Terminal Evaluation of UNDP/GEF Project:

Climate Smart Urban Development (CSUD) Challenge

(GEF Project ID 9342; UNDP PIMS ID: 5551)

Terminal Evaluation Report

Terminal Evaluation timeframe: August 2022, 2022

Date of Terminal Evaluation Report: 30 August 2022

Region and countries included in the project: ECIS, Serbia

GEF Focal Area/Strategic Program: GEF6, CCM-2 Program 3

Executing Agency/Implementing partner: Ministry of Environmental Protection

Other execution partners: UNDP support (UNDP supported National Implementation Modality)

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Disclaimer

This report has been prepared by independent consultant evaluators and is a product of the Independent Evaluation Office of UNDP. The findings and conclusions expressed herein do not necessarily reflect the views of UNDP Country Offices or the UNDP Senior Management.

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Abbreviations

AERS	Serbian Energy Agency
AWP	Annual Work Plan
CC	Climate Change
CDR	Combined Delivery Report
CPD	Country Programme Document
CSOs	Civil Society Organizations
CSUD	Climate Smart Urban Development
EBRD	European Bank for Reconstruction and Development
EE	Energy Efficiency
EOP	End of Project
ETF	Enhanced Transparency Framework
EU	European Union
EUD	European Union Delegation
EU ETS	EU Emission Trading Scheme
FAO	Food and Agriculture Organization
GCF	Green Climate Fund
GEF	Global Environment Facility
GHG	Greenhouse Gases
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IFI	International Financial Institution
ISS	Institute for Standardization
KfW	Kreditanstalt Für Wiederaufbau (German Development Bank)
KIC	Knowledge and Innovation Community (EIT Climate-KIC)
KII	Key Informant Interview
KM	Knowledge Management
LSG	Local Self-government
M&E	Monitoring and Evaluation
MoAFW	Ministry of Agriculture, Forestry and Water Management
MoEP	Ministry of Environmental Protection
MoESTD	Ministry of Education, Science and Technological Development
MoF	Ministry of Finance
MoME	Ministry of Mining and Energy
MoPALSG	Ministry of Public Administration and Local Self-Government
MoTTT	Ministry of Trade, Tourism and Telecommunications
MRV	Monitoring, Reporting and Verification
MTR	Medium Term Review (of the CSUD Project)

NAP	National Adaptation Plan
NCE	UNDP-Nature, Climate and Energy Team
NDC	Nationally Determined Contributions
NIM	National Implementation Modality
OECD	Organization for Economic Co-operation and Development
PA	Paris Agreement
PIF	Project Identification Form
PIR	Project Implementation Report
PIU	Project Implementation Unit
PPO	Public Procurement Office
RE	Renewable Energy
RTA	Regional Technical Advisor
SCC	Serbian Chamber of Commerce
SEPA	Serbian Environmental Protection Agency
SHS	State Hydrometeorological Services
SORS	Statistical Office of the Rep. of Serbia
SCTM	Standing Conference of Towns and Municipalities
SDGs	Sustainable Development Goals
SESP	Social and Environmental Screening Procedure
TE	Terminal Evaluation
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change

1. Executive Summary

1.1. Project Information Table

Project Title	**Serbia - Climate Smart Urban Development Challenge (CSUD)**		
UNDP Project ID (PIMS #):	5551	PIF Approval Date:	18 April 2016
GEF Project ID (PMIS #):	9342	CEO Endorsement Date:	16 December 2016
ATLAS Business Unit, Award # Proj. ID:	00087760, 00094603	Project Document (ProDoc) Signature Date (date project began):	21 February 2017
Country(ies):	Serbia	Date project manager hired:	01 March 2017
Region:	ECIS	Inception Workshop date:	18 May 2017
Focal Area:	Climate Change	Midterm Review completion date:	20 November 2019
GEF Focal Area Strategic Objective:	CCM-2 Program 3	Planned closing date:	December 2021
Trust Fund [indicate GEF TF, LDCF, SCCF, NPIF]:	GEF	If revised, proposed op. closing date:	22 August 2022
Executing Agency/ Implementing Partner:	Ministry of Environmental Protection		
Other execution partners:	UNDP support (UNDP supported NIM)		
Project Financing	at CEO endorsement (USD)	at Terminal Evaluation (USD)	
[1] GEF financing:	1,950,000	1,949,677	
[2] UNDP contribution:	100,000 cash	100,000 cash + 25,000 in-kind	
[3] Government:	5,000,000 cash + 400,000 in-kind	1,011,892 cash + 300,000 in-kind	
[4] Other partners:	4,960,000 cash + 100,000 in-kind	11,088,879 cash + 216,000 in-kind	
[5] Total co-financing [2 + 3+ 4]:	10,560,000	12,741,771	
PROJECT TOTAL COSTS [1 + 5]	12,510,000 USD	14,691,448	

1.2. Project Description

The project is aimed at promotion of innovation and community engagement for climate smart urban development (CSUD). Rather than defining the detailed technical and other solutions upfront, the Project seeks to actively engage citizens, civil society organizations (CSOs), public and business communities to come up with new and innovative ideas on how to contribute to this in practice and to jointly develop, finance and implement these ideas further. The project is wide in its scope covering sectors, such as energy, transport, construction, urban planning, water and waste management, and structured along in three main components:

Component 1, focusing on improved access to and availability of data by an open data approach for development, management and monitoring of CSUD related performance of Serbian municipalities. The core activity in Outcome 1 is the Open Data Challenge.

Component 2, focusing on new innovative technical and systemic solutions and business models contributing to climate smart urban development from public and business communities CSOs, citizens. The core activity in Outcome 2 is the Innovation Challenge.

Component 3, deals with knowledge management and Monitoring & Evaluation (M&E) to facilitate learning, scaling up and replication of project results.

1.3. Evaluation Ratings Table

Evaluation Ratings Table	
Monitoring & Evaluation (M&E)	Rating
M&E design at entry	Satisfactory (S)
M&E Plan Implementation	Satisfactory (S)
Overall Quality of M&E	Satisfactory (S)
Implementation & Execution	Rating
Quality of UNDP Implementation/Oversight	Highly Satisfactory (HS)
Quality of Implementing Partner Execution	Moderately Satisfactory (S)
Overall quality of Implementation/Execution	Satisfactory (S)
Assessment of Outcomes	Rating
Relevance	Highly Satisfactory (HS)
Effectiveness	Satisfactory (S)
Efficiency	Satisfactory (S)
Overall Project Outcome Rating	Satisfactory (S)
Sustainability	Rating
Financial resources	Likely (L)
Socio-political/economic	Likely (L)
Institutional framework and governance	Likely (L)
Environmental	Likely (L)
Overall Likelihood of Sustainability	Likely (L)

1.4. Concise summary of findings, conclusions and lessons learned

The project displays high level of international and national policy conformity. At international level, the project primarily contributes to specific GEF-6 Programming Directions, UNDAF/Country Programme Document, UNDP Strategic Plan and is directly connected to four Sustainable Development Goals (SDGs).

At national level, the results of the project have direct contributions towards country performance under Chapter 27 Environment and Chapter 15 Energy of the EU accession negotiations and have made a number of policy/planning interventions in the areas of waste management, urban development and energy.

The project design highlighted the role of participatory approach in introducing and enhancing innovation dimension of the climate solutions for urban development. Specifically, the project is a pioneer in bringing together innovation and climate change seeking solutions for climate smart urban development proposed by private sector, CSOs, research institutions, LSGs and individuals. Furthermore, the project had strong LSGs targeted activities, and aspired for contribution to gender mainstreaming in the proposed innovative solutions.

During the implementation, the project has established strong synergies with other ongoing projects which ensures sustainability and scaling up (EUD-financed project "EU for Green Agenda in Serbia", GEF funded – "Reducing Community Carbon Footprint by circular economy approach", "EU for Green Agenda in Serbia" - parallel financing by Swiss Development Cooperation, "Leveraging NDCs to achieve net-zero emissions and climate-resilient development", Government of Japan).

The main products of the Project are the eight LSG's open data projects and the eleven innovation projects. Around these products, a high number of trainings and other capacity building and dissemination activities/events were organized. Overall, the projects and the accompanying outreach activities ensure achievement of the Project Objective.

The project team displayed strong adaptive management by adjusting well to working under Covid-19 restrictions, managing to deliver effectively in the circumstances of political turmoil, displaying flexibility and efficient coordination with other relevant ongoing projects and activities. In order to respond to the emerging needs, several adjustments were made including introduction of "Innovation Challenge", establishing of Climate Incubator/Accelerator and adoption of an innovative Performance-Based Payments model to support the selected pilot projects.

The project had well-designed M&E plan also including MTR. The project team was well-versed with UNDP and Governmental procedures. The coordination and cooperation of PIU with the MoEP, stakeholders and the RTA were also well-functioning. The risks including social and environmental standards were well-managed and did not influence the success and pace of implementation of project outputs and activities.

Overall, the project exhibited satisfactory level of performance. It was highly relevant and timely, both in international and in national context. Satisfactory level of effectiveness and efficiency were convincingly demonstrated. Sufficient evidence was found that the overall progress towards achievement of the project objective is satisfactory, as is the overall progress towards achievement of most of the end-of-project targets under the three outcomes/components. The assessment of risks along financial, socio-economic, institutional and environmental dimensions does not identify any significant risk, that may affect the continued use of the project results, so the overall sustainability is rated likely.

On the other side, there were some issues which would need corrective action or particular attention to be improved or avoided in the following projects. Most prominent are the difficulty to compare projects with different primary goals, i.e., GHG emissions reductions, devising innovative solutions and proving their concept or making behavioural change with high social impact; difficulty to prove additionality of some of the projects; and difficulty to establish vigorous system for monitoring, reporting and verification of the achieved GHG emission reduction.

Although the Project have demonstrated adequate level of success in LSGs engagement, there were challenges rooted in the lack of human and financial capacities, complex and unfriendly administrative procedures, as well as consistency in political support and cooperation. Given that CSUD theme covers many

intertwined policy areas, the mentioned challenges were relevant also for interministerial cooperation and engagement of other ministries. Finally, there is always room for improvement the prospects for cooperation and building partnerships and synergetic action with other Donors and national and international partners.

A lesson learned is that the progress towards objective of the umbrella project could not be measured only through the GHG emissions reduction, number of the beneficiaries and the leveraged complimentary financing. Indicators, be they quantitative or qualitative, which will measure and value the level of innovation and social impact should also be included. Furthermore, the incomparability of the applying projects affects the implementation of innovation calls - setting the evaluation criteria, the evaluation process and selection of the winning projects. Later, in the implementation phase of the winning projects, monitoring the progress is also difficult, particularly the progress made at the umbrella project level.

The TE team meticulously noted the issues and lessons learned and delivered recommendations in three areas of relevance – call design, indicators, evaluation; local self-governments; and stakeholder involvement and partnerships, which capitalize on the lessons learned and help avoidance or mitigation of the identified issues.

1.5. Recommendations summary table

Recommendations summary table

Area: Call design, indicators, evaluation			
No	Action	Entity responsible	Timeframe
1	Differentiate the projects to be supported in the following groups: • Group 1: Projects based on mature technology and have well established methodology for calculation of GHG reductions • Group 2: Projects with significant potential for social impact/behavioural changes • Group 3: Projects with pronounced focus on innovation	UNDP Project Team Other donors or any potential supporter of similar projects Experts – project designers and developers of project documents	For future projects Continuous
2	Publish targeted call for each of the different groups and define adequate key indicators for Group 2 and Group 3, like for example, “number of persons reported pro-environment behaviour” or “delivery of a patent (yes/no)”. Examples of key indictors Include the Group 2 and Group 3 specific key indicators in the main Projects Results Framework, besides the “achievable GHG reductions” relevant for Group 1 only projects.	Experts – project designers and developers of project documents UNDP Project Team	For future projects Continuous

3	Prepare Manuals for Evaluators which will describe the general principles and procedures that will be used in the evaluation and selection of project proposals. The Manuals should include guidance and examples for all three project groups. Ideally, for each of the three project groups assign different experts for evaluation.	UNDP Project Team Experts engaged to develop manuals (ideally, experienced evaluators)	For future projects Continuous
4	Focus on additionality and GHG emissions reduction MRV component only for the Group 1 projects.	UNDP Project Team Experts – project designers and developers of project documents GHG emissions reduction MRV experts	For future projects Continuous
5	Provide additional support to the selected beneficiaries for marketing and branding of their products and/or project results. Put more emphasizes on these elements when designing the challenge calls in future.	UNDP Project Team Experts – project designers and developers of project documents Marketing and branding experts	For future projects Continuous
6	Given the importance of communications for reaching out potential beneficiaries and stakeholders, plan communication component separately and include communications targeted line in the project budget.	UNDP Project Team Communications experts Financial experts	For future projects Continuous
Area: Local self-governments			
No	Action	Entity responsible	Timeframe
7	Take into consideration needs and capacities of LSGs more thoroughly during the preparatory or inception phase of the projects in order to avoid that some of them are not ready enough or not committed to participate fully into the project activities. Exchange and share regularly knowledge with SCTM (due to their position and knowledge regarding LSGs readiness, interests, needs and capacities) in order to minimize the potential risks related to LSGs involvement.	UNDP Project Team Experts – project designers and developers of project documents LSGs SCTM	For future projects Continuous
8	In cases when the main goal is “opening data”, avoid supporting preparation of strategic and planning documents as their formal adoption is highly uncertain. Particularly, the strategic and planning documents which still does not represent a formal obligation for the beneficiary institution. Instead, support Studies which will inform CSUD projects design, facilitate their implementation and measure their impacts.	UNDP Project Team Experts – project designers and developers of project documents LSGs	For future projects Continuous

9	When a LSG is PBP beneficiary, apply a modified/ customized contract model considering complex and unfriendly procurement procedures which introduce high risk of impeding project implementation. For example, LSG should keep monitoring and supervision role, while a third entity should be in charge for implementation of the PBP agreement and procurement.	UNDP Project Team Financial and legal experts LSGs	For future projects Continuous
10	Organize more intensive campaigns with showcase events and other communication products presenting the LSG achievements under open data and innovation challenges. Organize peer-to-peer trainings with most advanced LSGs from open data innovation challenge serving as trainers in order to motivative and capacitate the other LSGs to prepare applications for the calls. This will also enable transfer of knowledge and experiences from successful projects (Example: promotion of the solution for animal waste mapping and management in Sremska Mitrovica).	UNDP Project Team Most advanced LSGs from open data innovation challenge Other LSGs Communication experts Media	For future projects Continuous
Area: Stakeholder involvement and partnerships			
No	Action	Entity responsible	Timeframe
11	Given the wide scope of CSUD topic, enhance the interministerial cooperation/ engagement, particularly for CSUD open data challenge where a great portion of relevant data is in the domain of the Ministry of Mining and Energy.	UNDP Project Team MoEP Ministry of Mining and Energy and other relevant ministries	For future projects Continuous
12	Maintain and enhance the partnerships with the umbrella institutions like SCTM (for LSGs) and Chamber of commerce and NALED (for private sector) enabling mutual exchanges and support, as well as for effective outreach through established networks and contacts.	UNDP Project Team SCTM Chamber of commerce NALED	For future projects Continuous
13	Improve the prospects for cooperation and building partnerships and synergetic action with other Donors and national partners through: • Enhancing transparency of the Environment portfolio • Reinforcing the country and other stakeholders' ownership over the projects and their results • Highlighting the contributions of the projects form the Environment portfolio to the objectives of other portfolios, particularly contributions in terms of transparency, openness, inclusiveness which are drivers of Good Governance portfolio	UNDP Other donors Serbian government Other national partners	For future projects Continuous

2. Introduction

2.1. Purpose and objective of the Terminal Evaluation (TE)

In accordance with UNDP and GEF M&E policies and procedures, the CSUD Project, as a medium-sized UNDP-supported GEF-financed project is required to undergo a Terminal Evaluation (TE) at the end of the project, the UNDP Serbia has initiated a TE of the medium-sized project titled "Climate Smart Urban Development (CSUD) Challenge". The project started on 21 February 2017, and it is expected to be finalized in August 2022, meaning it is in its final year of implementation.

The TE report assesses the achievement of project results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

Moreover, the TE Report promote accountability and transparency by assessing:

- The project strategy
- The implementation and adaptive management
- The achievement of project results against expectations set out in the project's Logical Framework/Results Framework including also identification of risks to sustainability

The TOR for the TE is presented in A1: Terminal Evaluation Terms of Reference. The TE process follows the guidance outlined in Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects, 2020. The TE team is composed of two independent evaluators – one team leader - evaluator and one national consultant. The TE follows a participatory and consultative approach ensuring close engagement with the Project Team and UNDP CO, the Regional Technical Advisors (RTAs), as well as stakeholders who have project responsibilities, including implementing agency and other governmental institutions, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project beneficiaries, academia, local government, private sector, Non-Governmental Organisations (NGOs), etc.

Also, gender-responsive methodologies and tools are used ensuring that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the TE report. Particularly, the TE team ensured that conclusions, recommendations and lessons learned including results related to gender equality and empowerment of women.

2.2. Scope

The TE promotes accountability and transparency and assesses the scope of project achievements. In particular, the TE assess the following:

a) Project Design/Formulation

- Project design
- Results Framework/Logframe
- Mainstreaming

b) Project Implementation & Adaptive Management

- Management Arrangements
- Work Planning
- Finance and co-finance
- Project-level Monitoring and Evaluation Systems

- Stakeholder Engagement
- Reporting
- Communications

c) Project Results

The results will be assessed according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects in the context of:

- Relevance – the extent to which the outcome is suited to local and national development priorities and organizational policies, including changes over time
- Effectiveness – the extent to which an objective was achieved or how likely it is to be achieved
- Efficiency – the extent to which results were delivered with the least costly resources possible
- Sustainability - The likely ability of an intervention to continue to deliver benefits for an extended period of time after completion.

Ratings are presented in A7: TE Rating scales.

The section on **conclusions** is written in light of the findings. Conclusions represent comprehensive and balanced statements that are verified by evidence and logically connected to the TE findings. They highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of solutions regarding important problems or issues relevant to project beneficiaries, UNDP and the GEF, including issues in relation to the gender equality and women's empowerment.

Recommendations are concrete, practical, feasible and targeted actions directed to the intended users of the evaluation. The recommendations are specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.

The TE report also includes **lessons** that can be taken from the evaluation, including best practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. The conclusions, recommendations and lessons learned of the TE report incorporate gender equality and empowerment of women.

2.3. Methodology

The stepwise process of the TE is presented in **Figure 1**.

TE Phases	Activities
 DATA COLLECTION	Documentation review (guided by the Evaluation matrix) Interviews (guided by the Evaluation matrix)
 DATA ANALYSIS	Organizing and classifying the collected info Checking factual evidence - comparative assessment and triangulation Extracting useful information that responds to the evaluation questions
 TE REPORT WRITING	Translating the data into usable formats as required by the TE guidance Drafting the conclusions, recommendations and lessons learned

Figure 1 Terminal Evaluation - step-by-step presentation

The Evaluation question matrix is provided in A4: Evaluation Question Matrix. It was constructed along the four GEF evaluation criteria and includes principal evaluation questions to be used as a basis for interviewing stakeholders and reviewing project documents.

2.4. Data Collection & Analysis

Documentation Review: The TE team reviewed the relevant documents that were made available by the UNDP CO, as well as other documents found from various other sources. The reviewed documentation is presented in A3: List of documents reviewed.

Interviews: The TE team conducted 14 online meetings with the key project stakeholders using as basis the questions stipulated in the Evaluation matrix (A4: Evaluation Question Matrix) and the in-depth interview guide (A5: Questionnaire used/Interview guide). 10 women were included among total 29 interviewees. The interviewees were selected based on their role in the project, institution and level of engagement. The TE team was able to reach out majority of targeted interviewees. Through the interviews, the TE obtained information about the key informants' impressions and experiences from implementation of the project. Triangulation of results, i.e., comparing information from different sources, such as documentation and interviews, or interviews on the same subject with different stakeholders, was used to check the reliability of evidence. The list of people interviewed is provided in A2: List of persons interviewed.

Data analysis: Data analysis was conducted through organizing and classifying the collected information, their tabulation and optimization, and by comparing the results with other appropriate information and data that enable extracting useful information that responds to the evaluation questions. Even during the data collection phase, the information gathered was triangulated to ensure accuracy and robustness.

The TE team used basic gender-responsive tools that include data on gender disaggregated participation in the project activities and assessment of the level of institutional capacity and actions of the project implementing partners for integrating gender into the climate change monitoring and reporting, as well as capability for addressing knowledge gaps on gender issues in climate change. The gender-related findings are reported under the assessment of Project Design/Formulation.

