept of NbS in Ukraine, including for cities.

Law of Ukraine “On Settlements Improvement” No. 2807-IV dated September 06, 2005.

This Law defines the legal, economic, environmental, social and organizational principles of improvement of settlements and is aimed at creating conditions conducive to human life and activities (which intersects with the tasks of the NbS).

The Law stipulates that its effect extends to relations arising in the field of improvement of settlements, and is aimed at creating a favourable environment for human life and activities, preserving and protecting the environment, ensuring sanitary and epidemiological welfare of the population (part 2 of Article 4).

According to this legal act, the improvement of settlements means a set of works on engineering protection, clearing, drainage and landscaping, as well as socio-economic,

organizational and legal, environmental measures to improve the microclimate, sanitation, noise reduction, etc. carried out on the territory of the settlement for the purpose of its rational use, proper maintenance and protection, creation of conditions for protection and restoration of the environment favourable for human life and activities.

That is, the implementation of NbS can be an integral part of measures to improve cities and other settlements in Ukraine.

The law also stipulates that the design, construction and reconstruction of the comprehensive improvement property¹²⁰ shall be based on the general plan of the settlement, complex transport schemes and schemes of traffic organization, detailed plans of territories, plans of red lines taking into account climatic conditions and urban features of the settlement, operational, fire, environmental

and sanitary rules and regulations, traffic safety conditions for vehicles and pedestrians, stages of construction, reconstruction and overhaul.



The text of the Law contains no direct reference to the NbS, including for cities.

That is, the Laws of Ukraine “On Regulation of Urban Planning Activities”, “On the General Land Planning of Ukraine”, “On SEA”, “On the Fundamentals of Urban Planning Activities”, “On Architecture Activities” and others define general legal principles, which currently can only be a legal basis for the development of the concept of NbS in Ukraine in cities or other settlements. But such legal framework cannot replace the direct clear enshrinement in the legislation of the rules on NbS, including their recognition as a possible or mandatory component of urban planning, spatial planning of cities and other settlements of Ukraine, etc.

4.3. State construction norms, state sanitary rules and regulations on development and acceptance of urban-planning documentation, realization of other urban-planning activity.

Construction norms, other rules and regulations are important in terms of implementation of the NbS, since they establish a set of qualitative and quantitative indicators and requirements governing the development and implementation of urban documentation, projects of specific objects, taking into account social, climatic, hydrogeological, environmental and other conditions and aimed at ensuring the formation of a full living environment and the best possible living conditions.

In particular, in accordance with the state construction standards (DBN), state sanitary rules and regulations (DSNiP), urban planning documentation is also developed (as already mentioned, such documentation is of a strategic nature, as it is a tool of state regulation of spatial planning). These DBN and DSNiP can be divided into two conditional groups:

- a. those relating to all types of urban planning documentation: DBN B.1.1-13:2012 “Composition and content of urban planning documentation at the state and regional levels”¹²¹ and Amendment No. 1 thereto¹²²; DBN B.2.2-12:2019 “Planning and development of

territories”¹²³; DBN B.2.2-5-2011 “Landscaping”¹²⁴ and Amendment No. 1¹²⁵ and No. 2¹²⁶ thereto; State Sanitary Regulations of Planning and Development of Settlements, approved by Order of the Ministry of Health of Ukraine No. 173 dated June 19, 1996¹²⁷;

- b. those related to a specific type of urban planning documentation, for example: DBN B.1.1-15-2012 “Composition and content of the general plan of a settlement”¹²⁸; DBN B.1-1-22: 2017 “Composition and content of the zoning plan”¹²⁹; DBN B.1.1-14-2012 “Composition and content of the detailed plan of the territory”¹³⁰ and Amendment No. 1 thereto¹³¹.

These documents contain no direct reference to the NbS, including references to the fact that such documents are prepared using NbS and/or that NbS are a component of such documentation. However, the existing general legal framework in these documents can be called as a basis for the development and clear enshrinement in national legislation of the concept of NbS, the introduction of an appropriate term in this regard, and so on.

For example, let's see **DBN B.2.2-12:2019 "Planning and development of territories"** in details.

These DBN: (a) apply to the planning and development of territories of settlements and intersettlement territories at the state, regional and local levels; (b) do not apply to the planning and construction of territories of strategic facilities, facilities of the military-industrial complex, penitentiary facilities, specific and highly specialized industries (including coal mines and fields, gas storage and gas pumping stations, open pit quarries mining). They are binding on government authorities, local self-government bodies, enterprises and institutions, regardless of their form of ownership and departmental subordination, public associations and citizens who carry out design, construction and improvement in urban and rural settlements and other territories.

These DBNs, for example, have the following special sections governing the spheres in which they may be applied or which may relate to NbS:

- Section 8 "Landscape and recreational areas", which identifies the types of landscaping and areas, quantitative, qualitative and other characteristics of green areas of settlements and other territories. In particular, such requirements are provided for: (a) networks of landscape and recreational areas; (b) for landscaping of settlements; (c) suburban landscape areas; (d) recreational areas; (e) health resorts; (e) tourist areas; (e) nature reserves;
- Section 14 "Environmental conditions of urban planning", which regulates the issues: (a) assessments of the natural habitat; (b) assessment of environmental conditions; (c) protection of air (atmosphere); (d) protection of water bodies; (e) noise protection; (e) vibration protection; (e) protection against electromagnetic pollution; (g) protection against radiation

and irradiation; (g) microclimate regulation; (h) development of protected areas and landscape protection; (i) planning constraints.



This DBN does not use the term "nature-based solutions" (or terms similar thereto). The current legal rules form a legal framework for putting the NbS into practice.

Green roofs and/or walls are one of the types of nature-based solutions for cities. If you analyse the relevant construction standards, such as **DBN V.2.6-220:2017 "Roof of buildings and structures"**¹³², you can see that it has a separate subsection 7.9 of section 7 called "Green Roof". This section sets out the technical requirements for the design of "green" roofs in Ukraine, i.e., one of the types of NbS.

In particular, it is determined, inter alia, that the "green" roof of the building is divided into the following types: (a) with intensive landscaping; (b) with "light" landscaping (excluding trees and tall shrubs); (c) with grass vegetation, and people walk on special paths; (d) placement of plants in special containers with soil.



The DBN regulates the main technical characteristics and rules for this.

Therefore, using this example we can say that the legislation of Ukraine, including at the level of state construction standards, regulates certain technical and other issues regarding solutions for cities, which can be attributed to the NbS. However, it can also be stated that such decisions are not called nature-based, primarily because this term is not applicable in the legislation of Ukraine.

At the same time, in order to clarify the issue of completeness and problems of legal regulation in national legislation (including DBNs, SNIps, etc.) issues of design and implementation in urban planning of a particular NbS, it is necessary to investigate this issue separately.

Nature-based solutions for cities
as a priority today

Nature-based solutions for cities:
the state of reflection in legislation,
strategies, policies and action
plans at the state level

Nature-based solutions for cities:
the state of reflection in legislation,
strategies, policies and action
plans at the regional and local
levels

State planning documents in the
field of urban planning, planning
and development of cities and
other territories and NbS

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CONCLUSION AND RECOMMENDATIONS

1. The legislation of Ukraine (including strategies, plans, programs) at the state, regional and local levels does not use the term "nature-based solutions" (or any similar term in the sense of NbS (Nature-based solutions)). At the same time, at the international level a number of international regulations (on climate change, biodiversity protection, European green deal, etc.) this term is not just used, but also has certain legal guidelines for understanding the essence of the NbS phenomenon, requirements for their implementation as one of tools for overcoming the environmental crisis, solving certain environmental problems, ensuring sustainable development of the state or its individual territories. In Ukraine, the term is now mentioned in the draft Strategy of Environmental Safety and Climate Change Adaptation until 2030, which was prepared and published for public discussion in March 2021, and is only planned for adoption.

1.1. It is proposed to include the term NbS in the sense of NbS (Nature-based solutions):

- in basic environmental laws/codes, first of all, in the Law of Ukraine "On Environment Protection". In such case, it is recommended not only to use the term "nature-based solutions" in any of the provisions, but also to provide a definition or disclose its content, to define the basic principles of legal regulation and implementation of the NbS. The laws/codes, where it is expedient to define the concept of "nature-based solutions", include special laws - Water Code of Ukraine, Forest Code of Ukraine, Land Code of Ukraine, Subsoil Code of Ukraine, Laws of Ukraine "On the Plant Life", "On the Animal Life", "On the Protection of the Atmosphere", "On the Nature Reserve fund", "On the Environmental Network", "On Waste", etc.;
- in basic laws in the field of urban planning, spatial planning - "On the Regulation of Urban Planning Activities", "On the Fundamentals of Urban

Planning", "On Architecture Activities", "On the Improvement of Settlements".

1.2. In order to prioritise the introduction of the NbS for state policy (primarily in the field of environment and urban planning), which is the impetus for the development of legislation on this issue at all levels, it is important to add provisions on the application of NbS in the relevant strategic documents (strategies, plans, programs, etc.). These documents include: First of all, the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period until 2030 as a document, the provisions of which should be integrated into other policies, as well as the Strategy of Environmental Safety and Climate Change Adaptation until 2030 (currently is only a draft) and the Biodiversity Conservation Strategy until 2030 (currently only the structure of the Strategy has been approved), since the introduction of NbS is provided for by international regulations that Ukraine should take into account when formulating policies on these issues.

