



## INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

Date: 21 April 2021

Reference: LBN/CO/IC/104/21

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**Country:** Lebanon

**Description of the assignment:** International Consultant

**Project name:** Country Entrepreneurship for Distributed Renewables Opportunities (CEDRO 5)

**Description of the assignment (Title of consultancy):** Detailed design and implementation follow-up for the Steam System improvement, Steam Condensate Return and control in one selected industrial facility

**Period of assignment/services:** 35 working days spread over 16 months

Proposals should be submitted online through the UNDP job site at <https://jobs.undp.org/> no later than **19 May 2021 at 11:59 PM Beirut Local Time. Proposals will not be received through email.**

Any request for clarification must be sent in writing to the e-mail [Procurement.lb@undp.org](mailto:Procurement.lb@undp.org). The UNDP Procurement Unit will respond in writing by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of inquiry, to all consultants.

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### 1. BACKGROUND

The United Nations Development Programme, in support of the Ministry of Energy and Water, has initiated the implementation of the CEDRO 5 project, which is co-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 Commission (EC) is encouraging innovation and entrepreneurship in Lebanon to support a clean energy transition. The overall aim of the EC 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 EC 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 UNDP 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 imitating enabling policy, training and capacity building, and targeting effective awareness initiatives on renewable energy (RE) and energy efficiency (EE).

## **2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED ANALYTICAL WORK**

The objective of the Consultancy is to provide the necessary technical support for the effective design, technical specifications drafting, monitoring of the implementation of energy efficiency activity (steam system improvement, steam condensate return and control), and technology transfer for Gemayel Freres.

In specific, the technology intervention aimed for will be steam system improvement, steam condensate return and control in Gemayel Freres (GF), Mount Lebanon, an industry specialized in the production of corrugated cardboards. GF sells and packages corrugated cardboards for both industrial and agricultural products. GF has one office building and three hangars used for production and storage and operates 24 hours a day, 7 days a week.

GF has a boiler of 17 Bars, 7 Tonnes/hr, which supplies steam at 180°C to the corrugator line. Another back up boiler of 4 Tonnes/hr exists for emergency cases. An Energy Audit was done in 2015 for the industry and identified the energy efficiency solutions that can save energy. The main energy efficiency solution is the steam network improvement along with steam condensate return with a control to the steam system and steam traps.

The existing steam network generates steam in the process of corrugated board manufacturing mainly to condition the paper and to dry out the starch-based glue in order to ensure a good and quick bonding between the paper layer and to remove excess moisture from the board. The steam is generated by a fire tube boiler at 13-14 Bar. There are two types of heat exchangers in the process: rotating cylinders and flat plates. Both heat exchangers are currently equipped with spiral type steam traps. The flat plates of the double backer section are equipped with steam pressure reducers while the rotating cylinders of the single facers and the double glue unit are supplied with live steam at line pressure. The condensate is collected from the heat exchangers through two lines and conveyed to an atmospheric feed water tank by steam pressure. No condensate pumps are used. The mixture of condensate and make up water is then pumped to the boiler. The industry is considering upgrading the condensate system to become

pressurized to improve the thermal efficiency. The project might introduce other improvements to the steam system to control, enhance, and monitor its performance.

The Consultant, in close coordination with the UNDP Project Management Unit (PMU) and the Association of Lebanese Industrialists (ALI) will be required to develop the full technical specifications (bidding documents) for the steam system improvement and steam condensate return with control to be implemented at the selected beneficiary facility, and assist in capacity building of the specified technology, including the publication of a guideline report, as per the below two tasks:

- **Task 1:** Support in the optimization of energy efficiency measures (steam system improvement, steam condensate recovery and control) in one selected site, including the design, technical specifications drafting, and monitoring of implementation of end-use energy efficiency project in the chosen industrial facility in Lebanon.
- **Task 2:** Support the process of technology transfer for the implemented energy efficiency application for Lebanon

**For additional information, please refer to ANNEX I – Terms of Reference**

### **3. Expected Outputs and deliverables**

The Required deliverables under the terms of reference are:

