



# FKEE

FONDI I KOSOVËS PËR EFIÇIENCË TË ENERGISJË  
KOSOVSKI FOND ZA ENERGETSKU EFIKASNOST  
KOSOVO ENERGY EFFICIENCY FUND

## Terms of Reference (TOR)

Ref. no: KEEF/1C2.1/CQ/2020 LOT1

Consulting Company for Development of the detailed energy audit reports, Detailed Designs, Technical Specifications including Supervision, Commissioning and Management Supervision during Defects Liability Period, for Energy Efficient Building Renovations and street lighting.

### **I. Introduction**

As agreed with the government, European Commission (EC) and other development partners, and as stated in the new Energy Efficiency Law, the Kosovo Energy Efficiency Fund (KEEF) has been established as an independent, autonomous and sustainable non-profit legal entity, to serve as the primary financier for municipal EE building renovations in Kosovo going forward. The KEEF is now developing its marketing strategy and investment plan to finance EE projects not served by commercial banks, starting with the municipal sector. The KEEF would allow its capital to revolve over time, and thus seek to become a sustainable financing and implementation agency.

With the successful implementation of the Kosovo Energy Efficiency and Renewable Energy Project (KEEREP), government, EC, and World Bank funds have been used to capitalize KEEF, which is seeking to expand the Project scope on a more sustainable basis. KEEF is planning to invest into and implement more than 100 municipal projects over the next 1-2 years to increase energy efficiency in buildings and street lighting and, more importantly, create a permanent institutional structure and financing mechanism that can continue to renovate public buildings and public lighting, and eventually expand to other markets.

Under sub-component 1b of the Project would include consultancies to support the investment component, including development of detailed designs, construction supervision, and project commissioning/passports. It would also include technical assessments needed for adequate disposal of any hazardous materials from the renovations as well as their actual disposal and a pre-and post-renovation building occupant satisfaction surveys. A consultant will be selected in accordance with World Bank's Procurement Regulations for IPF Borrowers' (the Regulations), issued July 2016, and

revised November 2017, and Aug 2018 for the supply of goods, works, non-consulting and consulting services.

## **II. Scope of Services**

The Consultant will be required to develop detailed energy audit reports and same ones to convert into tender documents by developing detailed designs, drawingstechnical specifications. The consultant will supervise works including commissioning and Defects Liability Period (DLP). The Consultant will also advise KEEF on capacities and potential deficiencies with local construction firms to assist in the determination of appropriate package and lot sizes, license requirements, etc.

Number of buildings for Lot 1 are 21, divided per municipalities as follow: Istog - 4 buildings, Peja – 2 buildings, Decani – 1 building, Gjakova – 3 buildings, Prizreni – 4 buildings, Rahoveci - 3 buildings and Klina – 4 buildings.

## **III. Key tasks are expected to include:**

### **Task 1: Completion of detailed energy audit report**

The Consultant will then conduct site visits to complete baseline energy assessments (i.e., detailed energy audits) for the selected buildings under package 6. This will include, inter alia, collecting baseline information on the facility (building description and function, age, heated area, drawings, equipment inventory) as well as analyses on existing building envelope, heating systems, and other energy-using systems (e.g., indoor/outdoor lighting, cooling and ventilation, cooking, etc.). The analysis should also take into account buildings connected to the district heating networks, fuel pricing, planned closures/expansions, etc. The baseline energy assessment reports will also specifically analyze the potential for implementation of solar water heating systems in selected buildings where there is a significant use of hot water as well as decentralized application of renewable energy (RE) sources (e.g. photovoltaic) to reduce the demand for consumption from the electricity supplier.

