United Nations Development Programme

PROJECT DOCUMENT

Serbia

Project Title: Green cities transformation – smart, sustainable and low-carbon urban solutions in triangular metropolitan area
Project Number: 01002971/1295925
Implementing Partner: Ministry of Environmental Protection
Start Date: 01 November 2024 **End Date: 31 December 2029** **PAC Meeting date:**

Brief Description
The project aims to support pilot interventions for the green, digital, and nature-positive transformation of three cities (Belgrade, Novi Sad, Zrenjanin) promoting sustainable urban development. The interventions will focus on: (i) promoting multi-sectoral resource and energy efficiency through decarbonization and circular business models; (ii) implementing integrated intra and inter-city spatial planning to enhance resilience and sustainability; and (iii) preserving natural capital and biodiversity. These efforts are expected to provide valuable experience by promoting a polycentric approach and developing tailored solutions, particularly for mid-size and smaller cities (Novi Sad and Zrenjanin).

Contributing Outcome (UNSDCF, CPD, RPD):
CPD Outcome 3. Strengthen resilience to shocks and crises
CPD Outcome 1: Structural transformation accelerated, particularly green, inclusive, and digital transitions

Indicative Output(s) with gender marker: GEN2

Total resources required:		4,000,000.00
Total resources allocated:		
	UNDP TRAC:	0.00
	Donor:	0.00
	Government:	855,000.00
	In-Kind:	0.00
Unfunded:		3,145,000.00

Agreed by:

Government	UNDP
Print Name: Irena Vujovic, Minister, Ministry of Environmental Protection	Print Name: Fabrizio Andreuzzi, UNDP RR *ad interim*
Date: 04.12.2024	Date: 04.12.2024.

I. DEVELOPMENT CHALLENGE

The productivity of nearly all Serbian cities has been decreasing. Despite ongoing migration from rural to urban areas, the total urban population in Serbia has decreased to 1990 levels, with the exception of Belgrade, Novi Sad and Novi Pazar[1]. There are several key development challenges that Serbian cities and local self-governments (LSGs) continue to face, which also affect their attractiveness for sustainable business development, employment and, thus, productivity. These challenges include: i) insufficient access to quality services and infrastructure; ii) mounting environmental challenges, including air pollution and waste management, iii) deficiencies in urban planning and governance systems, leading to uncoordinated and -uncontrolled urban sprawl; and iv) increasing disaster and climate change related risks, such as extreme heat events, droughts and/or floods.

While at the national level, Serbia has made significant progress in adopting new laws, regulations, programs and targets to advance sustainable green city development, these advancements have largely not yet been transformed to local level action. One reason for this is the unusually complex multilayer planning system in Serbia. This complexity, combined with LSGs' capacity constraints, inadequate financing, and often un-coordinated, overlapping or even conflicting institutional structures and responsibilities, prevents Serbian LSGs from translating new green city policies and targets into integrated local level planning and implementation.

The most significant urban and industrial area in Serbia is the triangular metropolitan area formed by Belgrade, Novi Sad and Zrenjanin, having jointly a population of 2,16 million or 32% of Serbia's total population. Zrenjanin occupies the largest land area in the Autonomous Province of Vojvodina and is Serbia's second-largest territory with an area of 1,326 km^2. The triangular metropolitan area also includes some of Serbia's most prominent natural reserves such as the wetlands of Carska Bara and Okanj Bara (recognized also as Ramsar sites in accordance with the Ramsar Convention on Wetlands), the national park Fruška Gora between Belgrade and Novi Sad as well as 45 natural goods protected by the law in the Belgrade region.

All three cities are facing similar challenges, including air pollution, inappropriate waste and wastewater management, high level of urbanization, lack of green areas, increase of traffic congestion, increased vulnerability to high temperatures and extreme rainwater. For addressing this, the cities have set a path towards reducing pollution and greening their infrastructure with the commitments enshrined also by their voluntary participation in the Covenant of Mayors and the Green Cities initiative. The high costs of achieving the requirements of the EU Acquis already transposed into the Serbian legislation is posing a challenge for these plans, however, to which continuing increase of urban area and long years of inadequate infrastructure maintenance are also contributing.

While in the baseline, the cities are planning significant programs and investments in urban infrastructure by using also public-private partnerships (PPPs), their more fundamental green transformation is obstructed by the lack of integrated and inclusive approaches to green city development that, in turn, would adequately prioritize and enable investments into nature positive, resource & energy-efficient, climate-resilient and economically and socially attractive city development in a more coordinated and holistic manner. The same applies to the existing and planned Government investments, including USD $39 million to be spent through the Ministry of Environmental Protection to support investments in waste management, wastewater treatment plants and other green infrastructure, as well as USD 1 million to be spent through the Provincial Secretariat for Urban Planning and Environmental Protection of the Autonomous Province of Vojvodina on city infrastructure and urban planning in the city of Zrenjanin. Additionally, the Government of Serbia is planning the investments worth of $5 billion into environmental infrastructure at municipal level (wastewater treatment and solid waste management). EU supports the Republic of Serbia through the Operational Programme for Environment and Energy sector at the amount of EUR 240 million in the period 2024 – 2027. The main priority areas are environment and climate change, transport, digital economy and society, and energy. By targeting these specific sectors and interventions, the Programme strives to contribute to the overall goals of waste management, water management, energy efficiency and air quality in Serbia. Although important, however, these are investments that do not necessarily promote integrated city planning and more comprehensive green transformation, thereby limiting their overall impact.

[1] As concluded by a recent World Bank study *"Sustainable Cities Serbia: Unlocking the transformational potential of cities for the green transition"* (June 2023), financed by the Swiss State Secretariat for Economic Affairs (SECO)

In general, Serbia lacks financial mechanisms to support integrative and innovative solutions for improving communal and ecosystem services by urban planning that link investments with infrastructural development and preservation of natural capital and ecosystem restauration in the triangular metropolitan area. Although, participatory approach involving communities, both women and men, as well as marginalized groups (young, Roma people) in urban planning and citizens-centered infrastructural projects exists, it does not ensure that all stakeholders are consulted. Therefore, the participatory approach needs to be strengthened.

The immediate, underlying and root causes of the development challenge are further illustrated in the problem tree analysis (Figure 1).

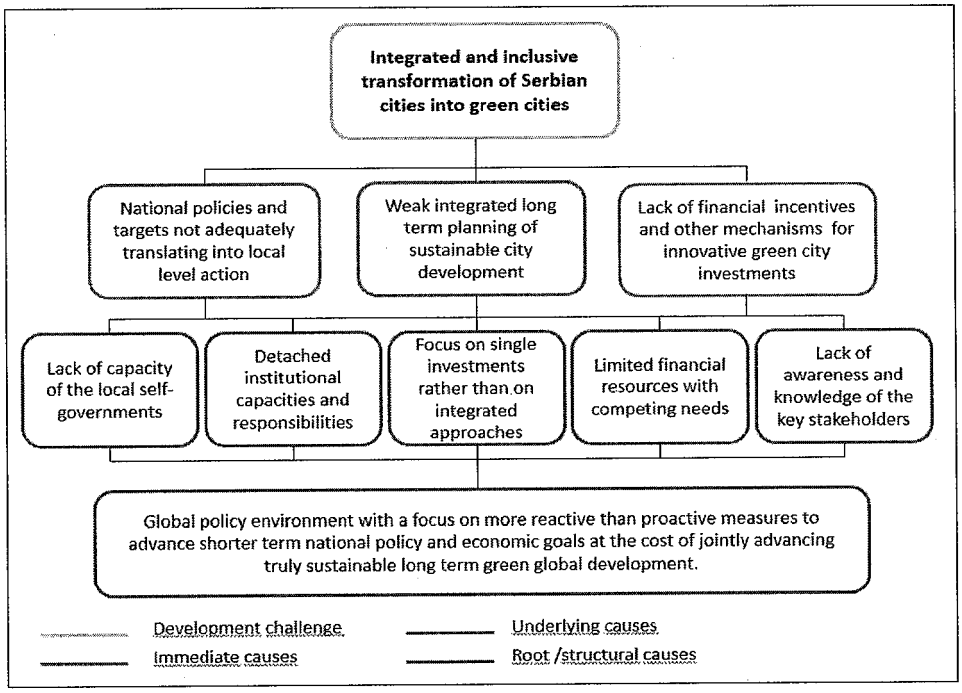


Figure 1. Problem tree

The project is firmly in line with Serbia's national policy and laws, each of which is emphasizing the importance of development in accordance with sustainable development goals, digitalization, and climate resilience. These laws and other policy documents include, among others: (i) the Serbian Urban Development Strategy until 2030 that defines strategic objectives of urban development; (ii) the National Cleaner Production Strategy, (iii) the Strategy for Sustainable use of Natural Resources and Goods, (iv) the Long -Term Renovation Strategy for Encouraging Investments in Renovation of the National Building Stock of the Republic of Serbia by 2050, (v) the Integrated National Energy and Climate Plan of the Republic of Serbia (NECP), (vi) Circular Economy Development Program until 2024 promoting circular economy; (vii) the Law on Environmental Protection (with the latest revision in 2018); (viii) the Law on Waste Management (with the latest revision in 2023), (ix) the Waste Management Programme for the period 2022-2031; (x) the Spatial plan of Serbia that defines urbanization and industrialization in line with green and nature-based solutions (xi) the Law on Planning and Construction, (xii) the Law on Communal activities.

The project is also aligned with the Green Agenda for the Western Balkans which requires Serbia and other countries of the region to further prevent environmental degradation and improve citizens wellbeing by improved intra- and intercity urban planning, decarbonization, nature-based solutions to mitigate climate change risks, and greening of communal infrastructure and services in general. The main global contribution of Serbia in this context lies in its efforts and experience to tackle urban challenges in medium sized cities that are often neglected in global discussion.

The Serbian Urban Development Strategy until 2030 defines the following strategic objectives of urban development: i) sustainable economic development; ii) urban settlements management; iii) social well-being; iv)

quality of the environment; and v) urban development management. However, the investments into urban infrastructure usually tend to address the visible most immediate problems at the cost of conducting longer term integrated city planning to balance the needs and benefits of green development targets and citizens' well-being.

The project will also support Serbia in achieving the Nationally Determined Contribution (NDC) targets by reducing energy intensity and promoting renewable energy solutions in communal infrastructure, as well as by better resource efficiency through circular economy and maintenance of carbon sinks. The project is aligned with the national climate change priorities as defined by the Climate Change Law, the Third National Communication (TNC, 2023) and the Low-Carbon Development Strategy, National Adaptation Programme and the National Energy and Climate Plan (NECP) that promote low-carbon solutions and resources efficiency, sustainable passenger transport and promotion of nature-based solutions as priority areas for climate resilient development.

II. STRATEGY

As part of the global GEF-8 Sustainable Cities Integrated Program, the project will contribute to the global effort to address the environmental and social challenges caused by the urbanization observed also in Serbia. In line with the objectives of the global project, the project seeks to do this by: i) supporting integrated and inclusive urban planning, strategies, and policy development; ii) promoting investments in sustainable, nature-positive, and resilient urban development; iii) adopting innovative financing mechanisms; and iv) strengthening knowledge-sharing and capacity-building. By switching the focus from the responsive passive approach in environmental protection to a more forward-looking green & low-carbon circular economy-based approach will provoke structural changes and create a market for new green investments and green jobs, while at the same time improving Serbia's overall energy & resource efficiency, climate resilience, decarbonization and depollution of the environment, and biodiversity.

To address the stated development challenge, including the immediate, underlying and root causes and the related causal chains discussed in the previous section, the theory of change (ToC) can be presented in a simplified form by an iterative process including three main elements, as illustrated in Figure 2 below. A more specific illustration of the project's Theory of Change is presented at the end of this chapter in Figure 2.

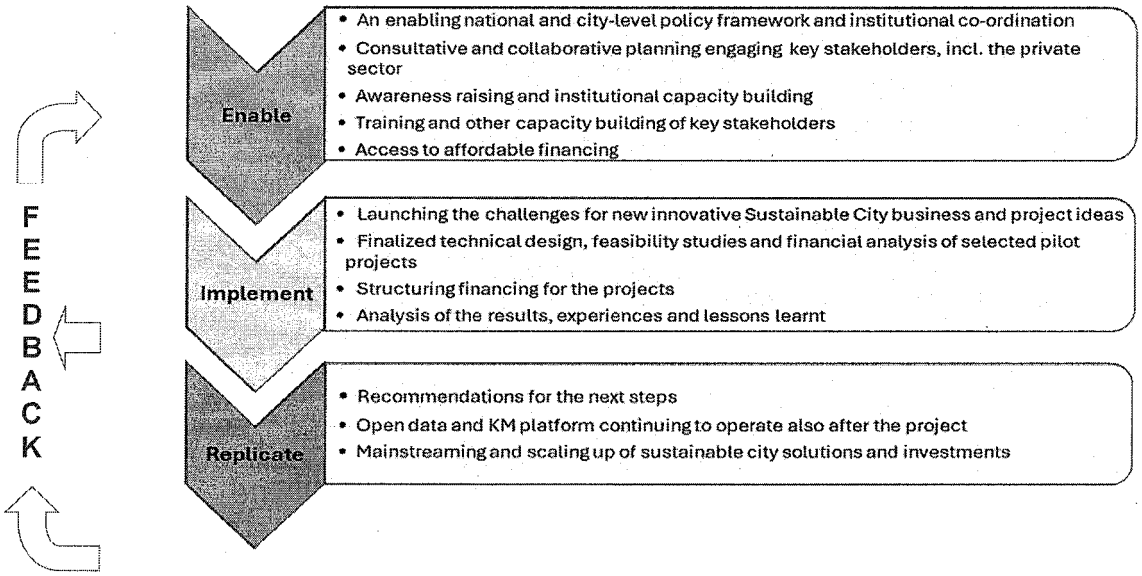


Figure 2: Simplified illustration of the ToC and the key areas to be addressed and supported by the project

Building on the results and lessons learnt from the earlier GEF - supported Climate Smart Urban Development (CSUD) and Circular Economy (CE) projects in Serbia, a similar approach for advancing Serbia's Green City Agenda has been adopted for this project, with a particular focus on the triangular area formed by the cities of Belgrade, Novi Sad and Zrenjanin. Besides sourcing new innovative community-based business initiatives and investment ideas through performance-based grants and a challenge-based approach developed and already tested by the

earlier projects, the project will address the equally important policy, capacity building and public awareness raising dimensions in the following subsectors:

- Water supply and wastewater treatment
- Municipal waste management by applying circular economy
- Transition to circular economy in energy and material consumption, including chemicals of global concern
- Promoting energy efficiency and renewable energy solutions
- Promoting sustainable transport solutions and intermodal transport services
- Integration of nature-based solutions in urban planning and development and preservation of urban biodiversity
- Digitalization of municipal services and creation of "Digital Twin Cities".

The GEF grant is expected to have a catalytic effect by unlocking investments in sustainable and resilient urban development by an integrated approach combining policy changes and institutional strengthening with new innovative investments to improve communal infrastructure and services, while also benefiting the environment and providing social advantages. An already tested innovation challenge approach will be applied to support pilot projects.

The construction of wastewater treatment plants and primary and secondary networks in the three cities will improve land and groundwater quality. Current air quality, with an increased value of PM 10 in urban areas, will be improved through energy efficiency measures, replacing existing domestic heating appliances with new eco-design compliant appliances, increased share of renewable energy, sustainable urban mobility, and smart industrialization. In general, sustainable urban planning will preserve natural capital and ecosystem services, which are essential for the climate resilience of the triangular metropolitan area. Integrated approach, digitalization and innovation will maximize impacts compared to single investment-based solutions in urban infrastructure.

The project will engage key stakeholders by a collaborative approach to achieve project targets. By recognizing the current bottlenecks in translating the national policies, programs and targets into integrated and concrete action at the level of LSGs, a particular focus of project's technical assistance activities will be on removing the structural, capacity and other barriers related to this. These include barriers to effective operationalization of digital data collection and management systems for all critical sectors related to sustainable green city development (land use, green infrastructure, energy (EMIS), mobility, building stock, waste, biodiversity etc.), which have been promoted already by the previous GEF supported projects, but not yet effectively adopted, operationalized or sustained. In addition, the project will consider testing the digital twin city approach by creating a living city replica, constantly updated with data from its physical twin. This approach will enable the urban planners, decision makers and users of communal services to analyze data, monitor systems and run simulations exactly as if they were working with the physical asset. In return, this approach can significantly contribute to saving energy and resources in various communal services, while also reducing investment risks.

It is also important to note that promoting sustainable and green city development is not only about supporting specific investments, but about fostering a change in people's mindset that should permeate society. This process requires inputs and commitments from a variety of stakeholders to work towards the same goal with mutually recognized benefits. Therefore, it is critical that from the very beginning the policy framework and suggested measures for sustainable green city development will be developed by co-creation (concept of living labs). The project shall promote an inclusive, consultative process in close cooperation with the public, private, academic and civil society stakeholders, as well as citizens. This offers an opportunity to better engage the civil society and emphasize also the important role women can play in this process. Furthermore, the approach helps to attract investments from the private sector and multilateral development banks and raise investors' awareness and transparency regarding the sustainability of their investments. Co-creation based on end-users' feedback and experience will result in better communal services that are better aligned with citizens' needs.

The project activities are designed to consider gender-specific issues in the policy and regulatory amendments, when applicable. The project will also integrate gender-specific dimensions into the planning of project's knowledge management activities. The project will ensure and closely monitor that equal training opportunities are provided for both men and women.

