



Request for Proposals (RFP)

For the Supply and Installation of Energy Monitoring Equipment

- Energy Smart Mediterranean Schools Networks Project

ESMES (A_B.4.3-0123)

Financed in the framework of the ENI CBC Mediterranean Sea Basin Programme 2014-2020



The enclosed document is prepared by the Lebanese Center for Energy Conservation (LCEC).

LCEC reserves the right to request additional information to be added to this RFP.

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Section 1: Introduction

A. Purpose

1. The objective of this Request for Proposals (RFP) is to select one bidder to procure Energy Monitoring Equipment for autonomous energy data collection in up to seven (7) Lebanese public schools¹. The Energy Monitoring Equipment will collect data from measurement devices and will be connected to a common online platform with project partners.
2. The contractor will supply, install, and commission, all the equipment.
3. The contractor will be responsible for the operation of the system for a period of twelve (12) months starting from the Operation Date of the project, following the commissioning of the systems and the acceptance of works by LCEC.
4. The contractor will be responsible for the maintenance of the system for a period of twenty-four (24) months starting from the Operation Date of the project.
5. This RFP is intended to guide the bidders through the specifications, procurement, and selection of the Energy Monitoring Equipment.
6. The RFP is designed to provide interested bidders with sufficient information to submit bids while meeting the minimum requirements, but it is not intended to limit a bid's content or to exclude any relevant or essential data. Bidders are encouraged to expand upon the specifications to further highlight their service capability as it relates to this RFP.
7. All information included in all the pages of this document and its Annex is an integral part of this RFP.

B. Background Information

About ENI CBC MED Programme

8. ENI CBC Med is the largest Cross-Border Cooperation (CBC) initiative implemented by the European Union (EU) under the European Neighbourhood Instrument (ENI). Through calls for proposals, ENI CBC Med finances cooperation projects for a more competitive, innovative, inclusive and sustainable Mediterranean area.

¹ The contract to be signed with the winning bidder will include the works related to six (6) selected schools and an optional 7th school that has not been selected yet.



9. The Programme has a budget of € 209 million for the 2014-2020 period and the Managing Authority (MA) is the Autonomous Region of Sardinia in Italy.
10. Some of the main challenges addressed by projects selected for funding in the framework of the programme are the creation of innovative start-ups, development of Mediterranean-wide economic value chains, the diversification of tourism, technological transfer, the inclusion of women in the labour market, better management of waste, water and coastal areas, and the improvement of energy efficiency in public buildings.
11. For more information, please refer to the following website:
<http://www.enicbcmcd.eu/about-us/the-programme-at-a-glance>

About ESMES

12. Buildings have high energy consumption causing considerable CO₂ emissions and high economic costs. This is why the intervention in public schools is critical, being a relevant part of buildings stock with a low/often unknown energy performance.
13. The Energy Smart Mediterranean Schools Network project (ESMES), is part of the ENI CBC Med Programme and focuses on the optimization of energy consumption in public schools through innovative, monitoring-based renewable energy and energy efficiency (REEE) pilot actions.
14. ESMES is being implemented in five (5) Mediterranean countries and it involves six (6) organizations: The Institute for University Cooperation (ICU) being the Lead Beneficiary, the Lebanese Center for Energy Conservation (LCEC) being the Project Partner in Lebanon, the German Jordanian University (GJU) in Jordan, the National Agency for Energy Management of Tunisia, the Ribera Consortium of Valencia in Spain, and the Alcamo Municipality in Italy.
15. ESMES is expected to contribute to environmental protection, climate change adaptation and mitigation, by adopting the below specific objectives:
 - a. Increase civil society awareness and improve energy habits through the cross-border engagement of students in a sustainable use of energy resources in Jordan, Tunisia, Lebanon, Italy and Spain.
 - b. Reduce the energy consumption in public school buildings in the five (5) mentioned countries, through the introduction of cost-effective REEE solutions tailored to buildings energy loads, type and use, and climatic zone.



- c. Enhance capacities of national, regional and local institutions to plan and realize improved energy rehabilitations for higher energy sustainability of public buildings through cross-border cooperation.
- 16. ESMES will be implemented over a duration of three years starting September 2019.
- 17. For more information about the project, please visit the following website:
<http://www.enicbcmed.eu/projects/esmes>.

About LCEC

- 18. The Lebanese Center for Energy Conservation (LCEC) is an independent organization at the Ministry of Energy and Water in Lebanon. It is a technical point of reference specialized in renewable energy and energy efficiency.
- 19. LCEC works on setting national strategies and action plans to be adopted by the Lebanese Government and on the implementation and quality control of national projects and initiatives in the country. LCEC is also involved in the update and development of the legal and administrative framework needed for the greening of the energy sector.
- 20. LCEC provides both the public and private sector with expert advice, finance and accreditation, develops energy efficiency standards and labels, and provides national energy database indicators.
- 21. For more information about LCEC, please refer to the following website:
<http://lcec.org.lb/en/LCEC>

C. Bid Overview

- 22. As ESMES will focus on the optimization of energy consumption in public schools through innovative, monitoring based renewable energy and energy efficiency (REEE) pilot actions, this bid call is related to the Energy Monitoring Equipment which includes all related hardware, infrastructure upgrade and software.
- 23. Electrical data will be collected from up to seven (7) schools in Lebanon and fifty (50) schools in total in the five (5) partner countries. The data will be automatically collected, stored, processed and published on an online platform that is being developed by GJU in Jordan.
- 24. More information will be provided in the following sections and technical specifications

Section 2: Administrative Information

A. Schools Selection

25. Below is the list of targeted schools under this RFP.

Table 1 List of Schools

Referenc e	School Name	District- Governorate	Site Coordinates	Contact Person
School 1	Amir Shakib Erslan - Mixed Public Secondary School	Beirut-Beirut	Verdun 33.888664, 35.481775	Faten Sukkar 01-314987
School 2	Majadel Public School	Tyre-South	Majadel 33.229553, 35.365054	Malek Hammadi 07-410746
School 3	Barouk Public School	Chouf-Mount Lebanon	Barouk 33.707089, 35.685613	هند عفيف البتديني 05-240132
School 4	Ecole Officielle Hosh El Omara	Zahle-Bekaa	Zahle 33.831074, 35.901856	Micheline Khoury 08-822488
School 5	Ain Jarfa Intermediate Public School	Hasbaya- Nabatieh	Ain Jarfa 33.383087, 35.688711	Zeina Al Kakhi 07-550674
School 6	Ecole des Arts et Métiers	Matn-Mount Lebanon	Dekwaneh 33.879921, 35.545459	Antoinette Khanfour 01-690237
School 7	<p><i>School 7 has not been selected yet.</i></p> <p><i>The bidder should quote the works related to the 7th school separately as an optional item in the BoQ.</i></p> <p><i>LCEC reserves the right to exclude School 7 from the scope of work of the contractor under this RFP at any time.</i></p>			



B. Procurement Timetable

26. The following dates are set forth for informational and planning purposes, however, LCEC reserves the right to change the dates.

