ARZ 2.0 Web Portal Design and Development
Request for Proposal (RFP)

Description of Requirements

Context of the Requirement	Design and Implementation of the ARZ Green Building Assessment Tool web portal
Brief Description of the Required Services	Design and develop an ARZ Green Building Assessment Tool web portal in both English and Arabic languages. WHO: The web portal is intended for the Lebanese Commercial building stakeholders and the general public. WHAT: The web portal is intended to be a free and accessible **Green Building Rating System (GBRS) Assessment Tool** as well as the possibility to request a full certification**,** and to provide updated information and guidance related to green building design and rating. HOW: The web portal content includes an assessment tool into which the end user would input the facility's information (energy consumption details, dimensions, construction material, construction type, GPS location…) as well as upload documents (such as AutoCAD files, pdf files, etc…) and receive a certificate in return for the rating of the building. The web portal would also have the option to request a detailed evaluation by a certified assessor. WHY: The web portal aims at relaunching the ARZ GBRS and to ensure its widest accessibility to Lebanese professionals and end users.
List and Description of Expected Outputs to be Delivered	The web portal should be fully functional, modern, interactive, responsive and user friendly in English and Arabic. For more details please refer to the TOR in Annex 1.
Person to Supervise the Work/Performance of the Service Provider	Lebanon Green Building Council (LGBC) – Project Manager and team
Frequency of Reporting	Weekly reporting during concept development phase and bi-weekly during concept implementation. (A summary of tasks)
Progress Reporting Requirements	Once per week (A summary of tasks)
Location of work	☐ Exact Address/es *[pls. specify]* ☒ At Contractor's Location
Expected duration of work	24 months
Target start date	October 1st, 2020
Target trial version date	February 27th, 2021
Target beta version date	September 30th, 2021
Going live date	February 15th, 2022
Implementation Schedule	☒ Required

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indicating breakdown and timing of activities/sub-activities	☐ Not Required
Names and curriculum vitae of individuals who will be involved in completing the services	☒ Required ☐ Not Required
Payment Terms	Conditions for Payment Release: Within ten (10) days from the date of meeting the following conditions: a) LGBC's written acceptance (i.e. not mere receipt) of the quality of the deliverables' outputs; and b) Receipt of invoice from the Service Provider. c) All invoices must be billed before the 9th of September 2022.
Criteria for Contract Award	☐ Lowest Price Quote among technically responsive offers ☒ Highest Combined Score (based on the 70% technical offer and 30% price weight distribution).
Criteria for the Assessment of Proposal	**Technical Proposal (70%)** ☒ *Technical Proposal (100%)* ☒ Expertise of the Firm: 10% ☒ Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan: 80% ☒ Management Structure and Qualification of Key Personnel: 10% **Financial Proposal (30%)** To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by LGBC.
Contact Person for Inquiries (Written inquiries only)	Dr. Riad Assaf Email: riadassaf@hotmail.com
Technical Proposal	Technical Proposal must be sent before September 25th, 2020 midnight (Beirut time) by email to: Mrs. Rima Sorour: lgbc.procurement@gmail.com and Dr. Riad Assaf: riadassaf@hotmail.com Note: Do not send financials with the technical proposal.
Financial Proposal	Bidders that obtain a minimum of 70% on their technical proposal will be contacted to submit separately their financial proposal.

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Annex 1

Terms of Reference

1. BACKGROUND INFORMATION

The United Nations Development Programme has initiated the implementation of the *CEDRO 5 project*, which is funded by the European Union. The CEDRO 5 project is implemented in partnership with the Association of Lebanese Industrialists (ALI), The Lebanon Green Building Council (LGBC), and the International Renewable Energy Credits (I-REC) Institution.

The European Union (EU) is encouraging innovation and entrepreneurship in Lebanon to support a clean energy transition. The overall aim of the EU is to address job creation and growth in support of Lebanon's economy, in line with the first priority sector of the Single Support Framework for EU Support to Lebanon (2017-2020), while supporting Climate Change Mitigation in Lebanon. The specific objective is to promote innovation, entrepreneurship and job creation in support of Lebanon's clean energy transition and Nationally Determined Contributions (NDCs) for the energy sector. The European Union (EU) proposes the gradual shift towards a clean energy transition (gradual phasing out from fossil fuels by switching to renewable energy sources) and circular economy principles, paving the way for (1) tapping into the potential for green jobs and growth (in particular in the energy sector), (2) alleviating financial and economic burden of the current energy system on the various sectors and sub-sectors of Lebanon, (3) facilitating access to financing, and (4) improving the linkages amongst green entrepreneurship, small-and-medium sized enterprises (SMEs), industries and research/technology centers.

