



## **Enhancing the Energy Management System to Scale up Energy Efficiency Investments in Public Buildings in Serbia**

### **Part I: Project Information**

#### **GEF ID**

10443

#### **Project Type**

MSP

#### **Type of Trust Fund**

GET

#### **CBIT/NGI**

CBIT **No**

NGI **No**

#### **Project Title**

Enhancing the Energy Management System to Scale up Energy Efficiency Investments in Public Buildings in Serbia

#### **Countries**

Serbia

#### **Agency(ies)**

UNDP

#### **Other Executing Partner(s)**

Ministry of Mining and Energy

#### **Executing Partner Type**

Government

#### **GEF Focal Area**

Climate Change

#### **Taxonomy**

Focal Areas, Climate Change Mitigation, Climate Change, Financing, Technology Transfer, Energy Efficiency, Renewable Energy, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Demonstrate innovative approaches, Stakeholders, Beneficiaries, Type of Engagement, Consultation, Participation, Information Dissemination, Partnership, Communications, Awareness Raising, Public Campaigns, Education, Behavior change, Private Sector, Financial intermediaries and market facilitators, Individuals/Entrepreneurs, Capital providers, SMEs, Large corporations, Civil Society, Community Based Organization, Academia, Trade Unions and Workers Unions, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Participation and leadership, Capacity Development, Integrated Programs, Sustainable Cities, Buildings, Global Platform for Sustainable Cities, Capacity, Knowledge and Research, Knowledge Generation, Knowledge Exchange, Learning, Adaptive management, Indicators to measure change, Innovation

**Rio Markers**

**Climate Change Mitigation**

Climate Change Mitigation 2

**Climate Change Adaptation**

Climate Change Adaptation 0

**Submission Date**

5/18/2021

**Expected Implementation Start**

10/1/2021

**Expected Completion Date**

9/30/2026

**Duration**

60In Months

**Agency Fee(\$)**

133,475.00

**A. FOCAL/NON-FOCAL AREA ELEMENTS**

| <b>Objectives/Programs</b>    | <b>Focal Area Outcomes</b>              | <b>Trust Fund</b> | <b>GEF Amount(\$)</b> | <b>Co-Fin Amount(\$)</b> |
|-------------------------------|---|-------------------|-----------------------|--------------------------|
| CCM-1-3                       | Accelerating energy efficiency adoption | GET               | 1,405,000.00          | 51,000,000.00            |
| <b>Total Project Cost(\$)</b> |   |                   | <b>1,405,000.00</b>   | <b>51,000,000.00</b>     |

## B. Project description summary

### Project Objective

To reduce greenhouse gas emissions by improving the energy efficiency and promoting the use of renewable energy sources in public buildings with a particular focus on state-owned buildings leading to direct GHG emissions of at least 146,000 tonnes of CO<sub>2</sub>e from project investments and at least 300,000 tonnes of indirect CO<sub>2</sub>e emissions.

| <b>Project Component</b> | <b>Financing Type</b> | <b>Expected Outcomes</b> | <b>Expected Outputs</b> | <b>Trust Fund</b> | <b>GEF Project Financing(\$)</b> | <b>Confirmed Co-Financing(\$)</b> |
|--------------------------|-----------------------|--------------------------|-------------------------|-------------------|----------------------------------|-----------------------------------|
|--------------------------|-----------------------|--------------------------|-------------------------|-------------------|----------------------------------|-----------------------------------|

| Project Component  | Financing Type       | Expected Outcomes  | Expected Outputs  | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|--|----------------------|--|---|------------|---------------------------|----------------------------|
| 1. Enabling policy framework and capacity building for energy audits and energy management | Technical Assistance | Outcome 1: An official energy audit system and improved energy management with a particular focus on central and provincial government owned buildings and buildings which fall in competence of public service institutions (such as health justice, education, culture, etc) | <p>Output 1.1 Required bylaws and rulebooks for official energy audits finalized to complement the related provisions of the new Law on the Efficient Use of Energy.</p> <p>Output 1.2 Upgraded EMIS software to include new functionalities to facilitate, among others, automatic data transfer and data analysis.</p> <p>Output 1.3 A full licensing system for energy auditors developed and in place, including the establishment of a registry of licensed energy auditors.</p> <p>Output 1.4 Establishment of an EMIS help desk with a help desk manager and trained students to support the building managers and other key stakeholders to operate with EMIS</p> <p>Output 1.5 At least 30 buildings belonging to category B-2</p> | GET        | 575,000.00                | 2,000,000.00               |

| Project Component                                    | Financing Type | Expected Outcomes   | Expected Outputs  | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|--|----------------|---|---|------------|---------------------------|----------------------------|
| 2. Catalyzing building related EE and RE investments | Investment     | Outcome 2:<br><br>Catalyzing capital investments in energy efficiency with a particular focus on central government-owned buildings | Output 2.1<br>Detailed energy audits for at least 28 large Government buildings completed<br><br>Output 2.2<br>Final investment proposals with related technical design, feasibility studies and financial analysis completed for all buildings meeting the agreed technical and financing criteria for renovation. | GET        | 390,000.00                | 600,000.00                 |
| 2. Catalyzing building related EE and RE investments | Investment     | Outcome 2:<br><br>Catalyzing capital investments in energy efficiency with a particular focus on central government owned buildings | Output 2.3<br>Completed EE and RE renovation of at least 28 Central Government buildings.   | GET        | 220,000.00                | 43,700,000.00              |

| Project Component   | Financing Type       | Expected Outcomes   | Expected Outputs  | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|---|----------------------|---|---|------------|---------------------------|----------------------------|
| 3. Monitoring, evaluation and outreach, to scale up the investments | Technical Assistance | Outcome 3: Monitoring, evaluation and outreach for scaling up the investments | <p>Output 3.1: Project inception report and workshop</p> <p>Output 3.2: Project web-site that can be continued to be used and updated also after the project end.</p> <p>Output 3.3 International EMIS workshop</p> <p>Output 3.4: Final project report, including monitored results of the supported EE and RE investment projects, a study of lessons learnt and an analysis and related recommendations for scaling up the project results.</p> <p>Output 3.5 Project terminal evaluation</p> <p>Output 3.6 Final project workshop</p> | GET        | 95,000.00                 | 100,000.00                 |
| <b>Sub Total (\$)</b>   |                      |   |   |            | <b>1,280,000.00</b>       | <b>46,400,000.00</b>       |

**Project Management Cost (PMC)**

|                               |                     |                      |
|-------------------------------|---------------------|----------------------|
| GET                           | 125,000.00          | 4,600,000.00         |
| <b>Sub Total(\$)</b>          | <b>125,000.00</b>   | <b>4,600,000.00</b>  |
| <b>Total Project Cost(\$)</b> | <b>1,405,000.00</b> | <b>51,000,000.00</b> |



**C. Sources of Co-financing for the Project by name and by type**

| <b>Sources of Co-financing</b> | <b>Name of Co-financier</b>                 | <b>Type of Co-financing</b> | <b>Investment Mobilized</b> | <b>Amount(\$)</b>    |
|--------------------------------|---|-----------------------------|-----------------------------|----------------------|
| Recipient Country Government   | Ministry of Mining and Energy               | Public Investment           | Investment mobilized        | 1,500,000.00         |
| Recipient Country Government   | Ministry of Mining and Energy               | In-kind                     | Recurrent expenditures      | 1,000,000.00         |
| Donor Agency                   | Council of Europe Development Bank (CEB)    | Loans                       | Investment mobilized        | 47,300,000.00        |
| Donor Agency                   | CEB SIGA and SCA Trust Funds                | Grant                       | Investment mobilized        | 700,000.00           |
| Donor Agency                   | European Western Balkans Joint Fund (EWBJF) | Grant                       | Investment mobilized        | 350,000.00           |
| GEF Agency                     | UNDP  | In-kind                     | Recurrent expenditures      | 50,000.00            |
| GEF Agency                     | UNDP  | Grant                       | Investment mobilized        | 100,000.00           |
| <b>Total Co-Financing(\$)</b>  |   |                             |                             | <b>51,000,000.00</b> |

**Describe how any "Investment Mobilized" was identified**

The main source of co-financing for the targeted investments will be a 40 million Euro sovereign guarantee loan from the Council of Europe Development Bank (CEB) to finance the rehabilitation 28 buildings with the total floor area of 208,000 m<sup>2</sup>. For the preparation of the required technical documents for the CEB loan appraisal, grant funding equal to EUR 900,000 will be provided by CEB trust funds and EWBJF. With the USD/EUR exchange rate of 0,85 as of March 31st, 2021, these are equal to about USD 47.3 and 1.05 million respectively. These will be complemented by the Government's own budget funding (grant) worth of USD 1.5 million and the UNDP core budget contribution of USD 100,000.

**D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds**

| <b>Agency</b>                    | <b>Trust Fund</b> | <b>Country</b> | <b>Focal Area</b> | <b>Programming of Funds</b> | <b>Amount(\$)</b>   | <b>Fee(\$)</b>    |
|----------------------------------|-------------------|----------------|-------------------|-----------------------------|---------------------|-------------------|
| UNDP                             | GET               | Serbia         | Climate Change    | CC STAR Allocation          | 1,405,000           | 133,475           |
| <b>Total Grant Resources(\$)</b> |                   |                |                   |                             | <b>1,405,000.00</b> | <b>133,475.00</b> |

**E. Non Grant Instrument**

NON-GRANT INSTRUMENT at CEO Endorsement

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Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

**F. Project Preparation Grant (PPG)**

PPG Required **true**

**PPG Amount (\$)**

50,000

**PPG Agency Fee (\$)**

4,750

| <b>Agency</b>                  | <b>Trust Fund</b> | <b>Country</b> | <b>Focal Area</b> | <b>Programmin<br/>g of Funds</b> | <b>Amount(\$)</b> | <b>Fee(\$)</b>  |
|--------------------------------|-------------------|----------------|-------------------|----------------------------------|-------------------|-----------------|
| UNDP                           | GET               | Serbia         | Climate<br>Change | CC STAR<br>Allocation            | 50,000            | 4,750           |
| <b>Total Project Costs(\$)</b> |                   |                |                   |                                  | <b>50,000.00</b>  | <b>4,750.00</b> |

## Core Indicators

### Indicator 6 Greenhouse Gas Emissions Mitigated

| Total Target Benefit                                 | (At PIF) | (At CEO Endorsement) | (Achieved at MTR) | (Achieved at TE) |
|--|----------|----------------------|-------------------|------------------|
| Expected metric tons of CO <sub>2</sub> e (direct)   | 146000   | 146000               | 0                 | 0                |
| Expected metric tons of CO <sub>2</sub> e (indirect) | 300000   | 300000               | 0                 | 0                |

### Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

| Total Target Benefit                                 | (At PIF) | (At CEO Endorsement) | (Achieved at MTR) | (Achieved at TE) |
|--|----------|----------------------|-------------------|------------------|
| Expected metric tons of CO <sub>2</sub> e (direct)   |          |                      |                   |                  |
| Expected metric tons of CO <sub>2</sub> e (indirect) |          |                      |                   |                  |
| Anticipated start year of accounting                 |          |                      |                   |                  |
| Duration of accounting                               |          |                      |                   |                  |

### Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

| Total Target Benefit                                 | (At PIF) | (At CEO Endorsement) | (Achieved at MTR) | (Achieved at TE) |
|--|----------|----------------------|-------------------|------------------|
| Expected metric tons of CO <sub>2</sub> e (direct)   | 146,000  | 146,000              |                   |                  |
| Expected metric tons of CO <sub>2</sub> e (indirect) | 300,000  | 300,000              |                   |                  |
| Anticipated start year of accounting                 | 2022     | 2023                 |                   |                  |
| Duration of accounting                               | 3        | 3                    |                   |                  |

### Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

| Total Target Benefit     | Energy (MJ) (At PIF) | Energy (MJ) (At CEO Endorsement) | Energy (MJ) (Achieved at MTR) | Energy (MJ) (Achieved at TE) |
|--------------------------|----------------------|----------------------------------|-------------------------------|------------------------------|
| Target Energy Saved (MJ) |                      | 2,340,000,000                    |                               |                              |

### Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

| Technology | Capacity (MW) (Expected at PIF) | Capacity (MW) (Expected at CEO Endorsement) | Capacity (MW) (Achieved at MTR) | Capacity (MW) (Achieved at TE) |
|------------|---------------------------------|---|---------------------------------|--------------------------------|
|------------|---------------------------------|---|---------------------------------|--------------------------------|

**Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**

|               | Number (Expected at PIF) | Number (Expected at CEO Endorsement) | Number (Achieved at MTR) | Number (Achieved at TE) |
|---------------|--------------------------|--------------------------------------|--------------------------|-------------------------|
| <b>Female</b> | 5,000                    | 5,000                                |                          |                         |
| <b>Male</b>   | 5,000                    | 5,000                                |                          |                         |
| <b>Total</b>  | 10000                    | 10000                                | 0                        | 0                       |

## Part II. Project Justification

### 1a. Project Description

The project design in respect to all points listed above has remained essentially the same as already presented in the PIF. The main changes done during the PPG phase are due to the status of the amended Energy Efficiency Law. While in the PIF, the Output 1.1 was defined as "Amended Law on Efficient Use of Energy and related rulebooks, including the finalisation of bylaws for official energy audits", the work on the amendment of the EE Law proceeded already during the PPG up to the point that the draft has been submitted to Serbian Parliament for final review and approval. As such, the Output 1.1 was reformulated to just focus on supporting the development of the required secondary legislation to facilitate the actual implementation of the Law. In addition, Outputs 1.4: EMIS Helpdesk, Output 1.4: At least 60 appointed and appropriately trained energy managers and Output 1.8: Development of an agreed methodology for conducting energy audits and calculating buildings' energy performance in accordance with the state of art EU standards and methodologies adapted into Serbian conditions and taken into use (which is still missing) were added under Outcome 1 to address and highlight the specific areas and barriers, which the project also needs to address in order to achieve its stated targets and support the sustainability of its results. For Outcome 2, the project strategy and the outputs listed under that have remained identical to what was presented already in the PIF. For Outcome 3, the mid-term evaluation was removed among the outputs (as it is not required anymore from medium-size projects) and the inception report and workshop were added as specific outputs to align the outputs under Outcome 3 with the project M&E plan. In addition, an international EMIS workshop was added under Outcome 3 to strengthen the project's global KM and outreach impact.

An important positive development during the PPG phase was also the final approval of the CEB loan by the Serbian Parliament meaning that this project main co-financing source will be available to support the suggested investments.

By building on what was presented already in the PIF, an updated description addressing other key issues of the project design is presented below.

*Global environmental and/or adaptation problems, root causes and barriers that need to be addressed*

Inefficient use of energy, originating predominantly from fossil fuels, represents a major development concern in Serbia, as well as a large source of GHG emissions. Energy sector GHG emissions account for 80% of the national GHG emissions and 40% of this comes from energy (mainly heat) consumption in buildings.

Many studies have pointed out that Serbia has a large potential for energy efficiency improvements and GHG emission reduction in its aging building stock, primarily resulting from the fact that major part of its building stock was built during the 70s and the 80s of the last century, characterized by reinforced concrete frame building structure, brick walls without any thermal insulation, deteriorated wood/metal fenestration and worn-out metalwork. Secondly, there is a large potential to decarbonize fuel mix in the building sector by producing heat from renewable energy sources.

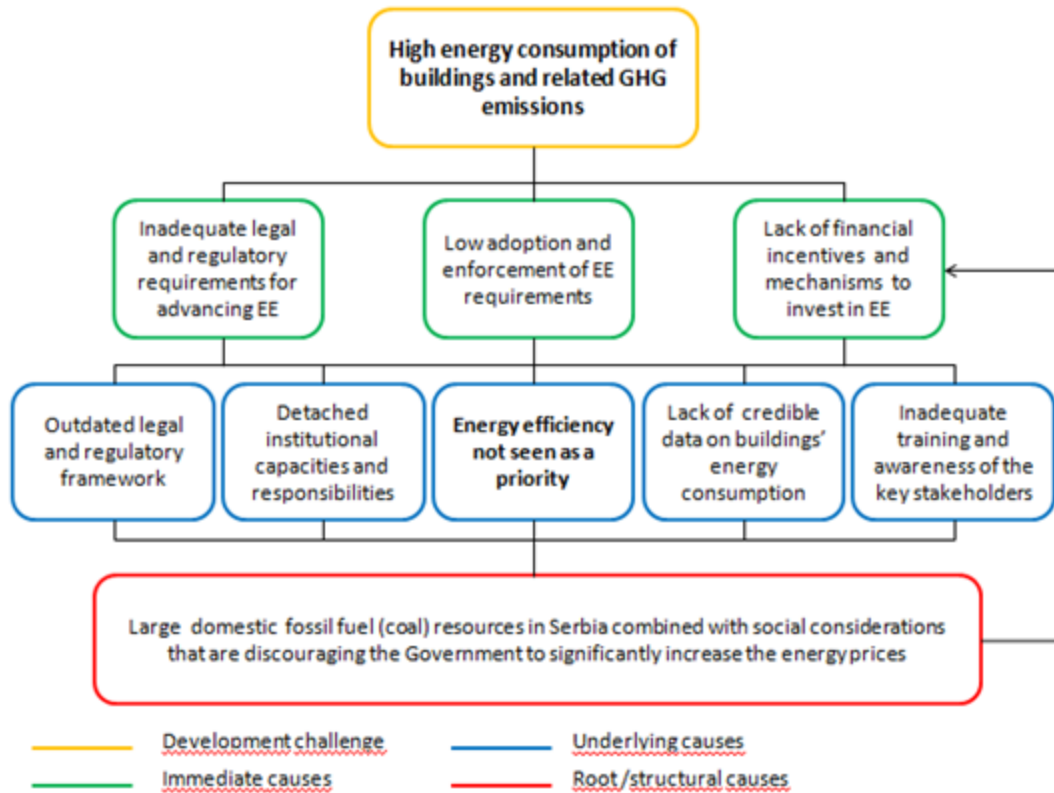


Figure 1 Problem tree

*Baseline scenario and associated baseline projects*

The baseline scenario is that in the absence of the project, the identified legal and other barriers remain and the central government buildings remain without proper energy management and energy performance monitoring systems thereby hindering also the related energy efficiency and renewable energy investments. The Law on Efficient Use of Energy defines scope and activities of EMS such as: appointing the licensed energy managers, monitoring the energy and water consumption and cost thereof, elaborating annual report on energy consumption, achieving the annual energy savings targets prescribed by the Government, adopting the energy efficiency programs and plans, implementing the energy efficiency measures, informing the MME on achieving the targets set in their energy efficiency programs and plans, performing energy audits at least once every ten years, etc. While the Law has been in force since 2013, and the accompanying bylaw since 2016, not much progress has been made with central government buildings, provincial buildings and buildings in competence of designated entities, which fall under the public service institutions and public enterprises, although the largest energy saving potential in building sector relates to this category of buildings.

Energy efficiency is among the priorities set by the Sustainable Development Strategy of the Republic of Serbia as well as by the Economic Reform Programme for the period of 2019-2021. The project is also in line with the Energy Sector Development Strategy of the Republic of Serbia until 2025 envisaging measures to improve energy efficiency in all sectors. As envisaged by the Decisions of Ministerial Council of Energy Community, the Decree on the Establishment of an Implementation Program for the mentioned strategy from 2017 until 2023 (POS) defines the implementation of the EU Directives 2012/27/EU (EED) and 2010/31/EU (EPBD), in particular, Article 5 of the EED and Article 4 of the EPBD, among measures to be implemented in the energy efficiency field by 2023. The new



amended Law on Energy Efficiency and Rational Use of Energy has been prepared and is currently (as of March 30, 2021) waiting for the final Parliament approval.

Regarding the UNFCCC framework, the Second National Communication) of the Republic of Serbia to UNFCCC (2017) points out the significant GHG emission reduction potential in the energy sector ?as a result of implementation of measures for renovation of public, residential and commercial buildings, as well as private houses?. Moreover, energy efficiency is recognized as a key measure in achieving the Intended Nationally Determined Contribution (INDC) to reduce GHG emissions by 9.8 % by 2030 compared to the 1990 baseline year emissions.

