



Mainstreaming Low – emission Energy Technologies to Build Guyana’s Green Economy

TERMS OF REFERENCE

Title of Consultancy:	Energy Sector Capacity Building
Location:	Georgetown, Guyana
Type of Contract:	Firm I
Expected Duration:	2 months
Expected Start Date:	October 01, 2020
Expected Closing Date:	November 19, 2020

I. INTRODUCTION AND BACKGROUND

Guyana energy sector is highly dependent on imported fossil fuels for power generation. Recognizing the fact that a well-managed energy sector is pivotal for economic growth, and that the sector continues to play an important role in achieving the country’s broader development objectives over the longer term, Guyana has signaled its intention to shift its developmental trajectory towards one that is low-carbon and climate resilient. To realize this vision, the diversification of Guyana’s energy mix is critical thereby capitalizing on its abundant renewable energy potential.

In its Nationally Determined Contributions (NDCs) to the Paris Agreement, Guyana has committed to eliminating its heavy dependence on fossil fuels for power generation by developing an energy mix consisting of wind, solar, biomass and hydropower to supply both the demand of the national and regional grids. Under the “Green State Development Strategy: Vision 2040 (GSDS)”, Guyana has articulated and incorporated its energy transition intentions which was in accordance with its commitments made under Sustainable Development Goal 7 and the NDC ambition of achieving close to 100% Renewable Energy (RE) by 2025. An immediate objective of GSDS is to promote the use of domestic, renewable energy resources.

In support of its RE ambition, the Government of Guyana through the Office of Climate Change (OCC), Ministry of the Presidency in collaboration with the United Nations Development Programme (UNDP) successfully mobilized resources through the Global Environment Facility (GEF) to implement the Project “Mainstreaming Low-emission Technologies to build Guyana’s Green Economy”, herein after referred to as “Low Emissions Project”. This 4-year Project aims to accelerate the uptake of renewable energy (RE) and energy efficiency (EE) technologies to reduce national dependency on imported fossil fuels and support Guyana on its path towards more decentralized,



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inclusive and resilient development. It will further strengthen delivery skills of public and private energy stakeholders, develop a portfolio of low-emission energy projects and secure investment for implementation of 4.4 MW RE/EE capacity. The electricity produced (7,000 MWh annually) will benefit approx. 10,000 individuals (m/f equally) in regions 1 -7, and 10, which translates into fiscal budget savings of US\$ 850,000 annually. The Green House Gas emission reductions over a 10-year period will amount tot 68,000 tCO₂eq through direct and post-project investments combined.

It has been recognized that technical capacity constraints pose a major challenge within the energy sector, which undermines the sustainability of initiatives. Therefore, the Project will ensure the training and certification of a cohort of engineers/instructors /technicians within the key agencies of the energy sector and technical institute respectively as well as institutionalization of the knowledge into the curriculum of the Government Technical Institute.

II. KEY FUNCTIONS

UNDP in collaboration with the Office of Climate Change, Ministry of the Presidency is seeking to recruit a firm to:

1. Execute the North American Board of Certified Energy Practitioners (NABCEP) Training and Certification in Solar Photovoltaic Systems to develop and enhance the technical capacity of the Guyana's energy sector.
2. Conduct a curriculum revision of the Power Generation Stand-by Level I and/or Power Line Construction and Maintenance Distribution Level I standards in adherence with the Caribbean/ National Vocational Qualification (C/NVQ) to arrive at a curriculum that include knowledge and competencies in Solar Photovoltaic installation, repairs, maintenance.

III. DUTIES AND RESPONSIBILITIES

UNDP is seeking to recruit a firm to perform the following tasks:

- I. Output I - North American Board of Certified Energy Practitioners (NABCEP) Training
 - a. The consultancy firm will work with the Office of Climate Change (OCC) to deliver an online NABCEP Solar PV Training and Certification for two courses – NABCEP Solar PV Associate Course and NABCEP Solar PV System Inspector Course – to key energy stakeholders inclusive of the Guyana Energy Agency (GEA), Guyana Power and Light (GPL), Hinterland Electrification Company Inc. (HECI), Ministry of Communities (MOC), Guyana Electrical Inspectorate (GEI), Council for Technical and Vocation Education and Training (CTVET), Government Technical Institute