1.3. To sum up, the acts of legislation, in which it is expedient to enshrine the term "NbS" and/or provisions on the priority role of NbS as a matter of priority, include: among the laws: the Law of Ukraine "On Environment Protection" and the Law of Ukraine "On Regulation of Urban Planning Activities", and among the strategies, plans, programs at the state level: Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period until 2030, approved by the Law of Ukraine No. 2697-VIII dated February 28, 2019, Strategy of Environmental Safety and Climate Change Adaptation until 2030 (currently is only a draft) and Biodiversity Conservation Strategy until 2030 (now only the structure of the Strategy is approved).

1.4. At the same time, it is possible to propose, in parallel with the process of including provisions on NbS in laws

and strategic documents at the state level or without it, to implement provisions on the priority role of NbS at the level of regional and local strategic and other documents. The existence of positive practices for the implementation of NbS and the practice of legalizing the priority role of NbS at the level of regional and local strategies, plans, programs, as well as the dissemination of this experience in the country - will be an argument for legal regulation of NbS at the national level. The legal basis for regulating this issue at the regional and local level (in the absence of the concept of NbS in the national legislation, including strategic documents of state policy) can now be the relevant provisions on NbS, enshrined in international regulations.

2. DBNs, SNIPs, etc. play a significant role in urban planning, spatial planning, as they formulate mandatory technical and other characteristics of certain processes and phenomena of these areas ("green" roofs, other methods of landscaping, methods of protection against noise, to ensure energy efficiency in construction buildings and structures, in relation to climate change mitigation, etc.). NbS should play a priority role in such processes, but they do not yet have legislative recognition in Ukraine. Therefore, it is recommended to include the concept of NbS in DBNs, SNIPs, etc. At the same time, it is important to study separately the question of how many and which of the known practices of NbS are enshrined in the legislation, technical and other regulation at the level of DBNs, SNIPs, etc.

3. The use of the term NbS in the legislation is associated with ensuring a common understanding of its meaning, substance, basic requirements/characteristics, criteria, application rules/procedures, etc. This is possible through the regulation of these issues at the level of special acts of legislation (a separate law (separate article or section of the law), a separate subordinate legal act or regulation, standard, etc.). At the same time, such a legal definition should

be made taking into account individual decisions at the international level (for example, such a decision as the IUCN Global Standard for Nature-Based Solutions, adopted in 2020 (first edition)).¹³³

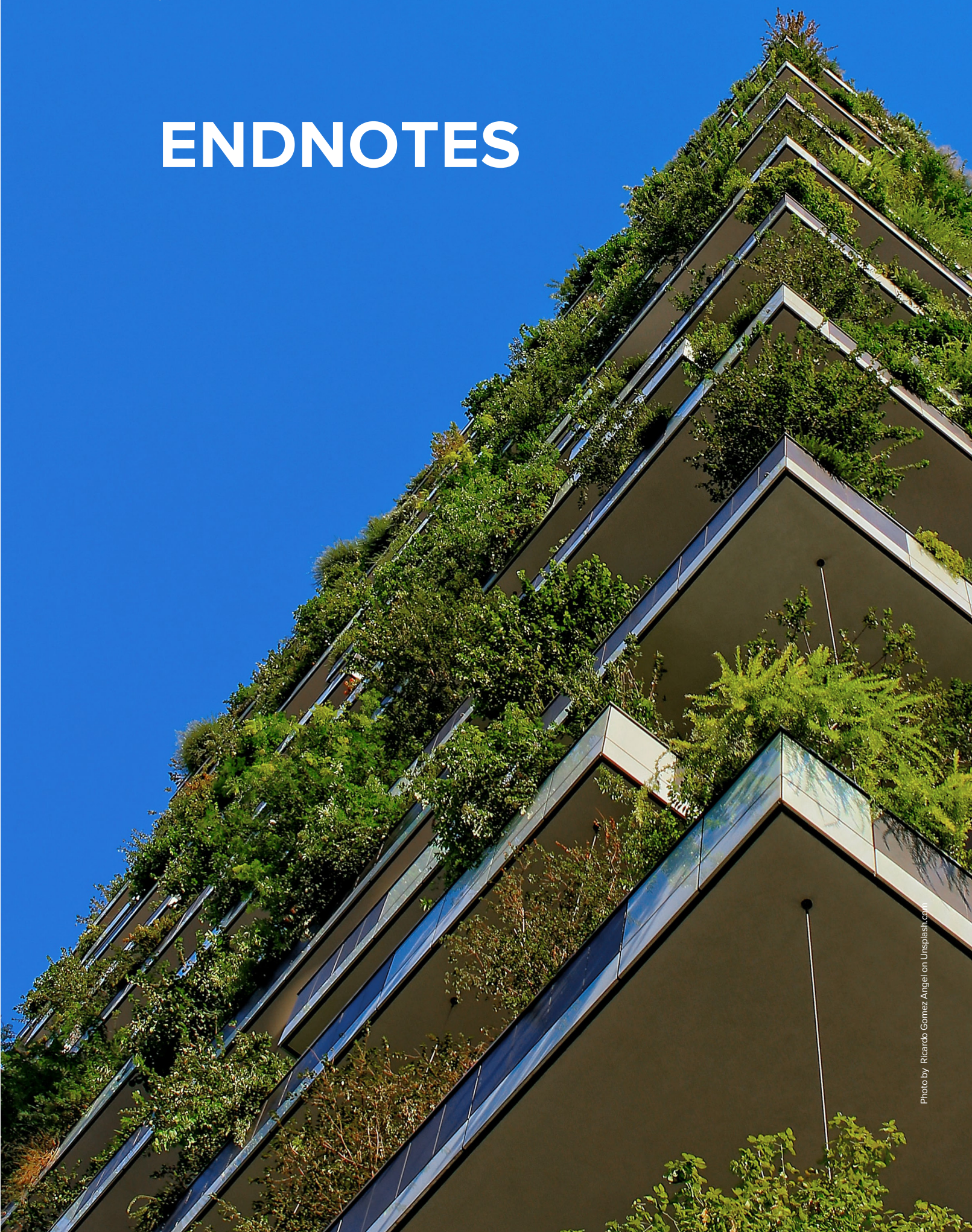
4. Legislative recognition of NbS in Ukraine and dissemination of practices in their application may raise the question of the feasibility of accounting, inventory of NbS at the state, regional, local level, inclusion of a part regarding NbS in the urban planning cadastre, data on inventory of green areas (e.g., roofing and vertical landscaping), to the account of places of composting of organic waste, etc.

5. Enshrinement of NbS in the legislation of Ukraine and dissemination of practices of their application may raise the question of expediency of enshrining at the legislative level enhanced protection of NbS practices and enhanced legal liability for destruction, dissemination of these practices / individual solutions, etc.

6. Effective implementation of NbS in Ukraine is associated with adequate institutional support, knowledgeable/experienced staff, awareness of NbS of all stakeholders. This requires Ukraine to ensure proper informational and educational work among the population; inclusion of issues on NbS in educational programs of educational institutions of all levels, including programs for professional development of employees in relevant spheres.

7. Effective implementation of NbS in Ukraine is associated with adequate funding (budgetary and extrabudgetary). This will require not only the provision of funding at the appropriate level of NbS implementation practices in Ukraine, but also the creation of a system of financial incentives (in the form of soft loans and/or tax benefits, etc.).