The Consultant will then prepare baseline energy assessment reports, which shall include:

- On-site inspections
- Review of available documentation (e.g., drawings of boiler plant, heating installation, etc)
- Building state description and identified measures
- Interviews with facility managers/engineers
- Energy calculations
- Economic calculations
- Write-ups of the Baseline Energy Assessment Report

Based on analysis, the baseline energy assessment report will propose technically-viable EE measures, calculate energy savings (both based on achievement of heating norms as well as expected actual energy savings), investment costs, payback times and net present value (6% discount rate) based on both adjusted and actual savings), environmental benefits, along with implementation plans, operations and maintenance (O&M) and training requirements, and energy monitoring. Possible EE and renovation measures should include, but not be limited to, building envelope measures (e.g., windows, wall/floor/roof insulation and repair, doors), efficient heating (water and space) systems, heat meters and controls (for those with DH connections), fuel switching (including to renewable energy such as

solar water heating, biomass, air source or ground-source heat pumps), cooling and ventilation systems, fans and pumps, lighting system (indoor and outdoor), and improved O&M practices. For buildings within reach of the DH network in Pristina, the feasibility of a DH connection should be actively explored. The baseline energy assessments should also include detailed identification of potentially hazardous materials (asbestos, mercury from lighting) in the buildings as well as propose mitigation measures for the proper disposal according to the local laws and regulations and World Bank requirements.

The consultant will present the draft final energy audit to the building user committee that will be within the beneficiary institutions. The user committees for each building will be set up by KEEF in cooperation with the beneficiary institution. During the presentation, the proposed interventions will be discussed, and feedback solicited from the committees. The consultant will review financially feasible feedback, additional measures, etc. and advise KEEF for possible inclusion in the final renovation plans.

## **Task 2: seismic assessment, prepare detailed technical specifications and basic renovation designs**

2a) Analyze the building comparing the existing survey and the proposed retrofit according to EE Audit report;

Conduct site visits to assess the impact of the proposed developments of EE project on the existing structure.

Verification of the building with the acting seismic safety codes and other relevant codes and standards.

Identification of vulnerable and less vulnerable places inside the building, and also Identification of seismic deficiencies of the building structure. Perform an assessment of the existing building in order to isolate and identify the structural frame/elements of the building: The type of structural slab (solid slab or hollow body, bearing in a direction or in both); The location and section of the bearing axes of the slab (location of beams and / or load-bearing walls of the slab) and the presence of flat beams in the slab; The location and section of the structure columns; The presence of earthquake bracing elements (reinforced concrete walls, CMU reinforced cores, or others). Preparation seismic vulnerability assessment including conclusion and recommendations. Provide recommendations on low cost and effective retrofitting if deemed applicable.

2b) Prepare any required supplemental drawings of audited facilities, where drawings do not otherwise exist. The Consultant will make site visits and prepare project plans (drawings) for selected buildings including actual measures of windows, entrance doors, building envelope, and unheated areas – building roof and basement; description of windows, doors, external walls, and materials of which buildings are made.

2c) Prepare detailed technical specifications and basic renovation designs. Following KEEF and World Bank approval of the audit reports and agreement from KEEF and the beneficiaries on the EE measures to be included, the Consultant will prepare detailed technical specifications for works to be tendered and implemented in the selected public buildings. The technical specifications should include description of individual actions and unit's measures (bill of quantities and costs estimates). This design will also include the investigation and quantification of presences of the amount of hazardous materials, specifically asbestos and mercury containing light-bulbs, including specifications and bill of quantities for removal, packaging, transport and disposal/interim storage of these hazardous materials, personal safety equipment and monitoring requirements (the Environmental Mitigation and Monitoring Measures based on the Environmental Management Framework) and estimate of costs for the measures.

This will also include the location where the asbestos can be disposed and the interim storage location for the mercury containing light-bulbs as per EMF and Kosovo legislation. They shall be included in the Basic Renovation Designs that shall be prepared by the Consultant. The Basic Renovation Designs shall be certified by the Consultant according to relevant provisions in the Kosovo Law on Construction, Administrative Instruction No. 01/2012 on Energy Audits and Technical Regulation on Thermal Energy Saving and Thermal Protection in Buildings. The draft Basic Renovation Design must be submitted to the beneficiary for formal consent, and to any required third parties for review and certification. Any comments provided by the beneficiary, third party auditor or KEEF must be taken into account and revised, as appropriate, before the design is finalized. Three hard copies of each design for each building shall be submitted to Contracting Authority and one soft copy (including drawings in PDF plus AutoCAD format).

The consultant will also present the draft technical designs to the building user committee that will be within the beneficiary institutions. During the presentation, the proposed technical designs will be discussed, and feedback solicited from the committees. The consultant will review the feedback provided on technical designs and advise KEEF for possible inclusion of reasonable changes in the final renovation plans.