- (GTI), Board of Industrial Training (BIT), and Municipalities of Bartica, New Amsterdam and Georgetown.
- b. Develop and share training agenda for both courses: NABCEP PV Associate and NABCEP PV System Inspector courses
 - c. Develop and distribute course materials to potential students to support the NABCEP Solar PV Associate and Solar PV System Inspector courses
 - d. Execute an online NABCEP Solar PV training for the Solar PV Associate and Solar PV System Inspector courses
 - e. Execute post training evaluation
 - f. Provide training report
2. Output 2 - curriculum revision of the Power Generation Stand-by Level I and/or Power Line Construction and Maintenance Distribution Level I standards
- a. Initial meeting with CTNET and education stakeholders remotely
 - b. Review of Occupational and Facility Standards (Power Generation Stand-by Level I and Power Line Construction and Maintenance Distribution Level I)– gaps identification
 - c. Presentation of gaps and how gaps will be addressed
 - d. Address gaps to arrive at a curriculum for a Solar PV Installation, Repairs and Maintenance curriculum
 - e. Revise Occupational Standards and Facility Standards above to develop Solar PV Installation, Repairs and Maintenance teaching modules for the delivery of the curriculum
 - f. Presentation of draft revise curriculum and teaching modules for CTNET, GTI, BIT and OCC for comments
 - g. Address comments raised
 - h. Validation workshop/meeting
 - i. Submit final revised curriculum and modules

IV. DELIVERABLES:

The selected consultancy firm will plan, organize, and effectively undertake the required work leading to the successful delivery of the following:

Output I and its deliverables

- Deliverable 1: Inception report and work plan
- Deliverable 2: online NABCEP Training
 - o All Presentations and support training material to be copied on a CD, memory stick and in hard copy
 - o Training report

Output 2 and its deliverables

- Deliverable 3: Inception meeting minutes
- Deliverable 4: Draft Revised Curriculum and Teaching Modules
- Deliverable 5: Final Revised Curriculum and Teaching Modules

V. INSTITUTIONAL ARRANGEMENT:

For the execution of the online training, the consultancy firm will report to the Head of the Office of Climate Change or her designee and will be responsible for the preparation and delivery of comprehensive report of the activities undertaken within the terms of the consultancy. The Project Manager will liaise with the consultancy firm during the execution of the online training, seek approval/acceptance of all outputs from the Project Management Unit and Project Director, Head, Office of Climate Change in consultation with Programme Analyst, UNDP Guyana Country Office.

However, for the undertaking of the curriculum development, the consultancy firm will work under the guidance of and will report to the CTVET, with oversight from the Project Director or the Project Manager. The draft revised curriculum and teaching modules will be presented to the stakeholders, MOE, CTVET, BIT, GTI, OCC, UNDP inclusive of Lead Group to solicit comments. Comments will be addressed by the consulting firm and validated by the stakeholders identified above prior to finalization of the curriculum and teaching modules. The finalized curriculum and teaching modules will be approved by CTVET, then the Project Manager, in consultation with Programme Analyst, UNDP Guyana Country Office, before receiving final approval from the Project Director by signing-off on deliverables, then submission to UNDP Guyana for payment.

The consultancy firm is expected to work remotely for the execution of the consultancy. Face to face consultation may be required for the completion of the curriculum development.

VI. DURATION OF THE WORK:

Tasks	End Product/deliverables	Duration	Payment
Preparation of all training materials including presentations and agenda	Training agenda, Training presentation Training material (Prior to arrival)	3 days	No Cost
Inception Meeting	Inception report and workplan	1 day	10%
Conduct online NABCEP Training sessions: PV Associate and System Inspector	Training completed Training Report	14 days	40%

Output 2 initial meeting with education stakeholders	Minutes Implementation schedule	1 day	5 %
Review Occupational standards Develop facility standards and identify gaps	Presentation of gaps	2 days	5%
Develop/ revise Solar PV Installation, Repairs and Maintenance Curriculum and teaching modules, and submit a draft revised Solar PV Installation, Repairs and Maintenance Curriculum and teaching modules for feedback	Draft Solar PV Installation and Maintenance Curriculum and teaching modules	14 days	30%
Comments on draft curriculum and teaching modules by CTVET, GTI, BIT, OCC, UNDP	Comments	10 days	No Cost
Address comments and host Validation meeting		1 day	No cost
Address comments prepare final Curriculum	Final Curriculum	3 days	10%%

The duration of the consultancy is 49 days within the period. The consultancy is expected to start on October 1, 2020 and expected to be completed on November 19, 2020.

