



TERMS OF REFERENCE

Consultancy to conduct a detailed assessment of existing Sustainable Energy (Renewable Energy, Energy Conservation, Energy Efficiency) education and training curricula at the post-secondary level in Jamaica

1. BACKGROUND

The three-year Deployment of Renewable Energy and Improvement of Energy Efficiency in the Public Sector Project is being implemented by the United Nations Development Programme (UNDP) in partnership with the Petroleum Corporation of Jamaica (PCJ). The project is expected to end in August 2019. It is funded by the Global Environment Facility (GEF) Trust Fund, PCJ and the Development Bank of Jamaica.

This project seeks to advance a low carbon development path and reduce Jamaica's public sector energy bill through the introduction of renewable energy (RE) and improvement in energy efficiency (EE) in the health sector. It will improve relevant capacity in the public sector by increasing the knowledge base of its operatives on matters pertinent to RE and EE as well as developing the appropriate technical skills necessary to support investments in the sector. It will contribute to the strengthening of the regulatory framework that governs the development and deployment of RE and EE technologies. In addition, the project will support and explore all potential mechanisms involving public-private partnerships (PPPs) that will facilitate a greater uptake of RE and EE.

It has been recognized that there are no national industry standards to define the level, type and grade of RE/EE training provided by existing institutions. Currently, the institutions in the field determine their own curricula based on an incomplete assessment of gaps in the field and in the absence of guiding standards or regulations for training. Due to this, RE/EE training is offered in a fragmented manner which results in inefficiency and potential duplications in training of technicians. Furthermore, the absence of standards to guide or streamline the offer of training and certification, results in technicians having to matriculate through several courses at different levels to gain competencies. These courses are not always well defined or comparable across institutions.

In addition, due to this lack of coordination and prohibitive costs of RE/EE test equipment, training institutions currently face some limitations in the capacity to offer practical exercises to students. Due to the relative costs of acquiring and maintaining relevant equipment, institutions currently are able to offer practical exercises only in the most widely used machinery. This limits the competency which candidates

are able to claim and reduces the overall capacity for growth in the sector. Training institutions have identified other gaps which currently hinder the growth of the industry, which warrant addressing

In supporting the development of industry standards in education and training and enhancing the capacity of RE/EE training and education institutions, the project will support an assessment of the current training landscape for RE and EE and provide recommendations for the establishment of a regulatory system and standards for the provision of training and education in RE/EE technology. As such, a firm is being sought to undertake the assessment.

2. DUTIES AND RESPONSIBILITIES

Objective:

The purpose of this consultancy is to conduct a detailed assessment of existing Sustainable Energy (Renewable Energy, Energy Conservation, Energy Efficiency) education and training curricula at the post-secondary level in Jamaica that will facilitate the development and upgrading of skills and competences within the Sustainable Energy Sector.

Scope of Work

The firm will be expected to:

- Consult with key industry stakeholders to conduct a skills and needs assessment. This involves a range of analytical studies including: (i) gap analysis and (ii) consolidated situational analysis.
- Develop an assessment tool in consultation with UNDP, and relevant stakeholders including the Jamaica Tertiary Education Commission (JTEC) to review the existing curricula in sustainable energy and linked sectors. The tool will be the primary means of collecting data on programme offerings, course contents, training materials and assessment methodologies at post-secondary institutions in Jamaica, including but not limited to:
 1. *HEART Trust NTA;*
 2. *Vector Technology Institute;*
 3. *University of Technology, Jamaica;*
 4. *University of the West Indies, Mona Campus;*
- Administer the assessment tool at the post-secondary institutions to assess the curricula and develop an inventory of current programmes.

The tool should capture information on the:

 - Names of courses/programmes, years in existence; number of participants to date disaggregated by sex, age and course content;
 - Number and level of courses and certifications granted (Local and International), recognition and accreditation of courses/programmes.
 - Pre- requisites and exemptions, relevance to and articulation with other available courses/certifications
 - Methodology for course evaluation and performance assessment of students
 - Management structure, faculty qualification, learning supports and infrastructure for programmes and any other areas as agreed upon by UNDP.

