COMPREHENSIVE ENERGY AUDIT OF ISLAMABAD CLUB (RFP)

Islamabad Club

(E-Application Submission through EPADS)

SCM 2025/26 / TD-14

Bidding Documents

(Single Stage-Two Envelope Bidding Procedure)

02 October, 2025 @ 1400 Hrs

TENDER NOTICE
Islamabad Club (IC)

SCM/Comprehensive Energy Audit 2025/26 / TD-14

1. Sealed bids are invited from Government / FBR Registered Firms for the Comprehensive Energy Audit for IC on FOR Basis.
2. Bidding documents containing detailed terms & condition for submission of bids, method of procurement (Single Stage Two Envelopes), eligibility etc. are available for registered bidders on EPADS. Quotations shall be submitted as per requirement of the tender documents.
3. **Tender Documents** can be downloaded from **IC/EPADS** websites and Bids will be submitted as per requirements mentioned in the tender documents. Bid will be submitted through EPADS and bidders will submit their original CDR of 3% of quoted amount in the favor of" Islamabad Club----------".
4. Submit Rs 5000/- as Tender fee in favor of Islamabad Club (Faysal Bank, Tendering and Contracts, A/C #) attach bank receipt with technical offer. Offers will not be entertained without payment of processing fee.
5. Details for Submission & Opening of bids for tender are as under:-

Sr	Description	Submission	Tender Opening	Completion Days
a.	Comprehensive Energy Audit of Islamabad Club, SCM 2025/26 / TD-14	02nd –October 2025 1400hrs	02nd –October-2025 1430	15 Days

Supply Chain Management Office (Purchase Office)

(ISLAMABAD CLUB)

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1. Introduction

Islamabad Club is a premier facility committed to operational excellence and sustainability. To achieve significant reductions in energy consumption, utility costs, and environmental impact, the Club intends to engage a qualified Energy Audit Firm to conduct a comprehensive Energy Audit of its entire facility. This Terms of Reference (ToR) defines the scope, objectives, methodology, and deliverables required for this assignment. The selected auditor shall conduct the audit in strict compliance with these ToRs, the agreed timeline, and all relevant national regulations and international standards.

2. Objectives

The primary objectives of the energy audit are:

i. To establish a detailed energy consumption baseline and analyze historical energy usage patterns for all utilities (electricity, gas, water, diesel, etc.).
ii. To identify and quantify technical and operational inefficiencies in energy-consuming systems, equipment, and building fabric.
iii. To recommend practical, cost-effective Energy Conservation Measures (ECMs) with detailed technical and financial analysis.
iv. To provide a prioritized implementation roadmap for ECMs to reduce energy costs and greenhouse gas emissions.
v. To assess the technical and economic feasibility of integrating renewable energy sources (primarily solar PV) on-site.

3. Scope of Work

The energy audit shall be a Detailed Energy Audit (equivalent to ASHRAE Level 2) and shall encompass, but not be limited to, the following areas:

i. Pre-Audit Phase:
   (a) Review of detailed historical energy data (electricity, gas, water, diesel) for the past 24 months.
   (b) Analysis of tariff structures to understand cost drivers.

(c) Development of a detailed audit plan and measurement strategy.

ii. Site Investigation and Data Collection:

The audit shall include a thorough examination of:

(a) Building Envelope: Insulation, windows, doors, and air leakage.

(b) HVAC Systems: Chillers, boilers, air handling units (AHUs), fan coil units (FCUs), pumps, cooling towers, and control strategies.

(c) Lighting Systems: Interior, exterior, and emergency lighting; types of lamps, ballasts, and control systems.

(d) Motors and Drives: Pumps, fans, and other motor-driven equipment; assessment of load factors and potential for Variable Speed Drives (VSDs).

(e) Electrical Systems: Power distribution transformers, cables, switchgear, and power factor analysis.

(f) Domestic Hot Water (DHW) Systems: Water heaters, pumps, and distribution pipes.

(g) Other Significant Energy Uses: Kitchen equipment, swimming pool pumps & heaters, etc.

(h) Operational Practices: Operating schedules, set points, maintenance practices, and building management system (BMS) protocols.

iii. Measurement and Monitoring:

The auditor shall use appropriate instrumentation (e.g., power analyzers, data loggers, thermographic cameras, lux meters, ultrasonic flow meters) to measure:

(a) Electrical parameters (power, energy, power factor, harmonics).