**Task 3: Assisting of KEEF on preparation of minimum technical qualifications:**

3a) The Consultant shall Assist KEEF to prepare minimum technical qualifications, required legal documents and certificates of materials and equipment.

3b) Assisting KEEF in the pre-bid meeting in answering the question raised by bidders, site visits, also assisting the evaluation committee in the debriefing meeting.

**Task 4: Supervise completion and acceptance/commissioning of the construction works:**

4a) supervise a construction project, prepares the site reports and send a copy of material acceptance to professional consultants. Oversee all phases of project and contract and sign payment parts as specified on contract. Administer contracts; evaluate schedules; monitor progress of the contractors on projects; ensure that project deadlines are met. This will include the carrying out of environmental supervision regarding proper removal, packaging, and transport and disposal/interim storage of the hazardous materials and use of personal safety equipment and monitoring in line with requirements of design and Environmental Mitigation and Monitoring Measures for each renovation based on the Environmental Management Framework. Completion of supervising of the construction works is linked with the progress of Construction Company that carried out works. Consultant shall make sure that all health & safety measures are respected by Construction Company during the entire period of construction project.

**-Inception Report and Design Review**, to be issued within three weeks from the signing the contract. It shall: (i) further define the aims and objectives of the services to be provided; (ii) set out a detailed work program for the rest of the project; (iii) identify potential problems to be overcome and possible solutions; (iv) identify counterpart staff in the Client's office and other organizations, and identify their other commitments; (v) include a stakeholder analysis identifying other third party organizations involved in the project implementation process; (vi) include a review of the current status of project implementation; and (vii) conclusion on the design.

**-Interim Monthly Progress Reports for works contract.** These will describe the physical and financial progress of the works, and will address contractual and technical matters. They shall provide information on (tentative list below that can be amended): (i) a description of physical progress, with

reference to the program; (ii) explanations for differences between actual and forecast progress; (iii) a summary financial report containing cash-flow forecasts and budget expenditure; (iv) status of payments and requests for payment; (v) explanations for differences between actual and forecast cash-flow; (vi) summary of claims and disputes; (vi) major milestones, obstacles, achievements, constraints on progress or problems encountered and appropriate identified solutions; (vii) remarks on procedural issues; (viii) variations and proposals for future variations to the timing and budgets of individual activities; (ix) a projection of activities for the forthcoming month; (x) recommendation for further actions and improvements, both short- and long-term; (xi) records of human resources, mechanical equipment and materials. Testing and quality control; (xii) local issues/stakeholder issues; (xiii) a summary of environmental issues, including compliance with the Environmental Monitoring Report (EMP).

**-Site inspection reports-** The Consultant shall prepare and submit site inspection reports for key activities as defined during the implementation phase of the inspection. They shall also include related documents and/or comments with results or suggested remedial actions (if deemed to be necessary).

**-Environmental Monitoring Report (quarterly),** shall be prepared in accordance with the World Bank requirements for preparation of such reports, but not limited to the above.

*Project performance monitoring reports* and achievement of main key indicators by project, some indicators require annual report, some require six-monthly reports. Indicators requiring reporting are listed in section Reports of this document.

Performance of interim indicators (six-monthly reports)

-Number of buildings /out of total have been renovated under the project;

-Percentage of the total classified buildings in the project area in good and fair condition;

-National construction Safety Program developed and launched;

**-Draft Project Completion Report,** to be delivered 4 weeks prior to completion of the contract period. These will provide an overview and measure of success of the project. They shall contain: (i) a summary of information contained in the previous monthly reports; (ii) an overall review of the project; (iii) a description of physical progress, with reference to the program; (iv) explanations for differences between actual and forecast progress; (v) a summary financial report containing cash-flow forecasts and budget expenditure; (vi) the status of payments and requests for payment; (vii) explanations for differences between actual and forecast cash-flow on summary of claims and disputes; (viii) an assessment of impact of project on the number of people employed; (ix) a report on problems encountered and how they were overcome; (x) recommendations for maintenance works; (xi) report on the Environmental Monitoring Program. The Consultant shall review and approve in consultation with the Client the relevant completion reports with enclosed test results for the particular work sections submitted by the Contractor. These reports shall address all —Tests on Completion and —Tests after Completion including their results. The approval of the completion reports shall be a pre-condition for issue of any Taking-over Certificate and Tests after Completion

