

**Terms of Reference (ToR):**  
**Selection of One (1) IT Consultancy/Individual Expert to support the**  
**LCEC in the Implementation of the Building Energy Performance (BEP)**  
**Tool in Lebanon**

BUILD\_ME – Accelerating 0-emission Building Sector Ambitions in the MENA Region Project

Prepared by LCEC  
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## **1. Background**

LCEC is a not-for-profit organization within the Lebanese Ministry of Energy and Water (MEW) with a financially and administratively independent statute. LCEC acts as the technical arm of the Lebanese Government and specifically the Ministry of Energy and Water in all issues related to energy efficiency and renewable energy.

The main role of the LCEC is to set up national action plans and strategies to develop the sustainable energy sector in Lebanon. LCEC's role also expands to the implementation of national projects and initiatives undertaken by the Lebanese Ministry of Energy and Water as well as by other national and international stakeholders.

The work of LCEC includes a multi-layer approach: technical support, legal and institutional development, awareness raising, capacity building, and financial mechanisms and incentives.

### **1.1 BUILD\_ME Project**

The project “Accelerating 0-emission building sector ambitions in the MENA region project”, known as BUILD\_ME, supports the promotion of low-energy buildings in the MENA region, in improving access to finance, advising on the policy framework, and offering technical solutions including trainings to local stakeholder. BUILD\_ME is funded by the International Climate Initiative (IKI) of the German Federal Ministry for Economic Affairs and Climate Action (BMWK). BUILD\_ME focuses on Egypt, Jordan, and Lebanon.

BUILD\_ME has developed the Building Energy Performance (BEP) Tool which provides the relevant actors in the MENA region a free, usable software tool to calculate the overall energy performance of buildings and the cost-effectiveness of building energy efficiency measures. The building energy performance (BEP) tool has been used in many international projects, delivering realistic results based on a solid, internationally applicable methodology. The model’s calculation core is based on ISO 52016 – Energy efficiency of buildings - energy requirements for heating and cooling, indoor temperatures, and sensitive and latent heat loads, an international standard. ISO 52016 is the most up-to-date standard for calculating building energy requirements and best matches the requirements of the BUILD\_ME project. For more info., please check the BUILD\_ME project website <https://www.buildings-mena.com/info/building-energy-performance-tool>.

Based on the BEP tool, BUILD\_ME is jointly with the project's national partners developing an Energy Performance Certificate (EPC) scheme. The EPC provides a clear classification of the building’s energy efficiency levels ranging from A+ to G (green to red).

## 1.2 Objective of this ToR

The purpose of this ToR is to outline the scope of work and establish the selection criteria for one (1) IT Consultancy/Expert to support the LCEC in implementing the BEP Tool in Lebanon by integrating it with the existing LCEC website. This integration will help improve energy performance assessments and provide valuable insights for stakeholders in Lebanon.

## 2. Scope of Work

The selected IT Consultancy/Expert will be responsible for:

- **Server Setup:** Setting up the necessary server infrastructure, including configuration and software installations, to support the BEP Tool.
- **Deployment of the BEP Tool:** This involves handling C#/.NET, PHP, MySQL, and JavaScript code, and ensuring compatibility with the LCEC website. Setting up and configuring the MySQL database, including importing initial data and creating backups.
- **Testing and Quality Assurance:**
  - Conducting thorough testing of the tool's functionalities to ensure seamless performance and accuracy.
  - Ensuring the tool's data processing, including climate and baseline building data, is seamlessly connected and accessible through the website.
  - Managing the interaction between servers, facilitating the smooth transfer of calculation requests and results.
- **Handing Over of Works:** Provide a comprehensive handover of the tool, including documentation, related files, and relevant user guides.

The LCEC will provide the winning applicant with the BEP tool integration requirements documents and data files upon contract award. The integration requirements documents shall include:

- Setup requirements
- Input Data Requirements
- Server Setup Guide
- Configuration Requirements
- Tool Installation
- Data Deployment and Code Production

All costs associated with licenses, subscriptions, and service renewals must be included in Form 3 as part of the application. The selected applicant will be responsible for setting up the necessary service accounts and providing them to LCEC. Payments for the following services are excluded from the BoQ subject of Form 2 of this ToR and shall be managed separately by the LCEC.

- SpreadsheetGear for .NET Framework – Subscription and renewal Fees
- PHP Generator for MySQL – License Fees
- Virtual Private Server (VPS) package – Subscription Fees

### 3. Proposal Timeline

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

ToR Announcement	20 November, 2024
Requests for Clarifications Deadline	25 November, 2024
Closing Date for Receipt of Applications	05 December, 2024
Announcement of Winning Applicant	10 December, 2024

- The deadline for submitting applications as mentioned in the Timeline is on the 05<sup>th</sup> of December 2024.
- All applications received after the mentioned date and time will be rejected.
- Application must be sent in soft copy to [energy@lcec.org.lb](mailto:energy@lcec.org.lb).

LCEC may, at its discretion, extend the deadline for the submission of applications, in which case all rights and obligations of LCEC and the applicants subject to the previous deadline shall after that be subject to the deadline as extended.