Awareness-raising activities will involve the participation and cooperation of women associations and women NGOs to support the mainstreaming of gender considerations in related awareness-raising and information

materials. All contractors will be required to ensure non-discriminatory participation of men and women during the implementation of their respective tasks. Female innovators, entrepreneurs and experts will be specifically encouraged to participate in the project implementation. Additionally, the project will ensure that women-rights organizations are included in each of the co-creation activities. The project will ensure gender balance among stakeholders and beneficiaries of the innovation challenges, by defining gender-sensitive criteria, ensuring gender balance within the project selection committees and providing gender expertise to the projects.

Regarding actual investments and new business opportunities for green city development, the project will follow the methodology and tools already tested within the earlier GEF-funded CSUD and CE projects to further blend and leverage funding for low-carbon and climate-resilient development solutions, including nature-based solutions (NbS) and ecosystem services. These include innovation challenges and performance-based payments, new type of partnerships with the private sector, multi-stage evaluation of proposals with strong ownership of national counterparts as well as incubation/acceleration type of technical assistance and mentoring provided to the project teams. By this, the GEF grant seeks to have a catalytic effect by unlocking investment in sustainable urban development, digital and green solutions for the improvement of communal services and conservation of the peri-urban area with consideration for policy development and financial investments that reflects an integrated approach. In other words, rather than focusing on single investments or demonstration projects, the project aims to address the requirements for sustainable and resilient green city development in a more holistic manner.

To meet the project objective, it is essential to have a clear political will both at the government and municipal level of the three participating cities to effectively encourage and support the green transformation. The positive experiences from the earlier CSUD and CE projects, as well as some initial steps already taken both by the Government and the participating cities, provide a positive signal in this regard. The project has been developed in close consultation with the key stakeholders and beneficiaries. By conducting rigorous technical and financial due diligence of the pilot investments, the project also seeks to minimize any technical and financial failures.

All the measures supported by the project also need to be socially and environmentally acceptable. This has been addressed by a comprehensive Social and Environmental Screening Process (SESP) and related Environmental Social Management Framework (ESMF) as well as a Gender Analysis and Gender Action Plan.

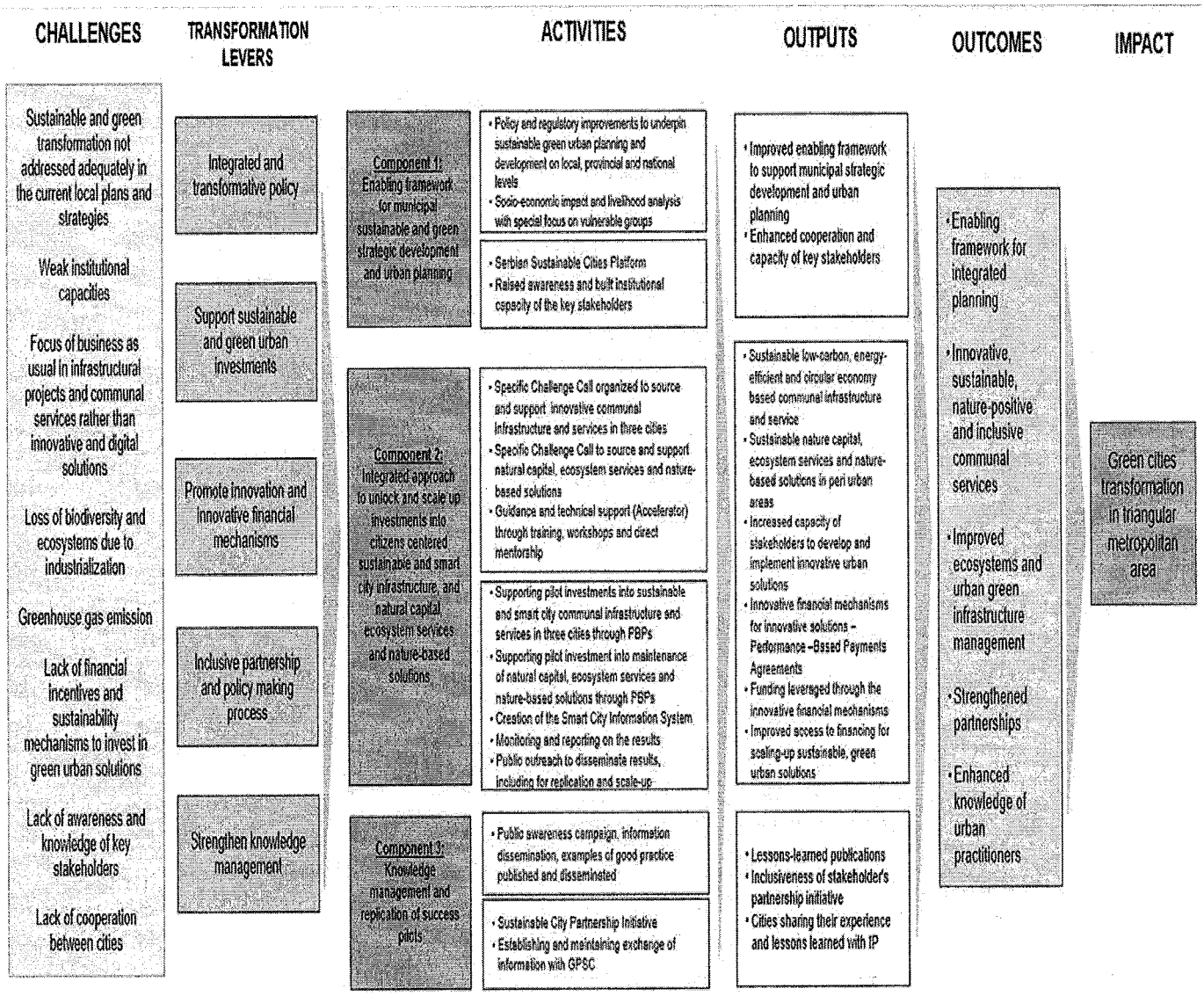


Figure 3. Project Theory of Change

III. RESULTS AND PARTNERSHIPS

Expected Results

By building on the Theory of Change discussed in the previous section, the project implementation strategy and expected results are structured under three interrelated components, which are briefly discussed below. For further details, a reference is made to chapter "Project Results Framework".

The project will contribute to the global effort to address the environmental and social challenges caused by the ongoing global urbanization process observed in Serbian cities by supporting i) integrated and inclusive urban planning, strategies, and policy development; ii) promoting investments in sustainable, nature-positive, and resilient urban development; iii) adopting innovative and sustainable financing mechanisms; and iv) strengthening knowledge-sharing and capacity-building with the initial focus on the triangular metropolitan area.

Expected global environmental benefits to be produced by the project include: i) GHG emission reduction through innovative solutions and green infrastructure (Paris Agreement/NDC); ii) increasing the number of nature-based

solutions and area of peri-urban landscape; iii) improved access to financing for ecosystems and biodiversity conservation, as well as iv) effective management of land and ecosystem restoration in the triangular metropolitan area (Global biodiversity framework).

The specific components and their expected outcomes and outputs consist of the following:

Component 1. Enabling framework for municipal sustainable and green strategic development and urban planning

Outcome 1 Integrated and participatory cross-sectoral green city planning methods, mechanisms and practices effectively applied for the development of the triangular metropolitan area.

Output 1.1. A roadmap with recommendations for streamlining integrated inclusive green urban development into different local sectoral plans by also taking into account the current capacity constraints of the LSGs and with a goal to move towards incorporating national policy targets for smart climate resilient green city development.

Output 1.2 Enhanced capacity of the participating LSGs to transform national regulations, programs and targets to integrated and inclusive local level action for green city development. This includes but is not limited to: i) effectively operationalized systems for digital data collection and management (land use, mobility, biodiversity, buildings, energy (EMIS), emissions, waste), ii) strengthened human capacities and resources for data management, participatory planning and project preparation; and iii) streamlined institutional and sectoral co-ordination and co-operation.

Output 1.3 Socio-economic impact and livelihood analysis conducted with related recommendations and, as applicable, a Livelihood Action Plan with a specific focus on vulnerable groups potentially affected by suggested policy measures, plans and investments, as it concerns, for instance, improved waste management and advancing the circular economy approach.

Output 1.4 An integrated and inclusive green cross-sectoral development plan for the triangular metropolitan area covering all key areas and sectors supported by the project and considered as essential for transforming Serbian cities into smart, sustainable, low-carbon and climate resilient green cities. This shall also include the development of "Maps of Hope" leveraging spatial data to identify where nature-based actions can safeguard essential life support areas to maintain key biodiversity and ecosystem services. The data-driven approach works with available spatial data sources on nature, society, and economic variables, and develops action maps that reflect different balances across relative national priorities. Recognizing that there may be trade-offs between optimal biodiversity outcomes or social and employment impacts, the Maps of Hope approach allows stakeholders to place different weights on different outcomes to understand how alternative prioritization can change and what land use or nature protection and restoration actions are most appropriate for delivering objectives in a balanced way.

Output 1.5 Serbian Sustainable Cities Platform created as an online knowledge management and investment platform to support: (i) inter-institutional collaboration, (ii) transformative actions, (iii) development of local green plans and other related documents, (iv) mobilization and financing innovative green urban and nature-based solutions.

Output 1.6. Awareness raising and building of institutional capacities of the key stakeholders (national & local level), including development of online training platform on transformative approach for sustainable city development to be piloted in 3 cities and transferred to other medium sized cities in Serbia and region

Component 2. Integrated approach to unlock and scale up investments into citizens centered sustainable and smart city infrastructure, natural capital, ecosystem services and nature-based solutions

Outcome 2: New innovative and sustainable green city investments implemented with reported results

Output 2.1 Specific Challenge Call organized to source and support the implementation of innovative solutions that provide low-carbon, energy-efficient and circular economy based communal infrastructure and services.

Output 2.2 Specific Challenge Call organized to source and support solutions that maintain natural capital and ecosystem services and promote nature-based solutions in peri-urban triangular metropolitan area.

Output 2.3 Guidance and technical support provided through trainings, workshops and direct mentorship (Accelerator) for selected solutions – to support transformation of initial ideas into marketable businesses and products and structuring financing by blended financing for sharing the initial project costs and reducing the risks.

Output 2.4 Pilot investments supported to develop sustainable, resilient and smart communal infrastructure and services in the participating three cities by Performance-Based Payments Agreements, Innovation Awards, and other innovative financing schemes, as applicable.

Output 2.5 Pilot investments supported for maintaining and advancing natural capital, ecosystem services and nature-based solutions by Performance-Based Payments Agreements

Output 2.6 A Smart City Information System prepared to support management of smart/green city infrastructure.

Output 2.7 Monitored and reported results of the supported investment projects.

Output 2.8 Public outreach conducted to disseminate results and promote replication and scaling up, including possible city fairs and other opportunities for presenting and pitching the winning ideas.

As regards the selection of projects for GEF financial support under component 2, the primary complementary challenges to the ongoing baseline activities based on cities' needs will be selected and the detailed selection criteria finalized at the outset of project operations, but the tentative evaluation criteria will include the following:

- Innovation
- Alignment with the Sustainable Urban Development Strategy
- Multi dimension impact – covering several areas
- CO2 t saved per USD invested
- Contribution to climate change adaptation / Alignment with National Program for Adaptation
- Increase of recycling rates
- Contribution to biodiversity

and with the following exclusivity criteria:

- No physical displacement
- Use of biomass only from sustainable sources
- No activities in natural protected areas
- No use or transport of hazardous waste

Component 3. Knowledge management and replication of successful pilots

Outcome 3: Comprehensive analysis, reporting and sharing of the project results and lesson learnt nationally and internationally.

Output 3.1 Public awareness campaign organized, including information dissemination, examples of good practice published and disseminated (videos, social media, TV, papers, websites etc.)

Output 3.2 Sustainable City Partnership Initiative (association of cities and municipalities with green and sustainable vision) established and promoted, including organization of international, regional and national events to promote integrated city planning approaches. The Initiative will also disseminate project results, lessons learned and promote experience sharing and replication.

Output 3.3 Exchange of information with Global Platform for Sustainable Cities established and maintained (along with other cities of the Sustainable Cities, joint trainings, organizing site visits).

While the project duration for replicating and scaling up supported investments during the project implementation is likely to be too short, the goal is to conduct activities that can support and facilitate their replication and scaling up after the project end, and thereby can also be considered as consequential impact of the project. The detailed activities supporting this may include, among others:

- Organizing site visits to successful green cities projects in other urban areas. This allows local stakeholders to see firsthand how these solutions work and their benefits;
- Conducting workshops and seminars to educate urban planners, policymakers, and community members about principles, design, and implementation of green urban development;
- Offering training programs and courses for local professionals, such as architects, engineers, and landscapers;
- Providing support for identifying and accessing funding sources, including grants, loans, and public-private partnerships;
- Ensuring that a system is in place for monitoring the performance of the supported projects and to evaluate their impact on urban sustainability and resilience.

- Fostering collaboration between various stakeholders, including government agencies, NGOs, academic institutions, and businesses, to leverage resources and expertise.
- Advocating for the integration of supported measures into urban planning and development policies at the regional and national levels.
- Benchmarking – comparing project results with those in other cities to identify areas for improvement and innovation.
- Facilitating otherwise knowledge exchange between cities, regions, and countries to share successful strategies and solutions

As regards biodiversity and NbS related knowledge management in particular, the project will capture lessons learned through UNDP's portal "Learning for Nature," (www.LearningForNature.org), which currently has more than 80,000 policy-relevant learners from more than 190 countries. The portal is UNDP's premier site for promoting learning on nature-related topics, including climate resilience, nature-based solutions, spatial planning – and more than 175 other course offerings. Specifically, UNDP would develop a micro-site to share all of the details of methodologies used in the project and will develop a stand-alone micro-course as an independent tutorial for the site. Some courses in the past, such as ecosystem restoration, have attracted more than 10,000 to 15,000 learners each.

Resources Required to Achieve the Expected Results

To achieve the expected results of this project, a range of resources is essential. Key inputs include dedicated UNDP staff at the country, regional, and HQ levels, government personnel, and expert consultants in areas such as legal, financial, and gender analysis. Adequate project funding will cover operational costs, workshops, surveys, technical assessments, system upgrades, and stakeholder consultations. Strategic partnerships with government agencies, civil society organizations, educational institutions, and the private sector will facilitate policy alignment, community engagement, and capacity-building activities.

Partnerships

The key partnerships of the project include those already outlined in the previous chapter with a brief summary in table 1 below.

Table 1. Key partnerships of the project

Name of the entity	Envisaged role in project implementation	Timing of engagement and methods
Ministry of Environmental Protection	The project implementing partner, including the daily management of project activities, ensuring timely implementation of these activities and reporting on the achieved results. Coordination of work with other entities engaged as project partners and across various Government counterparts. The MoEP is also responsible for environmental protection, circular economy, industrial emissions, waste and wastewater management and climate change related issues in general, including related legal and regulatory framework. It is also the Government entity in charge of financing green investments from the Government budget and supporting investments in environmental infrastructure at the local level. The MoEP will provide the required financial resources to ensure sustainability of project interventions upon the project closure.	From the beginning of the project Meeting, email, phone, workshops
Ministry of Finance	A key stakeholder for the establishment of any new financial support mechanisms. The role of the Ministry of Finance in the project is to ensure that financing mechanisms, such as Innovation Awards and Performance-based Payment Agreements, are gradually integrated into the Government budgeting and financing framework. The Ministry of Finance also approves budget plans and expenditures for other governmental entities, including resources to be used as co-financing for any Government co-financed projects.	As needed Meeting, email, phone
Ministry of Construction, Transport, and Infrastructure	The key ministry for ensuring that city planning incorporates sustainable practices, energy-efficient infrastructure and resilient urban development to mitigate climate change impacts, but also to support sustainable and circular	From the beginning of the

	principles. The Ministry is responsible for the implementation of the Sustainable Urban Development Strategy and the Strategy for Fostering Investment in the Renovation of the Building Stock. The Ministry is responsible for developing and promoting sustainable transport system to reduce carbon emissions and enhance mobility. Therefore, the Ministry is implementing LIID project, co-financed by the World bank and AFD, to promote sustainable urban development investments in Serbia and to improve the capacity of all 145 Serbian LSGs to develop and manage green, inclusive and climate resilient sustainable mobility infrastructures.	project Meeting, email, phone, workshops, press releases
Ministry of Mining and Energy	The Ministry of Mining and Energy has introduced the energy management information system (EMIS) in local self-governments as a tool supporting the energy management system in public and commercial buildings. The system is intended primarily for monitoring and analysing data on consumption and costs of energy and water in public buildings under the responsibility of local-self-governments, the province and the national level, but this concept design is flexible which enables it to be used with equal success also for buildings which are the responsibility of other institutions and organizations, indirect budget beneficiaries, commercial buildings and public enterprises. Every year, the Ministry allocates funds for increasing energy efficiency in public buildings and in households, through public calls for local self-governments. In 2023, energy efficiency measures were done in 10,000 households, in 131 local self-governments, with the total value of 17 million USD. The Ministry is also the Managing Authority for the Operational Programme Environment and Energy 2024-2027 with a planned 240 million EUR investment support.	From the beginning of the project Meeting, email, phone, workshops, press releases
Local Self-Governments of Belgrade, Novi Sad and Zrenjanin	Cities of Belgrade, Novi Sad and Zrenjanin have undertaken projects and initiatives aimed at promoting sustainable and advancing the green city concept. Cities have dedicated energy managers and an Energy Management Information System, but further consultations are required on how to effectively operationalize them together with other required data management systems essential for green city development. Cities are also developing recycling infrastructure and implementing public awareness campaigns to encourage waste segregation and recycling. Cities are constantly expanding network of dedicated cycling lanes to promote cycling as a sustainable mode of transportation. Also, cities are investing in the development and maintenance of urban parks and green spaces, which are expanding really fast. Construction and upgrading wastewater treatment facilities to improve water quality and reduce pollution in rivers and water bodies are key priorities of three cities. Strategies and plans developed are aligned with national and climate goals.	From the beginning of the project Meeting, email, phone, workshops, trainings, press releases
National Academy of Public Administration (NAPA)	The National Academy of Public Administration is the central institution of the system of professional development in public administration of the Republic of Serbia, with the status of officially recognised organiser of informal adult educational activities. To be consulted when preparing the training materials with the aim to certify the training materials and ensure sustainability.	As needed Meeting, email, phone, trainings
State hydrometeorological service	Collecting and managing various climate related data	As needed Meeting, email, phone
Provincial Secretariat for Urbanism and Environmental Protection	Support for the promotion of project results and engagement with stakeholders	As needed Meeting, email, phone, workshops, trainings, press releases
Provincial Secretariat for Energy, Construction and Transport	Support for the promotion of project results and engagement with stakeholders	As needed Meeting, email, phone, workshops, trainings, press releases