The 40 million Euro sovereign guarantee loan from the Council of Europe Development Bank (CEB) to finance the rehabilitation of 28 government-owned buildings with the total floor area of 208,000 m<sup>2</sup> serves as the main baseline project. This will be complemented by Government?s own funding worth of about USD 2.5 million and CEB affiliated grant funding equal to 900,000 EUR for the preparation of technical documents for CEB loan appraisal.

*Proposed alternative scenario with a brief description of expected outcomes and components of the project*

The objective of the project is to reduce greenhouse gas emissions by improving the energy efficiency and promoting the use of renewable energy sources in public buildings with a particular focus on state owned buildings. By building on the results of the earlier UNDP-GEF project, the MME with support from UNDP initiated an idea of a project platform for energy efficiency renovation of public buildings in Serbia, where the different activities and funding opportunities can be properly coordinated.

While the CEB loan and the related TA grant will be specifically used for the renovation of 28 pre-selected Government buildings, the GEF grant will be used for broader sectoral technical assistance activities to develop an enabling legal and regulatory framework, to build the capacity and strengthen the local institutions to facilitate adequate energy management and energy performance monitoring of all public buildings and to prepare otherwise the necessary ground for further preparation and replication of similar energy efficiency investments as supported with the CEB loan. When applicable, this will also include increasing use of decentralized renewable energy sources such as solar and geothermal for meeting buildings? energy needs. By building on the lessons learnt from the earlier UNDP-GEF project, particular emphasis needs to be placed, among others, on strengthening the local capacities to conduct adequate financial analysis of the proposed EE retrofit projects and measures, coaching new energy managers, for which a well-managed and adequately resourced help desk was found to be an essential mechanism, and proper monitoring of the results of the supported investment projects based on verified data provided by EMIS. For all this, it is also essential to develop and adopt among the first project activities a commonly agreed buildings? energy performance and GHG reduction calculation methodology aligned with recognized international best practices rather than relying on hypothetical and eventually outdated theoretical values and calculation models.

To address the identified development challenge and the immediate, underlying and root causes and the related causal chains discussed in the previous section, the theory of change (ToC) can be presented by an iterative process including three main elements, as illustrated in figures 2.

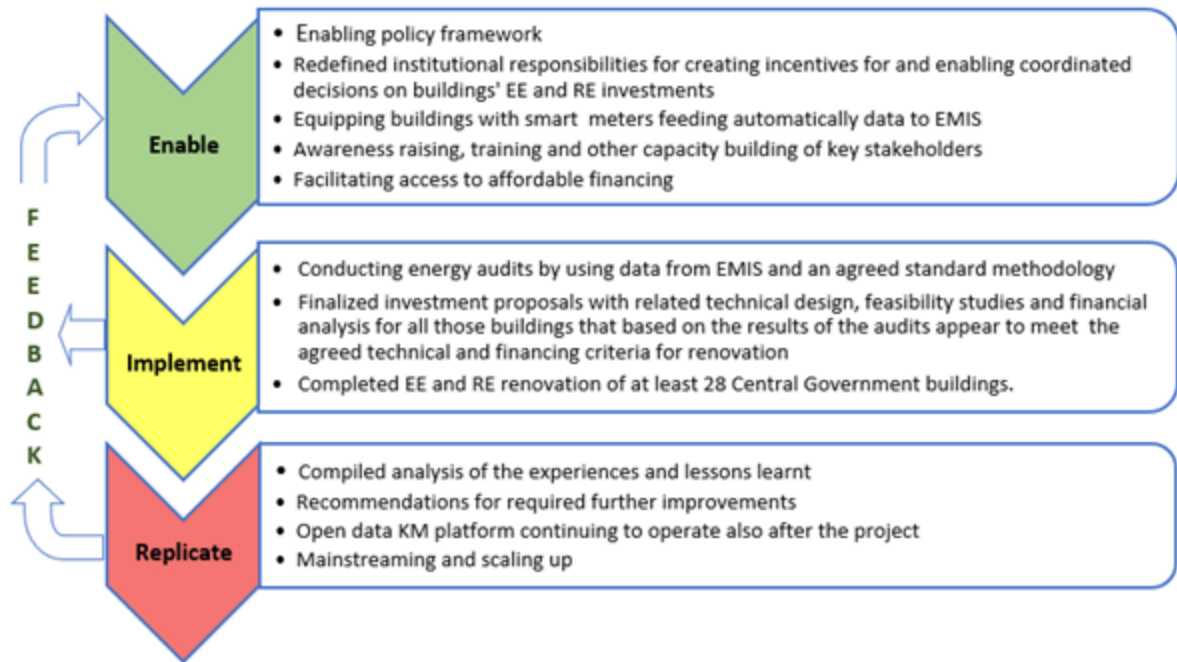


Figure 2: Simplified illustration of the ToC and the areas to be addressed and supported by the project.

Furthermore, the causal chains between the identified barriers/underlying problems and the project outputs, outcomes and objective as suggested by the to STAP's primer on the issue of Theory of Change (TOC) - <https://www.stapgef.org/theory-change-primer> is illustrated in figure 3 below.

As commonly noted, access to financing is not really the main problem as long as the economic and financial benefits of energy efficiency improvements can be clearly demonstrated and verified based on credible data, there are trained local professionals to prepare and implement projects based on state of art knowledge and practices, the policy makers also recognize and acknowledge the benefits of improved energy efficiency on country's overall economic and environmental wellbeing and, consequently, advance enabling policies to facilitate this also in practice. As such, the Theory of Change also heavily builds on creating an enabling environment for further advancing the energy efficiency agenda in Serbia rather than just financing a few technical demonstration projects.

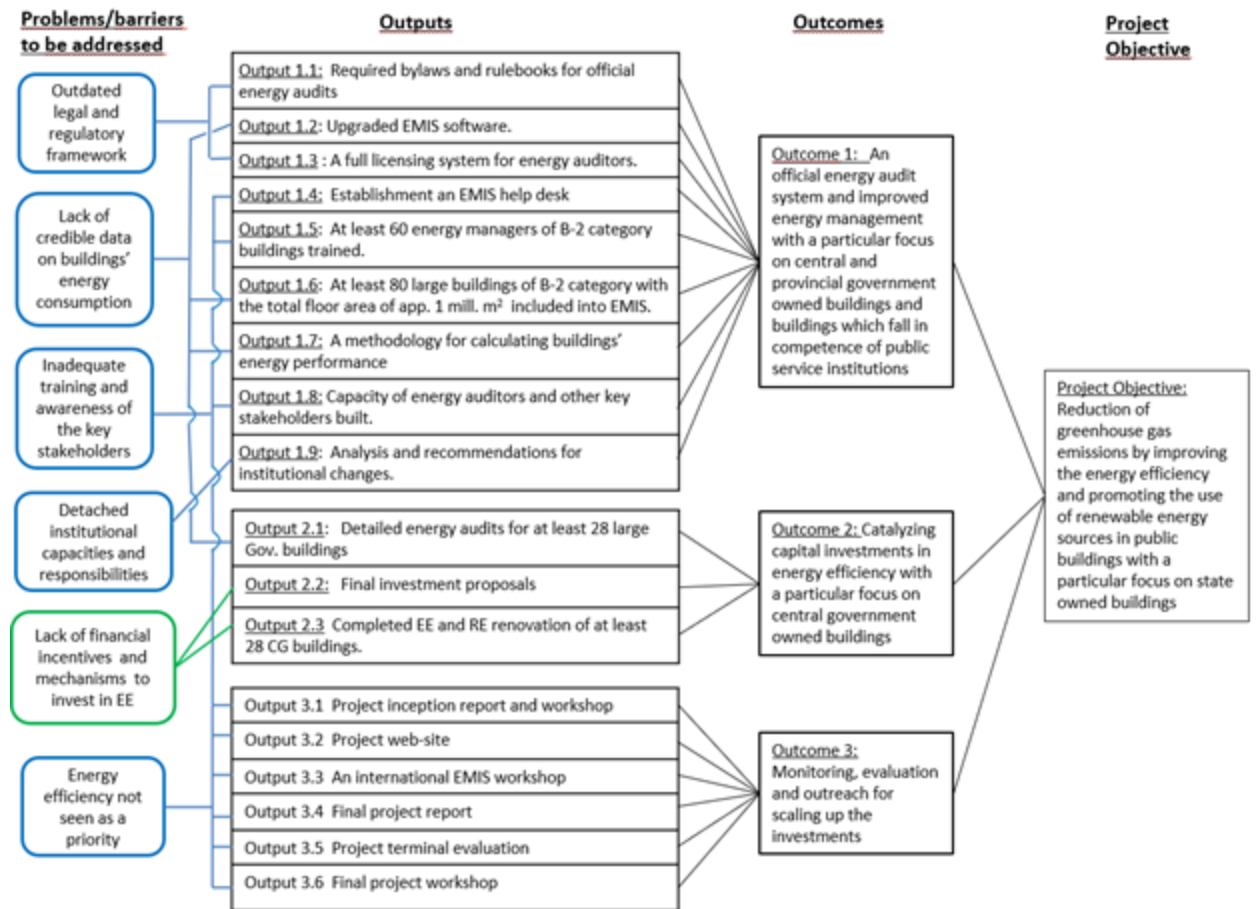


Figure 3: A complementary illustration of the ToC showing the causal chains

By a combination of different measures discussed in further detail in chapter IV "Results and Partnerships" and chapter V "Project Results Framework" of the project document, the project seeks to contribute to a transformational change towards enhancing energy efficiency and use of renewable energy such as solar energy for meeting buildings' energy needs, while simultaneously reducing buildings' energy costs, improving their thermal comfort and, and applicable, also indoor air quality.

For meeting the project objective, it is essential that there will be clear political will to effectively support further development and implementation of the EMS and EMIS in Serbia. The positive experiences from the ongoing EMIS project as well as a loan agreement signed by the Government, and ratified by the Serbian Parliament for a 40 million Euro sovereign guarantee loan for the actual renovation of the buildings provide a positive signal to this effect. By rigorous technical and financial due diligence of the proposed investment proposals, the project also seeks to minimize any technical and financial failures.

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

*Alignment with GEF focal area and/or Impact Program strategies;*

The project is contributing to the GEF-7 Focal Area Objective 1: "Promote innovation and technology transfer for sustainable energy breakthroughs". As outlined by the GEF-7 Replenishment Programming Directions (GEF/R.7/10 April 2, 2018): To take advantage of the GEF's comparative advantage, programming under this objective does not prioritize direct support for large-scale deployment and diffusion of mitigation options with GEF financing only. Rather, GEF-7 resources should be utilized to reduce risks and enhance enabling environments, so that the results can facilitate additional investments and further support by other international financing institutions, the public and private sector, and/or domestic sources to replicate and scale up in a timely manner. Having an advanced energy management information system, backed up by a central support unit, to help facilitate larger investment project preparation and later monitoring of their results including energy and cost savings will directly feed into this framework and defined targets.

*Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF and co-financing*

While a previous UNDP project (PIMS 4588, GEF ID 5518 Serbia Energy Management Information System) has greatly advanced the use of energy management and related information systems in Serbian local self-governments (municipalities and cities) and the buildings owned by them, the central Government buildings, provincial buildings and buildings in competence of public service institutions and public enterprises have been largely neglected until now. This is due to the lack of financial resources as well due to the non-supportive legal and regulatory framework. According to a WB study, there are about 27,000,000 m<sup>2</sup> of public building space in the need for major retrofit in Serbia, out of which 375,000 m<sup>2</sup> are in the competence of the central Government only.

The main source of co-financing for the targeted investments will be a 40 million Euro sovereign guarantee loan from the Council of Europe Development Bank (CEB) to finance the rehabilitation 28 buildings with the total floor area of 208,000 m<sup>2</sup>. For the preparation of the required technical documents for the CEB loan appraisal, grant funding equal to EUR 900,000 will be provided by CEB trust funds and EWB/JF. With the USD/EUR exchange rate of 0,85 as of March 31st, 2021, these are equal to about USD 47.3 and 1.05 million respectively. These will be complemented by Government's own budget funding (grant) worth of USD 1.5 million and the UNDP core budget contribution of USD 100,000.

The initiatives listed above are complemented by the proposed GEF funded project with a focus on further advancing an enabling legal and regulatory framework, better energy management and energy performance monitoring of the public buildings in general, but with a particular focus on central government buildings as well as preparing ground for new investment proposals by energy audits and other measures to address the retrofit needs of the entire building stock. When applicable, this will also include increasing use of decentralized renewable energy sources such as solar and geothermal for meeting buildings' energy needs.

While the CEB loan and the related TA grant will be specifically used for the renovation of 28 pre-selected Government buildings, the GEF grant will be used for broader sectoral technical assistance activities to develop an enabling legal and regulatory framework, to build the capacity and strengthen the local institutions to facilitate adequate energy management and energy performance monitoring of all public buildings and to prepare otherwise the necessary ground for further preparation and replication of similar energy efficiency investments as supported with the CEB loan.

The proposed GEF project and the CEB loan form a mutually supporting package, where both projects are essential in supporting each other. First of all, the UNDP EMIS team was actively participating and supporting the Government of Serbia in the preparation of the CEB loan application with an envisaged set-up that while the financing of the actual investments can be facilitated by the CEB loan, the GEF will complement it by:

1) Facilitating adequate data gathering for further project preparation and monitoring purpose by introducing better energy management and EMIS to all Government owned public buildings (which is not financed by the CEB loan);

2) Preparing ground for energy audits by training and facilitating the licensing of more professional energy auditors; and

3) Promoting further EE investments in Government owned public buildings both by supporting their better energy management and gathering information for that by EMIS as well as compiling and sharing knowledge, information and lessons learnt about the first 28 projects supported by the CEB loan.

#### *Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)*

The direct global environmental benefits of the project will primarily result from the renovation of 28 central governmental buildings managed by the Administration for Joint Services of the Republic Bodies (UZZPRO). According to initial estimates, this should result in at least 30% of reduction in primary energy consumption, 20% reduction in related CO2 emissions and 29% savings in operating costs. In addition, the project will contribute to the protection and preservation of cultural heritage. From the targeted buildings, about 50% are classified as heritage buildings.

A more detailed analysis of the global environmental benefits of the project is presented in Annex Q (Annex 13 of the project document) and has also been uploaded with the submission as a separate document.

#### *Innovation*

Although Energy Management and the related Energy Management Information System (EMIS) was introduced in Serbia already in 2015 by following the successful example of Croatia which has been implementing EMIS since 2009), it is still being further developed with new innovative features and sub-components, while targeting also new sectors. The new advanced features and functionalities to be developed for EMIS have been discussed in greater detail under Component 1 in chapter IV. Results and Partnership of the project document.

It is also to be noted that in the regional context Energy Management Information Systems are not yet widely spread in general. As such, both Croatia and Serbia can be seen as front-runners in this field and a source of innovation and inspiration also for other countries.

The joint Energy Efficiency Renovation Programme of 28 Central Government Buildings provides an excellent platform for testing and demonstrating new innovative energy efficiency and renewable energy technologies in the selected buildings such as new building automatization for controlling and optimizing building's indoor temperature, humidity and air quality, net metering in the case of buildings own energy production, for instance, by solar energy or heat pumps, new technologies for improving heat recovery from buildings waste heat resources such as exhaust ventilation air, new materials and shading installations to prevent excess heat accumulation into the buildings during the summer time, thereby reducing the cooling needs etc. All these present still quite new and innovative technologies and approaches in the Serbian context, thereby preparing ground for their broader acceptance and adoption both by the building owners and suppliers of buildings' energy technologies and services as well as preparing ground for the adoption of new policy requirements, should the testing of new technologies and approaches demonstrate that they can be used to further advance the energy efficiency agenda in Serbia in a technically and economically feasible way. Furthermore, the project provides a platform for developing and advancing new business models such as using energy supply contracts for managing public buildings' heating, cooling and other energy needs, should this

facilitate buildings? energy management and further improvement of their energy performance in a most cost-effective and environmentally friendly way.

#### *Sustainability*

For project sustainability it is essential that the key stakeholders are convinced by both the long and shorter term "win-win-win" opportunities of the suggested measures and activities, including:

- ? environmental benefits by reducing energy consumption and related greenhouse gas emissions;
- ? budget savings by improved energy efficiency and reduced energy costs; and
- ? eventually improved quality of the services concerned.

? A Help Desk for EMIS which continues beyond the life time of the project

The improvement of the regulatory framework under component 1 will enhance the sustainability of project results by making, for instance, EMS mandatory for all significant energy consumers and subsectors targeted by the project, thereby creating also a sustainable demand and new work opportunities for the trained energy managers and energy auditors.

As regards the question on who will pay for the operation and maintenance costs of the 28 buildings of demonstration after the GEF project implementation is over, the government has always been paying and will continue to pay the O&M costs for its buildings, through the Administration of the Joint Services (UZZPRO) which is in charge of the maintenance of CGBs. There is a specific allocation in the state budget for this purpose. As in any other state, the state budget is subject to annual planning and shall be adopted in the previous year for the following year.

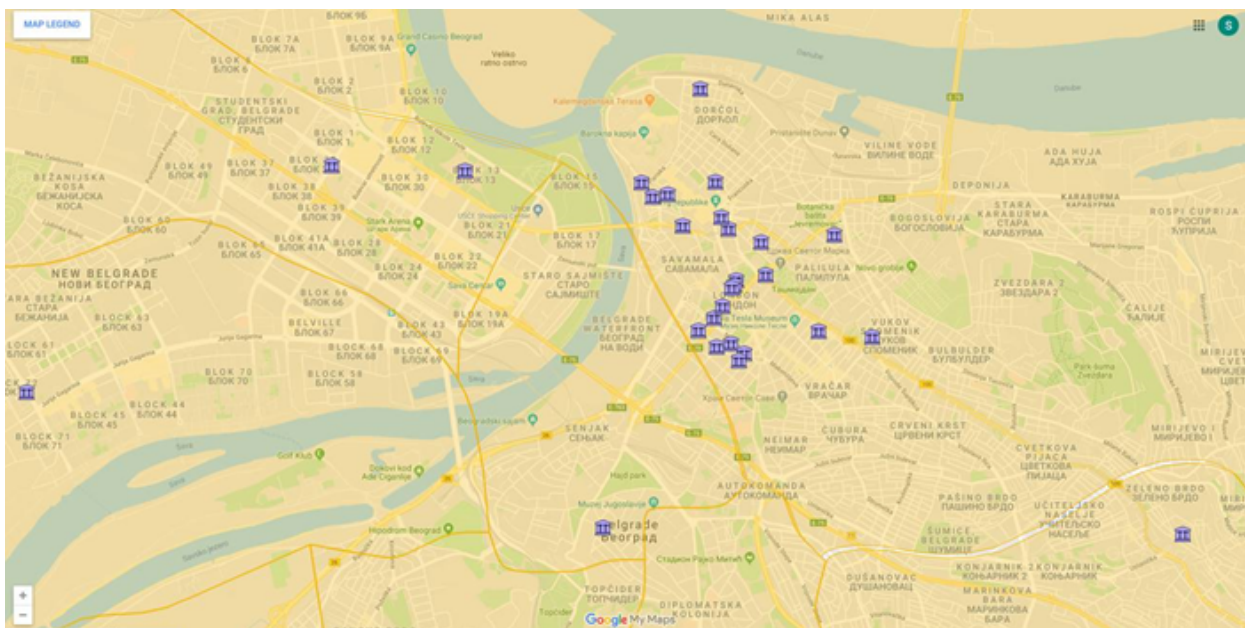
#### *Potential for scaling-up*

The total floor area of public buildings in Serbia is estimated at about 27 million m<sup>2</sup> i.e. over 100 times more than the 208,000 m<sup>2</sup> targeted by the investment component of this project. The best results with EMIS so far have been achieved with the municipalities and cities with population above 20,000, while with the state authority, provincial authority bodies and public services almost no progress has been made yet. This also means that a significant potential for scaling up the effort with the mentioned entities still exist. A number of different financing initiatives currently underway in Serbia support the idea that by enhancing the local capacity to prepare credible EE investment proposals by recognizing their benefits and justifying these initiatives with more accurate data and tools for monitoring their impact, these opportunities can leverage financing and encourage new financing models (such as Energy Supply and/or Energy Service Contracts) to support the actual investments. The close monitoring and sharing of the results of the investment projects implemented in the frame of the proposed project will also build a basis for further replication and scaling up the use of those technologies.