ENDNOTES



1. The concept of a "city" in the title of this work and certain provisions of its text is used as a collective term in the meaning of any settlement of Ukraine (settlements located on the territory of Ukraine are divided into urban and rural; urban settlements include cities of republican, regional, district subordination and urban-type settlements, rural include villages and settlements regardless of their administrative subordination (according to the letter of explanation of the Ministry of Justice of Ukraine No. 27/13/32-16 dated January 27, 2016)). URL: <https://minjust.gov.ua/m/list-rozysnennya-ministerstva-yustitsii-ukraini-vid-27012016-271332-16-schodo-prava-na-vchinennya-notarialnih-diy-posadovimi-osobami-organu-mistsevogo-samovryaduvannya-v-naselenih-punktah-yaki-mayut-status-selisch-miskogo-tipu-u-zvyazku-iz-vnesennyam-zmin/>).
2. State planning documents - strategies, plans, schemes, urban planning documentation, national programs, state target programs and other programs and program documents, including amendments thereto, which are developed and/or subject to approval by government authorities, local self-government bodies (item 3 of part 1 of Article 1 of the Law of Ukraine "On Strategic Environmental Assessment" No. 2354-VIII dated March 20, 2018. URL: <https://zakon.rada.gov.ua/laws/show/2354-19#Text>).
3. About. Defining Nature-based Solutions. IUCN. URL: <https://www.iucn.org/theme/nature-based-solutions/about>
4. The term "natural solutions" ("природничі рішення") is used, for example, in the "Living Planet Report 2020. Recommendations of WWF International for top-ranking civil servants. 2020. 7 pages. URL: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKewjH1NSDgd_xAhVH_rsIHRILC-4QFnoECBgQAA&url=https%3A%2F%2Fwwwfeu.awsassets.panda.org%2Fdownloads%2F2_lpr_polic_.pdf&usg=AOvVaw1ayKfNaVBtHivSO_r_L5GEEd
5. This work used this very term (nature-based solutions (NbS)).
6. United Nations Framework Convention on Climate Change (1992). URL: https://zakon.rada.gov.ua/laws/show/995_044#Text
7. Paris Agreement adopted as part of the United Nations Framework Convention on Climate Change (2015). URL: https://zakon.rada.gov.ua/laws/show/995_l61#Text
8. Biodiversity Strategy for 2030: Bringing nature back into our lives. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (Brussels, 2020, unofficial translation into Ukrainian made by the Ukrainian Human Rights Group). URL: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKewihzYnMjt_xAhVF_rsiHRyZCvoQFnoECAYQAA&url=https%3A%2F%2Ffuncg.org.ua%2Fwp-content%2Fuploads%2F2020%2F10%2FStratehiia.pdf&usg=AOvVaw1MfrjczM5nkiY3s2aJ-Rst
9. Biodiversity strategy for 2030. Bringing nature back into our lives. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (Brussels, 2020). URL: https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF
10. The European Green Deal. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (Brussels, 2019). URL: <https://bit.ly/2UaSc4e>
11. Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their Member States, on the other hand dated June 27, 2014. URL: https://zakon.rada.gov.ua/laws/show/984_011#Text
12. Living Planet Report 2020. Recommendations of WWF International for top-ranking civil servants. 2020. 7 pages. 3 URL: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKewjH1NSDgd_xAhVH_rsIHRILC-4QFnoECBgQAA&url=https%3A%2F%2Fwwwfeu.awsassets.panda.org%2Fdownloads%2F2_lpr_polic_.pdf&usg=AOvVaw1ayKfNaVBtHivSO_r_L5GEEd
13. About. Defining Nature-based Solutions. IUCN. URL: <https://www.iucn.org/theme/nature-based-solutions/about>
14. At the international level, the term "nature-based solutions" is still evolving.
15. About. Defining Nature-based Solutions. IUCN. URL: <https://www.iucn.org/theme/nature-based-solutions/about>
16. IUCN Global Standard for Nature-based Solutions: a user-friendly framework for the verification, design and scaling up of NbS: first edition. 2020. URL: <https://portals.iucn.org/library/node/49070>
17. Designed to allow rainwater to infiltrate through the surface, either into underlying layers (soils and aquifers), or be stored below ground and released at a controlled rate to surface water.
18. Swales are broad, shallow, linear vegetated channels which can store or convey surface water (reducing runoff rates and volumes) and remove pollutants. They can be used as conveyance features to pass the runoff to the next stage of the substance use disorder (SuDS) treatment train and can be designed to promote infiltration where soil and groundwater conditions allow.
19. The main role of channels and rills are to capture runoff at the start of a SuDS train, allow deposition of sediment and convey the runoff to

- downstream SuDS features. They can also be used in between SuDS features as connectors. They collect water, slow it down and provide storage for silt and oil that is captured.
20. Filter strips are uniformly graded, gently sloping, vegetated strips of land that provide opportunities for slow conveyance and (commonly) infiltration. They are designed to accept runoff as overland sheet flow from upstream development and often lie between a hard-surfaced area and a receiving stream, surface water collection, treatment or disposal system.
 21. Infiltration trenches are shallow excavations filled with rubble or stone. They allow water to infiltrate into the surrounding soils from the bottom and sides of the trench, enhancing the natural ability of the soil to drain water.
 22. Infiltration basins are vegetated depressions designed to hold runoff from impervious surfaces, allow the settling of sediments and associated pollutants, and allow water to infiltrate into underlying soils and groundwater.
 23. See: Nature-based solutions guide: Natural water retention measures. Prepared by the NWRM project, led by Office International de l'Eau (OIEau), translated by WWF-Ukraine. 2021. 58 pages. URL: <https://wwf.ua/?2824341/nature-based-solutions>
 24. Constitution of Ukraine No. 254к/96-VR dated June 28, 1996. URL: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>
 25. Law of Ukraine "On Environment Protection" No. 1264-XII dated June 25, 1991. URL: <https://zakon.rada.gov.ua/laws/show/1264-12#Text>
 26. Convention on Biological Diversity of 1992. URL: https://zakon.rada.gov.ua/laws/show/995_030#Text
 27. Law of Ukraine "On Ratification of the Convention on Biological Diversity" No. 257/94-VR dated November 29, 1994. URL: <https://zakon.rada.gov.ua/laws/show/257/94-%D0%B2%D1%80#Text>
 28. Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period until 2030, approved by the Law of Ukraine No. 2697-VIII dated February 28, 2019. URL: https://zakon.rada.gov.ua/laws/show/2697-19?find=1&text=%D0%BF%D1%80%D0%B8%D1%80%D0%BE%D0%B4#w1_2
 29. Resolution of the National Security and Defence Council of Ukraine dated March 23, 2021 "On challenges and threats to the national security of Ukraine in the environmental sphere and priority measures to neutralize them" enacted by the Decree of the President of Ukraine No. 111/2021 dated March 23, 2021. URL: <https://www.president.gov.ua/documents/1112021-37505>
 30. Decree of the President of Ukraine "On Sustainable Development Goals of Ukraine until 2030" No. 722 dated September 30, 2019. URL: <https://zakon.rada.gov.ua/laws/show/722/2019#Text>
 31. Concept of Implementation of the State Climate Change Policy for the period up to 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 932-r dated December 07, 2016. URL: <https://zakon.rada.gov.ua/laws/show/932-2016-%D1%80#n8>
 32. Action Plan for the Implementation of the Concept of Implementation of the State Climate Change Policy for the period up to 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 878-p dated December 06, 2017. URL: <https://zakon.rada.gov.ua/laws/show/878-2017-%D1%80#Text>
 33. Notice of promulgation of the Draft Ordinance of the CMU "On Approval of the Strategy of Environmental Safety and Climate Change Adaptation until 2030". Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. Announcement. Public consultation. March 01, 2021. URL: <https://mepr.gov.ua/news/36922.html>
 34. Energy Strategy of Ukraine until 2035 "Security, Energy Efficiency, Competitiveness", approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 605-p dated August 18, 2017. URL: <https://zakon.rada.gov.ua/laws/show/605-2017-%D1%80#Text>
 35. National Target Program for the Development of the Water Management and Environmental Recovery of the Dnieper River Basin until 2021", approved by Law of Ukraine No. 4836-VI dated May 24, 2012. URL: <https://zakon.rada.gov.ua/laws/show/4836-17#Text>
 36. National Action Plan to Combat Land Degradation and Desertification approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 271-p dated March 30, 2016. URL: <https://zakon.rada.gov.ua/laws/show/271-2016-%D1%80#Text>
 37. National Waste Management Strategy of Ukraine until 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 820-p dated November 08, 2017. URL: <https://zakon.rada.gov.ua/laws/show/820-2017-%D1%80#Text>
 38. National Waste Management Plan until 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 117-p dated February 20, 2019. URL: <https://zakon.rada.gov.ua/laws/show/117-2019-%D1%80?find=1&text=%D0%BF%D1%80%D0%B8%D1%80%D0%BE%D0%B4#w1>
 39. Strategy of Sustainable Development "Ukraine-2020" approved by the Decree of the President of Ukraine No. 5 dated January 12, 2015. URL: <https://zakon.rada.gov.ua/laws/show/5/2015#Text>

40. Now we have Decree of the President of Ukraine "On the Sustainable Development Goals of Ukraine until 2030" No. 722 dated September 30, 2019 URL: <https://www.president.gov.ua/documents/7222019-29825>.
41. National Energy Efficiency Action Plan until 2020, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 1228-r dated November 25, 2015. URL: <https://zakon.rada.gov.ua/laws/show/n0001824-15#n2>
42. Plan of Activities for the Implementation of the National Energy Efficiency Action Plan until 2020, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 1228-r dated November 25, 2015. URL: <https://zakon.rada.gov.ua/laws/show/1228-2015-%D1%80#Text>
43. Concept of the State Target Program of the Land Relations Development in Ukraine for the period up to 2020, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 743-p dated June 17, 2009. URL: https://zakon.rada.gov.ua/laws/show/743-2009-%D1%80?find=1&text=%D0%BF%D1%80%D0%B8%D1%80%D0%BE%D0%B4#w1_1
44. Strategy of Development of the Agricultural Sector of the Economy until 2020, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 806-p dated October 17, 2013. URL: <https://zakon.rada.gov.ua/laws/show/806-2013-%D1%80#Text>
45. We discuss the State Forest Management Strategy. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. October 26, 2020. URL: <https://mepr.gov.ua/news/36109.html>
46. Approved the structure of the Biodiversity Preservation Strategy until 2030. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. Biodiversity. March 19, 2021. URL: <https://mepr.gov.ua/news/37045.html>
47. We invite you to discuss the draft Water Strategy of Ukraine. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. Sustainable Water Management. Public consultation. June 14, 2021. URL: <https://mepr.gov.ua/news/37577.html>
48. Discussion of the Maritime Strategy of Ukraine. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. Sustainable Water Management. November 30, 2020. URL: <https://mepr.gov.ua/news/36381.html>
49. Draft Ordinance of the Cabinet of Ministers of Ukraine "On approval of the Concept of the State Target Program of Development of Land Relations and the National Infrastructure of Geospatial Data in Ukraine until 2030". Web-site of the State Service of Ukraine for Geodesy, Cartography and Cadastre (StateGeoCadastre). July 06, 2020. URL: <https://land.gov.ua/old/info/proekt-rozporiadzhennia-kabinetu-ministriv-ukrainy-pro-skhvalennia-kontseptsii-derzhavnoi-tsilovoi-prohramy-rozvytku-zemelnykh-vidnosyn-ta-natsionalnoi-infrastruktury-heoprostorovykh-danykh-v-uk/>
50. Low Carbon Development of Ukraine until 2050. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. Public information. Climate change and the ozone layer. Public consultation. November 03, 2017. URL: <https://mepr.gov.ua/news/31815.html>
51. State Regional Development Strategy for 2021-2027, approved by Resolution of the Cabinet of Ministers of Ukraine No. 695 dated August 08, 2020. URL: https://zakon.rada.gov.ua/laws/show/695-2020-%D0%BF?find=1&text=%D1%80%D0%B5%D0%B3%D1%96%D0%BE%D0%BD#w1_8
52. Action Plan for 2021-2023 for the Implementation of the State Regional Development Strategy for 2021-2027, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 497-p dated May 12, 2021. URL: <https://zakon.rada.gov.ua/laws/show/497-2021-%D1%80#Text>
53. N.R. Malysheva, M.I. Yerofeiev. Scientific and Practical Commentary to the Law of Ukraine "On Environment Protection". Kharkiv: Pravo, 2017. P. 9.
54. Ibid. P. 25.
55. Forest Code of Ukraine No. 3852-XII dated January 21, 1994. URL: <https://zakon.rada.gov.ua/laws/show/3852-12#Text>
56. Land Code of Ukraine No. 2768-III dated October 25, 2001. URL: <https://zakon.rada.gov.ua/laws/show/2768-14#Text>
57. Water Code of Ukraine No. 213/95-VR dated June 06, 1995. URL: <https://zakon.rada.gov.ua/laws/show/213/95-%D0%B2%D1%80#Text>
58. Subsoil Code of Ukraine No. 132/94-VR dated July 27, 1994. URL: <https://zakon.rada.gov.ua/laws/show/132/94-%D0%B2%D1%80#Text>
59. Law of Ukraine "On the Plant Life" No. 591-XIV dated April 09, 1999. URL: <https://zakon.rada.gov.ua/laws/show/591-14#Text>
60. Law of Ukraine "On the Animal Life" No. 2894-III dated December 13, 2001. URL: <https://zakon.rada.gov.ua/laws/show/2894-14#Text>
61. Law of Ukraine "On the Protection of the Atmosphere" No. 2707-XII dated October 16, 1992. URL: <https://zakon.rada.gov.ua/laws/show/2707-12#Text>
62. Law of Ukraine "On the Nature Reserve Fund of Ukraine" No. 2456-XII dated June 16, 1992. URL: <https://zakon.rada.gov.ua/laws/show/2456-12#Text>