Table 2 Procurement Timetable

Issue Date of the RFP	1 September 2020
Questions Due Date	21 September 2020
Response Date to Questions	28 September 2020
Closing Date for Receipt of Bid Proposals	05 October 2020 at 2:00 PM (Beirut Time)
Announcement Date of Winning Bidder	within 15 working days of the closing date for receipt of bid proposals
Contract Signature Date	Within 10 working days of the announcement of winning bidder

C. Clarification Process

27. From the issue date of this RFP until the announcement of the winning bidder, bidders may contact LCEC **ONLY by email** to: energy@lcec.org.lb in case of questions, comments, or suggestions, including the following in the email subject **"Bid: ESMES Monitoring RFP"**.
28. LCEC assumes no responsibility for not answering questions comments, or suggestions whereby the bidder failed to include "Bid: ESMES Monitoring RFP" in the email subject.
29. Oral questions will not be permitted.
30. LCEC assumes no responsibility for verbal representations made by its employees unless such representations are confirmed in writing and incorporated into the RFP.
31. Written responses to questions, requests for clarifications, or suggestions will be sent to all bidders on or before the date listed in the Procurement Timetable.
32. LCEC will share a list of questions and answers with all bidders.
33. If the questions, requests for clarifications, or suggestions pertain to a specific section of the RFP, the page and section number(s) must be referenced.



D. Amendment of the RFP and Withdrawal of Bid Proposal

34. LCEC may, at its discretion, ask any bidder for a clarification of its proposal which shall be submitted within a stated period of time. Any request for clarification and all clarifications shall be in writing. If a bidder does not provide clarifications of the information requested by the date and time set in the request for clarification, its proposal may be rejected.
35. Should any company interested in submitting a proposal fail to provide its contact details to the LCEC, the LCEC shall not be responsible if such company fails to receive any updates to this document or clarifications relating thereto.
36. The bidder may withdraw its bid proposal prior to the closing date for receipt of bid proposals by submitting a written request to withdraw to LCEC. Electronic mail and faxed requests to withdraw will not be accepted. The bidder's withdrawal notice shall be prepared, sealed, marked, and sent by hand and followed by a signed confirmation from LCEC.

E. Submission of Bid Proposals and Validity Period

37. The deadline for the submission of proposals is as mentioned in the Procurement Timetable.
38. All proposals received after the mentioned date and time will be rejected and returned unopened to the bidder.
39. LCEC may, at its discretion, extend the deadline for the submission of proposals, in which case all rights and obligations of LCEC and the applicants subject to the previous deadline shall thereafter be subject to the deadline as extended.
40. Proposals must be delivered to the LCEC offices, no later than 2:00 PM, at the following address: Ministry of Energy and Water (MEW), Corniche du Fleuve, 1st Floor, Room 303.
41. The period of validity of proposal is 120 days and it starts on the closing date for receipt of bid proposals.
42. The period of validity of quotation is 120 days and it starts on the closing date for receipt of bid proposals.
43. In exceptional circumstances, LCEC may request the bidders to extend the validity of the proposal and quotation beyond what has been initially indicated in this RFP.



F. Bid Proposal Opening

44. LCEC will open bid proposals after the closing date for receipt of bid proposals as specified in this RFP.
45. The bid proposals will remain confidential until the Evaluation Committee has reviewed all of the bid proposals submitted in response to this RFP and the LCEC has announced a notice of intent to award a contract.
46. The financial offers will be kept sealed and will be opened in the presence of the qualified bidders, prior to announcing the winning bidder.

G. Costs of Preparing the Bid Proposal

47. The costs of preparation and delivery of the bid proposal are solely the responsibility of the bidder.

H. Reservation of Rights

48. At any time prior to the deadline for submission of proposals, LCEC may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, to:
 - a. Modify or withdraw from the RFP, or modify the provisions contained in the RFP, for any reason;
 - b. Select zero, one, or multiple bid proposal(s) in response to this RFP in order to enter into negotiations or execute an agreement;
 - c. Award contract to bidder(s) based on some or all criteria in this RFP, or additional criteria not specified in this RFP, or post-bid negotiations;
 - d. Waive any material or immaterial non-conformity in any bid received;
 - e. Reject parts of bid or entire bid for any reason;
 - f. LCEC shall have no obligation to provide a reason for rejecting a bid;
 - g. Issuance of this RFP in no way constitutes a commitment by LCEC to award a contract.

I. Verification of Bid Proposal Contents and Reference Checks

49. The contents of a bid proposal submitted by a bidder is subject to verification.
50. Misleading or inaccurate responses shall result in disqualification.



51. LCEC reserves the right to contact any reference to assist in the evaluation of the bid proposal, to verify information contained in the bid proposal, and to discuss the bidder's qualifications and the qualifications of any party identified in the bid proposal.
52. LCEC reserves the right to obtain and consider information from other sources concerning a bidder, such as the bidder's capability and performance under other contracts.

J. Disposition of Bid Proposals

53. All bid proposals become the property of LCEC and shall not be returned to the bidder.
54. All information submitted by a bidder may be treated as public information by LCEC following the conclusion of the selection process. Commercially sensitive information may be made anonymous only if the bidder explicitly identifies it as commercially sensitive and detrimental to the bidder's financial or commercial position.

K. Joint Ventures, Consortiums, and Associations

55. Given the scale of implementation, bids submitted by a joint venture, consortium or association of two or more firms as partners will not be accepted.

Section 3: Format and Content of Bid Proposals

A. Introduction

56. These instructions prescribe the format and content of the bid proposal and are designed to facilitate the submission of a bid proposal that is easy to understand and evaluate.
57. Failure to adhere to the proposal format shall result in the disqualification of the bid proposal.

B. General Instructions

58. The bidder shall prepare one (1) hard copy of the bid proposal.
59. The bid proposal shall be divided into two parts: (1) the Technical Proposal and (2) the Financial Proposal.
60. The Technical Proposal and the Financial Proposal shall be placed in separate envelopes.
61. The two (2) envelopes must be sealed.
62. If any of the envelopes is not sealed and marked as required, LCEC will assume no responsibility for the misplacement of the proposal or its premature opening.
63. The bidder shall submit a CD containing a digital copy of the entire proposal (except the financial offer) as one searchable document in PDF format. The CD must be clearly marked to indicate the name of the bidder and the title of this RFP.
64. The entire bid proposal including the two (2) envelopes and the CD shall be sealed in another envelope (or a box if necessary to accommodate the size of the bid proposal).
65. If the Technical Proposal is in multiple volumes, the volumes shall be numbered in the following fashion: 1 of 4, 2 of 4, etc.
66. The envelopes shall be labeled with the following information:
 - a. RFP Title
 - b. Bidder's Name, Address, email, and Telephone Number
 - c. The Lebanese Center for Energy Conservation (LCEC), Ministry of Energy and Water (MEW), Corniche du Fleuve, 1st Floor, Room 303, Phone: 00961 1 569101.
67. The bid proposal shall be typed or written in indelible ink and shall be signed by the bidder or a person or persons duly authorized to bind the bidder to the contract. The



latter authorization shall be indicated by written power-of-attorney accompanying the proposal.