#### **1b. Project Map and Coordinates**

**Please provide geo-referenced information and map where the project interventions will take place.**

See Annex E

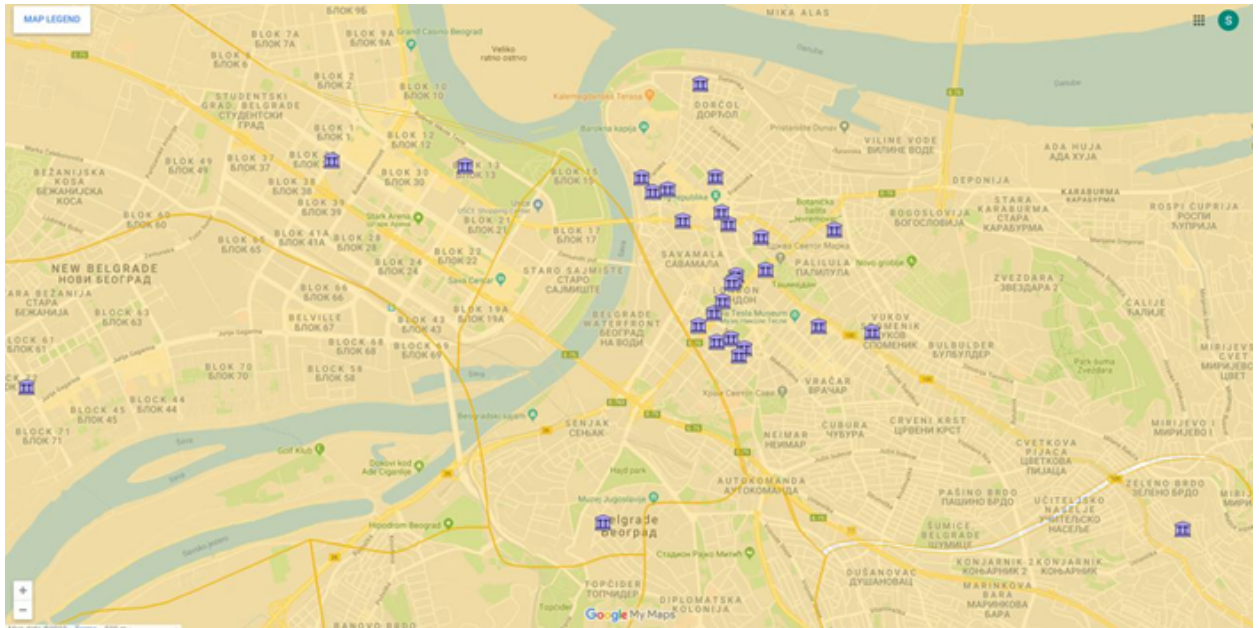


Coordinates of project sites

| Building No | Latitude   | Longitude  |
|-------------|------------|------------|
| 1           | 44.8190139 | 20.4602799 |
| 2           | 44.8157043 | 20.4610747 |
| 3           | 44.827619  | 20.4583408 |
| 4           | 44.8178386 | 20.4540221 |
| 5           | 44.8133613 | 20.4663075 |
| 6           | 44.8093836 | 20.4627728 |
| 7           | 44.8175805 | 20.4520891 |
| 8           | 44.7862116 | 20.5216936 |
| 9           | 44.8145756 | 20.4620526 |
| 10          | 44.8039563 | 20.4624032 |
| 11          | 44.8051279 | 20.4738783 |
| 12          | 44.8200424 | 20.4274299 |
| 13          | 44.8205288 | 20.4099106 |
| 14          | 44.8090979 | 20.4624656 |
| 15          | 44.8030234 | 20.4641005 |
| 16          | 44.8023396 | 20.4633836 |
| 17          | 44.8148911 | 20.4559899 |
| 18          | 44.7868162 | 20.445558  |

|    |            |            |
|----|------------|------------|
| 19 | 44.8045444 | 20.4809201 |
| 20 | 44.8051725 | 20.4581249 |
| 21 | 44.8036496 | 20.4604837 |
| 22 | 44.8189179 | 20.4506463 |
| 23 | 44.7994281 | 20.3698199 |
| 24 | 44.8140487 | 20.4759541 |
| 25 | 44.8074191 | 20.4612685 |
| 26 | 44.8063056 | 20.4601669 |
| 27 | 44.8103428 | 20.4668913 |
| 28 | 44.8098476 | 20.46306   |





### 1c. Child Project?

**If this is a child project under a program, describe how the components contribute to the overall program impact.**

n/a

### 2. Stakeholders

**Select the stakeholders that have participated in consultations during the project identification phase:**

**Civil Society Organizations** No

**Indigenous Peoples and Local Communities**

**Private Sector Entities** Yes

**If none of the above, please explain why:** Yes

(Stakeholder Engagement Plan is attached to the project document as Annex 9 and has been uploaded with the submission also as a separate document) In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

During project implementation, the engagement of key stakeholders will be facilitated by multiple means starting with the project inception workshop. Depending on the situation with the COVID-19 at that time in Serbia, the inception workshop can be organized either as an on-site or an on-line event. An on-line knowledge management (KM) platform will also be established among the first project

activities in order to share up to date information of the project as well as to educate key project stakeholders and the general public on the key topics the project is dealing with. The KM platform also includes a forum, in which these topics can be discussed and through which specific questions to the project management or other project participants on those topics can be made. Other means for engaging stakeholders and facilitating public participation will be the workshops and training activities organized during the projects as its final report and terminal evaluation, which will also be published online. In addition, the project will organize an international workshop on EMIS bringing together government and UN offices and other key stakeholders implementing EMIS in other countries.

The project Implementing Partner and the project management assigned by it has the overall responsibility for implementing the Stakeholder Engagement Plan with UNDP providing oversight. The project management may also assign certain tasks for implementing the plan for other parties such as the FME subject to a written agreement. The ultimate responsibility for ensuring the implementation of the plan at the adequate level also in this case, however, remains with the project Implementing Partner.

As regards the stakeholders to be engaged and the timing for that, a reference is made to the table included in the stakeholder engagement plan. The project budget includes specific budget lines for engaging local experts, training and public outreach workshops and for establishing and managing project website, which are all part of or contribute to local stakeholder engagement. While the total budget for project's technical assistance activities excluding project management will be about USD 1,2 million, it is difficult to define what particular share out of this is assigned for stakeholder engagement in particular since it will be a core element of all project's technical assistance activities in one form or another. In the project's M&E framework, there are also gender specific indicators measuring, for instance, the number of participants in project's training activities, recording the visitors at the project website well as indicators for checking and monitoring that project activities contributing in one way or another to stakeholder engagement such as workshops, project monitoring and evaluation reports have been completed on time and published online.

**Please provide the Stakeholder Engagement Plan or equivalent assessment.**

#### **Annex N: Stakeholder Engagement Plan**

(Annex 9 of the Project Document)

##### Public engagement during project development

The key stakeholders listed in table 3 below have been consulted and their comments taken into account in project development. Due to the restrictions caused by the global COVID-19 pandemic, no on-site project preparation workshops could be organized, but the stakeholders could be engaged by using different on-line collaboration platforms and video-conferencing facilities beside a few on-site meetings by adopting the required precautionary measures.

The stakeholders, their relevant interests, and why they are included

The key stakeholders, their envisaged roles and reasons for their inclusion are summarized in table 3 below.

Table 3 Key partnerships of the project

| Name of the entity   | Envisaged role and potential areas for co-operation during project implementation   | Timing of engagement              |
|--|---|-----------------------------------|
| <b>Central government administration and related organizations and companies</b> |   |                                   |
| Ministry of Mining and Energy (MME)  | The project implementing partner, including coordination of the work with other government institutions involved in the project as partners (UZZPRO and MCTI) and beneficiaries (users of the CGB). Also, the MME will have a key role in communicating with public utility companies for outputs and activities requiring their engagement . | From the beginning of the project |
| The Administration for Joint Services of the Republic Bodies (UZZPRO)            | Provides centralized maintenance for the selected 28 Central Government Owned Buildings (CGBs) and is envisaged to be a key partner to provide operational support for project activities.  | From the beginning of the project |
| Ministry of Construction, Transport and Infrastructure (MCTI)                    | A key project partner for project's technical support as it concerns, for instance, construction permits and developing a methodology for calculating buildings' energy performance   | From the beginning of the project |
| <b>Local (city) administration and PUCs</b>                                      |   |                                   |
| City of Belgrade   | Envisaged project partner responsible for issuing location information, technical conditions and permits  | From the beginning of the project |
| Public Utility Companies (PUCs)  | Envisaged project partners responsible for issuing technical conditions for design and sharing other metering and billing information   | From the beginning of the project |
| <b>Energy and Construction related NGOs and professional associations</b>        |   |                                   |
| Chamber of Commerce  | Envisaged project partner for engaging private sector   | From the beginning of the project |
| Chamber of Engineers   | Envisaged project partner for engaging professionals and providing advisory services related to buildings' energy performance calculation methodology, technical design and construction.   | From the beginning of the project |
| <b>Universities and other scientific, research and educational entities</b>      |   |                                   |

|   |  |   |
|---|--|---|
| Belgrade University                                       | Envisaged project partner for engaging professionals and providing advisory services related to buildings? energy performance calculation methodology, technical design and construction.  | From the beginning of the project   |
| <b>International organizations and financing entities</b> |  |   |
| Council of Europe Bank (CEB)                              | Providing a EUR 40 million loan for supporting energy efficiency renovation of public buildings, complemented by CEB Trust Fund grants worth of EUR 0.6 million from Slovakia and Spain, to be used for preparatory activities of the EE renovation of 28 Central Government Buildings (elaboration of design documents, etc).   |   |
| EU/WBIF   | Providing EUR 0.3 million for operation of PMU involved in preparatory activities for EE renovation of 28 Central Government Buildings .   | From the beginning of the project   |
| KfW   | Providing a EUR 110 million loan for EE renovation of the Military Medical Academy (a program similar to EERCGB with the MoU signed in February 2020)  | From the beginning of the project   |
| UNDP  | Responsible for the oversight of project implementation and co-financing the EMIS management and upgrading.  | From the beginning of the project   |
| <b>Individuals and private sector</b>                     |  |   |
| Architects and building engineers                         | To be engaged as:<br>1) stakeholders, experts and representatives of their professional field to the working groups or task forces to finalize the required secondary legislation for the implementation of the new Law on Efficient Use of Energy Resources<br>2) professionals to be trained for EMIS, energy audits, energy management as well as design and monitoring of energy efficiency retrofits<br>3) contributors and/or contractors for feeding information to and managing EMIS, conducting energy audits and designing energy efficiency retrofits | Across the project duration depending on the schedule of activities and expected type of participation (see Annex 4 ? Multi Year Work Plan) |
| Appointed and future energy managers                      |  |   |
| Energy auditors and those wishing to obtain a license     |  |   |
| IT specialists  |  |   |

The private sector will have a key role in implementing the project ? primarily as a service provider for developing new features and functionalities for EMIS data management as well as for different elements of the actual building renovation, including energy audits, technical and financial feasibility analysis, actual construction work and monitoring of the results of the work done. Besides, the private sector (e.g. private banks) will have a role in providing project financing, managing the credit lines of international multilateral financing institutions and offering new type of financing instruments and modalities such as ESCO financing.

The steps and actions to achieve meaningful consultation and inclusive participation, including information dissemination

During project implementation, the participation will be facilitated by multiple means starting with the project inception workshop. Depending on the situation with the COVID-19 at that time in Serbia, the inception workshop can be organized either as an on-site or on-line event.

An on-line knowledge management platform (basically a website complemented by different social media channels) will be established among the first project activities in order to share up to date information of the project as well as to educate key project stakeholders and the general public on the

key topics the project is dealing with, including a forum, in which these topics can be discussed and through which specific questions to the project management or other project participants on those topics can be made.

Other means for engaging stakeholders and facilitating public participation will be the workshops and training activities organized during the projects as its final report and terminal evaluation, which will also be published online.

#### Roles and responsibilities for implementation of the Plan

The project Implementing Partner and the project management assigned by it has the overall responsibility for implementing the Stakeholder Engagement Plan with UNDP providing oversight. The project management may also assign certain tasks for implementing the plan for other parties such as the FME subject to a written agreement. The ultimate responsibility for ensuring the implementation of the plan at the adequate level also in this case, however, remains with the project Implementing Partner.

#### The timing of the engagement throughout the project cycle

See table 3

#### The budget for stakeholder engagement throughout the project cycle and, where applicable, for related capacity-building to support this engagement

There is not specific budget titled stakeholder engagement, but there are specific budget lines for engaging local experts, training and public outreach workshops, establishing and managing project website, which all part of or contribute to local stakeholder engagement. While the total budget for project's technical assistance activities excluding project management will be about USD 1,2 million, it is difficult to define what particular share out of this is assigned for stakeholder engagement in particular since it will be a core element of all project's technical assistance activities in one form or another.

#### Key indicators of stakeholder engagement during project implementation, and steps that will be taken to monitor and report on progress and issues that arise

In the project's M&E framework, there are gender specific indicators measuring, for instance, the number of participants in project's training activities, recording the visitors at the project website well as indicators for checking and monitoring that project activities contributing in one way or another to stakeholder engagement such as workshops, project monitoring and evaluation reports have been completed on time and published online.

No Free, Prior and Informed Consent (FPIC) by indigenous people is required for project activities.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

**Select what role civil society will play in the project:**

**Consulted only;**

**Member of Advisory Body; Contractor;**

**Co-financier;**

**Member of project steering committee or equivalent decision-making body;**

**Executor or co-executor;**

**Other (Please explain) Yes**

Advancing the energy efficiency agenda as influencers and contributors to public outreach, influencing also policy making

### **3. Gender Equality and Women's Empowerment**

**Provide the gender analysis or equivalent socio-economic assesment.**

Gender Analysis and Gender Action Plan are attached to the project document as Annex O (Annex 11 of the Project Document) has been uploaded with the submission also as a separate document.

#### **Annex O: Gender Analysis and Gender Action Plan**

(Annex 11 of the Project Document)

Enhancing the Energy Management System to Scale up Energy Efficiency Investments in Public Buildings in Serbia

#### **Gender Assessment and Action Plan**

##### **I. Introduction**

This assessment aims to provide an overview of the gender situation in Serbia, identify gender issues that may be relevant to the project, and to examine potential gender mainstreaming opportunities. The official data available from the Government of Serbia, relevant NGOs, donor agencies, and multilateral development banks was collected and examined for the purpose of this assessment.

##### **II. Energy Efficiency in the Public Buildings Sector**

Inefficient use of energy, originating predominantly from fossil fuels, represents a major development concern in Serbia, as well as a large source of GHG emissions. Energy sector GHG emissions account for 80% of the national GHG emissions and 40% of this comes from energy (mainly heat) consumption in buildings.

Many studies have pointed out that Serbia has a large potential for energy efficiency improvements and GHG emission reduction in its aging building stock, primarily resulting from the fact that major part of its building stock was built during the 70s and the 80s of the last century, characterized by reinforced concrete frame building structure, brick walls without any thermal insulation, deteriorated wood/metal fenestration and worn-out metalwork. Secondly, there is a large potential to decarbonize fuel mix in the building sector by producing heat from renewable energy sources.

Serbia's Energy Sector Development Strategy (2016) reference and energy efficiency (EE) scenarios for heat supply both anticipate continued growth in heat consumption and supply with only up to 8 % coming from renewable energy sources. As such, it is unlikely that Serbia can meet its Intended Nationally Determined Contribution (INDC) to reduce its GHG emissions by 9.8 percent by 2030 compared to the 1990 base year emissions.

The 2012 Energy Efficiency Directive (2012/27/EU) hereinafter: EED establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. In relation to public buildings, overall compliance with the Article 5 of the Energy Efficiency Directive (EED) is supported by the Government Decision 05 no. 337-6889/2018, where a default approach is chosen for the implementation of Art. 5 of EED, i.e. to rehabilitate annually 1% of the total floor area of heated and/or cooled buildings owned and occupied by central government, whereas, the Article 5 of EED stipulates to rehabilitate 3% .

### **III. Existing Gender Inequality**

The estimated number of population in the Republic of Serbia in 2019 was 6,945,235. Observed by gender, 51.3% are women (3,561,503) while 48.7% are men (3,383,732).[1]<sup>1</sup> The employment rate of women is 38.1%, which is by 14.7 p.p less than the employment rate of men (52.8%)

Among students who complete general secondary four-year education (high school), there are more girls (58%) than boys (42%). Also, girls make majority among students who complete secondary vocational four-year schools (53% girls to 47% boys). Boys are more numerous in the fields of education: electrical engineering, mechanical engineering and metalworking, geodetics and construction, transport, forestry and woodworking and geology and mining. More women complete tertiary education (higher schools and university). Among the enrolled students, women make 56%, and among graduates they make 58% (data for 2016). Among graduate students in 2016, women accounted for more than a half of all graduates in a large number of fields of education, while men are dominant in the fields of: Informatics and Communication Technologies (74%) and engineering, manufacturing and civil engineering (63%). In the field of services, the shares of women and men are equal (50%). In 2016, more women (57%) than men (43%) became holders of PhD degrees. Women make majority in many academic fields; however, men are more represented in: engineering, manufacturing and construction (57%), and in most of services (69%).

In 2014, Serbia adopted the EU Gender Equality Index as a means to measure progress. In 2016, Serbia scored 55.6 which is a progress compared to 2014 of 3.4 points. Nevertheless, Serbia is behind the EU five year average of by 10.4. The largest differences are measure in the areas of time, power and money and smallest differences are related to knowledge, work and health.[2]<sup>2</sup>

Through the years, there were several indices developed to quantify the concept of gender inequality. The United Nations Development Programme (UNDP) uses Gender Inequality Index (GII) and Gender Development Index (GDI).[3]<sup>3</sup> GII is a composite measure that shows inequality in achievement

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between women and men in reproductive health, empowerment and the labour market while GDI measures achievement in human development in three areas: health, education, and command over economic resources. The GDI considers the gender gaps on human development between men and women.

Serbia has a GII of 0.161 (2018) and ranks 37<sup>th</sup> out of 162 countries. The GDI value (2019) is 0.976 indicating that the gender gap in human development in areas of health, education, and command over economic resources (represented by estimated earned income) is minimal. The world average GDI value is 0.941.

The Global Gender Gap Index (GGGI) of the World Economic Forum examines the gap between men and women in four categories: economic participation and opportunity, educational attainment, health and survival; and political empowerment.<sup>[4]</sup> Out of 153 countries, Serbia's rank based on GGGI was 39 in 2020 is given below:

Table 1: The Global Gender Gap Index

| Description                                       | Score   | Rank |
|---|---|------|
| Economic participation and opportunity            | 0.700   | 62   |
| Educational attainment                            | 0.997   | 53   |
| Health and survival                               | 0.971   | 99   |
| Political empowerment                             | 0.276   | 41   |
| GGGI<br>Source: The Global Gender Gap Report 2014 | 0.662<br>Inequality = 0.00<br>Equality = 1.00 | 103  |

Results indicate high gender inequality in political empowerment.

#### IV. Legal and Administrative Framework Protecting Women and Promoting Gender Equality

The Republic of Serbia is a member of the Council of Europe (CoE) and a candidate for EU accession. Serbia has ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and it regularly submits reports to UN on the implementation of the Convention<sup>[5]</sup> and its Optional Protocol as well as the Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence.

In the field of education, Serbia has ratified the United Nations Educational, Scientific and Cultural Organization Convention against Discrimination in Education (UNESCO Convention). In the field of



labour standards, Serbia has ratified all eight of the fundamental International Labour Organization (ILO) Conventions including the Equal Remuneration Convention and the Discrimination (Employment and Occupation) Convention. It has developed a broad anti-discrimination and human rights legal framework.

The Constitution of the Republic of Serbia<sup>[6]</sup> guarantees the equality of women and men and obliges the State to develop equal opportunities policy, equality before the law, and prohibit both direct and indirect discrimination based on any ground, particularly on race, sex, national origin, social origin, birth, religion, political or other opinion, property status, culture, language, age, mental or physical disability.

The anti-discrimination legal framework includes of the Law on the Prohibition of Discrimination<sup>[7]</sup> which specifically identifies and prohibits gender discrimination with regard to equality of rights in political, economic, cultural and other issues.