2.5. Ethics

The evaluation team put all efforts to comply with the requirement of ethical conduct of evaluations, namely the four United Nations Evaluation Group (UNEG) guiding ethical principles for evaluation: Integrity, Accountability, Respect, and Beneficence. In particular, the team ensured the anonymity of the interviewees (i.e., not citing without their permission, UNDP staff not present during the interviews), engaging with the interviewees in a way that honours their dignity, well-being, personal agency and characteristics, honesty, truthfulness, impartiality and professionalism in communication.

2.6. Limitations to the evaluation

The planned timeline was shortened due to late solicitation of the TE consultants. However, the deadline for the final report had remained the same. The summer vacation holidays falling in the time of the TE, as well as the busy agendas of the relevant stakeholders, also imposed difficulties in the scheduling the interviews. Due to Covid-19 pandemic, all the interviews were conducted online, but given that this has been a dominant operational mode for almost two years for most of the people, no significant limitations were encountered. All efforts from the TE team and UNDP were put in place to squeeze the actual timeline for conducting desk review and interviews and writing the reports in a timely manner.

2.7. Structure of the TE report

The TE report is composed of five chapters. The **executive summary**, **introduction** and **project description** chapters, are followed with a chapter on **findings**, presenting the assessment of:

- The project design/formulation
- The project implementation and adaptive management
- The achievement of project results against expectations set out in the project's Logical Framework /Results Framework including also identification of risks to sustainability

The last chapter of the TE report, **main findings, conclusions, recommendations & lessons** elaborates:

- Main findings, presented as statements of fact that are based on analysis of the data
- Conclusions that are well substantiated by evidence and logically connected to the TE findings
- Recommendations that are concrete, practical and feasible actions to take and decisions to make directed to the users of the evaluation
- Lessons learned including best practices in addressing issues relating to relevance, performance and success, as well as examples of good practices in project design and implementation, that are applicable to other GEF and UNDP interventions

3. Project Description

3.1. Project start and duration, including milestones

The CSUD project was approved for implementation as a medium-size GEF project for the duration of 5 years. The approved GEF project grant amounts to 1,950,000 USD with the total 10,560,000 USD pledged as parallel co-financing commitment by the project partners. The specific timeline of the project is summarized in Table 1.

Table 1 Timeline of the project

Milestone	Date
PIF Approval Date	18 April 2016
CEO Endorsement Date	16 December 2016
Project Document Signature Date (project start date)	22 February 2017
Project Inception Workshop	18 May 2017
Date of the Mid-term Review	20 November 2019
Duration of TE	August 2022
Date of full TE completion	22 August 2022
Planned Closing Date of the Project	22 August 2022

3.2. Development context: environmental, socio-economic, institutional, and policy factors relevant to the project objective and scope

The Government of Serbia submitted its first Nationally Determined Contribution (NDC) to the UNFCCC on 30 June 2015 with a pledge to reduce its GHG emission by 9.8% from the 1990 level by 2030. The energy supply is dominated by the use of fossil fuels with locally produced coal (lignite) contributing to over 50% of the total primary energy supply, followed by oil products (23%), natural gas (12%), biofuels and waste (7%) and hydro (6%).

The Government of Serbia committed to achieve its emission reduction within key emitting sectors, among other, by the continuing in transposition of the EU directives dealing with energy efficiency (EE) and the promotion of renewable energy (RE). Increasing the share of renewable energy, improved energy efficiency and modernization of industrial processes were foreseen as key areas for the reduction of energy related GHG emissions, while in the agriculture sector further development of livestock supplies was envisaged.

Besides taking actions at the national level, the huge untapped mitigation potential exists at the municipal level, through improvement of local communal services, industries, businesses etc. It is estimated that municipalities are directly responsible for and cover the cost of approximately 6% of final energy consumption in Serbia. In addition, being in charge of the local energy policy, heat market and municipal services, municipalities decisively influence up to 10% of final energy consumption in Serbia. On the top of this, the municipalities have a strong influence on the large share of final energy consumption in households and commercial activities.

3.3. Problems that the project sought to address, threats and barriers targeted

Before the Project, climate change mitigation and related EE, RE and other measures are not yet viewed as a primary area of concern by Serbian municipalities. Those were not considered as a priority despite the common principal agreement and understanding on the need to develop the cities in both environmentally and economically sustainable way. Even there were several internationally financed projects that already offered technical assistance for public awareness raising and training, or finance targeted energy efficiency (EE) and renewable energy (RE), or supporting the introduction of energy management systems and establishing specific purpose credit lines and other financing mechanisms to support larger scale municipal EE and RE investments, the effective mechanisms to address climate change mitigation were missing and there was a need to identify win-win opportunities addressing the primary concerns of municipalities, while also producing tangible GHG reduction benefits, by applying innovations.

To effectively address climate change mitigation, there is a need to identify win-win opportunities addressing the primary concerns of municipalities, while also producing tangible GHG reduction benefits, by applying innovations. The constantly growing spectrum of new technical and systemic solutions are available, that can improve the quality and efficiency of public services and create new business and employment opportunities for local communities, while simultaneously contributing to climate change mitigation. However, such innovations and new approaches might never make their way to the actual implementation stage due to different administrative, financial, public perception or other barriers - or simply, because the innovators and possible adopters and beneficiaries of these ideas are not aware of or do not trust each other.

Some of the main barriers identified for introduction of the climate change mitigation policies and measures at municipal level were as follows:

- Shortage of financial resources
- Lack of credible data to conduct adequate baseline analysis
- Administrative barriers
- Lack of awareness and capacity to consider, develop and implement state of the art technical solutions, new implementation and financing models
- Lack of concrete incentives to explore and crowdsource new and innovative ideas and approaches
- Such barriers often lead to short term solutions to solve the most pending problems, but which may not really address the longer-term challenges in an economically, socially and environmentally “smartest” way.

3.4. Immediate and development objectives of the project

UNDP, acting as a GEF implementing agency is providing assistance to the Serbian Government, namely MoEP, in the preparation and implementation of the GEF funded project “Climate smart urban development (CSUD)”.

The Project is designed to promote innovation and community engagement for climate smart urban development by:

- Active engagement of citizens, CSOs, public and business communities to come up with new and innovative ideas on how to contribute to this in practice and to jointly develop, finance and implement these ideas further. Possible areas include broader and more effective use of

information and communication technologies (ICT), including its integration into existing city management systems to enable and spearhead innovation and productivity gains in city services, optimization of the resource use and reduction of physical mobility needs.

- Increasing the share of "climate proof" public services by improved energy efficiency and increased use of renewable energy sources, traffic flow optimization and alternative transport modes, including the promotion of carbon-free public and non-motorized transport, building automation systems for lighting, heating, air conditioning and ventilation, waste management (improving recycling schemes and waste to energy) and contributing to climate change mitigation by other means are also to be considered in this context.
- Identifying "the best fit" for a specific problem/city/town, and then finance, implement and sustain the solution in a situation, where the capacities and resources of city authorities to do so on their own are extremely limited.

Therefore, the Project Objective is to promote innovation and community engagement for climate smart urban development (CSUD) in Serbia. By a challenge prize approach, it seeks to actively engage the civil society, public and business communities to come up with new and innovative ideas on how to contribute to this in practice and to jointly develop, finance and implement these ideas further. Broader and more effective use of new information and communication technologies (ICT) to enable and spearhead innovation and productivity gains, optimization of the resource use (e.g. by improved energy efficiency and resource sharing), reduction of physical mobility needs, more attractive public and non-motorized transport, increased use of renewable energy sources, climate smart waste management (improved recycling schemes and waste to energy) and other measures contributing to climate change mitigation are among the topics to be considered in this context. This should further trigger transformational shift towards smart, inclusive cities of the future that are based on citizens participation and citizens centered solutions.

The project will have a stepwise approach in seeking to achieve its objective. First, the project will build up the capacity and assist participating municipalities to mainstream ICT into city management systems and to put in place digital inventories and tools to gather data, monitor actions and also make this information easily accessible by the public. This is further encouraged by launching the first challenge program for the development and establishment of such systems with phased awards, technical and financial backstopping for most innovative and cost-effective technical solutions and for most progressive municipalities to implement them.

Secondly, the project will develop and launch a more comprehensive challenge program for climate smart urban development (CSUD) as an innovative mechanism to source solutions for low-carbon activities and to coach and support otherwise their further development, testing and commercialization.

Finally, the project will monitor and evaluate the impact of the supported activities and backstop their replication and mainstreaming, including, as applicable, further development of the national legal and regulatory framework in order to create an enabling environment for the identified climate-smart solutions and for encouraging innovation in urban management in general. These activities are structured under three project components (outcomes), which are discussed briefly below with further details in Section 3.7, Theory of Change

3.5. Expected results

The project is expected to deliver numerous results along the following lines:

Improved access to and availability of data: CSUD Project is expected to improve access to and availability of data by an open data approach for development, management and monitoring of CSUD related

performance of Serbian municipalities. This "open data" approach may also encourage the users of different communal services to think how to deliver such services in a more cost-effective, socially acceptable and/or environmentally friendly way as well provide a ground for new innovations that may either directly or indirectly use the data made available. Furthermore, the project will assist the participating municipalities to develop their capacities to gather and monitor CSUD related and, to the extent possible, real time data with an emphasis on integrated, cross-sectoral data management systems and development of web portals and mobile platforms for facilitating public access to this information.

New innovative technical and systemic solutions and business models: CSUD will identify, test and replicate the activities that will support the design, establishment and operation of a CSUD challenge program to initiate and support new innovative measures leading to actual GHG emission reduction. The program will target businesses, academic and research institutions, civic society organisations (CSOs), communities and their citizens, and will seek to identify solutions, which involve partnerships between these groups. In doing so, the aim is to harness entrepreneurship and innovation and foster shared goals around CSUD in co-operation with the participating municipalities, which will be the primary beneficiaries of the activities funded and implemented. The challenge program will be designed by taking into account the latest international experience and lessons learnt, while at the same time considering the specific challenges and framework conditions in Serbia.

Knowledge Management: The project is expected to generate, maintain and disseminate knowledge and lessons learnt to encourage and facilitate further development, scaling up and replication of the project results and intervention strategy including well maintained and regularly updated CSUD knowledge management web-portal with institutional arrangements and agreements in place to continue its operation also after the project; the project "lessons learnt" report and recommendations for future work; and international mid-term and final knowledge management seminar.

3.6. Main stakeholders: summary list

The project included also a broad list of stakeholders:

- Ministry of Environmental Protection as the main Project's counterpart and the governmental entity responsible for climate change related issues
- Ministry of Mining and Energy, as the lead institutions for EE and RE related policies
- Ministry of Finance (MoF), responsible for the establishment of new financial support mechanisms
- Ministry of Education, Science and Technological Development (MoESTD) and it integral part the Serbian Innovation Fund
- Local self-governments (LSGs): cities and municipalities
- The Standing Conference of Towns and Municipalities (SCTM)
- Serbian Chamber of Commerce representing private sector interest
- CSOs, research institutions and academia
- Private sector representatives
- Donors and IFIs:
    - EUD, UniCredit bank and the Embassy of Sweden are identified in co-project financing modality
    - KfW, EBRD, GIZ are mentioned in the framework of relevant ongoing or completed projects.
- Other Project partners: Climate KIC (EIT), French Embassy

- Other public sector representatives:
    - Ministry of Public Administration and Local Self-Government (MoPALSG) and the Directorate for eGovernment
    - Ministry of Trade, Tourism and Telecommunications (MoTTT)
    - Serbian Energy Agency (AERS)
    - Serbian Environmental Protection Agency (SEPA)
    - Statistical Office of the Republic of Serbia (SORS)
    - State Hydrometeorological Services (SHS)
    - Public Procurement Office (PPO)
    - Institute for Standardization (ISS)

3.7. Theory of Change

The CSUD project represents a practical and successful example of the concrete implementation of the Serbian climate change policy, and at the same time it is in line with the Serbia'a commitments under the UNFCCC and the Paris Climate Agreement (including its contribution to the NDCs). Moreover, the CSUD project created new mechanisms for the greater involvement of various stakeholders, including private and commercial sectors in climate-related innovations and initiatives. Through application and operationalisation of the PBP Agreement, the Project contributes to the de-risking of the public sector expenditures, at the same time ensuring the blending of funds of the national budget with the private sector capital and in that way complements scarce budgetary resources at the local level.

The CSUD Project promote innovation and community engagement for climate smart urban development in Serbia through two main components, which have related outcomes to reach the objective of the project:

Component/Outcome 1: CSUD Open Data Challenge for new ICT tools and platforms for Serbian municipalities for climate-smart management, monitoring and reporting

This component seeks to build up the capacity and assist participating municipalities to mainstream ICT into city management systems and to put in place digital inventories and tools to gather data, monitor actions and also make this information easily accessible by the public. This is further encouraged by launching the first challenge program for the development and establishment of such systems with phased awards, technical and financial backstopping for most innovative and cost-effective technical solutions and for most progressive municipalities to implement them.

Component 2/Outcome 2: CSUD challenge program for harnessing innovations for climate-smart urban development and supporting their further development and mainstreaming.

The purpose of this component is to develop and launch a more comprehensive challenge program for climate smart urban development (CSUD), eventually as a part of the new Green Fund planned by the Government, as an innovative mechanism to source solutions for low-carbon activities and to coach and support their further development and testing. This component supports the design, establishment and operation of a challenge program for climate smart urban development. It targets businesses, communities and citizens, seeks to identify solutions by creating partnerships, between those groups and the participating municipalities, whereas the municipalities remain the primary beneficiaries of the activities funded and implemented.

Component/Outcome 3: Knowledge Management (KM) and Monitoring and Evaluation (M&E)

The particular emphasis under this component is on generating, maintaining and disseminating knowledge and lessons learnt to encourage and facilitate further development, scaling up and replication of the project results and intervention strategy.

The CSUD Project is seeking to identify and promote win-win opportunities that can effectively address climate change mitigation at local level by applying innovations while also producing tangible GHG reduction benefits. However, such innovations and new approaches were hard to reach to the actual implementation stage due to the various existing administrative, financial, public perception or other barriers - or simply, because the innovators and possible adopters and beneficiaries of these ideas were not aware of or do not trust each other. The CSUD Project therefore provided support to innovative solutions and business models through challenge calls and the Climate Incubator/Accelerator contributing to the awareness-raising on climate change within the country, at national and local levels, but also raising the interest of other donors to implement the same approach for sourcing innovative solutions in specific sectors.

4. Findings

4.1. Project Design/Formulation

Analysis of Results Framework: project logic and strategy, indicators

The Results Framework in the Project Document contains 3 Outcomes, 26 Outputs and 12 indicators established as benchmarks for measurement of achievements of the project at the level of the Project Objective and Outcomes. Both innovation challenge components (outputs) have a well-defined general process on how to carry out the challenges, which is helpful guidance for the Project Team. The Project is open to all relevant sectors, such as energy, transport, construction, urban planning, water and waste management. This is wide approach is helpful in nurturing innovative ideas in all sectors and allows to select the best ideas for further development and finally implementation. The indicators meet the requirements of GEF to be "SMART". Targets both for MTR and TE are clearly defined, MTR targets take into account a ramp-up period in the project and are usually between 25% and 40% of the target for the TE.

The project is relevant for the needs and priorities of Serbia as the recipient country and is consistent with the strategic and programmatic priorities of the donor (Program 3 "Promote integrated low-emission urban systems" under the Climate Change Objective 2 "Demonstrate systemic impacts of mitigation options" of the GEF-6 Programming Directions) and the Implementing Agency (UNDP Strategic Plan output "Scaled up action on climate change adaptation and mitigation cross sectors which is funded and implemented" and UNDAF/Country Programme Document Output 8: By 2020, there are improved capacities to combat climate change and manage natural resources and communities are more resilient to the effects natural and man-made disasters).The project is also in line with the Sustainable Development Goals (SDGs) such as SDG 7 "Affordable and Clean Energy", SDG11 "Sustainable Cities and Communities", SDG 12 "Responsible Consumption and Production" and SDG 13 "Climate Action".

The project is also expected to assist Serbia to align with the EU policy and standards in a number of areas, such as climate change and energy, innovation, smart cities and communities.

The project aspires for contribution to gender mainstreaming in the selected projects and in general, for strengthening the ability of Serbia to participate actively in addressing the global environmental threat of climate change in a gender responsive manner. Also, the targets, where relevant, are disaggregated by gender, aiming at not more than 55% from the same gender.

The issue raised at MTR about the definition of the term "direct beneficiary" used in some of the indicators (Indicators 2 and 9) is still valid, although, in the after-MTR reporting, the Project Team put some efforts to provide more clarity.

Assumptions and Risks

The Project Results Framework elaborates the assumptions made when defining the Project objective, the Outcomes and almost all Indicators (examples: Commitment of the local public authorities to co-operate and assign required human and other resources; No legal obstacles or confidentiality requirements restricting the data access; The challenge program and prizes can be made attractive enough for the targeted participants; etc.).

Ten potential risks are identified in the Offline Risk Log in the ProDoc of different nature – political, operational, financial, technology, organizational. For each of them, likeness, potential impact, mitigation response with responsibility, are specified.

Social and Environmental Screening Report is included as an annex to the ProDoc which details the overarching principles in order to Strengthen Social and Environmental Sustainability:

- Mainstreaming human-rights based approach: open monitoring, information and knowledge management and broad community engagement and participation; improving the transparency and accountability of local governance, opportunities for public participation in decision making and quality and cost-efficiency of public services, as well as further enhancing equal human rights to safety, healthcare, social security and education, new employment and business opportunities.
- Improving gender equality and women's empowerment: including gender specific indicators into the project results framework, collecting gender disaggregated data on the project impact during its implementation and specifically encouraging female innovators, entrepreneurs and experts to participate in the project implementation.
- Mainstreaming environmental sustainability: The investments and other measures supported by the project may generate waste, which, if not properly and managed, may be disposed in an environmentally not sound matter. The project will have a requirement for all investment proposals seeking for project support to include an adequate waste management plan incorporated into the project design.

Lessons from other relevant projects (e.g., same focal area) incorporated into project design

This project was among the pioneers addressing at the same time innovation (smart climate solutions) and broad community engagement. Therefore, it could not incorporate lessons learned from other similar national and regional projects. However, the ProDoc to maps and builds upon more than 20 relevant projects/activities (naming them "baseline projects"). Projects focusing on the development and implementation of climate change and urban development related activities, including both technical assistance and establishment of new specific purpose credit lines, are found particularly relevant and useful for the CSUD project design.

Planned stakeholder participation

The CSUD project requires intensive engagement of number of various stakeholders (including local governments and the private sector). As per the Stakeholder engagement plan, MoEP performs a leadership and coordination role for the project acting in coordination with the other key stakeholders, which include:

- Ministry of Mining and Energy
- Ministry of Finance
- Ministry of Education, Science and Technological Development (hosting the Serbian Innovation Fund)
- Local self-governments - municipalities
- The Standing Conference of Towns
- Private and public companies
- Serbian Chamber of Commerce
- Donors and IFIs: EUD, UniCredit bank and the Embassy of Sweden,KfW, EBRD, GIZ

Linkages between project and other interventions within the sector

Enhanced coordination between other relevant projects and interventions was one of the inherent goals of the CSUD project. Strong synergies are identified with other ongoing projects, as follows:

- Green Climate Fund – development of National Adaptation Plan

- UNDP funded project within the Climate Promise initiative to enhance Serbian NDC
- GEF funded - Enhancing Transparency Framework for the Republic of Serbia
- EBRD Green Innovations Vouchers funded by the Austrian DRIVE (Delivering Resource Efficiency Investments) Programme, supported by the Central European Initiative (CEI)
- Chamber of Commerce and Industry's funded: Circular Economy Platform
- SIDA funded - Environmental Infrastructure Support Programme (EISP 2)

Also, possible contributions are identified in the following policy/planning and legislative interventions:

- National Waste Management Program/Sludge Management Program
- Action Plan for Sustainable Urban Development
- Energy legislation (areas of energy cooperative and prosumers)

4.2. Project Implementation

Adaptive management (changes to the project design and project outputs during implementation)

The adaptive dimension of the project management is demonstrated through the following actions/interventions:

- The term "Challenge Program", which was used in the ProDoc, was changed to "Innovation Challenge". With respect to the use of the innovation challenge mechanism in the project, the ProDoc doesn't contain the required justification for the use of this mechanism, as it is defined in the POPP guidance on the use of such mechanisms. Subsequently, as such procedures became operational during project implementation, the Project Team has prepared a Note to File on 27 June 2019, to justify the use of this new mechanism. The Note to File "Adaptive Management on the UNDP GEF Climate Smart Urban Development Project - Explaining the Use of Innovation Challenge Mechanism to Support Climate Smart Urban Development (CSUD)" was approved and recorded into PIMS.
- A Climate Incubator/Accelerator was established to provide a help desk for project applicants and support to the selected project ideas through technical staff of the Project and mentors of the incubation/acceleration team.
- For pilot projects selected for financing the concept of Performance-Based Payments (PBP) was introduced as an adaptive management measure.
- The project team adjusted well to working under COVID restrictions, managed to deliver effectively in the circumstances of political turmoil, displaying flexibility and efficient coordination with other relevant ongoing projects and initiatives.