(b) Temperatures and pressures across HVAC systems.

(c) Lighting levels.

(d) Equipment run-times and operational schedules.

(e) Efficiency of major equipment (where feasible).

iv. Analysis and Reporting:

(a) Calculate energy performance indicators (EnPIs).

(b) Benchmark facility performance against similar buildings/clubs.

(c) Identify, quantify, and prioritize Energy Conservation Measures (ECMs) with calculations of:

- Annual Energy Savings (kWh, kW, GJ, etc.)
- Annual Cost Savings (PKR)
- Estimated Implementation Cost (PKR)
- Simple Payback Period (SPP) and Return on Investment (ROI)

(d) Provide a high-level feasibility study for renewable energy (solar PV), including potential system size, generation capacity, space requirements, and preliminary financial metrics.

v. Methodology and Standards

The audit must be conducted in accordance with the following international standards and best practices:

- ISO 50002:2014 - Energy Audits: The primary standard for methodology.
- ASHRAE Procedures for Commercial Building Energy Audits: Level 2 Audit Standard.
- National Energy Efficiency & Conservation Authority (NEECA) Guidelines: Where applicable.
- All relevant local safety and electrical codes.

4. Deliverables

The consultant shall submit the following deliverables in both hard (5 copies) and soft (searchable PDF & MS Excel) copies:

#	Deliverable	Description	Due Date (After Contract Signing)
1	Inception Report	Detailed work plan, audit methodology, team composition, CVs of key personnel, and list of measurement equipment to be used.	7 Days
2	Draft Final Audit Report	Comprehensive report for review by Islamabad Club, incorporating all findings, data analysis, and proposed ECMs.	21 Days
3	Final Energy Audit Report	Revised report incorporating all client comments.	28 Days
4	Executive Presentation	A presentation to the Club's management summarizing key findings, recommendations, and the financial implications.	As scheduled

5. Contents of Final Report:

(a) Executive Summary

(b) Introduction and Methodology

(c) Facility Description and Operational Overview

(d) Energy Consumption Analysis & Baseline Establishment

(e) Detailed System-by-System Analysis with photographs

(f) List of Prioritized ECMs with Investment-Grade Analysis (Savings, Cost, Payback)

(g) Renewable Energy Integration Assessment

(h) Implementation Roadmap and Monitoring & Verification (M&V) Plan

(i) Appendices: Raw data, measurement results, detailed calculations, equipment specs.

6. Bidder's Proposal Requirements

In response to this RFQ, the bidder's proposal must include:

i. Technical Proposal: Detailed methodology, work plan, and team structure.

ii. Team CVs: CVs of the lead energy auditor and key team members, demonstrating relevant experience and certifications (e.g., Certified Energy Manager - CEM, CMVP).

iii. Company Profile: Company history, similar projects completed in the last 3 years (with client references).

iv. Certificate of Compliance: A statement confirming compliance with PPRA Rules and these ToRs.

v. Financial Proposal: A clear and detailed breakdown of all costs (professional fees, equipment, travel, taxes, etc.) quoted as a lump sum fixed price in PKR.

7. Evaluation Criteria

Proposals will be evaluated based on the following criteria:

i. Technical Proposal & Methodology (60%)
   a. Understanding of ToR and proposed methodology (20%)
   b. Qualifications and experience of proposed key personnel (20%)
   c. Relevant past performance and client references (20%)

ii. Financial Proposal (40%)
   a. Completeness, clarity, and cost-effectiveness of the quoted lump sum price.

8. Roles and Responsibilities

Islamabad Club (Client) shall:

i. Provide all available historical utility data, building plans, and equipment schedules.

ii. Provide full access to the facility during agreed-upon times.

iii. Appoint a single point of contact to facilitate the audit team.

iv. Provide available logistics support (internal transportation); and external transport will be the auditor's responsibility.

v. Review and provide timely feedback on deliverables.

The Energy Auditor (Consultant) shall:

i. Deploy a qualified and experienced team with all necessary calibrated measurement equipment.

ii. Conduct the audit safely and with minimal disruption to Club operations.

iii. Adhere strictly to the agreed timeline and scope.

iv. Maintain confidentiality of all Club data.

v. Deliver all reports and outputs as specified in Section 5.0.

9. Duration

The entire assignment, from the kick-off meeting to the submission of the final report and presentation, shall be completed within four (4) weeks from the date of the issuance of the Letter of Intent (LOI) or contract signing.