BOSNIA AND HERZEGOVINA
FEDERATION OF BOSNIA AND HERZEGOVINA

Project BiH10/00103203 "Scaling-up Investment in Low Carbon Public Buildings in Bosnia and Herzegovina "funded by Green Climate Fund (GCF) through the United Nations Development Programme in Bosnia and Herzegovina (UNDP BiH)

TERMS OF REFERENCE FOR CONSULTANCY SERVICES

PERFORMING WORKS SUPERVISION for objects in Kupres, Zenica, Kakanj, Visoko, Zavidovići, Tešanj, Odžak 1, Odžak 2

Contracts No:

UNDP/GCF-BiH10/00103203-CQ-03-CS-21-FBIH

1. Background:

The Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina and United Nations Development Programme in Bosnia and Herzegovina (UNDP BiH) signed a Letter of Agreement on the implementation of the Project Scaling-up Investment in Low Carbon Public Buildings in Bosnia and Herzegovina "funded by Green Climate Fund (GCF).

Within the Project is planned that UNDP BiH will make available a GCF grant to the Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina in the amount of 4.002.697 USD. The amount is planned for the implementation of infrastructure energy efficiency measures in FBiH.

Building on UNDP's Derisking Renewable Energy Investment (DREI) approach, the proposed Project consists of two closely related outputs aimed at addressing financial and non-financial barriers, thereby reducing the risks and achieving an attractive and acceptable risk-return profile.

Output 1.1: Addressing non-financial barriers to investment in low-carbon buildings and infrastructure ("Policy de-risking")

Output 1.2: Addressing financial barriers to low-carbon investment in buildings and infrastructure ("Financial de-risking and Investment support").

These Terms of Reference (ToR) define the nature and detailed scope of an assignment to provide engineering services, including supervision and approval of civil and mechanical works.

2. Objectives

BiH recognized the potential of public sector buildings for GMH emission reduction and the need to increase emission reduction and develop a sustainable system for public

building renovation and overcome identified barriers to investment in low-carbon retrofits of a public building.

The objective of the proposed Project is to scale up investment in low-carbon public buildings via design and implementation of the National Framework for Low-Carbon Investment in Public Buildings comprising an integrated package of policy, regulatory, technological, informational, financial, and managerial solution designed to address country-specific risks and barriers to investment. The GCF project will result in a four-to-five-fold increase in the level of investment in low-carbon public buildings; this, in turn, will enable BiH to meet its stated objective to reduce GHG emission from the public buildings sector.

For the implementation of energy efficiency investments in public buildings, the Project Implementation Unit (PIU) on behalf of the Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina - FMPP ('the Client') intends to hire a Consultant Company ('the consultant') who will perform the following services: conducting supervision and commissioning of civil and mechanical works.

3. Description and Scope of Services:

3.1 GENERAL DEFINITION OF SERVICES

The services will be performed for the public buildings listed in Annex 1 of this ToR. The services to be provided by the Consultant are described in detail in section 3.2. The assignment will be compensated on the basis of the Time-Based contract provisions.
The consulting services (“the Services”) include works supervision on reconstructing the existing boiler rooms. The works include the dismantling of existing equipment in the boiler rooms, the procurement, installation, and the commissioning of new equipment according to the technical specifications given in the tender documentation, all following local law, energy efficiency regulations in FBiH, national standards, and regulations and environmental requirements.

3.2 DETAILED SCOPE OF WORK

Works Supervision

Consultant's service must be done in accordance with local law, energy efficiency regulations in FBiH, national standards and regulations. The works supervision ensures that the measures are implemented in accordance with the technical designs and specifications in satisfactory precision and quality and in accordance with the Client's requirements. This task covers the duties and responsibilities of the Project Manager described in the general and particular conditions in the standard bidding documents. This includes inter/alia:

- Verify ”as built” documentation prepared by the works contractor(s);
- Coordinate with the relevant stakeholders (the Client, building administration, canton/municipality, and, as applicable, the relevant line Ministry) and the civil works contractor(s) on the detailed works plan and schedule;
- Carry out the supervision of all works and the supply and installation of goods, including quality control of materials, equipment, and installations, and their

compliance with the technical design requirements, regulation, and environmental requirements (including the Environmental Management Plan/checklist provided in Annex 2) in the Federation of Bosnia and Herzegovina; this also includes spot-checks on adequate registration/licensing of workers employed on-site;

