BOSNIA AND HERZEGOVINA

FEDERATION OF BOSNIA AND HERZEGOVINA

ADDITIONAL FINANCING FOR ENERGY EFFICIENCY PROJECT-ID P165405

TERMS OF REFERENCES

for the Consultant

for provision of services related to the stocktaking of all public buildings owned by Federal and Cantonal Governments in Federation of Bosnia and Herzegovina and development of a digital map-based platform to capture and visually present data on location of all identified buildings, and supplemented with data on the public buildings needs for the energy efficiency

Ref. No. BEEPAF-P165405-CQ-34-CS-21-FBIH

1. Background

The Government of Bosnia and Herzegovina (BH) has recognized the importance of energy efficiency (EE) to support sustainable economic growth and move towards EU accession and has received financing for the Additional Financing for the Bosnia and Herzegovina Energy Efficiency Project (BEEP) from the International Bank for Reconstruction and Development (IBRD) credit funds. 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. The AF BEEP became effective March 2020.

The project is supported by a US\$32 million IBRD credit for BH, which is made available to the two entities, with US\$ 19.23 million allocated to the Federation of Bosnia and Herzegovina (FBH). The project consists of three components implemented separately in each entity:

Component 1: Energy efficiency investments in public facilities

Component 2: Support for the development of scalable financing mechanisms and capacity building

Component 3: Project Management

The project implementation unit (PIU) established within the Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina (FMPP) is responsible for the preparation, coordination, management and implementation of the project in the Federation of Bosnia and Herzegovina, including procurement, contracting, and payments of all goods, works and services related to the project.

This Terms of Reference (ToR) defines the nature and detailed scope of an assignment for an inventory taking of all public buildings owned by the Federal and Cantonal Governments in Federation of Bosnia and Herzegovina, verification of data in cases when there is a concern about accuracy of specific dataset submitted by the public building owner, and development of data base and development of a digital map-based platform to capture and visually present data on location of all identified buildings, that are supplemented with data on the public buildings needs for the energy efficiency investments.

The FMPP will manage, update and maintain this database. The Cantons will have access to the database. Furthermore, it will utilize existing open platforms where possible to help automate data sharing with other similar platforms.

Based on the preliminary data assessment, the expected stock of public buildings is up to 3,600. Of those, 2000 may be eligible for the EE improvements. It is expected that out of those 2,000, for up to 500 (25%) will need additional data verification through direct field visit.

The Consultant will coordinate activities with, report to and work under the direction of the PIU Project Manager/Coordinator and PIU Technical Experts.

Scope of Work for the Consultant

The main purpose of the assignment is to: identify all public buildings owned by the Federal and Cantonal Government, create database containing data on each identified public building and present all the collected data in a form of a digital map-based platform.

The scope of the services of the Consultant will include but not be limited to the following

- Under this assignment the Consultant has the responsibility to design the Work Plan and submit for approval by PIU Program Manager / Coordinator
- In coordination and under direction of the PIU Program Manager / Coordinator, take inventory of all public buildings owned by the Federal and Cantonal Governments in Federation of Bosnia and Herzegovina.
- Develop a database of data collected for each public building, and design a digital mapbased platform to capture and visually present data on location of all identified buildings, supplemented with data on the public buildings needs for the energy efficiency investments
- When there is a concern about the accuracy of the data submitted by the specific public building owner/end user, conduct verification of the data accuracy for that specific public building. The Consultant will conduct the above-mentioned verification only

- through, and based on request of the PIU Program Manager / Coordinator
- Use the collected data for analysis of the finical framework for energy efficiency of public buildings in Federation of Bosnia and Herzegovina

Key responsibilities of the Consultant hired under this Terms of References include:

I. Identification of all the public buildings owned by the Federal and Cantonal Governments and development of database

- 1. In order to collect data on the status of public buildings owned by the Federal and Cantonal Governments, the Consultant will:
 - a. Design the Work Plan that will describe in details approach and methods for data collection, data collection instruments, method/s of data analysis and expected results, detailed time schedule for implementation, and information about the team that will collect and analyze collected data, The work plan will be submitted to PIU for review and approval;
- 2. In order to identify public buildings owned by the Federal and Cantonal Governments, the Consultant will:
 - a. Perform a review of the existing documentation such as the Federal and Cantonal public building energy efficiency studies, the cantonal public buildings energy efficiency improvement plans, and other documents and data bases (EMIS), whereby the FMPP will provide all available documentations
 - b. Collect updated information through close cooperation/contact with relevant Federal and Cantonal institutions and the public buildings users that can provide these data (Federal and Cantonal Ministries, Federal and Cantonal Administrations of Geodetic and Property Affairs, etc.).
 - c. Compile the list of public buildings owned by the Federal and Cantonal Governments and verify the list and the data with the relevant institutions.
 - d. Design the database and submit the verified database to the PIU and FMPP
 - 3. The database of public buildings should, for each public building, contain at minimum the following data¹:
 - a. Name of the building
 - b. Address of the building (Canton, Municipality, Street)
 - c. Ownership status
 - d. Name of institution/s that are using the building
 - e. The purpose of use of public building
 - f. Whether the public building is used for commercial purposes
 - g. Whether the institution plans to reallocate its activities to other building
 - h. Year of construction
 - i. The building construction system (classic, prefabricated, etc.)
 - i. Type of building
 - k. General construction status of the building (construction soundness)

¹ The requirement for developing the inventory of buildings in accordance with the signed Energy Community Treaty should be taken into account.