<b>ID</b>	<b>Deliverables/ Outputs</b>	<b>Estimated Duration to Complete</b>	<b>Target Due Dates</b>	<b>Review and Approvals Required</b>
1	<ul style="list-style-type: none"> <li>• Kick-off meeting</li> <li>• Validation of the energy audit recommendation for the installation of a steam condensate return system; estimate the financial requirements for the recommended EE works; and establish the timeframe and major milestones for the proposed works (Task 1.1.1)</li> </ul>	3	1 month after contract signature	UNDP Project Manager
2	<ul style="list-style-type: none"> <li>• Full technical specifications (Task1.1.2)</li> <li>• Assist PMU in clarifying procurement related questions (Task 1.1.3)</li> <li>• Assist in the bid evaluation (Task 1.1.3)</li> <li>• General work procedures for</li> </ul>	15	6 months from contract signature	UNDP Project Manager

	contractors (Task 1.1.4) and checklists (Task 1.2.1)			
3	<ul style="list-style-type: none"> <li>Supervise the implementation and commissioning (Tasks 1.2.2, 1.2.3)</li> <li>Review the winning contractor's program for O&amp;M training for the selected facility (Task 1.2.4)</li> <li>Prepare the commissioning reports for 1 implemented site (Task 1.2.5)</li> </ul>	14	13 months from contract signature	UNDP Project Manager
4	<ul style="list-style-type: none"> <li>Assist CEDRO 5 team in monitoring of the site</li> <li>1 Technology transfer workshop (Task 2.1)</li> <li>Development of 1 guideline report (Task 2.2)</li> </ul>	3	16 months from contract signature	UNDP Project Manager

For additional information, please refer to ANNEX I – Terms of Reference

#### 4. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

##### I- Academic Qualifications:

- Bachelor's degree in mechanical engineering or related field (required)
- Masters' degree in mechanical engineering or related field with focus on industries (is a plus)

##### II- Experience:

- At least 5 years of experience in conducting feasibility studies and detail design of energy efficiency systems for industries.

##### III- Technical experience:

- Demonstrated experience in energy efficiency systems for industries mainly focused on steam boilers and steam condensate return. The bidder should submit proof of completed assignment.

*At least 3 completed projects in steam condensate return with similar scope (i.e., design and implementation follow up). The list of completed projects (to be accounted for in the experience) should be provided listing: project name, nature of work completed and exact role of consultant within this work, year of completion, description of type of*

*facility. Failure to submit the here mentioned information, the criterion will not be considered.*

- Knowledge of thermal simulation software (STARe, SIMSCALE, Siemens Thermal Simulation, or similar).
- Previous experience in the region of in the countries with similar conditions.
- Previous experience in corrugated cardboard manufacturing industries is a plus.

#### **IV- Competencies:**

- Proficiency in English language.
- Ability to work with tight deadlines amending based on the CEDRO team's feedbacks.

### **5. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS.**

Interested individual consultants must submit the following documents/information to demonstrate their qualifications:

#### **(I). Technical Proposal:**

**(i) Letter to UNDP Confirming Interest and Availability for the Individual Contractor (IC) Assignment**

**(ii) Explaining why** you are the most suitable for the work

**(iii) P11 (Personal History Form)** including past experience in **similar projects** and at least **3 references**, mentioning the references' e-mails addresses.

**iv)** Copy of degrees / certifications must be submitted.

**v)** List of projects (relevant) detailing the consultant's scope of work along with completion date must be submitted for full evaluation grading. The list of completed projects (to be accounted for in the experience) should be provided listing: project name, nature of work completed and exact role of consultant within this work, year of completion, description of type of facility. Failure to submit the here mentioned information, the criterion will not be considered.