The CEDRO 5 project aims to achieve the objectives outlined above through enhancing innovation, entrepreneurship and research, assisting in technology transfer and the creation of new value chains in the renewable energy and energy efficiency sector, supporting and initating enabling policy, training and capacity building, and targeting effective awareness initiatives on renewable energy (RE) and energy efficiency (EE).

2. MAIN OBJECTIVE

The LGBC is seeking a proposal from qualified firms who have conducted similar projects with companies and organizations to develop the ARZ Green Building Assessment Tool. The developed web portal needs to allow users, in a clear, simple, professional, well-designed and easy to navigate manner to perform a full assessment of their existing or new commercal buildings (offices, hospitals, hotels, malls and education facilities), with the possibility of requesting an official assessment by an ARZ certified assessor.

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The web portal will also have an information section which provides the users with the ARZ 2.0 rating system manual and information about sustainaibility news in the construction and commercial sectors.

3. GENERAL REQUIREMENTS

3.1. Technology Requirements

The below are the minimum requirements:
- The web portal needs to be developed using open source technology and customizable content management system (CMS);
- The bidder should assess the capacity and limitations of the available database technologies in the market to respond effectively to the requirements of this call. The deliverable should be a detailed table listing the advantages and disadvantages of the selected technology/approach, taking into consideration budget limitations and cost-efficiency concerns. The bidder should include in their proposal the technology/programming language which is going to be used and list all its advantages;
- The bidder should take into consideration with their proposed technology allowing the web portal administrator (LGBC project team) to change (add/remove) sections, sub-sections, pages, as well as updating the web portal with new material and information whenever needed. This should be included in the training delivered at the end of project;
- Additionally, the web portal should have a webmail for unlimited accounts with unlimited storage, POP3 and IMAP access, auto responder, forwards, aliases and mailing lists (up to 5,000 emails), Anti-Virus and spam filtering (configurable);
- Provide timely support and maintenance for the life of the project (i.e. until September 30th, 2022) or the period agreed upon in the contract.

3.2. Methodology, Project Management and Expertise

The bidder should have previous experience in designing and developing web portals of similar requirements companies or organizations. It is the responsibility of the bidder to provide the best project management plan in agreement with the LGBC project team to achieve timeliness and best results of the delivery. As a minimum, the bidder should have:

- A project manager:
  With a bachelor's in computer engineering, computer sciences, or any related field;
  With a minimum of 4 years' experience in managing client contracts for web portal development.

- UX/UI developer:
  With a bachelor's in computer engineering, computer sciences, or any related field;

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With a minimum of 2 years' experience in developing web portals.

- Full stack web developer:
  With a bachelor's in computer engineering, computer sciences, or any related field;
  With a minimum of 2 years' experience in developing web portals.

The bidder should explain in detail the methodology they are going to apply to develop the ARZ Green Building Assessment Tool web portal. A detailed project plan should be provided and agreed on at the beginning of the project. Also, quality assurance plan and techniques should also be included inside the offer. The bidder should provide weekly reports of the progress of work. A weekly meeting with the LGBC team and communication expert is also required to track the work progress.

3.3. Hosting Requirements

▪ **Infrastructure:** based on the proposed solution, the bidder should advise on the most optimal and efficient hardware and hosting environment to guarantee the best performance in terms of data entry and user experience.

The bidder should provide a stable hosting plan for 2 years with the following minimum specifications:
- o World leading hosting company or hosted at the winning bidder's hosting server;
- o High and constant up-time: 99.99% guaranteed;
- o Compatible with the technology chosen and provides efficiency of services in terms of fast loading pages and continuous security upgrades;
- o Scalable hosting space (with redundancy on hard drive);
- o Easy to scale secure cloud hosting;
- o All needed licenses for the developed system, shall be purchased and provided by the bidder and will be solely owned by LGBC;
- o Available hosting control panel;
- o Hosting site statistics;
- o Search Engine Optimization;
- o Unlimited traffic/Bandwidth, suitable for at least 1000 visits per month;
- o Resource usage and alerts;
- o Servers administration and migration works will be the sole responsibility of the bidder;
- o Fast support response time: the bidder will be the sole responsible toward LGBC to swiftly solve any hosting issue that might occur;
- o The bidder will guarantee to not perform any hosting update/maintenance without prior notification and agreement with LGBC team.