Actual stakeholder participation and partnership arrangements

All stakeholders have been included as planned, organized in the following key groups:

- Project teams - there were project teams of municipalities, companies, CSOs, research institutes, individuals

- Mentors and trainers – thematic experts
- Experts – evaluators, GHG monitoring expert, gender expert, communications expert

Furthermore, the existing cooperation with some institutions enhanced further:

- MoEP - new GEF7 project replicating CSUD innovation challenge mechanism and methodology,
- Standing Conference of Towns and Municipalities, Serbian Chamber of Commerce, Climate KIC (EIT), NALED – synergies with ongoing projects in the relevant areas; knowledge, experience network sharing.

Finally, new partnerships have been established (SIDA, EU delegation, GIZ, Japanese government, Slovak Embassy, Swiss government) ensuring sustainability and scaling up.

Project Finance and Co-finance

The financial information extracted from the UNDP financial system (ATLAS) as presented in Table 2 and Table 3. Information on actual expenditures in 2022 is not available, so the actual costs in Table 3 are calculated based on the planned costs for 2022. Changing in the budget was adequately conducted as per UNDP standard operational procedures with justifications provided. The actual expenditures fit into the planned project budget per outcome/activity. The expenditure ratio at the TE period is almost 100%.

Table 2 Project expenditures (in USD)

	2017		2018		2019	
Outcome	Planned	Actual	Planned	Actual	Planned	Actual
1	85,100	86,995	157,100	236,626	171,600	139,542
2	80,900	74,532	136,400	310,895	307,900	424,358
3 (M&E)	6,100	510	8,900	5,368	32,300	31,369
PM	21,000	20,317	21,000	22,629	21,000	14,779
Total	**193,100**	**192,354**	**323,400**	**575,518**	**532,800**	**610,048**

	2020		2021		2022	
Outcome	Planned	Actual	Planned	Actual	Planned	Actual
1	122,644	95,103	88,683	48,088	48,325	
2	241,816	208,375	74,883	57,340	19,500	
3 (M&E)	15,806	8,215	48,248	16,595	32,943	
PM	9,622	5,271	29,672	22,292	9,142	
Total	**389,888**	**316,964**	**241,486**	**144,883**	**109,910**	

Source: UNDP (ATLAS)

Table 3 Summary of the planned and actual expenditures (in USD)

Outcome	Estimated costs at design	Actual costs	Expenditure ratio (actual/planned)
1	655,000	654,679	99.95%
2	1,095,000	1,095,000	100.00%
3 (M&E)	95,000	95,000	100.00%
PM	105,000	104,998	100.00%
Total	**1,950,000**	**1,949,677**	**99.98%**

Source: UNDP (ATLAS)

GEF funding was 1,950,000 USD (cash) and additional funds amounting 12,741,771 USD, (12,200,771 USD (cash) and 541,000 USD (in-kind)) were mobilized from the MoEP and other partners (A6: Co-financing tables). The mobilized co-financing is 21% higher than projected at the approval (12,741,771 USD versus 10,560,000 USD).

Monitoring and Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)

Design at entry:

- Mandatory GEF M&E requirements were fully implemented.
- M&E Budget was adequately planned.
- M&E to facilitate learning, scaling up and replication of project results was included in Component/Outcome 3.
- Given the focus of the Project to the social impact and innovation, the Results Framework would have benefited from inclusion of indicators, be they quantitative or qualitative, which will measure/value the level of social impact and innovation.

Implementation:

- PIRs are in line with the standard GEF PIR format with adequate level of details in narrative descriptions of achievements.
- The GEF Tracking Tool (TT) contains all required information and duly reflect the progress made.
- Effective and efficient conduct of the MTR.
- Adequate response from the project management to the MTR recommendations. Close monitoring of projects and payments approved at PB meetings
- Lessons learned and knowledge generation captured through
    - Open Data Challenge Guideline
    - Innovation Challenge Guideline
    - Step – by – step Guideline on setting and running Innovation Challenge Call
    - Crowdfunding Alternative financing Guideline
    - Gender and Climate Change Training Handbook

Overall assessment:

Overall, the M&E displays satisfactory conduct. Issues with monitoring of the achieved GHG emissions reductions and indistinctness related to direct beneficiaries (identified at MTR) remain valid at the TE stage also.

UNDP implementation/oversight (*) and Implementing Partner execution (*), overall project implementation/execution (*), coordination, and operational issues

UNDP implementation/oversight:

The UNDP team was well-versed with UNDP and Governmental procedures. A Project Implementation Unit (PIU) has been established by UNDP, including a Project Manager (PM), a Senior CSUD Expert (SCE) and a

Project Assistant (PA). The Project Manager is responsible for overall project coordination and implementation, consolidation of work plans and project documentation, preparation of quarterly progress reports, reporting to the project supervisory bodies, coordinating work of the PIU and supervising the work of the project experts and project staff.

The coordination and cooperation between PIU and stakeholders have been very well-functioning and as a result the project components have been mutually reinforcing. All stakeholders interviewed by the TE team rated the level of UNDP support as highly satisfactory and qualified the UNDP team as highly dedicated and motivated. Cooperation and communication with the RTA were also highly rated.

UNDP successfully managed to link the topic of innovation/innovation challenges with the topics of energy and climate change, which is seen as a huge achievement by all stakeholders. They also testified excellent work planning and strong adaptive management on the UNDP side.

The communication officer was included in organization of events and protocols, content development and communication with all types of media including dedicated website which ensured effectiveness and efficiency of the communications. Also, there was a Communication Strategy developed. In particular, the Calls were highly effectively and efficiently promoted (confirmed by all project teams) which resulted in high number of applications.

Implementing Partner execution:

The MoEP appointed a National Project Director (NPD) and it established CSUD Project Support Unit comprised of representatives of several key MoEP departments, with the following roles:

- To secure, manage and facilitate the implementation of the committed MoEP cash and in-kind support to the project,
- To facilitate the organization and implementation of the public call for proposals for the CSUD Challenge,
- To make sure the Calls are implemented in accordance with applicable Government rules and procedures and support the project implementation otherwise.

The Ministry raised its capacity to implement GEF-funded projects, which will be tested during the implementation of the GEF7 project: “Reducing community carbon footprint by a circular economy approach in the Republic of Serbia” which started in March 2022.

Communication with the PIU and overall support of the project activities was well-functioning within the limits of MoEP institutional and human capacities. More proactive approach to engage other relevant ministries would have been beneficial. Also, stronger involvement of the MoEP would be helpful in further promoting project activities and disseminating lessons learnt.

Due to COVID-19 pandemic, the budget of the MoEP has been decreased. Therefore, the Ministry could not fulfil envisaged commitments related to co-financing project activities (about 20% of the committed cash support was delivered).

Overall project implementation/execution, coordination, and operational issues:

The CSUD project was designed for implementation under the NIM in line with the Standard Basic Assistance Agreement between UNDP and the Government of Serbia with MoEP as the designated Implementing Partner.

The Project Board (PB) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendation for UNDP/Implementing Partner approval of

project plans and revisions. Managerial arrangements for PB and frequency of PB meetings are adequate for the size and level of complexity of the project.

The project teams and other stakeholders were closely engaged in project implementation. Stronger involvement of the MoEP would be helpful in further promoting project activities and disseminating lessons learnt. Better interministerial cooperation and a more pro-active approach of the Project towards the MoE in particular, would be beneficial, as many of the activities under the Project have an energy component including energy data. Also, more pro-active approach of the Project towards selected LSGs would be beneficial in order to facilitate ownership and political commitment.

Risk Management including Social and Environmental Standards (Safeguards)

The project was supported by UNDP as the GEF Implementing Agency and as such followed the respective procedures of the Agency. The risks have been adequately monitored, reviewed and updated by the project team, CO and UNDP-Nature, Climate and Energy Team (NCE) in ATLAS and PIMS+.

The main external risk for the project delivery was seen as related to the political situation in the country and extraordinary and/or regular elections, for the mitigation of which the project team was supposed to maintain a non-partisan stance and focus on the mission of bringing tangible project results while standing ready to respond to possible shifts. The Covid-19 pandemic has indeed affected and slowed down the activities and required the project team to ask for eight-month no-cost extension of the project (approved by UNDP's Global Environmental Finance Executive Director) and shift to alternative methods by applying virtual tools and organizing hybrid events.

Social and Environmental Standards were ensured by applying the overarching principles for mainstreaming human-rights based approach, improving gender equality and women's empowerment and mainstreaming environmental sustainability, which were stipulated in the SESP report.

Overall, the risks including social and environmental standards are well-managed and did not influence the success and pace of implementation of project outputs and activities.

4.3. Project Results

Progress towards objective and expected outcomes (*)

The information presented in this section has been sourced from the PIRs, MTR and UNDP management response to MTR recommendations supplemented with information collected from interviews of the key project stakeholders. The progress towards project objective is summarized in Table 4, while the progress towards the four project outcomes is presented for each outcome in separate Table 5-7. Each table is followed by narrative description of the outcome which, besides EOP Level and Assessment, also provides justification for the rating. In the tables, the following colour-coding for the rating of the status of target achieved:

Green: Completed, indicator shows successful achievements (ratings HS or S)	Yellow: Indicator shows expected completion by the end of project with minor shortcomings. (ratings MS or MU)	Red: Indicator shows poor achievement – unlikely to be completed by project closure (ratings U or HU)

Table 4 Progress towards project objective

Project Strategy	Indicators	EOP Target (incl. Baseline, MTR, targets)	EOP Level & Assessment	Rating
Project Objective: Promote innovation and community engagement for CSUD	**Mandatory IRRF Indicator 1:** 1.4.1 a: Extent to which climate finance is being accessed	**EOP target:** At least 10 million USD complementary financing leveraged to support climate smart urban development in Serbia Baseline: N/A MTR target: At least 3.5 million USD	The Project has leveraged around 12,700,000 USD of complementary financing (total funding – GEF/UNDP funding) to support CSUD since the project started. Issue: Additionality	S
	Mandatory Indicator 2: Number of direct project beneficiaries with gender disaggregated data.	**EOP target:** 20,000 people, from whom not more than 55% for the same gender Baseline: N/A MTR target: 5,000 people, from whom not more than 55% for the same gender	More than 25,000 beneficiaries have been benefitting from of the CSUD project results, including benefits arising out of the GHG emissions reduction, improved quality of the environment, employment, income generation, knowledge and capacities More than half of the beneficiaries are women. (Based on the estimations from the innovation projects) supported by the CSUD project). The overall number of beneficiaries is likely to be higher if beneficiaries from the open data projects supported by the CSUD projects and beneficiaries from outreach and training events are taken into account. Issue: Indistinctiveness with the definition of "direct beneficiary"	S
	Indicator 3: Direct incremental GHG emission reduction impact of the project	**EOP target:** 100 kt CO_2 calculated over 20 years lifetime of the investment Baseline: N/A MTR target = 100 kt CO_2 calculated over 20 years lifetime of the investment	The estimated direct GHG emission reduction impact of the 5 innovative projects selected for co-financing after the first phase of the incubation process amounts 500 kt CO_2 eq. (Based on the estimations from the innovation projects) supported by the CSUD project). Issue: Need for more vigorous calculation and monitoring of the achieved GHG emission reduction	S

The MOEP provided co-financing of 1,000,000 USD to support innovative solutions and other project activities. Due to COVID-19 pandemic, the budget of the MOEP has been decreased. Therefore, the Ministry could not fulfil envisaged commitments related to co-financing project activities. However, as indicated in annex A6: Co-financing tables, the amount of co-financing provided by private sector as well as other entities for eleven innovative solutions supported by the project is 10,349,719 USD. The Swedish Government, as one of the CSUD project partners, provided additional funding of 516,160 USD, whereas 216,530 USD has been used for direct support to 7 innovative solutions, which leveraged co-finance of 467,079 USD. Additional funding has been provided by the Slovak Ministry of Finance, amounted 138,000 (+65,000) USD for developing technical documentation necessary for supporting the implementation of the new solar business models in Serbia.

Project direct financing of about 932,474 USD (GEF/UNDP funding + SIDA funding) leveraged 10,349,719 USD of complementary financing to support climate smart urban development in Serbia, meaning that for 1 dollar invested by the CSUD project has leveraged additional 11 dollars in form of concrete investments. This is an excellent result. However, the issue of additionality, as raised at the MTR remains valid.

According to the figures presented, the Project overperformed also along the other two indicators - Number of direct project beneficiaries and Direct incremental GHG emission reduction. However, the issues of indistinctiveness of direct beneficiary and the need for more vigorous calculation and monitoring of the achieved GHG emission reduction are present at the TE stage also.

Hence, despite overperformance in terms of figures for all three indicators, the progress towards Project Objective is satisfactory due to the issues mentioned above.

Finally, the Project is commended for its pioneering role in making social impact, including stakeholder engagement, and devising innovative solutions in the country and in the wider region. A highly satisfactory performance along these lines is convincingly demonstrated.

Table 5 Progress towards Outcome 1

Project Strategy	Indicators	EOP Target (incl. Baseline, MTR, targets)	EOP Level & Assessment	Rating
Component/Outcome 1: Improved access to and availability of data by an open data approach for development, management and monitoring of CSUD related performance of Serbian municipalities.	**Indicator 4:** Number of municipalities having an integrated cross-sectoral on-line information management system with open public access covering at least the energy, transport and waste sectors with regularly updated monitoring data and clearly defined sector specific performance targets, which are aggregated, to the extent possible, by gender.	**EOP target:** 5 Baseline: 0 MTR target: 2	Three municipalities have on-line information management systems operating, these are Kragujevac, Zvezdara, Nis Kragujevac has historic data on energy consumption in buildings and fuel consumption of vehicles online. Zvezdara publishes live data on the fuel consumption in the public swimming pool. Nis has published a number of indicators for energy, transport and waste management Issue: The information management systems are not regularly updated. In most cases, only include historic data. It is important to improve consistency and replicability. Also, sector specific performance targets are not clearly defined.	MS

	Indicator 5: Number of municipal CSUD indicators, for which data is publicly available online	**EOP target:** at least 5 indicators for each subsector (energy, transport, waste) Baseline: 0 MTR target: at least 5 indicators for each subsector (energy, transport, waste)	Four municipalities opened data related to energy consumption, including heat consumption (Zvezdara, Kragujevac, Sabac, Nis). Three municipalities opened data related to transportation (Krusevac, Kraljevo, Nis). Three municipalities opened data related to waste management (Kragujevac, Kraljevo, Sremska Mitrovica). Two municipalities have made their data publicly available on their municipal websites in the domain of energy consumption, water consumption and transportation (Zvezdara and Kragujevac). Issue: Clarity is needed for the indicators for each of the sectors.	S
	Indicator 6: Annual number of data users (combined for all the participating municipalities) and disaggregated, to the extent possible, by gender.	**EOP target:** 5,000 Baseline: 0 MTR target: 1,000	More than 1,150 people registered as data users of the piloted open data portals within the City of Kragujevac and Zvezdara Municipality (data are not gender segregated). Issue: Info is missing for Nis	MU
	Indicator 7: Number of municipalities producing annual CSUD performance reports	**EOP target:** 5 Baseline: 0 MTR target: 2	Two municipalities (Kragujevac and Zvezdara) are producing reports and accompanying documents, related to the piloting of the CSUD project related activities.	MU

The Open Data Challenge was announced in November 2017 with a deadline for applications in February 2018. The call was accompanied by an application guide providing details on the background of the challenge, process, timelines and evaluation criteria/scoring. All cities and municipalities in Serbia with more than 20,000 inhabitants were invited to send their applications as well as civil society organizations, registered local community groups, private companies and research organizations registered in Serbia who apply as part of consortia with Serbian cities and municipalities. 15 municipalities handed in their proposals, out of which the following 8 projects were selected:

- Zvezdara Municipality: An innovative solution for the online monitoring and analysis of electricity consumption in public buildings
- City of Šabac: Project for the collection of data on GHG emissions from domestic heaing in the city of Šabac
- City of Sremska Mitrovica: Animal water polluters inventory in the territory of the city of Sremska Mitrovica
- City of Kruševac: Energy and financial calculator “The city’s new face” – The climate smart city of Kruševac
- Municipality of Krupanj: A calculator for the future!
- City of Kraljevo: Keep in touch
- City of Kragujevac: Kragujevac, open data in combating climate change
- Ćuprija Municipality: The creation of a repository of energy efficient materials, public and residential buildings.

The City of Nis showed strong interest in participating in the project at a later stage, although they had not participated in the Open Data Challenge. Their participation was approved, and the City of Nis officially joined the Incubator in September 2019. Between June and December 2018, the projects selected received support through the Climate Incubator to turn their ideas into concrete projects that will contribute to data collection, analyses and management, opening data to the broader community and involving citizens in the work of the local government. Implementation of the data management systems started in early 2019. The City of Sremska Mitrovica has developed an application for identifying and reporting animal waste on the territory of the city.

Five cities and municipalities fulfilled requirements and received co-financing for implementing innovative project related to improving collection, management and opening data related to the energy sector, waste management, energy efficiency and renewable resources (Kraljevo, Šabac, Kruševac, Kragujevac and Nis) through developing Local Law Carbon Development Strategies and supported Local GHG inventories. All the Strategies have not been formally adopted yet; two municipalities expect to be adopted soon.

The Ministry of Environment has officially confirmed readiness to accept and operationally manage the Climate Smart Information System, upon completion of the project. Based on the information received by the UNDP Project team during the Inception phase, the continuation of this process has been ensured through the support from the Swiss Cooperation, signed in August 2022, with MoEP and UNDP as the main implementing partners.

Table 6 Progress towards Outcome 2

Project Strategy	Indicators	EOP Target (incl. Baseline, MTR, targets)	EOP Level & Assessment	Rating
Component/Outcome 2: New innovative technical and systemic solutions and business models contributing to climate smart urban development identified, tested and replicated.	**Indicator 8:** Number of new innovative technical and systemic solutions and/or business models contributing to climate smart urban development identified, tested and replicated	**EOP target:** At least 5 new concepts contributing to climate smart urban development tested in different sectors and including at least one gender-sensitive concept Baseline: N/A MTR target: At least 1 new concept contributing to climate smart urban development tested in one of the subsectors.	11 innovate projects new concepts contributing to climate smart urban development and tested in different sectors were selected and approved for co-financing by the Project Board. 2 gender -sensitive concepts: GreenEnergy point project: 65% of women were supported for the establishment of agricultural households for owners of private forests, through the development of new business model for diversification of wooden biomass sources, including private forest owners. Institute Mihajlo Pupin project: Promotion of the use of proposed digitalized solutions that will allow an easier inclusion of women in agriculture. Issues: Additionality; Need for more vigorous calculation and monitoring of the achieved GHG emission reduction (particularly in the projects based on the technologies with well-established methodologies for monitoring, reporting and verification of the achieved GHG emissions reduction.	S

	Indicator 9: Number of direct beneficiaries with gender disaggregated data from the measures implemented	**EOP target:** 15,000, from whom not more than 55% for the same gender Baseline: N/A MTR target: 4,000, from whom not more than 55% for the same gender	Please see the EOP Level & Assessment of Indicator 2	S

The Innovation Challenge was announced in November 2017 with a deadline for applications in January 2018. The call was accompanied by an application guide providing details on the background of the challenge, process, timelines and evaluation criteria/scoring. The call was open for various types of applicants, including local self-governments, public utilities, CSOs, research institutions and individuals. Between March and May 2018, an additional call for advanced projects was initiated to secure projects which are in further stages of development.

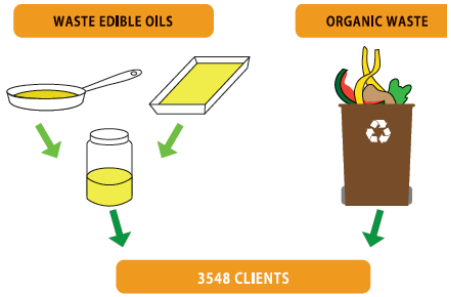
A total of 111 applications were submitted in the call, with the majority of applications from individuals, CSOs, local self-governments, research institutions and companies. Applications were received from all parts of Serbia. After technical assessment and evaluation by independent experts, 34 innovative ideas were selected, all aiming to reduce the GHG emissions in the areas of energy, transport, waste management, agriculture, forestry. 25 applicants have received innovation award, additional 9 ideas were selected due to their potential, and these were given the opportunity to receive support for further development of their concepts through participation in the project incubator. The call for advanced projects results in 4 additional projects, bringing the total number of selected projects to 38.

