

# TERMS OF REFERENCE

## Supervision of works

UNDP/GCF-BiH10/00103203-RFP-CQ-CS-21-23-FRS

### 1. BACKGROUND

The Environmental Protection and Energy Efficiency Fund of Republic of Srpska has been financed by UNDP/GCF towards the cost of an Scaling-up Investments in Low-Carbon Public Buildings in Bosnia and Herzegovina. The project development objective is to demonstrate the benefits of energy efficiency improvements in public sector buildings and support the development of scalable energy efficiency financing models.

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The objective of the Energy Efficiency Project's corresponds to goals underlined in the Law on Spatial Planning and Construction of Republic of Srpska (Official Gazette of Republic of Srpska No. 40/13, 106/15, 3/16 and 84/19) and the Law on Energy Efficiency of Republic of Srpska, adopted in 2013.

Scaling-up Investments in Low-Carbon Public Buildings in Bosnia and Herzegovina will support energy efficiency investments in schools, hospitals and clinic centers. A small number of other public facilities (e.g., elderly homes, orphanages, other administrative buildings) may also be included. The project will finance energy efficiency upgrades/renovations of buildings, as well as related technical consultancy services (e.g., energy audits, technical and social monitoring and evaluation, technical designs, supervision and subproject commissioning).

These investments will reduce the energy consumption of selected public buildings, and demonstrate the economic viability of energy efficiency improvements, including reduced recurring energy costs and associated public expenditures. In addition, the subprojects will generate demonstrable co-benefits, such as reduced CO<sub>2</sub> emissions and improved indoor comfort levels (e.g., improved indoor temperature, better lighting and indoor air quality). The results indicators against which the implementation progress of Scaling-up Investments in Low-Carbon Public Buildings in Bosnia and Herzegovina will be measured against include: lifetime energy savings, lifetime fuel savings, greenhouse gas savings, increase in end-user satisfaction, number of buildings with EU-compliant energy certification, number of municipal energy managers trained, number of subprojects commissioned, and direct project beneficiaries.

The Project Implementation Unit (PIU) within the Environmental Protection and Energy Efficiency Fund of Republic of Srpska will be responsible for preparation, coordination, management and implementation of the project, including procurement, contracting, and payments of all goods, works and services related to the project.

These Terms of Reference (ToR) define the nature and detailed scope of an assignment to provide supervision of civil works at the selected sites, including project commissioning.

## 2. DESCRIPTION AND SCOPE OF SERVICES

### 2.1 GENERAL DEFINITION OF SERVICES

For the preparation and implementation of energy efficiency investments in public buildings that are planned to be retrofitted in 2023., the PIU on behalf of the Environmental Protection and Energy Efficiency Fund of Republic of Srpska ('the Client') intends to hire a Consultant Company ('the Consultant') who will perform all the services described below.

The services will be performed for public buildings (schools, hospitals, kindergartens and other public buildings) in Republic of Srpska. It is expected that the original contract will be signed for the first phase (described services for 16 buildings to be implemented in 2023) with possibility of extension via contract amendment for second phase (services for building selected for implementation in 2023/2024) subject to satisfactory performance. List of buildings will be provided by the Client (See Annex 1).

The services to be provided by the Consultant are described in detail in section 2.2. The Consultant shall work in compliance with all relevant and valid regulations in Republic of Srpska, including but not limited to the Law on Construction and Physical Planning, as well as the following rulebooks: 1) Regulation on Energy Certification of Buildings, 2) Regulation on Minimum Requirements of Energy Performance of Buildings and 3) Regulation on Methodology for Calculation of Energy Performance of Buildings published in Official Gazette of Republic of Srpska 30/15 and the establishment of a certification and licensing system for energy auditors (individual and firms) required for the labelling of building energy performance.