The Administration for Joint Services of the Republic Bodies (UZZPRO)	This is a Government entity that is in charge of management of all public buildings under the authority of the Central Government. Their particular role may be of importance in case that some of the selected innovative solutions can be applied in government building which can have significant scale-up effect.	As needed Meeting, email, phone
PPP Commission	Responsible for the promotion and approval of each PPP project. To be engaged for the approval of solutions based on PPP approach, as well as for the promotion of good practice.	As needed Meeting, email, phone, workshops
Other cities	Knowledge transfer and engagement with the Sustainable City Partnership Initiative. Users of the Sustainable Cities Platform and of the online training platform.	As needed Meeting, email, phone, workshops, trainings
Private sector	The private sector (including companies and industries) is recognized as one of the key beneficiaries of the project with significant potential for leveraged financing for green investment projects. The private sector will engage as the proposer of innovative solutions in challenge calls, as well as service and works provider for their implementation.	As needed Meeting, email, phone, workshops
Standing Conference of Towns and Municipalities (SCTM)	A representative of the Serbian municipalities and a key project partner to support the introduction and implementation of project related activities at the municipal level with the related outreach, networking, co-ordination and training activities through its working committees. Host for the Sustainable Cities Platform. Also participating in the legal and regulatory work by reviewing and commenting draft regulations and assisting Local Self Governments (LSGs) to prepare local supporting policy documents of relevance to the project. SCTM has developed a methodology for climate change adaptation planning at the local level.	From the beginning of the project Meeting, email, phone, workshops, trainings
National Alliance for Local Economic Development (NALED)	As an organization that brings together representatives from the public, private and civil sectors, NALED advocates for the promotion of sustainable development, with focus on overcoming obstacles such as skills shortages, infrastructure and technological deficiencies. The Alliance is very active primarily of a better policy of eco-taxes and fees, management of packaging waste, food waste and special waste streams, to switch from a linear to circular economy.	As needed Meeting, email, phone, workshops, trainings
Chamber of Commerce and Industry of Serbia	Envisaged project partner for engaging and advancing the green city agenda within the private sector, including knowledge management, capacity building and training. The Chamber has carried out numerous activities related to the green transformation of the Serbian economy, by different departments.	As needed Meeting, email, phone, workshops, trainings
Academic Institutions	Academic institutions such as University of Belgrade and University of Novi Sad have been engaged in preparation of strategies and programmes related to climate change, urban planning, green infrastructure and waste management on national and local levels. Universities have a research project on sustainable urban development, including energy efficiency, waste management, green infrastructure, construction, forestry. In addition, academic institutions collaborate with the private sector fostering partnerships that enhance the planning and implementation of sustainable projects.	As needed Meeting, email, phone, workshops
World Bank	The World Bank, in cooperation with the Ministry of Construction, Transport and Infrastructure and supported by the Swiss State Secretariat for Economic Affairs (SECO), initiated the Green, Livable, Resilient Cities in Serbia Program to strengthen sustainable and resilient urban development of selected 10 cities in the country. Through the technical assistance selected cities receive support with planning and implementing sustainable, low-carbon and resilient urban development programs, while providing the national government with policy recommendations and suggested actions to facilitate the implementation of Serbian Sustainable Urban Development Strategy. The World Bank also provides a loan of USD 300 million to support Serbian local self-governments to manage sustainable infrastructure, promote equitable growth and facilitate the	As needed Meeting, email, phone, workshops

	green transition. Also, the World Bank in partnership with the Ministry of Mining and Energy is implementing Scaling-Up Residential Clean Energy (SURCE) Project, providing support for the uptake of energy efficiency, sustainable heating, and rooftop solar photovoltaics (PV) by households.	
Swiss State Secretariat for Economic Affairs (SECO)	SECO 's activities aim at strengthening the municipal capacities to manage climate-resilient and inclusive urban development, and to increase energy efficiency and decarbonisation of energy sector. Under this portfolio of projects SECO is striving to strengthen municipal capacities to sustainability plan, implement and manage climate-resilient and inclusive urban development. The European Energy Award will be continued and further support energy management capacities of municipalities. The second focus of SECO's project is on decarbonisation of the district heating sector with the introduction of solar, thermal and innovative technologies and biomass.	As needed Meeting, email, phone, workshops
European Investment Bank (EIB)	EIB, as EU climate bank, supports sustainable connectivity and the green and digital transition in Serbia, investments in the inland waterway network. Under the project "EU for Green Agenda in Serbia", together with EU, UNDP, Sweden and SECO, EIB is supporting green innovations in Serbia and the energy transition of the economy.	As needed Meeting, email, phone, workshops
EBRD	The EBRD is implementing Circular Economy Regional Initiative (Near Zero Waste), which is a GEF funded initiative that includes Serbia and other countries of the Western Balkans. The objective of the project is to catalyse and scale up of circular economy initiatives by addressing barriers to investments in circular economy technologies and processes, and adoption of circular economy strategies and business practices. In addition, the project will cooperate with the EBRD's "Green Cities facility. Under EBRD Green Cities, the Bank works with municipalities to assess and prioritise environmental challenges and develop an action plan to tackle these through sustainable infrastructure investments and policy interventions (for example Belgrade and Novi Sad) The EBRD helps to improve transport links (Novi Sad) and municipal services, such as water, wastewater, solid waste and public transit, through a combination of investments, policy advice and technical assistance. EBRD, in cooperation with the World Bank, also unlocked private-sector funding for infrastructure projects, including facilitating PPP for the Belgrade Solid Waste project.	As needed Meeting, email, phone, workshops
Delegation of the EU in Serbia	The EU is providing Economic and Investment Plan for the countries of the Western Balkans to support ambitious Green Agenda for the Western Balkans, including Serbia. This programme will secure additional financing for green transition of public and private sector and industries. One of the core elements of this initiative is to decarbonize the economies of the West Balkan countries. To achieve this, circular economy, air quality and biodiversity have been recognized as the priority areas for intervention. The project will seek synergy with the EU funded initiative on Green Agenda, in particular in identification, acceleration and co-financing of concrete decarbonization solutions based on principles of circularity.	As needed Meeting, email, phone, workshops
GIZ	The GIZ is one of the international development agencies operating in Serbia at the national but also at the municipal level. Projects supported by GIZ contribute to improvement of policies but also support the development of local environmental infrastructure and smart cities, such as in case of municipal waste and wastewater management. The project will build partnership with the GIZ funded activities at the municipal level to ensure synergy and multiplication of effects on the state of environment, lowering emissions and improving waste recovery, reuse and recycling. The project will build upon this partnership when providing further policy support to the Government and LSGs. Furthermore, the GIZ is supporting mainstreaming gender equality and social services on local level.	As needed Meeting, email, phone, workshops
NGOs	Possible areas for co-operation to be clarified further with NGOs and related initiatives such as: • European Movement in Serbia • National Convent on the EU • Environmental Ambassadors for Sustainable Development • RES Foundation • Heinrich Böll Stiftung – Representation Belgrade	As needed Meeting, email, phone, workshops

	• European Center for Regional Cooperation • Centre for Ecology and Sustainable Development • National Association for Local Economic Development (NALED) • Cirekon (Circular Economy oriented CSO) • Environmental Engineers • Belgrade Open School • Yurom Center from Nis – organization for the protection of Roma people rights and their active involvement in the society • CSO Standing Conference Roma Citizens Association (SKRUG) – League of Roma	

In addition to the partnerships listed above, private sector entities are absolutely critical to the project as initiators, implementers and financiers of new business ideas that will support the transition towards sustainable and green communities in Serbia. Therefore, the project will actively engage and consult with the private sector in developing an enabling policy framework, as well as involve them as key beneficiaries of the Smart City Information System (SCIS), which is foreseen to continue operating beyond the project's duration. The Innovation Challenge Calls and the Performance-based payments are specific UNDP solicitation and financing modalities to engage the private sector in formulating and implementing innovative solutions to pressing development (social & environmental) challenges. To ensure sustainability, the project will support the Government (namely the MoEP and the Ministry of Finance) to formulate new mechanisms that can continue to identify and finance such solutions in the long term, without direct UNDP involvement. The new Government-led mechanism will also consider blending of funds, green borrowing schemes and innovative financing instruments such as the green bonds, ESCO-based financing and green guarantees.

The environmental and climate change related policies and strategies in Serbia fall under the jurisdiction of the Ministry of Environmental Protection (MoEP). Co-ordination between different government entities is ensured by intersectoral bodies such as the National Climate Change Council, the Working Group for Circular Economy and the Working Group for SDGs implementation. Within the MoEP, the Group for Circular and Green Economy and the Department for Waste Management have been specifically assigned to deal with circular economy related issues. Furthermore, given the cross-sectoral nature of green city development, the project needs to engage and closely co-operate with Ministry of Construction, Transport, and Infrastructure and the Ministry of Mining and Energy. The latter is particularly important for effectively operationalizing and revitalizing the Energy Management Information systems at the level of LSGs, which to large extent is currently neglected despite of significant previous support provided also by the GEF to advance EMIS and energy management in Serbia. Although under the jurisdiction of different ministry, its integration is a critical component of green city development within the scope of this project.

To effectively raise awareness and build capacity, the project will collaborate closely with the Chamber of Commerce and Industry of Serbia and its departments.

Special attention will be given to communication with expert community. Due to the technical complexity of the project, the project results will be presented at expert conferences and workshops organized by professional organizations such as Chambers of Commerce, National Association for Local Economic Development etc. The involvement of the Serbian Chamber of Commerce, as well as the National Association for Local Economic Development (NALED) and the Chamber of Engineers will ensure that project related information is broadly disseminated among the business community while participation of the Standing Conference of Towns and Municipalities will ensure commitments and contribution of the local self-governments.

Risks and Assumptions

The project risks are discussed in greater detail in Annex to this project document. As per the standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of the risks to the UNDP Country Office. The UNDP Country Office will record progress in the Quantum risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual PIR.

Stakeholder Engagement

The Stakeholders Engagement Plan maps out two groups of stakeholders related to the project:

- Affected parties, who are impacted or likely to be impacted directly or indirectly, positively or adversely, by the Project.
- Interested parties who may have an interest in the Project. They include individuals or groups whose interests may be affected by the Project and who have the potential to influence the Project outcomes in any way.

Under Component 1 for Integrated and participatory cross-sectoral green city planning methods, mechanisms and practices effectively applied for the development of the triangular metropolitan area, stakeholder engagement will be made with the targeted local governments, ministries, NGOs and communities. The activities include conducting the socio-economic impact and livelihood analysis and a livelihood action plan with a specific focus on vulnerable groups. Within this component an integrated and inclusive green cross sectoral development plan for the triangular metropolitan area will be prepared, as well as a Serbian Sustainable Cities platform as on online knowledge management platform. The platform will support (i) inter-institutional collaboration, (ii) transformative actions, (iii) development of local green plans and documents, (iv) mobilization and financing innovative green urban and nature-based solutions. Finally, awareness raising and building of institutional capacities of the key stakeholders (national & local level), including development of online training platform on transformative approach for sustainable city development to be piloted in 3 cities and transferred to other medium sized cities in Serbia and region. Especially important for achieving the set targets and impact for this components is also to engage the key stakeholders for further consultations about the current capacity constraints and other barriers the LSGs are having in fully integrating new data collection and management systems such as EMIS into their operations or transforming different national level laws, regulations, programs and targets to advance sustainable green city development into local level action, and how these capacity constraints and barriers could be effectively overcome with joint Government and project support.

Component 2 - Integrated approach to unlock and scale up investments into citizens centered sustainable and smart city infrastructure, natural capital, ecosystem services and nature-based solutions will engage with a number of stakeholders by launching specific challenge calls and providing trainings, workshop and mentoring for selected solutions.

Component 3. Knowledge management and replication of successful pilots will focus on engaging with all relevant stakeholders by conducting a public awareness campaign, the establishment of the Sustainable City Partnership Initiative (association of cities and municipalities with green and sustainable vision) and exchange of information with Global Platform for Sustainable Cities established and maintained (along with other cities of the Sustainable Cities IAP, joint trainings, organizing site visits)

Table 2: ***List of affected and other interested stakeholders***

No	Component	Affected parties	Areas of interest	Other interest parties
1	Component 1 - Integrated and participatory cross-sectoral green city planning methods, mechanisms and practices effectively applied for the development of the triangular metropolitan area	Ministry of Environmental Protection Three cities CSOs, including those representing vulnerable groups addressed by the SESP and the ESMF Standing Conference of Towns and Municipalities NALED National Academy for Public Administration Consultants	Preparation of integrated and inclusive green cross sectoral development plan for the triangular metropolitan area Socio-economic impact and livelihood analysis Sustainable Cities Platform Online training platform on transformative approach for sustainable city development	Ministry of Construction, Transport and Infrastructure, Ministry of Mining and Energy Universities Donors and projects
2	Component 2. Integrated approach to unlock and scale up investments into citizens centered sustainable and smart city infrastructure,	Ministry of Environmental Protection Three cities Citizens Consultants	Challenge call to source and support the implementation of innovative, digital and other types of solutions that provide low-carbon, energy-efficient and circular economy based communal infrastructure and	Ministry of Finance Other cities PPP Commission Chamber of Commerce and Industry

	natural capital, ecosystem services and nature-based solutions	Private sector Academia IT solution providers Managers of protected areas	services Challenge Call organized to source and support solutions that maintain natural capital and ecosystem services and promote nature-based solutions Smart City Information System to support management of smart/green city infrastructure Transfer of experience from innovative financing for pilot investments	Commercial banks SCTM Universities Donors and projects
3	Component 3. Knowledge management and replication of successful pilots	Ministry of Environmental Protection Cities Consultants	Public Awareness Campaign Involvement in the Sustainable Cities Partnership Initiative Exchange of knowledge and experience within the Global Platform for Sustainable Cities	Citizens Cities outside of Serbia Donors and projects

Other interested parties

Besides stakeholders that are affected by the project, main groups of stakeholders interested in the sustainable cities are Civil Society Organizations (CSOs) including international NGOs, academia, and the donor agencies. The list of affected and other interested stakeholders will continue to be updated during the project implementation.

Vulnerable groups

As there is risk, that some policy and other measures the project is advocating may have social impacts on disadvantaged or vulnerable groups, a socio-economic impact and livelihood analysis and, as applicable, a Livelihood Action Plan with a specific focus on vulnerable groups potentially affected by suggested policy measures, plans and investments, as it concerns, for instance, improved waste management and advancing the circular economy approach has been included among the project outputs and activities. As part of the alignment with the EU acquis, Serbia will need to increase the rates of recycling. The increase of recycling rates in the formal waste streams can have a negative impact on the revenues of informal waste collectors. As defined in the GIZ publication "A Road Map for Integration – Inclusion of informal collectors into the evolving waste management system in Serbia[2]": *"An informal collector is a natural person who is not officially employed as a worker, nor part of a registered waste or recycling enterprise. A collector working as a self-employed person or as an individual or family enterprise extracts valuable materials found in waste and sells them to a junk shop (recycling shop, buyer) at the lowest (semi-)formal level of the value chain. The majority of Serbian collectors of secondary resources are Roma, and work full-time to support their families by collecting. A minority of collectors, estimated at around 20% of all those collecting, come from other ethnic groups including Serbs. These non-Roma collectors are generally older, and are generally collecting aluminium cans or cardboard in order to supplement salaries or pensions".*

The pilot investments the project is planning to support could also lead to the reduction of recyclable materials available for collection and thus impact the income of the marginalized and vulnerable groups involved in informal waste collection. The project design foresees measures for minimizing economic displacement as outlined in the ESMF. There is already a number of options and proposals for the integration elaborated by different donors, such as the GIZ or UN agencies. The already mentioned GIZ publication also provides recommendations for such integration.

The assessment and selection of new innovative approaches under the UNDP project for waste management will include screening of experience from previous attempts and providing the opportunity for piloting new ideas. These approaches could include options for the formalization of groups involved in collection of recyclables in order to assure that their work is formally recognized as part of the value chain, thereby providing an opportunity for social security and stable income. The focus here beside supporting policy changes and other related measures will be on education of the Roma people and increasing their opportunities on the job market. The activities such as organization of trainings for obtaining qualifications for the job market or support for obtaining the elementary school diploma (as a precondition for employment in public utility companies) will be supported.