For these projects, the Climate Incubator was introduced as a technical assistance facility to support further development and elaboration of innovative climate smart ideas into more mature projects and solutions ready for implementation. The incubator also provided support in terms of project analytics, studies, prototype development, testing of the prototypes, establishing partnerships and identification of funding sources. Throughout 2018, all 38 project ideas in the Climate Incubator have received mentorship and coaching support and eventually their progress has been evaluated by mentors, the Ministry and UNDP. In November 2018 a final scoring table was elaborated to rank projects based on their performance and progress throughout incubation/acceleration process. Based on this ranking, the 5 best innovation projects were selected for receiving co-financing for implementation.

1. Sanicula Ltd. - Innovative approach to production of pellets from medicinal herbs

The project introduces the concept of a circular economy into the process of producing essential oils from medicinal herbs. During the distillation of medicinal herbs, remaining waste is processed in order to obtain ecological fuel - pellets. By pelleting biomass produced as the by-product during the distillation of medicinal herbs would eliminate waste as a category in this production. The pellet will be used again in the distillation process instead of currently used fuel. The remaining quantities of pellets (as new type of biomass), unused in the distillation process, will be offered to the market. Estimated emission reduction is 94,810 t CO_2 eq during the life cycle of the project.

2. Esotron Ltd. - Reduce garbage for collective health and happiness

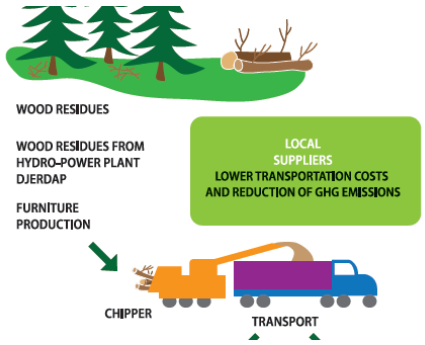


The project refers to collecting organic waste and reducing its volume and quantity at the landfills in Serbia. The aim of the project is to use, expand and improve the existing collection network of waste edible oils with the collection of organic waste from facilities that produce more than 50 meals a day, as prescribed by the Waste Management Law. Calculated GHG emission reduction is a result of diverting the organic waste fraction from landfilling (in the testing phase, 1000 t of organic waste/year diverted results in 430 t CO_2 eq emissions reduction). Lifetime estimated emission reduction is 33,316 t CO_2 eq.

3. Jugo-Impex e.e.r. - Polyurethane foams - end of waste

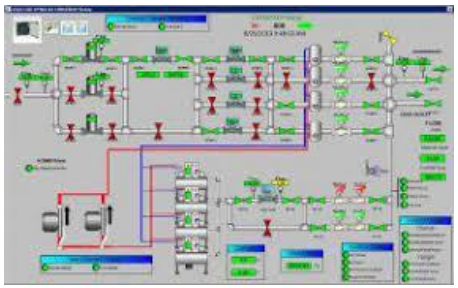
The project refers to the application of circular economy principles in the treatment of electronic waste (cooling devices). The polyurethane foam which is left after the Freon is separated will be converted into a new product which shall become an absorbent that collects oily liquids such as gasoline and petrol, in case of their uncontrolled leaking into the environment (hence preventing unintentional burning of fossil fuel and related GHG emissions).Preliminary analyses indicate that, in the first phase, separation of approximately 10 t of freon will lead to 16,525 t CO_2 eq emissions reduction per year.

4. Green Energy Point Ltd. - New Approach in Production of Heat and Electricity from Woody Biomass



The project aims at introducing a new approach and implementation of innovative technology in the production of combined heat and power by combustion of woody biomass. Generated heat energy will be used in the process of pellet production, with parallel electricity generation that will be sold to Public Enterprise Electric Power Industry of Serbia (EPS) at affordable prices. The project also introduces a new business model of cooperation with partners, associations, suppliers of raw materials, local agricultural holdings and local self-government. The plant will use biomass near the collection site, which will result in lower transportation costs and reduction of GHG emissions compared to a collection from distant parts of Serbia. A part of woody biomass will be obtained by extracting waste wood that jeopardize the functioning of the Hydro-Power Plant "Djerdap". The initial GHG emissions reduction was calculated on the basis of the construction of the woody biomass powered facility of total 19,764 MWh of electrical and 57,739 MWh of heat energy production. Annual GHG emission reduction of drying process is estimated at 39,510 t CO_2.

5. Public Utility Company for Production and Distribution of Thermal Energy, Šabac - Establishing SCADA system for Supervision and Management of Heat Distribution Substations at district Heating System of the City of Šabac



The project promotes an innovative solution to increase the energy efficiency of the municipal district heating system (DH), by using real time data to quickly and effectively react to non-standard system behaviour. The project also creates an opportunity to provide transparent and real-time data on heat consumption available to all end-users, based on which DH system users can plan savings of energy and heating costs. The innovation also raises the transparency of DH system operation, with a public presentation of results. The DH system parameters achieved will be publicly available at the city's web page, displaying articles, charts and trends in energy consumption. The estimated reduction in emissions is 31,660 t CO_2 eq per year during the lifetime of the project.

Figure 2 depicts the process from idea to co-funded innovation project.

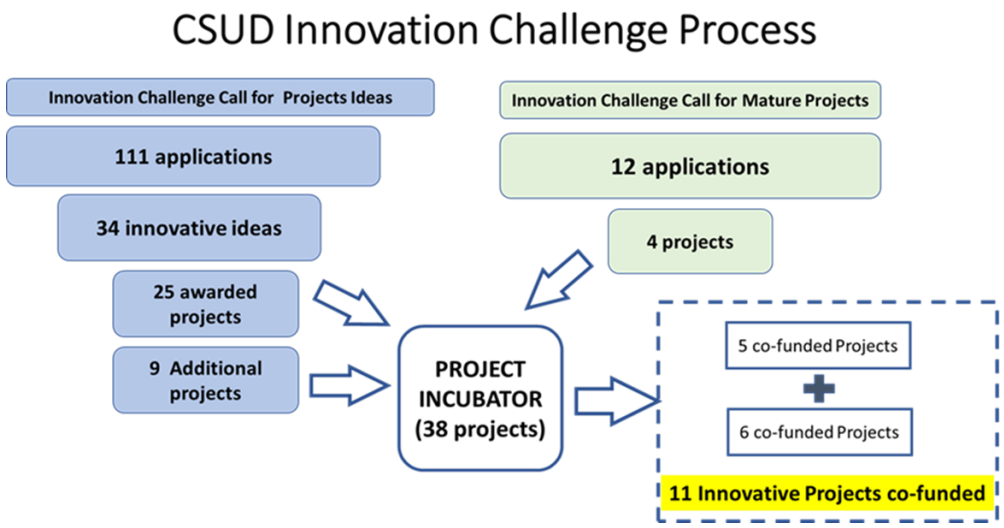


Figure 2 CSUD Innovation Challenge process

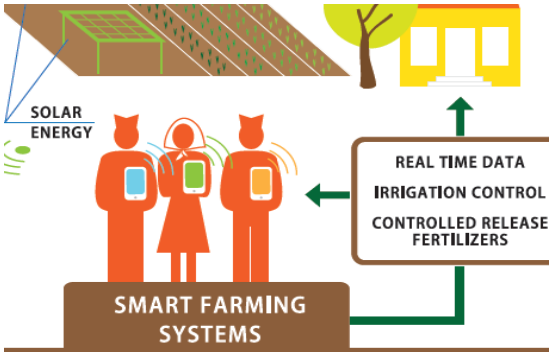
Financing is provided through Performance-Based Agreements, which link the provision of fund to the achievement of individual milestones agreed between the projects and UNDP. Typically, the projects receive an advance payment upon signature and 2-3 payments based on achievement of indicators.

Additional 6 innovate projects was selected and approved for co-financing by the Project Board in March 2020:

6. Global Sustainability Experts Ltd - Innovative business models for solar energy

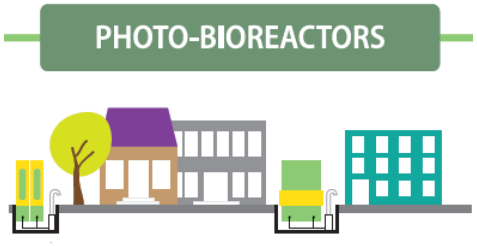
The project introduces models that enables the solar plant to operate without governmental subsidies. This model is based on direct trade in electricity between the producer and distributer of electricity. It also reduces the risk that can be caused by the state of emergency, which was the case during the COVID-19 pandemic when feed-in-tariffs were suspended making it unreliable business model. Therefore, the project is focused on the commercial approach in renewable energy production-consumption. Instead of relying on a single buyer (government, i.e., EPS), this business model uses the benefits of the liberalized market, making the company capable to approach more customers and clients at the same time. The Company is also one of the founders of the second energy cooperative in Serbia. In cooperation with the Science and Technology Park Cacak, GSE Ltd established the Climate Change Training Center. The estimated direct GHG emission reduction for the period of 25 years of investment is 835 tCO_2 eq.

7. Institute Mihajlo Pupin - Smart Land



The project promotes a multidisciplinary approach to smart and economically sustainable farming by applying artificial intelligence solutions for optimization of climate smart agriculture and land management (contributing to sustainable management of natural resources). The “Smart Land” is a remote-control system powered by renewables and replaces old and fossil fuels-based systems for land management. The “Smart Land” is integrated hybrid-power system that consists of a Mobile robotic solar power electric generator 7,5KW and a complimentary portable wind turbine of total power of 500W. A remotely operated irrigation system is combined with a distributed wireless sensor network to provide permanent monitoring of the soil and the crop by measuring the amount of moisture, soil acidity (pH value), amount of the mineral substances, microclimatic conditions at the site, pathological changes to crops due to the presence of the parasite or fungus. One of the elements of the “Smart Land” is a specialized software interface, i.e. application designed for personal devices, for smart crop management (agro-food production) that will assist farmers to achieve better results in crop care and cultivation using contemporary IT solutions. The estimated GHG emission reduction for 10 ha is 15 t CO_2 eq per year or 300 t CO_2 eq during the lifetime of the project. The project has a high potential for replicability considering that 620,000 individual households are registered in Serbia, with an average of 5.5 hectares.

8. Institute for Multidisciplinary Research - LIQUID3

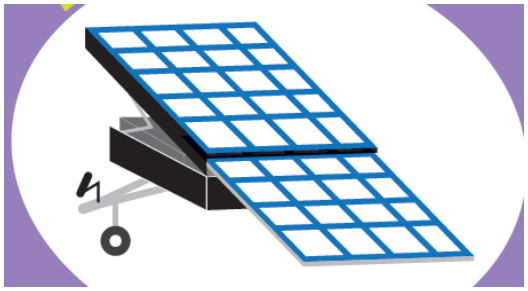


The project introduces compact, commercially viable photo-bioreactor technology for eliminating CO_2 and generating O_2 in densely populated urban areas. Technology is based on microalgae – aquatic photosynthetic organisms to sequestrate CO_2 and to produce O_2 and biomass. The microalgae show 10 times higher CO_2 fixation efficiency compared to average trees. The project addresses the problem of significant emission of CO_2 in urban centres. The system is a combination of the air purifier, bench, and solar charger. Microalgae biomass will be used as a fertilizer for public parks. One unit of LIQUID3 photo-bioreactor removes the amount of CO_2 per day (and produces O_2) that is equivalent to 200 m^2 of lawn or two 10-years old trees. After prototype testing, the serial production will start with market competitive price.

9. National Association of Autonomous and Electrical Vehicles - "E-mobility Cloud Center

The project developed a mobile application and platform that promote the use of e-vehicles by networking e-chargers powered by renewable energy sources (RES). The software platform, "E-mobility Cloud Center", will create the open network of electric vehicle chargers in Serbia and contains the trip planner and technical specifications of each charger. Project supported installation of three electrical chargers (in the vicinity of shopping mall and newly constructed urban blocks), to serve for piloting and optimization of the application and platform. E-charging infrastructure and the software platform are preconditions for increasing the number of electric vehicles in Serbia, as accompanying elements to Government subsidies.

10. Telefon-Inzenjering Ltd - Solar Portable Aggregator



The project provides a technical solution for off-grid energy supply. The mobile solar panels can replace the diesel-powered generators. The solar portable aggregator is an innovative & environmentally friendly solution for electricity supply in case of emergency interventions during the extreme weather and disasters, for organization of various outdoor events, for irrigation, lighting on construction sites, as well as for off-grid remote households. The solar mobile aggregator is projected to work as an independent source of electricity that satisfies all aesthetic and technical requirements. The solar mobile aggregator is placed in a car trailer with a lid in two strings. Solar gel batteries and outlet can sustain the highest number of charging cycles compared to others at the market. The trailer has additional transportation space (for people and/or the equipment). The system operation has no adverse environmental impacts and no direct CO_2 emissions. Expected CO_2 emission reduction: One system (8kW) will have 16t/year of CO_2 emission reduction. The product is also supported by local commercial bank through innovative borrowing scheme.

11. City of Kraljevo – Evergreen

The project introduces an innovative remotely controlled early warning system for forest fires which is crucial for the protection of forest ecosystem, assets, lives and reducing CO_2 emissions. "Evergreen" is the pilot system that consists of an observation station for the detection and early warning of forest fires, a GIS system with thematic maps and software for the exchange of information with the central system of the Center for civil protection in the initial stage of forest fires. Once operational, such early warning system will maintain the pools of carbon sinks in any forested areas that are prone to forest fires.

All projects were closely monitored against the indicators included in their PBP contracts and the collected and aggregated information was used to monitor the progress at CSUD level in line with its Result Framework matrix.

Table 7 Progress towards Outcome 3

Project Strategy	Indicators	EOP Target (incl. Baseline, MTR, targets)	EOP Level & Assessment	Rating
Component/ Outcome 3: Knowledge management and M&E to facilitate learning, scaling up and replication of project results.	**Indicator 10:** Status of the Project MRV system and quality of the data delivered by that	**EOP target:** A MRV system for emissions reductions resulting from project activities in place and reporting verified data from all activities. Baseline: No project related MRV system in place MTR target: A MRV system for emissions reductions resulting from project activities in place and reporting verified data from all activities.	A GHG inventory and MRV expert was engaged to conduct detailed analyses and (re)calculation of the GHG emissions reduction associated with the supported innovative projects. An MRV system has been set up for each of the eleven innovative projects based on the targets proposed for each project. The CSUD project MRV system was set. Monitoring included site visits of teams, reporting on deliverables as per defined indicators, and verification of the implemented project activities by the Project Board. Issue: Systematic approach is missing, so the robustness and sustainability of this undertaking is questionable.	S
	Indicator 11: Agreed knowledge management products and events delivered	**EOP target:** • The CSUD knowledge management web-portal sustained after the project • Lessons learnt report finalized • An international end of the project workshop organized Baseline: N/A	• The CSUD website (http://inovacije.klimatskepromene.rs) has been transformed so that it also performs function of knowledge management web-portal. There is a separate section "Innovation Platform", which presents information on 11 innovative technological solutions. The web-portal will be maintained through the follow-up GEF and EU projects. • Lessons learned and knowledge generation captured through ○ Open Data Challenge Guideline	HS

		MTR target: • The CSUD knowledge management web-portal established • At least one international CSUD knowledge management event (workshop or seminar) organized	○ Innovation Challenge Guideline ○ Step – by – step Guideline on setting and running Innovation Challenge Call ○ Crowdfunding Alternative financing Guideline ○ Gender and Climate Change Training Handbook • The Final Project Conference was held on 15 July 2022, in Belgrade, with the participation of donor community and national and international partners.	
	Indicator 12: Number of expressions of interest received for replicating the project intervention strategy, specific technical solutions or business models for new projects and/or municipalities	**EOP target:** At least one new municipality and 5 project proponents expressing interest to replicate one or more of the supported interventions. Baseline: N/A MTR target = 0	In addition to 8 municipalities involved through the Open Data Challenge, the City of Nis has expressed interest to replicate activities that are being conducted in 8 municipalities under the Open Data Challenge. As a response, the CSUD project team included the City of Nis into the UNDP led regional initiative "the City Experimentation Fund" - that should result in addressing systemic challenges and respond to key priorities and issues identified by the cities. The Swedish Government supported the innovation challenge for Climate Smart Bio-Waste Management, inspired by the innovation challenge methodology piloted within CSUD Project. 34 innovative solutions for reducing, re-using and improving the management of food waste and green waste were submitted. 7 projects (3 PUCs, 3 private companies and one CSO), have been selected for co-financing and implementation of innovative technical solutions and business models.	HS

A number of additional achievements can be reported which facilitate learning, scaling up and replication of project results:

- Project proposed by Esotron l.t.d is being further replicated and upscaled, in cooperation with the GIZ by enlarging, optimizing and platforming the network of stakeholders (both generators and operators) involved into challenge of organic waste management. This joint initiative is being implemented through the GIZ “City Challenge” programme and in close cooperation with the City of Belgrade as pilot location.
- CSUD Project enabled inclusion of Serbia into regional initiatives of relevance to CC mitigation and resilience, such as the Solar Mayors’ Club.
- Circular Economy Accelerator has been initiated by UNDP based on lessons learned from CSUD to support sourcing and development of business ideas that are based on circular economy approach, at the same time producing tangible GHG emissions reduction.
- The new GEF7 project replicating CSUD innovation challenge mechanism and methodology, prepared and submitted by the Ministry of Environmental Protection started with implementation in March 2022. The Project is focusing on creation of sustainable/circular cities and communities in Serbia.
- The Delegation of European Union in Serbia (EUD) decided to implement the CSUD approach, i.e. based on the challenge calls, acceleration, and PBP’s agreements for the Green Agenda Project in Serbia. The PBPs mechanism will be applied to support all 5 pillars of the Green Agenda.

- The project applies CSUD's Innovation Challenge approach, accelerator and PBPs for sourcing and co-financing, was selected by the Government of Japan to support decarbonization of Serbian industry based on the UNDP proposal. The project aims at contributing to the achievement of NDC targets by assisting in identification and implementation of technologies and innovative business models in those priority sectors that are most affected by increased climate ambition and mitigation of greenhouse gas emissions. The project will last from March 2022 to March 2023. Total value of the project is 1,050,000USD.
- In August 2022, Swiss Government decided to support Serbia by provision of the support through applying Innovation Challenge approach as parallel co-financing of the "EU for Green Agenda in Serbia". The project will be implemented from August 2022 until 30 June 2026. Total project value is 4,905,556 USD.

As to the communication and outreach activities/channels the following should be mentioned:

- To inform interested stakeholders about the opportunities under the CSUD project, a considerable number of workshops and seminar were organized, and the Project Team participated in various public events. At the majority of these events the entire CSUD Project and both challenges (Open Data Challenge and Innovation Challenge) were presented. The most important events were:
    - 5 preparatory workshops in Belgrade, Nis, Novi Sad, Krusevac and Kragujevac, in total 286 participants
    - 4 info days (in Subotica and three times in Belgrade), in total 148 participants
    - Gender and Climate Change, 6 outreach events, total of 241 participants
    - Climathons in Sabac and Kragujevac, total of 50 participants
    - International mid-term event "Citizens Build Smart Cities" on 11 October 2019 in Belgrade, 140 participants
    - Various other public events, such as EcoExpo, Eco Fair, Climate Diplomacy Week, Belgrade Security Forum, City2City platform
    - Final conference event on 15 July 2022, in Belgrade, with the participation of donor community and national and international partners
- More than 800 articles and video materials are published in national and international media related to CSUD project, innovation challenge calls and supported teams.
- More than 250,000 users have seen posts related to CSUD Project on social networks.
- More than 20,000 views have videos regarding CSUD Project on UNDP Serbia profile on YouTube channel.
- The project web site has become a platform for climate smart innovations. It also represents a marketplace for matchmaking the innovators with potential end users and beneficiaries of such solutions.

Relevance (*)

At international level, the project primarily contributes to Program 3 “Promote integrated low-emission urban systems” under the Climate Change Objective 2 “Demonstrate systemic impacts of mitigation options” of the GEF-6 Programming Directions. The project is also in line with the Sustainable Development Goals (SDGs) such as SDG 7 “Affordable and Clean Energy”, SDG11 “Sustainable Cities and Communities”, SDG 12 “Responsible Consumption and Production” and SDG 13 “Climate Action”. It contributes to the following country outcome included in the UNDAF/Country Programme Document: By 2020, there are improved capacities to combat climate change and manage natural resources and communities are more resilient to the effects natural and man-made disasters. Finally, the project is linked to the following output of the UNDP Strategic Plan: Scaled up action on climate change adaptation and mitigation cross sectors which is funded and implemented.