**-Final inspection report-** The final inspection report of the Consultant shall address the status of the work items at the time of Taking-over by the Client. The minor outstanding works, defects, failures, shortcomings are to be listed and compiled. Possible remedial actions by the Contractor as needed, are to be listed and noted, including the given period of time the Contractor is to rectify. The material handed over by the Contractor to the Client will be checked and listed for status and completeness

**-Final Report on works contract**, to be delivered 2 weeks after completion of the contract period or after comments on the Draft Project Completion Report provided by the Client. The contents will be as for the draft completion report, with the incorporation of comments/suggestions from the reviewing parties.

The Consultant will submit a final report not later than two weeks after the Completion Certificate is issued. The report shall contain at least: (i) Copies of requests for issuance of a takeover certificate; (ii) A list of approved As-Built Design submitted by the Contractor showing all the modifications in relation to the Main design elements or surveyor of performed works; (iii) Quality assessment of materials and workmanship; (iv) Data on the technical difficulties encountered and how they were solved; (v) Comment on the As-Built Design, (vi) List of Instructions for Use and Maintenance, (vii) Final Report on Contractor's ESHS performance (Code of conduct, compliance with EMP, EMF, consent/permits and other relevant project requirements. Deliver to the Client upon completion of the works all job records, reproducible "as-built" drawings and the instruction necessary for the satisfactory operation and maintenance of the works.

4b) Evaluate on the completion and commissioning of the project, confirming its compliance with the investment plan. In case of deviation from those plans, justification of the differences and evaluation of consequences in terms of compliance of the project with the eligibility criteria of the Facility. Before issuing the Taking-Over Certificate the Consultants will enforce any obligation placed on the Contractor to remove from that part of the Site to which the Certificate relates all obstructions, surplus materials, plant, wreckage, rubbish and Temporary works. Upon completion of the whole of the works the Consultants will require the Contractor to remove all plant, equipment and materials except those required to complete any outstanding or remedial works and facilities required by the Consultants during the Defects Notification Period.

Completion of the commissioning of construction works is linked with the finalization works by Construction Company. The Taking-over certificate shall be prepared and issued by the Consultant in consultation with the Client, following the successful completion of the works provided that Consultant is satisfied that the defects or deficiencies have been successfully rectified.

The issue of the Taking-over Certificate shall be subjected to:

- ✓ The Contractor having provided the operating and maintenance manuals, as well as all the drawings and documents handled over to the Client requested in the Contract.
- ✓ No major deficiencies are found and minor deficiencies are listed in the defects list by the Consultant.
- ✓ Items specified as reverting to the Employer revert accordingly

The consultant shall witness the works performance tests carried out under Test after Completion. They will analyze, evaluate and approve the final performance tests with the concurrence of the Client.

The analyses, results and conclusions with recommendations shall be compiled in the performance evaluation report to be submitted to the Client.

The Consultant shall prepare for the final inspection and acceptance meeting, thereafter prepare the Performance Certificate with the approval of the Client and submit after the expiry date of the Defects Notification Period, to the Client who will issue the Performance Certificate to the Contractor

#### **Task 5: Management and Supervision during Defects Liability Period (DLP)**

For each part of the works for which a Taking-Over Certificate has been issued, the Consultant is responsible for supervision during the related, subsequent, 12-month Defects Notification Period for completing all outstanding works (as defined in the Taking-Over Certificate) and rectifying any defective works which are identified before or during the Defects Notification Period. The Consultants' responsibility will be to:

- (i) Undertake periodic inspections of the works (report on a quarterly basis) during the Defects Notification Period to determine any work defects that might become apparent; and
- (ii) Supervise the Contractor's completion of any works outstanding and remedial works to rectify defects during the Defects Notification Period for each stage of the works.

The Contract shall not be considered completed until a Performance Certificate is signed by the Consultants and delivered to the Client and copied to the Contractor, stating the date on which the Contractor shall have completed its obligations to complete the works and remedy any defects to the Consultants' satisfaction.