[2] https://www.giz.de/en/downloads/GIZ_A_Road_Map_For_Integration_online_LiNKS.pdf

The project will ensure continuous engagement with the representatives of the three cities. In addition to the contact person for each city nominated by the mayor, the project will establish a network of counterparts in the relevant departments of the city administration and relevant public utility companies. Depending on the internal organization and preference, the cities can organize an internal project related working group for easier communication.

The support within Component 1 will be tailor made. Based on the initial analysis of needs, the project will approach the relevant departments to offer policy advise combining policy advice, trainings and coaching. Within Component 2, the representatives of the three cities will be consulted about the specific needs and challenges to be addressed by the innovative solutions. The invitations for proposals will be coupled with information sessions in all three cities.

Within Component 3, the three cities will be invited to share their experience, engage and co-host training, peer exchange and awareness raising events.

South-South and Triangular Cooperation (SSC/TrC)

As regards global outreach and "south-south" co-operation, project will explore opportunities for meaningful participation in specific global and regional events where UNDP could support engagement with the global development discourse on advancing green city agenda. This will also be supported and facilitated by the learning and knowledge-sharing activities of the GEF-8 Sustainable Cities Integrated Program's global platform by targeted city learning, international expert meetings and global workshops.

Digital Solutions

As discussed already in the previous sections, digital solutions can significantly enhance the effectiveness of green and sustainable projects by improving communal services and encouraging greater citizen participation. By leveraging digital technologies, cities can achieve greater transparency, reduce resource consumption, and create a more participatory approach to urban development. Some digital solutions that cities can adopt are:

- Smart Management systems for communal services such as smart bins equipped with sensors that can monitor fill levels in real time, optimizing waste collection routes and reducing fuel consumption and emissions from waste collection trucks; smart water meters and sensors to detect leaks, monitor water quality and reduce water wastage; smart street lightening, tracking energy consumption of public building owned by cities through EMIS and other similar systems;
- Smart management systems for nature – based solutions and green spaces such as using GIS and remote sensing technologies to improve existing maps and monitor green spaces, urban forests and biodiversity;
- Digital twins including improving data collection and management;
- Updating local climate smart urban development platform developed under the GEF6 funded project "Climate Smart Urban Development Challenge", managed by the MoEP that can be used for better urban planning;
- Digital Platforms for participatory planning such as improving existing and developing new online platforms for some cities to involve citizens in urban planning process, such as participatory budgeting, green space design and public consultations on sustainability projects.

Knowledge

For knowledge management, the project will build on an "Open Knowledge" approach by publishing all project related documentation, presentations, training materials and supported new project and business initiatives in the Serbian Sustainable Cities Knowledge Sharing Platform, unless there is a specific reason for not doing so in order to protect, for instance, some intellectual property rights or commercially sensitive information. This applies also to the project terminal evaluation, which similar to all GEF financed UNDP implemented projects, will be available for downloading from the public UNDP website: web.undp.org/gef/evaluation.shtml.

Development of the Serbian Sustainable Cities Platform (SSCP) has been included as Output 1.5 in the project strategy to serve as an integrated online knowledge management and investment platform to support: (i) inter-institutional collaboration, (ii) transformative actions, (iii) development of local green plans and documents, and (iv) mobilization and financing innovative green urban and nature-based solutions. While taking full advantage of the available IT opportunities, the activities implemented within this framework will also encompass online training platform on

transformative approach for sustainable city development to be piloted in 3 cities and transferred to other medium sized cities in Serbia and region.

The initial version of the Circular Economy Navigator as a part of the SSCP is sought to be established by the end of the first year of project implementation with continuing further development, upgrading and updating throughout the project implementation. The day-to-day management and updating of the content of the SSCP will be done by the staff of the Project Management Unit (PMU) supported also by the MoEP. The project's KM and related implementation strategy also includes workshops to provide an opportunity at regular intervals to present and discuss project results and further plans with the key stakeholders.

To ensure sustainability, the project-based SSCP will be transformed into the Sustainable Cities Knowledge Hub, linked with the webpage of the Standing Conference of Towns and Municipalities (SCTM), and supported also by the Project Implementing Partner (MoEP) and the cities of Belgrade, Novi Sad and Zrenjanin. As such, it will become a central tool for further dissemination of the good practices and lessons learnt of public and private enterprises piloting sustainable and green urban and peri-urban projects and solutions. This will be complemented by an online training platform targeting key policymakers and company managers to build their knowledge on the main sustainable urban development related policy and legislative trends and achievements at the national, EU and global level, and to enhance their capacity to respond to the increasing demand for resource efficient low-carbon CE solutions in combatting climate change and other environmental challenges. The training platform will be an integral part of the SSCP and will be implemented by UNDP, in co-operation with the Project Implementing Partner, the SCTM and the National Academy for Public Administration.

The project is building on the methodology and tools already successfully tested by the Climate Smart Urban Development (CSUD) project in Serbia" (GEF ID: 9342)) and Reducing Community Carbon Footprint by Circular Economy Approach in Serbia (GEF ID: 10425). These tools include innovation challenges and performance-based payments to blend and leverage funding for climate resilient urban development solutions, a new type of partnership with the private sector, multi-stage evaluation of proposals with strong ownership of national counterparts as well as incubation/acceleration type of technical assistance and mentoring provided to the project teams. The SSCP builds on the good experiences of the KM platform established as a part of the CSUD project and The Low Carbon Communities Innovation Platform (LCCIP) to facilitate interaction between the cities and communities, research institutions and companies (both public and private) in order to produce new innovative low-carbon, green and sustainable project ideas and business solutions.

For learning from corresponding initiatives in other countries and for ensuring that the latest global knowledge, best practices and technological developments can be considered in further development and implementation of project activities, the project shall link up with the Global Platform for Sustainable Cities (GPSC) (https://www.shiftcities.org/about) set up in the frame of the GEF 6 and GEF 7 Sustainable Cities Impact Programme. The core project team will also be supported by a coaching team composed of a network of international research institutes and professionals, who may provide technical backstopping and share knowledge on the latest international developments in their particular field e.g. as invited speakers or other contributors to the events organized by the project.

The project also seeks to both benefit from and contribute to the GPSC, which serves as a knowledge platform where participating cities can tap the cutting-edge knowledge and expertise in sustainable urban planning, and exchange ideas and share experiences. In this sense, the project will work with the GPSC to carry out joint activities and knowledge sharing to incorporate the use of geospatial data and tool to monitor the changes in the urban setting (e.g. growth of green infrastructure and green corridors), tools for integrating urban planning and development of urban sustainability plans and strategies, to operationalize expertise on public-private partnerships, to enhance opportunities for exchange of experiences between the public and private sectors in order to attract private sector involvement, especially in developing and implementing NbS and ecosystem services. Collaboration with the GPSC will be extremely important for participating cities and their public utility companies, urban planning departments, nature conservation and environmental protection agencies and managers of protected areas.

All new initiatives presented at the SSCP will be given a specific ID code and a card, by which the progress of each pilot initiative can be monitored, and the experiences and lessons learnt from them recorded. Each ID card will consist of two parts. One part will be available only to the Implementing Partner and UNDP for internal monitoring purposes (incl. financial monitoring), while the other part will include publicly visible data about the project and the lessons learned from their implementation. The project team will also monitor and prepare specific progress reports for each supported pilot initiative, while also preparing visual materials such as videos to document different stages of their development and implementation.

Targeted stakeholders will be primarily engaged through bilateral discussions as well as by organizing at least one or two larger consultative knowledge management workshops, where the project intermediate results and further implementation can be presented for and discussed with a broader audience. For this purpose, the project will also establish a "Community of Practitioners" which will have its dedicated webpage on social media to exchange information and communicate with other interested stakeholders.

The new urban green initiatives sourced by the Innovation Challenge are sought to be further elaborated with stakeholders such as the SCTM and NALED, so that they can continue to identify and disseminate innovative decarbonization technologies even upon the completion of the project. It is expected that this will boost the innovation capacity of domestic enterprises in the field of green technologies, resource efficiency and ecosystem services by linking them to local R&D service providers. Participation of the research institutions is equally relevant as they will ensure promotion and testing of new technologies based on their research work and collaboration with other research institutions globally.

The SCTM will support the matching of local self-governments with the innovators and facilitating the application of appropriate innovative green and sustainable solutions at the local level. The SCTM will also include dissemination of lessons learned, knowledge and examples of good practices, sourced through the project, among interested municipalities.

The SSCP and e-training platform will be compiled into one easily accessible online platform. All knowledge materials generated by the project, including the training materials, data and reports with lessons learned from the new pilot initiatives, draft regulations and their updates, good practices and lessons learned will be available for any city and municipality, public and private company, national, provincial or local institutions, scientific community or interested individuals seeking to better inform themselves on green urban solutions and its decarbonization potential in Serbia.

As a summary from what has been discussed already earlier in this chapter, the knowledge outputs to be produced and shared with the stakeholders will include, among others, the following:

- The Serbian Sustainable Cities and online training Platform (SSCP) to facilitate open online access to all KM materials produced by the project as well as links to other related KM services (GPSS);
- A virtual marketplace included within the SSCP to compile and share information for: i) marketing of new innovative business ideas and projects; and ii) finding suitable implementation and financing partners for them;
- Specific match-making and training events to facilitate face-to-face contacts and discussions together with associated training materials stored and published also online;
- The progress, monitoring and evaluation reports of the pilot initiatives supported by the project as well as the overall project final report and terminal evaluation; and
- Videos and other visual presentation materials of the pilot initiatives

For all knowledge products, the support of a gender expert will also be used in order to incorporate gender specific considerations into them at a required level.

The project will support the implementation of open monitoring, information and knowledge management as well as broad community engagement and participation in the preparation and updating of key policy documents under Outcome 1. This will be done by a highly participatory approach, thereby seeking to improve the transparency and accountability of local governance, opportunities for public participation in decision making and development of people's living environment. In this way, the project will make sure that all findings and good results obtained during the acceleration and implementation phase are captured and used to inform the policy creation/amendments.

The Implementing Partner will also make sure that all successful results arising from the acceleration and implementation phases, as well as examples of good practice, are captured and used to feed policies and decision making. For this purpose, the MoEP as Implementing Partner will form an inter-ministerial Working Group comprised of all relevant national, provincial and local authorities. These working groups will closely follow the implementation of the project and use the results for informed decision making and policy creation/amendments.

The project will also support the processes of mainstreaming human rights issues through its design and activities by a clearly defined human-rights based approach. This action will also support the right to information and will aim to reflect the views of various stakeholders, including minorities and marginalized groups.

Innovation

The project includes several innovative elements both in Serbia and in the global context by supporting the transition of Serbia cities into in sustainable, nature-positive, and resilient green cities. It will create a new type of platform for closer interaction between the Government, local communities, companies, financing entities and research institutions in advancing the green city agenda in Serbia, thereby contributing also to the related policy development by considering the findings of the scientific community and the feedback from the private sector.

Innovative pilot solutions can range from technological advancements to novel governance approaches and community engagement strategies, such as smart infrastructure, advanced materials, digital twins, new urban design and planning approaches (NbS), big data analytics, GIS and spatial analysis, urban living labs.

On the financing side, the project will explore new green funding schemes and provide a platform for blended financing for combining different financial sources from bilateral donors, private sector and other international sources such as EU IPA and multilateral funds. By the support of such a platform, applying different incentive, risk sharing and co-funding instruments in an innovative and flexible way still presents a novel approach to project financing in Serbia and would make the targeted investments and related business development more attractive also to the private sector. The innovation challenges combined with performance-based payments (PBPs) will be an elementary part of this initiative as a method for sourcing new project and business ideas as well as exploring the use of new financing modalities such as crowdfunding (with or without the PBPs) in financing green city investments.

Sustainability

The project has been designed to create an enabling framework for a sustainable city by enhancing inter-institutional and inter-sectoral coordination, improving policy and regulatory instruments, strengthening dialogue and collaboration.

For sustainability, the supported pilot initiatives must offer both long and short term "win-win" opportunities, including environmental, economic and, when applicable, social ones. Realistic cost-sharing opportunities for project owners and other key stakeholders will be considered from the very beginning together with the engagement of the private sector. The GEF contribution is limited to a maximum of 50% of the total investments depending on the project type, which can be considered as a reasonable cost-sharing ratio for de-risking new innovative project and business ideas not tested before without over-subsidizing them, while also ensuring that the supported projects have an adequately healthy financial basis and risk profile.

As regards the sustainability of the proposed challenge-based financing mechanism, the Ministry of Environmental Protection continues to look for new financing vehicles, which would facilitate partnerships with the private sector, in particular in the waste industries, and to move away from direct subsidies towards blending of funds and leveraging private capital. After being initiated by the GEF project, the proposed challenge-based financing mechanism shall become a part of the new Green Fund of the Ministry of Environmental Protection/Government together with a variety of other financing instruments that can be used for supporting environment and climate infrastructure/project investments. In other words, the Ministry can take the proposed challenge-based financing mechanism over and continue to manage and implement it also after the GEF project.

Capacity building will enable cities and other project partners to improve their capacities for planning, implementing and monitoring of urban, green, adaptive and sustainable urban and peri-urban growth through training tailored to the specific needs of stakeholders, information management to facilitate information and knowledge sharing. Collaboration with the GPSC will ensure that the most up to date knowledge and international expertise on urban sustainability and resilience is available to the project partners in building the new capacities.

Potential for scaling-up

The potential for scaling up will be among the key criteria when evaluating the proposals submitted to challenge calls. The required framework for this is provided by the Serbian Urban Development Strategy identifying the challenges and opportunities for cities' green transition in a broader national context, while also identifying and highlighting tangible actions (through the challenge call and otherwise), which could be easily implemented, replicated and scaled up from the economic and commercial point of view. Rather than preparing any policy documents or programs as simple civil servant or consultancy work, the aim of the project is to support a truly consultative and participatory process by bringing different stakeholders together to discuss and work on concrete actions that are required to accelerate the process of green transition of Serbian cities. As a part of this process, the awareness of key decision-makers and their trust on the benefits and opportunities in moving towards that direction at the community level can be built also in general.

The green transition will be further enabled and encouraged by assisting the national government or the LSGs in drafting new legislative and regulatory acts to remove the identified barriers and by facilitating the transfer of the knowledge and experience gained during the project by using public media, seminars, workshops and other already existing communication and co-operation platforms. Given the foreseen interest of several GEF program countries in similar activities, the materials developed, and the results and lessons learned during the project are expected to be of direct interest also to them. The rapidly growing international recognition of the importance of cities' green transition as key means to combat the global environmental and social challenges is likely to give a further boost for scaling up the project impact.

IV. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

As a child project of the World Bank led global GEF-8 Sustainable Cities Integrated Program, the project strategy is building on the experiences and lessons learnt from the previous GEF-6 and 7 Programs, including better alignment between technical assistance and investment, greater partnership and private sector involvement, and a stronger global influence over the urban sustainability agenda, thereby contributing to the overall cost efficiency and effectiveness of the Program.

As reflected in the GEF-8 Program Framework Document (PFD), the experience has also shown that it is critical to streamline technical assistance (TA) type of activities into downstream investments, thereby providing comprehensive support throughout the urban development value chain, from knowledge to financing. While the same approach was adopted already in the previous GEF supported stand-alone national Climate Smart Urban Development (CSUD) and Circular Economy (CE) projects in Serbia, the global framework of the Sustainable Cities Integrated Program will further support the cost-efficiency and effectiveness of the Serbia Child project by direct access to knowledge, experiences, expertise and tools provided by the global program and from the other countries participating it, thereby bringing expanded cost-effective opportunities to cities through joint activities.

The Global Platform for Sustainable Cities, which is led by the World Bank, will serve as a forum to advance the urban sustainability agenda, maximize the impact of the child projects, and engage leadership to scale up the ambition and commitment. The platform aims to: (1) promote an integrated policy approach across the six thematic areas; (2) collaborate with financial institutions, including multilateral development banks (MDBs), international and domestic financial institutions, and the private sector to help prepare the next generation of investment projects; (3) bring good practices and innovation into the design and implementation of the city-level child projects; (4) broaden and deepen the partnerships; and (5) strengthen knowledge management and capacity-building.

As demonstrated already by the earlier CSUD and CE projects, innovation challenges provide an effective and flexible mechanism to facilitate and promote concrete collaboration with different stakeholders and leverage also significant private sector financing for green city investments. The competitive dimension of innovation challenges, on the other hand, promotes cost efficiency and effectiveness by allowing the project team to choose project support proposals that appear to contribute best to the stated project targets. Furthermore, the performance-based mechanism works as a good de-risking instrument, as the payments are made only on the basis of achieving the agreed results.

Project Management

The Ministry of Environmental Protection will support the project by providing equipment and premises for the Project Management Unit (PMU). The office space will be located within MoEP, where a dedicated project manager and project assistant will be stationed. Project implementation will be conducted with the full engagement of the Ministry staff from the Department for Project Management and under the overall management of the PMU. UNDP shall be responsible for Identification and/or recruitment of members of the Project Support Unit (PSU) and consultants according to UNDP norms, rules and requirements, to enable implementation of all technical outputs and proper project management, which shall be also located at the premises of the Ministry of Environment. The Ministry shall nominate representatives from the Climate Change Department as liaisons to the PSU.