At national level, the alignment with the EU policy and standards in a number of areas, such as climate change and energy, innovation, smart cities and communities, will be the main driver for development of relevant CC governance and institutional frameworks for the years to come. The results of the projects have direct contributions towards country performance under Chapter 27 Environment and Chapter 15 Energy of the EU accession negotiations. Also, in consultation and cooperation with the relevant ministries, the project made a number of policy/planning interventions in the accompanying sectors which include, but are not limited to:

- Providing expert’s support to the revision of the National Waste Management Programme for the period 2022 – 2031, including an Action plan with specific activities
- Providing expert’s support to the drafting of the National Sludge Management Programmme through the complementary output financed by Swedish Development Agency
- Inputs to the Action plan for the period 2021 to 2022 for implementing the Strategy for sustainable urban development of the Republic of Serbia (Measure 2.3.4) based on the solution proposed by the CSUD’s Award Project implemented by the National Association of Autonomous and Electric Vehicles (NAAEV)

The project design highlighted the role of participatory approach in enhancing innovation dimension of the climate solutions for urban development. Almost all interviewed stakeholders confirmed the strong potential of the project for stakeholder engagement, and the permanent communication and exchanges with the project team, regarding their interests and needs. Specifically, the project is a pioneer in bringing together innovation and climate change seeking solutions for climate smart urban development proposed by private sector, CSOs, research institutions, LSGs and individuals. Furthermore, the project had strong LSGs targeted activities, from one side through open data challenge and on the other, by supporting the establishment of the first energy cooperative in Serbia “Solar roofs of Sabac”, preparation of the first donation-based crowdfunding campaign for constructing a mini solar power plant on the roof of a kindergarten in City of Kragujevac, as well as supporting the promotion of two Energy Cooperatives, “Solar Roof of Sabac” and Energy Cooperative “Elektropionir”. Finally, the project aspired for contribution to gender mainstreaming in the proposed innovative solutions and for strengthening the ability of Serbia to participate actively in addressing the global environmental threat of climate change in a gender responsive manner.

During the implementation, the project has established strong synergies with other ongoing projects which ensure sustainability and scaling up. Some examples include:

- EUD-financed project "EU for Green Agenda in Serbia"
- GEF funded – "Reducing Community Carbon Footprint by circular economy approach"
- EU for Green Agenda in Serbia - parallel financing by Swiss Development Cooperation
- "Leveraging NDCs to achieve net-zero emissions and climate-resilient development", Government of Japan

Effectiveness (*)

The Project seeks to actively engage citizens, CSOs, public and business communities to come up with new and innovative ideas on how to contribute to smart climate urban development in practice and to jointly develop, finance and implement these ideas further. Hence, the main products of the Project are the eight LSG's open data projects and the eleven innovation projects. Around these products, a high number of trainings and other capacity building and dissemination activities/events were organized. Overall, the projects and the accompanying outreach activities ensures achievement of the Project Objective that is, to promote innovation and community engagement for climate smart urban development (CSUD).

Given the required social impact and innovation, the effectiveness would have been even higher if a clear distinction is made among:

- Projects based on mature technology and have well established methodology for calculation of GHG reductions (Group 1)
- Projects with significant potential for social impact/behavioral changes (Group 2)
- Projects with pronounced focus on innovation (Group 3)

For Group 2 and Group 3 specific key indicators should be devised, like for example, "number of persons reported pro-environment behavior" or "delivery of a patent (yes/no)". Besides the "achievable GHG emission reductions" relevant only for Group 1 projects, specific key indicators the Group 2 and Group 3 must be included in the main Projects Results Framework in order to capture (value) also the progress made regarding the level of social impact and innovation.

Efficiency (*)

The project team displayed strong adaptive management by adjusting well to working under Covid-19 restrictions, managing to deliver effectively in the circumstances of political turmoil, displaying flexibility and efficient coordination with other relevant ongoing projects and activities. In order to respond to the emerging needs, several adjustments were made including introduction of "Innovation Challenge", establishing Climate Incubator/Accelerator and adoption of an innovative of Performance-Based Payments model to support the selected pilot projects.

The project benefited from active stakeholder participation. All stakeholders have been included as planned - project teams of municipalities, companies, CSOs, research institutes and individuals, mentors and trainers, evaluators, GHG monitoring expert, gender experts, communication experts. Furthermore, the existing cooperation with some institutions enhanced further. Examples include MoEP, through new GEF7 project replicating CSUD innovation challenge mechanism and methodology and Standing Conference of Towns and Municipalities, Serbian Chamber of Commerce, Climate KIC (EIT), NALED through synergies with ongoing projects in the relevant areas and knowledge, experience network sharing. Also, new partnerships have

been established, i.e., SIDA, EU delegation, GIZ, Japanese government, Slovak Embassy, and Swiss government, which ensures sustainability and scaling up.

The actual expenditures fitted into the planned project budget per outcome/activity. Changing in the budget was adequately conducted as per UNDP standard operational procedures, with justification provided. Initial commitments for co-funding at national level, were not realized in full amount.

The project had well-designed M&E plan including also MTR. Given the focus of the Project to the social impact and innovation, the Results Framework would have benefited from inclusion of indicators, be they quantitative or qualitative, which will measure/value the level of social impact and innovation. The issues with monitoring of the achieved GHG emissions reductions and indistinctness related to direct beneficiaries (identified at MTR) remain valid at the TE stage also.

The project team was well-versed with UNDP and Governmental procedures. The coordination and cooperation of PIU with the MoEP, stakeholders and the RTA was also well-functioning. Stronger involvement of the MoEP would be helpful in further promoting project activities and disseminating lessons learnt. Better interministerial cooperation and a more pro-active approach of the Project towards other relevant ministries, as well as LSGs would be beneficial in order to facilitate ownership and political commitment.

The risks including social and environmental standards are well-managed and did not influence the success and pace of implementation of project outputs and activities.

Overall Outcome (*)

Highly satisfactory level of relevance, and satisfactory level of effectiveness and efficiency, are convincingly demonstrated. Also, sufficient evidence is found that the overall progress towards achievement of the project objective is satisfactory, as is the overall progress towards achievement of most of the EOP targets under the outcomes/components.

Sustainability: financial (*), socio-economic (*), institutional framework and governance (*), environmental (*), and overall likelihood (*)

Financial sustainability

The financial sustainability is rated likely on the grounds of the already initiated projects and activities in the field:

- The Swedish Government, as one of the CSUD project partners, provided additional funding of 516,160 USD, whereas 216,530 USD has been used for direct support to 7 innovative solutions, which leveraged co-finance of 467,079 USD (the innovation challenge for Climate Smart Bio-Waste Management)
- New GEF7 project replicating CSUD innovation challenge mechanism and methodology, prepared and submitted by the Ministry of Environmental Protection started with implementation in March 2022. The Project is focusing on creation of sustainable/circular cities and communities in Serbia.
- The Government of Japan to support decarbonization of Serbian industry based on the UNDP proposal. The project aims at contributing to the achievement of NDC targets by assisting in identification and implementation of technologies and innovative business models in those priority sectors that are most affected by increased climate ambition and mitigation of greenhouse gas emissions. The project will last from March 2022 to March 2023. Total value of the project is 1,050,000USD.

- In August 2022, Swiss Government decided to support Serbia by provision of the support through applying Innovation Challenge approach as parallel co-financing of the "EU for Green Agenda in Serbia". The project will be implemented from August 2022 until 30 June 2026. Total project value is 4,905,556 USD.
- The Delegation of European Union in Serbia (EUD) decided to implement the CSUD approach, i.e. based on the challenge calls, acceleration, and PBP's agreements for the Green Agenda Project in Serbia. The PBPs mechanism will be applied to support all 5 pillars of the Green Agenda. Value EUR 3,599,884 for Phase 1

Finally, Environment and Climate Action was one of the priority sectors during the IPA II period (2014-2020) and remains amongst the priority sectors also for the current IPA III period (2021-2027). It is reasonable to expect that the Government of Serbia will allocate necessary co-financing resources if necessary.

Institutional framework and governance sustainability

The Ministry of Environment has officially confirmed readiness to accept and operationally manage the Climate Smart Information System, upon completion of the project. The continuation of this process has been ensured through the support from the Swiss Cooperation, signed in August 2022, with MoEP and UNDP as the main implementing partners

Harmonization of Serbia's legislation with EU acquis will be the main driver for development of relevant CC institutional and governance frameworks at national but also at local level for the years to come

Therefore, it is expected that the national and local institutional and governance frameworks for CC will be sustained and even strengthened during the process of Serbia's accession to EU. However, risks related to inconsistency of political players and local polices, as well as risks of insufficient and inadequate human resources remain valid also for the years to come

Socio-economic sustainability

The investments which contribute to smart climate urban development will continuously be among the top country priorities given the country aspiration for EU membership. In parallel, they can contribute to further enhancing or maintaining the quality and availability of public services and equal human rights to safety, healthcare, social security and education, while also creating new employment and business opportunities and support human rights to work. Based on this, the socio-economic sustainability can be rated likely.

However, the transformation into a carbon-neutral and climate-adapted society, as well as all other processes, could have negative effects on vulnerable social groups that will require special care. Throughout the projects' implementation, the root causes of potential negative effects should be clearly identified in order to develop effective solutions addressing the negative socio-economic effects.

Environmental sustainability

The investments which contribute to smart climate urban development may generate waste, which, if not properly managed, may be disposed in an environmentally not sound matter. An adequate waste management plan should be incorporated into the project design in order to ensure environmental sustainability. There might be some environmental risks related to land degradation or land use change, particularly with projects focusing on with large energy plant or in the area of forestry, but all of them are regulated through Environmental Impact Assessment requirement from the environmental law.

With these safeguards, the environmental sustainability of the project is rated likely.

Overall likelihood

Given the likeness along all four dimensions, the overall likelihood of sustainability of the project is rated likely.

Country Ownership

The national ownership was overall strong. The project team had a strong support from all stakeholder groups and the implementing partner. The project has made an excellent result in engaging broadly the community for finding and implementing innovative solutions leaving nobody behind in building smart climate resilient Serbian society.

Gender equality and women's empowerment

The project aspired for contribution to gender mainstreaming in the pilot projects, be they innovation or open data projects and in general, for strengthening the ability of Serbia to participate actively in addressing the global environmental threat of climate change in a gender responsive manner.

In-depth gender mainstreaming study was conducted for the innovation projects which generated a number of gender-sensitive concepts and indicators. For example, the under GreenEnergy point project, 65% of women were supported for the establishment of agricultural households for owners of private forests, through the development of new business model for diversification of wooden biomass sources, including private forest owners. Furthermore, Institute Mihajlo Pupin project promotes the use of proposed digitalized solutions that will allow an easier inclusion of women in agriculture.

The Project delivered a training handbook on gender mainstreaming based on the experience and lessons learnt. Six outreach events entitled Gender and Climate Change were organized throughout the country with total of 241 participants.

Gender relevant reporting was also included in the reporting and open data projects, but in most cases, it is limited to simple women-versus-men counting. Deeper "so what" analyses are needed in order to understand the implications and adequate recommendation for further gender mainstreaming actions.

Cross-cutting Issues

The cross-cutting themes were adequately addressed in the project design phase. Hence, Social and Environmental Screening Report is included as an annex to the ProDoc which details the overarching principles to address different cross-cutting issues and strengthen social and environmental sustainability. Through the adopted principle for mainstreaming human-rights based approach, the following cross-cutting issues are covered:

- Open monitoring, information and knowledge management and broad community engagement and participation
- Improving the transparency and accountability of local governance, opportunities for public participation in decision making and quality and cost-efficiency of public services
- Enhancing equal human rights to safety, healthcare, social security and education, new employment and business opportunities

GEF Additionality

The project's strong records, in community engagement, devising innovative solutions and synergy building pointed to high additionality of GEF investment. This is also based on the strong competitive advantage of

the UNDP, as it had been extensively involved in many relevant Environment (Climate Change) and Good Governance projects.

Out of the six forms of potential additionality ((1) Specific Environmental, (2) Legal/Regulatory, (3) Institutional/Governance, (4) Financial, (5) Socio-Economic and (6) Innovation), the project has demonstrated mostly Innovation additionality, but also Specific Environmental additionality and Socio-Economic additionality.

Catalytic Role / Replication Effect

The project has had a prominent catalytic role at national level convincingly demonstrated through newly initiated projects and activities supported by GEF and other donors:

- EUD-financed project “EU for Green Agenda in Serbia”
- GEF funded - Reducing Community Carbon Footprint by circular economy approach”
- EU for Green Agenda in Serbia - parallel financing by Swiss Development Cooperation
- Leveraging NDCs to achieve net-zero emissions and climate-resilient development, Government of Japan

Given its focus – innovation, social impact, smart solutions for climate resilience, the project is also likely to have a large replication effect at international level. An example is inclusion of the City of Nis into the regional UNDP initiative "The City Experimentation Fund".

Progress to Impact

All interviews confirmed that the Project has made considerable social impact and performed highly satisfactory with regards to community engagement. Also, valuable innovative solutions were devised through innovation projects beneficial for large number of households, companies, LSGs, CSOs, public utilities, research institutes and citizens. The social and environmental impact is further enhanced with additional products and activities. Specifically, the project developed mobile application for collecting data on illegal dumpsites in Serbia and supported the establishment and promotion of energy cooperatives in the country and the promotion of donation-based crowdfunding.

The project has considerable impact on the overarching priority of the country for EU membership. Hence, the results of the projects have direct contributions towards country performance under Chapter 27 Environment and Chapter 15 Energy of the EU accession negotiations. Also, the project has made a number of policy/planning interventions, impacting thus policies and strategic planning in the areas of waste management, urban development and energy.

Finally, the impact in terms of women’s empowerment is satisfactory, given the efforts made along gender mainstreaming into the innovation projects and outreach activities focused on Gender and Climate Change.

5. Main Findings, Conclusions, Recommendations & Lessons

5.1. Main Findings

This section summarizes the main findings in a form of short statements based on the observations and analyses presented in the Chapter 4.

PROJECT DESIGN/FORMULATION	
Analysis of Results Framework: project logic and strategy, indicators	Well-defined
Assumptions and Risks	Reasonable and sufficiently detailed
Lessons from other relevant projects (e.g., same focal area) incorporated into project design	The project benefited highly from previous experience, lessons learnt, capacities built
Planned stakeholder participation	All-inclusive
Linkages between project and other interventions within the sector	Strong synergies with other ongoing projects
PROJECT IMPLEMENTATION	
Adaptive management	Very strong
Actual stakeholder participation and partnership arrangements	Very active stakeholder participation
Project Finance and Co-finance	The actual expenditures fit into the planned project budget per outcome/activity. The expenditure ratio at the TE period is almost 100%. The mobilized co-financing is 21% higher than projected at the approval
Monitoring and Evaluation	Design at entry (*): Satisfactory (S) Implementation (*): Satisfactory (S) Overall assessment of M&E (*): Satisfactory (S)
Implementation	UNDP implementation/oversight (*): Highly Satisfactory (HS) Implementing Partner execution (*): Moderately Satisfactory (MS) Overall project implementation/execution, coordination, and operational issues (*): Satisfactory (S)
Risk Management including Social and Environmental Standards (Safeguards)	Adequately integrated

PROJECT RESULTS	
Progress towards objective and expected outcomes (*)	Project Objective: Satisfactory (S) Outcome 1: Moderately Satisfactory (MS) Outcome 2: Satisfactory (S) Outcome 3: Satisfactory (S)
Relevance (*)	Highly Satisfactory (HS)
Effectiveness (*)	Satisfactory (S)
Efficiency (*)	Satisfactory (S)
Overall Outcome (*)	Satisfactory (S)
Sustainability	Financial (*): Likely (L) Socio-economic (*): Likely (L) Institutional framework and governance (*): Likely (L) Environmental (*): Likely (L) Overall likelihood (*): Likely (L)
Country Ownership	Strong national ownership
Gender equality and women's empowerment	Adequately addressed
Cross-cutting Issues	Adequately integrated
GEF Additionality	Mostly Innovation additionality, but also Specific Environmental additionality and Socio-Economic additionality
Catalytic Role / Replication Effect	Prominent catalytic role at national and international level
Progress to Impact	Considerable social and environmental impact; Valuable innovative solutions; Considerable impact on the overarching priority of the country for EU membership; Policy impacts in the areas of waste management, urban development and energy; Adequate contribution to women's empowerment.

5.2. Conclusions

Overall, the project exhibited satisfactory level of performance. It was highly relevant and timely, both in international and in national context. Satisfactory level of effectiveness and efficiency were convincingly demonstrated. Sufficient evidence was found that the overall progress towards achievement of the project objective is satisfactory, as is the overall progress towards achievement of most of the end-of-project targets under the three outcomes/components. The assessment of risks along financial, socio-economic, institutional and environmental dimensions does not identify any significant risk, that may affect the continued use of the project results, so the overall sustainability is rated likely.

On the other side, there were some issues which would need corrective action or particular attention to be improved or avoided, in the following projects. Most prominent are the following:

- Difficulty to compare projects with different primary goals, i.e., GHG emissions reductions, devising innovative solutions and proving their concept or making behavioural change with high social impact
- Difficulty to prove additionality of some of the projects
- Difficulty to establish vigorous system for monitoring reporting and verification of the achieved GHG emission reduction

Although the Project have demonstrated adequate level of success in LSGs engagement, there were challenges rooted in the lack of human and financial capacities, complex and unfriendly administrative procedures, as well as consistency in political support and cooperation. Given that CSUD theme covers many intertwined policy areas, the mentioned challenges were relevant also for interministerial cooperation and engagement of other ministries. Finally, there is always room for improvement of the prospects for cooperation and building partnerships and synergetic action with other Donors and national partners.

The TE team meticulously noted these issues and, in the next section, will deliver recommendations for their avoidance or mitigation.

5.3. Recommendations

In line with the issues noted, the recommendations are delivered in three areas of relevance:

- Call design, indicators, evaluation
- Local self-governments
- Stakeholder involvement and partnerships

Recommendations summary table			
Area: Call design, indicators, evaluation			
No	Action	Entity responsible	Timeframe
1	Differentiate the projects to be supported in the following groups: • Group 1: Projects based on mature technology and have well established methodology for calculation of GHG reductions • Group 2: Projects with significant potential for social impact/behavioural changes • Group 3: Projects with pronounced focus on innovation	UNDP Project Team Other donors or any potential supporter of similar projects Experts – project designers and developers of project documents	For future projects Continuous

2	Publish targeted call for each of the different groups and define adequate key indicators for Group 2 and Group 3, like for example, “number of persons reported pro-environment behaviour” or “delivery of a patent (yes/no)”. Examples of key indictors Include the Group 2 and Group 3 specific key indicators n the main Projects Results Framework, besides the “achievable GHG reductions” relevant for Group 1 only projects.	Experts – project designers and developers of project documents UNDP Project Team	For future projects Continuous
3	Prepare Manuals for Evaluators which will describe the general principles and procedures that will be used in the evaluation and selection of project proposals. The Manuals should include guidance and examples for all three project groups. Ideally, for each of the three project groups assign different experts for evaluation.	UNDP Project Team Experts engaged to develop manuals (ideally, experienced evaluators)	For future projects Continuous
4	Focus on additionality and GHG emissions reduction MRV component only for the Group 1 projects.	UNDP Project Team Experts – project designers and developers of project documents GHG emissions reduction MRV experts	For future projects Continuous
5	Provide additional support to the selected beneficiaries for marketing and branding of their products and/or project results. Put more emphasizes on these elements when designing the challenge calls in future.	UNDP Project Team Experts – project designers and developers of project documents Marketing and branding experts	For future projects Continuous
6	Given the importance of communications for reaching out potential beneficiaries and stakeholders, plan communication component separately and include communications targeted line in the project budget.	UNDP Project Team Communications experts Financial experts	For future projects Continuous

Area: Local self-governments			
No	Action	Entity responsible	Timeframe
7	Take into consideration needs and capacities of LSGs more thoroughly during the preparatory or inception phase of the projects in order to avoid that some of them are not ready enough or not committed to participate fully into the project activities. Exchange and share regularly knowledge with SCTM (due to their position and knowledge regarding LSGs readiness, interests, needs and capacities) in order to minimize the potential risks related to LSGs involvement.	UNDP Project Team Experts – project designers and developers of project documents LSGs SCTM	For future projects Continuous
8	In cases when the main goal is "opening data", avoid supporting preparation of strategic and planning documents as their formal adoption is highly uncertain. Particularly, the strategic and planning documents which still does not represent a formal obligation for the beneficiary institution. Instead, support Studies which will inform CSUD projects design, facilitate their implementation and measure their impacts.	UNDP Project Team Experts – project designers and developers of project documents LSGs	For future projects Continuous
9	When a LSG is PBP beneficiary, apply a modified/ customized contract model should considering complex and unfriendly procurement procedures which introduce high risk of impeding project implementation. For example, LSG should keep monitoring and supervision role, while a third entity should be in charge for implementation of the PBP agreement and procurement.	UNDP Project Team Financial and legal experts LSGs	For future projects Continuous
10	Organize more intensive campaigns with showcase events and other communication products presenting the LSG achievements under open data and innovation challenges. Organize peer-to-peer trainings with most advanced LSGs from open data innovation challenge serving as trainers in order to motivative and capacitate the other LSGs to prepare applications for the calls. This will also enable transfer of knowledge and experiences from successful projects (Example: promotion of the solution for animal waste mapping and management in Sremska Mitrovica).	UNDP Project Team Most advanced LSGs from open data innovation challenge Other LSGs Communication experts Media	For future projects Continuous

Area: Stakeholder involvement and partnerships			
No	Action	Entity responsible	Timeframe
11	Given the wide scope of CSUD topic, enhance the interministerial cooperation/ engagement, particularly for CSUD open data challenge where a great portion of relevant data is in the domain of the Ministry of Mining and Energy.	UNDP Project Team MoEP Ministry of Mining and Energy Other relevant ministries	For future projects Continuous
12	Maintain and enhance the partnerships with the umbrella institutions like SCTM (for LSGs) and Chamber of commerce and NALED (for private sector) enabling mutual exchanges and support, as well as for effective outreach through established networks and contacts.	UNDP Project Team SCTM Chamber of commerce NALED	For future projects Continuous
13	Improve the prospects for cooperation and building partnerships and synergetic action with other Donors and national partners through: • Enhancing transparency of the Environment portfolio • Reinforcing the country and other stakeholders' ownership over the projects and their results • Highlighting the contributions of the projects form the Environment portfolio to the objectives of other portfolios, particularly contributions in terms of transparency, openness, inclusiveness which are drivers of Good Governance portfolio	UNDP Other donors Serbian government Other national partners	For future projects Continuous

5.4. Lessons Learned

Innovation, Community engagement and Behavioural change are the key words defining the focus of the CSUD project and all that brought in function of climate change mitigation and building climate resilience. Consequently, the CSUD project had to deal with variety of ideas and later, projects, with different primary goals, i.e., GHG emissions reductions, opening climate related data, devising innovative solutions and proving their concept or making behavioural change with high social impact. Although all of them contribute to climate smart urban development, they are not comparable by their results and impacts. Simply said, each of these lines could represent a project on its own. On the other side, having a common overall goal,

it is reasonable to undertake all the mentioned lines under an umbrella project in order to use efficiently the logistical resources (management, communication, networks, partnerships, synergies, knowledge and best practices exchange).