63. Law of Ukraine "On the Environmental Network of Ukraine" No. 1864-IV dated June 24, 2004. URL: <https://zakon.rada.gov.ua/laws/show/1864-15#Text>
64. Law of Ukraine "On Waste" No. 187/98-BP dated March 05, 1998. URL: <https://zakon.rada.gov.ua/laws/show/187/98-%D0%B2%D1%80#Text>
65. Law of Ukraine "On Fundamentals of the State Regional Policy" No. 156-VIII dated February 05, 2015. URL: https://zakon.rada.gov.ua/laws/show/156-19?find=1&text=%D1%81%D1%82%D1%80%D0%B0%D1%82%D0%B5%D0%B3#w1_2
66. A. Maiev. State regional policy in Ukraine: prerequisites, goals, regulatory framework. Public administration and local self-government. Collection of Research Papers / Dnipropetrovsk Regional Institute of Public Administration of the National Academy for Public Administration under the President of Ukraine. 2015. Issue 2 (25). P. 170.
67. Law of Ukraine "On the State Forecasting and Development of Programs of Economic and Social Development of Ukraine" No. 1602-III dated March 23, 2000. URL: <https://zakon.rada.gov.ua/laws/show/1602-14#Text>
68. Budget Code of Ukraine No. 2456-VI dated July 08, 2010. URL: <https://zakon.rada.gov.ua/laws/show/2456-17#Text>
69. List of oblasts regional target programs implemented for funds of the regional budget (as of March 10, 2021). Web-site of the Poltava Regional Council. URL: <https://www.oblrada-pl.gov.ua/rubric/perelik-oblasnyh-cilovyh-program-shcho-realizuyutsya-za-koshty-oblasnogo-byudzhetu>
70. Waste Management Program for Khmelnytskyi oblast for 2018-2022, approved by the Resolution of the Oblast Council No. 39-18/2018 dated March 27, 2018. URL: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cad=rja&uact=8&ved=2ahUKewi8j86Sx-LxAhW__rsIHfpCAasQFnoECAIQAA&url=https%3A%2F%2Fkm-oblrada.gov.ua%2Fwp-content%2Fuploads%2F2018%2F02%2FPrograma-z-vidkhodami-KHODA-ostatochnv1.doc&usq=AOvVaw1DETC6okfGLnxYSRE5WvRU
71. Program for Improvement of Energy Efficiency and Reduction of Energy Consumption in Vinnytsia oblast for 2017-2022. URL: <https://vinrada.gov.ua/upload/files/7sklikannya/17Ses/310.rar>
72. Program for the Development and Preservation of Green Areas in the city of Kropyvnytskyi for 2018-2021, approved by the Resolution of Kropyvnytskyi City Council No. 1765 dated July 12, 2018, as amended by the Resolution of Kropyvnytskyi City Council No. 3144 dated February 14, 2020. URL: <https://bit.ly/2Wf4WrK>
73. Regional Development Strategies until 2027. Web-site of the Ministry for Communities and Territories Development of Ukraine. Main. Areas of activity. State regional policy. Strategic planning of the regional development. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/>
74. Strategy of Development of Mykolaiv oblast until 2027, approved by the Resolution of Mykolaiv Oblast Council No. 2 dated December 23, 2020. URL: <https://www.minregion.gov.ua/wp-content/uploads/2021/02/strategiya-rozvytku-mykolayivskoyi-oblasti-na-period-do-2027-roku.pdf>
75. Strategy of Development of Ternopil oblast for 2021-2027 and Action Plan for Implementation thereof. URL: <https://www.minregion.gov.ua/wp-content/uploads/2021/02/strategiya-rozvytku-ternopilskoyi-oblasti-na-2021-2027-roky.pdf>
76. Strategy of Regional Development of Sumy oblast for 2021-2027, Action Plan for 2021-2023 for the Implementation of the Strategy of Regional Development of Sumy oblast for 2021-2027, approved by the Resolution of the eighth convocation of Sumy Oblast Council dated December 11, 2020 p. URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/12/strategiya-regionalnogo-rozvytku-sumskoyi-oblasti-na-2021-2027-roky.pdf>
77. Strategy of the Regional Development of Dnipropetrovsk oblast until 2027. URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/12/strategiya-regionalnogo-rozvytku-dnipropetrovskoyi-oblasti-na-period-do-2027-rok.pdf>
78. Strategy of Development of Kirovohrad oblast for 2021-2027, approved by the Resolution of Kirovohrad Oblast Council No. 743 dated March 12, 2020. URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/12/strategiya-rozvytku-kirovogradskoyi-oblasti-na-2021-2027-roky.pdf>
79. Strategy of Development of Cherkasy oblast for 2021-2027, approved by the Resolution of Cherkasy Oblast Council No. 38 dated September 11, 2020. URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/12/strategiya-rozvytku-cherkaskoyi-oblasti-na-period-2021-2027-roky.pdf>
80. Strategy of Development of Zhytomyr oblast until 2027, approved by the Resolution of Zhytomyr Oblast Council No. 1722 dated December 18, 2019 (as amended on December 24, 2020 by No. 16). URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/05/onovlena-zatverdzhena-strategiya-do-2027-roku-1-1.pdf>
81. Strategy of Development of Kyiv oblast for 2021-2027, approved by the Resolution of Kyiv Oblast Council No. 789-32-VII dated December 19, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-kyivskoyi-oblasti-na-2021-2027-roky/>
82. Strategy of Development of Lviv oblast for 2021-2027. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/>

strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-lvivskoyi-oblasti-na-period-2021-2027-rokiv/