The preparation and implementation of this project is and will be closely coordinated by the UNFCCC National Focal Point. The Public Relations Officer within the MoEP will assist in promoting and communicating project results to key

stakeholders and the general public. MoEP is also responsible for coordinating the implementation of other climate change, circular economy, waste management and nature protection related projects.

The project will leverage UNDP Direct Country Office Support Services to ensure efficient project execution. Collaborative arrangements with related projects will be established to maximize synergies and avoid duplications.

The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies. The audit cycle and process will be discussed during the inception workshop. If the Implementing Partner is a UN Agency, the project will be audited according to that Agency's applicable audit policies.

V. RESULTS FRAMEWORK

Intended Outcome as stated in the UNSDCF/Country Programme Results and Resource Framework:

CPD Outcome 3. Strengthen resilience to shocks and crises

CPD Outcome 1: Structural transformation accelerated, particularly green, inclusive, and digital transitions

Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:

3.2 Quantities of greenhouse gas emissions

Applicable Output(s) from the UNDP Strategic Plan: 3.1 Climate change mitigation and adaptation measures designed and implemented, and climate ambition raised

Project title and Quantum Project Number: Green cities transformation – smart, sustainable and low-carbon urban solutions in triangular metropolitan area,

EXPECTED OUTPUTS	OUTPUT INDICATORS[3]	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)						DATA COLLECTION METHODS & RISKS
			Value	Year	Year 1	Year 2	Year 3	Year 4	Year 5	FINAL	
Output 1 Integrated and participatory cross-sectoral green city planning methods, mechanisms and practices effectively taken into use for the development of the triangular metropolitan area	***1.1*** Sustainable digital data management systems in place and key sectoral data (land use, mobility, biodiversity, buildings, energy, emissions, waste) systematically collected and used for integrated, cross-sectoral and participatory green urban development plan(s) in the triangular metropolitan area.	*Datasets from the municipalities on city services*	No system in place and cross-sectoral data collection not coordinated	2024			Sustainable digital data management systems in place and systematic collection of key sectoral data (land use, mobility, biodiversity, buildings, energy, emissions, waste) started		Integrated, cross-sectoral and participatory green urban development plan completed for the triangular metropolitan area by effectively using the collected data and with at least 80% of the collected data accessible to	Integrated, cross-sectoral and participatory green urban development plan completed for the triangular metropolitan area by effectively using the collected data and with at least 80% of the collected data accessible to the public through open data policies and platforms	Survey among the system users in charge of the green urban development plan to assess the effectiveness and data quality of the system

[3] It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

EXPECTED OUTPUTS	OUTPUT INDICATORS[3]	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)						DATA COLLECTION METHODS & RISKS
			Value	Year	Year 1	Year 2	Year 3	Year 4	Year 5	FINAL	
									the public through open data policies and platforms		
	1.2 Status of the Serbian Sustainable Cities Platform (SSCP) and the number of its users	*Website developed data*	*SSCP is developed and in testing phase*	*2024*			*SSCP in operation with at least 30 registered users and 500 visits*		*SSCP in operation and regulargy updated with at least 50 registered users and 1000 visits*		*Consultant reports*
Output 2 New innovative and sustainable green city investments implemented	***2.1*** Number of new green city projects implemented with project support	*PBPs agreements*	0	2024			At least 5 projects implemented		*At least 15 projects implemented*		*Consultant reports*
	2.2 Number of new green city projects implemented with project support	*Awardees of PBPs business plans*	*0*	*2024*			*US 3 million*		*US 15 million*		*Confirmation from the PBP beneficiaries on the co-finance allocation and type of leveraged financing (equity, loan, other)*
	2.3 Greenhouse Gas Emissions Mitigated (metric tons of CO2e)	*Innovation projects validation report*	*0*	*2024*			*0*		*1,100 ktons of* CO_{2eq}		*Validation report* *GHG Expert Report*
	2.4 Area of landscapes under improved practices (hectare)	*Project Reports* *End-of-project impact*	*0*	*2024*			*500*		*4,000*		*Consultants report* *Validation report*

EXPECTED OUTPUTS	OUTPUT INDICATORS[3]	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)						DATA COLLECTION METHODS & RISKS
			Value	Year	Year 1	Year 2	Year 3	Year 4	Year 5	FINAL	
		report									
Output 3: Comprehensive analysis, reporting and sharing of the project results and lesson learnt nationally and internationally.	3.1 Number of KM materials produced by the project	*KM annual reports*	*0*	*2024*			*At least 10 KM materials produced*		*At least 20 KM materials produced*		*Annual reports* *Database*
	3.2 Number of people exposed to project's KM activities disaggregated by their professional field and other background.	*SCPI Platform statistics*	*0*	*2024*			*10,000*		*30,000*		Automatic (built-in) compilation of the SCIP Platform visitor statistics.

VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans:

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Inception Workshop and Report	Familiarize key stakeholders with the detailed project strategy and discuss any changes, discuss the roles and responsibilities of the project team, review the results framework and monitoring plan, review financial reporting rpocedures and budget monitoring.	Incpetion Workshop within 2 months of the first disbursement	Relevant changes in the Project Document and captured in Incpetion Report	Ministry of Environmental Protection UNDP	7,500 USD
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.		
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.		
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.		
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.		
Annual GEF Project Implementation Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)	Mandatory contribution by Project Team, CO and RTA. Strengths and weaknesses will be reviewed by project management and used to inform decisions to improve project performance		10,000
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the	Specify frequency (i.e., at least annually)	Any quality concerns or slower than expected progress should be discussed by		

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
	project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.		the project board and management actions agreed to address the issues identified.		

Evaluation Plan

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNSDCF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
Independent Mid-Term Review (MTR)	NA			After the second year of the full project implementation	MoEP, Belgrade, Novi Sad, Zrenjanin, SCTM, NALED, Provincial Secretariat for Urban Planning and Environmental Protection, users of PBPs	25,000 USD
Independent Terminal Evaluation (TE)	NA			At least 6 months before operational closure of the project	MoEP, Belgrade, Novi Sad, Zrenjanin, SCTM, NALED, Provincial Secretariat for Urban Planning and Environmental Protection, users of PBPs	40,000 USD

VII. MULTI-YEAR WORK PLAN

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year					RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1 (2025)	Y2 (2026)	Y3 (2027)	Y4 (2028)	Y5 (2029)		Funding Source	Budget Description	Amount
Output 1: Integrated and participatory cross-sectoral green city planning methods, mechanisms and practices effectively applied for the development of the triangular metropolitan area *Gender marker: GEN2*	1.1 A roadmap with recommendations for streamlining integrated inclusive green urban development into different local sectoral plans by also taking into account the current capacity constraints of the LSGs and with a goal to move towards incorporating national policy targets for smart climate resilient green city development	9,000	9,000	8,000	9,000	0	UNDP	MoEP (Cost sharing 30071)	71200 International Consultants	35,000
		15,000	30,000	15,000	15,000	10,000	UNDP	MoEP (Cost sharing 30071)	71300 Local consultants	85,000
	1.2 Enhanced capacity of the participating LSGs to transform national regulations, programs and targets to integrated and inclusive local level action for green city development	20,000	20,000	20,000	20,000	20,000	UNDP	MoEP (Cost sharing 30071)	71400 Contractual services – Individuals	100,000
	1.3 Socio-economic impact and livelihood analysis conducted with related recommendations and, as applicable, a Livelihood Action Plan	2,000	2,000	2,000	2,000	2,000	UNDP	MoEP (Cost sharing 30071)	71600 Travel	10,000
	1.4 An integrated and inclusive green cross-sectoral development plan for the triangular metropolitan area covering all key areas and sectors supported by the project and considered as essential for transforming Serbian cities into smart, sustainable, low-carbon and climate resilient green cities	0	5,000	5,000	5,000	5,000	UNDP	MoEP (Cost sharing 30071)	74200 Audio Visuals	20,000
		5,000	21,000	10,000	7,000	5,000	UNDP	MoEP (Cost sharing 30071)	72100 Contract Companies	48,000
	1.5 Serbian Sustainable Cities Platform created as an online knowledge management and investment platform	1,000	1,000	1,000	1,000	1,000	UNDP	MoEP (Cost sharing 30071)	74500 Miscellaneous	5,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year					RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1 (2025)	Y2 (2026)	Y3 (2027)	Y4 (2028)	Y5 (2029)		Funding Source	Budget Description	Amount
	1.6 Awareness raising and building of institutional capacities of the key stakeholders (national & local level), including development of online training platform	10,000	14,000	5,000	5,000	5,000	UNDP	MoEP (Cost sharing 30071)	75700 Training and workshop	39,000
	Per year	**62,000**	**102,000**	**66,000**	**64,000**	**48,000**				
					Sub-Total for Output 1					**342,000**
Output 2: New innovative and sustainable green city investments implemented with reported results *Gender marker: GEN2*	2.1 Specific Challenge Call organized to source and support the implementation of innovative solutions that provide low-carbon, energy-efficient and circular economy based communal infrastructure and services	5,000	5,000	5,000	5,000	0	UNDP	MoEP (Cost sharing 30071)	71200 International consultants	20,000
	2.2 Specific Challenge Call organized to source and support solutions that maintain natural capital and ecosystem services and promote nature-based solutions in peri-urban triangular metropolitan area	9,000	18,000	18,000	18,000	9,000	UNDP	MoEP (Cost sharing 30071)	71300 Local Consultants	72,000
	2.3 Guidance and technical support provided through trainings, workshops and direct mentorship (Accelerator) for selected solutions	49,413.362	52,394.548	49,413.362	49,413.362	46,432.176	UNDP	MoEP (Cost sharing 30071)	71400 Contractual services – Individuals	247,066.81
	2.4 Pilot investments supported to develop sustainable, resilient and smart communal infrastructure and services in the participating three cities by Performance-Based Payments Agreements, Innovation Awards, and other innovative financing schemes	0	0	100,000	120,000	0	UNDP	MoEP (Cost sharing 30071)	71455 Innovation awards	220,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year					RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1 (2025)	Y2 (2026)	Y3 (2027)	Y4 (2028)	Y5 (2029)		Funding Source	Budget Description	Amount
	2.5 Pilot investments supported for maintaining and advancing natural capital, ecosystem services and nature-based solutions by Performance-Based Payments Agreements	5,000	7,000	7,000	7,000	5,000	UNDP	MoEP (Cost sharing 30071)	71600 Travel	31,000
	2.6 A Smart City Information System prepared to support management of smart/green city infrastructure	0	200,000	950,000	850,000	0	UNDP	MoEP (Cost sharing 30071)	72600 Perfomance Based payments	2,000,000
	2.7 Monitored and reported results of the supported investment projects	1,000	1,000	1,000	1,000	1,000	UNDP	MoEP (Cost sharing 30071)	74500 Miscellaneous	5,000
	2.8 Public outreach conducted to disseminate results and promote replication and scaling up	10,000	15,000	15,000	10,000	5,000	UNDP	MoEP (Cost sharing 30071)	75700 Training and workshop	55,000
	Per year	**79,413.362**	**298,394.548**	**1,145,413.362**	**1,060,413.362**	**66,432.176**				
		Sub-Total for Output 2								**2,650,066.81**
Output 3 Comprehensive analysis, reporting and sharing of the project results and lesson learnt nationally and internationally	3.1 Public awareness campaign organized	6,000	6,000	6,000	6,000	6,000	UNDP	MoEP (Cost sharing 30071)	71300 Local Consultants	30,000
		15,000	15,000	15,000	15,000	15,000	UNDP	MoEP (Cost sharing 30071)	71600 Travel	75,000
		24,200	24,200	24,200	24,200	24,200	UNDP	MoEP (Cost sharing 30071)	71400 Contractual Services – Individuals	121,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year					RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1 (2025)	Y2 (2026)	Y3 (2027)	Y4 (2028)	Y5 (2029)		Funding Source	Budget Description	Amount
	3.2 Sustainable City Partnership Initiative (association of cities and municipalities with green and sustainable vision) established and promoted	5,000	5,000	6,000	6,000	0	UNDP	MoEP (Cost sharing 30071)	72100 Contract Companies	22,000
		5,000	10,000	10,000	10,000	10,000	UNDP	MoEP (Cost sharing 30071)	74200 Audio Visuals	45,000
	3.3 Exchange of information with Global Platform for Sustainable Cities established and maintained	1,000	1,000	1,000	1,000	1,000	UNDP	MoEP (Cost sharing 30071)	74500 Miscellaneous	5,000
		5,000	8,000	8,000	8,000	5,000	UNDP	MoEP (Cost sharing 30071)	75700 Training services and workshops	34,000
	Per year	**61,200**	**69,200**	**70,200**	**70,200**	**61,200**				
		Sub-Total for Output 3								**332,000**
Output 4 Monitoring and Evaluation	4.1 Project results and outcomes monitored and evaluated	2,500	5,000	2,500	2,500	5,000	UNDP	MoEP (Cost sharing 30071)	71300 Local consultants	17,500
		8,200	8,200	8,200	8,200	8,200	UNDP	MoEP (Cost sharing 30071)	71400 Contractual Services – Individuals	41,000
	Per year	**10,700**	**13,200**	**10,700**	**10,700**	**13,200**				
	Sub-Total for Output 4									**58,500**
Project Management Cost	Project management	47,600	47,600	47,600	47,600	47,600	UNDP	MoEP (Cost sharing 30071)	71400 Contractual Services – Individuals	238,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year					RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1 (2025)	Y2 (2026)	Y3 (2027)	Y4 (2028)	Y5 (2029)		Funding Source	Budget Description	Amount
		5,000	5,000	5,000	5,000	5,000	UNDP	MoEP (Cost sharing 30071)	71600 Travel	25,000
		5,000	5,000	5,000	5,000	5,000	UNDP	MoEP (Cost sharing 30071)	72800 Equipment	25,000
		0	7,000	7,000	7,000	7,000	UNDP	MoEP (Cost sharing 30071)	74000 Professional services	28,000
	Per year	**57,600**	**64,600**	**64,600**	**64,600**	**64,600**				
	Sub-Total for Project Management									**316,000**
Total programmable per year		270,913.36	547,394.548	1,356,913.362	1,269,913.36	253,432.176				**3,698,566.81**
General Management Support		8,533.77	17,242.93	42,742.77	40,002.27	7,983.11				**116,504.85**
Direct Project Costs		13,545.67	27,369.73	67,845.67	63,495.67	12,671.61				**184,928.34**
GRAND TOTAL PER YEAR		**292,992.80**	**592,007.21**	**1467501.8**	**1373411.3**	**274086.9**				**4,000,000**
TOTAL										**4,000,000**

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

General roles and responsibilities in the projects' governance mechanism

Implementing Partner: The Implementing Partner (IP) for this project is **the Ministry of Environmental Protection (MoEP)** of the Government of Serbia.

The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
- Procurement of goods and services, including human resources.
- Financial management, including overseeing financial expenditures against project budgets.
- Approving and signing the multiyear workplan.
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures. The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

Responsible Parties: The Project Board may introduce other Responsible Parties during the project implementation to assist in the implementation of certain project outputs, as well as the recipient of Low-Value PBPs Agreements.

Project stakeholders and target groups: The key project stakeholders, target groups and envisaged partnerships are presented in chapter IV "Results and Partnerships" as well in Annex 9: "Stakeholder Engagement Plan."

UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project. UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

The GEF OFP (Ministry for Environmental Protection – also an IP for the Project) and UNDP had discussions on several options for project the management arrangements as it concerns, in particular, the Innovation Challenges and accompanying Innovation Challenge Awards and Performance-based Payment Agreements (PBPAs), which mechanisms were approved also by the GEFSec at the PIF stage. The discussion and analysis concluded that the Ministry does not have the capacity to implement the project without UNDP support with further background provided at the end of this chapter. As a result, the Project Implementing Partner (MoEP) has requested UNDP execution support to NIM by an official letter signed by the Serbia GEF OFP. It is also to be noted that execution support, in line with UNDP ICF and POPP/financial regulations, can only be provided in the case it is requested by the Government and agreed by the GEF. The UNDP execution support will be performed by the Innovation Challenge Support Unit, which is project-based and located at the premises of the Government/Ministry of Environmental Protection. The Innovation Challenge Support Unit will be part of the overall project management.