Therefore, a lesson learned is that the progress towards objective of the umbrella project could not be measured only through the GHG emissions reduction, number of the beneficiaries and the leveraged complimentary financing. Indicators, be they quantitative or qualitative, which will measure and value the level of innovation and social impact should also be included.

Furthermore, the incomparability of the applying projects affects the implementation of innovation calls - setting the evaluation criteria, the evaluation process and selection of the winning projects. Later, in the implementation phase of the winning projects, monitoring the progress is also difficult, particularly the progress made at the umbrella project level. Sub-calls organized along each of the mentioned lines would help overcoming this issue.

6. Annexes

A1: TE TOR (excluding TOR annexes)
A2: List of persons interviewed
A3: List of documents reviewed
A4: Evaluation Question Matrix (evaluation criteria with key questions, indicators, sources of data, and methodology)
A5: Questionnaire used/Interview guide
A6: Co-financing tables (if not included in body of report)
A7: TE Rating scales
A8: Summary of Evaluation Results (ratings)
A9: Signed UNEG Code of Conduct for Evaluators
A10: Relevant terminal GEF Core Indicators
A11: Relevant terminal Tracking Tools
A12: Signed TE Report Clearance form

A1: Terminal Evaluation Terms of Reference

Terminal Evaluation Terms of Reference for UNDP-supported GEF-finance projects

BASIC CONTRACT INFORMATION

Title:	**Evaluator - Terminal Evaluation for UNDP-supported GEF-financed Project**
Project:	Climate Smart Urban Development Challenge
Reporting to:	UNDP Evaluation Manager
Duty Station:	Home-based
Contract Type:	Individual Contract Framework Agreement (IC) or Reimbursable Loan Agreement (RLA)
Duration:	27 working days within the period July - September 2022

BACKGROUND

1. Introduction

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the medium-sized project titled **"Climate Smart Urban Development Challenge" (PIMS#5551)** implemented through the UNDP. The project started on 21 February 2017 and is in its final year of implementation. The TE process must follow the guidance outlined in the document 'Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects (TE_ Guidance for UNDP-supported GEF-financed Projects.pdf).

2. Project Description

The United Nations Development Programme (UNDP), acting as an implementing agency of the Global Environment Facility (GEF), is supporting the Ministry of Environmental Protection (MoEP) to implement the five-year "Climate Smart Urban Development Challenge (CSUD)" project, jointly financed by the GEF, MoEP and stakeholders. The objective of the project is to promote climate-smart urban development. By a challenge prize approach, it seeks to actively engage the civil society, public and business communities to come up with new and innovative ideas on how to contribute to this in practice and to jointly develop, finance and implement these ideas further. Broader and more effective use of new information and communication technologies (ICT)to enable and spearhead innovation and productivity gains, optimization of the resource use (e.g. by improved energy efficiency and resource sharing), reduction of physical mobility needs, more attractive public and non-motorized transport, increased use of renewable energy sources, climate smart waste management (improved recycling schemes and waste to energy) and other measures contributing to climate change mitigation are among the topics to be considered in this context.

The project implementation started in February 2017, and was to last until February 2022, but its implementation has been extended by August 2022. The total project budget is US$ 12,510,000, out of which US$ 1,950,000 is GEF budget, UNDP US$ 100,000, in-kind US$ 500,000 and other (parallel) cash US$ 9,960,000.

Main project outcomes are:

Outcome 1: Improved access to and availability of data by an open data approach for development, management and monitoring of CSUD related performance of Serbian municipalities.

Outcome 2: New innovative technical and systemic solutions and business models contributing to climate

Outcome 3: Knowledge management and M&E to facilitate learning, scaling up and replication of project results.

All activities and measures undertaken by the project will need to result in tangible GHG emissions reduction and considered from the perspective of climate smart planning. Project provided assistance in the establishment of "Innovation Challenge Programme" with the goal to provide initial capital for interested stakeholders (including businesses, research-scientific institutions, civil society organizations, individuals etc.) for testing and initiation of most innovative project ideas, including the opportunity for further co-financing of the most successful solutions. By the establishment of "Innovation Challenge Programme, project seeks to actively engage the civil society, research-scientific institutions, public and business community to come up with new and innovative ideas on how to contribute to this in practice and to jointly develop, finance and implement these ideas further.

The project assists municipalities to mainstream ICT into city management systems, putting in place digital inventories and tools to gather data and monitor actions. The Open Data Challenge was a public call for proposing innovative and cost-efficient ideas/solutions for simple and user-friendly public access to city/municipal climate change-related data, and for improving the management of this data. Open Data Challenge Call was open from 22 November 2017 until 05 February 2018, following the awarding of the best innovative ideas in June 2018. Under this challenge eight innovative ideas proposed by local self-government (municipalities and cities) were awarded, covering areas of energy efficiency, solar energy promotion, sustainable transportation, waste management, engagement of citizens in urban planning and development. In the following stage, the project is focused at the development and testing of the information system for climate smart urban development (including also the local greenhouse gas inventory). After completion of such information system, Local low-carbon development strategies were developed for five cities.

The Innovation Challenge was a public call for proposing innovative and cost-effective ideas for the reduction of greenhouse gases (GHG) emission created by public services and facilities, while simultaneously providing social, economic and environmental benefits for the community and its citizens. Out of 111 innovative ideas received to the challenge, 34 project ideas in total proposed by individuals, public and private companies, CSOs, local self-governments and research community, have been selected and were further mentored by the Climate Incubator/Accelerator towards mature projects stage. Selected project ideas under the Innovation Challenge are related to the areas of energy efficiency, renewable energy, bio-fuels, urban mobility, agriculture, green infrastructure, organic waste management, forestry.

In order to support further development of innovative project ideas and project proposals selected during independent evaluation under both Challenges, into projects and businesses that are ready for implementation at local level, the Ministry of Environmental Protection and UNDP have established a Climate Incubator/Accelerator. Services that are provided through the Climate Incubator include: business advisory support, one-on-one mentoring, facilitating access to finance and market, building partnerships and networking, promotion, targeted trainings and review and/or development of technical documentation.
Overall, the CSUD project promotes innovative and integrative approaches and new technologies for reducing greenhouse gas emissions at the local level and new business models, public private partnerships and social inclusiveness. This should further trigger transformational shift towards smart, inclusive cities of the future that are based on citizens participation and citizens centered solutions.

This is an adjusted standard term of reference for evaluations in UNDP, considering the impact of COVID-19 on evaluations, including consideration for COVID-19 situation assessment within countries, impact and restrictions on evaluations, alternative approaches, methodologies and considerations to mitigate the impact of COVID-19 on evaluations.
As of 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic as the new coronavirus rapidly spread to all regions of the world. The Government of Serbia declared the State of Emergency due to the COVID-19 outbreak on 14th March 2020. Consequently, number of restrictions were introduced related to movement of people and goods, working arrangements for public and private companies and state institutions. Daily Curfew restrictions were also introduced.
COVID-19 pandemic and the state of emergency declared by the Government in March 2020, caused a significant slowdown, even a deadlock in remaining project activities, which could not be resolved by the engagement of the project staff only. The state of emergency implied very strict measures including rigid travel restrictions (incl. public transport in the cities), as well as night and weekend curfews. Main project partners/beneficiaries are public institutions, which were heavily affected by the measures imposed to fight the COVID pandemic. Operating regime of all public institutions has been significantly changed and limited. Employees have been greatly focused on other urgent issues arising from the crisis. A significant number of employees in the ministries has temporarily been assigned to other duties or working remotely. Such measures have significantly impeded project activities, mainly capacity building and awareness raising. Consequently, the finalization of all expected project activities is delayed for three months, including the terminal project evaluation.
If it is not possible to travel to or within the country for the evaluation then the evaluation team should develop a methodology that takes this into account the conduct of the evaluation virtually and remotely, including the use of remote interview methods and extended desk reviews, data analysis, surveys and evaluation questionnaires. This should be detailed in the Inception report and agreed with the Evaluation Manager.
If all or part of the evaluation is to be carried out virtually then consideration should be taken for stakeholder availability, ability or willingness to be interviewed remotely. In addition, their accessibility to the internet/ computer may be an issue, and these limitations must be reflected in the evaluation report. If a data collection/field mission is not possible then remote interviews may be undertaken through telephone or online (skype, zoom etc.). International consultants can work remotely with

national evaluator support in the field if it is safe for them to operate and travel. No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority.
A short validation mission may be considered if it is confirmed to be safe for staff, consultants, stakeholders and if such a mission is possible within the evaluation schedule. Equally, qualified and independent national consultants can be hired to undertake the evaluation and interviews in country as long as it is safe to do so.

3. TE Purpose

The TE report will assess the achievement of project results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The TE report promotes accountability and transparency and assesses the extent of project accomplishments.

DUTIES AND RESPONSIBILITIES

4. TE Approach & Methodology

The TE must provide evidence-based information that is credible, reliable and useful.

The TE team (**evaluator and national consultant**) will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP) the Project Document, project reports including annual PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based evaluation. The TE team will review the baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools that must be completed before the TE field mission begins.

The TE team is expected to follow a participatory and consultative approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office(s), the Regional Technical Advisors, direct beneficiaries and other stakeholders.

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to implementing agency, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project beneficiaries, academia, local government and CSOs, etc.

The specific design and methodology for the TE should emerge from consultations between the TE team and the above-mentioned parties regarding what is appropriate and feasible for meeting the TE purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The TE team must use gender-responsive methodologies and tools and ensure that gender equality and

women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the TE report.

The final methodological approach including interview schedule, field visits and data to be used in the evaluation should be clearly outlined in the inception report and be fully discussed and agreed between UNDP, stakeholders and the TE team. TE team should prepare and use questionnaires for broader stakeholder group and virtual interviews. The evaluation team can revise the approach in consultation with the evaluation manager and key stakeholders. These changes in approach should be agreed and reflected clearly in the TE Inception Report.

The final TE report should describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the evaluation.

5. Detailed Scope of the TE

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see TOR Annex A). The TE will assess results according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects, available at: *TE_ Guidance for UNDP-supported GEF-financed Projects.pdf*.

The Findings section of the TE report will cover the topics listed below. A full outline of the TE report's content is provided in ToR Annex C.

The asterisk "(*)" indicates criteria for which a rating is required.

Findings

i. Project Design/Formulation

- National priorities and country driven-ness
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Safeguards
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

ii. Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
- Implementing Agency (UNDP) (*) and Executing Agency (*), overall project oversight/implementation and execution (*)
- Risk Management, including Social and Environmental Standards

iii. Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- GEF Additionality
- Catalytic Role / Replication Effect
- Progress to impact

iv. Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE team will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best practices in addressing issues relating to relevance, performance and success that can provide

knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE team should include examples of good practices in project design and implementation.

- It is important for the conclusions, recommendations and lessons learned of the TE report to include results related to gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown in the ToR Annex F.

6. Expected Outputs and Deliverables

The **Evaluator** shall prepare and submit:

Deliverables	**Deadline**
1. TE Inception Report, including the Evaluation Criteria Matrix template, prepared and accepted	11 August 2022
2. Presentation of Initial Findings to UNDP, Implementing partner and beneficiaries prepared and delivered	15 August 2022
3. Draft TE Report: Full draft report with annexes prepared and submitted	22 August 2022
4. Final TE Report* (up to 30 pages) and Audit Trail detailing how all received comments have (and have not) been addressed in the final TE report prepared and accepted	2 days upon received comments on the Draft TE, not later than 14 September 2022

*The final TE report must be in English.

All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.[1]

7. TE Arrangements

The principal responsibility for managing the TE resides with the UNDP Country Office. The UNDP CO Serbia will contract the consultants and ensure the timely provision of per diems and travel arrangements within the country for the TE team, if necessary. Due to Covid-19 pandemic situation all meetings/interviews should be organized virtually. The Project Team will be responsible for liaising with the TE team to provide all relevant documents, set up stakeholder interviews, and arrange field visits. TE team will send deliverables to the Evaluation Manager.

8. Duration of the Work

[1] Access at: http://web.undp.org/evaluation/guideline/section-6.shtml

The total duration of the TE will be approximately 15 working days within the period July - August 2022. The tentative TE timeframe is as follows:

- *28 July 2022: Application closes*
- *29 July 2022: Selection of TE Team*
- *01 August 2022: Prep the TE team (handover of project documents)*
- *03 August 2022: Document review and preparing TE Inception Report, Finalization and Validation of TE Inception Report- latest start of TE mission*
- *5 working days: TE mission: stakeholder meetings, interviews – virtually organized*
- *10 August 2022: Mission wrap-up meeting & presentation of initial findings- earliest end of TE mission*
- *5 calendar days: Preparation of draft TE report*
- *15 August 2022: Circulation of draft TE report for comments*
- *1 working day: Incorporation of comments on draft TE report into Audit Trail & finalization of TE report*
- *17 August 2022: Preparation & Issue of Management Response*
- *19 August 2022: Expected date of full TE completion*

The expected start date of contract is *01 August 2022*.

9. Duty Station

Due to Covid-19 pandemic situation all meetings/interviews should be organized virtually.
Duty-station: home-based

Travel:

- International travel will not be required to *Republic of Serbia* during the TE mission;
- The BSAFE course must be successfully completed prior to commencement of travel;
- Individual Consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director.
- Consultants are required to comply with the UN security directives set forth under: https://dss.un.org/dssweb/
- All related travel expenses will be covered and will be reimbursed as per UNDP rules and regulations upon submission of an F-10 claim form and supporting documents.

REQUIRED SKILLS AND EXPERIENCE

10. TE Team Composition and Required Qualifications

The principal responsibility for managing TE resides with the UNDP Country Office. The UNDP CO Serbia will contract the consultants. A team of two independent evaluators will conduct the TE – one team leader - Evaluator, and one national consultant.

The team leader- Evaluator will be responsible for the overall design and writing of the TE report and accompanying annexes. The national expert will support the organization on the interviews with key stakeholders and project beneficiaries; assess emerging trends with respect to regulatory frameworks, capacity building, work with the Project Team in developing the TE itinerary.

The evaluator(s) cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document), must not have conducted this project's Mid-Term Review and should not have a conflict of interest with the project's related activities.

Skills and Competencies

- Excellent analytical skills
- Displays ability to synthesize research and reach empirically based conclusions on related subject
- Strong writing skills
- Proven capacity to produce reports
- Displays capacity to provide experienced advice on best practices
- Possesses knowledge of inter-disciplinary development issues
- Focuses on result for the client and responds positively to feedback
- Good application of Results-Based Management
- Good communication, coordination and facilitation skills
- Consistently ensures timeliness and quality of work
- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability
- Demonstrates integrity by modeling ethical standards

Education

- Master's degree in the project related field (mechanical/ electrical/ agriculture/ forestry/ environment engineering or economy);
- Knowledge of the UNFCCC and Paris Agreement;

Experience

- Minimum 10 years of professional experience in relevant technical areas, preferably in energy/environmental protection sectors
- Relevant experience with results-based management evaluation methodologies;
- Experience applying SMART indicators and reconstructing or validating baseline scenarios;
- Competence in adaptive management, as applied to *GEF Climate Change Focal Area;*
- Experience in evaluating projects;
- Track record of professional international experience in project development/ management/ monitoring/ evaluation in the climate change field
- Experience working with the GEF or GEF-evaluations, means of verification: the list of evaluated GEF projects
- Good knowledge of international experiences, state of the art approaches and best practices in the specific areas the project and its subcomponents are dealing with
- Demonstrated understanding of issues related to gender and climate change and experience in gender sensitive evaluation and analysis
- Excellent communication skills;
- Demonstrable analytical skills;

- Project evaluation/review experience within United Nations system will be considered an asset
- Experience in working with wide range of stakeholders (private, governmental, etc.).

Language

- Fluency in written and spoken English.

11. Evaluator Ethics

The TE team will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The evaluator must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The evaluator must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses without the express authorization of UNDP and partners.

12. Payment Schedule

- 20% payment upon satisfactory delivery of the final TE Inception Report and approval by the UNDP
- 40% payment upon satisfactory delivery of the draft TE report to the UNDP
- 40% payment upon satisfactory delivery of the final TE report and approval by the UNDP and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

  Criteria for issuing the final payment of 40%
  - The final TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
  - The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other MTR reports).
  - The Audit Trail includes responses to and justification for each comment listed.

13. APPLICATION PROCESS

DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS

Application Procedure

Application should include:
- CV in English language containing date of birth, contact information (home address, phone number, e-mail) and timeline of work experience (including description of duties);
- Offeror's Letter (only PDF format will be accepted) confirming Interest and availability for the Individual Contractor (IC) Assignment. Can be downloaded from the following link: http://www.undp.org.rs/download/ic/Confirmation.docx.

- The Offeror's Letter should include financial proposal specifying a total lump sum amount for the tasks specified in this announcement with a breakdown of costs.
- Offeror's Letter must also include the methodology concept containing a preliminary plan of work (no more than two pages).

Any request for clarification must be sent by standard electronic communication to the e-mail vacancy.rs@undp.org. The procuring UNDP entity will respond by standard electronic mail and will send response, including an explanation of the query without identifying the source of inquiry, to all consultants.

Financial Proposal:

Lump sum contracts

The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in installments or upon completion of the entire contract). Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including travel, per diems, and number of anticipated working days).

Travel

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources.

Evaluation

1. Cumulative analysis

When using this weighted scoring method, the award of the contract should be made to the individual consultant whose offer has been evaluated and determined as:

a) responsive/compliant/acceptable, and
b) Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.
* Technical Criteria weight; 70%
* Financial Criteria weight; 30%

Only candidates obtaining a minimum of 49 points would be considered for the Financial Evaluation

Criteria	Weight	Max. Points
Technical	70%	70 points
• Criteria A	Desk review of CVs based on relevant professional experience in relevant technical areas, preferably in energy/environmental protection sectors	30
• Criteria B	Desk Review of CVs based on experience in working with the GEF or GEF-evaluations	25
• Criteria C	Qualifications (Educational background and language requirements)	15
Financial	30%	30 points

Additional Information:

- Individual Contract (IC) will be applicable for individual consultants applying in their own capacity.

- Reimbursable Loan Agreement (RLA) will be applicable for applicants employed by any legal entity. Template of RLA with General Terms and Conditions could be found on: http://www.undp.org.rs/download/RLA%20with%20General%20Terms%20and%20Conditions.doc. In the case of engagement of Civil servants under IC contract modality a no-objection letter should be provided by the Government entity. The 'no-objection' letter must also state that the employer formally certifies that their employees are allowed to receive short-term consultancy assignment from another entity without being on "leave-without-pay" status (if applicable), and include any conditions and restrictions on granting such permission, if any. If the previous is not applicable 'leave-without-pay' confirmation should be submitted.