### **FINANCIAL PROPOSAL**

- **Lump sum contracts**

The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables. Payments are based upon output, i.e. upon delivery of the services specified in the TOR as follows:

<b>Milestone</b>	<b>Deliverables/ Outputs</b>	<b>Target Due Dates</b>	<b>Payment terms</b>
<b>1</b>	<ul style="list-style-type: none"> <li>Kick-off meeting</li> </ul> Validation the energy audit recommendation in the installation of a steam condensate return system; estimate the financial requirements for the recommended EE works; and establish the timeframe and major milestones for the proposed works (Task 1.1.1)	1 month from contract signature	10% upon completion of Task 1
<b>2</b>	<ul style="list-style-type: none"> <li>Full technical specifications for 1 beneficiary site (Task 1.1.2)</li> <li>Assist PMU in clarifying procurement related questions (Task 1.1.3)</li> <li>Report on the evaluation of bid (Task 1.1.3)</li> </ul> General work procedures for contractors (Task 1.1.4) and checklists (Task 1.2.1)	6 months from contract signature	40% Upon completion of Task 2
<b>3</b>	<ul style="list-style-type: none"> <li>Supervision of implementation and commissioning of 1 site (Tasks 1.2.2, 1.2.3)</li> <li>Supervision of winning contractor's program for O&amp;M training for 1 selected facility (Task 1.2.4)</li> </ul> Prepare the commissioning reports for 1 implemented site (Task 1.2.5)	13 months from contract signature	40 % upon completion of Task 3
<b>4</b>	<ul style="list-style-type: none"> <li>Assist PMU in monitoring of the site</li> <li>1 Technology transfer workshop (Task 2.1)</li> </ul> Development of 1 guideline report (Task 2.2)	16 months from contract signature	10% upon completion of Task 4

In order to assist the requesting unit in the comparison of financial proposals, **the financial proposal shall include a breakdown of this lump sum amount (including travel, per diems, and number of anticipated working days).**

The financial proposal shall be presented using the enclosed format of Appendix a - Annex III.

**Travel:**

**Two site visits are expected by the consultant, first to technically assess Gemayel Freres industry before design and tender preparation, and second at commissioning phase and workshop presentation.**

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources.

In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed.

## **6. EVALUATION**

Individual consultants will be evaluated based on the following methodology:

**Cumulative analysis**

When using this weighted scoring method, the award of the contract should be made to the individual consultant whose offer has been evaluated and determined as:

a) responsive/compliant/acceptable, and

b) Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

*\* Technical Criteria weight; [70%]*

*\* Financial Criteria weight; [30%]*

Criteria	Weight	Max. Point
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<b><u>Technical Competence</u></b>	<b>70%</b>	<b>100</b>
<ul style="list-style-type: none"> <li>• <b>Criteria A: Academic qualifications</b></li> <li>- Bachelor's degree in Mechanical Engineering or related field: 10 points</li> <li>- Masters' degree in Mechanical engineering or related field with focus on energy efficiency technologies (additional 5 points)</li> </ul>		15
<ul style="list-style-type: none"> <li>• <b>Criteria B: Years of relevant experience</b></li> </ul> <p>Years of relevant experience in conducting feasibility studies, detailed design, and supervision of energy efficiency implementations for the industrial sector and processes</p> <p>Note: List of projects (selective) detailing the consultant's scope of work along with completion date must be submitted for full evaluation grading</p> <p>Less than 5 years: 0 points  5-7 years: 15 points  8 - 9 years: 18 points  10 years and above: 25 points</p>		25
<ul style="list-style-type: none"> <li>• <b>Criteria C: Technical Experience</b></li> <li>- Experience in energy efficiency systems for industries especially steam boilers and steam condensate return.</li> </ul> <p>List of completed projects (to be accounted for in the experience) should be provided listing: project name, nature of work completed, year of completion, description of type of facility. Failure to submit the here mentioned information, the criterion will not be considered</p> <p>1-3 projects: 10 points  4- 6 projects: 30 points  above 6 projects: 40 points</p> <p>Experience in the carton / paper industry is a plus (additional 10 points)</p> <li>- Knowledge of thermal simulation software (STARe, SIMSCALE, Siemens Thermal Simulation, or similar): 5 Points.</li> <li>- Previous Experience in the region: 5 Points (proof must be submitted)</li>		60
<b><u>Financial (Lowest Offer/Offer*100)</u></b>	<b>30%</b>	<b>100</b>



<b><u>Total Score</u></b>	<b>Technical Score * 0.7 + Financial Score * 0.3</b>
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*Only candidates obtaining a minimum technical score of 70 points would be considered for the Financial Evaluation.*

### **How to apply:**

The consultancy is open for all international consultants who meet the selection criteria and propose a competitive fee. Interested consultants are requested to apply only through this UNDP jobs portal.