83. Strategy of Development of Odesa oblast for 2021-2027, approved by the Resolution of Odesa Oblast Council No. 1228-VII dated March 03, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-odeskoyi-oblasti-na-period-2021-2027-roky/>
84. Strategy of Development of Poltava oblast for 2021-2027, approved by the Resolution of the plenary of the 29th session of Poltava Oblast Council of the VIIth convocation dated December 20, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-poltavskoyi-oblasti-2021-2027/>
85. Strategy of Development of Rivne oblast until 2027, approved by the Resolution of Rivne Oblast Council No. 1618 dated March 13, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-rivnenskoyi-oblasti-na-period-do-2027-roku/>
86. Strategy of Development of Kharkiv oblast for 2021-2027. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-harkivskoyi-oblasti-na-2021-2027-roky/>
87. Strategy of Development of Chernivtsi oblast until 2027. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-regionalnogo-rozvytku-cherniveczkoyi-oblasti-na-period-do-2027-roku/>
88. Strategy of Sustainable Development of Chernihiv oblast until 2027, approved by the Resolution of the twenty-first session of Chernihiv Oblast Council of the seventh convocation No. 4-21/VII dated December 18, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-stalogo-rozvytku-chernigivskoyi-oblasti-na-period-do-2027-roku/>
89. Strategy of Development of Khmelnytskyi oblast for 2021-2027, approved by the Resolution of Khmelnytskyi Oblast Council No. 49-29/2019 dated December 20, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-hmelnyczkoyi-oblasti-na-2021-2027-roky/>
90. Strategy of Development of Kherson oblast for 2021-2027. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-hersonskoyi-oblasti-na-period-2021-2027-rokiv/>
91. Strategy of Development of Luhansk oblast for 2021-2027, approved by the Ordinance of the Chairman of Luhansk Oblast State Administration, the Head of Luhansk Oblast Military and Civil Administration No. 246 dated March 26, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-luganskoyi-oblasti-na-2021-2027-roky/>
92. Strategy of Development of Ivano-Frankivsk oblast for 2021-2027, approved by the Resolution of Ivano-Frankivsk Oblast Council No. 1381-34/2020 dated February 21, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-ivano-frankivskoyi-oblasti-na-2021-2027-roky/>
93. Strategy of the Regional Development of Zaporizhzhia oblast until 2027, approved by the Resolution of Zaporizhzhia Oblast Council No. 134 dated December 12, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-regionalnogo-rozvytku-zaporizkoyi-oblasti-na-period-do-2027-roku/>
94. Regional Development Strategy of Zakarpattia oblast for 2021-2027, approved by the Resolution of Zakarpattia Oblast Council No. 1630 dated December 20, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/regionalna-strategiya-rozvytku-zakarpatskoyi-oblasti-na-period-2021-2027-rokiv/>
95. Strategy of Development of Donetsk oblast until 2027, approved by the Ordinance of the Chairman of Donetsk Oblast State Administration, the Head of Donetsk Oblast Military and Civil Administration No. 147/5-20 dated February 17, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-doneczkoyi-oblasti-na-period-do-2027-roku/>

96. Strategy of Development of Volyn oblast until 2027, approved by the Resolution of Volyn Oblast Council No. 29/16 dated March 12, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-volynskoyi-oblasti-na-period-do-2027-roku/>
97. Strategy of the Balanced Regional Development of Vinnytsia oblast until 2027, approved by the Resolution of Vinnytsia Oblast Council No. 42 dated February 21, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiyazbalansovanogo-regionalnogo-rozvytku-vinnyczkoyi-oblasti-na-period-do-2027-roku/>
98. Strategy of Development of the City of Kyiv until 2025, approved by the Resolution of Kyiv City Council No. 824/7060 dated December 15, 2011 (restated and approved by the Resolution of Kyiv City Council No. 724/2886 dated July 06, 2017. URL: <https://dei.kyivcity.gov.ua/files/2017/7/28/Strategy2025new.pdf>
99. Strategy of Development of the City of Zaporizhzhia until 2028, approved by the Resolution of the City Council No. 57 dated December 20, 2017. URL: https://zp.gov.ua/upload/editor/strategiya_e.pdf
100. Environment Protection Program of Ivano-Frankivsk oblast until 2025, approved by the Resolution of Ivano-Frankivsk Oblast Council No. 30-2/2020 dated December 23, 2020. URL: <https://orada.if.ua/decision/30-2-2020/>
101. Oblast Environment Protection Program for 2017-2021, approved by the Resolution of Rivne Oblast Council No. 482 dated March 17, 2017 (as amended). URL: https://www.ecorivne.gov.ua/tmp/Programa%20ONPS_%202017_2021.doc
102. Civil Code of Ukraine No. 435-IV dated January 16, 2003. URL: <https://zakon.rada.gov.ua/laws/show/435-15#Text>
103. Commercial Code of Ukraine No. 436-IV dated January 16, 2003. URL: <https://zakon.rada.gov.ua/laws/show/436-15#Text>
104. Law of Ukraine "On the Regulation of Urban-Planning Activities" No. 3038-VI dated February 17, 2011. URL: https://zakon.rada.gov.ua/laws/show/3038-17?find=1&text=%D0%BF%D1%80%D0%B8%D1%80%D0%BE%D0%B4#w1_3
105. Law of Ukraine "On the Foundations of Urban Planning" No. 2780-XII dated November 16, 1992. URL: https://zakon.rada.gov.ua/laws/show/2780-12?find=1&text=%D0%B1%D1%83%D0%B4%D1%96%D0%B2#w1_72
106. General Land Planning Scheme of Ukraine approved by Law of Ukraine No. 3059-III dated February 07, 2002. URL: <https://zakon.rada.gov.ua/laws/show/3059-14#Text>
107. Law of Ukraine "On the Architecture Activities" No. 687-XIV dated May 20, 1999. URL: <https://zakon.rada.gov.ua/laws/show/687-14#Text>
108. Law of Ukraine "On Settlements Improvement" No. 2807-IV dated September 06, 2005. URL: <https://zakon.rada.gov.ua/laws/show/2807-15#Text>
109. Concept of Sustainable Development of Settlements approved by Resolution of the Verkhovna Rada of Ukraine No. 1359-XIV dated December 24, 1999. URL: <https://zakon.rada.gov.ua/laws/show/1359-14#Text>
110. State Construction Standards mean a regulation approved by the central executive authority in charge of the formation of state policy in the field of construction (paragraph 5 of part 1 of Article 1 of the Law of Ukraine "On Construction Standards" No. 1704-VI dated November 05, 2009).
111. Sectoral Construction Standards mean a regulation approved by the central executive authority within its powers in the absence of state construction standards or the need to establish requirements for the construction of certain types of buildings that specify the requirements of state construction standards (paragraph 6 of part 1 of Article 1 of the Law of Ukraine "On Construction Standards" No. 1704-VI dated November 05, 2009).
112. Construction Standards means a technical regulation, which establishes binding requirements for the object of standardization in construction (paragraph 3 of part 1 of Article 1 of the Law of Ukraine "On Construction Standards" No. 1704-VI dated November 05, 2009).
113. State Sanitary Rules and Regulations means binding legal acts and regulations of the central executive authority in charge of the formation of state policy in the field of health, establishing medical safety requirements for the environment and its individual factors, non-compliance with which poses a threat to health and human life and future generations, as well as the threat of emergence and spread of infectious diseases and mass non-communicable diseases (poisonings) among the population (paragraph 10 of Article 1 of the Law of Ukraine "On Ensuring Sanitary and Epidemic Welfare of the Population" No. 4004-XII dated February 24, 1994).
114. Law of Ukraine "On the State Construction Standards" No. 1704-VI dated November 05, 2009. URL: <https://zakon.rada.gov.ua/laws/show/1704-17#Text>
115. Law of Ukraine "On Ensuring Sanitary and Epidemic Welfare of the Population" No. 4004-XII dated February 24, 1994. URL: <https://zakon.rada.gov.ua/laws/show/4004-12#Text>

116. That is, which in themselves are of a strategic nature and/or which regulate issues related to strategic documents in this sphere.
117. Urban planning documentation means approved text and graphic materials on the regulation of planning, construction and other use of territories (item 7 of part 1 of Article 1 of the Law of Ukraine "On Regulation of Urban Planning Activities" No. 3038-VI dated February 17, 2011).
118. In accordance with para. 2 of Section I "General provisions" of the General Land Planning Scheme of Ukraine approved by the Law of Ukraine No. 3059-III dated February 07, 2002.
119. Law of Ukraine "On the Strategic Environmental Assessment" No. 2354-VIII dated March 20, 2018. URL: <https://zakon.rada.gov.ua/laws/show/2354-19#Text>
120. Comprehensive improvement means a complex of works performed in the designated territory of a settlement (micro-district, block, park, boulevard, street, lane, descent, etc.) on the arrangement (restoration) of roads and sidewalks, equipment with devices for traffic safety, landscaping, outdoor lighting and outdoor advertising, installation of small architectural forms, implementation of other measures aimed at improving the engineering and sanitary condition of the territory, improving its aesthetic appearance (part 1 of Article 22 of the Law of Ukraine "On Settlements Improvement").
121. State Construction Standards (DBN) B.1.1-13:2012 "Composition and content of the urban-planning documentation at the state and regional levels". URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/12/17.1-DBN-B.1.1-132012.-Sklad-ta-zmist-mistobudivnoyi-do.pdf>
122. Amendment No. 1 to State Construction Standards (DBN) B.1.1-13:2012 "Composition and content of the urban planning documentation on the state and regional levels", approved by the Order of the Ministry of Regional Development, Construction, Housing and Communal Services of Ukraine" No. 294 dated November 18, 2015. URL: https://www.minregion.gov.ua/wp-content/uploads/2016/09/Zmina-1-DBN-B.1.1-13_2012.pdf
123. State Construction Standards (DBN) B.2.2-12:2019 "Planning and development of territories". URL: <https://www.minregion.gov.ua/wp-content/uploads/2019/06/B2212-IB.pdf>
124. State Construction Standards (DBN) B.2.2-5:-2011 "Improvement of territories". URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/12/24.1-DBN-B.2.2-52011.-Planuvannya-ta-zabudova-mist-sel.pdf>
125. Amendment No. 1 to State Construction Standards (DBN) B.2.2-5:-2011 "Improvement of territories". URL: https://www.minregion.gov.ua/wp-content/uploads/2018/06/ZM4_DBN_B225.pdf
126. Amendment No. 2 to State Construction Standards (DBN) B.2.2-5:-2011 "Improvement of territories". URL: https://www.minregion.gov.ua/wp-content/uploads/2020/02/zmina-2_blagoustrij-terytorij.pdf
127. State Sanitary Regulations of Planning and Development of Settlements, approved by the Order of the Ministry of Environment Protection of Ukraine No. 173 dated June 19, 1996. URL: <https://zakon.rada.gov.ua/laws/show/z0379-96#Text>
128. State Construction Standards (DBN) B.1.1-15-2012 "Composition and content of the general plan of a settlement". URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/12/19.1-DBN-B.1.1-152012.-Sklad-ta-zmist-generalnogo-pla.pdf>
129. State Construction Standards (DBN) B.1.1-1-22:2017 "Composition and content of the territorial zoning". URL: <https://www.minregion.gov.ua/wp-content/uploads/2018/05/DBN-B-1.1-22.pdf>
130. State Construction Standards (DBN) B.1.1-14-2012 "Composition and content of the detailed plan of a territory". URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/12/18.1-DBN-B.1.1-142012.-Sklad-ta-zmist-detalnogo-planu.pdf>
131. Amendment No. 1 to State Construction Standards (DBN) B.1.1-14-2012 "Composition and content of the detailed plan of a territory", approved by the Order of the Ministry of Regional Development, Construction, Housing and Communal Services of Ukraine" No. 345 dated December 27, 2017. URL: https://www.minregion.gov.ua/wp-content/uploads/2018/02/ZM_DBN_V1114.pdf
132. State Construction Standards (DBN) B.2.6-220:2017 "Roofs of buildings and structures". URL: <https://www.minregion.gov.ua/wp-content/uploads/2018/01/V26-220.pdf>
133. IUCN Global Standard for Nature-based Solutions: a user-friendly framework for the verification, design and scaling up of NbS: first edition. 2020.