In compliance with the Law on Equality between Sexes<sup>[8]</sup>, public authorities are obliged to develop active equal opportunity policies. A person discriminated on the basis of gender issues may request legal remedies and a compensation from a court. Companies employing more than 50 employees are obliged to draw up annual plans to eliminate gender-based discrimination in hiring, promotion and pay. Companies have to report annually on how they are fulfilling their obligations under the Law. With regard to professional development and training, the employer must select the trainees in such a way to reflect the gender balance of all employees in the company or in relevant organisational unit.

The Penal Code<sup>[9]</sup> prescribes penalties for criminal offenses of discrimination.

The Law on Planning System (OGRS 30/2018), requires that during preparation and implementation of public planning documents (spatial, investment, development plans and strategies, concepts and action plans) impact on gender equality is considered. In addition, the Decree on methodology of public policy management, analysis of the effects of public policy and regulations and on the contents of documents, prescribes use of the gender equality impact test which is used to assess the impact of proposed regulations on vulnerable categories of population including women..

Gender equality strategic framework consist of the National Gender Equality Strategy (2016-2020) and the Gender Equality Action Plan (2018-2020) call for equal participation of women and men in decision making at all levels and in all policy areas. In 2014 the Government set up a Gender equality coordination body.

The strategic goal 3 of the National Gender Equality Strategy (2016-2020) is systemic inclusion of gender issues in enactment, implementation and monitoring of public policy at all levels, by which Serbia officially introduced gender mainstreaming in public policy, by which it supports the Conclusions of the Fourth UN conference on women (1995), as indicated in the Beijing Declaration and Platform for Action<sup>[10]</sup>.

At local level, due to the efforts of the association of local authorities - Standing Conference of Towns and Municipalities (SCTM), in implementing the European Charter on Equality between Women and Men at Local level, a progress has been achieved in establishing gender equality mechanisms; in 2014,

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90% of LSGs have established a gender equality mechanism, in comparison with 53% of LSGs in 2010. 71% of LSGs have appointed a gender equality focal point.

## **V. Gender Issues in Energy Efficiency**

Introducing energy efficiency measures in buildings is a relatively new issue in Serbia just as are gender assessments. Insofar there has not been any research or comprehensive assessment related to gender issues in energy efficiency sector.

International banks through which loans facilitate investments in energy efficiency require adherence to environmental and social safeguards and gender related data is monitored per building approved for investments. While such data is required for internal reporting, it has not been published.

International organisations also promote gender balance at project level. A publication Women in sustainable energy, climate change, and environmental protection ? leadership for change<sup>[11]</sup><sup>11</sup> was prepared on the basis of research of 800 women and provides general recommendations to increase share of women in energy sector.

To be able to properly assess and demonstrate gender equality it is necessary to establish baseline data. In that sense, EMIS database enables collecting gender disaggregated data for public buildings (building users, employees, data entry operators, maintenance staff, building energy managers, municipal energy managers, etc.). The same can be done with the registry of licensed energy auditors.

The Ministry of Mining and Energy is the main project implementing partner of the project and no assessment has been done into the institutional capacity to manage or deal with gender issues relevant to energy efficiency projects. However, since gender mainstreaming in public policy is procedure recognized by the Government, it can be envisaged that during the inception phase specific actions relevant for this project can be agreed along with the work plan and specific staff assignments.

It also can be expected that the project team will be required to define and monitor gender indicators for each building at the request of the international bank. These indicators are defined in compliance with the IFIs Environmental and Social Safeguards and envisaged in the Table 2, Proposed Action Plan

## **VI. Recommendations**

For the purpose of works on buildings and further establishment of energy management system it is recommended that baseline gender related data as indicated in the column ?Indicators? in the Table 2 Proposed action plan, is collected. Due to the required educational background in technical studies for the implementation of the project components, such as the training of energy auditors, the targets should be set in a realistic ways and in compliance with the proportion of male to female graduates in respective technical fields in Serbia, which is 70:30.

During project implementation, gender disaggregated data can be collected for specific actions as indicated in the action plan below. This data and the results can be included in the annual Project Implementation Report, Mid-Term Report, and Terminal Evaluation.



Table 2: Proposed Action Plan

| Objective  | Action   | Indicator   | Responsible Institution | Baseline/End of Project Target   | Timeline      |
|--|--|---|-------------------------|--|---------------|
| Outcome 1: An official energy audit system and improved energy management with a particular focus on central and provincial government owned buildings and buildings which fall in competence of public service institutions (such as health justice, education, culture, etc.). |  |   |                         |  |               |
| Output 1.1: Amended Law on Efficient Use of Energy and related rulebooks, including the finalisation of bylaws for official energy audits.   |  |   |                         |  |               |
| Participation of women in drafting legislation.  | Require balanced gender participation in legislation drafting work groups of the ministries.   | Number of women and men involved in for drafting legislation. | MME                     | Baseline: to be collected during inception report<br>Target: 65% (percentage of women employed in public services) | Years 1 and 2 |
| Ensure participation of women in debates on Law amendments.  | Invite NGOs promoting gender equality to participate in public debates on Law amendments.<br><br>Invite professional organisations and encourage participation of female members to participate in debate. | Number of women and men participating in public debates.      | MME                     | Baseline: to be collected during inception report<br>Target: 50%   | Years 1 and 2 |
| Output 1.2: Upgraded EMIS software to include new functionalities to facilitate, among others, automatic data transfer and data analysis.  |  |   |                         |  |               |

| Objective   | Action   | Indicator   | Responsible Institution | Baseline/End of Project Target  | Timeline    |
|---|--|---|-------------------------|---|-------------|
| Gender balanced employment, gender balanced training.   | <p>Ensure gender based legal provisions are obeyed by software companies acting as service providers (legal obligations for companies with more than 50 employees).</p> <p>Ensure gender balanced training in use of software.</p>   | <p>Number of man and women contracted for software development.</p> <p>Number of men and woman trained for use of software.</p> | MME and UZZPRO          | <p>Baseline: n/a (new project based activity)</p> <p>Target: 50%</p>                                  | Years 1-5   |
| Output 1.: At least 30 buildings of B-2 category equipped with smart meters and other required hard- and software for including them in EMIS. |  |   |                         |   |             |
| Active women participation in job opportunities i.e. activities related to design and implementation of smart metering systems.               | <p>Provide support to ensure women participation in drafting tender documents.</p> <p>Ensure gender based legal provisions are obeyed by designing companies and companies acting as equipment suppliers/installers (legal obligations for companies with more than 50 employees).</p> | Number of men and women participating in implementation of smart metering systems.  | MME, UNDP               | <p>Baseline: n/a</p> <p>Target: 50%</p>   | Years 2 - 4 |
| Output 1. 4: At least 60 energy managers of B-2 cat. buildings trained together with other capacity building.                                 |  |   |                         |   |             |
| Gender balance achieved among trained energy managers.  | <p>Ensure that legal provisions related gender issues are respected in event of training existing staff in public buildings.</p> <p>Encourage training of women through invitations to apply channeled through professional associations and women groups.</p>                         | Number of men and woman trained for energy management and other capacity building.  | MME, UZZPRO, UNDP       | <p>Baseline: 37% of female graduates with engineering background</p> <p>Target: 50% women trained</p> | Years 1=5   |

| Objective  | Action   | Indicator   | Responsible Institution  | Baseline/End of Project Target  | Timeline         |
|--|--|---|--------------------------|---|------------------|
| Output 1.7: At least 80 large public buildings of app. 1,000,000 m2 in total included into EMIS                                    |  |   |                          |   |                  |
| <p>Gender balance in tasks related to filling in the EMIS data.</p> <p>Enable monitoring of gender disaggregated through EMIS.</p> | <p>Ensure that legal provisions related gender issues are respected in event of training existing staff in public buildings.</p> | <p>Number of men and women assigned to fill in the EMIS data.</p> <p>Number of public buildings with gender disaggregated data available in EMIS.</p> | <p>MME, UZZPRO, UNDP</p> | <p>Baseline: n/a<br/>Target: 65%</p> <p>Baseline: n/a<br/>Target: 80 buildings with gender disaggregated data</p> | <p>Years 1=5</p> |
| Output 1.3: Introducing full licensing system for energy auditors and building their capacity to conduct the audits                |  |   |                          |   |                  |

| Objective  | Action   | Indicator   | Responsible Institution  | Baseline/End of Project Target  | Timeline                            |
|--|--|---|--|---|-------------------------------------|
| <p>Provide access to female professionals to licensing process.</p> <p>Enable monitoring of gender disaggregated data for licensed auditors.</p> | <p>Assure that legal provisions related to gender and employment/training opportunities are respected in event of training of existing staff in public sector or in companies larger than 50 employees.</p> <p>Recommend that compliance with the data above is included in procurement procedures. Encourage gender balanced licensing of trainees who do not belong to groups above thorough professional associations and women groups.</p> <p>Encourage participation of female professionals in development of licensing procedure thorough professional associations and women groups and public bodies.</p> <p>Introduce gender disaggregated data in the registry of energy auditors to provide baseline.</p> <p>Monitor the data collected in the registry.</p> | <p>Number of men and women licensed to do energy audits.</p> <p>Number of men and women participating in licensing procedure.</p> | <p>The Ministry of Mining and Energy, Faculty of Mechanical Engineering as an authorised training institution for energy managers and energy auditors, Chamber of Commerce and Industry.</p> | <p>Baseline: 37% of female graduates with engineering background</p> <p>Target: 50% women licensed and participation in licensing procedure</p> | <p>Year 1 and year 2, Quarter 1</p> |

Output 1.10: An analysis and related recommendations for eventually required institutional changes.

| Objective  | Action   | Indicator   | Responsible Institution | Baseline/End of Project Target   | Timeline                  |
|--|--|---|-------------------------|--|---------------------------|
| Active women participation in developing new energy management related policies and regulations and energy efficiency investment projects according to the provision of the Law on planning system | <p>Encourage women participation in the process of identifying legal, institutional and capacity building gaps through working groups and discussion panels.</p> <p>Apply provisions of the Law on planning system relevant for gender mainstreaming</p> | <p>Number of man and women participating in discussions and working groups.</p> <p>Number of Gender equality tests conducted for the purpose of policies and regulations change.</p> <p>Number of identified policies and procedures which can be changed in a way to promote gender balance in energy management and energy efficiency measures.</p> | MME and UNDP            | <p>Baseline: n/a<br/>Target: 50%</p> <p>Baseline: n/a<br/>Target: one test per proposed policy change</p>                    | Year 3-5, Quarter 1       |
| Outcome 2: Catalyzing capital investments in energy efficiency with a particular focus on central government owned buildings   |  |   |                         |  |                           |
| Output 2.1: Detailed energy audits for at least 28 large Government buildings  |  |   |                         |  |                           |
| Women participation in energy audits.  | Ensure gender balance when selecting companies/professionals to conduct energy audits by applying applicable legislation.  | Number of men and women performing energy audits.   | UNDP                    | <p>Baseline: 37% of female graduates with engineering background</p> <p>Target: 50% women participating in energy audits</p> | Year 1- Year 3, Quarter 1 |



| Objective   | Action  | Indicator  | Responsible Institution | Baseline/End of Project Target  | Timeline |
|---|---|--|-------------------------|---|----------|
| Output 2.2: Final investment proposals with related technical design, feasibility studies and financial analysis for all those buildings that based on the results of the audits appear to meet the agreed technical and financing criteria for renovation. |   |  |                         |   |          |
| Women participation in preparation of technical documentation.  | Ensure gender balance when selecting companies/professionals to conduct energy audits by applying applicable legislation. | Number of men and women elaborating technical documents.   | UNDP                    | Baseline: 37% of female graduates with engineering background<br><br>Target: 50% women participating in energy audits | Year 2-3 |
| Output 2.3: Completed EE and RE renovation of at least 28 Central Government buildings.   |   |  |                         |   |          |
| Gender balance achieved in the process of EE and renovation of government buildings.  | Ensure Bank's requirements related to gender balance are monitored by project team.                                       | Number of men and women employed in renovated buildings.<br><br>Number of men and women employed/newly employed as Energy Managers in renovated buildings. | UNDP                    | Baseline<br><br>Baseline n/a<br><br>Target: 50%   | Year 2-5 |
| Outcome 3: Outreach, monitoring and evaluation for scaling up the investments.  |   |  |                         |   |          |
| Output 3.1 Project inception report and workshop<br>Output 3.3: Project terminal evaluation.  |   |  |                         |   |          |

| Objective   | Action   | Indicator                                      | Responsible Institution | Baseline/End of Project Target                                       | Timeline  |
|---|--|--|-------------------------|--|---|
| Identify missing baseline values<br>Verify achieved results of gender mainstreaming action plan.  | Collect gender related baseline data and specify values during the inception phase, as indicated in the column ?Indicators? in this table<br><br>Collect data according to the schedule agreed during the inception phase for the purpose of monitoring and final results. | Gender related data available for evaluations. | UNDP                    | Baseline: n/a<br><br>Target: to be determined during inception phase | Year 1, Quarter 1<br><br>Year 5, Quarters 3 and 4 |
| Output 3.2: Final project report, including monitored results of the supported EE and RE investment projects, a study of lessons learnt and an analysis and related recommendations for scaling up the project results. |  |  |                         |  |   |
| Verify achieved results of gender mainstreaming action plan.  | Use collected gender related baseline data during the inception phase, as indicated in the column ?Indicators? in this table<br><br>Use collected data according to the schedule agreed during the inception phase for the purpose of monitoring and final results.        | Gender related data available for evaluations. | UNDP                    | Baseline: n/a<br><br>Target: to be determined during inception phase | Year 5, Quarter 3-5                               |
| Output 3.2: Project web-site that can be continued to be used and updated also after the project end  |  |  |                         |  |   |

| Objective   | Action  | Indicator   | Responsible Institution | Baseline/End of Project Target  | Timeline  |
|---|---|---|-------------------------|---|-----------|
| Ensure users' outreach, information presentation and dissemination include women. | Consult both men and women on type of information needs during scoping.<br><br>Develop appropriate information-awareness material.<br><br>Ensure that information material is gender sensitive. | Number of gender sensitive promotional materials in compliance with the legislation and developed national and international guidelines <sup>[12]</sup> <sup>12</sup> .<br><sup>[13]</sup> <sup>13</sup><br><br>Number of female employees in Government institutions that occupy buildings consulted in the development of promotional material. | MME, UZZPRO, UNDP       | Baseline: n/a<br><br>Target: all promotional materials<br><br><br><br>Baseline: 0<br><br>Target 50% women | Years 1-5 |
| Output 3.4: Final project workshop.   |   |   |                         |   |           |
| Present project results.  | Ensure women participation through invitation to the project stakeholders.  | Number of men and woman participating in final workshop.  | UNDP                    | Baseline: n/a<br><br>Target: 50%  |           |

Table 3 Budget for the action

Since the project is mainstreaming gender issues into the project activities, it is foreseen that the PMU staff, namely the project manager, the the project assistant and the MME + FME task managers will be responsible for ensuring that related provision in the project document and in this annex will be taken into account in the implementation of those activities as well as for monitoring and reporting on in the annual PIRs to what extent this has been achieved. The issue will also be addressed by the project terminal evaluation. The estimated time allocation for the PMU to staff to implement and monitor the impact of the actions of the GAP has been estimated as 5% of their total time and costs allocation equally spread over 5 years, as indicated in the table below:



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[1] Serbian Statistical Office, 2020

[2] Government of Serbia, Gender Equality Index in Republic of Serbia, 2018  
[https://www.rodnaravnopravnost.gov.rs/sites/default/files/2018-12/Indeks%20rodne%20ravnopravnosti%202018\\_SRP.PDF](https://www.rodnaravnopravnost.gov.rs/sites/default/files/2018-12/Indeks%20rodne%20ravnopravnosti%202018_SRP.PDF)

[3] United Nations Development Programme. Human Development Reports.  
<http://hdr.undp.org/en/content/table-4-gender-inequality-index>.

[4] World Economic Forum. The Global Gender Gap Report 2020. Country Profiles.  
[http://www3.weforum.org/docs/WEF\\_GGGR\\_2020.pdf](http://www3.weforum.org/docs/WEF_GGGR_2020.pdf)

[5] The government of Serbia, Fourth report on the implementation of CEDAW, 2017,  
<https://ljudskaprava.gov.rs/sr/node/156>. ?????? ?????????? ?????????? ?? ????????? ??  
<https://ljudskaprava.gov.rs/sr/node/156>

[6] ?Official Gazette of Republic of Serbia? No. 98/2006

[7] ?Official Gazette of Republic of Serbia? No.22/2009

[8] ?Official Gazette of Republic of Serbia? No 104/2009

[9] ?Official Gazette of Republic of Serbia? No 85/2005, 88/2005,107/2005, 72/2009, 111/2009, 121/2012, 104/2013, 108/2014, 94/2016 i 35/2019

[10] National report on implementation of Beijing Declaration and Platform for Action for the past 25 years (2020), Government of Serbia

[11] Women in sustainable energy, climate change, and environmental protection ? leadership for change (2018), Provincial Institute for Gender Equality

[12] A handbook for use of gender sensitive language, Coordination body for gender equality of the Government of Serbia and UNDP Women 2019 [http://socijalnoukljucivanje.gov.rs/wp-content/uploads/2019/07/prirucnik\\_za\\_upotrebu\\_rodno\\_osetljivog\\_jezika\\_naslovna.jpg](http://socijalnoukljucivanje.gov.rs/wp-content/uploads/2019/07/prirucnik_za_upotrebu_rodno_osetljivog_jezika_naslovna.jpg)

[13] A guideline for use of gender sensitive language in the public administration in Serbia, 2020 OSCE <https://www.osce.org/files/f/documents/5/7/454309.pdf>

**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?**

Yes

**Closing gender gaps in access to and control over natural resources;**

**Improving women's participation and decision making** Yes

**Generating socio-economic benefits or services or women** Yes

**Does the project's results framework or logical framework include gender-sensitive indicators?**

Yes

#### **4. Private sector engagement**

**Elaborate on the private sector's engagement in the project, if any.**

The private sector will have a key role in implementing the project ? primarily as a service provider for developing new features and functionalities for EMIS data management as well as for different elements of the actual building renovation, including energy audits, technical and financial feasibility analysis, actual construction work and monitoring of the results of the work done. Besides, the private sector (e.g. private banks) will have a role in providing project financing, managing the credit lines of international multilateral financing institutions and offering new type of financing instruments and modalities such as ESCO financing.

**Table 1** Elaboration of the private sector engagement

| <b>Output</b>  | <b>Role of the private sector</b>  |
|--|--|
| Output 1.1 Required bylaws and rulebooks for official energy audits finalized to complement the related provisions of the new Law on the Efficient Use of Energy.            | Stakeholders to be consulted<br>Expertise for drafting the documents                           |
| Output 1.2 Upgraded EMIS software to include new functionalities to facilitate, among others, automatic data transfer and data analysis.                                     | Expertise in software development  |
| Output 1.3 A full licensing system for energy auditors developed and in place, including the establishment of a registry of licensed energy auditors.                        | Trainers and trainees;<br>provision of energy audit services with related business development |
| Output 1.4 Establishment of an EMIS help desk with a help desk manager and trained students to support the building managers and other key stakeholders to operate with EMIS | Beneficiaries of help desk services  |

|  |   |
|--|---|
| Output 1.5 At least 30 buildings belonging to category B-2 with the combined floor area of at least 150,000 m2 equipped with smart meters to measure heat and water consumption and to transfer it automatically to EMIS database and upgrading other required hard- and software to manage the data | Vendors and installers of smart meters<br>Hard- and software developers                       |
| Output 1.6 At least 60 energy managers of buildings within category B-2 trained together with other human capacity building of persons responsible for energy management of buildings and facilities within this category and for analyzing the submitted reports                                    | Eventual provision of energy management services  |
| Output 1.7 At least 80 large public buildings with the total floor area of approximately 1 million m2 included into EMIS   | Provision of technical expertise  |
| Output 1.8: A methodology for conducting energy audits and calculating buildings? energy performance in accordance with the state of art EU standards and methodologies adapted into Serbian conditions and taken into use   | Provision of technical expertise  |
| Output 1.9: Capacity of energy auditors and other key stakeholders for conducting energy audits by the agreed methodology built.   | Trainers and trainees   |
| Output 1.10 An analysis and related recommendations for required institutional changes to deal with different energy management related aspects of buildings owned by the central government.  | Provision of expert support   |
| Output 2.1 Detailed energy audits for at least 28 large Government buildings completed   | Energy audit services   |
| Output 2.2 Final investment proposals with related technical design, feasibility studies and financial analysis completed for all buildings meeting the agreed technical and financing criteria for renovation   | Project development services with related technical expertise                                 |
| Output 2.3 Completed EE and RE renovation of at least 28 Central Government buildings.   | Design and construction works   |
| Output 3.1: Project inception report and workshop  | Eventual participants, organizing support   |
| Output 3.2: Project web-site that can be continued to be used and updated also after the project end.  | Provision of technical expertise and related services for web-site development and management |
| Output 3.3 International EMIS workshop   | Participants, organizing support  |
| Output 3.4: Final project report, including monitored results of the supported EE and RE investment projects, a study of lessons learnt and an analysis and related recommendations for scaling up the project results.  | Technical expertise for drafting the report   |

Output 3.5 Project terminal evaluation

Evaluation services, stakeholders to be consulted

### 5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

All risks will be further defined during project implementation according to hazard identification, assessment of vulnerability and exposure, risk classification, and then through the development of risk mitigation plan which includes ranking of risks according to a clearly defined scale, and using the best available data.