Engagement of Government Officials and Employees

- Government Officials or Employees are civil servants of UN Member States. As such, if they will be engaged by UNDP under an IC which they will be signing in their individual capacity (i.e., engagement is not done through RLA signed by their Government employer), the following conditions must be met prior to the award of contract:
    - A "No-objection" letter in respect of the individual is received from the Government employing him/her, and;
    - The individual must provide an official documentation from his/her employer formally certifying his or her status as being on "official leave without pay" for the duration of the IC.
- The above requirements are also applicable to Government-owned and controlled enterprises and well as other semi/partially or fully owned Government entities, whether or not the Government ownership is of majority or minority status.
- UNDP recognizes the possibility that there are situations when the Government entity employing the individual that UNDP wishes to engage is one that allows its employees to receive external short-term consultancy assignments (including but not limited to research institutions, state-owned colleges/universities, etc.), whereby a status of "on-leave-without-pay" is not required. Under such circumstance, the individual entering into an IC with UNDP must still provide a "No-objection" letter from the Government employing him/her. The "no objection" letter required under (i) above must also state that the employer formally certifies that their employees are allowed to receive short-term consultancy assignment from another entity without being on "leave-without-pay" status, and include any conditions and restrictions on granting such permission, if any. The said document may be obtained by, and put on record of, UNDP, in lieu of the document (ii) listed above.

Criteria for Selection of the Best Offer

Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring method – where the educational background and experience on similar assignments will be weighted at 70% and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

14. Annexes to the TE ToR

- ToR Annex A: Project Logical/Results Framework
- ToR Annex B: Project Information Package to be reviewed by TE team
- ToR Annex C: Content of the TE report
- ToR Annex D: Evaluation Criteria Matrix template
- ToR Annex E: UNEG Code of Conduct for Evaluators
- ToR Annex F: TE Rating Scales and TE Ratings Table
- ToR Annex G: TE Report Clearance Form
- ToR Annex H: TE Audit Trail template
- Annex I: UNDP Evaluation dispute resolution process - handed over to evaluators when signing the contract

A2: List of persons interviewed

During the preparatory phase

#	Organization	Name and position	Date of the interview (if already set)
1	UNDP CO Serbia	Miroslav Tadić, Project Manager Ana Seke, Project Coordinator Daniel Varga, Evaluation Manager	10.08.2022
2			
3			

During the inception phase

#	Organization	Name and position	Date of the interview (if already set)
	UNDP CO Serbia	Ana Seke, Project Cooridnator	12.08.2022.
4	UNDP Regional Office	Jana Koperniech, UNDP-NCE Technical Adviser	12.08.2022.
5		Tugba Varol, UNDP-NCE Programme Associate	

During the evaluation phase

#	Organization	Name and position	Date of the interview (if already set)
	UNDP CO Serbia	Ana Seke, Project Coordinator	12.08.2022.
6	Radio Television of Serbia	Slavica Gligorović, Journalist (environment)	15.08.2022.
7	Serbian Chamber of Commerce	Siniša Mitrović, Head of CE Center,	15.08.2022.
8		Ivana Putnik, Senior adviser in CE Center	15.08.2022.
9		Vukašin Vojinović, Senior advisor in CE Center	15.08.2022.
10	UNDP Regional Office	Robert Pašičko, Expert on Low Carbon Development and Alternative Finance, Innovation Team, Istanbul Regional Hub	15.08.2022.
11		Marina Petrović, Alternative Finance and Technology Expert	15.08.2022.
12	Accelerator and Incubator consultants and mentors	Milivoje Jovanović, Consultant for business related projects	16.08.2022.
13		Aca ilić, Consultant for business related projects	16.08.2022.
14	Standing Conference of Towns and Municipalities	Miodrag Gluščević, Programme Director for Sector for Urban Development, Environment and Communal Services	16.08.2022.
15	UNDP Comms team	Danijela Šever Radovanović, Communications Officer, CO Serbia	16.08.2022.
16	Evaluator team	Mladen Crnomarković, Evaluator for the Innovation projects concept	16.08.2022.
17	NALED representative	Slobodan Krstović, Director for sustainable development	16.08.2022.

18	Telefon Inžinjering	Sava Radojičić, Consultant	17.08.2022.
19	City of Šabac	Slobodan Jerotic, ex Director of PUC Toplana Sabac	17.08.2022.
20	NAAEV	Milan Čabarkapa, Project team member	17.08.2022.
21	City of Kraljevo (Evergreen project)	Zdravko Maksimović, Head of DRR Department	17.08.2022.
22	Centre for Multidisciplinary Research	Ivan Spasojevic, Research professor and Team Leader	17.08.2022.
23	E reciklaža	Nebojša Vraneš, consultant	17.08.2022.
	City of Kraljevo	Zdravko Maksimović, Head of DRR Department	17.08.2022.
24		Mirjana Prodanović, Sector for project management and LER	
25	City of Niš	Bojan Gajić, Energy manager	17.08.2022.
26	City of Sremska Mitrovica	Dušan Filimonović, Project partner	17.08.2022.
27		Srećko Čupić, Head of Veterinary Department	
	Toplana Šabac	Slobodan Jerotic, ex Director of PUC Toplana Sabac	17.08.2022.
28	Ministry of Environmental Protection	Sandra Dokić, Assistant Minister	Written Interview conducted
29	Swedish Embassy representative	Ida Reuterswärd, First Secretary Programme Office	18.08.2022.

A3: List of documents reviewed

#	Item (electronic versions preferred if available)	CSUD relevant document/folder
1	Project Identification Form (PIF)	PIF Document
2	UNDP Initiation Plan	Initiation Plan
3	Final UNDP-GEF Project Document with all annexes	Project Document
4	CEO Endorsement Request	CEO Endorsement Letter and project review
5	UNDP Social and Environmental Screening Procedure (SESP) and associated management plans (if any)	Social and Environmental Screening Report, June 2016
6	Inception Workshop Report	Inception Workshop _08.05. 2017 documents Inception Report_09.2017
7	Mid-Term Review report and management response to MTR recommendations	MTR report, Management response to MTR recommendations
8	All Project Implementation Reports (PIRs)	PIR 2018, PIR 2019, PIR 2020, PIR2022 PIR 2022
9	Progress reports (quarterly, semi-annual or annual, with associated workplans and financial reports)	
10	Oversight mission reports	3 Monitoring Session Reports
11	Minutes of Project Board Meetings and of other meetings (i.e. Project Appraisal Committee meetings)	Minutes of 11 PB meetings (2017 – 1, 2018 -1, 2019 – 2, 2020 -4, 2021 -3)
12	GEF Tracking Tools (from CEO Endorsement, midterm and terminal stages)	GEF Tracking Tools (from CEO Endorsement, midterm stages)
13	GEF/LDCF/SCCF Core Indicators (from PIF, CEO Endorsement, midterm and terminal stages); for GEF-6 and GEF-7 projects only	GEF 7 Core Indicator Worksheet at MTR
14	Financial data, including actual expenditures by project outcome, including management costs, and including documentation of any significant budget revisions	Note on approval of Innovation Challenge Mechanism 4 Combined Delivery Reports (2017, 2018) CDR19, CDR2021, CDR2022, CDR07-12, 2020 Table: Project expenditures – annual planned and actual (2017-2022) by outcomes and

		project management 8 UNDP – LSG Contracts (total 56 000 USD) 5 Performance Based Contracts (477 599 USD) 6 Performance Based Contracts (238 345 USD)
15	Co-financing data with expected and actual contributions broken down by type of co-financing, source, and whether the contribution is considered as investment mobilized or recurring expenditures	5 Performance Based Contracts (co-financing 9 551 898 USD) 6 Performance Based Contracts (co-financing 248 410 USD + 10 000 USD in kind) 5 Financing agreements with MoEP (711 892 USD) MoEP in-kind? Sweden, Third Party Cost Sharing Agreement SIDA (donor) (4 950 495.05 SEK) Slovak Ministry of Finance co-financing (Contract for goods and services Enviros (138 000 USD)
16	Audit reports	Due Diligence for 5 private sector entities Due Diligence for 6 private sector entity 3 Spot Check reports
17	Electronic copies of project outputs (booklets, manuals, technical reports, articles, etc.)	Open Data Challenge Guideline Innovation Challenge Guideline Evaluation criteria for both challenges Crowdfunding Alternative financing Guideline Step – by – step Guideline on setting and running Innovation Challenge Call
18	Sample of project communications materials	Media materials (video and brochures) Communication Plan
19	Summary list of formal meetings, workshops, etc. held, with date, location, topic, and number of participants	Information system workshop 3 Incubator workshops Climate Diplomacy Week materials Climate Smart Community Gathering materials Solar Mayor's Club materials
20	Any relevant socio-economic monitoring data, such as average incomes / employment levels of stakeholders in the target area, change in revenue related to project activities	5 GHG calculation studies Innovation Challenge Winning Project's Gender Mainstreaming Potential & Action Plans 5 Local Low Carbon Development Strategies

21	List of contracts and procurement items over ~US$5,000	8 UNDP – LSG Contracts (total 56 000 USD) 5 Performance Based Contracts (477 599 USD), 6 Performance Based Contracts (238 345 USD) List of contracted consultants/experts (role and contract amount)
22	List of related projects/initiatives contributing to project objectives approved/started after GEF project approval (i.e. any leveraged or "catalytic" results)	List of synergetic projects

A4: Evaluation Question Matrix

	Indicators	Sources	Methodology	Response / Finding	Opportunities for Improvement
RELEVANCE					
Project Strategy: To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards expected results?					
Project Design:					
To what extent is the project in line with national and local priorities?	Alignment with national policies and local development plans Correspondence of the grants to the selection criteria	ProDoc and AWPs, National strategies, regional development plans	Comparative analysis		
	Alignment with GEF focal area outcomes and outputs	GEF documents, ProDoc, AWPs	Comparative analysis		
Have synergies with other projects and initiatives been incorporated in the design?	Evidence of stakeholder mapping in the ProDoc and examples of synergistic activities planned	ProDoc, Inception report, interviews	Comparative analysis		
Were lessons from other relevant projects properly incorporated into the project design?	Evidence of lessons from other projects listed and considered in the design stage	ProDoc, Inception report, interviews	Comparative analysis		
Were perspectives of those affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, considered during project design processes?	Evidence that the project design was informed by the perspectives of local stakeholders	KIIs, ProDoc and Inception report	Comparative analysis		
Have issues materialized due to incorrect assumptions or changes to the context to achieving the project results as outlined in the ProDoc?	Evidence of comprehensive risk analysis and mitigation measures in the ProDoc and AWPs	Annual PIRs, AWPs and ProDoc	Comparative analysis		
Results Framework:					
Are the project objective and outcomes clear, practicable, and feasible within its time frame?	level of coherence between project objectives and outcomes, and resources	ProDoc, Inception report, KIIs, PIRs,	Comparative analysis		
Are the project's logframe indicators and targets appropriate?	Evidence of the project logframe capturing key results at output and outcome level	ProDoc, Inception report, AWPs, KIIs	Comparative analysis		
How "SMART" are the project targets (Specific, Measurable, Attainable, Relevant, Time-bound)? If applicable, what specific amendments or revisions to the targets and indicators are recommended?	Evidence of the project targets being SMART	ProDoc, Inception report, AWPs	Review of the targets		

	Indicators	Sources	Methodology	Response / Finding	Opportunities for Improvement
Mainstreaming of gender equality and women's empowerment					
To what extent were broader development and gender aspects factored into project design? Has there been progress so far that has led to or could in the future catalyse beneficial development effects (i.e., income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis?	Evidence of alignment with broader development agenda, including gender roles	ProDoc and AWPs, UNDP CPAPs and CPD, and UNDAF, PIRs and GEF Core Indicator tracking tools	Comparative analysis		
Other cross cutting issues					
To what extent were other cross cutting issues (i.e., due diligence process with companies which received funding, human rights or labour standards assessments etc…) factored into project design and implementation?	concurrence of interviewee feedback and evidence from document review	KIIs SESP reports, Due Diligence reports, Spot Check reports, PIRs, AWPs, Board meeting minutes	Triangulation		
EFFECTIVENESS					
Progress towards Results: To what extent have the expected outcomes and objectives of the project been achieved thus far?					
Progress towards Outcomes Analysis:					
Are the logframe indicators met? If not then why? Are the targets from the GEF Tracking Tool met? If not, why?	Evidence of meeting the midterm targets, evidence of concurrence of interviewee feedback on the factors	KIIs, PIRs, tracking tool	Triangulation, contribution analysis, "Progress towards results analysis"		
Considering the aspects of the project that have already been successful, what were the factors behind these?	concurrence of interviewee feedback and evidence from document review	KIIs, documents	Triangulation		
Which barriers have hindered achievement of the project objective in the remainder of the project?	concurrence of interviewee feedback and evidence from document review	KIIs, documents	Triangulation		
EFFICIENCY					
Project Implementation & Adaptive Management					

	Indicators	Sources	Methodology	Response / Finding	Opportunities for Improvement
Management Arrangements, GEF Partner Agency:					
Has there been an appropriate focus on results?	concurrence of interviewee feedback and evidence from document review	KIIs, documents	Triangulation,		
Has the UNDP support to the Executing Agency/Implementing Partner and Project Team been adequate?	concurrence of interviewee feedback and evidence from document review	KIIs, documents	Triangulation,		
Has the quality and timeliness of technical support to the Executing Agency/Implementing Partner and Project Team been adequate?	concurrence of interviewee feedback and evidence from document review	KIIs, documents	Triangulation,		
How has the responsiveness of the managing parties to significant implementation problems (if any) been?	concurrence of interviewee feedback and evidence from document review	KIIs, documents (Board meetings minutes)	Triangulation, compart analysis		
Are there salient issues (e.g., project duration and scope) that have they affected project outcomes and sustainability?	concurrence of interviewee feedback and evidence from document review	KIIs, documents	Triangulation, comparative analysis		
Management Arrangements, Executing Agency/Implementing Partner:					
Were the capacities of the executing institution(s) and its counterparts properly considered when the Project was designed?	concurrence of interviewee feedback and evidence from document review	KIIs, documents (e.g., Capacity Development Framework at baseline, ProDoc and Inception report)	Triangulation, comparative analysis		
Were partnership arrangements properly identified and roles and responsibilities negotiated prior to Project approval?	concurrence of interviewee feedback and evidence from document review	KIIs, documents (e.g., ProDoc)	Triangulation, comparative analysis		
Were counterpart resources, enabling legislation, and adequate project management arrangements in place at Project entry?	concurrence of interviewee feedback and evidence from document review	KIIs, documents	Triangulation, comparative analysis		
Has there been an appropriate focus on timeliness?	concurrence of interviewee feedback and evidence from document review; as well as evidence of using appropriate management tools	KIIs, documents (esp., AWPs)	Triangulation,		
Have management inputs and processes, including budgeting and procurement been adequate?	concurrence of interviewee feedback and evidence from document review	KIIs, documents (esp., AWPs and Baard meeting minutes)	Triangulation,		
Has overall risk management been proactive, participatory, and effective?	concurrence of interviewee feedback and evidence from document review	KIIs, documents	Triangulation, comparative analysis		
Has there been sufficient candour and realism in annual reporting?	concurrence of interviewee feedback	KIIs, documents	Triangulation,		

	Indicators	Sources	Methodology	Response / Finding	Opportunities for Improvement
	and evidence from document review		comparative analysis		
Has there been adequate mitigation and management of environmental and social risks as identified through the UNDP Environmental and Social screening procedure?	concurrence of interviewee feedback and evidence from document review	KIIs, documents (e.g., UNDP Environmental and Social screening document)	Triangulation, comparative analysis		
Work Planning					
Has the project experienced delays in start-up and/or implementation? What were the causes of the delays? And, have the issues been resolved?	concurrence of interviewee feedback and evidence from document review	KIIs, documents (AWPs and PIRs; Board Meetings minutes))	Triangulation, comparative analysis		
Were the work-planning processes results-based? Has the project team used the project's results framework/ logframe as a management tool?	concurrence of interviewee feedback and evidence form document review; as well as evidence of using appropriate management tools	KIIs, documents (esp., Annual Work Plans and PIRs)	Triangulation, comparative analysis		
Have there been any changes to the logframe since project start, and have these changes been documented and approved by the project board?	evidence from document review;	ProDoc, Inception report, AWPs and PIRs. KIIs	Triangulation, comparative analysis		
Finance and Co-finance:					
Have strong financial controls been established allow the project management to make informed decisions regarding the budget at any time, and allow for the timely flow of funds and the payment of satisfactory project deliverables?	concurrence of interviewee feedback and evidence from document review	PIRs, CDRs, AWPs, Board meeting minutes	Triangulation, comparative analysis		
Are there variances between planned and actual expenditures? If yes, what are the reasons behind these variances?	concurrence of interviewee feedback and evidence from document review	PIRs, CDRs, AWPs,	Triangulation, comparative analysis		
Has the project demonstrated due diligence in the management of funds, including annual audits and spot checks?	concurrence of interviewee feedback and evidence from document review	PIRs, CDRs, AWPs, Board meeting minutes, Spot Check reports	Triangulation, comparative analysis		
Have there been any changes made to the fund allocations as a result of budget revisions? Assess the appropriateness and relevance of such revisions.	concurrence of interviewee feedback and evidence from document review	PIRs, CDRs, AWPs, Board meeting minutes	Triangulation, comparative analysis		
Has pledged co-financing materialized? If not, what are the reasons behind the co-financing not materializing or falling short of targets?	concurrence of interviewee feedback and evidence from document review	PIRs, CDRs, AWPs, Board meeting minutes	Triangulation, comparative analysis		
Project-level Monitoring and Evaluation Systems					

	Indicators	Sources	Methodology	Response / Finding	Opportunities for Improvement
Was the M&E plan sufficiently budgeted and funded during project preparation and implementation thus far? Are sufficient resources being allocated to M&E? Are these resources being allocated effectively?	concurrence of interviewee feedback and evidence from document review	PIRs, CDRs, AWPs, KIIs	Triangulation, comparative analysis		
Are the M&E systems appropriate to the project's specific context? Do the monitoring tools provide the necessary information? Do they involve key partners, stakeholders including groups (e.g., women indigenous peoples, children, elderly, disabled, and poor)? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How ell are the development objectives built into monitoring systems: How are perspectives of women and men involved and affected by the project monitored and assessed?	concurrence of interviewee feedback and evidence from document review	PIRs, AWPs, KIIs	Triangulation, comparative analysis		
To what extent have follow-up actions, and/or adaptive management measures, been taken in response to the PIRs?	concurrence of interviewee feedback and evidence from document review	PIRs, AWPs, KIIs	Triangulation, comparative analysis		
Stakeholder Engagement:					
Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?	concurrence of interviewee feedback and evidence from document review	PIRs, AWPs, KIIs	Triangulation, comparative analysis		
Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?	concurrence of interviewee feedback and evidence from document review	PIRs, AWPs, Board meeting minutes KIIs	Triangulation, comparative analysis		
How has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives? Are there any limitations to stakeholder awareness of project outcomes or to stakeholder participation in project activities? Is there invested interest of stakeholders in the project's long-term success and sustainability?	concurrence of interviewee feedback and evidence from document review	PIRs, AWPs, Board meeting minutes KIIs	Triangulation, comparative analysis		
Reporting					
How have adaptive management changes been reported by the Project Team and shared with the Project Board?	concurrence of interviewee feedback and evidence from document review	PIRs, AWPs, Board meeting minutes, KIIs	Triangulation, comparative analysis		

	Indicators	Sources	Methodology	Response / Finding	Opportunities for Improvement
How well have the Project Team and partners undertaken and fulfil GEF reporting requirements?	evidence from document review	Board meeting minutes and other documents KIIs	Triangulation, comparative analysis		
How have PIRs been shared with the Project Board and other key stakeholders?	concurrence of interviewee feedback and evidence from document review	Board meeting minutes and other documents (GEF regional office), KIIs	Triangulation, comparative analysis		
How have lessons derived from the adaptive management process been documented, shared with key partners and internalized by partners, and incorporated into project implementation?	concurrence of interviewee feedback and evidence from document review	PIRs, AWPs, Lessons Learned reports, Board meeting minutes, KIIs	Triangulation, comparative analysis		
Communication:					
Was communication regular and effective? Were there key stakeholders left out of communication? Were there feedback mechanisms when communication is received? Did this communication with stakeholders contribute to their awareness of project outcomes and activities and long-term investment in the sustainability of project results?	concurrence of interviewee feedback evidence from document review evidence of appropriate feedback tools used	PIRs, AWPs, Board meeting minutes, other documents KIIs	Triangulation, comparative analysis		
Were proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?)	concurrence of interviewee feedback evidence from document review evidence of appropriate communication tools	PIRs, AWPs, Board meeting minutes, other documents KIIs	Triangulation, comparative analysis		
Were there possibilities for expansion of educational or awareness aspects of the project to solidify a communications program, with mention of proper funding for education and awareness activities? What aspects of the project might yield excellent communications material, if applicable?	concurrence of interviewee feedback	Board meeting minutes, KIIs	Triangulation,		
SUSTAINABILITY					
Risk Management					
Were the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module the most important? And, are the risk ratings applied appropriate and up to date? If not, explain why.	Evidence of adequate risk identification	Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module, KIIs	Triangulation, comparative analysis		
Financial Risks to Sustainability:					