- Visit the buildings regularly in order to ensure that all of the works are carried out according to the technical specifications given in the tender documentation, all following local law, energy efficiency regulations in FBiH, national standards, and regulations and environmental requirements and to monitor progress of works at each building. The Consultant will prepare a short report (Progress Report) every 14 days on the work progress, including compliance with the work plan and technical documentation, the Environmental Management Plan, 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 Federation of Bosnia and Herzegovina that could be affected by the energy efficiency works. Building visit reports will also include photographs providing a good view of the works progress, and highlight any issues or problems at the worksite.
- Sign regularly erection diaries and construction books and verify installed goods and materials as well as performed works;
- Verify payment certificates submitted by the Contractors, 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 Contractor, in coordination with the Client, 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 and the beneficiary's approval for any additional works required or modifications to be introduced prior to performance of such work; if agreed modifications were introduced by the Constructor with prior written approval of Consultant, the client and the beneficiary, the Consultant shall verify the final technical documentation, detailed technical design (after the work completion) and related cost estimates; the Consultant should not approve any extended or additional works prior to obtaining a 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;
- If necessary, give assistance to the Investor in obtaining approvals of the relevant authorities 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) 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, and (iii) 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.

The objects, for which the Works Supervision is required, are mentioned in Annex 1.

4. Output/Deliverables and Time Schedule:

The deliverables include the following documents for each building separately:

- Consultant's Detailed Works plan and Schedule; Revised plans, if any revision done;
- Progress Reports, on a two weeks basis including all the detailed mentioned above (local language);
- Verified interim and final payment certificates based on verified construction books (monthly);
- Environmental Check-List Report;
- Final acceptance and commissioning report for each building certifying the quality of the works, materials and equipment including final technical documentation after the work completion in compliance with local regulations;
- Other reports as relevant (e.g. final technical documentation in case of any modifications made as approved by the Client and relevant authorities during construction).

Progress Reports shall be submitted in one (1) copy on CD ROM (MS Word, Excel) in local language every fourteen (14) days.

Verified interim and final payment certificates in six (6) hard copies in local language and shall be submitted to the Client by 10th of every month.

Environmental Check-List Report in one (1) hard copy and one (1) copy on CD ROM (MS Word, Excel) in local language and shall be submitted to the Client within fifteen (15) days after acceptance on the successfully implemented works;

Final acceptance and commissioning report in three (3) hard copies and one (1) copy on CD ROM (MS Word, Excel) in local language.

5. Duration

- The perceived duration is:

Works for **Kupres, Zenica, Kakanj, Visoko, Zavidovići, Tešanj, Odžak 1, Odžak 2**:
3 months (supervision services 4 months, 15 days before/after the Works)

6. Qualification requirements and basis for evaluation

The Consultant should be a qualified firm or joint venture of firms (up to 3 companies for a joint venture) that have demonstrated experience in supervision of works (of several sites at the same time) for energy efficiency measures in large public, commercial and residential multi apartment buildings. The firm must propose a team capable of successfully carrying out all aspects of the ToR with in-depth experience in executing similar consultancies. The Consultant shall demonstrate his capability to mobilize enough skilled staff for carrying out the project activities within the allocated timeframe and include

all necessary engineering specialists as part of the proposal by including in the technical proposal the Curriculum Vitae of the proposed key staff, including educational background, relevant working experience in similar projects, and by confirming their availability during the period of the contract.

Interested consultants must provide information indicating that they are qualified to perform the services by fulfilling following requirements:

- Company information: name, registration, address, telephone number, email address, year of establishment, contact person for the project, fields of expertise;
- Confirmation on no obligations relating to the payment of direct and indirect taxes in accordance with the relevant laws of Bosnia and Herzegovina (may not be older than three (3) months) or with the applicable law of the country from the EOI submitter;
- a license from The Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina for Design and Work Supervision (mechanical design). If not available, it will be obtained within 30 days as a condition to signing the contract. Such consultant shall confirm along with the EOI that he will secure the license if he is selected to submit technical/ financial proposals;
- Hold a license from the Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina for Performing energy audit and certification of buildings for complex buildings systems in the Federation of Bosnia and, if not available, will be obtained within 30 days as a condition to signing the contract. Such consultant shall confirm along with the EOI that he will secure the license if he is selected to submit technical/ financial proposals;

The shortlisting criteria are:

Qualified consulting firms and their staff for this assignment should have extensive experience in the services mentioned above. The required minimum experience should be demonstrated by at least (3) three assignments that included similar tasks during the last five (5) years with a value of at least BAM 50,000 per assignment.

Details of the referenced assignments would include the contract(s) value, location(s), number of staff involved in the contract(s), name of the Client(s), name of partners for contract(s) execution, source(s) of financing, type of services provided, contract(s) commencement and completion dates, a brief description of the contract(s).

The team of an individual consultant available under the assignment may include the following experts: civil, mechanical, electrical engineers, and architects). The team members must have at least a university degree and, as a minimum, five years of professional experience. CVs of Key Experts are not required /will not be evaluated/ at the shortlisting stage.