See table below

Table 2 Project risks

| Description | Risk Category | Impact & Probability | Risk Treatment / Management Measures | Risk Owner |
|-------------|---------------|----------------------|--------------------------------------|------------|
|-------------|---------------|----------------------|--------------------------------------|------------|



|   |                  |   |  |                               |
|---|------------------|---|--|-------------------------------|
| <p>Lack of political will to effectively support, which may prevent or hamper further development and implementation of the EMS and EMIS in Serbia.</p> | <p>Political</p> | <p>The adoption of the targeted secondary legislation under Output 1.1 may be significantly delayed or stopped entirely similar to the adoption of EMIS into Government owned B-2 category buildings</p> <p>L = 2<br/>I = 4</p> <p>Risk level: Moderate</p> | <p>Implementing the project in close consultation with the key stakeholders and beneficiaries, including the Ministry of Mining and Energy, Ministry of Finance and other line ministries. The positive experiences of the Government with the first EMIS project as well as the recent adoption of the new law on Efficient Use of Energy Resources are also likely reduce this risk.</p> | <p>MME / Project director</p> |
| <p>The Government does not have the financial resources to support the proposed EE retrofits or their effective replication.</p>                        | <p>Financial</p> | <p>There is no financing for the planned retrofits</p> <p>L = 1<br/>I = 5</p> <p>Risk level: Moderate</p>   | <p>This risk is mitigated by the fact that the Government has already signed an agreement with the CEB for a 40 million Euro sovereign guarantee loan to finance the retrofit of the first 28 buildings</p>  | <p>MME / Project director</p> |

|  |                                |   |  |   |
|--|--------------------------------|---|--|---|
| <p>Due to technical problems with the planned EE retrofit investments and technologies used, the trust of the key stakeholders on the proposed measures is lost.</p> | <p>Other (technology risk)</p> | <p>The confidence of the key stakeholders on the proposed EE and RE measures is lost resulting in that the implementation of new projects, which are suggested to apply the same measures is lost.<br/>L = 2<br/>I = 3<br/>Risk level: Moderate</p> | <p>Adequate due diligence and, when applicable, pre-testing of the proposed EE and RE solutions. The risk that EMIS software gets outdated can be mitigated by constantly updating it.</p> | <p>Management of both the UNDP/GEF project and the CEB loan</p> |
| <p>The proposed measures and retrofit projects may generate waste that is harmful to the environment and human health, if not properly managed and disposed.</p>     | <p>Environmental</p>           | <p>The implemented measures will result in non-acceptable local environmental problems<br/>L = 2<br/>I = 3<br/>Risk level: Moderate</p>   | <p>Having as an obligatory component for all proposals an environmental impact assessment addressing also the waste issue.</p>   | <p>Management of both the UNDP/GEF project and the CEB loan</p> |

|  |                      |   |  |   |
|--|----------------------|---|--|---|
| <p><b>Climate Change Risks</b> - The changing climate and extreme weather conditions eventually appearing more frequently and more intensively may pose specific risks to those building retrofit measures that are exposed to such weather.</p> | <p>Environmental</p> | <p>The implemented measures will not produce the desired benefits or will result in adverse effects to the lifetime of the building</p> <p>L = 2<br/>I = 3<br/>Risk level: Moderate</p> | <p>Taking the changing climate and the risk for more frequent and intensive extreme weather conditions into account in the calculations, in defining the technical specifications for the equipment and in ensuring their proper installation. In addition, there will be an increased emphasis on cooling and insulation given expected increases in temperature. Building retrofit design will be made considering the increased maximum rainfall and soil water erosion expected based on projections taking into account climate change impacts.</p> | <p>Management of both the UNDP/GEF project and the CEB loan</p> |
|--|----------------------|---|--|---|

|  |             |   |   |  |
|--|-------------|---|---|--|
| Inadequate local capacity to effectively implement the proposed measures                 | Operational | The targeted project results will not be achieved<br>L = 2<br>I = 4<br>Risk level: Moderate   | Adequate focus on capacity building, coaching and adaptive management. EMIS Help desk to support energy managers and other key stakeholders with EMIS, energy management and monitoring.  | Project Board and UNDP by their oversight functions and responsibilities |
| Continuing COVID-19 pandemic will prevent some project activities from being implemented | Social      | The targeted project results will not be achieved and the stakeholders cannot be engaged at the level required.<br>L = 2<br>I = 4<br>Risk level: Moderate | Planning and developing alternative ways or introducing required precautionary measures for allowing the implementation of critical project activities despite of COVID-19 restrictions. For instance, all required project meetings, workshops and training events can also be organized online. | Management of both the UNDP/GEF project and the CEB loan                 |

In addition to the summary table above, the COVID-19 and climate change related risk are discussed in further detail below.

#### *COVID-19 related risks and opportunities*

While the situation with COVID-19 in Serbia is gradually getting better (Figure 4) and Serbia is also vaccinating its people with leading rates in Europe, the possible impacts COVID-19 or similar pandemic are briefly discussed below.

## Serbia Situation

**711,116**  
confirmed cases

**6,811**  
deaths

Source: World Health Organization  
Data may be incomplete for the current day or week.

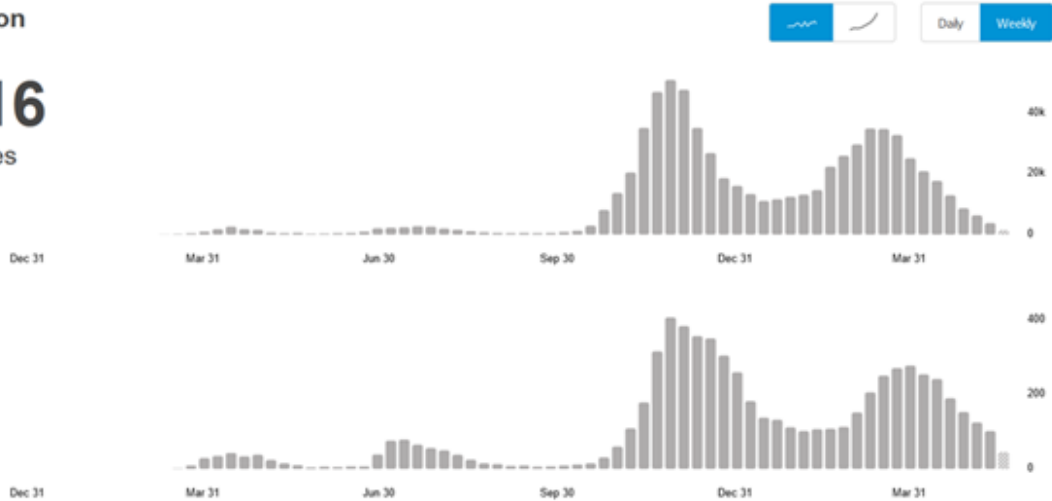


Fig. 4 COVID-19 related situation in Serbia (Source: <https://covid19.who.int/region/euro/country/rs>)

The main impact of continuing COVID-19 pandemic on project implementation will be because of eventually continuing social distancing measures and restrictions for public gatherings. In such a case, the planned public outreach events, stakeholder consultation meetings and group training cannot be organized by physical meetings, but they would need to be virtual ones. During the pandemic most people among the stakeholders the project is targeting have already become familiar with different types of virtual meetings and, therefore, continuing such online events in the frame of this project, as needed, is not expected to create major challenges. As needed, the project will also provide specific training for or facilitate otherwise the participation of those stakeholders that may require such support.

Also, as it concerns the project staff, they will be responsible for the type of deskwork that can also be conducted outside the project office, if needed. As such, COVID-19 even if continuing with related restrictions is not likely to have any major impact on implementing the project in schedule. Similarly, no impact on baseline or stated project targets is foreseen.

The main impact as potential delays due to eventually worsening COVID-19 pandemic could be on the actual renovation and related construction works, should the pandemic requires the reintroduction of some social distancing measures at construction sites.

As regards the opportunities, the project will create new work and investment opportunities for energy efficient technologies, thereby contributing to green recovery and resilience by engaging both the public and the private sector for mutually benefitting co-operation producing both global and local environmental benefits, new green business opportunities also for the private sector and ingredients for green economic recovery in general.

### *Climate Change Risks*

The analysis prepared for the Second National Communication of Serbia predicted an average temperature rise of 0.5-0.9 °C by 2040 and 1.8-2.0 °C during 2041-2070. For precipitation, the models predicted a change between +20% and -20% with reduced rainfall expected during the summer season accompanied by longer periods of drought. Vulnerability assessments were made for the hydrology and water resources, forestry, agriculture and health care with a conclusion that all these sectors will be affected by climate change. No specific vulnerability assessment has been done yet on the built environment such as buildings, waste treatment facilities, landfills etc., but it is clear that any predicted changes on the temperature, precipitation or both would need to be fully taken into account in the feasibility studies and technical design documents prepared for any building renovations with due attention on building thermal comfort,

eventually increasing cooling needs and management of more frequent extreme weather conditions such as stormy winds and rainfalls. As such, all these aspects would also need to be taken fully into account in the training activities organized by project.

## 6. Institutional Arrangement and Coordination

### **Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.**

This project will be implemented using the National Implementing Modality (NIM). UNDP will be responsible for oversight and quality assurance. The Implementing Partner for this project is the Ministry of Mining and Energy (MME) of the Government of Serbia. The MME, in cooperation with Administration for Joint Services of the Republic Bodies (UZZPRO), is also tasked by the Government to implement the EE renovation programme of 28 Central Government Buildings, financed by the CEB loan and grant. The Faculty of Mechanical Engineering (FME) of the Belgrade University will be the Responsible Party for specific outputs outlined in the project document, including outputs 1.4 - 1.10, 2.1-2.2, 3.2-3.3 and 3.5. Harmonized Approach to Cash Transfers (HACT) assessments have been carried out for both the Ministry of Mining and Energy and for the Faculty of Mechanical Engineering (FME) of the University of Belgrade and have determined that both agencies are capable of implementing a UNDP GEF project.

UNDP is accountable to the GEF for the implementation of this project. This includes oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering GEF project cycle management services comprising project approval and start-up, project supervision and oversight, and project completion and evaluation. UNDP is also responsible for the Project Assurance role of the Project Board/Steering Committee.

1. The Project Board consisting of representatives of the MME, UZZPRO and UNDP will be responsible for coordination between various donor and government-funded projects and programmes. In addition, the co-ordination will be facilitated by direct consultations of the project management with various governmental and non-governmental entities throughout the project implementation.

Diagrams showing the project organizational structure, the roles of the key project stakeholders with coordination relationship or links and the co-ordination between this project and the projects financed (CEB) or eventually to be financed (GCF) by other multilateral agencies are shown in figures 5 and 6 below. Private sector contributions to the project will be coordinated by the PMU and the project Implementing Partner by the annual work plans and the related procurement calls as it concerns activities supported directly by the project. Besides, the project will organize during project implementation several training and other knowledge management and co-ordination workshops, where the role of private sector can be further discussed in a consultative manner together with the private sector representatives. As it concerns the envisaged role of the private sector *vis a vis* the different project activities, this has been discussed in further detail in chapter 4 of this CEO AR.

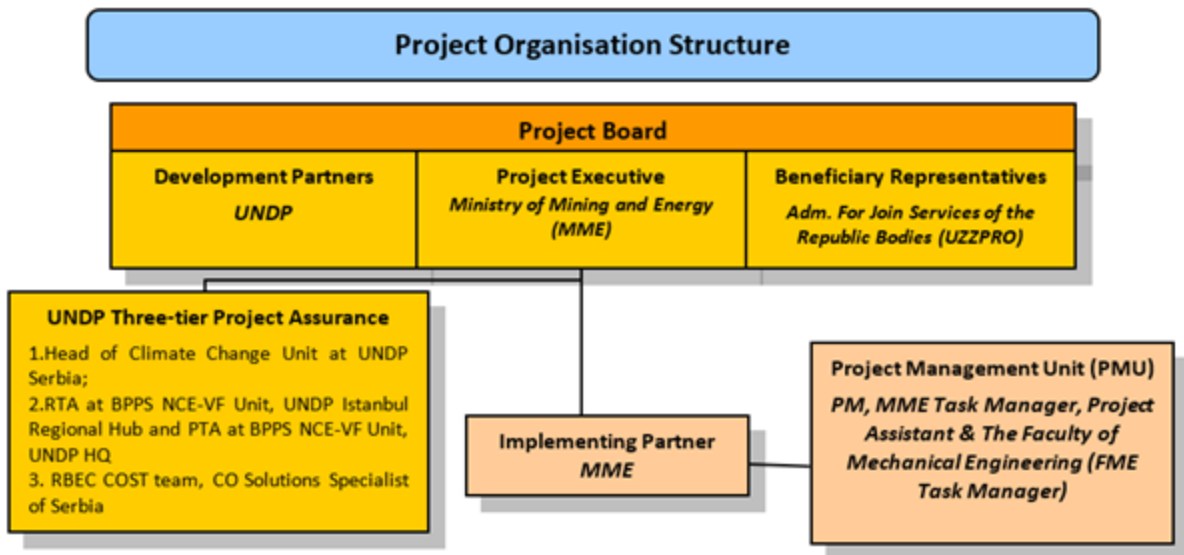


Figure 5 Project organizational structure

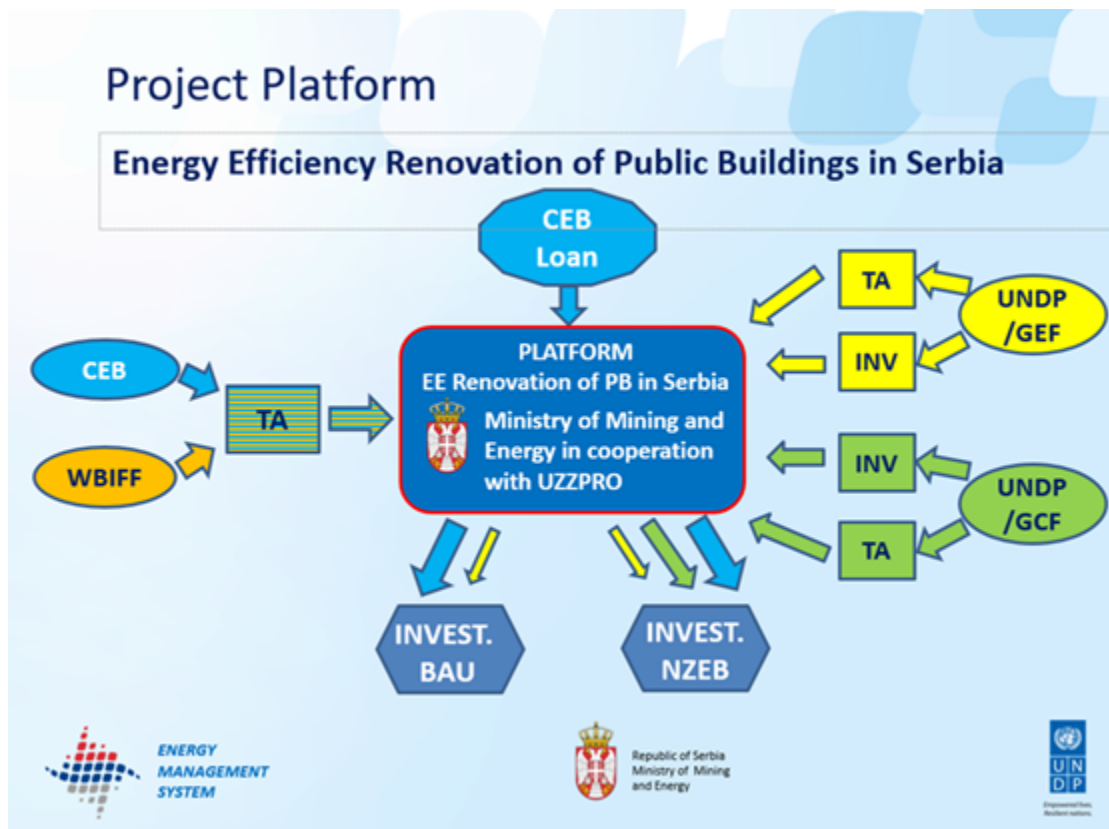


Figure 6 Co-ordination with other already existing (CEB) or potential future projects (GCF) through the platform established by the Ministry of Mining and Energy in co-operation with UZZPRO.

## 7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

The project is in line with Energy Sector Development Strategy of the Republic of Serbia until 2025 with projections to 2030 (Off. Gazette of RS 101/15) which envisages measures in improving energy efficiency in all sectors of final energy consumption as a key mean in transition to sustainable energy sector. Besides, the Decree on the establishment of an Implementation Program for the mentioned strategy from 2017 until 2023 year (POS) (Off. Gazette of RS 104/2017) <http://www.mre.gov.rs/dokumenta-efikasnost-izvori.php> defines in chapter 3.7 the implementation of Article 5 of EED among measures to be implemented in the energy efficiency field by 2023.

Energy efficiency is among the priorities set by Sustainable Development Strategy of RS as well as by the Economic Reform Programme for the period of 2019-2021. Following its commitments regarding to decisions of Energy Community, Serbia has adopted three consecutive National Energy Efficiency Action Plans (NEEAP) in the period 2010/2018. As specified in the NEEAPs, building sector is expected to contribute largely to national energy efficiency increase. Serbia's target by 2020 is set in POS.

Regarding the UNFCCC framework, the Second National Communication to UNFCCC (2017) of the Republic of Serbia points out the significant GHG emission reduction potential in energy sector "as a result of implementation of measures for renovation of public, residential and commercial buildings, as well as private houses". Moreover, energy efficiency is recognized as a key measure in achieving the Intended Nationally Determined Contribution (INDC) to reduce GHG emissions by 9.8 % by 2030 compared to 1990 base line year emissions.

## 8. Knowledge Management

**Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.**

In Knowledge Management, the project will build on an "Open Knowledge" approach publishing all project related documentation, presentations, training materials and supported new project and business initiatives on the project's KM Platform (basically a website complemented by different social media



channels) complemented by workshops and the use of electronic media such as TV and radio, for which regular statements and video coverages of project activities will be provided. Workshops will be organized at least at the beginning and at the end of the project, from which at least one will also be for an international audience. The project budget includes specific allocations for these. As a specific output the project also includes a final project report, including monitored results of the supported EE and RE investment projects, a study of lessons learnt and an analysis and related recommendations for scaling up the project results. The report of the Terminal Evaluation will also be publicly available in English and posted on the UNDP ERC website.

The timeline, milestones and key deliverables of the project's knowledge management approach are further elaborated in table 3 below.

**Table 3 Key deliverables of the project's knowledge management approach (covered also partly by the project M&E budget)**

| <b>Deliverable</b>                         | <b>Envisaged timeframe</b>                                 | <b>Budget</b>       |
|--|--|---------------------|
| Inception report and workshop              | 4Q/2021  | US\$ 5,000          |
| Online KM platform (website)               | Online 4Q/2021 + updated throughout project implementation | US\$ 20,000         |
| International EMIS workshop                | Q1/2024  | US\$ 10,000         |
| Other training and KM workshops            | At regular intervals throughout project implementation     | US\$ 12,000         |
| Final project report, incl. lessons learnt | Q1/2026  | US\$ 10,000         |
| Terminal evaluation                        | Q2/2026  | US\$ 40,000         |
| Final project workshop                     | Q2/2026  | US\$ 5,000          |
| <b>Total</b>                               |  | <b>US\$ 102,000</b> |

## 9. Monitoring and Evaluation

### Describe the budgeted M and E plan

The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. The Monitoring Plan included in Annex J (Annex 5 of the project document) details the roles, responsibilities, and frequency of monitoring project results.