	Indicators	Sources	Methodology	Response / Finding	Opportunities for Improvement
What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)? What additional factors are needed to create an enabling environment for continued financing?	concurrence of interviewee feedback evidence from document review	KII	Triangulation,		
Has there been the establishment of financial and economic instruments and mechanisms to ensure the ongoing flow of benefits once the GEF assistance ends (i.e., from the public and private sectors, income generating activities, and market transformations to promote the project's objectives)?	concurrence of interviewee feedback evidence from document review	KII, PIRs and other documents (e.g., updated Capacity Development Framework)	Triangulation		
Socio-Economic Risks to Sustainability					
Are there any social or political risks that may jeopardize sustainability of project outcomes?	concurrence of interviewee feedback evidence from document review	KII	Triangulation,		
What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow?	concurrence of interviewee feedback evidence from document review	KII	Triangulation,		
Is there sufficient public/ stakeholder awareness in support of the objectives of the project?	concurrence of interviewee feedback evidence from document review	KII	Triangulation,		
Are lessons learned being documented by the Project Team on a continual basis?	concurrence of interviewee feedback and evidence from document review	Lessons Learned reports, KIIs	Triangulation, comparative analysis		
Are the project's successful aspects being transferred to appropriate parties, potential future beneficiaries, and others who could learn from the project and potentially replicate and/or scale it in the future?	concurrence of interviewee feedback evidence from document review	KII	Triangulation,		
Institutional Framework and Governance Risks to Sustainability					
Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize project benefits?	concurrence of interviewee feedback evidence from document review	KII	Triangulation, comparative analysis		
Has the project put in place frameworks, policies, governance structures and processes that will create mechanisms for accountability, transparency, and technical knowledge transfer after the project's closure?	concurrence of interviewee feedback evidence from document review evidence of the project using	KII, document review	Triangulation, comparative analysis		

	Indicators	Sources	Methodology	Response / Finding	Opportunities for Improvement
	appropriate frameworks, policies, governance structures and processes				
How has the project developed appropriate institutional capacity (systems, structures, staff, expertise, etc.) that are likely to be self-sufficient after the project closure date?	concurrence of interviewee feedback evidence from document review	KII Other documents (PIRs, government papers)	Triangulation, comparative analysis		
How has the project identified and involved champions (i.e., individuals in government and civil society) who can promote sustainability of project outcomes?	concurrence of interviewee feedback evidence from document review	KII, document review	Triangulation, comparative analysis		
Has the project achieved stakeholders' (including government stakeholders') consensus regarding courses of action on project activities after the project's closure date?	concurrence of interviewee feedback evidence from document review	KII, document review (esp. the Board meeting minutes)	Triangulation, comparative analysis		
Does the project leadership have the ability to respond to future institutional and governance changes (i.e., foreseeable changes to local or national political leadership)? Can the project strategies effectively be incorporated/mainstreamed into future planning?	concurrence of interviewee feedback evidence from document review	KII, document review	Triangulation, comparative analysis		
Environmental Risks to Sustainability:					
Are there environmental factors that could undermine and reverse the project's outcomes and results, including factors that have been identified by project stakeholders?	concurrence of interviewee feedback evidence from document review	KII, document review	Triangulation, comparative analysis		

A5: Questionnaire used/Interview guide

1. What has been your involvement in the project?
2. What are the major challenges you have faced so far in implementing the project? Can they be addressed be adjusting the project implementation strategy?
3. Are there constraints on the availability of government staff on the ground to assist project implementation?
4. What training or technical assistance have you received from the project?
5. How useful was it? Has it had any significant effect on how you do your job? Please explain.
6. Should anything be changed to make the project more effective and efficient?
7. What are the most tangible benefits provided by the CBIT project in your sector/area so far?
8. What are the biggest challenges in the progress towards the national transparency framework in your sector/area?
9. Please describe the current status of the measurement system, reporting and verification on GHG in your sector/area?
10. Which parts of the institutional arrangements for the national transparency framework have made the best progress to date and in which parts there has been least progress?
11. Are you satisfied with the coordination and communication aspects of the project?
12. Is there adequate technical support and management of the project activities?
13. Have there been any planned activities that have been difficult to complete according to the schedule? Have delays affected progress toward expected results?
14. What have been the main lessons learned from the project so far?
15. What kind of support from the CBIT project is most needed in your sector/area for the remaining period of the project implementation?

A6: Co-financing tables

CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

TERMINAL EVALUATION
PROJECT "SERBIA - CLIMATE SMART URBAN DEVELOPMENT CHALLENGE (CSUD)"
GEF Project ID 9342; UNDP PIMS ID: 5551

Please include evidence for co-financing for the project with this form (please add rows as necessary)

Sources of Co-financing	Name of Co-financier	Type of Co-finan.	Investment mobilized	Amount USD (at CEO approval)	Amount USD (at TE stage)
Other	GEF Solar Mayor's Club	Grant	Mobilized		20,000
GEF Agency	UNDP	Grant	Mobilized	100,000	100,000
GEF Agency	UNDP	In-kind	Recurr exp.		25,000
Recip. Ctr Gov	MoEP	Grant	Mobilized	5,000,000	1,011,892
Recip. Ctr Gov	MoEP	In-kind	Recurr exp.	400,000	300,000
Other	SIDA Bio-Waste Challenge	Grant	Mobilized		516,160
Other	Slovak Ministry	Grant	Mobilized		138,000
Other	Slovak Ministry	Grant	Mobilized		65,000
Other	Private companies	Grant	Mobilized	4,960,000	9,827,603
Other	CSOs	Grant	Mobilized		30,300
Other	Research institutions	Grant	Mobilized		78,000
Other	Research institutions	In-kind	Mobilized		10,000
Other	Public Utility Companies	Grant	Mobilized		126,862
Other	Local-Self Governments	Grant	Mobilized		36,405
Other	Local-Self Governments	In-kind	Mobilized		6,000
Other	Private companies through Bio-Waste	Grant	Mobilized		250,549
Other	Standing Conference of Towns	In-kind	Mobilized	100,000	100,000
Other	GIZ	In-kind	Mobilized		100,000
Total Co-financing				**10,560,000**	**12,741,771**

A7: TE Rating scales

Ratings for Project Implementation & Adaptive Management

6	Highly Satisfactory (HS)	Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading to efficient and effective project implementation and adaptive management. The project can be presented as "good practice".
5	Satisfactory (S)	Implementation of most of the seven components is leading to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action.
4	Moderately Satisfactory (MS)	Implementation of some of the seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action.
3	Moderately Unsatisfactory (MU)	Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action.
2	Unsatisfactory (U)	Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management.
1	Highly Unsatisfactory (HU)	Only a negligible level of outcomes achieved and/or there were severe shortcomings.
	Unable to Assess (U/A)	Available information does not allow an assessment.

Ratings for Progress towards Results

6	Highly Satisfactory (HS)	The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as "good practice".
5	Satisfactory (S)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
4	Moderately Satisfactory (MS)	The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
3	Moderately Unsatisfactory (MU)	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
2	Unsatisfactory (U)	The objective/outcome is expected not to achieve most of its end-of-project targets.
1	Highly Unsatisfactory (HU)	Only a negligible level of outcomes achieved and/or there were severe shortcomings.
	Unable to Assess (U/A)	Available information does not allow an assessment.

Ratings for Sustainability

4	Likely (L)	Negligible risks to sustainability, with key outcomes on track to be achieved by the project's closure and expected to continue into the foreseeable future
3	Moderately Likely (ML)	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review
2	Moderately Unlikely (MU)	Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on
1	Unlikely (U)	Severe risks that project outcomes as well as key outputs will not be sustained
	Unable to Assess (U/A)	Available information does not allow an assessment.

A8: Summary of Evaluation Results (ratings)

Evaluation Ratings Table	
Monitoring & Evaluation (M&E)	Rating
M&E design at entry	Satisfactory (S)
M&E Plan Implementation	Satisfactory (S)
Overall Quality of M&E	Satisfactory (S)
Implementation & Execution	Rating
Quality of UNDP Implementation/Oversight	Highly Satisfactory (HS)
Quality of Implementing Partner Execution	Moderately Satisfactory (S)
Overall quality of Implementation/Execution	Satisfactory (S)
Assessment of Outcomes	Rating
Relevance	Highly Satisfactory (HS)
Effectiveness	Satisfactory (S)
Efficiency	Satisfactory (S)
Overall Project Outcome Rating	Satisfactory (S)
Sustainability	Rating
Financial resources	Likely (L)
Socio-political/economic	Likely (L)
Institutional framework and governance	Likely (L)
Environmental	Likely (L)
Overall Likelihood of Sustainability	Likely (L)

A9: Signed UNEG Code of Conduct for Evaluators

Independence entails the ability to evaluate without undue influence or pressure by any party (including the hiring unit) and providing evaluators with free access to information on the evaluation subject. Independence provides legitimacy to and ensures an objective perspective on evaluations. An independent evaluation reduces the potential for conflicts of interest which might arise with self-reported ratings by those involved in the management of the project being evaluated. Independence is one of ten general principles for evaluations (together with internationally agreed principles, goals and targets: utility, credibility, impartiality, ethics, transparency, human rights and gender equality, national evaluation capacities, and professionalism).

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: Natasa Markovska

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Skopje, North Macedonia (Place) on 22.08.2022

Signature: 

Signed UNEG Code of Conduct for Evaluators

Independence entails the ability to evaluate without undue influence or pressure by any party (including the hiring unit) and providing evaluators with free access to information on the evaluation subject. Independence provides legitimacy to and ensures an objective perspective on evaluations. An independent evaluation reduces the potential for conflicts of interest which might arise with self-reported ratings by those involved in the management of the project being evaluated. Independence is one of ten general principles for evaluations (together with internationally agreed principles, goals and targets: utility, credibility, impartiality, ethics, transparency, human rights and gender equality, national evaluation capacities, and professionalism).

Evaluators/Consultants:

10. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
11. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
12. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
13. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
14. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
15. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
16. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
17. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
18. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: Tanja Popovicki

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Belgrade, Serbia (Place) on 22.08.2022

Signature: 

A10: Relevant terminal GEF Core Indicators

UNDP PIMS 5551 Serbia (GEFID 9342)
FY19 / TE
GEF 7 Core Indicator Worksheet

Core Indicator 1	**Terrestrial protected areas created or under improved management for conservation and sustainable use**					***(Hectares)***
			Hectares (1.1+1.2)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 1.1	Terrestrial protected areas newly created					
Name of Protected Area	WDPA ID	IUCN category	Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Indicator 1.2	Terrestrial protected areas under improved management effectiveness					
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score		
				Baseline		Achieved
				Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Core Indicator 2	**Marine protected areas created or under improved management for conservation and sustainable use**					***(Hectares)***
			Hectares (2.1+2.2)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	*TE*
Indicator 2.1	Marine protected areas newly created					
Name of Protected Area	WDPA ID	IUCN category	Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Indicator 2.2	Marine protected areas under improved management effectiveness					
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score		
				Baseline		Achieved
				PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Core Indicator 3	**Area of land restored**					***(Hectares)***
			Hectares (3.1+3.2+3.3+3.4)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.1	Area of degraded agricultural land restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE

Indicator 3.2	Area of forest and forest land restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.3	Area of natural grass and shrublands restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 4	**Area of landscapes under improved practices (hectares; excluding protected areas)**					***(Hectares)***
			Hectares (4.1+4.2+4.3+4.4)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.3	Area of landscapes under sustainable land management in production systems					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided					
Include documentation that justifies HCVF			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 5	**Area of marine habitat under improved practices to benefit biodiversity**					***(Hectares)***
Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE

Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 5.3	Amount of Marine Litter Avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 6	**Greenhouse gas emission mitigated**					***(Metric tons of CO_2 e)***
			Expected metric tons of CO_2 e (6.1+6.2)			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)			*100,000*	*51,800*	*500,000*
	Expected CO2e (indirect)			*1,500,000*		
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector					
			Expected metric tons of CO_2 e			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
	Anticipated start year of accounting					
	Duration of accounting					
Indicator 6.2	Emissions avoided Outside AFOLU					
			Expected metric tons of CO_2 e			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)			*100,000*	*51,800*	*500,000*
	Expected CO2e (indirect)			*1,500,000*		
	Anticipated start year of accounting					
	Duration of accounting			*20*	*20*	*20*
Indicator 6.3	Energy saved					
			MJ			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 6.4	Increase in installed renewable energy capacity per technology					
		Technology	Capacity (MW)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
Core Indicator 7	**Number of shared water ecosystems (fresh or marine) under new or improved cooperative management**					***(Number)***
Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE

Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
		Shared water ecosystem	Rating (scale 1-4)			
			Rating		Rating	
			PIF stage	Endorsement	MTR	TE
Core Indicator 8	**Globally over-exploited marine fisheries Moved to more sustainable levels**					***(Metric Tons)***
Fishery Details			Metric Tons			
			PIF stage	Endorsement	MTR	TE
Core Indicator 9	**Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products**					***(Metric Tons)***
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)					
POPs type			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
(select)	(select)	(select)				
(select)	(select)	(select)				
(select)	(select)	(select)				
Indicator 9.2	Quantity of mercury reduced					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.3	Hydrochloroflurocarbons (HCFC) Reduced/Phased out					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.4	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.5	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
		Technology	Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.6	Quantity of POPs/Mercury containing materials and products directly avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	PIF stage	Endorsement

Core Indicator 10	**Reduction, avoidance of emissions of POPs to air from point and non-point sources**					***(grams of toxic equivalent gTEQ)***
Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					***(Number)***
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female		*8,250*	2,600	*13,750*
		Male		*6,750*	*2,400*	*11,250*
		Total		*15,000*	*5,000*	*25,000*

A11: Relevant terminal Tracking Tools

Tracking Tool for GEF6 Climate Change Mitigation Projects (At Terminal Evaluation)

Special Notes: Projects need to report on all indicators that are included in their results framework

Reporting on lifetime emissions avoided

Lifetime direct GHG emissions avoided: Lifetime direct GHG emissions avoided are the emissions reductions attributable to the investments made during the project's supervised implementation period , totaled over the respective lifetime of the investments.

Lifetime direct post-project emissions avoided: Lifetime direct post-project emissions avoided are the emissions reductions attributable to the investments made outside the project's supervised implementation period, but supported by financial facilities put in place by the GEF project, totaled over the respective lifetime of the investments. These financial facilities will still be operational after the project ends, such as partial credit guarantee facilities, risk mitigation facilities, or revolving funds.

Lifetime indirect GHG emissions avoided (top-down and bottom-up): indirect emissions reductions are those attributable to the long-term outcomes of the GEF activities that remove barriers, such as capacity building, innovation, catalytic action for replication.

Please refer to the following references for Calculating GHG Benefits of GEF Projects.

Manual for Energy Efficiency and Renewable Energy Projects

Revised Methodology for Calculating Greenhouse Gas Benefits of GEF Energy Efficiency Projects (Version 1.0)

Manual for Transportation Projects

For LULUCF projects, the definitions of "lifetime direct and indirect" apply. Lifetime length is defined to be 20 years, unless a different number of years is deemed appropriate. For emission or removal factors (tonnes of CO2eq per hectare per year), use IPCC defaults or country specific factors.

Section A. General Data

	At Terminal Evaluation	
Project Title	Climate Smart Urban Development Cha	
GEF ID	9342	
GEF Agency	UNDP	
Agency Project ID	5551	
Country	Serbia	
Region	ECA	
Date of Council/CEO Approval		
GEF Grant (US$)	1,950,000	
Date of submission of the tracking tool		
Technology Needs Assessment, or other Enabling Activities (such as Technology Action Plans, Nationally Appropriate Mitigation Actions (NAMA) under the UNFCCC?	1	

Section B. Quantitative Outcome Indicators

Indicator 1: Total Lifetime Direct and Indirect GHG Emissions Avoided (Tons CO2eq)	Results at Terminal Evaluation	Indentify Sectors, Sources andTechnologies. Provide disaggregated information if possible. see Special Notes above
Lifetime direct GHG emissions avoided	500,000	Renewable energy (wooden biomass, new type of pellets, mobile solar aggregate) Waste management (food waste, electric and electronic waste) Heat production (introducing SCADA system) Agriculture (digitalization of farm production) Forestry (early warning system for forest fires) Urban infrastructure (photobio-reactor using CO2 and producing oxigen)
Lifetime indirect GHG emissions avoided		

Indicator 2: Lifetime Energy Saved		IEA unit converter: http://www.iea.org/stats/unit.asp) Fuel savings should be converted to energy savings by using the net calorific value of the specific fuel. End-use electricity savings should be converted to energy savings by using the conversion factor for the specific supply and distribution system. These energy savings are then totaled over the respective lifetime of the investments.
Indicator 3: Increase in Renewable Energy Capacity and Production		Disaggregate by type (Wind, Biomass, Geothermal, Hydro, solar, Photovoltaic, Marine power etc)
Increase in Installed RE capacity per technology (MW)		
Lifetime RE production per technology (MWh)		(IEA unit converter: http://www.iea.org/stats/unit.asp)
Indicator 4: Number of Users of low GHG systems (Number, of which female)		Identify Sector, describe the low GHG system and technologies and explain methodology for estimation
	25,000, from whom not more than 55% for the same gender Female - 13,750 Male - 11,250	
Indicator 5: Number of Hectares under Low GHG Management Practices (Ha.)		Identify source (conservation, avoided deforestation, afforestation/reforestation), type of low GHG Management Practice and describe methodology used for estimation
Indicator 6: Time Saved in adoption of low GHG technology (Percentage)		For technologies and practices to be supported under the project (i) estimate baseline time to deployment (without project support), (ii) report actual time to deployment with project suport and (iii) calculate % of time saved.
Indicator 7: Volume of investment mobilized and leveraged by GEF for low GHG development (co-financing and additional financing) of which		Expected additional resources implies resources beyond co-financing committed at CEO endorsement.
Public	183,267	under the Performance Based Payments Agreement
Private	9,827,603	under the Performance Based Payments Agreement
Domestic	358,849	Investment provided by CSOs, Research Institutions and local self-governments as obligatory co-financing under the Performance Based Payments Agreement

External	719,160	Co-financing provided by Swedish International Development Cooperation Agency (Sida) - $ 516,160 Slovak Ministry of Finance - $ 203,000
Indicator 8: Identify specific GHG reduction target (percent), if any, under any national, sectoral, local plans		Specify plan, area/sector (if subnational), and baseline from which reduction is expected

Section C. Qualitative Indicators

Indicator 9: Degree of support for low GHG development in policy, planning and regulations	Target Rating (1-10)	Results Rating (1-10)	For all policies/sectors relevant to project activities. Identify the policy/regulations (national, sectoral) and provide rating. Guidance for qualitative rating is available at (link to CCM program Results Framework)
National	6	6	National Programme on Waste Mangement 2022-2031, adopted by the Government in 2022. Main document in defining strategic framework in waste and wastewater sectors, including Action plan
Sector	3	3	Draft National Programme on Sludge Management, in the public consultation stage
Sector	7	7	Law on the use of renewable energy resources, adopted in 2021. Main contribution was on Articles related to energy cooperative and prosumers.
Indicator 10: Quality of MRV Systems	Target Rating (1-10)	Results Rating (1-10)	Provide details of coverage of MRV systems - area, type of activity for which MRV is done, and of Reporting and Verification processes.
Activity	5	5	
Activity			
Indicator 11: Degree of strength of financial and market mechanisms for low GHG development	Target Rating (1-10)	Results Rating (1-10)	Provide details of the financial mechanisms and identify the sector and the type of low GHG technology or development activity it supports
	9	9	challenge mechanism and the Performance Based Payments Agreements. Due to good results, during the project implementation, Sweden decided to co-finance an additional challenge call. In 2021 and 2022, three new projects started, with the support of the European Union, the Government of Japan and the Swiss Agency for development and cooperation. In these projects, the innovation challenge mechanism will be applied again and co-financing of investments will be done through the Performance Based Payments Agreements. The total value of the three projects is 9,5 million dollars.

A12: Signed TE Report Clearance form

Terminal Evaluation Report for 'Climate Smart Urban Development (CSUD) Challenge' (UNDP Project ID-PIMS #5551) Reviewed and Cleared by:

Commissioning Unit (M&E Focal Point)

Name: Daniel Varga

Signature: Daniel Varga Date: 31/8/2022

Regional Technical Advisor (Nature, Climate and Energy)

Name: Jana Koperniech

Signature: Koperniech Date: 31/8/2022