Consultants may associate with other firms in the form of a joint venture or a sub consultancy to enhance their qualifications. All the members of the joint venture shall be jointly and severally liable for the entire assignment. However, the experience of the sub-consultant will not be considered while shortlisting.

During the proposal stage selected consultant within its technical-financial proposal will submit:

- Curricula Vitae (short version, specifying experience in similar assignments, eleven (11) CVs of key personnel from various professions requested under such services) of key staff who will be working on the assignment(s) with minimum:
    - Team Leader, responsible for managing/overseeing the entire consultancy contract implementation; University degree (Master's equivalent) in architecture, mechanical, electric or civil construction engineering or related field; minimum seven (7) years of experience in relevant field, including project management of similar assignments;
    - Responsible key staff for managing/coordinating supervision of works:
        - At least two (2) graduate architect and/or civil engineers with competency exam passed and at least five (5) years of work experience in relevant field;
        - At least six (6) graduate mechanical engineers with competency exam passed and at least five (5) years of work experience in relevant field;
        - At least two (2) graduate electrical engineers with competency exam passed and at least five (5) years of work experience in relevant field;
        - One (1) administrative assistant (support personnel, CV not needed).

ANNEXES

Annex 1 – Draft List of selected public buildings

Annex 2 - Environmental Management Plan/check list

Annex 1 – List of selected public buildings

This annex includes the list of selected public buildings and might be a subject to change.

No	Building Name	Canton	Location	Contact info	Works to be implemented (ENG)	Heated area (m2)
1.	Elementary school „Fra Miroslava Džaje“	HBC/ Canton10	Splitska bb, Kupres	Tel.: +387 34 274 099 e.mail: os.kupres@tel.net.ba	Reconstruction of heating system: - replacement of existing boilers with new ones on biomass, - installation of other equipment in boiler room.	2.236
2.	Elementary school "Ahmed Muradbegović" Zenica	ZDC	Stranjani bb, Zenica	Tel: (032) 460-535 e.mail: os.ahmedmuradbegovic@gmail.com		1.778
3.	Elementary school "Rešad Kadić" Kakanj	ZDC	Gradac 240, Kakanj	Tel: +387 32 465-235 e.mail: os.rkadic@bih.net.ba		1.627
4.	Elementary school "Mula Mustafa Bešeskija" Visoko	ZDC	Donje Moštre, Visoko	Tel: +387 32 465 220 e.mail: info@osmmb.edu.ba		2.378
5.	Elementary school “Prva Osnovna škola” Zavidovići	ZDC	Safvet-bega Bešlagića bb, Zavidovići	Tel/Fax: (032) 465-071, (032) 465-074 e.mail: poszav@bih.net.ba		2.620
6.	Elementary school "Kulin Ban" Tešanjka	ZDC	Trg žrtava 8. oktobra, Tešanjka	Tel: +387 32 465 370 e.mail: kulinban@bih.net.ba		1.634
7.	Dom zdravlja Odžak	Posavina canton	Titova b.b., Odžak	Tel: +387 31 762 552		2.715
8.	Elementary school „Vladimir Nazor“ Odžak	Posavina canton	Nova b.b., Odžak	Tel/Fax: +387 31 761 216; Central +387 31 761 277 e.mail: os.vn-odzak@hotmail.com; os.vladimir.nazor@hotmail.com		3.006

Annex 2 - Environmental Management Plan/check list

General part

The Contractor is obliged during the works to follow relevant laws and regulations relevant to the scope of the works, which apply at the level of the Municipality, the Canton and the Federation of Bosnia and Herzegovina, relating to physical planning and construction, environmental protection and health and safety at work.

The table above refers to environmental protection measures from potential impacts during different stages of project development. The Contractor is required to always comply with the provisions of this Environmental Management Plan, and the Project Manager (professional supervision) and / or members of the Project Implementation Unit should properly monitor the implementation of the proposed measures.

Environmental Management Plan (EMP)

Stage: Designing				
Impact on environment	**Mitigation measures**	**Mitigation costs**	**Institutional responsibility**	**Comments**
Overview of final project documentation	Ensure that the activities in the project documentation comply with the Environmental Management Plan, the Law on Fire and Fire Protection and in accordance with the Rule book on storage and keeping fuel oil ("Official Gazette of SFRJ", No. 45/67)	Part of project activities, included in operational costs	Contracted Design Consultant, together with Project Implementation Unit or team	