68. The power of attorney should authorize the person signing the forms and bid proposal to act as a representative on behalf of the bidder.
69. The bid proposal, as well as all correspondence and documents relating to the RFP shall be written in the English language.
70. Supporting documents related to the power of attorney, the company incorporation, and the company financial situation and performance could be in Arabic.
71. Other supporting documents and printed literature that are part of the application may be in another languages, provided they are accompanied by an accurate official translation of the relevant passages into the English language, in which case, for purposes of interpretation of the application, the translation shall govern.
72. A proposal shall contain no interlineations, erasures, or overwriting except, as necessary to correct errors made by the bidder, in which case such corrections shall be initiated by the person or persons signing the proposal.
73. Evaluators will read the printed copy of the proposal. All evaluators may not have access to the internet, therefore it is recommended not to include URLs, hyperlinks or other forms of internet-based content in the proposal.
74. Only necessary documents must be provided. Irrelevant datasheets, products certificates and other documents will negatively affect the evaluation of the proposals.

C. Technical Proposal

75. The technical proposal must be prepared and organized in three (3) parts:

Table 3 Technical Proposal Organization

Part 1	Forms
Part 2	Design and Specifications
Part 3	Unpriced BoQ

76. All of the three (3) parts must be referred to by an indexed file separator.
77. Each of the three (3) parts should include the required information as per the details and order of documents provided below.

Part 1 - Forms 1 to 9 with all supporting documents

78. The forms provided in Annex should be completed, signed, stamped, and submitted with all supporting documents. Any alternate form/text in any of the forms, would result in the disqualification of the bid proposal.

79. The table below lists the forms to be submitted.

Table 4 List of Forms

Form Ref.	Description	Notes
		<i>All the forms should be completed, signed and stamped</i>
Form 1	Commitment Letter	
Form 2	Letter of Application	
Form 3	Applicant Information Form	The bidder shall attach copies of original documents of articles of incorporation (or equivalent documents of constitution or association), and/or documents of registration of the company.
Form 4	Experience in Energy Monitoring Equipment	
Form 5	Financial Situation and Performance	The bidder shall provide copies of financial statements for the years 2017, 2018, and 2019
Form 6	Bid Bond	To be made payable to the LCEC to the amount of 4,000,000 Lebanese Pounds (LBP). The bid bond shall be drawn in a manner acceptable to the LCEC.
Form 7	Performance Security	The bid bond shall be returned after signing the contract with the winning bidder and a performance security has been duly entered and executed according to the Lebanese laws and regulations (performance bonds, taxes, duties, stamp fees) equivalent to 10% of the contract amount in Euro. However, the bidder shall be

		<p>forfeited the performance security for non-compliance or inability to successfully complete the project in the proposed timeframe.</p> <p>At this stage, the bidder shall provide a copy of the template Performance Security, signed and stamped, thus confirming its commitment to execute a performance security, as per the template, before signing the contract.</p>
<u>Form 8</u>	Team Composition and Tasks Assignment	The bidder shall attach the CV of each team member separately.
<u>Form 9</u>	Warranty Form with a fiscal stamp	

Part 2 - Design and Specifications

80. This part should include the following information:

- a. Solution Overview
- b. Detailed hardware and software description (all major and minor components as requested in Section 6)
- c. Comprehensive and full design, specifications, calculations, drawings, technical details, datasheets, etc.
- d. Training overview as requested in Section 6
- e. Installation and testing plan as requested in Section 6
- f. Operation, warrantee, and maintenance as requested in Section 6

81. The bidder shall only propose one specific design with well-defined components and configurations.

82. The submission of more than one (1) option for the design, components, brands, and/or configurations, will result in the disqualification of the bid.

83. The bidder must submit a clear serial number/model number of the components used.

84. The accompanying compliance certificates should clearly show the serial number/model number of the components as well as the date of the issuing and the date of validity of the certificates.



85. Only relevant certificates must be provided with the component number and required standards highlighted or marked. The certificates must be issued by a recognized third party.
86. The bidder must submit the name of the issuing body of the certificates for the measurement devices and the source of the accreditation of this body.

Part 3 - Unpriced Bill of Quantities (BoQ)

87. The technical proposal must include a clear detailed list of components of all the products proposed by the bidder.
88. The reference and model number along with the brand of products should be clearly specified in the BoQ.
89. If the bidder decides to mention instead of the specific products references the terms “similar”, “equivalent”, or “superior function” for the design, products, performance, and/or configurations, the proposal will be rejected.
90. The list of proposed components shall be included without any pricing.

D. Financial Proposal

91. The financial offer should be submitted in a separate sealed envelope.
92. The financial offer must be submitted in Euro and exclusive of VAT.
93. The financial offer must take into consideration that 50% of the contract amount will be made in Euro in cash, and the remaining 50% will be made via a bank transfer from a Lebanese commercial bank to another Lebanese commercial bank (no transfers outside Lebanon will be made).
94. The bidders must quote the prices for all the components referred to in their submitted solution and BoQ along with description, specifications, country of origin, manufacturer of equipment, materials, tools, operation, training, and maintenance, etc.
95. Bidders must quote in their offers all auxiliary items (Equipment, infrastructure, licenses, components, etc.) that is required for the system to function as expected at least for five (5) years after the Operation Date of the project.
96. If any item is needed during installation and operation and was not stated in the offer; then it is the bidder’s responsibility to provide at no additional cost.



97. For each system, the price of the contract is a lump sum. The bidder's total remuneration shall be a fixed lump-sum including all staff costs, subcontractor's (if any) costs, printing, communications, travel, accommodation, and the like, and all other costs incurred by the bidder in carrying out the services.
98. If any item is needed during the installation was not stated in the offer, then it is the bidder's responsibility to provide it at no additional cost.
99. At any time during the validity of the financial offer, no price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by LCEC after it has received the financial offer.

Section 4: Evaluation of Bid Proposals

A. Introduction

100. This section describes the evaluation process which will be used to determine the winning bidder.
101. The proposals shall be reviewed based on the following:
- Completeness of the proposal;
 - Technical responsiveness and full compliance of the proposal with the minimum specifications and requirements described in this RFP and addendums; and
 - Best price.
102. The proposal will undergo a three-stage evaluation with evaluation of the technical proposal being completed prior to any price proposal being opened and compared.
- Stage 1: Administrative and Technical Qualification;
 - Stage 2: Financial Offer Comparison;
 - Stage 3: Negotiation and Contract Signature.
103. Stage 1 evaluation will be based on the compliance with all terms of this document.
104. The evaluation committee will reject proposals that do not meet all the qualification criteria stated in section B below.
105. Bidders who pass the Stage 1 evaluation will proceed to Stage 2 Financial Offer Comparison.
106. The bidder who passes Stage 2 will proceed to Stage 3 Negotiation and Contract Signature.