Submissions through any other media will not be considered.

The application must include all of the following documents:

1. P11,
2. Technical Proposal,
3. Annex 3 (Offerors Letter) and
4. Financial proposal

All files shall be submitted in one single document and uploaded as word or PDF file to the UNDP job site.

It has been observed that bidders don't submit all requested documents and thus reducing their chance to be selected for a contract with UNDP. before you submit your offer please revise that the application is complete and comprises all four (4) documents.

Incomplete applications will not be considered.

## **ANNEXES**

### **ANNEX I - TERMS OF REFERENCE (TOR)**

### **ANNEX II - INDIVIDUAL CONSULTANT CONTRACT AND GENERAL TERMS AND CONDITIONS**

### **ANNEX III - OFFEROR'S LETTER TO UNDP CONFIRMING INTEREST AND AVAILABILITY FOR THE INDIVIDUAL CONTRACTOR (IC) ASSIGNMENT**

**ANNEX III**

**OFFEROR'S LETTER TO UNDP  
CONFIRMING INTEREST AND AVAILABILITY  
FOR THE INDIVIDUAL CONTRACTOR (IC) ASSIGNMENT**

Date \_\_\_\_\_

**Celine Moyroud  
Resident Representative  
United Nations Development Programme  
Arab African International Bank Building  
Riad El Solh Street, Nejme, Beirut 2011 5211  
P.O. Box 11-3216 Beirut, Lebanon**

Dear Sir/Madam:

I hereby declare that:

- a) I have read, understood and hereby accept the Terms of Reference describing the duties and responsibilities of an **International Consultant - Detailed design and implementation follow-up for the Steam System improvement, Steam Condensate Return and control in one selected industrial facility** under **Country Entrepreneurship for Distributed Renewables Opportunities (CEDRO 5)**
- b) I have also read, understood and hereby accept UNDP's General Conditions of Contract for the Services of the Individual Contractors;
- c) I hereby propose my services and I confirm my interest in performing the assignment through the submission of my CV or Personal History Form (P11) which I have duly signed and attached hereto as Annex 1;
- d) In compliance with the requirements of the Terms of Reference, I hereby confirm that I am available for the entire duration of the assignment, and I shall perform the services in the manner described in my proposed approach/methodology which I have attached hereto as Annex 3;
- e) I hereby propose to complete the services based on the following payment rate : *[pls. check the box corresponding to the preferred option]:*

☐ A total lump sum of \_\_\_\_\_ *[state amount in words and in numbers, indicating exact currency]*, payable in the manner described in the Terms of Reference.

- f) For your evaluation, the breakdown of the abovementioned all-inclusive amount is attached hereto as Appendix a;
- g) I recognize that the payment of the abovementioned amounts due to me shall be based on my delivery of outputs within the timeframe specified in the TOR, which shall be subject to UNDP's review, acceptance and payment certification procedures;
- h) This offer shall remain valid for a total period of 90 days after the submission deadline;
- i) I confirm that I have no first degree relative (mother, father, son, daughter, spouse/partner, brother or sister) currently employed with any UN agency or office *[disclose the name of the relative, the UN office employing the relative, and the relationship if, any such relationship exists]*;
- j) If I am selected for this assignment, I shall *[pls. check the appropriate box]*:

☐ Sign an Individual Contract with UNDP;

☐ Request my employer *[state name of company/organization/institution]* to sign with UNDP a Reimbursable Loan Agreement (RLA), for and on my behalf. The contact person and details of my employer for this purpose are as follows:

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- k) I hereby confirm that *[check all that applies]*:

- ☐ At the time of this submission, I have no active Individual Contract or any form of engagement with any Business Unit of UNDP;
- ☐ I am currently engaged with UNDP and/or other entities for the following work :

Assignment	Contract Type	UNDP Business Unit / Name of Institution/Company	Contract Duration	Contract Amount


☐

I am also anticipating conclusion of the following work from UNDP and/or other entities for which I have submitted a proposal :