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- **Data Entry requirements:** given the type of information needed (entered / uploaded) the bidder needs to recommend the best solutions for the web portal optimal performance:
  - Determine appropriate compression techniques, resolutions, sizes, color maps, and depths to ensure that images are delivered at sufficiently high speed and quality;
  - Develop appropriate calculator for each criterion based on models with logical parameters provided and explained by LGBC;
  - Develop a well-designed user interface that allows fast processing of data entry, seamless interaction with the calculator and generation of adequate grading;
  - Buildings data export in MS-Excel and Python formats;
  - Set up additional features such as data analysis and reporting for the back-end that serves the LGBC to make use of the data collected;
  - Set up a media library separated by submission for obtaining legal proof and documentation from users requesting official rating via upload;
  - Other additional features include but not limited to creation of user management, project assignment and authorization, dashboard management for front-end and back-end, description and help tabs for each criterion, etc.

3.4. Specific Requirements:

ARZ 2.0 Business Development Committee (BDC) has defined the skeleton of the new GBRS version. The work of this committee covered five commercial sectors (offices, hotels, hospitals, malls and educational facilities) considering for each sector the possible three different statuses: 1) existing building, 2) new building in design phase, 3) new building in construction phase.

Table 1. Building Grade vs Building Rating

Building grade	Building rating
00 to 49	Uncertified
50 to 59	Certified
60 to 69	Bronze
70 to 79	Silver
80 to 89	Gold
90 to 100	Platinum

Hence, BDC defined 15 different applications (i.e. 5*3=15) represented in Figure 1; they constitute the spine of ARZ 2.0. Each application will be rated according to its grade that reflects how much the building is environmentally friendly or in other words, is in harmony with the elements of Nature. The relationship between the rating and the grade of a building is given in Table 1.

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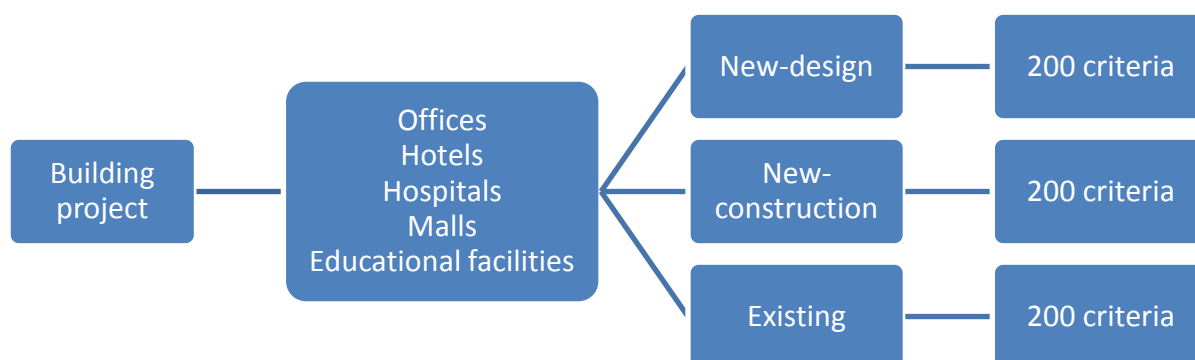Page 6 of 13

Figure 1. The 15 building applications

Five modules (site, materials, water, wellness, energy) representing the five elements of Nature, as described in Table 2, will help evaluate each application. The latter grade is a weighted average of the five modules grades. The weighted average depends on the application. The bigger the weight is, the more important the module is for a specific kind of building sector.

Table 2. Element of Nature vs Module name

Nature element name	Module name
1st element: Cosmos, Ether or Space	Site
2nd element: Earth	Materials
3rd element: Water	Water
4th element: Fire	Energy
5th element: Air	Wellness

A module listed in Table 2 is subdivided into several families gathering a group of relevant criteria. There will be no more than 200 criteria per building status (existing, new-design, new-construction) spread among the five modules to describe the design, the construction and the functionalities of each type of the defined 15 kinds of building applications. Depending on the latter, the module grade will be a weighted average of the criteria grades that it contains.

The criterion grade is a function of multiple parameters which values are data-entry based. The number of parameters easily reaches 50 for one criterion. Each data-entry is subject to predefined conditions: a) a numerical entry belongs to a specific interval; b) an alphanumeric entry belongs to a specific set of values (i.e. as many as 20 different values for one entry).