- 1. Has the public building been refurbished in the last 10 years in terms of increasing energy efficiency? If yes, the Consultant will describe the investment / energy efficiency measures
- m. Number of employees
- n. Number of users
- o. The contact information for the public building maintenance manager (Name, email, phone number)
- p. Source of financing for covering energy consumption costs (budget user or non-budget user)

The PIU and FMPP reserve the right to expand the list of data the Consultant is expected to collect. The database will, among other things, be the basis for selecting public buildings for the energy efficiency investments, and creating a list of public objects for which an analysis of before and after energy efficiency investments will be conducted. This database will be expanded /updated with the data and information on the public buildings needs for the energy efficiency investments.

II. Development of a digital map-based platform to capture and visually present data on location of all identified buildings, and supplemented with data on the public buildings needs for the energy efficiency investments

The Consultant is expected to develop a digital map based platform that will capture and visually present all the data collected. The main purpose of this assignment is an advanced visualization of the public buildings locations through the online map-based platform that allows for an interactive tool for mapping data on the public buildings status, an estimated energy consumption of each public building (energy use data), necessary investments in energy efficiency measures in each public building, and potential energy savings achieved through these investments in energy efficiency measures.

The map-based platform should be user friendly, fully featured GIS application that can be customized by user/s to suit data processing and visualization needs.

The map-based platform should be developed based on the following principles:

- Designed with the user and incorporates the key users' suggestions
- Designed through iterative process that allows for incorporating feedback
- Utilize existing open platforms where possible to help automate data sharing and connection with other similar platforms (platforms of the Federal and Cantonal Administrations of Geodetic and Property Affairs²).

III. Organizing the field teams for the inventory taking of public buildings' and verification of the self-reported energy efficiency data

 $^{^{2}}$ For example, use the same identification number for the public building already assigned in the treal estate cadastre

- 1. The Consultant is expected to organize sufficient number of the field teams that are capable and ready to conduct, with a short notice, site visit to the specific public building, and verify the data in cases when there is a concern about accuracy of specific dataset collected through the questionnaires filled and submitted by the public building's representative.
- 2. The designed method and procedure for data verification should be simple and enable fast and low-cost site visits to the specific public buildings when requested by the PIU Program Manager / Coordinator.

IV. Conducting analysis of the financial framework for energy efficiency of public buildings in Federation of Bosnia and Herzegovina

The energy efficiency retrofitting of public buildings was mostly financed form the budgets of varies levels of governments in Federation of Bosnia and Herzegovina. Grants and soft loans are the most commonly used financing mechanisms. Commercial loans have been used in a small number of cases, and mainly for heating system replacement projects. The available data on the number and types of public buildings in FBiH, and their energy efficiency status do not allow for accurate assessment of the financial framework for the implementation of energy efficiency measures. Existing information indicates that the current financial framework is covers between 18-40 percent of needs for energy efficiency improvements of public buildings. The collected data will provide good basis for a more accurate assessment of the required financial framework.

Based on the data collected, primarily the one referring to the payback period, the different source financing will be assigned to the building. They will be dived into 3 main groups. (i) Domestic source of financing (e.g. own financing of end users of buildings in the public sector; financing through entity ministries and other institutions through loans; funding through entity ministries and other institutions through grants) (ii) International source of financing (e.g. financing through international financial institutions through loans; financing through international development agencies through grants) (iii) Specific forms of financing (e.g. revolving fund, ESCO, PPP, etc.). This will provide a general overview of the funds needed for the implementation of EE in public buildings with the proposal of source of financing.

In order to prepare the assessment of the financial framework for energy efficiency in public buildings sector the Consultant will ensure that the analysis:

- is taking into consideration existing good practices and legal frameworks related to the financing of energy efficiency retrofitting of public buildings;
- is providing sound guidelines for creation of new financial instruments and mechanisms

- is providing sound guidelines for development of market driven financing instruments (commercial loans, ESCO, public-private partnerships, etc.)
- is providing sound basis for promotion of use of market-based financing instruments by end-users of public buildings; and
- is providing sound basis for negotiating further credit arrangement between FBiH governments and third parties;

Duration of Contract

Expected duration of the contract is 6 months during the period from January 2022 to July 2022.

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 developing public building stock energy retrofits. 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 their 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, facsimile number, 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 relevant law of the country from the EOI submitter;
- Hold a license from Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina for performing energy audit and certification of buildings for complex building systems in FB&H or if not available will be obtained within 30 days as condition to sign the contract. The Consultant shall provide a confirmation along with the EOI that he will secure the license in case he is selected to submit technical/ financial proposals
- Details of experience in minimum two (2) similar assignments undertaken in last five (5) years, including value of consulting services and value of works, location, name of the Client, type of services provided, contract period of execution;
- Curricula Vitae (short version, specifying experience in similar assignments, five (5) 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, or civil construction engineering or related field; minimum ten (10) years of experience in relevant field, including project management of similar assignments;
- At least two (2) additional graduate architect and/or civil engineers with competency exam passed and at least five (5) years of work experience in relevant field;
- At least two (2) IT engineers with five (5) years of work experience in web based mapping platforms development.
- One (1) administrative assistant (support personnel, CV not needed);

Consultants Reporting Obligations

The Consultant will submit monthly report to the Project Implementation Unit of the Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina within 5 days after each month expires with description of the realized activities and the list/specification of the reimbursable costs.

For the purpose of payments for eligible reimbursable costs the Consultant will submit along with the monthly report related proof and appropriate supporting documents/receipts, invoices etc.