While project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements, additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring and Evaluation Policy. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report.

The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

The GEF Core indicators included as Annex will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to the TE. The updated monitoring data should be shared with TE consultants prior to required evaluation missions, so these can be used for subsequent ground truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF website.

An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center. The evaluation will be "independent, impartial and rigorous". The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

The total indicative costs of the project's M&E are US\$ 70,000 (slightly less than 5% of the total amount of requested GEF funds), with a break down and timing as follows:

| <b>GEF M&amp;E requirements</b>                                     | <b>Indicative costs (US\$)</b> | <b>Time frame</b>                                  |
|---|--------------------------------|--|
| <b>Inception Workshop</b>   | 5,000                          | Within 60 days of CEO endorsement of this project. |
| <b>Inception Report</b>   | Incl. in workshop costs        | Within 90 days of CEO endorsement of this project. |
| <b>M&amp;E of GEF core indicators and project results framework</b> | 10,000                         | Annually and at mid-point and closure.             |

| GEF M&E requirements                      | Indicative costs (US\$) | Time frame                             |
|---|-------------------------|--|
| GEF Project Implementation Report (PIR)   | 10,000                  | Annually typically between June-August |
| Monitoring of GAP and ESMF (NA)           | (incl. above)           | On-going.                              |
| Monitoring of stakeholder engagement plan | 5,000                   | On-going.                              |
| Supervision missions                      | None                    | Annually                               |
| Independent Terminal Evaluation (TE)      | 40,000                  | June 30, 2026                          |
| <b>TOTAL indicative COST</b>              | <b>70,000</b>           |  |

## 10. Benefits

**Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCE/SCCF)?**

The socio-economic benefits of the project include increased employment opportunities for a variety of project related professional fields, direct savings in public spendings by reduced energy bills as well as better thermal comfort for the people working or visiting the buildings that have been retrofitted.

In addition, it is estimated that 300,000 tons of indirect CO<sub>2</sub> emissions and 146,000 tons of direct CO<sub>2</sub> emissions will allow approximately 25 new government jobs to be created as a result of energy savings allowing budget funds being able to be redeployed elsewhere as a result of estimated savings of some \$116,800 from the 28 cultural heritage buildings and approx. double this amount from the indirect GHG reductions from the replication buildings which works out to approx. \$250,000 in savings. In addition, from the Council of Europe Bank loan it is estimated that some 1,000 new jobs will be created as a result of construction costs of \$47.3 million so in total we expect approx. 1025 new green jobs to be created by the project.

The annual costs savings in the energy bills of all 28 buildings to be retrofitted over 25 years is estimated at \$ 37 million USD (or approx. \$ 1.48 million USD per annum) On the basis of direct lifetime GHG emissions avoided of 146,000 tons CO<sub>2</sub>, reductions estimated by the project at a conservative number of \$20 per ton. The number of people benefitting from new employment opportunities and better thermal comfort of the public buildings they are visiting or working has been estimated to reach at least 10,000 people by the end of the project. If one takes into account the indirect GHG reductions then the savings are even higher.

By project monitoring activities, the achieved socio-economic benefits will be duly recorded and presented as a part of project's KM activities, by which the awareness of the key decision makers on the win-win

nature of the improved energy efficiency of public buildings is sought to be triggered for the national socio-economic benefits if further EE investments and related GEBs. In addition, the KM activities will feed into and support the national communications of the government of Serbia and the nationally determined commitment (NDC) also.

Year 1 and Year 2 of the project will see the KM focus on awareness and training of energy managers, whereas Years 3, 4, and 5 will focus on dissemination of project results and making sure that the national energy consumption database is continually maintained and updated.

Key milestones and outputs from the KM approach will include training of energy managers under component 1 and this will be scheduled to take place mainly in Years 2,3 and 4 of the project. A project inception report and project inception workshop (Year 1) under component 3 as well as a continually updated project website, an international EMIS workshop (Year 4 or 5) and a final project report (Year 5) including a lessons learned study (Year 5) which is widely disseminated.

## 11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

### Overall Project/Program Risk Classification \*

| PIF             | CEO<br>Endorsement/Approval | MTR | TE |
|-----------------|-----------------------------|-----|----|
| Medium/Moderate |                             |     |    |

#### Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

# Social and Environmental Screening Template (2021 SESP Template)

*The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document at the design stage. Note: this template will be converted into an online tool. The online version will guide users through the process and will embed relevant guidance.*

## Project Information

| <i>Project Information</i>                       |  |
|--|--|
| 1. Project Title                                 | Enhancing the Energy Management System to Scale up Energy Efficiency Investments in Public Buildings in Serbia |
| 2. Project Number (i.e. Atlas project ID, PIMS+) | 6388   |
| 3. Location (Global/Region/Country)              | Serbia   |
| 4. Project stage (Design or Implementation)      | Design   |
| 5. Date  | 11 May 2021  |

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

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

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

The project will promote energy efficiency with an emphasis on improving and scaling up the energy management and related energy management information system (EMIS) in those building categories, which have until now been lacking behind. Therefore, the project will enhance availability, accessibility and quality of services related to energy efficiency and building management for all. More efficient and environmentally friendly building management can contribute to advancement of the quality of life and rights to safe and clean environments for all, while also creating temporary new employment during buildings rehabilitation, new employment of energy managers, and business opportunities for suppliers/construction companies during implementation. In addition, during its implementation, the project will contribute to improvement of the transparency and accountability of central government local governance and provide opportunities for meaningful public participation in decision making.

The requisite enabling conditions for sustaining the project results will be strengthened through targeted knowledge management, monitoring & evaluation, and gender mainstreaming and social inclusion. The project is also designed to strengthen the environmental management capacities of the provincial level conservation agencies, other provincial sectors, local governments, civil society, and community groups. Inclusive consultations during the project preparation phase with local communities, local governments, civil society, and provincial agencies have socialized the key stakeholders to the proposed interventions and will continue to do so throughout. The project is well positioned to assist the governmental partners in implementing these envisaged actions according to human rights related standards and practices according to national and international laws, through participatory community consultations, demonstration of collaborative management arrangements that involve local communities, and development of sustainable alternative livelihood opportunities.

The project will include an integrated grievance redress mechanism which will enable project-affected people to raise concerns or grievances, consistent with the accountability and rule of law human rights principle. The grievance mechanism is available to all, and designed to ensure it is free, effective and fair. This is detailed in the ESMF.

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

In accordance with UNDP procedure, a gender analysis has been conducted during the project preparation phase to identify the differences, needs, roles and priorities of women and men. Consultations were made with local communities, as well as representatives of provincial government agencies and civil society organizations. The project results framework contains measurable indicators related to gender equality and women's empowerment.

Gender and social inclusion training will be mandatory for project implementation staff and service providers. Knowledge products will be developed and disseminated, tailored to the literacy and cultural circumstances of the local project communities, to ensure equitable gender and social inclusion. Specific project activities are also proposed to support the engagement of women. The results of the gender analysis conducted during the project preparation phase will be integrated into further project design to ensure that gender-based differences are built into project activities as appropriate, and gender-disaggregated targets will be developed as indicators of project's success. In the process of observing gender equality, Serbian gender equality legislation and policy framework will be observed and relied upon. It will be ensured that project will be scored 1 as per the Atlas Gender Marker.

Specific gender roles have been integrated into the project and programme level implementation arrangements, including but not limited to the following:

Project activities will be designed in such a manner that gender specific issues can be taken into in the policy and regulatory amendments, when applicable. It will also ensure that equal training opportunities are provided for both men and women and that women are equally represented and supported to attend training. Awareness raising activities will involve participation and cooperation of women associations and women NGOs to support mainstreaming of gender considerations in awareness raising and information materials, to ensure that awareness raising is developed on the different energy consumption patterns and needs of men and women and to take gender differentiated priorities into account in energy management related activities otherwise.

Energy Management Information System (EMIS) and energy audits will enable the collection of gender disaggregated data, which is expected to provide the necessary data for policy makers to identify possible constraints as well as opportunities to address the needs of women and men in relation to the available energy services.

Based on the fundamental principles of promoting equality and combating discrimination, participation in the proposed project activities shall be guaranteed regardless of sex, racial or ethnic origin, religion or belief, age or sexual orientation. All contractors shall be requested to provide non-discriminate participation of men and women during the implementation phase of respective tasks, training and later employment.

The Gender Strategy will be monitored during project implementation by collecting gender specific data on the stakeholders addressed and involved into project activities as well as on the impact of those activities. Gender specific indicators has also been included into the project results framework. The improved energy efficiency and thermal comfort as a result of better monitoring of the energy performance of central government buildings (CGB) in general is foreseen to directly benefit the women since it is estimated that out of some 6800 employees, 65% are women.

In order to achieve the above, the Project Manager will appoint a gender focal point in the PMO who will implement and monitor the project level Gender Action Plan and support project focal points at PA Administration and site levels to mainstream gender into all project activities. The four PA pilot sites will each designate a staff member as a gender focal point who will assist in the implementation of the gender mainstreaming plan and support the project-recruited gender experts. A Project-recruited gender expert will support the project with gender training, monitoring & evaluation of site activities, and consultations with local communities. Gender mainstreaming objectives for the project will be championed and monitored by the Gender Expert and the project gender focal points, with back-up from the UNDP country office.



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

Mainstreaming environmental sustainability is in the core of project strategy by introducing and providing tools for environmentally sustainable management of all targeted public buildings in Serbia. By improving their energy efficiency, the project will effectively reduce Serbia's greenhouse gas emissions and help the country to meet its commitments under the Paris Climate Agreement, while also contributing to the sustainable development goals dealing with affordable and clean energy (SDG 7), sustainable cities and communities (SDG 11) and climate action (SDG 14).

Environmental sustainability is inherent in this project objective and outcomes. Under Component 1, the project will endeavor to ensure sustainability of the project outcomes through supporting the national PA reform process backed by reform laws, regulations, and guidelines, and through expanding coverage of Key Biodiversity Areas (KBAs) and increasing connectivity within the national PA system. Under Component 2, the establishment of demonstration sites of adaptive habitat management and rehabilitation will enhance key breeding, staging and wintering sites for globally significant migratory birds, with the goal of achieving mutually beneficial conservation and socioeconomic outcomes, respecting priorities of both conservation and sustainable development. Under Component 3 the requisite enabling conditions for sustaining the project results will be strengthened through targeted knowledge management, monitoring & evaluation, and gender mainstreaming and social inclusion. The project is also designed to strengthen the environmental management capacities of the provincial level conservation agencies, other provincial sectors, local governments, civil society, and community groups.

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

The project has been developed in close consultation with the key stakeholders and beneficiaries, including the Ministry of Mining and Energy, Ministry of Finance and other line ministries, UZZPRO, local (City) administration and local public utilities, energy and construction related NGOs and professional associations, universities and international organizations and financing institutions all of which will have roles in the project as project partners. It is also expected that a private sector have a key role in implementing the project ? primarily as a service provider for developing new features and functionalities for EMIS data management as well as for different elements of the actual building renovation, including energy audits, technical and financial feasibility analysis, actual construction work and monitoring of the results of the work done.

The project seeks to facilitate continuing contacts and co-operation between the different stakeholder groups at the national and international level by organizing seminars, workshops and other public events, thereby bringing project proponents, policy makers and potential investors / other donors together.

An on-line knowledge management platform (basically a website complemented by different social media channels) will be established among the first project activities in order to share up to date information of the project as well as to educate key project stakeholders and the general public on the key topics the project is dealing with, including a forum, in which these topics can be discussed and through which specific questions to the project management or other project participants on those topics can be made.

The project will furthermore provide opportunities for regional cooperation with countries that are implementing initiatives on buildings energy management in geopolitical, social and environmental contexts relevant to the proposed project in Serbia. Countries currently in the process of introducing EMIS include, among others, Armenia, Azerbaijan and Moldova.

A gender responsive approach has been developed through preparation of a Gender Analysis and Action plan. A Stakeholder Engagement Plan has also been developed. The ESMF developed in the course of the project preparation, foresees us of grievance procedures and specifies responsibilities for managing the grievance procedure.

No Free, Prior and Informed Consent (FPIC) by indigenous people is required for project activities.

The project Implementing Partner and the project management assigned by it has the overall responsibility for implementing the Stakeholder Engagement Plan with UNDP providing oversight. The project management may also assign certain tasks for implementing the plan for other parties such as the FME subject to a written agreement. The ultimate responsibility for ensuring the implementation of the plan at the adequate level also in this case, however, remains with the project Implementing Partner.

**Part B. Identifying and Managing Social and Environmental Risks**

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| <p><b>QUESTION 2:</b><br/>What are the Potential Social and Environmental Risks?</p> <p><i>Note: Complete SESP Attachment 1 before responding to Question 2.</i></p> | <p><b>QUESTION 3:</b> What is the level of significance of the potential social and environmental risks?</p> <p><i>Note: Respond to Questions 4 and 5 below before proceeding to Question 5</i></p> |   |  | <p><b>QUESTION 6:</b> Describe the assessment and management measures for each risk rated Moderate, Substantial or High</p> |
| <p><b>Risk Description</b><br/><i>(broken down by event, cause, impact)</i></p>  | <p><b>Impact and Likelihood</b><br/><i>(1-5)</i></p>  | <p><b>Significance</b><br/><i>(Low, Moderate Substantial, High)</i></p> | <p><b>Comments</b><br/><i>(optional)</i></p> | <p><b>Description of assessment and management measures for risks rated as Moderate, Substantial or High</b></p>            |

|   |                       |                        |  |  |
|---|-----------------------|------------------------|--|--|
| <p><b>Risk 1:</b> During their renovation, the central government office buildings will be closed. This could potentially restrict the availability of basic services provided within these buildings, which may harm especially marginalized individuals or groups who depend on the provision of these services and it may restrict access of employees to the place of work (Principle 1, Standards 3 and 5)</p> | <p>I = 4<br/>L =2</p> | <p><b>Moderate</b></p> | <p>This risk may materialize, if closing of a public building for renovation will limit people's access to the services it has provided before and to the place of work.</p> | <p>The risk pertains to Output 2.3 which belongs to a category 1b financing, i.e. the Output 2.3 is fully financed by Council of Europe Bank Loan. During the preparation of the project document, <a href="#">the Framework Loan Agreement LD 2025 (2016) between the Council of Europe Bank and the Government of Serbia for a Programme loan ?energy efficiency in central government buildings (OGRS 6/2020) -was signed and ratified in the Parliament on November 26, 2020 in a form of Law. In compliance with the loan Agreement, the Borrower through the MME shall implement the Programme in conformity with the requirements set forth in the Environmental and Social Safeguards Policy as adopted by CEB's Administrative Council's Resolution 1588 (2016)</a></p> |
|   |                       |                        |  | <p>The final screening SESP (2021) identifies that the impacts and risks are few in number, limited in scale, largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation.</p>  |
|   |                       |                        |  | <p>Consistency with the Council of Europe Bank Environmental and Social Safeguards was analyzed, according to which principles <i>Conditions and rights of workers</i> and <i>Protection of vulnerable groups</i> are triggered.</p> <p>The risk categorization is consistent with the CEB <a href="#">categorization namely the Category B (moderate) risks which have a limited number of potentially adverse environmental and social impacts, which are generally site-specific, largely reversible, and readily addressed through mitigation measures, which is consistent with SES moderate qualification of risks.</a></p>  |
|   |                       |                        |  | <p>Risk management measures:</p>   |
|   |                       |                        |  | <p>As an essential part of planning the renovation, the central government authorities need to ensure the continuation of similar services at an alternative location, which is still easily accessible to employees and also to marginalized individuals or groups. This risk can be mitigated through application of national legislation which was analyzed during final screening. Detailed evaluation</p>   |

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| <p><b>Risk 2:</b> The project might potentially reproduce discriminations against women, especially with regards to their participation in the design and implementation of the project or access to opportunities and benefits provided by project outcomes. (Principle 2)</p> | <p>I = 3<br/>L = 3</p> | <p><b>Moderate</b></p> | <p>The participation of women may not be adequately ensured, when, for instance, appointing and training new energy managers and auditors. Based on the monitoring of the ongoing EMIS project, there are still significantly fewer women than men, who have been trained for and appointed as municipal and central government buildings energy managers. The reasons for this, however, require further analysis. The Risk is related to the three project components.</p> | <p>The risk is present in all three project outputs, hence both Category 1a and Category 1b financing. <b>Output 2.3 is fully financed by Council of Europe Bank Loan.</b></p> <p>During the preparation of the project document, <a href="#">the Framework Loan Agreement LD 2025 (2016) between the Council of Europe Bank and the Government of Serbia for a Programme loan ?energy efficiency in in central government buildings (OGRS 6/2020) –was signed and ratified in the Parliament on November 26, 2020 in a form of Law. In compliance with the loan Agreement, the Borrower through the MME shall implement the Programme in conformity with the requirements set forth in the Environmental and Social Safeguards Policy as adopted by CEB?s Administrative Council?s Resolution 1588 (2016).</a></p> <p>- <a href="#">In relation to Outputs 2.1 and 2.2., the grant for the technical assistance through the Western Balkans Infrastructure Project Facility and the technical Assistance from the Slovak Inclusive Growth Account and the Spanish Cohesion Account grant were signed. Both for which separate agreements were signed between the Government of Serbia and the Council of Europe Bank. Pursuant to Article 3 of the Grant Agreements, the responsibility for the activities under the grant is with the Ministry of Energy and Mining. The Ministry is obliged to apply CEBs Environmental and Social Safeguards Policy as adopted by CEB?s Administrative Council?s Resolution 1588 (2016).</a></p> <p>The final screening SESP (2021) identifies that the impacts and risks are few in number, limited in scale, largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation.</p> <p>Consistency with the Council of Europe Bank Environmental and Social Safeguards was analyzed according to which CEB E&amp;S safeguard principle <i>Gender equality and non-discrimination</i> is triggered.</p> <p>The risk categorization is consistent with the CEB <a href="#">categorization whereas the Category B (moderate) risks have a</a></p> |
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| <p><b>Risk 3:</b> The outcomes of the Project may be sensitive or vulnerable to potential impacts of climate change (Standard 2)</p> | <p>I = 4<br/>L = 2</p> | <p><b>Moderate</b></p> | <p>In planning the renovation, there is a need to consider not only the current climate conditions, but the projected changes in average temperatures, precipitation and winds and eventual extreme weather conditions such as heat waves, heavy rains or stormy winds, which may put more stress on the building envelope or thermal conditions inside the buildings.</p> | <p>The risk pertains to <b>Output 2.3</b> which belongs to a category 1b financing, i.e. the Output 2.3 is fully financed by Council of Europe Bank Loan. During the preparation of the project document, <a href="#">the Framework Loan Agreement LD 2025 (2016) between the Council of Europe Bank and the Government of Serbia for a Programme loan ? energy efficiency in central government buildings (OGRS 6/2020) –was signed and ratified in the Parliament on November 26, 2020 in a form of Law. In compliance with the Loan Agreement, the Borrower through the MME shall implement the Programme in conformity with the requirements set forth in the Environmental and Social Safeguards Policy as adopted by CEB’s Administrative Council’s Resolution 1588 (2016).</a></p> <p>The final screening SESP (2021) identifies that the impacts and risks are few in number, limited in scale, largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation.</p> <p>Consistency with the Council of Europe Bank Environmental and Social Safeguards was checked according to which principles a) <i>Environmental principles, substantive standards and practices foreseen in EU Directives</i> b) <i>Climate change principles</i> are triggered.</p> <p>The risk categorization is consistent with the CEB <a href="#">categorization</a> <u>whereas, the Category B (moderate) risks have a limited number of potentially adverse environmental and social impacts, which are generally site-specific, largely reversible, and readily addressed through mitigation measures.</u></p> <p>Risk management measures</p> <p>In the repair and renovation plans of each building, the projected future impact of climate change with different scenarios has to be taken fully into account, when assessing and calculating, for instance, the requirements for maintaining comfortable thermal conditions inside the buildings or strength of the building outdoor structures to the extreme weather conditions. These issues will be considered during preparation of energy efficiency audits and at design stage. This risk will be mitigated through application of national</p> |
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| <p><b>Risk 4:</b> The elements of construction, operation or decommissioning during project's implementation may pose potential safety risks to local communities (Principle 3, Standard 3)</p> | <p>I = 4<br/>P = 2</p> | <p><b>Moderate</b></p> | <p>This risk is not fundamentally different from the risks associated with any other building construction works within the cities, but in any case should be properly monitored and managed during the project implementation stage.</p> | <p>The risk pertains to Output 2.3 which belongs to a category 1b financing, i.e. the Output 2.3 is fully financed by Council of Europe Bank Loan. During the preparation of the project document, <a href="#">the Framework Loan Agreement LD 2025 (2016) between the Council of Europe Bank and the Government of Serbia for a Programme loan ?energy efficiency in in central government buildings (OGRS 6/2020) –was signed and ratified in the Parliament on November 26, 2020 in a form of Law. In compliance with the loan Agreement, the Borrower through the MME shall implement the Programme in conformity with the requirements set forth in the Environmental and Social Safeguards Policy as adopted by CEB's Administrative Council's Resolution 1588 (2016)</a></p> <p>The final screening SESP (2021) identifies that the impacts and risks are few in number, limited in scale, largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation. Consistency with the Council of Europe Bank Environmental and Social Safeguards was checked according to which principles ?a) Stakeholder information and consultation b) Grievance procedure c) Community health and safety are triggered.</p> <p>The risk categorization is consistent with the CEB <a href="#">categorization whereas the Category B (moderate) risks have a limited number of potentially adverse environmental and social impacts, which are generally site-specific, largely reversible, and readily addressed through mitigation measures.</a></p> <p>Risk management measures</p> <p>As an essential part of planning the renovation, the local authorities need to ensure that the related works are not posing any safety risks for the population as required also by the Serbian laws Detailed explanation about the arrangements to mitigate this risk needs to be included into project plans for each building at early stages of project development and before they can be approved for implementation. Also, a grievance procedure will be established A framework approach will be addressed</p> |
|---|------------------------|------------------------|---|---|