The Consultants will issue a Defect Liability Certificate within 28 days of expiry of the last Defects Notification Period. The Consultants shall also recommend the release of any remaining retention money. Notwithstanding issuance of the Defect Liability Certificate, the Contractor and Client shall remain liable to each other for the fulfillment of any obligations incurred under the Contract prior to issuance of the Defect Liability Certificate and which remain unperformed at the time of issue. Immediately following the issue of the Defect Liability Certificate the Consultants will ensure that the Contractor clears the site and reinstates it to the requirements stated in the works Contract. If the contractor fails to observe this requirement within 28 days of issue of the Defect Liability Certificate, the Consultants will advise the Client of the necessary actions that may be taken by the Client to mitigate the situation.

**Reporting** - A number of reports are scheduled to be provided over the course of the DLP. The more comprehensive description is provided below:

**-Inception Report for the DLP** (first Quarter of the DLP), to be issued within three months from the official taking over certificate for the works, the consultant shall submit a statement at completion showing:

- The value of the works done within the contract in accordance with the Contract and further sums considered to be due;
- Identification of any defects which may occurred after Taking-Over Certificate. The consultant will duly inform officially contractor accordingly on behalf of the client.
- Identify outstanding works and remedy defects which are to be executed at the risk and cost of the contractor if and to an extent that the work is attributed to:
  - a) Any design for which the contractor is responsible
  - b) Plant, materials or workmanship not being in accordance with the contract,
  - c) Failure by the contractor to comply any other obligation

If and to the extent that such work is attributed to any other cause, the Contractor shall be notified promptly by (or on behalf of) the employer and clause 38 of the Works Contract [Variation Procedure] shall apply.

- Provide an estimate of any other amounts which will become due.
- The Consultants certify this certificate as for Interim Payment Certificates.
- The consultant will be entitled to extension of the DLP for Contractor for works or section of the works which cannot be used for the purpose for which they are intended by reason of defect or damage. However, the DLP will not be extended by more than two years.
- If the contractor fails to remedy the defect within the 14 days, the consultant is entitled to fix a due date on behalf of the employer, on or by which the defect or damage is to be remedied. The consultant shall give a reasonable notice of this date.
- After completion of the defect the consultant will check performance complained for the works which have been corrected. The tests shall be carried out by contractor at its own cost.
- Finally, once the all defects have been remedied and the DLP is expired the consultant will issue the final Taking Over Certificate and provide a detail report and statement to employer for the completion of all works and remedies under the contract and shall also recommend the release of any remaining bonds and retentions.

**-Progress Monitoring Report during the DLP (quarterly)**, shall be prepared in accordance with the KEEF requirements for preparation of such reports, but not limited to the above.

Project performance monitoring reports and achievement of main key indicators by project have different timing to track progress; some indicators require annual report, some require six-monthly reports. Indicators requiring reporting are listed in section Reports of this document.

- Performance of interim indicators (six-monthly reports)
- The buildings which are renovated under the project;
- Percentage of the total classified works in the project which in good and fair condition;
- Draft Project Completion Report, to be delivered 4 weeks prior to completion of the contract Defect Liability period. These will provide an overview and measure of success of the project.

**-Defects liability period report / final report on supervision service contract** This report will contain all the details of remedies performed by the Contractor to correct the observed defects and failures noted, including all ESHS issues occurred during the Defects Liability Period. This report is to be submitted no later than 2 weeks after the issuance of the end of the Defects Liability Period.

**-Reports upon request.** The Employer or Project manager may request the Consultant to submit specific reports on the issues related to the execution of the works. The Consultant will make the requested report in such manner within a reasonable time. The Consultant is obliged to provide all assistance to the Project manager and Employer, upon request, in drawing up reports to the bodies that comprise the institutional framework for project implementation described in the introduction to this project task, relating to project implementation reports, financial reports and etc.

**-Facilities provided by the consultant:** The Consultant must ensure that his / her professional staff has adequate support and equipment. All costs for equipment and administrative and logistic support will be within the jurisdiction of the Consultant including:

-All costs arising from the activities of its staff during the contract period, including accommodation, allowances, transportation, insurance, etc.