In case the user requires a certified rating for the building, he/she should be able to prove that all the parameters are correct. An assessor, certified by LGBC, will review the presented documentation then produce the certified rating. Should the user fail to submit the documentation, or simply doesn't want a certificate, he/she will still be able to get an online rating.

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Whether the user chooses an online rating or a certified rating, he/she can generate a report that shows all the earned criteria grades, the modules and the building grades. On top of that, it will provide suggestions for those who wish to increase their building rating level.

The ARZ Green Building Assessment Tool web portal should have the following requirements:

- **Back-end and Content Management System Module**: The content management system / back-office should allow the system administrator (i.e. the bidder during the O&M period) the full flexibility over the ARZ Green Building Assessment Tool web portal sitemap and page interconnectivity, and the LGBC team flexibility to edit the web portal content as follows:

- **The system administrator**:
  - The system administrator should have the flexibility to add / remove any additional desired page to the website;
  - The system administrator should have infinite navigation tree management providing an easy way to add, edit, or delete navigation nodes;
  - The system administrator should have full templates management (templates of individual pages, i.e. the system administrator should be able to add / remove / edit individual pages in sub-sections such as implementations, publications);
  - The system administrator should have the ability to link any navigation node to any pre-defined template file;
  - The system administrator should have the ability to add, edit, delete or sort content blocks.

- **Both the system administrator and the LGBC team:**
  - Both the system administrator and the LGBC team should have the ability to easily link any navigation node to any content block;
  - The system administrator and the LGBC team should be able to put announcements on the system for a specific period.

- **The content management system should feature:**
  - Familiar and rich authoring environment: spell checking in real time for input and text area;
  - Cross-Browser compatibility: it should support the following browsers:
    - □ Chrome 7.0 and higher
    - □ Safari 5.0 and higher
    - □ Opera 9.5 and higher
    - □ Firefox 3.0 and higher
    - □ Microsoft EDGE;
  - The option of keeping a log file for all activities, entries, updates, etc. made by backend / frontend users. The system administrator should be able to see the modifications and be able to roll back or delete.

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- **User Registration:** Owners and/or official person designated by owner will be able to register to the ARZ web-based platform by providing the minimum following details:
  - Full Name;
  - Contact Information (email address, phone number, professional position, etc.);
  - Commercial Building Information (Company Name, Address, phone number, web portal, sector, type of building, location through google maps, etc.).

The registration process needs to have a verification process where the system administrator sends a confirmation email to the email address provided by the user.

After signing in the user is allowed to fill-out their application to obtain their online rating system. The user can only submit the application if all the information is submitted (no blanks) and within the specified range (no errors).

- **Reporting Module:** The CMS will provide the option to permit the administrator (LGBC team and system administrator) to generate reports based on user's activity:
  - Based on date and time of visit;
  - Based on user activity on the site (number of downloads / uploads, reports generated, etc.);
  - The status of the certification process (Registered, Incomplete, Rated and Official Rating).

The reporting module should allow the user to:
  - Export the excel generated report;
  - Sort and filter reports by all fields.

- **Web portal Maintenance**: The bidder is responsible to provide maintenance support to the ARZ Green Building Assessment Tool web portal until September 30th, 2022 which shall include the following:
  - Ensure the web portal is set and running;
  - Responsible of fixing all web portal issues and bugs inside the code;
  - Responsible of coding minor additional modules for the web portal (additional sections / sub-sections / icons / etc.);
  - Keep a regular backup schedule for the full site, online and offline;
  - Perform regular test on the backups every month to ensure that the backups are valid;
  - Update and install latest CMS software updates;
  - Identify issues that might be slowing down web portal, fix accordingly;
  - Identify new referrers that are sending traffic to the platform;
  - Provide regular platform traffic stats based on the server web logs.

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- **Web portal Visual Design**: The ARZ Green Building Assessment Tool web portal look and feel should be user friendly and easy to navigate – the bidder is requested to provide his/her own design and will be evaluated accordingly.

The web portal – *an assessment tool* – will be used to allow the end user to conduct a quick assessment for the facility / building and request an official assessment should they want to. In addition, the web portal will host a part where the end user could get the latest information (products / services / trends) in the construction sector. The wireframe design should have a user-friendly interface and that include the following branding elements:
- Logo Mechanism and application color schemes, fonts, typography, palette, etc.;
- A site map that includes all the key pages showing their relationship to each other and defining how the platform's overall navigation is structured;
- A detailed view of the content that will appear on each page.