B. Administrative and Technical Qualification

107.The bidder must meet the below minimum eligibility criteria:

Table 5 Minimum Eligibility Criteria

Qualification Criteria	Minimum Eligibility
Year of incorporation:	The commercial registration of the company shall not be issued later than January 2015.
Financial capability:	The bidder shall have an average total revenue (turnover) of at least 150,000,000 LBP (considering the years 2017, 2018, and 2019).
Past performance:	The bidder shall have at least five (5) years of experience in the design, supply, and installation of similar systems.
Team members	One of the team members must have at least five (5) years of experience in the design, supply, and installation of similar systems with at least five (5) similar projects that are operational.

108.LCEC shall disqualify proposals for any of the below reasons:

- The bidder profile does not meet all the eligibility criteria.
- The bidder fails to deliver the bid proposal by the due date and time.
- The bidder fails to deliver the financial proposal in a separate sealed envelope.
- The bidder fails to include information necessary to substantiate that it will be able to meet the project requirements. A response of "will comply" or merely repeating the requirement is not sufficient.
- If the bidder decides to mention instead of the specific products references the terms "similar", "equivalent", or "superior function" for the design, products, performance, and/or configurations.
- The bidder fails to respond to the LCEC request for information, documents, or references.
- The bidder fails to include any form, signature, certification, authorization, stipulation, disclosure or guarantee requested in the sections of this RFP.
- The bidder presents the information requested by this RFP in a format inconsistent with the instructions of the RFP.
- The bidder fails to submit one offer based on full Design, Installation, Operation, Training and Maintenance.



- j. The bidder provides misleading or inaccurate responses.
- k. The bidder provides conflicting, contradictory, implausible (technical data or calculation) or in any other way misleading information.
- l. The bidder fails to abide by any of the requirements stated in the RFP sections:
 - i. Section 1: Introduction
 - ii. Section 2: Administrative Information
 - iii. Section 3: Format and Content of Bid Proposals
 - iv. Section 4: Evaluation of Bid Proposals
 - v. Section 5: Contract Terms and Payment
 - vi. Section 6: Technical Specification
 - vii. Annex

C. Stage 2: Financial Offers Comparison

- 109. Bidders who pass the Stage 1 evaluation will proceed to Stage 2 Financial Offer Comparison.
- 110. The financial offers will be kept sealed and will be opened in the presence of the qualified bidders, prior to announcing the winning bidder.
- 111. The bidder with the lowest price will proceed to Stage 3 Negotiation and Contract Signature.

D. Stage 3: Negotiation and Contract Signature

- 112. LCEC reserves the right to negotiate the proposed financial offer with the winning bidder before the signing the contract.
- 113. In case the winning bidder does not sign the contract within thirty (30) days of the announcement of the award, then the LCEC reserves the right to disqualify the winning bidder and choose the next bidder, in such case the winning bidder will forfeit the bid bond.

Section 5: Contract Terms and Payment

A. Method of Payment

114. All payments shall be done in Euro.

115. 50% of the contract amount will be made in Euro in cash, and the remaining 50% will be made via a bank transfer from a Lebanese commercial bank to another Lebanese commercial bank (no transfers outside Lebanon will be made). LCEC shall effect payments to contractor after acceptance by LCEC of the invoices submitted by the contractor, upon achievement of the corresponding milestones of the project.

116. (40%) of contract price in Euro in cash upon comprehensive design submitted by the contractor and accepted by LCEC.

117. (40%) of contract price in Euro via a bank transfer from a Lebanese commercial bank to another Lebanese commercial bank (no transfers outside Lebanon will be made) upon installation on site (supervised and accepted by the LCEC).

118. (20%) of contract price (10% in Euro in cash and 10% bank transfer from a Lebanese commercial bank to another Lebanese commercial bank) upon final completion, commissioning, and acceptance of all works.

B. Contract Period and Penalties

119. The contractor shall complete the design, installation, testing and final commissioning and achieve the Operation Date of the project within six (6) months from the Contract Signature Date.

120. Subject to the contract, liquidated damages equal to 70 Euro/day (bank transfer from a Lebanese commercial bank to another Lebanese commercial bank or access to performance security) will apply to every working day of delay. The maximum period of delay for this contract will not be more than four (4) weeks, after that, LCEC has the right to terminate the contract or take any other action it deems necessary to complete the works.

121. The contractor is responsible for the training of LCEC and the involved schools on the Energy Monitoring Equipment. The training shall be conducted within two (2) months after project Operation Date.



122. The contractor is responsible for the complete operation of the Energy Monitoring Equipment for a period of twelve (12) months at no additional charge starting from the Operation Date of the project.

123. All works shall be maintained free of charge including all required spare parts for twenty-four (24) months starting from the Operation Date of the project.

C. Legal Status

124. The contractor shall be considered as having the legal status of an independent contractor vis-à-vis LCEC. The contractor's personnel and sub-contractors shall not be considered in any respect as being the employees or agents of LCEC.

D. Sources of Instructions

125. The contractor shall neither seek nor accept instructions from any authority external to LCEC in connection with the performance of the services under this contract. The contractor shall refrain from any action which may adversely affect LCEC and shall fulfill its commitments with the fullest regard to the interests of LCEC.

126. The contractor may not communicate at any time to any other person, government or authority external to LCEC, any information known to it by reason of its association with LCEC which has not been made public except with the authorization of LCEC; nor shall the contractor at any time use such information to private advantage. These obligations do not lapse upon termination of this contract.

E. Observance of the Law

127. The contractor shall comply with all Lebanese laws, decrees, ordinances, rules, and regulations (including future amendments) bearing upon the performance of its obligations under the terms of this contract.

F. Settlement of Disputes

128. The Parties shall use their best efforts to settle amicably any dispute, controversy or claim arising out of, or relating to this contract or the breach, termination or invalidity thereof. In case amicable efforts fail, the settlement of disputes will take place in the courts of Beirut according to Lebanese laws and regulations.



G. Termination of Contract

129. LCEC reserves the right to terminate without cause this contract at any time upon 15 days prior written notice to the contractor, in which case LCEC shall reimburse the contractor for all reasonable costs incurred by the contractor prior to receipt of the notice of termination.
130. In the event of any termination by LCEC as per the above, no payment shall be due from LCEC to the contractor except for work and services satisfactorily performed in conformity with the express terms of this contract. The contractor shall take immediate steps to terminate the work and services in a prompt and orderly manner and to minimize losses and further expenditures.
131. Should the contractor be adjudged bankrupt, or be liquidated or become insolvent, or should the contractor make an assignment for the benefit of its creditors, or should a receiver be appointed on account of the insolvency of the contractor, LCEC may, without prejudice to any other right or remedy it may have, terminate this contract forthwith. The contractor shall immediately inform LCEC of the occurrence of any of the above events.