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|---|------------------------|------------------------|--|--|
| <p><b>Risk 5:</b> Risks related to occupational health and safety during the renovation works and that the employment opportunities provided by the project may fail to comply with national and international labor standards (Standard 7)</p> | <p>I = 4<br/>P = 2</p> | <p><b>Moderate</b></p> | <p>This risk is not fundamentally different from the risks associated with any other ongoing construction works, but in any case should be properly monitored and managed during the project implementation stage.</p> | <p>The risk pertains to Output 2.3 which belongs to a category 1b financing, i.e. the Output 2.3 is fully financed by Council of Europe Bank Loan. During the preparation of the project document, <a href="#">the Framework Loan Agreement LD 2025 (2016) between the Council of Europe Bank and the Government of Serbia for a Programme loan ?energy efficiency in in central government buildings (OGRS 6/2020) -was signed and ratified in the Parliament on November 26, 2020 in a form of Law. In compliance with the loan Agreement, the Borrower through the MME shall implement the Programme in conformity with the requirements set forth in the Environmental and Social Safeguards Policy as adopted by CEB?s Administrative Council?s Resolution 1588 (2016)</a></p> <p>The final screening SESP (2021) identifies that the impacts and risks are few in number, limited in scale, largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation.</p> <p>Consistency with the Council of Europe Bank Environmental and Social Safeguards was assessed according to which principles <i>Conditions and rights of workers</i> is triggered.</p> <p>The risk categorization is consistent with the CEB <a href="#">categorization</a> <u>whereas, the Category B (moderate) risks have a limited number of potentially adverse environmental and social impacts, which are generally site-specific, largely reversible, and readily addressed through mitigation measures.</u></p> <p>Risk management measures</p> <p>Occupational Health Management Protocol will be designed as a part of the sub projects preparation phase for renovation of the buildings in compliance with Serbian legislation, The project will also produce an action plan and promotion materials to support, in particular companies and individuals involved into the renovation works, in compliance with SES and international standards, as of how to undertake preventive measures to ensure occupational safety of workers. As part of the project design, trainings and awareness raising will be organized for</p> |
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| <p><b>Risk 6:</b> The proposed project may result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values (Principle 3, Standard 4)</p> | <p>I = 4<br/>P = 2</p> | <p><b>Moderate</b></p> | <p>Many public buildings in the need of renovation also have historical, cultural and/or architectural values, which the planned renovation works may put at risk, if not properly taken into account.</p> | <p>The risk pertains to Output 2.3 which belongs to a category 1b financing, i.e. the Output 2.3 is fully financed by Council of Europe Bank Loan. During the preparation of the project document, <a href="#">the Framework Loan Agreement LD 2025 (2016) between the Council of Europe Bank and the Government of Serbia for a Programme loan ?energy efficiency in in central government buildings (OGRS 6/2020) -was signed and ratified in the Parliament on November 26, 2020 in a form of Law. In compliance with the loan Agreement, the Borrower through the MME shall implement the Programme in conformity with the requirements set forth in the Environmental and Social Safeguards Policy as adopted by CEB?s Administrative Council?s Resolution 1588 (2016)</a></p> <p>The final screening SESP (2021) identifies that the impacts and risks are few in number, limited in scale, largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation. Consistency with the Council of Europe Bank Environmental and Social Safeguards was checked according to which <i>the Bank funds projects identified as cultural heritage/cultural good in national legislation.</i></p> <p>The risk categorization is consistent with the CEB <a href="#">categorization whereas , the Category B (moderate) risks have a limited number of potentially adverse environmental and social impacts, which are generally site-specific, largely reversible, and readily addressed through mitigation measures.</a></p> <p>Risk management measures</p> <p>All renovation works of objects of historical, cultural or architectural value(s) need to be carefully planned in close co-operation with the experts and authorities with a duty to protect these values, while also taking into account the views of different civil society organizations affiliated with the subject. No permission for the requested renovation works shall be given, before it can be ensured that the eventual historical, cultural and architectural values of the targeted building have been adequately ensured, which is ensured by permitting procedures of national authorities.</p> |
|---|------------------------|------------------------|--|---|

|   |                        |                        |   |   |
|---|------------------------|------------------------|---|---|
| <p><b>Risk 7:</b> The proposed measures and retrofit projects may generate waste that is harmful to the environment and human health, if not properly managed and disposed. (Principle 3, Standard 8)</p> | <p>I = 3<br/>P = 3</p> | <p><b>Moderate</b></p> | <p>The renovation of old buildings may always produce waste which, if not properly stored, treated and disposed, may pose a risk to the environment. The risk is related to Outcome 2</p> | <p>The risk pertains to output 2.3 which is a category 1b financing, i.e. the Output 2.3 is fully financed by Council of Europe Bank Loan. During the preparation of the project document, <a href="#">The Framework Loan Agreement LD 2025 (2016) between the Council of Europe Bank and the Government of Serbia for a programme loan ?energy efficiency in in central government buildings (OGRS 6/2020)2 -was signed and ratified in the Parliament on November 26, 2020 in a form of Law. In compliance with the loan Agreement, the Borrower through the MME shall implement the Programme in conformity with the requirements set forth in the Environmental and Social Safeguards Policy as adopted by CEB?s Administrative Council?s Resolution 1588 (2016)</a></p> <p>The final screening SESP (2021) identifies that the impacts and risks are few in number, limited in scale, largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation. Consistency with the Council of Europe Bank Environmental and Social Safeguards was checked according to which <i>a) stakeholder information and consultation b) grievance procedure, c) environmental principles, substantive standards and practices foreseen in EU Directives d) climate change principles are triggered</i></p> <p>. The risk categorization is consistent with the CEB <a href="#">categorization whereas the Category B (moderate) risks have a limited number of potentially adverse environmental and social impacts, which are generally site-specific, largely reversible, and readily addressed through mitigation measures.</a></p> <p>Risk management measures</p> <p>The project will mitigate this risk by having a requirement for all investment proposals seeking for project support to include an adequate waste management plan within the project design and include in tender documents All proposals should also have a broader impact assessment, which beside waste issue shall address also the other identified risks. A</p> |
|---|------------------------|------------------------|---|---|

|  |  |          |   |  |
|--|--|----------|---|--|
| Other risks?   |  |          |   |  |
| <b>QUESTION 4: What is the overall project risk categorization?</b>  |  |          |   |  |
|  |  |          |   |  |
|  | <i>Low Risk</i>  | ?        |   | Given that no high risk or substantial risk elements were identified during the final screening the project as a whole can be assessed as a moderate risk project. During project preparation phase ESMF will be developed in order to address the identified risks. |
|  | <i>Moderate Risk</i>   | x        |   |  |
|  | <i>Substantial Risk</i>  | ?        |   |  |
|  | <i>High Risk</i>   | ?        |   |  |
| <b>QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)</b> |  |          |   |  |
| Question only required for Moderate, Substantial and High Risk projects  |  |          |   |  |
|  | <u><i>Is assessment required?</i></u><br><i>(check if ?yes?)</i> | <u>X</u> |   | <i>Status?</i><br><i>(completed, planned)</i>  |
|  | <i>if yes, indicate overall type and status</i>                  |          | X Targeted assessment(s)                          | Completed during PPG: gender analysis, stakeholder analysis<br><br>Planned during implementation: are indicated in ESMF Table 3  |
|  |  | ?        | ESIA (Environmental and Social Impact Assessment) |  |

|  |   |   |  |   |
|--|---|---|--|---|
|  |   | ? | SESA<br>(Strategic<br>Environmental<br>and Social<br>Assessment)                             |   |
| <b><i>Are management plans required? (check if ?yes)</i></b>                                 | X |   |  |   |
| <b><i>If yes, indicate overall type</i></b>  |   | X | Targeted management plans  | Completed during PPG: Gender Action Plan, Stakeholder Engagement Plan |
|  |   | ? | ESMP<br>(Environmental and Social Management Plan which may include range of targeted plans) |   |
|  |   | X | ESMF<br>(Environmental and Social Management Framework)                                      | To be completed prior to the project document signature               |
| <b><i>Based on identified risks, which Principles/Project-level Standards triggered?</i></b> |   |   | <b>Comments (not required)</b>   |   |
| <b><i>Overarching Principle: Leave No One Behind</i></b>                                     |   |   |  |   |
| <b><i>Human Rights</i></b>   | X |   |  |   |
| <b><i>Gender Equality and Women's Empowerment</i></b>  | X |   |  |   |
| <b><i>Accountability</i></b>   | X |   |  |   |

|  |   |  |
|--|---|--|
| <b><i>1. Biodiversity Conservation and Sustainable Natural Resource Management</i></b> | ? |  |
| <b><i>2. Climate Change and Disaster Risks</i></b>                                     | X |  |
| <b><i>3. Community Health, Safety and Security</i></b>                                 | X |  |
| <b><i>4. Cultural Heritage</i></b>   | X |  |
| <b><i>5. Displacement and Resettlement</i></b>   | X |  |
| <b><i>6. Indigenous Peoples</i></b>  | ? |  |
| <b><i>7. Labour and Working Conditions</i></b>   | X |  |
| <b><i>8. Pollution Prevention and Resource Efficiency</i></b>                          | X |  |

### **Final Sign Off**

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

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

# SESP Attachment 1. Social and Environmental Risk Screening Checklist

| <b>Checklist Potential Social and Environmental Risks</b>  |                            |
|--|----------------------------|
| <p><b>INSTRUCTIONS:</b> The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the <a href="#">SES toolkit</a> for further guidance on addressing screening questions.</p> |                            |
| <p><b>Overarching Principle: Leave No One Behind</b></p> <p><b>Human Rights</b></p>  | <b>Answer<br/>(Yes/No)</b> |
| P.1 Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?   | No                         |
| P.2 Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?  | No                         |
| P.3 Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?  | No                         |
| <i>Would the project potentially involve or lead to:</i>   |                            |
| P.4 adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?  | No                         |
| P.5 inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? [1]   | No                         |
| P.6 restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?   | Yes                        |
| P.7 exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?   | No                         |
| <b>Gender Equality and Women's Empowerment</b>   |                            |
| P.8 Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?   | No                         |
| <i>Would the project potentially involve or lead to:</i>   |                            |
| P.9 adverse impacts on gender equality and/or the situation of women and girls?  | No                         |
| P.10 reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?   | Yes                        |

|  |     |
|--|-----|
| P.11 limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?<br><i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i> | Yes |
| P.12 exacerbation of risks of gender-based violence?<br><i>For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.</i>   | No  |
| <b>Sustainability and Resilience:</b> Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below   |     |
| <b>Accountability</b>  |     |
| <i>Would the project potentially involve or lead to:</i>   |     |
| P.13 exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?   | No  |
| P.14 grievances or objections from potentially affected stakeholders?  | Yes |
| P.15 risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?   | No  |
| <b>Project-Level Standards</b>   |     |
| <b>Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management</b>   |     |
| <i>Would the project potentially involve or lead to:</i>   |     |
| 1.1 adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?<br><i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>  | No  |
| 1.2 activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?  | No  |
| 1.3 changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)  | No  |
| 1.4 risks to endangered species (e.g. reduction, encroachment on habitat)?   | No  |
| 1.5 exacerbation of illegal wildlife trade?  | No  |
| 1.6 introduction of invasive alien species?  | No  |

|  |  |     |
|--|--|-----|
| 1.7  | adverse impacts on soils?  | No  |
| 1.8  | harvesting of natural forests, plantation development, or reforestation?   | No  |
| 1.9  | significant agricultural production?   | No  |
| 1.10   | animal husbandry or harvesting of fish populations or other aquatic species?   | No  |
| 1.11   | significant extraction, diversion or containment of surface or ground water?<br><i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>   | No  |
| 1.12   | handling or utilization of genetically modified organisms/living modified organisms?[2]  | No  |
| 1.13   | utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)[3]   | No  |
| 1.14   | adverse transboundary or global environmental concerns?  | No  |
| <b>Standard 2: Climate Change and Disaster Risks</b>     |  |     |
| <i>Would the project potentially involve or lead to:</i> |  |     |
| 2.1  | areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?   | No  |
| 2.2  | outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters?<br><i>For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes</i>  | Yes |
| 2.3  | increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)?<br><i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i> | No  |
| 2.4  | increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?  | No  |
| <b>Standard 3: Community Health, Safety and Security</b> |  |     |
| <i>Would the project potentially involve or lead to:</i> |  |     |
| 3.1  | construction and/or infrastructure development (e.g. roads, buildings, dams)?<br>(Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)  | No  |
| 3.2  | air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?   | Yes |
| 3.3  | harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?  | Yes |



|  |     |
|--|-----|
| 3.4 risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?   | No  |
| 3.5 transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?   | Yes |
| 3.6 adverse impacts on ecosystems and ecosystem services relevant to communities? health (e.g. food, surface water purification, natural buffers from flooding)?   | No  |
| 3.7 influx of project workers to project areas?  | No  |
| 3.8 engagement of security personnel to protect facilities and property or to support project activities?  | No  |
| <b>Standard 4: Cultural Heritage</b>   |     |
| <i>Would the project potentially involve or lead to:</i>   |     |
| 4.1 activities adjacent to or within a Cultural Heritage site?   | No  |
| 4.2 significant excavations, demolitions, movement of earth, flooding or other environmental changes?  | No  |
| 4.3 adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts) | Yes |
| 4.4 alterations to landscapes and natural features with cultural significance?   | No  |
| 4.5 utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?   | No  |
| <b>Standard 5: Displacement and Resettlement</b>   |     |
| <i>Would the project potentially involve or lead to:</i>   |     |
| 5.1 temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?   | Yes |
| 5.2 economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions ? even in the absence of physical relocation)?  | No  |
| 5.3 risk of forced evictions?[4]   | No  |
| 5.4 impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?   | No  |
| <b>Standard 6: Indigenous Peoples</b>  |     |
| <i>Would the project potentially involve or lead to:</i>   |     |
| 6.1 areas where indigenous peoples are present (including project area of influence)?  | No  |
| 6.2 activities located on lands and territories claimed by indigenous peoples?   | No  |

|   |     |
|---|-----|
| 6.3 impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?<br><i>If the answer to screening question 6.3 is ?yes?, then the potential risk impacts are considered significant and the project would be categorized as either Substantial Risk or High Risk</i> | No  |
| 6.4 the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?  | No  |
| 6.5 the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?  | No  |
| 6.6 forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?<br><i>Consider, and where appropriate ensure, consistency with the answers under Standard 5 above</i>  | No  |
| 6.7 adverse impacts on the development priorities of indigenous peoples as defined by them?   | No  |
| 6.8 risks to the physical and cultural survival of indigenous peoples?  | No  |
| 6.9 impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?<br><i>Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.</i>   | No  |
| <b>Standard 7: Labour and Working Conditions</b>  |     |
| <i>Would the project potentially involve or lead to: (note: applies to project and contractor workers)</i>  |     |
| 7.1 working conditions that do not meet national labour laws and international commitments?   | Yes |
| 7.2 working conditions that may deny freedom of association and collective bargaining?  | No  |
| 7.3 use of child labour?  | No  |
| 7.4 use of forced labour?   | No  |
| 7.5 discriminatory working conditions and/or lack of equal opportunity?   | No  |
| 7.6 occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?  | Yes |
| <b>Standard 8: Pollution Prevention and Resource Efficiency</b>   |     |
| <i>Would the project potentially involve or lead to:</i>  |     |

|     |  |     |
|-----|--|-----|
| 8.1 | the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?   | Yes |
| 8.2 | the generation of waste (both hazardous and non-hazardous)?  | Yes |
| 8.3 | the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?   | Yes |
| 8.4 | the use of chemicals or materials subject to international bans or phase-outs?<br><i>For example, DDT, PCBs and other chemicals listed in international conventions such as the <a href="#">Montreal Protocol</a>, <a href="#">Minamata Convention</a>, <a href="#">Basel Convention</a>, <a href="#">Rotterdam Convention</a>, <a href="#">Stockholm Convention</a></i> | No  |
| 8.5 | the application of pesticides that may have a negative effect on the environment or human health?  | No  |
| 8.6 | significant consumption of raw materials, energy, and/or water?  | No  |

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[1] Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

[2] See the [Convention on Biological Diversity](#) and its [Cartagena Protocol on Biosafety](#).

[3] See the [Convention on Biological Diversity](#) and its [Nagoya Protocol](#) on access and benefit sharing from use of genetic resources.

[4] Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

#### Supporting Documents

Upload available ESS supporting documents.