Strict firewall will be maintained between the delivery of project oversight and quality assurance performed by UNDP and charged to the GEF Fee and any support to project execution performed by UNDP (as requested by and agreed to by both the Implementing Partner and GEF) and may be charged to the GEF project management costs (only if

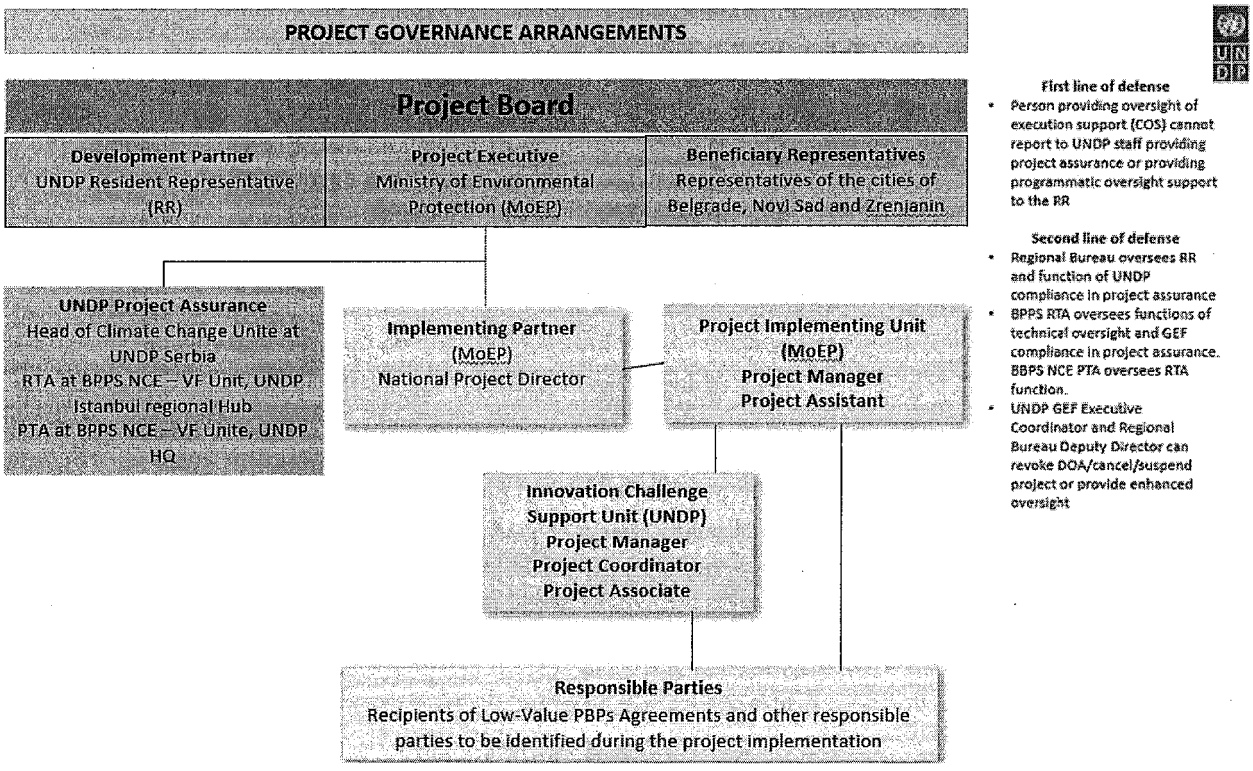
approved by GEF). The segregation of functions and firewall provisions for UNDP in this case is described in the next section. The firewall settings as outlined below apply and are coherent with the standing UNDP ICF and POPP:

"**Project execution support performed by Innovation Challenge Support Unit**" will be undertaken by personnel on non-staff contracts (i.e. Service Contract holders) specifically hired for the implementation of specific outputs under Outcome 1, 2 and 3 of this project (specified in further detail in table 3), and forming the so-called Innovation Challenge Support Unit, which is fully project-based. It will not involve any actions from the category of "programme or operational oversight". It will be limited to preparing TORs, specifications, requests, and arranging for a proper process for all project management activities such as "managing" the Innovation Challenge Calls, acceleration support, issuing and monitoring of Innovation Awards and Low-Value Performance-based payment Agreements as well as preparing documentation for procurement and recruitment processes, as needed. The Innovation Challenge Support Unit is partially funded by the project budget. The firewall will be ensured by the fact that the Innovation Challenge Support Unit will report to the Project Manager, engaged by the Implementing Partner, and to the Project Board, while administrative aspects of the contracts of the Unit's project personnel will be managed by the UNDP CO officer who is not, in any way, involved in programme nor operational oversight of the project.

The Innovation Challenge Support Unit will perform the requested services outlined in the letter of GEF OFP of Serbia (in Annex 2), in line with UNDP ICF, Financial and HR rules and other relevant sections of the POPP. The anticipated costs of the service provided will be covered by non-GEF resources of the project.

The oversight (i.e. over the Innovation Challenge Support Unit's compliance with the approved Total Budget and Work Plan) will be carried out by UNDP Country Office programmatic and operational units i.e. the Resilience and M&E/Program Finance Teams under the supervision of the CO Senior Management. The second tier of oversight will be provided from the UNDP regional and global level. Further detail can be found in Annex 19, UNDP Audit Checklist.

Project governance structure



The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.

UNDP project support: The Implementing Partner and GEF OFP have requested UNDP to provide support services for the full duration of the project, and the GEF has agreed for UNDP to provide such execution support services and for the cost of these services to be charged to the project budget. The execution support services – whether financed

from the project budget or other sources - have been set out in detail and agreed between UNDP Country Office and the Implementing Partner in a Letter of Agreement (LOA). This LOA is attached to this Project Document.

To ensure the strict independence required by the GEF and in accordance with the UNDP Internal Control Framework, these execution services will be delivered independent from the GEF-specific oversight and quality assurance services.

Segregation of duties and firewalls vis-à-vis UNDP representation on the project board

As noted in the Minimum Fiduciary Standards for GEF Partner Agencies, in cases where a GEF Partner Agency (i.e. UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and execution functions.

In this case, UNDP's implementation oversight role in the project – as represented in the project board and via the project assurance function – is performed by the UNDP Resident Representative Yakup Beris, the Programme Analyst Miroslav Tadic for programmatic oversight support and the Programme Associate Aleksandar Jovanovic for financial oversight. UNDP's execution role in the project (as requested by the implementing partner and approved by the GEF) is performed by the Project Manager Ana Seke, the Project Coordination Associate Milan Cerovac and the Portfolio Associate Vesna Bogdanovic, who will report to the Resilience Team Leader Zarko Petrovic.

Roles and Responsibilities of the Project Organization Structure

a) **Project Board:** All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.

The two main (mandatory) roles of the project board are as follows:

1) **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the "Provide Oversight" section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.

2) **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the "Manage Change" section of the POPP).

Requirements to serve on the Project Board

- ✓ Agree to the Terms of Reference of the Board and the rules on protocols, quorum and minuting.
- ✓ Meet annually; at least once.
- ✓ Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
- ✓ Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
- ✓ Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

Responsibilities of the Project Board

- ✓ Consensus decision making:
  - o The project board provides overall overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
  - o Review project performance based on monitoring, evaluation and reporting, including progress reports, risk logs and the combined delivery report;

- The project board is responsible for making management decisions by consensus.
- In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.
- In case consensus cannot be reached within the Board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

✓ Oversee project execution:
- Agree on project manager's tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded.
- Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
- Address any high-level project issues as raised by the project manager and project assurance;
- Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies);
- Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
- Track and monitor co-financed activities and realisation of co-financing amounts of this project.
- Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.

✓ Risk Management:
- Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.
- Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.
- Address project-level grievances.

✓ Coordination:
- Ensure coordination between various donor and government-funded projects and programmes.
- Ensure coordination with various government agencies and their participation in project activities.

Composition of the Project Board: The composition of the Project Board must include individuals assigned to the following three roles:

1. **Project Executive:** This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Board. The Executive usually is the senior national counterpart for nationally implemented projects (typically from the same entity as the Implementing Partner), and it must be UNDP for projects that are direct implementation (DIM). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Board. If the project executive co-chairs the project board with representatives of another category, it typically does so with a development partner representative. The Project Executive is: Sandra Dokic, State Secretary at the Ministry of Environmental Protection.

2. **Beneficiary Representative(s):** Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Board. The Beneficiary representatives are: Representatives of City of Belgrade, City of Novi Sad, City of Zrenjanin.

3. **Development Partner(s):** Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partner is: Yakup Beris, UNDP Resident Representative.

b) **Project Assurance:** Project assurance is the responsibility of each project board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and monitoring functions. UNDP performs quality assurance and supports the Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. Project assurance is totally independent of project execution.

A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function is: Miroslav Tadic, Programme Analyst Climate Change & Environment, UNDP Serbia.

c) **Project Management – Execution of the Project:** The Project Manager (PM) (also called project coordinator) is the senior most representative of the Project Management Unit (PMU) and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The project manager typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers.

A designated representative of the PMU is expected to attend all board meetings and support board processes as a non-voting representative.

The primary PMU representative attending board meetings is: Dragana Mehandzic, Department for Project Management Financed by EU and International Assistance in the Field of Environmental Protection, MoEP.

UNDP Implementation Support

The MoEP, serving as the project's IP, has requested UNDP implementation/execution support for certain project sub-components and tasks, as specified in further detail in table 3, below, and the attached letter of the Government/GEF OFP (Annex 2). The subcomponents and tasks requested to be supported include: (1) the implementation of the Innovation Challenge Policy of UNDP, (2) conducting acceleration process and (3) issuing and monitoring of Low-Value Performance-based Payment Agreements. The reason for requesting implementation support from UNDP is that the MoEP is incapable to carry out performance-based payments, whereas inside the UNDP it is an approved modality which has been successfully implemented on a previous UNDP GEF project in Serbia on climate smart urban development and circular economy.

Table 3 List of Responsibility Distribution between MoEP and UNDP

Outcomes	Updated outputs	Responsibility
	Output 1.1. An analysis with recommendations for streamlining integrated inclusive green urban development into different local sectoral plans (by also taking into account the current capacity constraints of the LSGs), with a goal to move towards incorporating national policy targets for smart climate resilient green city development.	MoEP
	Output 1.2 Enhanced capacity of the participating LSGs to transform national regulations, programs and targets to integrated and inclusive local level action for green city development, including i) operationalized systems for digital data collection and management (land use, mobility, biodiversity, buildings, energy (EMIS), emissions, waste), ii) strengthened human capacities and resources for data	MoEP with UNDP Implementation Support

Outcome 1	management, participatory planning and project preparation; iii) streamlined institutional and sectoral co-ordination and co-operation.	
	Output 1.3 Socio-economic impact and livelihood analysis conducted with related recommendations and, as applicable, a Livelihood Action Plan with specific focus on vulnerable groups potentially affected by suggested policy measures, plans and investments, as it concerns, for instance, improved waste management and advancing the circular economy approach.	MoEP
	Output 1.4 An integrated and inclusive green cross-sectoral development plan for the triangular metropolitan area covering all key areas and sectors supported by the project and considered as essential for transforming Serbian cities into the smart, sustainable, low-carbon and climate resilient green cities.	MoEP
	Output 1.5 Serbian Sustainable Cities Platform created as an online knowledge management and investment platform to support: (i) inter-institutional collaboration, (ii) transformative actions, (iii) development of local green plans and documents, (iv) promotion of innovative green urban and nature-based solutions.	MoEP with UNDP Implementation Support
	Output 1.6. Awareness raising and building of institutional capacities of the key stakeholders (national & local level), including development of online training platform on transformative approach for sustainable city development to be piloted in 3 cities and transferred to other medium sized cities in Serbia and region.	MoEP with UNDP Implementation Support
Outcome 2	Output 2.1. Specific Challenge Call organized to source and support the implementation of innovative, digital and other types of solutions that provide low-carbon, energy-efficient and circular economy based communal infrastructure and services in three cities	MoEP with UNDP Implementation Support
	Output 2.2. Specific Challenge Call organized to source and support solutions that maintain natural capital and ecosystem services and promote nature-based solutions in peri-urban triangular metropolitan area	MoEP with UNDP Implementation Support
	Output 2.3. Guidance and technical support provided through training, workshops and direct mentorship (Accelerator) for selected solutions – to support transformation of initial ideas into marketable businesses and products and structuring financing by blended finance for sharing the initial project costs and reducing the risks	MoEP with UNDP Implementation Support
	Output 2.4. Pilot investments supported into sustainable and smart city communal infrastructure and services in three cities through Performance-Based Payments Agreements, Innovation Awards, and other innovative financing schemes, as applicable	MoEP with UNDP Implementation Support
	Output 2.5. Pilot investments supported into maintenance of natural capital, ecosystem services and nature-based solutions through Performance-Based Payments Agreements	MoEP with UNDP Implementation Support
	Output 2.6. A Smart City Information System prepared to support management of smart/green city infrastructure	MoEP with UNDP Implementation Support
	Output 2.7. Monitored and reported results of the supported investment projects	MoEP
	Output 2.8. Public outreach conducted to disseminate results and promote replication	MoEP
Outcome 3	Output 3.1. Public awareness campaign organized, including information dissemination, examples of good practice published and disseminated (videos, social media, TV, papers, websites etc.)	MoEP with UNDP Implementation Support
	Output 3.2. Sustainable City Partnership Initiative established and promoted (association of cities and municipalities with green and sustainable vision), including	MoEP with UNDP Implementation

	organization of international, regional and national events to promote integrated city planning approaches. The Initiative will also disseminate project results, lessons learned and promote experience sharing and replication	Support
	Output 3.3 Exchange of information with Global Platform for Sustainable Cities established and maintained (along with other cities of the Sustainable Cities IAP, joint trainings, organizing site visits	MoEP

The observed decline in the Government capacity has occurred due to frequent government structure changes, either due to the elections or internal re-shuffling of the institutions. Such a trend also caused a massive outflow of qualified personnel from the institutions, equally affecting expert departments' capacities and those in charge of project management services. It is also important to indicate that Serbia's national institutional capacities are already suffering by being stretched and overburdened by strict requirements for managing the EU funded projects. Even in the case of other donor financed projects (such as the EU IPA projects), the MoEP receives execution support from the donor by sub-contracting implementing entities. Yet, the implementation of many of these projects is lagging, and the absorption capacity for EU funds is low.

The co-operation of the MoEP with municipalities on waste management and waste-water treatment is largely based on "business as usual" by using EU (IPA funds) and state loans as sources of financing, but without really actively exploring new innovative or more effective ways of dealing with waste and wastewater management at the municipal level and how these sectors could contribute to the decarbonization of Serbian economy.

At the moment, the Government/MoEP conducts public calls only for procurements that have strictly detailed and predefined technical criteria, thereby leaving not much room for the offerors to suggest alternative, innovative and eventually more effective ideas to deal with the required service or product. Cooperation with the private sector in the recycling industry, for instance, is based on incentives that are paid according to such criteria. The budgets of public calls for NGOs and research organizations are limited and activities are focused on one-time research-oriented interventions with no development focus or monitoring of impact after the projects have ended. As a financing modality, there are no mechanisms in place to use performance-based payment agreements. In Human Resource management, MoEP has lengthy procedures for the selection of experts, which is imposing a serious risk to timely implementation of the project.

The UNDP's Innovation Challenge policy and Performance-based Payment Agreements are an integral part of this project (as presented in the approved PIF). In order to conduct the challenges and ensure implementation and proper M&E of the selected innovative solutions, the MoEP has requested UNDP execution support.

Together with the GEF funds and the co-financing of the project, including support for the private sector, UNDP has developed a mechanism based on performance-based agreements, as an integral part of UNDP's Innovation Challenge Policy, where payments are done only after fulfilling the defined milestones and verification of defined indicators by the Project Board. The MoEP does not have the legal basis nor operational capacity to perform such duties on its own, but would need to delegate this to a third party, in this case the UNDP.

For effectively fulfilling the requirements of its supporting role, UNDP Serbia has already established and gradually built several partnerships with institutions such as Serbian Chamber of Commerce and Industry, National Association for Local Economic Development (NALED), the Innovation Fund, Standing Conference of Towns and Municipalities, EU Delegation in Serbia, the Government of Sweden and the Government of Switzerland with a network of around 10,000 stakeholders in order to foster co-operation and facilitate exchange experience and peer-to-peer learning. All this cannot be simply transferred to a third party without losing the ingredients of this groundwork, which is essential for the successful implementation of the proposed project.

By building on UNDP's Innovation Challenge Policy, UNDP Serbia has established its capacity to effectively support national institutions in launching challenge-based procurement calls for innovative solutions and to ensure transparent and prompt evaluation process consisting of three steps (technical screening, independent experts' evaluation and final evaluation in cooperation with national partners) by engaging a number of experts of various professional background. By this, UNDP will also build the capacities of other institutions so that they can effectively provide similar services in the future in cooperation with the corporate sector and industries.

For ideas selected for further development, the proponents receive mentoring and other expert support from an "Incubator/Accelerator Clinic" to develop initial ideas and proposals into mature projects ready for implementation. These are unique mechanisms developed by UNDP Serbia that ensure fast track engagement of specific expertise, but

also provide other types of assistance to innovative solutions, such as identification and establishment of partnerships, market research, business plan development, identification of funding sources (investors, commercial lending etc.). The Innovation Challenge Policy was already described in the approved Project Identification Form (PIF), as the main mechanism for sourcing, accelerating and implementation of the innovative green city solutions. The Government/MoEP cannot provide such de-risking assistance. Financial and other management of such supporting functions would be practically impossible to outsource for any other international agency either, which do not have specific operational procedures developed by UNDP for this purpose as an integral part of UNDP's Innovation Challenge policy.

In short, while launching the Serbian Sustainable Cities Platform proposed by the project and the challenge- based approach as a part of that will provide an entirely new entry mechanisms to advance the green city development in Serbia and to source new innovative ideas for it. The MoEP is not yet fully geared to implement this on its own. Therefore, it has requested UNDP support for implementation, thereby allowing the MoEP in parallel to also build its own capacity for eventually incorporating such support mechanism into its operations later on.

IX. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Serbia and UNDP, signed on (date). All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by the Ministry of Environmental Protection ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

X. RISK MANAGEMENT

Government Entity (NIM)

1. Consistent with the Article III of the SBAA, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
   a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
   b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism, that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Consolidated Sanctions List can be accessed via https://www.un.org/securitycouncil/content/un-sc-consolidated-list.

4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-

recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

(a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment. SH may occur in the workplace or in connection with work. While typically involving a pattern of conduct, SH may take the form of a single incident. In assessing the reasonableness of expectations or perceptions, the perspective of the person who is the target of the conduct shall be considered.

5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;

iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;

iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the

investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

6. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

7. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

9. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds.