H. Authority to Modify

132. No modification or change in this contract, no waiver of any of its provisions or any additional contractual relationship of any kind with the contractor shall be valid and enforceable against LCEC.

I. Assignment

133. The contractor shall not assign, transfer, pledge or make other disposition of this contract or any part thereof, or any of the contractor's rights, claims or obligations under this contract except with the prior written consent of LCEC.

J. Contractor's Responsibility for Employees

134. The contractor shall be responsible for the professional and technical competence of its employees and will select, for work under this contract, reliable individuals who will perform effectively in the implementation of this contract, respect the local customs, and conform to a high standard of moral and ethical conduct.



K. Sub-Contracting

135. In the event the contractor requires the services of sub-contractors, the contractor shall obtain the prior written approval and clearance of LCEC for all sub-contractors. The approval of LCEC of a sub-contractor shall not relieve the contractor of any of its obligations under this contract. The terms of any sub-contract shall be subject to and conform with the provisions of this contract.

136. The experience of sub-contractors will never be accounted for in the evaluation of proposals.

L. Title to Equipment

137. Title to any equipment and supplies that may be furnished by LCEC shall rest with LCEC and any such equipment shall be returned to LCEC at the conclusion of this contract or when no longer needed by the contractor. Such equipment, when returned to LCEC, shall be in the same condition as when delivered to the contractor, subject to normal wear and tear. The contractor shall be liable to compensate LCEC for equipment determined to be damaged or degraded beyond normal wear and tear.

M. Confidential Nature of Documents and Information

138. All maps, drawings, photographs, mosaics, plans, reports, recommendations, estimates, documents and all other data compiled by or received by the contractor under this contract shall be the property of LCEC, shall be treated as confidential and shall be delivered only to LCEC authorized officials on completion of work under this contract.

N. Officials Not to Benefit

139. The contractor warrants that no official of LCEC has received or will be offered by the contractor any direct or indirect benefit arising from this contract or the award thereof. The contractor agrees that breach of this provision is a breach of an essential term of this contract.



O. Indemnification

140. The contractor shall indemnify, hold and save harmless, and defend, at its own expense, LCEC, its officials, agents, servants and employees from and against all suits, claims, demands, and liability of any nature or kind, including their costs and expenses, arising out of acts or omissions of the contractor, or the contractor's employees, officers, agents or sub-contractors, in the performance of this contract. This provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, products liability and liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the contractor, its employees, officers, agents, servants or sub-contractors. The obligations mentioned herein do not lapse upon termination of this contract.

P. Encumbrances/Liens

141. The contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with LCEC against any monies due or to become due for any work done or materials furnished under this contract, or by reason of any other claim or demand against the contractor.

Q. Use of Name, Emblem or Official Seal

142. The contractor shall not advertise or otherwise make public the fact that it is a contractor with LCEC, nor shall the contractor, in any manner whatsoever use the name, emblem or official seal of LCEC, or any abbreviation of the name of LCEC in connection with its business or otherwise.

R. Copyright, Patents and Other Proprietary Rights

143. LCEC shall be entitled to all intellectual property and other proprietary rights including but not limited to patents, copyrights, and trademarks, with regard to products, or documents and other materials which bear a direct relation to or are produced or prepared or collected in consequence of or in the course of the execution of this contract as well as after execution. At the LCEC request, the contractor shall take all necessary steps, execute all necessary documents and generally assist in



securing such proprietary rights and transferring them to LCEC in compliance with the requirements of the applicable law.

S. Force Majeure; Other Changes in Conditions

144. Force majeure, as used herein, means acts of God, war (whether declared or not), invasion, revolution, insurrection, or other acts of a similar nature or force which are beyond the control of the parties.
145. In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the contractor shall give notice and full particulars in writing to LCEC, of such occurrence or change if the contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this contract. The contractor shall also notify LCEC of any other changes in conditions or the occurrence of any event which interferes or threatens to interfere with its performance of this contract. The notice shall include steps proposed by the contractor to be taken including any reasonable alternative means for performance that is not prevented by force majeure. On receipt of the notice required herein, LCEC shall take such action as, in its sole discretion, it considers to be appropriate or necessary in the circumstances, including the granting to the contractor of a reasonable extension of time in which to perform its obligations under this contract.
146. If the contractor is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities under this contract, LCEC shall have the right to suspend or terminate this contract following a period of notice of seven (7) days.

T. Child Labour

147. The contractor represents and warrants that neither it, nor any of its suppliers is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical mental, spiritual, moral or social development. Any breach of this representation and warranty shall entitle the LCEC to terminate this contract immediately upon notice to the contractor, at no cost to the LCEC.

U. Corrupt and Fraudulent Practices

148. Anticorruption Policy requires bidders, suppliers, and contractors to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy the organization defines, for the purposes of this provision, the terms set forth below as follows:

- a. “corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
- b. “fraudulent practice” means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- c. “coercive practice” means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- d. “collusive practice” means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

149. LCEC will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive practices, or any illegal practice in competing for the contract.

150. LCEC will sanction a party or its successor, including declaring ineligible, either indefinitely or for a stated period of time, to participate in contracts if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive practices, or any illegal practice in competing for, or in executing, a contract.

V. Conflict of Interest

151. LCEC considers a conflict of interest to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest may contribute to or constitute a prohibited practice under LCEC's Anticorruption Policy. In pursuance of LCEC's Anticorruption Policy's requirement, bidders, suppliers, and contractors under contracts must observe the highest standard of ethics. LCEC will take appropriate actions to manage such conflicts of interest which may include rejecting a proposal for award if it determines that a conflict of interest has flawed the integrity of any procurement process. At the time of bidding, bidders may be considered to be in a conflict of interest with one or more parties if they, including but not limited to:

- a. have controlling shareholders in common; or
- b. receive or have received any direct or indirect subsidy from any of them; or
- c. have the same legal representative for purposes of their proposal; or
- d. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or to influence the bid of another bidder in the subsequent bidding process or influence the decisions of LCEC regarding this bid process; or
- e. participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of this RFP. Where a firm, or a firm from the same economic or financial group, in addition to consulting, also has the capability to manufacture or supply goods or to construct works, that firm, or a firm from the same economic or financial group, may not normally be a supplier of goods or works, if it provided consulting services for the contract corresponding to this RFP, unless it can be demonstrated that there is no significant degree of common ownership, influence or control.