Stage: Construction				
Impact on environment	**Mitigation measures**	**Mitigation costs**	**Institutional responsibility**	**Comments**
Old equipment or waste that can be used again	Attempt to reuse or recycle the resulting waste as much as possible, in case it is not possible to reuse it, dispose waste into specific landfills. It is forbidden to burn or use all waste for fuel, including painted wooden parts of doors and windows. Long-term storage of such waste near the site is also not permitted.		Contractor or facility end user	
Construction waste	Separation of all types of waste, reuse and recycling wherever possible. Disposal of waste that cannot be reused or recycled, transported and disposed at specific landfills in cooperation with local waste management companies; there is no open incineration or illegal disposal of waste. Hazardous waste (smaller amount of paint, oil etc.) will be kept separately after the marking procedure and will be handed over to certain and authorized firms or agencies, in accordance with relevant legal requirements. Avoid long-term waste collection on site.		Contractor or subcontractor	Will be defined within scope of project documentation
Removal of materials that may contain asbestos (or other hazardous materials such as mercury bulbs)	Removal of asbestos-containing materials will be carried out in accordance with local laws, including construction standards, workplace safety issues, emissions of hazardous pollutants and disposal of waste and hazardous waste (in case there are no local regulations, Directive 2003/18 / EC of the European Parliament will be used, which will amend Council Directive 83/477 / EEC on the protection of workers from exposure to asbestos at work: the limit values of the floating dust particles are 0.1 fiber / cm3; also use the Good Practice Handbook: Asbestos: Health problems at work and community; World Bank).	Special subcontract during works, if necessary. Additional costs may be significant, depending on the amount of material to be removed.	Contractor	The Contractor should train his workers on how to evaluate the presence of asbestos-containing materials and to establish a safe removal process with appropriate protective equipment, continuous safe storage in hermetically sealed containers and management by an authorized agency or firm (registered within Ministries of Tourism and environment of entities).
Placement of the fuel oil tank	For existing tanks: Determine whether they are placed in accordance with the Law on fire protection and firefighting and in accordance with the Rule book on placement and keeping of fuel oil ("Official Gazette of SFRJ", No. 45/67)	Included in investment Special subcontract during works, if necessary. Additional costs may be significant.	Designer/Supervisor; Contractor	

	In case of a move of tank per User request: Ensure that the tanks are placed in accordance with the Law on fire protection and firefighting and in accordance with the Rule book on placement and keeping of fuel oil ("Official Gazette of SFRJ", No. 45/67)	User	Designer/Supervisor; User	
Random finding	In case of a random finding or other important discoveries during the excavation, all work must be suspended and notified to the competent authorities before proceeding.		Contractor	
Noise generation	Limit the work to daily intervals that are in accordance with local laws. Ensure uninterrupted use of the building for other users or tenants. Use machines with the appropriate attestations. Without unnecessary use of machines or vehicles on the ground.	Insignificant costs. Contractor's costs.	Contractor	
Dust generation	Suppression of dust with water or covering material and work surface that can create dust; reduce the speed in transporting these materials. Dust during the demolition can be reduced by using appropriate masks to work in the area; workers should use appropriate protective equipment.	Contractor's costs.	Contractor	
Organization of site and its removal after completion of works	Plan activities to minimize disturbance to the environment and neighbors (including plans to ensure proper traffic management at site access) Enclosing the construction site or setting up the marking measures. After completion of the works, the enclosed area will be returned to its original state and the entire waste will be cleaned in accordance with the provisions of this EMP, all the machines will be removed from the area. All scaffolds, cranes and other auxiliary equipment will be installed in such a way as to ensure workers' safety, but also the safety of passers-by. Everyone working on a site must be clearly marked with restricted access rights. Workers will also have to use adequate personal protective equipment.	Insignificant costs. Contractor's costs.	Contractor	It will be further defined with the specifications in the project documentation

Supervision plan for environment and monitoring

Stage: Construction				
WHICH Parameter should be monitored?	**WHICH** Parameter should be monitored?	**WHICH** Parameter should be monitored?	**WHICH** Parameter should be monitored?	**WHICH** Parameter should be monitored?
The works are carried out in accordance with all relevant legal requirements (and permits if necessary)	The works are carried out in accordance with all relevant legal requirements (and permits if necessary)	The works are carried out in accordance with all relevant legal requirements (and permits if necessary)	The works are carried out in accordance with all relevant legal requirements (and permits if necessary)	The works are carried out in accordance with all relevant legal requirements (and permits if necessary)
Waste management (including works and hazards)	Waste management (including works and hazards)	Waste management (including works and hazards)	Waste management (including works and hazards)	Waste management (including works and hazards)
The presence of asbestos or other harmful and hazardous materials on site	The presence of asbestos or other harmful and hazardous materials on site	The presence of asbestos or other harmful and hazardous materials on site	The presence of asbestos or other harmful and hazardous materials on site	The presence of asbestos or other harmful and hazardous materials on site
Noise and dust emission	Noise and dust emission	Noise and dust emission	Noise and dust emission	Noise and dust emission
Safety signs and notifications	Safety signs and notifications	Safety signs and notifications	Safety signs and notifications	Safety signs and notifications