- Avenues for practical placements or internships, learning outcomes for courses and direct career paths for programmes.
 - Cost for courses and tuition fees
 - Gaps in the curricula and challenges and lessons learnt in course delivery (Experience of faculty)
 - Assessment should include reflections from recent graduates and industry stakeholders with regards to their experiences in the industry.
 - Types of training methodology in the course (didactic, etc.)
 - Number and type of materials provided per course
- As part of the assessment of the areas of sustainable energy training available, there should be stock taking of the equipment used in the industries operating in the sustainable energy sector and a focus on the operation and maintenance of Solar Photovoltaic (PV) equipment as well as any related courses on finance and/or investment in the industry.
 - Prepare and submit first draft of the curricula assessment with recommendations for improvement to UNDP. This draft should be informed by the consultant's findings and global best practices. Assessment findings should detail coherence and relevance of programmes being offered, learning gaps, type and level of training required in Sustainable Energy in Jamaica.
 - Incorporate a gender analysis in the assessment and make recommendations for gender mainstreaming in the curricula.
 - Consult with key stakeholders including the Jamaica Tertiary Education Commission (JTEC) on recommended Sustainable Energy curricula needs at the post-secondary level in Jamaica.
 - Present findings of assessment and recommendations on status and proposals for the Sustainable Energy training curricula and programmes using PowerPoint or equivalent method to UNDP and key stakeholders for feedback.
 - Submit final report on the assessment of sustainable energy education and training landscape with recommendations for improvement.

3. REQUIRED QUALIFICATIONS AND EXPERIENCE

The consultancy will be undertaken by a reputable firm with a competent team to perform the services outlined in the scope of work above. At a minimum, the team should comprise individuals with the minimum qualification and experience as per the requirements below:

Key Expert 1: Team Leader – Curriculum Specialist

- Master's Degree in Education, Curriculum Development, Instructional Design or related field
- Minimum of 3 years' experience in development, assessment and evaluation of curriculum
- Demonstrated experience and ability to research, analyze and present complex information; including the ability to formulate relevant recommendations (at least 2 projects).

- Experience working in renewable energy/energy efficiency, energy sector regulation or related field is an asset.
- Strong communication skills including report writing
- Demonstrated experience engaging national/project stakeholder using participatory methodologies.
- Experience working with UN agencies and in Small Island Development States will be an asset.
- Fluency in English

Key Expert 2: Energy Specialist

- Master's Degree in Mechanical/Industrial/Electrical Engineering or related field.
- Post graduate certification in renewable energy, energy systems or related field
- Minimum of 5 years' experience working in the energy industry
- Experience conducting energy audits at the industrial level would be an advantage
- At least 3 years' experience working with in the field of renewable energy within the past 10 years
- Demonstrated knowledge of the energy industry and international best practices related to energy efficient equipment and renewable energy systems
- Strong communication skills including report writing and presentation
- Experience working with UN agencies and in Small Island Development States will be an asset.
- Fluency in English

4. TRAVEL

The work of this consultancy may require visits to the educational institutions under consideration or other related sources of information. All costs related to travel and accommodation related to undertaking this consultancy are to be included in the *financial proposal*. No separate travel or subsistence allowances will be given consideration.

5. IMPLEMENTATION AND REPORTING ARRANGEMENTS

The consultancy will be for **45 non-consecutive working days over a four (4) month period**. The consultant will report directly to the GEF5 Project Manager and under the overall direction of the Deputy Resident Representative, UNDP, Jamaica. Payments will be made upon receipt and approval by the GEF5 PMU and UNDP Jamaica CO. All work/documents and tools associated with this consultancy is the property of UNDP and should be submitted with the final report. Consultants are advised to read carefully the General Terms and Conditions for Professional Services available on the UNDP website at <http://www.jm.undp.org/>

6. PAYMENT SCHEDULE

Deliverables	Estimated Duration	Payment Percentage
Inception Report to include : - Detailed work-plan for delivery - Description of data collection methodologies - Assessment tools - Risks & Mitigating measures	5 Days	10%
Draft Assessment Report to include : - an analysis of current energy curriculum framework at post-secondary level. - Programme inventory - Preliminary Recommendations Data analysis, and where relevant, Gender disaggregated - Inclusion of gender analysis	30 Days	30%
Stakeholder Presentation of findings - Presentation of key findings (PowerPoint or Equivalent) - Key Discussion Points	2 Days	20%
Final Assessment Report and detailed Curriculum improvement Recommendations	8 Days	40%
Total	45 days	100%

7. EVALUATION

Consultant Firms will be evaluated based on the following methodology:

Combined Scoring method – where the qualifications and methodology will be weighted a max. of 70%, and combined with the price offer which will be weighted a max of 30%

The award of the contract will be made to the firm whose offer has been evaluated and determined as:

- Responsive and acceptable
- Having received the highest score out of a predetermined set of weighted technical and final criteria specific to the solicitation
- Only the highest ranked firm who would be found qualified for the job will be considered for the Financial Evaluation.
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- 1. *Technical Criteria* - 70% of total evaluation – max points: 70
Financial Criteria - 30% of total evaluation – max points: 30

Evaluation Criteria:-

Summary of Technical Proposal Evaluation Forms		Score Weight	Points Obtainable
1.	Expertise of Firm / Organisation submitting Proposal	20%	200
2.	Proposed Work Plan and Approach	30%	300
3.	Personnel	50%	500
Total			1000

Expertise of Firm/ Organization submitting Proposal		Points obtainable
1.1	Reputation of Organisation and Staff (Competence / Reliability) – Please provide a link to your organization’s website and another relevant publication that can attest to a strong reputation.	35
1.2	Litigation and Arbitration history – (firms are expected to mention all litigation and arbitration matters and indicate none if necessary)	10
1.3	General Organisational Capability which is likely to affect implementation (i.e. loose consortium, holding company or one firm, size of the firm / organisation, strength of project management support e.g. project financing capacity and project management controls)	60
1.4	Extent to which any work would be subcontracted (subcontracting carries additional risks which may affect project implementation, but properly done it offers a chance to access specialized skills) – Please clearly identify all sub-contractors where necessary	10
1.5	Quality assurance procedures, warranty – (firms are expected to indicate measures that will be used to guarantee the highest level of quality and integrity of the deliverables)	15
1.6	Relevance of: <ul style="list-style-type: none"> - Specialised Knowledge - Experience on Similar Programme / Projects in Jamaica - Experience on Projects in the Region - Work for UNDP/ major multilateral/ or bilateral programmes 	70
		200

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Proposed Work Plan and Approach – Technical Proposal		Points Obtainable
2.1	To what degree does the Offeror understand the task?	40
2.2	Have the important aspects of the task been addressed in sufficient detail?	40
2.3	Is the proposal based on an assessment of the project environment and was this data input properly used in the preparation of the proposal? (For example, did the consultant undertake any research of the market for this consultancy? What was the findings?)	30
2.4	Have the risk/limitations been identified and proposal for addressing same proposed?	60
2.5	Is the scope of task well defined and does it correspond to the TOR?	80
2.6	Is the presentation clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation to the project?	50
		300

Management Structure and Key Personnel			Points Obtainable
1	Task Manager/Team Leader		300
	Master's Degree in Education, Curriculum Development, Instructional Design or related field	75	
	Minimum of 3 years' experience in development, assessment and evaluation of curriculum	85	
	Demonstrated experience and ability to research, analyze and present complex information; including the ability to formulate relevant recommendations (at least 2 similar projects)	95	
	Demonstrated ability to communicate in writing effectively (sample of lead/sole authorship reports are requested)	20	
	Demonstrated experience in engaging national/project stakeholders using participatory methodologies (provide clear examples of number and types of sessions hosted)	15	
	Language Qualifications (fluency in English Language is required)	10	
3.2	Energy Specialist		200
	Master's Degree in Mechanical/Industrial/Electrical Engineering or related field.	50	
	Post graduate certification in renewable energy, energy management or related field	30	
	Minimum of 5 years' experience working in the energy industry	60	

	At least 3 years' experience working with in the field of renewable energy within the past 10 years	50	
	Language Qualifications (fluency in English Language is required)	10	
	Total Part 3		500

Financial Criteria

All financial proposals will be weighed against the lowest technically competent bid, (i.e.the lowest financial offer among technically compliant candidates will be given the maximum score of thirty (30) points and the remaining offers will be assigned a score in inverse proportion).

The candidate who obtains the highest cumulative score by adding both the weighted technical score and the financial score will be selected.

UNDP is committed to achieving workforce diversity in terms of gender, nationality and culture. All applications will be treated with the strictest confidence.

This TOR is approved by:

Signature: Bruno P. Pouezat

Name and Designation: **Bruno Pouezat, Resident Representative**

Date: 06/02/18