Section 6: Technical Specifications

A. Scope of Work

152. The contractor should design, supply, install, test, commission, operate, and maintain as per the requirements of this RFP, Energy Monitoring Equipment for each of up to the seven (7) schools (six (6) + one (1) optional) including a total of up to six (6) basic energy meters (five (5) + one (1) optional), one (1) advanced energy meter, seven (7) Uninterruptable Power Supply (UPS) systems (six (6) + one (1) optional), and one (1) thermal camera with all the needed accessories.
153. The thermal camera should be included in the proposal, BoQ, and technical offer as an optional component that may or may not be added to the contract.
154. The works and equipment related to the 7th school should be included in the proposal, BoQ, and technical offer as an optional item that may or may not be added to the contract.
155. The contractor is responsible for the operation and maintenance of the Energy Monitoring Equipment for the period specified in the following paragraphs without any additional charges and starting from the Operation Date of the project.
156. The Energy Monitoring Equipment should be compatible with GJU housed Online Platform as described in paragraph B. General Technical Requirements – Online Platform here below.
157. For each school, the contractor will supply the monitoring systems, equipment, components, software, and will be responsible for all aspects related to the good installation and operation of the components and all remote connections.
158. Bidders are encouraged to make a site visit and get acquainted with the existing electricity system in each school as the main requirement is to have an energy monitoring system that is compatible with the existing equipment and infrastructure.
159. It will be the bidder's sole responsibility and on its own expenses to understand the site nature, infrastructure and all requirements that are related to the tender or that may influence its pricing.
160. It is the bidder's sole responsibility to guarantee that all devices, software and modules are compatible with each other and compatible with the existing infrastructure at installation locations.



161. It is the bidder's sole responsibility to make sure that the offered design is complete and checked for completeness.
162. The bidder will be fully responsible for verifying any information that may be made available. Under no circumstances will LCEC be deemed responsible for the consequences of any such offered information.
163. The bidder shall propose high quality, commercially viable components. In addition, contractor shall use equipment that is widely deployed around the world and possesses a proven track record of reliability.
164. The bidders shall provide sufficient technical, hardware, software and protocol details to LCEC. This will be provided to LCEC to guarantee that the offered systems may communicate properly with the GJU housed Online Platform.
165. After installation completion, and within the operation and maintenance periods, the contractor shall perform any software upgrades necessary to integrate, store and process data received from LCEC within the GJU housed Online Platform.
166. The remote access to all measurement points should be made available for 20 years without a need for any additional costs or license renewals.
167. The bidder may consider the specifications in the technical specifications section as a guideline for the minimum requirements for designing the solution that achieve the project goals.

B. General Technical Requirements

Online Platform

168. The development of the online platform is not included under this contract.
169. GJU designs and manages an online platform that is linked to schools' smart meters to track/compare and publish energy consumption trends of involved schools. It is planned to be easily accessible and host open educational resources (OER) and training sessions for students and teachers.
170. Data will be collected from 50 schools in the 5 partner countries and will be automatically stored, processed and published online.
171. The software will manage data from 50 remote devices using internet in different time zones.



172. The software should be able to interface with any devices using Modbus protocol, and have the capabilities to import data from the said devices, from .csv files, and support cloud data importing (PUSH, PULL, GET).
173. The software monitors the facility electrical network, tracks real-time power conditions, analyzes power quality, tracks energy consumption and provides customized visualization tools like trend charts, dashboards, system historical trends, alarms, events and reports.
174. The software should have the capability to monitor unlimited devices.
175. Users can access administrative and configuration functions of the software, configure devices and communication paths, edit graphical displays, edit historical reports for energy cost, consumption, and power quality.
176. A mobile application will be developed allowing access to full monitoring system.

Loggers

177. Logger shall have sufficiently sized non-volatile memory to store all critical internal data upon sudden power loss.
178. Logger shall have sufficiently sized non-volatile memory for programmable onboard data logging for at least three (3) months of data logging at the required number of samples.
179. Logger shall be able to log all metered parameters.
180. Logger shall be able to support any logical combination of available setpoint conditions to control any internal or external function or event.
181. Subject to the above, logger shall be able to log all metered parameters for at least three (3) months of data logging at an interval of 5 min or less.

Communication

182. The communication system should have the capability to communicate with the online platform for real time monitoring and to transfer logged data to the server using push to cloud technology or FTP, file synchronization, ION technology.
183. Communication Connection: Ethernet over Fiber Optic or copper media.
184. Communication Protocols: Modbus, TCP/IP and ION.

VPN Router

185. Management and maintenance via Web



- 186.Support Required Network protocols to operate the system
- 187.Ethernet Interface
- 188.Number of ports: 2 x 10/100 Mbps (2 LANs or 1 LAN + 1 WAN)
- 189.Serial Interface (if it's required for online monitoring)
- 190.Number of ports 2 x RS-485 Modbus RTU.
- 191.Size of RAM: 64 Mbytes
- 192.Storage Size: 128 MB
- 193.Certification: C/RED, EAC, ROHS

Internet Access

- 194.The internet access shall be provided by each school.
- 195.The contractor is responsible for applying the necessary changes and upgrades to have access to each school's internet network.

Installation

- 196.The bidder shall perform any required maintenance or modifications to the main distribution board at the schools in order to properly install and secure the Energy Monitoring Equipment.

C. Monitoring Requirements

Basic Energy Meter – Total Six (6) units

- 197.The basic energy meter will be installed at the following schools:
 - a. School 1
 - b. School 2
 - c. School 3
 - d. School 4
 - e. School 5
 - f. School 7
- 198.The minimum requirements are stated in the points below.
 - a. **Measurement of:** line Current; line and phase Voltage; Frequency; Power factor per phase; total and phase Apparent, Active and reactive energy; total and phase Apparent, Active and reactive power; Total current harmonic distortion; Total voltage harmonic distortion.



- b. **Metering of:** Total Demand power (P, Q, S), Total Peak demand power (PM, QM, SM), Apparent power (S, S1, S2, S3), Reactive power (Q, Q1, Q2, Q3), Active power (P, P1, P2, P3), (Active, reactive, apparent energy), neutral current, current unbalance.
- c. **Measurement Accuracy**
 - i. Class 1 active energy conforming to IEC 62053-21
 - ii. Class 1 reactive energy conforming to IEC 62053-24
 - iii. Power +/- 1 %
 - iv. Voltage +/- 0.5 %
 - v. Current +/- 0.5 %
 - vi. Frequency +/- 0.05 %
 - vii. Power factor +/- 0.01
- d. **Sampling rate:** 64 samples/cycle
- e. **Product certifications:** CE conforming to IEC 61010-1
- f. **Security capabilities:** Password protected

Advanced Energy Meter – Total one (1) unit

199. The advanced energy meter will be installed at the following school: Ecole des Arts et Métiers (School 6).
200. The minimum requirements are stated in the points below.
- a. **Measurement of:** line Current; line and phase Voltage; Frequency; Power factor per phase; total and phase Apparent, Active and reactive energy; total and phase Apparent, Active and reactive power; Total current harmonic distortion; Total voltage harmonic distortion.
 - b. **Metering of:** Total Demand power (P, Q, S), Total Peak demand power (PM, QM, SM), Apparent power (S, S1, S2, S3), Reactive power (Q, Q1, Q2, Q3), Active power (P, P1, P2, P3), (Active, reactive, apparent energy), neutral current, current unbalance.
 - c. **Power quality analysis:** Harmonic distortion, Voltage sag and swell detection, Waveform capture, Compliance monitoring, Dip and swell, transient, Disturbance direction detection, Programmability (logic and math functions), Setpoint learning, Up to the 40th voltage and current harmonic.