Title

Module

Submitted

| Title                                    | Module              | Submitted |
|--|---------------------|-----------|
| 6388_Serbia EE_Annex<br>6_SESP__2021 ver | CEO Endorsement ESS |           |
| 6388_Serbia EE_Annex<br>6_SESP__2021 ver | CEO Endorsement ESS |           |

**ANNEX A: PROJECT RESULTS FRAMEWORK** (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

# Project Results Framework

|  |  |                 |                            |                                      |
|--|--|-----------------|----------------------------|--------------------------------------|
| <b>This project will contribute to the following Sustainable Development Goal (s):</b> #5 Gender equality, #7 Affordable and clean energy, #11 Sustainable cities and communities, #13 Climate Action  |  |                 |                            |                                      |
| <b>This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD):</b> Serbia adopts and implements climate change and environmentally friendly strategies that increase community resilience, decrease carbon footprint and boost the benefits of national investments |  |                 |                            |                                      |
|  | <b>Objective and Outcome Indicators</b><br><br>(no more than a total of 20 indicators)   | <b>Baseline</b> | <b>Mid-term Target</b>     | <b>End of Project Target</b>         |
| <b>Project Objective:</b><br>Reduction of greenhouse gas emissions by improving the energy efficiency and promoting the use of renewable energy sources in public buildings with a particular focus on state owned buildings   | <u><b>Mandatory Indicator 1:</b></u> Number of direct project beneficiaries disaggregated by gender (individual people)                          | NA              | Males: 500<br>Females: 500 | Males: 5 000<br>Females: 5 000       |
|  | <u><b>Mandatory GEF Core Indicators:</b></u><br><br><i>Indicator 2:</i> Direct and indirect lifetime GHG emissions avoided (metric tons of CO2e) | NA              | Direct: 0<br>Indirect: 0   | Direct: 146 000<br>Indirect: 300 000 |
|  | <i>Indicator 3:</i> Energy saved (TJ)  | NA              | 0 TJ                       | 2 340 TJ                             |
|  | <i>Indicator 4:</i> Increase in installed renewable energy capacity (MW)   | NA              | 0 MW                       | 1 MW                                 |
| <b>Project component 1</b>   | <b>Enabling policy framework and capacity building for energy audits and energy management</b>   |                 |                            |                                      |

|   |   |    |   |   |
|---|---|----|---|---|
| <b>Project Outcome 1:</b><br>An official energy audit system and improved energy management with a particular focus on central and provincial government owned buildings and buildings which fall in competence of public service institutions (such as health justice, education, culture, etc.) | <i>Indicator 5:</i> Status of the rulebooks listed under output 1.1 in chapter IV of the Prodoc   | NA | Over 50% of the rulebooks listed under output 1.1 drafted                       | All six rulebooks listed under output 1.1 formally adopted                  |
|   | <i>Indicator 6:</i> The number and total floor area of additional buildings belonging to the B-2 category included into EMIS together with appointed and adequately trained energy managers   | NA | An additional 40 buildings with the total floor area of at least 0,5 million m2 | An additional 80 buildings with the total floor area of at least 1 mill. m2 |
| <b>Outputs to achieve Outcome 1</b>   | Output 1.1: Required bylaws and rulebooks for official energy audits finalized, including a rulebook on: i) energy audits reports; ii) methodology for conducting energy audits; iii) examination of energy auditors; iv) training of energy auditors and payment of trainings costs; v) types of data, deadlines, manner and forms used to provide data on conducted energy audit; and vi) Energy Management Information System and viii) mandatory requirement for all buildings to appoint energy managers<br>Output 1.2: Upgraded EMIS software to include new functionalities to facilitate, among others, automatic data transfer and data analysis.<br>Output 1.3: A full licensing system for energy auditors developed and in place<br>Output 1.4: Establishment of an EMIS help desk with Help Desk Manager and trained students to support the building managers and other key stakeholders to operate with EMIS<br>Output 1.5: At least 30 buildings of B-2 category equipped with smart meters and other required hard- and software for including them in EMIS.<br>Output 1.6: At least 80 energy managers of B-2 category buildings appointed and adequately trained<br>Output 1.7: At least 80 large public buildings with the total floor area of approximately 1 million m2 included into EMIS.<br>Output 1.8: A methodology for conducting energy audits and calculating buildings' energy performance in accordance with the state of art EU standards and methodologies adapted into Serbian conditions and taken into use<br>Output 1.9: Capacity of energy auditors and other key stakeholders built to use the agreed methodology<br>Output 1.10: An analysis and related recommendations for eventually required institutional changes completed |    |   |   |

|   |   |    |  |  |
|---|---|----|--|--|
| <b>Project component 2</b>  | <b>Catalyzing building related EE and RE investments</b>  |    |  |  |
| <b>Outcome 2:</b><br>Catalyzing capital investments in energy efficiency with a particular focus on central government owned buildings. | <i>Indicator 7:</i> Number of renovated buildings   | NA | 0  | 28   |
|   | <i>Indicator 8:</i> Amount of investments for implemented energy saving and/renewable energy measures by using data from and monitored by EMIS  | NA | 0  | US\$ 40,000,000  |
| <b>Outputs to achieve Outcome 2</b>   | <p>Output 2.1 Detailed energy audits for at least 28 large Government buildings</p> <p>Output 2.2 Final investment proposals with related technical design, feasibility studies and financial analysis for all those buildings that based on the results of the audits appear to meet the agreed technical and financing criteria for renovation.</p> <p>Output 2.3 Completed EE and RE renovation of at least 28 Central Government buildings.</p> |    |  |  |
| <b>Project component 3</b>  | <b>Monitoring, evaluation and outreach for scaling up the investments</b>   |    |  |  |
| <b>Outcome 3:</b><br>Monitoring, evaluation and outreach for scaling up the investments   | <i>Indicator 9:</i> Status of project reports, workshops and KM platforms   | NA | Inception report and workshop completed, project's KM web-site up and running and interanational EMIS workshop organised | Final project report, terminal evaluation and final workshop completed |
|   | <i>Indicator 10:</i> Number of people disaggregated by gender reached by project's knowledge management and information dissemination activities  | NA | Males: 500<br>Females: 500   | Males: 1 000<br>Females: 1 000   |

|   |   |
|---|---|
| <b>Outputs to achieve</b><br><b>Outcome 3</b> | Output 3.1 Project inception report and workshop and international EMIS workshop<br>Output 3.2 Project web-site that can be continued to be used and updated also after the project end<br>Output 3.3 An international EMIS workshop<br>Output 3.4 Final project report, including monitored results of the supported EE and RE investment projects, a study of lessons learnt and an analysis and related recommendations for scaling up the project results.<br>Output 3.5 Project terminal evaluation<br>Output 3.6 Final project workshop |
|---|---|



**ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).**

The GEF Secretariat comments at the PIF/Work Program Inclusion to be considered at the time of the CEO endorsement/approval include the following:

1. In the PPG stage, please use the GEF recommended GHG accounting methodology to calculate CO2 emissions. Particularly for the consequential emission reduction amount. It seems that the amount shown in the PIF is too small, given that the country has 27 million m2 of floor area of public buildings.
2. At the CEO Approval stage, please make sure that the UNDP will not take any executing functions in Serbia for this GEF project.

The comments have been addressed as follows:

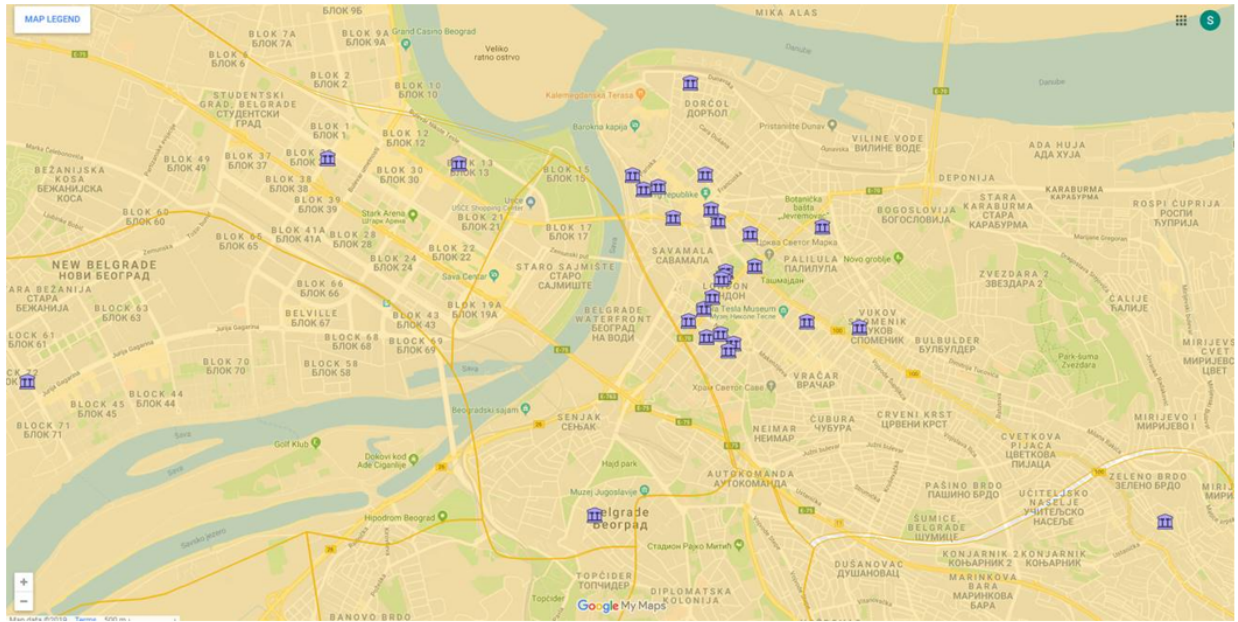
1. The project GHG reduction analysis is presented in Annex 13 of the project document following the "Guidelines for Greenhouse Gas Emissions Accounting and Reporting for GEF Projects" presented to the GEF Council in 48th meeting in June 2015 and the methodology adopted by the GEF in 2013 for energy efficiency projects "Calculating Greenhouse Gas Benefits of the Global Environment Facility Energy Efficiency Projects (Version 1.0).
2. No execution functions is taken by UNDP for this GEF project

**ANNEX C: Status of Utilization of Project Preparation Grant (PPG).  
(Provide detailed funding amount of the PPG activities financing status in the table below:**

| <i>Project Preparation Activities Implemented</i>  | <i>GEF Amount (\$)</i> |                             |                         |
|--|------------------------|-----------------------------|-------------------------|
|  | <i>Budgeted Amount</i> | <i>Amount Spent to date</i> | <i>Amount Committed</i> |
| Component A: Preparatory Technical Studies & Reviews   | 38,000                 | 10,000                      | 28,000                  |
| Component B: Formulation of the NCE VF Project Document, CEO Endorsement Request, and Mandatory and Project Specific Annexes | 9,000                  | 7,950                       | 1,050                   |
| Component C: Validation Workshop and Report  | 3,000                  | 653                         | 2,347                   |
| <b>Total</b>   | <b>50,000</b>          | <b>18,603</b>               | <b>31,397</b>           |

**ANNEX D: Project Map(s) and Coordinates**

**Please attach the geographical location of the project area, if possible.**



Project Sites marked in purple. Location is the City of Belgrade in Serbia.

<https://www.google.com/maps/d/u/0/edit?mid=1qZApZHjZK3FcY1uzZpAkkCMHUpZj-Lvr&usp=sharing>

The nearest border point is with Romania and it is 95 km from Belgrade.

**Coordinates of project sites**

| <b>Building No</b> | <b>Latitude</b> | <b>Longitude</b> |
|--------------------|-----------------|------------------|
| 1                  | 44.8190139      | 20.4602799       |
| 2                  | 44.8157043      | 20.4610747       |
| 3                  | 44.827619       | 20.4583408       |
| 4                  | 44.8178386      | 20.4540221       |
| 5                  | 44.8133613      | 20.4663075       |
| 6                  | 44.8093836      | 20.4627728       |
| 7                  | 44.8175805      | 20.4520891       |
| 8                  | 44.7862116      | 20.5216936       |
| 9                  | 44.8145756      | 20.4620526       |
| 10                 | 44.8039563      | 20.4624032       |
| 11                 | 44.8051279      | 20.4738783       |
| 12                 | 44.8200424      | 20.4274299       |
| 13                 | 44.8205288      | 20.4099106       |
| 14                 | 44.8090979      | 20.4624656       |
| 15                 | 44.8030234      | 20.4641005       |
| 16                 | 44.8023396      | 20.4633836       |
| 17                 | 44.8148911      | 20.4559899       |
| 18                 | 44.7868162      | 20.445558        |
| 19                 | 44.8045444      | 20.4809201       |
| 20                 | 44.8051725      | 20.4581249       |
| 21                 | 44.8036496      | 20.4604837       |
| 22                 | 44.8189179      | 20.4506463       |
| 23                 | 44.7994281      | 20.3698199       |
| 24                 | 44.8140487      | 20.4759541       |
| 25                 | 44.8074191      | 20.4612685       |
| 26                 | 44.8063056      | 20.4601669       |
| 27                 | 44.8103428      | 20.4668913       |
| 28                 | 44.8098476      | 20.46306         |

**ANNEX E: Project Budget Table**

**Please attach a project budget table.**

| Expenditure Category | Detailed Description   | Component (USDeq.) |                   |                   |                   |                   |                   |           |       |       | Total (US Deq.) | Responsible Entity                 |
|----------------------|--|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------|-------|-------|-----------------|------------------------------------|
|                      |  | Component 1        |                   | Component 2       |                   | Component 3       |                   | Sub-Total | M & E | PM C  |                 | (Executing Entity receiving funds) |
|                      |  | Sub-component 1.1  | Sub-component 2.1 | Sub-component 2.1 | Sub-component 2.2 | Sub-component 3.1 | Sub-component 3.2 |           |       |       |                 |                                    |
| Equipment            | Communication costs  |                    |                   |                   |                   |                   |                   | 0         |       | 4,000 | 4,000           | MME                                |
| Equipment-Vehicle    | Cost sharing of building EE retrofits, incl. tentatively smart meters of about USD 500 each + selected renewable energy investments such as roof-top PV systems with approximate costs of USD 1,200 per kWp for 100 kWp in total |                    |                   |                   | 220,000           |                   |                   | 220,000   |       |       | 220,000         | FME                                |

|  |  |  |  |  |  |  |  |        |  |       |        |     |
|--|--|--|--|--|--|--|--|--------|--|-------|--------|-----|
| <b>Vehicles</b>                          | ICT equipment and furniture for the PMU staff and office, as needed  |  |  |  |  |  |  | 0      |  | 3,000 | 3,000  | MME |
| <b>Contractual Services - Individual</b> | Contribution of the MME technical task manager by 135 weeks over 5 years with \$ 400 per week to Outputs 1.1-1.3 under Outcome 1 |  |  |  |  |  |  | 54,000 |  |       | 54,000 | MME |
| <b>Contractual Services - Individual</b> | Contribution of the FME Technical task manager by 120 weeks over 5 years with \$400 per week to Outputs 1.4-1.10 under Outcome 1 |  |  |  |  |  |  | 48,000 |  |       | 48,000 | FME |

|  |  |  |  |               |              |  |  |               |  |               |            |
|--|--|--|--|---------------|--------------|--|--|---------------|--|---------------|------------|
| <p><b>Contra<br/>ctual<br/>Service<br/>s -<br/>Individ</b></p> | <p>Contribution of the MME technical task manager by 120 weeks over 5 years with \$ 400 per week to Output 2.3 under Outcome 2</p> |  |  | <p>48,000</p> |              |  |  | <p>48,000</p> |  | <p>48,000</p> | <p>MME</p> |
| <p><b>Contra<br/>ctual<br/>Service<br/>s -<br/>Individ</b></p> | <p>Contribution of the FME Task manager by 130 weeks over 5 years with \$400 per week to Outputs 2.1-2.2 under Outcome 2</p>       |  |  | <p>52,000</p> |              |  |  | <p>52,000</p> |  | <p>52,000</p> | <p>FME</p> |
| <p><b>Contra<br/>ctual<br/>Service<br/>s -<br/>Individ</b></p> | <p>Contribution of the MME technical task manager by 5 weeks with \$ 400 per week to Outputs 3.1 and 3.5 under Outcome 3</p>       |  |  |               | <p>2,000</p> |  |  | <p>2,000</p>  |  | <p>2,000</p>  | <p>MME</p> |

|  |  |               |  |  |  |  |               |              |               |               |     |
|--|--|---------------|--|--|--|--|---------------|--------------|---------------|---------------|-----|
| <b>Contractual Services - Individual</b> | Contribution of the FME Technical task manager by 10 weeks over 5 years with \$400 per week to Outputs 3.2-3.4 and 3.6 under Outcome 3                                       |               |  |  |  |  | <i>4,000</i>  | <i>4,000</i> |               | <i>4,000</i>  | FME |
| <b>Contractual Services - Individual</b> | GEF contribution of project manager by 140 weeks with \$450 per week over 5 years and project assistant by 140 weeks with \$ 225 per week over 5 years to project management |               |  |  |  |  | <i>0</i>      |              | <i>94,500</i> | <i>94,500</i> | MME |
| <b>Contractual Services ? Company</b>    | Maintenance and further development of EMIS software   | <i>80,000</i> |  |  |  |  | <i>80,000</i> |              |               | <i>80,000</i> | MME |





|   |  |  |               |               |  |  |               |               |  |               |            |
|---|--|--|---------------|---------------|--|--|---------------|---------------|--|---------------|------------|
| <p><b>International Consultants</b></p> | <p>International project adviser support for Outcome 1, including support for adaptive management and methodology development for energy audits and calculation of buildings' energy performance. Weekly rate \$3,750 with 20 workweeks in total</p> |  | <p>75,000</p> |               |  |  |               | <p>75,000</p> |  | <p>75,000</p> | <p>FME</p> |
| <p><b>International Consultants</b></p> | <p>International project advisor support for Outcome 2. Weekly rate \$3,750 with 20 workweeks in total</p>   |  |               | <p>75,000</p> |  |  | <p>75,000</p> |               |  | <p>75,000</p> | <p>FME</p> |



|                                 |  |  |                       |  |  |  |                       |  |  |                       |            |
|---------------------------------|--|--|-----------------------|--|--|--|-----------------------|--|--|-----------------------|------------|
| <p><b>Local Consultants</b></p> | <p>EMIS helpdesk and institutional analysis and development. For EMIS help desk. 1 part time help-desk managers with a weekly rate of \$350 for 160 weeks in total, and part-time student positions for 3 students with a weekly rate of \$100 per week for 250 weeks in total over 5 years. For institutional analysis and development local expert costs \$1,000 per week for 20 weeks</p> |  | <p><i>151,000</i></p> |  |  |  | <p><i>151,000</i></p> |  |  | <p><i>151,000</i></p> | <p>FME</p> |
|---------------------------------|--|--|-----------------------|--|--|--|-----------------------|--|--|-----------------------|------------|

|                                       |   |  |              |  |               |              |               |  |  |  |               |  |  |               |     |
|---------------------------------------|---|--|--------------|--|---------------|--------------|---------------|--|--|--|---------------|--|--|---------------|-----|
| <b>Local Consultants</b>              | Inception report and final evaluation. Local expert costs with a weekly rate of \$1,000 for 3 and 6 weeks respectively. |  |              |  |               |              | <i>9,000</i>  |  |  |  | <i>9,000</i>  |  |  | <i>9,000</i>  | MME |
| <b>Local Consultants</b>              | Final project report  |  |              |  |               |              | <i>10,000</i> |  |  |  | <i>10,000</i> |  |  | <i>10,000</i> | FME |
| <b>Trainings, Workshops, Meetings</b> | Co-ordination, KM and training workshops  |  | <i>8,000</i> |  |               |              |               |  |  |  | <i>8,000</i>  |  |  | <i>8,000</i>  | FME |
| <b>Trainings, Workshops, Meetings</b> | Co-ordination, KM and training workshops  |  |              |  | <i>16,000</i> |              |               |  |  |  | <i>16,000</i> |  |  | <i>16,000</i> | FME |
| <b>Trainings, Workshops, Meetings</b> | Inception workshop  |  |              |  |               | <i>2,000</i> |               |  |  |  | <i>2,000</i>  |  |  | <i>2,000</i>  | MME |
| <b>Trainings, Workshops, Meetings</b> | Mid-term international EMIS workshop (\$12,000) and final project workshop (\$8,500)                                    |  |              |  |               |              | <i>20,500</i> |  |  |  | <i>20,500</i> |  |  | <i>20,500</i> | FME |

|                              |                                       |         |         |        |         |        |        |           |  |         |           |     |
|------------------------------|---------------------------------------|---------|---------|--------|---------|--------|--------|-----------|--|---------|-----------|-----|
| <b>Travel</b>                | International and local expert travel |         | 4,000   |        |         |        |        | 4,000     |  |         | 4,000     | FME |
| <b>Travel</b>                | International and local expert travel |         |         |        | 4,000   |        |        | 4,000     |  |         | 4,000     | FME |
| <b>Travel</b>                | International and local expert travel |         |         |        |         | 5,000  |        | 5,000     |  |         | 5,000     | MME |
| <b>Travel</b>                | Project management related travel     |         |         |        |         |        |        | 0         |  | 4,500   | 4,500     | MME |
| <b>Office Supplies</b>       | Office supplies                       |         |         |        |         |        |        | 0         |  | 4,000   | 4,000     | MME |
| <b>Other Operating Costs</b> | Annual financial audits               |         |         |        |         |        |        | 0         |  | 15,000  | 15,000    | MME |
| <b>Grand Total</b>           |                                       | 164,000 | 411,000 | 48,000 | 562,000 | 40,500 | 54,500 | 1,280,000 |  | 125,000 | 1,405,000 |     |

**ANNEX F: (For NGI only) Termsheet**

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

**ANNEX G: (For NGI only) Reflows**

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencies is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

**ANNEX H: (For NGI only) Agency Capacity to generate reflows**

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).