REPUBLIC OF TURKEY MINISTRY OF ENVIRONMENT, URBANISATION AND CLIMATE CHANGE GENERAL DIRECTORATE of CONSTRUCTION Internationally Funded Seismic Retrofitting Department

SEISMIC RESILIENCE AND ENERGY EFFICIENCY IN PUBLIC BUILDINGS PROJECT TERMS OF REFERENCE FOR RECRUITMENT OF MECHANICAL ENGINEER (Ref: WB/INDV-ME-01)

1. BACKGROUND

The Ministry of Environment, Urbanization and Climate Change has received financing from the World Bank toward the cost of the Seismic Resilience and Energy Efficiency in Public Buildings Project (SREEPBP) and intends to apply part of the proceeds for consulting services. The implementation period will end on June 30, 2027. Financed by the proceeds of the Loan Agreement signed between the Ministry of Treasury and Finance, the Project holds a budget of USD 265.000.000.

The overall objective of the Project is to improve disaster resilience and energy savings in selected central government buildings and to strengthen the policy framework and institutional capacity to develop, finance, and implement resilient and sustainable public buildings in Turkey.

The Project will promote a national strategic approach to increase energy efficiency and seismic performance in public buildings through an integrated approach that creates a demonstration effect and builds the foundations critical to reach scale and improve the vast building stock in Turkey (estimated at more than 9 million public and private structures). Such an approach is expected to yield the following benefits: (i) reduction in total cost through shared labor and complementary concurrent investments; (ii) sustainability of EE improvements through the building lifetime and payback period by ensuring investment in earthquake resistant buildings; (iii) functional upgrades such as autonomous energy (e.g. solar panels), which are crucial to ensure energy supply and continuity of service in the aftermath of an earthquake where energy service can be disrupted for days or weeks; (iv) strengthening of roofs associated with EE that can also increase the performance of building during disasters; (v) assessing the full economic case for building improvement through strengthening and renovation versus demolishing and rebuilding for both disaster risk management (DRM) and EE objectives; (vi) increasing the efficiency of public service investments in structural improvements and EE through more rapid and lower cost testing of critical materials and equipment and by testing and scaling innovative approaches; and (vii) minimizing disruption to building occupants and government services.

Project includes three components: (i) investments in central government buildings for seismic strengthening and EE improvement; (ii) advanced technical assistance (TA) and capacity building; and (iii) project implementation support.

The General Directorate of Construction Affairs (GDCA) established a project implementation unit (PIU) which is responsible for the overall implementation of the Project, such as the selection of the buildings, procurement of the various contractors (e.g., structural studies, energy audits, technical designs, renovation works, construction supervision, savings verifications, technical assistance or consultancies, etc.).

Within the framework of the Seismic Resilience and Energy Efficiency in Public Buildings Project (SREEPBP), a Mechanical Engineer (WB/INDV-ME-01) will be employed at the Project Implementation Unit of the General Directorate of Construction Affairs of the Ministry of Environment, Urbanization and Climate Change (MoEUCC).

2. OBJECTIVES

The main objective of the Consultant's services under this Terms of Reference (ToR) is to employ a Mechanical Engineer as an individual consultant who will work full-time in the Project Implementation Unit (PIU) to assist in the project implementation processes as specified in "Section 3. Scope of the Services", provides services for the monitoring of the activities planned within the Project.

3. SCOPE OF THE SERVICES

The Consultant shall;

- a) Supervise the work of the technical consultants: energy auditors, project designers, construction companies and commissioning consultants,
- b) Review and assess technical proposals of the consulting firms and offers from renovation contractors and provide inputs to the technical evaluation reports and support the PIU in contract negotiations,
- c) Review and analyze the energy audit reports on the basis of the technical and economic data, EE measures, energy savings, investment costs, payback times and profitability, environmental benefits, implementation plan, operation and maintenance, and energy monitoring,
- d) Review detailed technical designs and specifications, tender documents for renovation works, evaluate renovation bids, review construction supervision reports, oversight renovations and accuracy of energy savings (M&V reports),
- e) Visit construction sites for periodic audits for the compliance of the executions on site with the relevant contracts & specifications, monitor and report issues, contribute to and participate in Project related events,
- f) Review all audits and designs to ensure compliance with best practices on mechanical aspects (e.g., heating and cooling systems, thermal heat loss of buildings, solar water heating systems, etc.),
- g) Provide technical inputs into bidding documents, terms of references, project reports, bid evaluation reports, project supervision, and acceptance/commissioning reports,
- h) Coordinate the monitoring of results indicators of the renovations, including the achieved energy savings,
- i) Ensure compliance with local building codes, material standards, and engineering norms in Turkey throughout the design and construction of the renovation process,
- j) Based on early project experiences and inputs from the design firms, develop/propose technical standards and norms to be used in all future bidding documents to ensure high and consistent quality,
- k) Update and further refine the methodology for determining the energy savings for each Project for reporting purposes,
- 1) Provide training to PIU staff to improve their technical capacity on mechanical topics related to building renovations,
- m) Carry out other technical studies and assignments as requested by the GDCA's PIU.