d. **Measurement Accuracy**

- i. Class 0.2S active energy conforming to IEC 62053-21
- ii. Power $\pm 0.2\%$
- iii. Voltage $\pm 0.1\%$
- iv. Current $\pm 0.1\%$
- v. Frequency $\pm 0.05\%$
- vi. Power factor ± 0.005

e. **Sampling rate:** 512 samples/cycle

f. **Product certifications:** CE conforming to IEC 61010-1

g. **Security capabilities:** Password protected

h. **Waveform capture and sag/swell: 20 microseconds at 50 Hz:** the Meter shall be able to perform high speed sag/swell detection of voltage disturbances on a cycle-by-cycle basis, providing the duration of the disturbance, the minimum, maximum, and average value of the voltage for each phase during the disturbance. Disturbances less than one cycle in duration can be detected.

i. **Transients:** sub-cycle transient detection at 512 samples/cycle and perform 20 microsecond transient captures at 50Hz.

j. **Waveform Capture:** Perform 512 samples/cycle waveform capture recording with programmable oscillography waveform recorders.

k. **Power Quality:** Meter shall be able to measure power quality statistically in accordance with IEC 61000-4-30 Class A Edition 2 and perform power quality evaluations, statistical indicators (flicker, dips and swells, harmonics and inter-harmonics...etc.) in accordance with the EN50160 standards.

l. Statistical indicators of power quality shall be available via communications over Modbus RTU and Modbus TCP protocol.

m. PQ-Capable

Uninterruptible Power Supply (UPS) System – Total Seven (7) units

- 201. The contractor has to ensure continuous supply of power to all installed components including the internet router.
- 202. The contractor has to supply a UPS system with batteries.
- 203. The system components need to be adequately sized and approved by LCEC before installation.



- 204. The UPS specifications need to be compliant with the system requirements in every school.
- 205. Waveform Shape: Pure sinewave
- 206. Efficiency in AC Mode: 90% or better
- 207. Efficiency in Battery Mode: 90% or better
- 208. Voltage regulation: $\pm 1\%$
- 209. Battery type: VRLA, sealed maintenance free
- 210. Battery Capacity: As per the site requirements, noting that only the internet router and monitoring components need to be connected to the UPS
- 211. Battery Autonomy: eight (8) hours
- 212. Life Expectancy: More than five (5) years
- 213. Compliance of Standards: IEC 60896 2004
- 214. Tests: Shock test, Large current discharge test, Vent valve function test, Over discharge test, Vibration test, Oven test, Coldproof test, Heat cycle test, Short circuit test.

Thermal Camera (optional) – Total one (1) unit

- 215. Standalone unit, portable
- 216. 160 x 120 pixels IR resolution
- 217. Object temperature range from -20 to 250 °C
- 218. Thermal sensitivity: less than 70 mK
- 219. Adjustable emissivity value from 0.1 to 0.99
- 220. Encapsulation: IP54
- 221. Mixed vision (IR and normal camera)
- 222. Comes with a battery, charger, and storage media
- 223. 5 hours continuous scanning, rechargeable battery
- 224. At least 4 GB storage
- 225. Laser pointer
- 226. Compliant with EN 61010
- 227. Connections: Bluetooth, USB 2.0 high speed or USB Type-C with corresponding conversion cable either from Type A to C or Type C to A
- 228. Warranty: At least five (5) years



D. Training

229. The contractor is responsible for the training of LCEC and the involved schools on the Energy Monitoring Equipment (six (6) + one(1) optional). The training shall be conducted within six (6) months, starting from the date of contract signature and would include the following:

- a. Operation of the system
- b. Problems and troubleshooting
- c. Software installation and administration (Software management)
- d. Hardware and Software configuration and upgrade
- e. Data storage, access, custom processing and online publishing
- f. Training dates will be specified by the client at a later time

E. Operation

230. The contractor is responsible for the complete operation of the Energy Monitoring Equipment for a period of 12 months at no additional charge starting from the Operation Date of the project.

231. Operation will include but is not limited to: report creation, preventative and routine maintenance, adding partner school systems to the online platform when they are ready, and anything else deemed necessary for proper system operation.

F. Maintenance Guarantee

232. The contractor must provide LCEC with a "Maintenance Guarantee".

233. All work shall be maintained free of charge including all required spare parts for twenty-four (24) months starting from the Operation Date of the project.

234. The proposal should include a maintenance information including detailed terms for technical support, response time (within 3 working days) and spare parts needed.

235. Offer of warranty service must be clear and the bidder must show its commitment for doing the following:

- g. Response time for problem call.
- h. Response time for problem solving.
- i. Response time for software/configuration support.
- j. Response time for (hardware/software) failure.
- k. Response time for components replacements.



Annex

A. Form 1 - Commitment Letter

To: Lebanese Center for Energy Conservation
Beirut
Corniche du Fleuve

I, the undersigned, submit this proposal and declare that:

I have examined, have no reservations and commit to the most recent version of the
“Request for Proposals (RFP) For the Supply and Installation of Energy Monitoring
Equipment - Energy Smart Mediterranean Schools Networks Project”

Signed *[insert signature of an authorized representative of the Applicant]*

Name *[insert full name of person signing the Application]*

In the capacity of *[insert capacity of person signing the Application]*

Duly authorized to sign the Application for and on behalf of: *Applicant's Name [insert full name of Applicant]*

Address *[insert street number/town or city/country address]*

Dated on *[insert day number] day of [insert month], [insert year]*



B. Form 2 - Letter of Application

Date: *[day, month, and year]*

To: Lebanese Center for Energy Conservation (LCEC)
Ministry of Energy and Water
Corniche du Fleuve, First Floor, Room 303
Beirut, Republic of Lebanon

From: *[Name of the Bidder and Full Address]*

Name of the Project: "Request for Proposals (RFP) For the Supply and Installation of Energy Monitoring Equipment - Energy Smart Mediterranean Schools Networks Project"

We, the undersigned, submit this proposal and declare that:

- (a) We have examined and have no reservations to the most recent version of the RFP document and all its addendums;
- (b) We hereby confirm that we will comply with the policy in regard to Corrupt and Fraudulent Practices, and we have no conflict of interest in accordance with the section mentioned on this issue in the RFP;
- (c) We hereby confirm that if our proposal is selected, we shall sign the agreement as per the proposal;
- (d) We plan to subcontract the following key activities and/or parts of the works:
[Insert any of the key activities, subcontractors, details of the sub-contractors, their qualification and experience]
- (e) We understand that you may, without incurring any liability to the applicants, a) cancel the RFP at any time and b) accept no proposal or invite no applicant to sign the installation agreement. We also understand and accept that we shall bear all costs



associated with its preparation and submission and that LCEC will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the selection process;

- (f) All information, statements and description contained in the application are in all respect true, correct and complete to the best of our knowledge and belief;
- (g) We understand that LCEC and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application. This letter of application will also serve as an authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by LCEC to verify statements and information provided in this application, or with regards to the resources, experiences, and competence of the bidder.