REFERENCES



1. Budget Code of Ukraine No. 2456-VI dated July 08, 2010. URL: <https://zakon.rada.gov.ua/laws/show/2456-17#Text>
2. Water Code of Ukraine No. 213/95-BP dated June 06, 1995. URL: <https://zakon.rada.gov.ua/laws/show/213/95-%D0%B2%D1%80#Text>
3. General Land Planning Scheme of Ukraine approved by the Law of Ukraine No. 3059-III dated February 07, 2002. URL: <https://zakon.rada.gov.ua/laws/show/3059-14#Text>
4. Commercial Code of Ukraine No. 436-IV dated January 16, 2003. URL: <https://zakon.rada.gov.ua/laws/show/436-15#Text>
5. State Regional Development Strategy for 2021-2027, approved by Resolution of the Cabinet of Ministers of Ukraine No. 695 dated August 08, 2020. URL: https://zakon.rada.gov.ua/laws/show/695-2020-%D0%BF?find=1&text=%D1%80%D0%B5%D0%B3%D1%96%D0%BE%D0%BD#w1_8
6. State Construction Standards (DBN) Б.2.2-5:-2011 "Improvement of territories". URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/12/24.1-DBN-B.2.2-52011-Planuvannya-ta-zabudova-mist-sel.pdf>
7. State Construction Standards (DBN) B.1.1-13:2012 "Composition and content of the urban-planning documentation at the state and regional levels". URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/12/17.1-DBN-B.1.1-132012-Sklad-ta-zmist-mistobudivnoyi-do.pdf>
8. State Construction Standards (DBN) Б.2.2-12:2019 "Planning and development of territories". URL: <https://www.minregion.gov.ua/wp-content/uploads/2019/06/B2212-1B.pdf>
9. State Construction Standards (DBN) Б.2.6-220:2017 "Roofs of buildings and structures". URL: <https://www.minregion.gov.ua/wp-content/uploads/2018/01/V26-220.pdf>
10. State Construction Standards (DBN) B.1.1-15-2012 "Composition and content of the general plan of a settlement". URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/12/19.1-DBN-B.1.1-152012-Sklad-ta-zmist-generalnogo-pla.pdf>
11. State Construction Standards (DBN) B.1.1-1-22:2017 "Composition and content of the territorial zoning". URL: <https://www.minregion.gov.ua/wp-content/uploads/2018/05/DBN-B.1.1-22.pdf>
12. State Construction Standards (DBN) B.1.1-14-2012 "Composition and content of the detailed plan of a territory". URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/12/18.1-DBN-B.1.1-142012-Sklad-ta-zmist-detalnogo-planu.pdf>
13. State Sanitary Regulations of Planning and Development of Settlements, approved by Order of the Ministry of Environment Protection of Ukraine No. 173 dated June 19, 1996. URL: <https://zakon.rada.gov.ua/laws/show/z0379-96#Text>
14. Energy Strategy of Ukraine until 2035 "Security, Energy Efficiency, Competitiveness", approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 605-p dated August 18, 2017. URL: <https://zakon.rada.gov.ua/laws/show/605-2017-%D1%80#Text>
15. Living Planet Report 2020. Recommendations of WWF International for top-ranking civil servants. 2020. 7 pages. URL: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjH1NSDgd_xAhVH_rsIHRILC-4QFnoECBgQAA&url=https%3A%2F%2Fwww.feu.awsassets.panda.org%2Fdownloads%2F2_lpr_polic_.pdf&usq=AOvVaw1ayKfNaVBtHivSOr_L5GEd
16. National Target Program for the Development of the Water Management and Environmental Recovery of the Dnieper River Basin until 2021", approved by the Law of Ukraine No. 4836-VI dated May 24, 2012. URL: <https://zakon.rada.gov.ua/laws/show/4836-17#Text> Law of Ukraine "On Environment Protection" No. 1264-XII dated June 25, 1991. URL: <https://zakon.rada.gov.ua/laws/show/1264-12#Text>
17. Law of Ukraine "On the Architecture Activities" No. 687-XIV dated May 20, 1999. URL: <https://zakon.rada.gov.ua/laws/show/687-14#Text>
18. Law of Ukraine "On Settlements Improvement" No. 2807-IV dated September 06, 2005. URL: <https://zakon.rada.gov.ua/laws/show/2807-15#Text>
19. Law of Ukraine "On the State Construction Standards" No. 1704-VI dated November 05, 2009. URL: <https://zakon.rada.gov.ua/laws/show/1704-17#Text>
20. Law of Ukraine "On Waste" No. 187/98-BP dated March 05, 1998. URL: <https://zakon.rada.gov.ua/laws/show/187/98-%D0%B2%D1%80#Text>
21. Law of Ukraine "On the State Forecasting and Development of Programs of Economic and Social Development of Ukraine" No. 1602-III dated March 23, 2000. URL: <https://zakon.rada.gov.ua/laws/show/1602-14#Text>
22. Law of Ukraine "On the Environmental Network of Ukraine" No. 1864-IV dated June 24, 2004. URL: <https://zakon.rada.gov.ua/laws/show/1864-15#Text>
23. Law of Ukraine "On Ensuring Sanitary and Epidemic Welfare of the Population" No. 4004-XII dated February 24, 1994. URL: <https://zakon.rada.gov>

- ua/laws/show/4004-12#Text
24. Law of Ukraine "On Fundamentals of the State Regional Policy" No. 156-VIII dated February 05, 2015. URL: https://zakon.rada.gov.ua/laws/show/156-19?find=1&text=%D1%81%D1%82%D1%80%D0%B0%D1%82%D0%B5%D0%B3#w1_2
 25. Law of Ukraine "On the Foundations of Urban Planning" No. 2780-XII dated November 16, 1992. URL: https://zakon.rada.gov.ua/laws/show/2780-12?find=1&text=%D0%B1%D1%83%D0%B4%D1%96%D0%B2#w1_72
 26. Law of Ukraine "On the Protection of the Atmosphere" No. 2707-XII dated October 16, 1992. URL: <https://zakon.rada.gov.ua/laws/show/2707-12#Text>
 27. Law of Ukraine "On the Nature Reserve Fund of Ukraine" No. 2456-XII dated June 16, 1992. URL: <https://zakon.rada.gov.ua/laws/show/2456-12#Text>
 28. Law of Ukraine "On Ratification of the Convention on Biological Diversity" No. 257/94-BP dated November 29, 1994. URL: <https://zakon.rada.gov.ua/laws/show/257/94-%D0%B2%D1%80#Text>
 29. Law of Ukraine "On the Regulation of Urban-Planning Activities" No. 3038-VI dated February 17, 2011. URL: https://zakon.rada.gov.ua/laws/show/3038-17?find=1&text=%D0%BF%D1%80%D0%B8%D1%80%D0%BE%D0%B4#w1_3
 30. Law of Ukraine "On the Plant Life" No. 591-XIV dated April 09, 1999. URL: <https://zakon.rada.gov.ua/laws/show/591-14#Text>
 31. Law of Ukraine "On the Strategic Environmental Assessment" No. 2354-VIII dated March 20, 2018. URL: <https://zakon.rada.gov.ua/laws/show/2354-19#Text>
 32. Law of Ukraine "On the Animal Life" No. 2894-III dated December 13, 2001. URL: <https://zakon.rada.gov.ua/laws/show/2894-14#Text>
 33. We invite you to discuss the draft Water Strategy of Ukraine. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. Sustainable Water Management. Public consultation. June 14, 2021. URL: <https://mepr.gov.ua/news/37577.html>
 34. Approved the structure of the Biodiversity Preservation Strategy until 2030. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. Biodiversity. March 19, 2021. URL: <https://mepr.gov.ua/news/37045.html>
 35. Land Code of Ukraine No. 2768-III dated October 25, 2001. URL: <https://zakon.rada.gov.ua/laws/show/2768-14#Text>
 36. Amendment No. 1 to State Construction Standards (DBN) B.1.1-13:2012 "Composition and content of the urban planning documentation on the state and regional levels", approved by Order of the Ministry of Regional Development, Construction, Housing and Communal Services of Ukraine" No. 294 dated November 18, 2015. URL: https://www.minregion.gov.ua/wp-content/uploads/2016/09/Zmina-1-DBN-B.1.1-13_2012.pdf
 37. Amendment No. 1 to State Construction Standards (DBN) B.1.1-14:2012 "Composition and content of the detailed plan of a territory", approved by Order of the Ministry of Regional Development, Construction, Housing and Communal Services of Ukraine" No. 345 dated December 27, 2017. URL: https://www.minregion.gov.ua/wp-content/uploads/2018/02/ZM_DBN_V1114.pdf
 38. Amendment No. 1 to State Construction Standards (DBN) B.2.2-5:-2011 "Improvement of territories". URL: https://www.minregion.gov.ua/wp-content/uploads/2018/06/ZM4_DBN_B225.pdf
 39. Amendment No. 2 to State Construction Standards (DBN) B.2.2-5:-2011 "Improvement of territories". URL: https://www.minregion.gov.ua/wp-content/uploads/2020/02/zmina-2_blagoustrij-terytorij.pdf
 40. Subsoil Code of Ukraine No. 132/94-BP dated July 27, 1994. URL: <https://zakon.rada.gov.ua/laws/show/132/94-%D0%B2%D1%80#Text>
 41. Convention on Biological Diversity of 1992. URL: https://zakon.rada.gov.ua/laws/show/995_030#Text
 42. Constitution of Ukraine No. 254к/96-BP dated June 28, 1996. URL: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>
 43. Concept of the State Target Program of the Land Relations Development in Ukraine for the period up to 2020, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 743-p dated June 17, 2009. URL: https://zakon.rada.gov.ua/laws/show/743-2009-%D1%80?find=1&text=%D0%BF%D1%80%D0%B8%D1%80%D0%BE%D0%B4#w1_1
 44. Concept of Public Policy in Climate Change for the period up to 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 932-p dated December 07, 2016. URL: <https://zakon.rada.gov.ua/laws/show/932-2016-%D1%80#n8>
 45. Concept of Sustainable Development of Settlements approved by Resolution of the Verkhovna Rada of Ukraine No. 1359-XIV dated December 24,