-Automotive, equipment, office supplies and hardware and software to ensure that the monitoring is fully functional;

-All communication costs, including fax, email, telephone, etc.

-All the equipment, instruments, services and logistical support required for the implementation of the contract, and any costs incurred during its preparation of documents and drafts, copying, printing, etc.

-Technical equipment at the monitoring site;

-Other equipment, instruments, services and logistical support necessary for the implementation of the contract.

Excellent written and spoken English and Albanian is required. If the Consultant will require a translation services, it will be at his own expenses and the Consultant will be responsible for the accuracy of the translation.

The Consultant is required to obtain all the necessary permits, approvals, payment of all fees and contributions, as well as all the other elements necessary for the work of his professional staff who is engaged at his own expense for the performance of this Contract.

All these costs must be included in the Bid price

#### **IV. Deliverables and payment schedule**

The deliverables for each task will be submitted to and approved by the MED/PIU. The consulting firm must obtain approval for each deliverable before moving to subsequent tasks. The table below summarizes the deliverables and includes an indicative timeline and payment schedule.

Task	Deliverable	Deadline (months after contract signing)	Payment (% of total payment)	
1	1	Completion of detailed energy audit report	3	20%
2	2a	Seismic assessment report	4	25%
	2b	Prepare any required supplemental drawings of audited facilities,	5	
	2c	Prepare detailed technical specifications and basic renovation designs.	6	
3	3	Assisting KEEF in the pre-bid meeting the evaluation committee in answering the question raised by bidders, site visits, also assisting the evaluation committee in the debriefing meeting	7	5%
4	4a	Supervise a construction project as stated on 4a providing all reports.. Along with invoice the consultant will provide final reports on completion of works contract	Deadline for completion of the task is linked with the performance of construction	

			company	
	4b	Evaluate on the completion and commissioning of the project, confirming its compliance with the investment plan.	Deadline for completion of the task is linked with the performance of construction company	30%
5	5a	First Progress Report on DLP	3 months from starting period of DLP	5%
	5b	Second Progress Report on DLP	6 months from starting period of DLP	5%
	5c	Third Progress Report on DLP	9 months from starting period of DLP	5%
	5d	Final Report on DLP	12.5 months from starting period of DLP	5%

## V. Timeline

The estimate time for this assignment will be from October 2020 and to be continuing until the end of June 2023, subject of completion of the work contract and dlp period.

## VI. Selection process and evaluation criteria

The selection process will be conducted in accordance with selection of Consultants procedures in the World Bank Procurement Regulations for IPF Borrowers' (the Procurement regulations) for the supply of goods, works and non-consulting services, issued July 1, 2016 revised Nov 2017 and Aug 2018. The selection process will follow the selection based on Consultants Qualification (CQ) method, as defined in the mentioned Procurement Regulations".

Selection will be based on the following evaluation criteria:

- (i) Firms experience in architecture, engineering, supervision and project designing (40%);
- (ii) Relevant work experience in implementing similar projects (50%) and
- (iii) Availability of the qualified key staff within the consulting firm (10%).

## VII. Key staff:

1. Team leader / Civil Engineer with at least Master degree in Civil Engineering or related field with 10 year experience relevant to the project.
2. Mechanical Engineer with at least 5 years professional experience relevant to the project, preferable

in energy efficiency and renewable energy; with at least Master degree. The consultant must be certified energy auditor.

3. Electrical Engineer with at least 5 years professional experience relevant to the project, preferable in energy efficiency and renewable energy; with at least Bachelor degree. The consultant must be certified energy auditor.
4. Architect with at least 3 years professional experience relevant to the project; with at least Bachelor degree. The consultant must be certified energy auditor.
5. Civil Engineer Master degree in structural engineering, or civil engineering with proven expertise in structure;
6. Environmental Engineer or equivalent with at least 3 years of experience in hazardous material inventories in buildings, in particular asbestos and experience with requirements and practice for proper asbestos and mercury containing CFLs removal, handling, transport and disposal/storage including monitoring and personal safety equipment requirements.

The qualification of key staff (or their CVs) will not be taken into consideration for the shortlisting/evaluation criteria set forth under para VI above; however the first ranked consulting firm will be required at contract negotiations to provide the required key staff with respective qualification requirements.