### 4. Acceptance of Works

A Provisional Acceptance Certificate shall be issued by the LCEC upon successful testing, quality assurance, and handing over of the project.

The IT Consultancy/Expert shall be responsible, for 3 months from the date of the Provisional Certificate, for the reliability and proper operation of the tool.

The Final Acceptance Certificate shall be issued by the LCEC after 3 months of the Provisional Acceptance Certificate following the liability period, during which the IT Consultancy/Expert is responsible for supporting the LCEC and maintaining the tool for proper operation.

## 5. Payment Terms

Payments shall be made per the following Table:

Milestone	Payment Percentage
Contract Award	30%
Handing Over of Works	60%
Final Acceptance Certificate	10%

- All payments under this ToR shall be made in EURO as cash payments.
- The VAT shall be paid in Lebanese Pounds as per Lebanese Laws.

## 6. Evaluation Criteria

The IT Consultancy/Expert shall fill out and submit:

- Form 1: Applicant Information and Mandatory Attachments
- Form 2: Applicant Financial Offer – BOQ
- Form 3: Services – Price List
- Implementation Methodology

Evaluation of proposals will be conducted as per the below sections.

### 6.1 Mandatory Technical Evaluation Criteria (Pass/Fail)

All proposals will be screened based on the mandatory evaluation criteria (pass/fail) as per **below**. To be considered eligible or technically compliant in the mandatory evaluation a proposal must obtain a “Pass” in ALL mandatory criteria.

Applicant must:

- Fill, sign, and submit Forms 1, 2, and 3 of this ToR
- Provide curriculum vitae/professional qualifications of Expert (max 2 pages)
- Provide Implementation Methodology Document

### 6.2 Required Skills

IT Expert in charge of the project must meet the following criteria:

- **Minimum Education:** A completed Bachelor's degree in ICT (Information and Communication Technology) or a related field.
- **Experience:** At least 3+ years of experience in programming with the following languages and technologies:

- **PHP:** Proficient in developing dynamic web applications and server-side scripting.
  - **.NET C#:** Skilled in building robust and scalable applications using the .NET framework and C# language.
  - **JavaScript:** Experienced in creating interactive web applications, including familiarity with libraries and frameworks.
  - **jQuery:** Knowledgeable in utilizing jQuery to simplify HTML DOM tree traversal and manipulation.
  - **HTML/CSS:** Strong understanding of web development, including the creation and styling of web pages.
- **Preferred Frameworks:** While not mandatory, familiarity with the following frameworks and tools is highly desirable and considered an advantage:
- **SpreadsheetGear:** This is a powerful tool for .NET that allows developers to work with spreadsheets in a high-performance, feature-rich environment. Knowledge of SpreadsheetGear can be beneficial for tasks involving data analysis, reporting, and generating Excel-like documents.  
(<https://www.spreadsheetgear.com/>)
  - **PHP Generator for MySQL:** This tool helps create high-quality PHP scripts for interacting with MySQL databases. It simplifies the development process by generating code for CRUD (Create, Read, Update, Delete) operations, and having experience with this tool can accelerate database-driven application development.  
(<https://www.sqlmaestro.com/products/mysql/phpgenerator>)
  - **FPDF:** FPDF is a PHP class that allows you to generate PDF files with pure PHP. It provides a way to create PDF documents programmatically without needing additional libraries or tools. Familiarity with FPDF is valuable for creating invoices, reports, and other documents in PDF format.  
(<http://www.fpdf.org/>)

## 7. General Terms and Conditions

### 7.1 Sources of Instructions

The IT Consultancy/Expert shall neither seek nor accept instructions from any authority external to LCEC in connection with the performance of the services. The IT Consultancy/Expert shall refrain from any action that may adversely affect LCEC and shall fulfill its commitments with the fullest regard to the interests of LCEC.

The IT Consultancy/Expert 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 IT Consultancy/Expert at any time use such information to private advantage. These obligations do not lapse upon termination of the contract.

## **7.2 Observance of the Law**

The IT Consultancy/Expert 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 the contract.

## **7.3 Settlement of Disputes**

The IT Consultancy/Expert and the LCEC shall use their best efforts to settle amicably any dispute, controversy, or claim arising out of, or relating to the 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.

## **7.4 Title to Equipment**

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 the project or when no longer needed by the IT Consultancy/Expert. Such equipment, when returned to LCEC, shall be in the same condition as when delivered to the IT Consultancy/Expert, subject to normal wear and tear. The IT Consultancy/Expert shall be liable to compensate LCEC for equipment determined to be damaged or degraded beyond normal wear and tear.

## **7.5 Indemnification**

The IT Consultancy/Expert 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 IT Consultancy/Expert in the performance of this project. This provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, product liability, and liability arising out of the use of patented inventions or devices, copyrighted material, or other intellectual property by the IT Consultancy/Expert.

## **7.6 Encumbrances/Liens**

The IT Consultancy/Expert 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, or by reason of any other claim or demand against the IT Consultancy/Expert.

### **7.7 Use of Name, Emblem, or Official Seal**

The IT Consultancy/Expert shall not advertise or otherwise make public the fact that it is an IT Consultancy/Expert with LCEC, nor shall the IT Consultancy/Expert, 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.