1999. URL: <https://zakon.rada.gov.ua/laws/show/1359-14#Text>

46. Letter of Clarification of the Ministry of Justice of Ukraine No. 27/13/32-16 dated January 27, 2016. URL: <https://minjust.gov.ua/m/list-rozysnennya-ministerstva-yustitsii-ukraini-vid-27012016-271332-16-schodo-prava-na-vchinennya-notarialnih-diy-posadovimi-osobami-organu-mistsevogo-samovyraduvannya-v-naselenih-punktah-yaki-mayut-status-selisch-miskogo-tipu-u-zvyazku-iz-vnesennyam-zmin/>
47. Forest Code of Ukraine No. 3852-XII dated January 21, 1994. URL: <https://zakon.rada.gov.ua/laws/show/3852-12#Text>
48. A. Maiev. State regional policy in Ukraine: prerequisites, goals, regulatory framework. Public administration and local self-government. Collection of Research Papers / Dnipropetrovsk Regional Institute of Public Administration of the National Academy for Public Administration under the President of Ukraine. 2015. Issue 2 (25). Pages 168–179.
49. N.R. Malysheva, M.I. Yerofeiev. Scientific and Practical Commentary to the Law of Ukraine "On Environment Protection". Kharkiv: Pravo, 2017. 417 pages.
50. National Energy Efficiency Action Plan until 2020, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 1228-r dated November 25, 2015. URL: <https://zakon.rada.gov.ua/laws/show/n0001824-15#n2>
51. National Action Plan to Combat Land Degradation and Desertification approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 271-p dated March 30, 2016. URL: <https://zakon.rada.gov.ua/laws/show/271-2016-%D1%80#Text>
52. National Waste Management Plan until 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 117-p dated February 20, 2019. URL: <https://zakon.rada.gov.ua/laws/show/117-2019-%D1%80?find=1&text=%D0%BF%D1%80%D0%B8%D1%80%D0%BE%D0%B4#w1>
53. National Waste Management Strategy of Ukraine until 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 820-p dated November 08, 2017. URL: <https://zakon.rada.gov.ua/laws/show/820-2017-%D1%80#Text>
54. We discuss the State Forest Management Strategy. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. October 26, 2020. URL: <https://mepr.gov.ua/news/36109.html>
55. Oblast Environment Protection Program for 2017-2021, approved by the Resolution of Rivne Oblast Council No. 482 dated March 17, 2017 (as amended). URL: https://www.ecorivne.gov.ua/tmp/Programa%20ONPS_%202017_2021.doc
56. Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period until 2030, approved by the Law of Ukraine No. 2697-VIII dated February 28, 2019. URL: https://zakon.rada.gov.ua/laws/show/2697-19?find=1&text=%D0%BF%D1%80%D0%B8%D1%80%D0%BE%D0%B4#w1_2
57. Paris Agreement adopted as part of the United Nations Framework Convention on Climate Change (2015). URL: https://zakon.rada.gov.ua/laws/show/995_l61#Text
58. List of oblast target programs implemented for funds of the oblast budget (as of March 10, 2021). Web-site of Poltava Oblast Council. URL: <https://www.oblrada-pl.gov.ua/rubric/perelik-oblasnyh-cilovyh-program-shcho-realizuyutsya-za-koshty-oblasnogo-byudzhetu>
59. Plan of Activities for the Implementation of the National Energy Efficiency Action Plan until 2020, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 1228-p dated November 25, 2015. URL: <https://zakon.rada.gov.ua/laws/show/1228-2015-%D1%80#Text>
60. Action Plan for 2021-2023 for the Implementation of the State Regional Development Strategy for 2021-2027, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 497-p dated May 12, 2021. URL: <https://zakon.rada.gov.ua/laws/show/497-2021-%D1%80#Text>
61. Action Plan for the Implementation of the Concept of Public Policy in Climate Change for the period up to 2030, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 878-p dated December 06, 2017. URL: <https://zakon.rada.gov.ua/laws/show/878-2017-%D1%80#Text>
62. Notice of promulgation of the Draft Ordinance of the CMU "On Approval of the Strategy of Environmental Safety and Climate Change Adaptation until 2030". Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. Announcement. Public consultation. March 01, 2021. URL: <https://mepr.gov.ua/news/36922.html>
63. Nature-based solutions guide: Water retention measures. The NWRM draft is prepared under the direction of Office International de l'Eau (OIEau), translated by WWF-Ukraine. 2021. 58 pages. URL: <https://wwf.ua/?2824341/nature-based-solutions>
64. Environment Protection Program of Ivano-Frankivsk oblast until 2025, approved by the Resolution of Ivano-Frankivsk Oblast Council No. 30-2/2020 dated December 23, 2020. URL: <https://orada.if.ua/decision/30-2-2020/>
65. Program for Improvement of Energy Efficiency and Reduction of Energy Consumption in Vinnytsia oblast for 2017-2022. URL: <https://vinrada.gov.ua/upload/files/7sklikannya/17Ses/310.rar>
66. Waste Management Program for Khmelnytskyi oblast for 2018-2022, approved by the Resolution of the Oblast Council No. 39-18/2018 dated