### 2.2 DETAILED SCOPE OF WORK

#### **Task 1. Work Supervision**

The Consultant shall perform the supervision services at each of the sites as described below and as defined in the Law on Physical Planning and Construction of Republic of Srpska:

- The Consultant shall propose a competent person who will be appointed and referred to as Project Manager and will be responsible for supervising the execution of the works and administering the contract for works, as described below.
- Coordinate with relevant stakeholders (the Client and beneficiary, and if applicable, municipality and line ministry) and the civil works contractor(s) on the detailed works plan and schedule;
- Carry out the supervision of all works, and supply and installation of goods, including quality control of works, materials, equipment and installations, and their compliance with the technical design requirements, regulation and environmental requirements (including Environmental Management Strategies and Implementation Plan, Code of Conduct and other Contract specifics) in the Republic of Srpska;
- Coordinate and work closely with the designated municipal energy manager(s);
- Visit the sites at least once in week or more frequently if required by the Client and based on the needs and progress of works at each site. The Consultant shall prepare a short report after each visit on the work progress, including compliance with the work plan and technical documentation, Environmental Management Strategies and Implementation Plan, Code of Conduct, time schedule, quality assurance (including quality of works and materials/equipment delivered on the work site) and taking into account relevant

standards and norms of the Republic of Srpska that could be affected by the energy efficiency works. Site visit reports will also include photographs providing a good view of the works progress, and highlight any issues or problems at the worksite. A report template will be provided by the Client;

- Organize regular monthly meetings with all stakeholders (the Client, beneficiary, contractor) to review progress and civil works;
- Sign regularly erection ledgers and construction books and verify installed goods and materials as well as performed works;
- Verify payment certificates submitted by the Contractors or Suppliers, based on verified statement of works and contract requirements;
- Address problems that may occur, such as delays of delivery and installation, and bring issues to the Client's attention and recommend solutions to address the issues and avoid delays;
- Prepare requests to the Supplier and/or Contractor to remedy all defects, to replace the non-adequate equipment and to install the goods in accordance with the technical requirements;
- Seek the Client's approval for any additional works required or modifications to be introduced prior to performance of such work. The consultant should not approve any extended or additional works (irrespective of who requests them) without prior written approval of the Client;
- Be responsible for design revisions required as per site conditions during the implementation of the project in the minimum possible time;
- Obtain (if necessary) approvals of the relevant authorities to the modifications in detailed technical designs during contract implementation;
- Be responsible for (i) supervising the training provided by the works contractor to the beneficiaries' maintenance staff (as included in the contract for equipment suppliers/works contractors), (ii) preparing short manual on use of equipment and achieving the highest possible savings (iii) ensuring gathering attests, certificates and guarantee/warranty documentation from the contractor on the works and installed equipment, and providing the Client with the technical specification of the goods and equipment, the operation manuals and the maintenance protocols and schedules, (iv) providing the Client with all necessary information on the newly installed equipment and materials;
- Organize and manage commissioning and testing of the works and site handover; this includes managing acceptance and commissioning procedures and verifying formal agreements on the successfully implemented works and their completion, managing any follow-up activities required for formal acceptance of the works (if there remain any deficiencies requiring repeated commissioning), ensuring adequate technical documentation of the accomplished works, verifying final commissioning of the work sites, and verifying final payments invoices, including report of the client on payment of retention.

**Outputs:** Weekly reports (in Serbian) on the works progress, as described above. After completion and commissioning of work, submit one final report for each of the sites (in Serbian). Written approvals for materials and equipment that the Contractors intends to install (whether they comply with the required technical specification and drawings). Submit final technical documentation (lay-outs, drawings, technical specifications and detailed technical

designs when needed), including any modifications made, as approved by the relevant authorities, during the construction (in Serbian).

The time table for constructional sites opening, supervision and commissioning of the works will be determined after signing contracts with the selected bidders.

Site visit reports shall be delivered to the Client within 3 days after the visit.

The Client shall be informed 10 working days in advance about the actual date of commissioning.

The commissioning report will be delivered to the Client within 3 days after the commissioning together with the minutes comprising list and pictures of the possible defects which need to be remedied in order to works comply with the technical and functional requirements.

The duration of this task will be approximately 8 months. This task will be compensated on the basis of the Time-Based contract provisions.