### **7.8 Copyright, Patents, and Other Proprietary Rights**

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 project as well as after execution. At the LCEC's request, the IT Consultancy/Expert 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.

### **7.9 Force Majeure; Other Changes in Conditions**

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.

In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the IT Consultancy/Expert shall give notice and full particulars in writing to LCEC, of such occurrence or change if the IT Consultancy/Expert is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities. The IT Consultancy/Expert shall also notify LCEC of any other changes in conditions or the occurrence of any event that interferes or threatens to interfere with its performance. The notice shall include steps proposed by the IT Consultancy/Expert 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 IT Consultancy/Expert of a reasonable extension of time in which to perform its obligation.

If the IT Consultancy/Expert is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities, LCEC shall have the right to suspend or terminate the contract following a period of notice of seven (7) days.



## 7.10 Corrupt and Fraudulent Practices

Anticorruption Policy requires applicants to observe the highest standard of ethics during the execution of the project. 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.

LCEC will reject a proposal for award if it determines that the applicant 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.

## 7.11 Conflict of Interest

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, applicants 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 application, applicants may be considered to be in a conflict of interest with one or more parties if they, including but not limited to:

- have controlling shareholders in common; or
- receive or have received any direct or indirect subsidy from any of them; or
- have the same legal representative for purposes of their proposal; or
- 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 applicant in the subsequent bidding process or influence the decisions of LCEC regarding this bid process; or
- Participated in the preparation of this ToR.

## Form 1: Applicant Information Form and Mandatory Attachments

[All consultancies/Freelance Individuals applying for the project are requested to complete the information in this form]

<b>1. Applicant Details (1)</b>	
Type of Applicant <i>Consultancy / Freelancer (Select one)</i>	
Company Name <i>For Consultancies Only</i>	
IT Consultancy/Expert Name	
Legal Representative Name <i>For Consultancies Only</i>	
Contact Number	
Email Address	
Company Registration Number <i>For Consultancies Only</i>	
Tax Identification Number <i>(If applicable)</i>	
Address	
Website <i>if available</i>	
<b>2. Qualifications (2)</b>	<input type="checkbox"/> CV Attached
IT Consultancy/Expert Academic Details <i>Degree, Institution, Year of Completion</i>	
Relevant Certifications <i>List all relevant IT certifications</i>	
<b>3. Experience</b>	
IT Consultancy/Expert Years of Experience	
Key Projects Completed <i>Provide brief descriptions of relevant projects</i>	
Technologies Used <i>PHP, .NET C#, JavaScript, etc.</i>	
AWS & Windows Server Experience <i>Describe relevant experience</i>	
<b>4. Proposed Approach (3)</b>	
Methodology for Implementation	<input type="checkbox"/> Attached

- 1) The expert Curriculum Vitae (CV) document must be attached along with this form.
- 2) Consultancies must attach 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.
- 3) A separate document (stamped and signed) must outline the Implementation Methodology. To be attached along with this form.

Stamp\*, Signature\*\*, & Date:

\* Stamp is only required for consultancies.

\*\*For consultancies, the legal representative signature is required.

## Form 2: Applicant Financial Offer - BOQ

[All consultancies/Freelance Individuals applying for the project are requested to fill in the information in this form]

Item Description	Unit	Qty	Unit Price (€)	Total Price (€)
<b>Implementation of the following:</b> <ul style="list-style-type: none"> <li>• Servers Setup: Initial Setup and Configuration</li> <li>• Software Installation: PHP Generator and SpreadsheetGear for .NET Framework</li> <li>• Virtual Private Server (VPS) Account Setup</li> <li>• PHP Code Deployment: Deploying PHP Code on the Server</li> <li>• C#/.NET Code Deployment: Deploying C#/.NET Code on the Server</li> <li>• MySQL Database Configuration and Setup</li> <li>• Testing and Quality Assurance</li> <li>• Handing Over</li> </ul>	Man-Day	[TBD by Applicant]		
			VAT	
			<b>Grand Total (€)</b>	

Stamp\*, Signature\*\*, & Date:

\* Stamp is only required for consultancies.

\*\*For consultancies, the legal representative signature is required

### Form 3: Services – Price List

[All consultancies/Freelance Individuals applying for the project are requested to fill in the information in this form]

Item Description	Unit	Price (€)
<b>1. SpreadsheetGear for .NET Framework</b>		
1.1 Subscription	One-time Payment	
1.2 Renewal	Annual Fee	
<b>2. PHP Generator for MySQL</b>		
Option 1: PHP Generator for MySQL (single non-commercial license)	One-time Payment	
Option 2: PHP Generator for MySQL (single non-commercial license + 3-year upgrades)	One-time Payment	
<b>3. Virtual Private Server (VPS)</b>		
AWS Windows Virtual Private Server (VPS) to host specific components (C#/.NET web application) – Instance type: t3.xlarge <b>Or</b> Equivalent compatible VPS Service	Monthly Fee	

Stamp\*, Signature\*\*, & Date:

\* Stamp is only required for consultancies.

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