- March 27, 2018. URL: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKewi8j86Sx-LxAhW__rsIHfpCAasQFnoECAIQAA&url=https%3A%2F%2Fkm-oblrada.gov.ua%2Fwp-content%2Fuploads%2F2018%2F02%2FPrograma-z-vidkhodami-KHODA-ostatochnv1.doc&usg=AOvVaw1DEtc6okfGLnxYSRE5WvRU
67. Program for the Development and Preservation of Green Areas in the city of Kropyvnytskyi for 2018-2021, approved by the Resolution of Kropyvnytskyi City Council No. 1765 dated July 12, 2018, as amended by the Resolution of Kropyvnytskyi City Council No. 3144 dated February 14, 2020. URL: <https://amcu.gov.ua/storage/app/uploads/public/602/4f7/e79/6024f7e79ba55142892447.pdf>
 68. Draft Ordinance of the Cabinet of Ministers of Ukraine "On approval of the Concept of the State Target Program of Development of Land Relations and the National Infrastructure of Geospatial Data in Ukraine until 2030". Web-site of the State Service of Ukraine for Geodesy, Cartography and Cadastre (StateGeoCadastre). July 06, 2020. URL: <https://land.gov.ua/old/info/proekt-rozporiadzhennia-kabinetu-ministriv-ukrainy-pro-skhvalennia-kontseptsii-derzhavnoi-tsilovoi-prohramy-rozvytku-zemelnykh-vidnosyn-ta-natsionalnoi-infrastruktury-heoprosorovykh-danykh-v-uk/>
 69. United Nations Framework Convention on Climate Change (1992). URL: https://zakon.rada.gov.ua/laws/show/995_044#Text
 70. Regional Development Strategy of Zakarpattia oblast for 2021-2027, approved by the Resolution of Zakarpattia Oblast Council No. 1630 dated December 20, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvytku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/regionalna-strategiya-rozvytku-zakarpatskoyi-oblasti-na-period-2021-2027-rokiv/>
 71. Regional Development Strategies until 2027. Web-site of the Ministry for Communities and Territories Development of Ukraine. Main. Areas of activity. State regional policy. Strategic planning of the regional development. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvytku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/>
 72. Resolution of the National Security and Defence Council of Ukraine dated March 23, 2021 "On challenges and threats to the national security of Ukraine in the environmental sphere and priority measures to neutralize them" enacted by the Decree of the President of Ukraine No. 111/2021 dated March 23, 2021. URL: <https://www.president.gov.ua/documents/1112021-37505>
 73. Discussion of the Maritime Strategy of Ukraine. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. Sustainable Water Management. November 30, 2020. URL: <https://mepr.gov.ua/news/36381.html>
 74. Biodiversity Strategy for 2030: Bringing nature back into our lives. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (Brussels, 2020, unofficial translation into Ukrainian made by the Ukrainian Human Rights Group). URL: <https://uncg.org.ua/wp-content/uploads/2020/10/Stratehiia.pdf>
 75. Strategy of the Balanced Regional Development of Vinnytsia oblast until 2027, approved by the Resolution of Vinnytsia Oblast Council No. 42 dated February 21, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvytku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiyazbalansovanogo-regionalnogo-rozvytku-vinnyczkoyi-oblasti-na-period-do-2027-roku/>
 76. Low Carbon Development of Ukraine until 2050. Web-site of the Ministry of Environmental Protection and Natural Resources of Ukraine. News. Public information. Climate change and the ozone layer. Public consultation. November 03, 2017. URL: <https://mepr.gov.ua/news/31815.html>
 77. Strategy of the Regional Development of Dnipropetrovsk oblast until 2027. URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/12/strategiya-regionalnogo-rozvytku-dnipropetrovskoyi-oblasti-na-period-do-2027-rok.pdf>
 78. Strategy of the Regional Development of Zaporizhzhia oblast until 2027, approved by the Resolution of Zaporizhzhia Oblast Council No. 134 dated December 12, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvytku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-regionalnogo-rozvytku-zaporizkoyi-oblasti-na-period-do-2027-roku/>
 79. Strategy of the Regional Development of Sumy oblast for 2021-2027, Action Plan for 2021-2023 for the Implementation of the Strategy of the Regional Development of Sumy oblast for 2021-2027, approved by the Resolution of Sumy Oblast Council of the eighth convocation December 11, 2020 p. URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/12/strategiya-regionalnogo-rozvytku-sumskoyi-oblasti-na-2021-2027-roky.pdf>
 80. Strategy of Development of the Agricultural Sector of the Economy until 2020, approved by the Ordinance of the Cabinet of Ministers of Ukraine No. 806-p dated October 17, 2013. URL: <https://zakon.rada.gov.ua/laws/show/806-2013-%D1%80#Text>
 81. Strategy of Development of Volyn oblast until 2027, approved by the Resolution of Volyn Oblast Council No. 29/16 dated March 12, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvytku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-volynskoyi-oblasti-na-period-do-2027-roku/>
 82. Strategy of Development of Donetsk oblast until 2027, approved by the Ordinance of the Chairman of Donetsk Oblast State Administration, Head of Donetsk Oblast Military and Civil Administration No. 147/5-20 dated February 17, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvytku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/>

roku/strategiya-rozvytku-doneczkoyi-oblasti-na-period-do-2027-roku/

83. Strategy of Development of Zhytomyr oblast until 2027, approved by the Resolution of Zhytomyr Oblast Council No. 1722 dated December 18, 2019 (as amended on December 24, 2020 by No. 16). URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/05/onovlena-zatverdzhena-strategiya-do-2027-roku-1-1.pdf>
84. Strategy of Development of Ivano-Frankivsk oblast for 2021-2027, approved by the Resolution of Ivano-Frankivsk Oblast Council No. 1381-34/2020 dated February 21, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-ivano-frankivskoyi-oblasti-na-2021-2027-roky/>
85. Strategy of Development of Kirovohrad oblast for 2021-2027, approved by the Resolution of Kirovohrad Oblast Council No. 743 dated March 12, 2020. URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/12/strategiya-rozvytku-kirovogradskoyi-oblasti-na-2021-2027-roky.pdf>
86. Strategy of Development of Kyiv oblast for 2021-2027, approved by the Resolution of Kyiv Oblast Council No. 789-32-VII dated December 19, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-kyivskoyi-oblasti-na-2021-2027-roky/>
87. Strategy of Development of Lviv oblast for 2021-2027. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-lvivskoyi-oblasti-na-period-2021-2027-rokiv/>
88. Strategy of Development of Luhansk oblast for 2021-2027, approved by the Ordinance of the Chairman of Luhansk Oblast State Administration, the Head of Luhansk Oblast Military and Civil Administration No. 246 dated March 26, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-luganskoyi-oblasti-na-2021-2027-roky/>
89. Strategy of Development of Mykolaiv oblast until 2027, approved by the Resolution of Mykolaiv Oblast Council No. 2 dated December 23, 2020. URL: <https://www.minregion.gov.ua/wp-content/uploads/2021/02/strategiya-rozvytku-mykolayivskoyi-oblasti-na-period-do-2027-roku.pdf>
90. Strategy of Development of the City of Zaporizhzhia until 2028, approved by the Resolution of the City Council No. 57 dated December 20, 2017. URL: https://zp.gov.ua/upload/editor/strategiya__e.pdf
91. Strategy of Development of the City of Kyiv until 2025, approved by the Resolution of Kyiv City Council No. 824/7060 dated December 15, 2011 (restated and approved by the Resolution of Kyiv City Council No. 724/2886 dated July 06, 2017. URL: <https://dei.kyivcity.gov.ua/files/2017/7/28/Strategy2025new.pdf>
92. Strategy of Development of Odesa oblast for 2021-2027, approved by the Resolution of Odesa Oblast Council No. 1228-VII dated March 03, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-odeskoyi-oblasti-na-period-2021-2027-roky/>
93. Strategy of Development of Poltava oblast for 2021-2027, approved by the Resolution of the plenary of the 29th session of Poltava Oblast Council of the seventh convocation dated December 20, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-poltavskoyi-oblasti-2021-2027/>
94. Strategy of Development of Rivne oblast until 2027, approved by the Resolution of Rivne Oblast Council No. 1618 dated March 13, 2020. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-rivnenskoyi-oblasti-na-period-do-2027-roku/>
95. Strategy of Development of Ternopil oblast for 2021-2027 and Action Plan for Implementation thereof. URL: <https://www.minregion.gov.ua/wp-content/uploads/2021/02/strategiya-rozvytku-ternopilskoyi-oblasti-na-2021-2027-roky.pdf>
96. Strategy of Development of Kharkiv oblast for 2021-2027. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-harkivskoyi-oblasti-na-2021-2027-roky/>
97. Strategy of Development of Kherson oblast for 2021-2027. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-hersonskoyi-oblasti-na-period-2021-2027-rokiv/>
98. Strategy of Development of Khmelnytskyi oblast for 2021-2027, approved by the Resolution of Khmelnytskyi oblast Council No. 49-29/2019 dated December 20, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-rozvytku-hmelnytskoyi-oblasti-na-2021-2027-roky/>

99. Strategy of Development of Cherkasy oblast for 2021-2027, approved by the Resolution of Cherkasy Oblast Council No. 38 dated September 11, 2020. URL: <https://www.minregion.gov.ua/wp-content/uploads/2020/12/strategiya-rozvytku-cherkaskoyi-oblasti-na-period-2021-2027-roky.pdf>
- 100.1 Strategy of Development of Chernivtsi oblast until 2027. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-regionalnogo-rozvytku-cherniveczkoyi-oblasti-na-period-do-2027-roku/>
- 101.1 Strategy of Sustainable Development "Ukraine-2020" approved by the Decree of the President of Ukraine No. 5 dated January 12, 2015. URL: <https://zakon.rada.gov.ua/laws/show/5/2015#Text>
- 102.1 Strategy of Sustainable Development of Chernihiv oblast until 2027, approved by the Resolution of the twenty-first session of Chernihiv Oblast Council of the seventh convocation No. 4-21/VII dated December 18, 2019. URL: <https://www.minregion.gov.ua/napryamki-diyalnosti/derzhavna-rehional-na-polityka/strategichne-planuvannya-regionalnogo-rozvitku/regionalni-strategiyi-rozvytku-na-period-do-2027-roku/strategiya-stalogo-rozvytku-chernigivskoyi-oblasti-na-period-do-2027-roku/>
- 103.1 Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their Member States, on the other hand dated June 27, 2014. URL: https://zakon.rada.gov.ua/laws/show/984_011#Text
- 104.1 Decree of the President of Ukraine "On Sustainable Development Goals of Ukraine until 2030" No. 722 dated September 30, 2019. URL: <https://zakon.rada.gov.ua/laws/show/722/2019#Text>
- 105.1 Civil Code of Ukraine No. 435-IV dated January 16, 2003. URL: <https://zakon.rada.gov.ua/laws/show/435-15#Text>
- 106.1 About. Defining Nature-based Solutions. IUCN. URL: <https://www.iucn.org/theme/nature-based-solutions/about>
- 107.1 Biodiversity strategy for 2030. Bringing nature back into our lives. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (Brussels, 2020). URL: https://eur-lex.europa.eu/resource.html?uri=cellar:a3c806a6-9ab3-11ea-9d2d-01aa75ed71a1.0001.02/DOC_1&format=PDF
- 108.1 IUCN Global Standard for Nature-based Solutions: a user-friendly framework for the verification, design and scaling up of NbS: first edition. 2020. URL: <https://portals.iucn.org/library/node/49070>
- 109.1 The European Green Deal. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (Brussels, 2019). URL: <https://bit.ly/2UaSc4e>