10. In the implementation of the activities under this Project Document, UNDP places reasonable reliance upon the Implementing Partner for it to apply its laws, regulations and processes, and applicable international laws regarding anti money laundering and countering the financing of terrorism, to ensure consistency with the principles of then in force the UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy.

11. The Implementing Partner will ensure that its financial management, anti-corruption, anti-fraud and anti money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.

12. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and

Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

13. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

14. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, credible allegation of fraud or corruption or other financial irregularities with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

15. *Choose one of the three following options:*

Option 1: UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

Option 2: The Implementing Partner agrees that, where applicable, donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities which are the subject of this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Option 3: UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors, and sub-recipients.

16. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

17. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

18. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XI. ANNEXES

1. **Project Quality Assurance Report**
2. **Social and Environmental Screening Template**, including additional Social and Environmental Assessments or Management Plans as relevant.
3. **Risk Analysis.**
4. **Project Board Terms of Reference and TORs of key management positions.** Explained in chapter VIII Governance and Management Arrangement

ANNEX 2 UNDP SOCIAL AND ENVIRONMENTAL SCREENING TEMPLATE

Project Information

Project Information	
1. Project Title	**Green cities transformation – smart, sustainable and low-carbon urban solutions in triangular metropolitan area**
2. Project Number (i.e. Atlas project ID, PIMS+)	9584
3. Location (Global/Region/Country)	Serbia
4. Project stage (Design or Implementation)	Design
5. Date	31 October 2024

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the project mainstreams the human rights-based approach

Since the break-up of former Yugoslavia, Serbia has actively adhered to the principles of mainstreaming human rights in the national legislation and government policies. The country has ratified and participates in a number of international human rights conventions and protocols. Additionally, the country has adopted national strategies towards gender equality and against discrimination. The proposed project will further support this process and will mainstream a clearly defined human-rights based approach by its design and activities.

The project will support the implementation of innovative and digital solutions as well as broad community engagement and participation through a highly participatory approach, thereby also seeking to improve the transparency and accountability of local governance, opportunities for public participation in decision making and development of people's living environment. In this way, the project will support the right to information and will aim to reflect the views of various stakeholders, including minorities, marginalized and vulnerable groups in the project design and operation. A potential risk for the mentioned groups (primarily Roma and poor people) that are engaged in informal waste collection is reduced income opportunities, as the increased re-use of secondary materials is decreasing its disposal and collection opportunities by informal collectors. Low-carbon, energy-efficient and circular economy-based communal infrastructure and services ("sustainable and smart city infrastructure") and maintenance of natural capital, ecosystem services and nature-based solutions for increased urban climate resilience promoted under the project is expected to contribute to the further improvement of quality of life and the advancement of equal human rights to a safe and clean environment, while also creating new employment and business opportunities thus supporting the right for equal employment. Throughout the project implementation, specific emphasis will be on piloting options for the creation of employment opportunities for vulnerable groups, such as informal waste collectors, and also on gender related aspects and equal rights of men and women, as described in detail below. Moreover, the Project will take appropriate actions in terms of consultations with the affected communities and awareness raising to promote their informed decision-making, and ensure their full and effective engagement. Also, the project will seek active exchange and cooperation with relevant other activities in house and UN agencies or other donors, e.g. UNHCR Programme for the Empowerment of Roma, the GIZ Promoting social inclusion in Serbia project and others in Serbia.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

Serbia's progress towards gender equality is notable but still lags behind the European Union average. Addressing gender disparities is critical for sustainable urban planning to create inclusive and resilient cities.

Gender-based segregation in education and labor markets persists in Serbia, with women underrepresented in technical and managerial positions relevant to urban planning. Women in Serbia spend more time on unpaid domestic and care work, limiting their engagement in community and urban planning activities. Despite these challenges, high levels of financial inclusion for women present opportunities for their involvement in economic activities within urban areas. Increasing representation of women in decision-making positions can influence local strategies towards more inclusive urban development. Higher education levels among women can also contribute to informed community participation and leadership in urban planning initiatives. Green and digital sectors offer opportunities for women's economic participation, supporting entrepreneurship and innovation. Programs that facilitate women's access to financial resources and support women-led businesses in green and digital fields are critical.

Serbia's legislative framework supports gender equality, which is crucial for sustainable urban planning. The Constitution of Serbia establishes gender equality as a fundamental right, and the Law on Gender Equality (2021) mandates gender-responsive budgeting and integration of gender perspectives in environmental protection and urban planning.

Integrating gender into sustainable urban planning is crucial for creating resilient, inclusive, and livable cities for all residents. Gender integration ensures that the diverse needs and perspectives of all community members, including women, are considered, leading to more inclusive and equitable urban planning decisions. Since women and men often experience urban spaces differently, integrating gender perspectives can help identify and address specific safety and inclusivity concerns, making public spaces more accessible, safer, and better utilized for everyone.

Gender-sensitive planning ensures equitable access to resources such as public transportation, healthcare, education, and employment opportunities, significantly improving the quality of life for all residents. By considering the needs of women in urban planning, cities can create opportunities for women's economic participation, support female entrepreneurship and innovation, and provide access to green jobs, contributing to the overall economic growth and sustainability. Understanding the different ways men and women use urban resources can lead to more efficient and targeted use of those resources, thereby enhancing the sustainability and functionality of urban environments.
Gender-sensitive urban planning can foster social cohesion by promoting inclusive and diverse communities where everyone feels valued and respected. Women often play a key role in managing household resources and can be strong advocates for sustainable practices. Integrating their perspectives can enhance the effectiveness of environmental initiatives and policies. Furthermore, integrating gender perspectives ensures compliance with international conventions, national legislation, and strategic frameworks relevant to gender equality and sustainable urban planning. Gender-sensitive urban planning can enhance the resilience of cities by ensuring that both men and women can effectively contribute to and benefit from climate adaptation and mitigation strategies.

Briefly describe in the space below how the project mainstreams sustainability and resilience

In line with the objectives of the global project, the project seeks to address the environmental and social challenges caused by the urbanization by: i) supporting integrated and inclusive urban planning, strategies, and policy development; ii) promoting investments in sustainable, nature-positive, and resilient urban development; iii) adopting innovative financing mechanisms; and iv) strengthening knowledge-sharing and capacity-building. Mainstreaming environmental sustainability and increasing ecosystems resilience is at the core of the project strategy. Among others, environmental sustainability will be achieved by means of introducing and providing various tools for environmentally sustainable management and operation of all Serbian municipalities and SMEs, with a strong focus on nature-based solutions and improved ecosystem services. The project will support environmental management capacities for policy making (Component 1), as well as for green infrastructure investments by supporting; a) low-carbon, energy-efficient and circular economy-based communal infrastructure and services ("sustainable and smart city infrastructure"); b) maintenance of natural capital, ecosystem services and nature-based solutions for increased urban climate resilience (Component 2).

To ensure sustainability, the project will support the Government (namely the MoEP and the Ministry of Finance) to formulate new mechanisms that can continue to identify and finance such solutions in the long term, without direct UNDP involvement. The new, Government-led mechanism will also consider blending of funds, green borrowing schemes and innovative financing instruments such as the green bonds, ESCO-based financing and green guarantees.

On the local level, the project will support development of development strategies, urban plans, climate change and circular economy related plans and programmes, and introduction of urban sustainable solutions that will have multifunctional benefits and are results of multi-stakeholder participatory approach.

Briefly describe in the space below how the project strengthens accountability to stakeholders

The project design dedicates one Component to Knowledge management and replication of successful pilots and is closely aligned with the national and local policies regarding the promotion of urban innovative resource efficient, digital and circular economy. The support for setting the policy framework provided to the Ministry of Environmental

Protection and three cities will be subject to the legally prescribed public consultation process. This process will be supported by the project and ensure that all relevant stakeholders' comments are included.

Furthermore, the project will organize consultative meetings with different target groups, such as potential beneficiaries (SMEs, R&D, start-ups), public sector (local communities, public companies, government agencies) as well as CSOs and representatives of marginalized and vulnerable categories (Roma, women, poor) that might be impacted by the infrastructure investments. These consultations will provide an opportunity for the stakeholders to raise their concerns. In this context, the support for innovative approaches supported under Outcome 2 will be subject to an assessment of potential negative impacts. The invitation for participation in the challenge calls will be public and presented in dedicated events, providing an opportunity for the stakeholders to bring up any potential concerns. The draft Stakeholder Engagement Plan will be developed during the Project Document development phase as part of the ESMF, subject to further development during the implementation phase.

To effectively raise awareness and build capacity, the project will collaborate closely with the Standing Conference of Towns and Municipalities, the National Association for Local Economic Development (NALED) and the Chamber of Commerce and Industry of Serbia as well as the media. The Chamber of Commerce and Industry and NALED will ensure that project related information is broadly disseminated among the business community, while participation of the Standing Conference of Towns and Municipalities will ensure commitments and contribution of the local self-governments.

Special attention will be given to communication with the expert community. Due to the technical complexity of the project, the project results will be presented at expert conferences and workshop organized by professional organizations such as the Chamber of Engineers.

In addition, the project design supports citizen engagement by providing interactive platforms for citizen's engagement enabling residents to provide feedback, access information, and participate in decision-making processes within Component 2.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Complete SESP Attachment 1 before responding to Question 2.*	**QUESTION 3: What is the level of significance of the potential social and environmental risks?** *Note: Respond to Questions 4 and 5below before proceeding to Question 5*			**QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High**
Risk Description (broken down by event, cause, impact)	***Impact and Likelihood (1-5)***	***Significance (Low, Moderate Substantial, High)***	***Comments (optional)***	***Description of assessment and management measures for risks rated as Moderate, Substantial or High***
Risk 1: The collection of recyclable materials from household waste in Serbia is often undertaken by informal waste collectors, mostly Roma people, which may face a risk of losing their income opportunities by the introduction of new waste management practices. P.4 and P. 6, Standard 5, q5.2	I = 2 L = 4	Moderate	While greater efficiency and formalization of the sector are essential for increasing the recycling rates, there is also a need to take care of the continuing income opportunities of the current informal waste collectors. Loosing these income opportunities can lead to further disempowerment of Roma women whose economic participation is lowest in Serbia and living standard the poorest. Since the increase of recycling rates is defined by the National Waste Management Programme, this risk is present irrespective of the project activities. This risk is very likely to occur based on experience with waste management activities in the region and globally. In this context, the project is focuses on innovative approaches for waste management supporting circular economy while at the same time taking into account and addressing the potential risks to vulnerable population. In this way, the impact of the project is regarded as moderate.	The project will, within Output 1.3, prepare a socio-economic impact and livelihood analysis with a special focus on vulnerable groups potentially affected by suggested policy measures. It will show whether the informal waste collectors, collecting secondary materials, could be potentially economically affected by the project. This group includes mainly Roma and poor (elderly) people. The analysis will provide recommendations for mitigation of the risk, and the project will provide legal/regulatory/incentive recommendations and guidance for the full integration of "informal waste collectors" in the national social and employment policy. The project shall also consult these potentially groups on measures that can be taken to avoid, or, when avoidance is not possible, minimize adverse effects of any displacement or access restrictions, and improve their living standards and the overall socioeconomic status. This will include the exchange of data and information with CSOs and representatives of the Roma population, and other affected stakeholders and ensure their close involvement in the planning process and other relevant project activities. The project will require that the implementing entities put in place a systematic screening of proposed sub-projects that will pay special attention to their relevant SES risks highlighted in the SESP and subsequent SES documentation and also integrate any applicable screening requirements in the country. The Challenge calls will also: identify any proposal-affected groups (incl.

				vulnerable or disadvantaged groups, like Roma people), and ensure the meaningful, effective, and informed participation of stakeholders, including CSOs and representatives of the Roma population - allow both women and men to participate meaningfully and equitably in project design and decision-making, - ensure their close involvement in project activities. Innovative approaches, including the introduction of informal collectors in the legal system, will receive additional points when evaluating the challenge call applications. (P1.5 and P4.13) The positive experience from the calls will be advocated towards the policymakers.
Risk 2: The implementation of the project may lead to concerns about the human rights of affected marginalized social groups involved in waste collection, mainly Roma. P.5 and P.13 Standard 5, q5.2	I = 3 L = 3	Moderate	As the pilot projects and investments will involve change in the waste management practices and may negatively impact the source of income of informal waste collectors, it could result in potential conflicts and raise concerns about human rights of the affected population. Similar cases have been observed in other projects related to waste management in the region. However, since the regional sanitary landfill is already in operation in Belgrade, and the construction in Novi Sad is in advanced planning stage, the likelihood is assessed as moderately likely and the impact as intermediate, resulting in moderate significance of the risk.	The project will, within Output 1.3, prepare a socio-economic impact and livelihood analysis with a special focus on vulnerable groups potentially affected by suggested policy measures. It will show whether the informal waste collectors, collecting secondary materials, could be potentially economically affected by the project. This group includes mainly Roma and poor (elderly) people. The analysis will provide recommendations for mitigation of the risk, and the project will provide legal/regulatory/incentive recommendations and guidance for the full integration of "informal waste collectors" in the national social and employment policy. In order to pilot these recommendations and guidance, innovative approaches, including the introduction of informal collectors in the legal system, will receive additional points when evaluating the challenge call applications. Several capacity building events will be arranged for marginalized groups to become part of the formal waste management schemes (including the options for the establishment of their businesses). The project shall also consult these potentially groups on measures that can be taken to avoid, or, when avoidance is not possible, minimize adverse effects of any displacement or access restrictions, and improve their living standards and the overall socioeconomic status. This will include the exchange of data and information with CSOs and representatives of the Roma population, and other affected stakeholders and ensure their close involvement in the planning process and other relevant project activities.

				The project will require that the implementing entities put in place a systematic screening of proposed sub-projects that will pay special attention to their relevant SES risks highlighted in the SESP and subsequent SES documentation and also integrate any applicable screening requirements in the country. The project will also establish GRM to ensure that any disregard to the stakeholders' rights is heard early and duly addressed.
Risk 3: The project may have adverse impact on gender equality in terms of lower share of women among entities awarded for projects through challenges, or due to the lack of awareness and understanding of awarded entities on how to implement projects in gender responsible ways, in terms of adverse impact on women from Roma community engaged in waste collection practices and in terms of insufficient capacities of policy makers to properly mainstream gender in relevant policies. P.9	I=3 L=3	Moderate	Having in mind the lower participation of women among entrepreneurs and business owners, particularly in the areas related to circular economy and resource efficiency, as well as lower participation of women in related research, there is a risk of not achieving optimal outreach to women. There is also a risk to have a negative impact on the economic participation of women from marginalized groups, particularly Roma women. With the introduction of new processes and practices, they can face increased exclusion and consequently worsening of livelihoods. There is also a risk not to achieve sufficient capacity of policymakers for gender mainstreaming, so the policies and programs that will be adopted with the project support may lack proper gender mainstreaming. The risk is assessed as moderate.	The project document is gender sensitive and gender-specific indicators will be designed as part of the project results framework, collecting gender-sensitive data on the project impact during its implementation. Additionally, the project will specifically encourage female innovators, entrepreneurs, and experts to participate in the project implementation and the gender action plan will lay out how this will be done in detail. Promotion activities and training will be gender mainstreamed, targeting specific needs and roles of women, who are directly involved in waste management or any part of the product's lifecycle. The gender engagement strategy and gender action plan will ensure that key gender equality stakeholders are engaged in the activities and outcomes planned within the project regarding the development of the normative framework. Their participation and policy-making process design will ensure that gender equality is addressed adequately in policies brought with the support of this project.
Risk 4: Upstream impacts (risk of unintended social or environmental consequences of policy changes)	I=3 L=4	Substantial	Component 1 of the project involves policy changes and development of urban plans, there is substantial probability of	Since the targeted area covers nature-protected ecosystems, national parks and wetlands, the plan shall: - as far as possible, site any proposed construction activities in areas where natural habitats have already been