#### **4. QUALIFICATIONS OF THE FIRM AND KEYSPECIALISTS/INDIVIDUALS**

The Consultant should be a qualified firm, or a Joint Venture that has demonstrated experience in performance of works supervision. Interested companies must provide information indicating that they are qualified to perform the services by providing a reference list of similar assignments in the last 5 years. The reference list should contain information about the clients, assignment descriptions, value of the contracts and period of execution, etc. The Consultant must propose a team capable of successfully carrying out all aspects of the ToR with in-depth experience in executing similar assignments. The Consultant shall demonstrate his capability to mobilize enough skilled staff for carrying out the project activities within the allocated period of time including sufficient capacity to perform tasks in parallel for different sites at the same time. For this purpose, the Consultant is expected to include as part of the technical proposal a detailed work schedule and activity timeline, including allocation of number of staff, man hours, availability as well as their qualifications and experiences, including Curriculum Vitae of the proposed key staff and team members (CVs will be evaluated by the Client and could be subject to scrutiny).

The Consultant will provide details on the organization of teams (including engineers and technicians), including the need for several teams to operate simultaneously. The Client will appreciate the methodology proposed to achieve all the simultaneous tasks that have to be performed, in terms of quality and quantity of staff.

Energy efficiency measures that can be implemented at the buildings are: replacement of existing windows and doors with new one, installation of thermal insulation on the external walls, installation of thermal insulation on attic, pitched and flat roof and other accompanying works, reconstruction of mechanical installation and sanitation of toilets (see table in Annex 1).

Works supervision on above mention works can be performed by a firm which is authorized in accordance with Law on Construction and Physical Planning for works supervision for buildings for which construction permit is issued by the local authority.

The Consultants may associate in form of JV. A JV agreement has to be submitted in the Proposal.

In technical proposal, Consultants have to propose key experts with a personal licence for supervision of works.

Key experts are expected to include (basis for evaluation of the technical proposal):

- Position K-1: Project Manager, responsible for managing/overseeing the entire consultancy contract implementation; University degree (Master's equivalent) in mechanical, electric civil construction engineering, or architecture; minimum ten (10) years of general experience; minimum five (5) years of experience in works supervision.
- Position K-2 and K-3: a graduate architects (university degree) with at least five (5) years of general experience in supervision; minimum three (3) years of works supervisions of the implementation of energy efficiency measures.
- Position K-4: a graduate civil construction engineer (university degree) with at least five (5) years of general experience in supervision; minimum three (3) years of works supervisions of the implementation of energy efficiency measures.
- Position K-5 and K-6: a graduate mechanical engineer (university degree) with minimum five (5) years of general experience in supervision; minimum three (3) years of works supervisions of the implementation of energy efficiency measures.
- Position K-7 and K-8: an electrical/lighting engineer (university degree) with minimum five (5) years of general experience in supervision; minimum three (3) years of works supervisions of the implementation of energy efficiency measures.

In addition, for communication and correspondence of work supervision, Consultants may also include additional non-key staff with experience in supervision which include the implementation of energy efficiency measures, as needed to meet the TOR and workload.

## Annex 1-List of public buildings for works supervision

No.	Building	Area <sup>1</sup>
1.	Public building 1	≤3000m <sup>2</sup>
2.	Public building 2	≤3000m <sup>2</sup>
3.	Public building 3	≤3000m <sup>2</sup>
4.	Public building 4	≤3000m <sup>2</sup>
5.	Public building 5	≤3000m <sup>2</sup>
6.	Public building 6	≤3000m <sup>2</sup>
7.	Public building 7	≤3000m <sup>2</sup>
8.	Public building 8	≤3000m <sup>2</sup>
9.	Public building 9	≤3000m <sup>2</sup>
10.	Public building 10	≤3000m <sup>2</sup>
11.	Public building 11	≤3000m <sup>2</sup>
12.	Public building 12	≤3000m <sup>2</sup>
13.	Public building 13	≤3000m <sup>2</sup>
14.	Public building 14	≤3000m <sup>2</sup>
15.	Public building 15	≤3000m <sup>2</sup>
16.	Public building 16	≤3000m <sup>2</sup>

### NOTE:

The list of specific objects will be provided by the client.

#### **The following works are planned:**

- Architectural and construction works
- Works on mechanical installations,
- Work on electrical installation (accompanying works on mechanical installations).

### NOTE:

Estimated building area is 2500m<sup>2</sup>.

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<sup>1</sup> The area represents the estimated heated area of the building