Upon approval of the sitemap the bidder shall submit at least 2 different responsive template design proposal. These templates shall include but not limited to:
- Interface design (look and feel, colors, font size, page (or section header) and footer, page titles, style sheets, icons, buttons, tables and all infographic icons, maps charts or graphic to be used in the system.

4. DELIVERABLES

The bidder will propose in the workplan and methodology a set of deliverables that matches the project timeline and respects the target dates related to the web portal.

The final TOR that will be signed as part of the contract will formulate the negotiated contents of each deliverable.

The LGBC project manager and team will meet with the winning bidder after contract signature to discuss and provide feedback / direction on:

- The ARZ Green Building Assessment Tool web portal layout design;
- The ARZ Green Building Assessment Tool web portal sitemap;
- The general workplan and implementation schedule.

The project team will provide the winning bidder with ARZ GBRS content complete with the criteria and the data entry fields types and information.

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5. PROPOSAL REQUIREMENTS

Dear bidder, your proposal should include at least the following:

- Overview of your company
- Overview of how you will meet our objectives
- Explanation of your proposed platform / CMS
- Outline of your web portal design & development strategy
- Technological specifications and pre-requisites for system functionality
- Proposed web portal timeline from kickoff to launch
- Details about your team
- Attached CV of the development company representative and key personnel assigned to the proposed project
- Relevant portfolio experience for the past 4 years
- References
- Any key differentiators about you?
- Supporting documents for the below:
  - Company legal status and registration (شهادة تسجيل الشركة)
  - Company commercial register (سجل تجاري)
  - Company legal representative certificate (إذاعة تجارية)
  - Prior engagement with other UN Agency (including UNDP) or other international donors or organizations.

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Technical Evaluation Criteria

Summary of Technical Proposal Evaluation Forms		Points Obtainable
1.	Expertise of the Firm	100
2.	Web portal Layout and Design Methodology	800
3.	Management Structure and Key Personnel	100
	Total	**1000**

Section 1. Expertise of the Firm		Points obtainable
1.1	Company Profile Minimum of 2 years in designing, developing, and maintaining reference *Less than 3 years = 5 points; for 3 years = 10 points; for more than 3 years = 25 points*	25
1.2	General Organizational Capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted *25% of project staff are full-time, weak management controls: up to 5 points.* *Up to 50% of staff are full time, average management controls: up to 10 points.* *Up to 80% of staff are full time, PM controls and/or ISO management certification: up to 25 points*	25
1.3	Relevance of specialized knowledge and experience on similar engagements done in the region/country *Minimum 1 major project in fields related to the contract in the past three years (15 points)* *2 major projects in fields related to the contract in the past three years (30 points)* *More than 2 major projects in fields related to the contract in the past three years (50 points)*	50
Total Section 1		**100**

Section 2. Web portal Layout and Design		Points obtainable
2.1	Proposed technology for the web portal development (CMS) meets or exceeds the Terms of Reference requirements	100

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2.2	Description of the bidder's approach and methodology for meeting or exceeding the requirements of the Terms of Reference	200
2.3	Details on the web portal backend and frontend requirements in line with the Terms of Reference	300
2.4	Data Entry fields recommendations and performance	75
2.5	Workplan relevance for meeting or exceeding the timeliness requirements of the Terms of Reference	75
2.6	Web portal maintenance approach meets or exceeds the requirement of the Terms of Reference	50
Total Section 2		**800**

Section 3. Management Structure and Key Personnel			Points obtainable
3.1	Project Manager		50
	- Bachelor's degree in computer engineering, computer science or any related field	20	
	- Minimum 4 years of experience in managing a client contracts for web portal developing	25	
	- Arabic and English proficiency	5	
3.2	UX/UI developer		25
	- Bachelor's degree in computer engineering, computer science or any related field	9	
	- Minimum 2 years of experience in developing web portals	15	
	- Arabic and English proficiency	1	
3.3	Full stack web developer		25
	- Bachelor's degree in computer engineering, computer science or any related field	9	
	- Minimum 3 years of experience in developing web portals	15	
	- Arabic and English proficiency	1	
Total Section 3			**100**

Thank you for your interest in responding to this RFP with a proposal for our web portal. We look forward to your response.

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