Assignment	Contract Type	Name of Institution/ Company	Contract Duration	Contract Amount

- l) I fully understand and recognize that UNDP is not bound to accept this proposal, and I also understand and accept that I shall bear all costs associated with its preparation and submission and that UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the selection process.
- m) **If you are a former staff member of the United Nations recently separated, pls. add this section to your letter:** I hereby confirm that I have complied with the minimum break in service required before I can be eligible for an Individual Contract.
- n) I also fully understand that, if I am engaged as an Individual Contractor, I have no expectations nor entitlements whatsoever to be re-instated or re-employed as a staff member.
- o) UNDP is committed to provide security measures for all Contractors and to address the issue of Harassment, Sexual Harassment, Discrimination, and Abuse of Authority.  
Therefore, I confirm that if I am engaged as an Individual Contractor, before signing the contract, I will have to pass the online BSAFE training course (ca. 2 hrs) and the online training course (ca. 90 min) on prevention of sexual exploitation and abuse (PSEA) that can be accessed through the UNICEF leaning platform at <https://agora.unicef.org/login/signup.php>

Full Name and Signature:

Date Signed:

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**Annexes** *[pls. check all that applies]:*

- ☐ Duly signed P11 Form, in addition to at least 3 References' e-mails addresses
- ☐ Breakdown of Costs Supporting the Final All-Inclusive Price as per Template
- ☐ Brief Description of Approach to Work (if required by the TOR)

## APPENDIX a

# BREAKDOWN OF COSTS SUPPORTING THE ALL-INCLUSIVE FINANCIAL PROPOSAL

### A. Breakdown of Cost by Components:

Cost Components	Unit Cost	Quantity	Total Rate for the Contract Duration
<b>I. Personnel Costs</b>			
Professional Fees		35 working days spread over 16 months	
Life Insurance			
Medical Insurance			
Communications			
Land Transportation			
Others (pls. specify)			
<b>II. Travel Expenses to Join duty station</b>		2 missions	
Round Trip Airfares to and from duty station			
Living Allowance			
Travel Insurance			
Terminal Expenses			
Others (pls. specify)			
<b>III. Duty Travel</b>			
Round Trip Airfares			
Living Allowance			
Travel Insurance			
Terminal Expenses			
Others (pls. specify)			

### B. Breakdown of Cost by Deliverables

	<b>Deliverables/ Outputs</b>	<b>Due Dates</b>	<b>Payment Terms</b>	<b>Total in USD</b>
<b>1</b>	<ul style="list-style-type: none"> <li>• Kick-off meeting</li> <li>• Validation the energy audit recommendation in the installation of a steam condensate return system; estimate the financial requirements for the recommended EE works; and establish the timeframe and major milestones for the proposed works (Task 1.1.1)</li> </ul>	1 month from contract signature	10% upon completion of Task 1	
<b>2</b>	<ul style="list-style-type: none"> <li>• Full technical specifications for 1 beneficiary site (Task1.1.2)</li> <li>• Assist PMU in clarifying procurement related questions (Task 1.1.3)</li> <li>• Report on the evaluation of bid (Task 1.1.3)</li> <li>• General work procedures for contractors (Task 1.1.4) and checklists (Task 1.2.1)</li> </ul>	6 months from contract signature	40% Upon completion of Task 2	
<b>3</b>	<ul style="list-style-type: none"> <li>• Supervision of implementation and</li> </ul>	13 months from contract signature	40 % upon completion of Task 3	

	<p>commissioning of 1 site (Tasks 1.2.2, 1.2.3)</p> <ul style="list-style-type: none"> <li>• Supervision of winning contractor's program for O&amp;M training for 1 selected facility (Task 1.2.4)</li> <li>• Prepare the commissioning reports for 1 implemented site (Task 1.2.5)</li> </ul>			
4	<ul style="list-style-type: none"> <li>• Assist PMU in monitoring of the site</li> <li>• 1 Technology transfer workshop (Task 2.1)</li> <li>• Development of 1 guideline report (Task 2.2)</li> </ul>	16 months from contract signature	10% upon completion of Task 4	

Full Name and Signature:

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Date Signed:

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