P.5, P.6, P.9 Standard 1, q1.2 Standard 3, q3.2. Standard 5, q5.2			this risk occurring with medium impact. Furthermore, Output 1.4 is "An integrated and inclusive green cross-sectoral development plan for the triangular metropolitan area covering all key areas and sectors supported by the project and considered as essential for transforming Serbian cities into smart, sustainable, low-carbon and climate resilient green cities."	converted to other land uses or that have low value for biodiversity and ecosystem services, and low sensitivity to the anticipated impacts, - minimize unwarranted conversion or degradation of the habitat and resident species populations, - keep its interventions in natural and semi-natural habitats to minimum not to disturb the existing flora and fauna, degrade the habitat and reduce ecological connectivity in the ecosystem. The planning process will be subject to a scoped Strategic Environmental and Social Assessment based on the UNDP SES requirements and applicable country requirements. The specific approach and methodology will be designed before the initiation of the work on Output 1.4 in consultation with the UNDP SES Technical Adviser for the project. It will involve early screening of the planning drafts that will be followed with detailed studies that address the UNDP SES requirements and applicable country requirements.
Risk 5: The project may pose potential risk to the health and safety of the individuals involved in the new innovative green city investments within Component 2 the project. Standard 7, q7.1 and q7.6	I=4 L=2	Moderate	The probability of occurrence of this risk is low as the project will not support any activities which include any harmful/hazardous waste. This should also be properly monitored and managed during the project implementation stage. At the same time, the project will support diverting waste from landfilling and avoidance of landfilling of biodegradable waste, which will reduce the risk of methane related fires on landfills and thus reduce health and safety risk. Also, all investments will need to be implemented in accordance with the legal requirements for health and safety.	The project will require that the implementing entities put in place a systematic screening of proposed sub-projects that will pay special attention to their relevant SES risks highlighted in the SESP and subsequent SES documentation and also integrate any applicable screening requirements in the country. In cases where selected solutions involve construction or infrastructure instalment and operation, the sub-projects will: - follow the national standards prescribed by the national law. - ensure that their design, construction and operation is done by the experienced contractor(s) having relevant certifications and permits for the relevant works, - implement preventive/protective measures to avoid/minimize the relevant health and safety risks for the construction workers and the surrounding communities, and - be before the beginning of their actual use/operation approved (and where needed certified) by either competent authorities or independent professionals not involved in their design and construction.
Risk 6: The investments and other measures supported by the project with Component 2	I=3 L=3	Moderate	The investments supported within the Component 2 may	The project will require that the implementing entities put in place a systematic screening of proposed sub-projects that will

may lead to increase of pollution. Standard 3, q 3.1			lead to from infrastructure construction or reconstruction. The likelihood of this risk is assessed as moderately likely the overall impact is assessed as intermediate and the risk as moderate.	pay special attention to their relevant SES risks highlighted in the SESP and subsequent SES documentation and also integrate any applicable screening requirements in the country. The screening of subprojects will: ▪ Identify – using a tailored approach based on the UNDP Social and Environmental Screening Checklist – their potentially significant risks associated with the proposed activities on: o Biodiversity and Sustainable Natural Resource Management o Climate Change and Disaster Risks o Community Health, Safety Security o Cultural Heritage o Displacement and Resettlement o Labour and Working Conditions o Pollution Prevention and Resource Efficiency ▪ Determine the significance of potential SES risks based on the UNDP SES requirements ▪ Point out the relevant UNDP SES requirements for managing these risks. When doing so, the project shall consult the SES team for the latest insights on the effective operation of these screening systems. In cases where selected solutions involve construction or infrastructure instalment and operation, the sub-projects will: ▪ follow the national standards prescribed by the national law. ▪ ensure that their design, construction and operation is done by the experienced contractor(s) having relevant certifications and permits for the relevant works, ▪ implement preventive/protective measures to avoid/minimize the relevant health and safety risks for the construction workers and the surrounding communities, and be before the beginning of their actual use/operation approved (and where needed certified) by either competent authorities or independent professionals not involved in their design and construction
Risk 7: The outcomes of the projects supported in scope of Component 2 may have a negative impact on climate change or be sensitive/vulnerable to potential impacts of climate change	I=3 L=3	Moderate	The project proposals which will be supported under Component 2: include a) low-carbon, energy-efficient and circular economy-based communal infrastructure	The project will require that the implementing entities put in place a systematic screening of proposed sub-projects that will pay special attention to their relevant SES risks highlighted in the SESP and subsequent SES documentation and also integrate any applicable screening requirements in

Standard 2, q.2.1, q.2.2, q.2.3			and services ("sustainable and smart city infrastructure"); b) maintenance of natural capital, ecosystem services and nature-based solutions for increased urban climate resilience. The risk includes exposure to hazards, increase of vulnerability to potential impacts of climate change, maladaptive or negative coping practices. The likelihood is assessed as moderately likely and the impact as intermediate.	the country. The screening of subprojects will: • Identify – using a tailored approach based on the UNDP Social and Environmental Screening Checklist – their potentially significant risks associated with the proposed activities on: - Biodiversity and Sustainable Natural Resource Management - Climate Change and Disaster Risks - Community Health, Safety Security - Cultural Heritage - Displacement and Resettlement - Labour and Working Conditions - Pollution Prevention and Resource Efficiency • Determine the significance of potential SES risks based on the UNDP SES requirements • Point out the relevant UNDP SES requirements for managing these risks. When doing so, the project shall consult the SES team for the latest insights on the effective operation of these screening systems. If the screening of sub-projects indicates the need for EIA/SEA based on the national legislation or further assessment requirements based on UNDP SES (for Substantial and High-risk projects), the project will: Consider whether the local systems/processes used by the implementing partners can adequately address these UNDP SES requirements. Where gaps exist, suggest practical options for enhancing these systems/processes with additional requirements that achieve the equivalence and acceptable implementation of the relevant UNDP SES requirements. Assess any potentially significant risks/impacts and adopt measures that avoid, minimise or offset them so that they comply with the UNDP Social and Environmental Standards and applicable country requirements. Follow up and monitor the implementation of such agreed mitigation measures. Furthermore, the selection of the investments to be supported will include climate proofing. Based on the EU Climate Proofing Guidance, a simple instruction will be prepared as part of the application process. For this, the vulnerability assessments

				prepared as part of the NAP will be used, as well as the digital climate atlas and CC scenarios, as well as the disaster risk registry. In this way, investments which are highly vulnerable to climate change or are placed in areas of high risks, will be excluded. (S2.1, 2.2 and 2.3). The promotion of the use of NbS will lead to greater resilience counteracting heat waves and extreme rainfalls. The project will not support any investments in the environmentally sensitive areas with potentially negative impact. (S1.1 and S1.2) It will: ▪ minimize unwarranted conversion or degradation of the habitat and resident species populations, ▪ keep its interventions in natural and semi-natural habitats to minimum not to disturb the existing flora and fauna, degrade the habitat and reduce ecological connectivity in the ecosystem, and ▪ use cost-effective opportunities to enhance the habitat as part of the project. In addition, the project shall screen the sub-projects using the screening approached presented for previous risks to identify any potentially significant impacts of its proposed activities on habitats and ecosystems and ecosystem services. Such screening will consider impacts that may arise through the loss, degradation, and fragmentation of semi-natural and natural habitats (e.g. restricting the free movement of species between important habitats) or changes in the important ecosystem processes that support ecosystems and their services. When such screening will determine any potential Substantial or High Risks, the project shall commission their further assessments.
Risk 8: Adverse impacts to habitats and/or ecosystems and ecosystem services or activities within or adjacent to environmentally sensitive areas Standard 1, q.1.1, q.1.2	I=2 L=3	Moderate	The triangular metropolitan area also includes some of Serbia's most prominent natural reserves such as the wetlands of Carska Bara and Okanj Bara (recognized also as Ramsar sites in accordance with the Ramsar Convention on Wetlands), the national park Fruska Gora between Belgrade and Novi Sad as well as 45 natural goods protected by the law in the Belgrade region. The likelihood	Same as for Risk 7

			of adverse impacts is assessed as low and the impact as intermediate.	
[add additional rows as needed]				

QUESTION 4: What is the overall project risk categorization?

Low Risk	☐	
Moderate Risk	☐	
Substantial Risk	☒	
High Risk	☐	

QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)

Question only required for Moderate, Substantial and High Risk projects

Is assessment required? (check if "yes")	X			***Status? (completed, planned)***
if yes, indicate overall type and status		X	Targeted assessment(s)	To be completed during development of ProDoc: gender analysis, stakeholder analysis
		X	ESIA (Environmental and Social Impact Assessment)	Planned during implementation
		X	SESA (Strategic Environmental and Social Assessment)	Planned during implementation
Are management plans required? (check if "yes)	X			
If yes, indicate overall type		X	Targeted management plans (Gender Action Plan, Stakeholder Engagement Plan, on innovative solutions proposal level Waste Management Plan, Occupation Health and Safety Plans and, if needed, Livelihood Action Plan)	To be completed during ProDoc development phase: Gender Action Plan, Stakeholders Engagement Plan

			X	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	Planned during implementation
			X	ESMF (Environmental and Social Management Framework)	To be completed during ProDoc development phase
	Based on identified risks, which Principles/Project-level Standards triggered?		**Comments (not required)**		
	Overarching Principle: Leave No One Behind				
	Human Rights	X			
	Gender Equality and Women's Empowerment	X			
	Accountability	X			
	1. Biodiversity Conservation and Sustainable Natural Resource Management	X			
	2. Climate Change and Disaster Risks	X			
	3. Community Health, Safety and Security	X			
	4. Cultural Heritage	☐			
	5. Displacement and Resettlement	X			
	6. Indigenous Peoples	☐			
	7. Labour and Working Conditions	X			
	8. Pollution Prevention and Resource Efficiency	X			

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	***Date***	***Description***
QA Assessor		UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
Overarching Principle: Leave No One Behind **Human Rights**		**Answer (Yes/No)**
P.1	Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
P.2	Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	No
P.3	Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?	No
Would the project potentially involve or lead to:		
P.4	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
P.5	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities?	Yes
P.6	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	Yes
P.7	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Gender Equality and Women's Empowerment		
P.8	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
Would the project potentially involve or lead to:		
P.9	adverse impacts on gender equality and/or the situation of women and girls?	Yes
P.10	reproducing discriminations against women based on gender, especially regarding participationin design and implementation or access to opportunities and benefits?	No
P.11	limitations on women's ability to use, develop and protect natural resources, taking into accountdifferent roles and positions of women and men in accessing environmental goods and services? *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being*	No
P.12	exacerbation of risks of gender-based violence? *For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.*	No

Sustainability and Resilience: Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below		Yes
Accountability		
Would the project potentially involve or lead to:		
P.13	exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	Yes
P.14	grievances or objections from potentially affected stakeholders?	Yes
P.15	risks of retaliation or reprisals against stakeholders who express concernsor grievances, or who seek to participate in or to obtain information on the project?	No
Project-Level Standards		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
Would the project potentially involve or lead to:		
1.1	adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes*	Yes
1.2	activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Yes
1.3	changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	risks to endangered species (e.g. reduction, encroachment on habitat)?	No
1.5	exacerbation of illegal wildlife trade?	No
1.6	introduction of invasive alien species?	No
1.7	adverse impacts on soils?	No
1.8	harvesting of natural forests, plantation development, or reforestation?	No
1.9	significant agricultural production?	No
1.10	animal husbandry or harvesting of fish populations or other aquatic species?	No
1.11	significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	No
1.12	handling or utilization of genetically modified organisms/living modified organisms?	No
1.13	utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.14	adverse transboundary or global environmental concerns?	No
Standard 2: Climate Change and Disaster Risks		
Would the project potentially involve or lead to:		

2.1	areas subject to hazards such as earthquakes, floods, landslides, severewinds, storm surges, tsunami or volcanic eruptions?	Yes
2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters? *For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes*	Yes
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	Yes
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	No
Standard 3: Community Health, Safety and Security		
Would the project potentially involve or lead to:		
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complexdams)	Yes
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	No
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	No
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	No
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food,surface water purification, natural buffers from flooding)?	No
3.7	influx of project workers to project areas?	No
3.8	engagement of security personnel to protect facilities and property or to support project activities?	No
Standard 4: Cultural Heritage		
Would the project potentially involve or lead to:		
4.1	activities adjacent to or within a Cultural Heritage site?	No
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	No
4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.4	alterations to landscapes and natural features with cultural significance?	No
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
Would the project potentially involve or lead to:		
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No

5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	Yes
5.3	risk of forced evictions?	No
5.4	impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
Would the project potentially involve or lead to:		
6.1	areas where indigenous peoples are present (including project area of influence)?	No
6.2	activities located on lands and territories claimed by indigenous peoples?	No
6.3	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? *If the answer to screening question 6.3 is "yes", then Standard 6 requirements apply, and the potential significance of risks related to impacts on indigenous peoples must be Moderate or above.* *	No
6.4	the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? *Consider, and where appropriate ensure, consistency with the answers under Standard 5 above*	No
6.7	adverse impacts on the development priorities of indigenous peoples as defined by them?	No
6.8	risks to the physical and cultural survival of indigenous peoples?	No
6.9	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? *Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.*	No
Standard 7: Labour and Working Conditions		
Would the project potentially involve or lead to: (note: applies to project and contractor workers)		
7.1	working conditions that do not meet national labour laws and international commitments?	Yes
7.2	working conditions that may deny freedom of association and collective bargaining?	No
7.3	use of child labour?	No
7.4	use of forced labour?	No
7.5	discriminatory working conditions and/or lack of equal opportunity?	No
7.6	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	Yes

Standard 8: Pollution Prevention and Resource Efficiency		
Would the project potentially involve or lead to:		
8.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
8.2	the generation of waste (both hazardous and non-hazardous)?	No
8.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	No
8.4	the use of chemicals or materials subject to international bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention*	No
8.5	the application of pesticides that may have a negative effect on the environment or human health?	No
8.6	significant consumption of raw materials, energy, and/or water?	No

Annex 3 UNDP Risk Register

Project Title: Green cities transformation – smart, sustainable and low-carbon urban solutions in triangular metropolitan area	Project Number: 01002971/1295925	Date: 20-Oct-24

#	Event	Cause	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level	Risk Valid From/To	Risk Owner	Risk Treatment and Treatment Owner
1	There is a risk that adequate political support for suggested measures is not received from the responsible ministry/-ies or participating LSGs.	As a result of competing or conflicting priorities or lacking human resources or other capacity to implement the suggested measures	Which will impact in meeting the project targets of component 1, in particular	**7. STRATEGIC (7.5. Government commitment) - UNDP Risk Appetite: OPEN TO SEEKING**	Likelihood: **3 - Moderately likely** Impact: **4 - Extensive** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 20-Oct-24 To: 31-Dec-29	*Project Manger*	Risk Treatment 1.1: Developing the project in close consultation with the key stakeholders of the responsible ministries and local self-governments, and proposing measures, which are fully aligned or can contribute to meeting the needs of the local administration Risk Treatment Owner: Project management Risk Treatment 1.2: Awareness raising on the impact and benefits of the proposed measures to local decision makers Risk Treatment Owner: Project management Risk Treatment 1.3: Assigning necessary budget allocations for overcoming the initial resource or capacity barriers Risk Treatment Owner: Project management

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2	There is a risk that the responsible ministry(-ies) or the participating LSGs. do not have the financial resources to support the proposed measures or their effective replication	As a result of inadequate annual budget allocations or access to other resources.	Which will impact in financing and/or sustaining the envisaged projects or other measures.	**2. FINANCIAL (2.6. Budget availability and cash flow) - UNDP Risk Appetite: MINIMAL TO CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **4 - Extensive** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 20-Oct-24 To: 31-Dec-29	*Project Manger*	Risk Treatment 2.1: Signed co-financing letters required at the CEO Endorsement as well as having several different co-financing sources, including bi- and multilateral donors and the environmental funds managed by local self-governments. A significant share of financing for the planned pilot projects is also expected from the private sector. Risk Treatment Owner: Project management
3	There is a risk that the challenge calls do not motivate the targeted stakeholders i.e. no proposals of decent quality and amount are received ...	As a result of not matching with the challenge calls what the targeted stakeholders can offer.	Which will impact in meeting the stated overall projects targets and those of component 2 in particular.	**7. STRATEGIC (7.3. Stakeholder relations and partnerships) - UNDP Risk Appetite: OPEN TO SEEKING**	Likelihood: **2 - Low likelihood** Impact: **4 - Extensive** Risk level: **LOW (equates to a risk appetite of MINIMAL)**	From: 20-Oct-24 To: 31-Dec-29	*Project Manger*	Risk Treatment 3.1: Careful preparation and design of the call for proposals. The experiences and results from the previous projects also indicate that by good preparation and attractive marketing, this risk can be effectively addressed Risk Treatment Owner: Project management.

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4	There is a risk that due to technical failure of the equipment and/or software used, the trust of the key stakeholders and investors on the solution(s) is lost ...	As a result of supporting projects or measures not yet adequately tested.	Which will impact in meeting the stated overall project targets and cause also reputational damage.	**5. REPUTATIONAL (5.1. Public opinion and media) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 20-Oct-24 To: 31-Dec-29	*Project Manger*	Risk Treatment 4.1: Adequate due diligence and, when applicable, pre-testing of the proposed solutions + adequate guarantees from the suppliers. Risk Treatment Owner: Project management.
5	There is a risk that the supported investment projects or policy measures generate waste that is harmful to the environment and human health, if not properly managed and disposed.	As a result of unforeseen impacts of the supported investments projects or policy measures.	Which will impact in harming the environment and/or human health and cause also reputational damage for the suggested measures.	**1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 20-Oct-24 To: 31-Dec-29	*Project Manger*	Risk Treatment 5.1: Having as an obligatory component for all proposals an environmental impact assessment addressing also the waste issue. Risk Treatment Owner: Project management

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6	There is a risk that the changing climate and extreme weather conditions eventually appearing more frequently and more intensively pose specific risks to the supported projects or other measures that may be exposed to such weather.	As a result of exceptionally extreme weather conditions, their unforeseen impacts or inadequate preparation for them.	Which will impact in meeting the stated overall projects targets and those of component 2 in particular.	**1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 20-Oct-24 To: 31-Dec-29	*Project Manger*	Risk Treatment 6.1: Taking the changing climate and the risk for more frequent and intensive extreme weather conditions into account in the calculations, in defining the technical specifications for the equipment and in ensuring their proper installation and that they have adequate quarantees from the suppliers. Risk Treatment Owner: Project management and suppliers
7	There is a risk that there is inadequate local capacity to effectively implement the proposed measures.	As a result of failed recruitment or assignment of duties	Which will impact in in meeting the stated overall projects targets.	**4. ORGANIZATIONAL (4.2. Execution capacity) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **2 - Low likelihood** Impact: **4 - Extensive** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 20-Oct-24 To: 31-Dec-29	*Project Manger*	Risk Treatment 7.1: Adequate assessment of the capacities of the candidates to implement the project, coaching and adaptive management Risk Treatment Owner: Project IP, Project Board and Project Management