4. DURATION OF THE SERVICES

The services will be required on a full-time basis. The Consultant is expected to commence work from August-September 2023, with two months probation period and a renewable 1-year contract if performance is satisfactory.

5. QUALIFICATION REQUIREMENTS

- At least a bachelor's degree in mechanical engineering; an MS degree in project management or engineering would be an asset,
- At least five years of experience in the construction sector, experience in structural retrofitting of buildings would be an asset,
- At least three years of specific experience in energy efficiency design and/or construction work, prior experience in energy auditing of buildings and preparation of detailed project designs, and certification as an energy auditor or energy manager is an asset,
- Experience with Works or Supplies contracts, either in design, writing of specifications, bills of quantities, tender procedures, or site works supervision,
- Experience with working in interdisciplinary teams, project management, and working experience with IFIs financed projects would be an asset
- Proficiency in key computer applications, e.g., Word, Excel, and PowerPoint, have a strong client orientation,
- Good command of written and spoken English and Turkish.
- Ability to travel to construction sites

6. **REPORTS**

The Consultant shall submit brief monthly progress reports summarizing the Project related activities, issues, and recommendations during the assignment.

7. METHODOLOGY

The Consultant will be hired following the guidance of the World Bank's "Procurement Regulations for IPF Borrowers" – November 2020 ("Procurement Regulations"). The contract will be signed between the General Directorate of Construction Affairs of MoEUCC or his designee and the Consultant.

8. APPLICATION

Curriculum vitae (CV) in Turkish and in English in the format given below, together with a one-page application letter, must be delivered to the address below in person or by e-mail, indicating the title and the reference code of the applied position in the subject line. **The deadline for application is July 31, 2023, at 4:00 p.m. Turkey local time.** Confirmation will be shared upon receipt of the application.

Ministry of Environment, Urbanization and Climate Change General Directorate of Construction Affairs Internationally Funded Seismic Retrofitting Department Attn: Mr Önder YURDAKUL (Project Director) Mustafa Kemal Mahallesi, 2082. Cadde, No:52, 06510 Çankaya / Ankara E-mail: <u>ihale.kadev@csb.gov.tr</u> Website: <u>https://kamuguclendirme.csb.gov.tr/</u>

CURRICULUM VITAE

Name of Staff		:
Profession		:
Date and Place of Birth		:
Civil Status		:
Home Address		:
Phone	home	:
	mobile	:
E-Mail		:
POSITION APPLIED		:

KEY QUALIFICATIONS

Specific experience in:

- •
- •
- -
- •

EDUCATIONAL BACKGROUND

- •
- •
- •
- •
- •

PROFESSIONAL EXPERIENCES

(Employment Record)

- •
- •
- •

Language Proficiency* :

1.	Excellent	Good	Poor
Reading			
Writing			
Speaking			
2.	Excellent	Good	Poor
Reading			
Writing			
Speaking			
3.	Excellent	Good	Poor
Reading			
Writing			
Speaking			

* Language proficiency should be demonstrated through recognized language proficiency tests or assessments such as; YDS, TOEFL, IELTS. etc. Language proficiency statements without any proof will not be considered.

Computing Knowledge :

Experience in:

- •
- -
- •
- .

Membership of Professional Societies :

References and transcripts : AVAILABLE UPON REQUEST

Certification

I, the undersigned, certify that to the best of my knowledge and belief, this biodata correctly describes myself, my qualifications and my experience.

Signature