Signed *[insert signature(s) of an authorized representative(s) of the Applicant]*

Name *[insert full name of person signing the Application]*

In the capacity of *[insert capacity of person signing the Application]*

Duly authorized to sign the Application for and on behalf of:

Main Applicant's Name *[insert full name of Applicant]*

Address *[insert street number/town or city/country address]*

Dated on *[day, month, and year]*



C. Form 3 - Applicant Information Form

[Name of Applicant]

Applicant's name:	<i>[insert full name]</i>
Applicant's actual or intended country of registration:	<i>[indicate country of Constitution]</i>
Applicant's actual or intended year of incorporation:	<i>[indicate year of Constitution]</i>
Applicant's legal address [in country of registration]:	<i>[insert street/ number/ town or city/ country]</i>
Applicant's authorized representative information	<i>[insert full name]</i>
Name:	<i>[insert street/ number/town or city/country]</i>
Address:	<i>[insert telephone/fax numbers, including country and city codes]</i>
Telephone/Fax numbers:	<i>[indicate e-mail address]</i>
E-mail address:	

Attached are copies of original documents of articles of incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above.



D. Form 4 - Experience in Energy Monitoring Equipment

[Name of Applicant]

[The following table shall be filled in for the applicant]

[Identify contracts that demonstrate continuous Energy Monitoring Equipment work starting January 2015. List contracts chronologically, according to their commencement (starting) dates.]

Starting Year	Ending Year	Contract Identification
<i>[indicate year]</i>	<i>[indicate year]</i>	Contract name: <i>[insert full name]</i> Project Description: Overall Contract amount (US\$): Brief Description of the Works performed by the Applicant: Applicant Amount of contract: <i>[insert amount in US\$]</i> Award date: Completion date: Name of Employer: <i>[indicate full name]</i> Address: <i>[indicate street/number/town or city/country]</i> Contact Person Name & Details: <i>[name, phone, email]</i>
<i>[indicate year]</i>	<i>[indicate year]</i>	Contract name: <i>[insert full name]</i> Project Description: Overall Contract amount (US\$): Brief Description of the Works performed by the Applicant: Applicant Amount of contract: <i>[insert amount in US\$]</i> Award date: Completion date: Name of Employer: <i>[indicate full name]</i> Address: <i>[indicate street/number/town or city/country]</i> Contact Person Name & Details: <i>[name, phone, email]</i>

[Add rows, if necessary]



E. Form 5 - Financial Situation and Performance

[Name of Applicant]

[The following table shall be filled in for the applicant]

Type of Financial information in (LBP)	Historic information for (LBP)		
	2019	2018	2017
Statement of Financial Position (Information from Balance Sheet)			
Total Assets (TA)			
Total Liabilities (TL)			
Total Equity/Net Worth (NW)			
Current Assets (CA)			
Current Liabilities (CL)			
Working Capital (WC)			
Information from Income Statement			
Total Revenue (TR)			
Profits Before Taxes (PBT)			
Cash Flow Information			
Cash Flow from Operating Activities			

[The Applicant shall provide copies of financial statements for the last 3 years. The financial statements shall: (a) reflect the financial situation of the Applicant, (b) be independently audited or certified in accordance with local legislation, (c) be complete, including all notes to the financial statements, (d) correspond to accounting periods already completed and audited]



F. Form 6 - Bid Bond Form

To: The Lebanese Center for Energy Conservation (LCEC)
Ministry of Energy and Water Building, Corniche du Fleuve
1st Floor, Room 303
Beirut, Lebanon

WHEREAS, *[Name of Bidder]* (hereinafter called "The Bidder") has submitted its bid dated *[Date]* for the "Request for Proposals (RFP) For the Supply and Installation of Energy Monitoring Equipment - Energy Smart Mediterranean Schools Networks Project" (hereinafter called "the Bid").

BY THIS GUARANTEE we *[Name of Bank]* of *[Name of Country]* having our registered office at (hereinafter called "the Bank") are bound unto the Employer's Name & Address (hereinafter called "the Employer") in the sum of (amount in LBP) for which payment well and truly to be made to the said Employer the Bank binds itself, its successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this day of.....2020

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws the Bid during the period of bid validity specified in the Form of Bid; or
2. If the Bidder having been notified of the acceptance of its Bid by, the Employer during the period of bid validity:
 - Fails or refuses to execute the Form of Agreement; or
 - Fails or refuses to furnish or to increase the Performance Security Bank Guaranty,or
 - Refuses to accept the correction of the errors in the Bid,

We undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in



its demand the Employer will note that the amount claimed by it is due to it as a result of the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date 180 days after the deadline for submission of bids and it may be extended automatically after this date, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE SIGNATURE OF THE BANK IN THE CAPACITY OF

WITNESS SEAL

..... (Signature, Name, and Address)

NOTE: The bid bond submitted by the Bidder shall be in conformance with the above sample form. Any alternate form/text would result in the rejection of the bid



G. Form 7 - Performance Security

PERFORMANCE SECURITY – BANK GUARANTEE FOR GOOD PERFORMANCE OF WORK

Tenderers are to submit confirmation that a Performance Bank guarantee will be provided in the terms described in the RFP. The actual Bank Guarantee shall be executed at contract award.

Brief description of Contract: the Contract concerns the “Request for Proposals (RFP) For the Supply and Installation of Energy Monitoring Equipment - Energy Smart Mediterranean Schools Networks Project”

PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)

To: The Lebanese Center for Energy Conservation (LCEC)
Ministry of Energy and Water Building, Corniche du Fleuve
1st Floor, Room 303
Beirut, Lebanon

Gentlemen,

WHEREAS,(name and address of Contractor), hereinafter called “the Contractor”) has undertaken in pursuance of Contract No.datedto execute (name of project) hereinafter called “the Contract”);

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with an unconditional an irrevocable Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;



NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor up to a total of (in words) such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of (amount of Guarantee in the currency(ies) specified) (in words) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed hereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the date of issue of the Defects Liability Certificate by the Employer. In any case defect liability period shall not extend beyond four years from the date of taking over.

SIGNATURE AND SEAL OF THE GUARANTOR,

Name of the Bank

Address

Date



H. Form 8 - Team Composition and Tasks Assignment

Team Member Name	Position in this Project	Assigned Task

Please attach the CV of each team member separately.

I. Form 9 - Warranty Form

Component	Full Warranty Period (Years)
Basic Meters	<i>at least 5 years starting from the operation date</i>
Advanced Meters	<i>at least 5 years starting from the operation date</i>
UPS and Batteries	<i>at least 3 years starting from the operation date</i>
Thermal Camera	<i>at least 5 years starting from the operation date</i>
Overall System	<i>at least 2 years starting from the operation date</i>

Beirut on

Fiscal Stamps