VII. DUTY STATION:

The consultancy firm will work remotely for the duration of the consultancy except if required to conduct any face to face consultation. All logistical arrangements in Guyana will be made to facilitate the execution of the online training sessions. The Project Manager will facilitate all introductions of the consultant with the representatives of the CTVET, Ministry of Education, Government Technical Institute (GTI) and the Board of Industrial Training (BIT) and other stakeholders. Further engagement with the CTVET team or other stakeholders will occur as required and will be managed by CTVET.

VIII. TRAVEL:

All in country travel required for the successful execution of the consultancy will be the responsibility of the consultancy firm. Further, the consultancy firm is to take every precaution and comply with the Ministry of Public Health guidelines with respect to the COVID-19 pandemic once travel restrictions are lifted.

IX. REQUIRED SKILLS AND EXPERIENCE:

a. QUALIFICATIONS AND EXPERIENCE:

The consultancy firm required for this assignment should have an expert facilitator in Renewable Energy, especially solar photovoltaics, with experience in conducting training under the North American Board of Certified Energy Practitioners (NABCEP) certification system. The consulting team should have a minimum of two experts comprising of team leader/ facilitator (Renewable Energy Expert) and Curriculum Development Expert.

The prospective firm should have an online platform to deliver online training to students. Appreciation of country context of Guyana or experience with similar circumstances in another country or region would be an asset. Eligibility Criteria for Key Personnel should include the following:

- (1) Firm
 - Should be a registered institution
 - Should be an Accredited Training Provider for the North American Board of Certified Energy Practitioners (NABCEP)
 - Should have at least 3 years' experience in delivering NABCEP certification courses
 - Should have an online platform from which online training can be done

- (2) Team Leader – Facilitator
 - Master's Degree in Renewable Energy, Solar Energy, Energy or its equivalent with at least 3 years' experience in delivering NABCEP certification courses and training,
 - Or a Bachelor's degree in Renewable Energy, Solar Energy, Energy or its equivalent with at least 5 years' experience in delivering NABCEP certification courses and training
 - Previous experience and knowledge in designing and development and revision of Energy Curriculum and Teaching Modules; and knowledge of Guyana's energy sector would be an added advantage

- (3) Curriculum Development Expert
 - Master's Degree in Social Science, Management, Public Management or its equivalent with at least 3 years' experience in curriculum design, development and/or review,
 - Or a Bachelor's Degree in Social Science, Management, Public Management or its equivalent with at least 5 years' experience in curriculum design, development and/or review.
 - Previous experience and knowledge of the energy sector, especially solar PV systems, would be an asset

b. LANGUAGE:

- Facilitators should be proficient in spoken and written English

X. FINANCIAL PROPOSAL

The consultancy firm must submit a budget detailing estimated cost of the expected implementation of this activity. A fixed price contract will be entered into with the selected consultancy firm.

Note: (1) Any international travel undertaken, if required, will be reimbursed.

(2) Payments will be based on the invoice on achievement of agreed deliverable i.e. upon delivery of the services specified in the TOR and certification of acceptance by the UNDP. No costs other than what has been indicated in the financial proposal will be paid.

XI. PAYMENT OF SERVICES

The firm will be paid as per the submission and acceptance of deliverables outlined below.

Outputs	End Product/deliverables	Payment	Timing
Online NABCEP Training	- Training agenda, - Training presentation - Training material (Prior to arrival)	No Cost	3 days prior to arrival for consultancy
	- Inception report and work plan	10%	Within 3 days after start of consultancy
	- Training completed - Training Report	40%	Within 7 days of the completion of training
Curriculum Revision/development	- Minutes of initial meeting with CTNET	5 %	Within 3 days after meeting
	- Presentation of Gaps	5%	7 days after initial meeting
	- Draft Solar Photovoltaic Installation Repairs, and Maintenance Curriculum - Teaching Modules	30%	21 days after initial meeting
	- Final Curriculum and Teaching Modules	10%	3 days after validation meeting

XII. CRITERIA FOR SELECTION

The selection of the best offer from the shortlisted firms will be based on a Combined Scoring method – where the technical evaluation will be weighted a maximum of 70 points, and combined with the price offer which will be weighted a maximum of 30 points. The 70 points rating shall be based on how well the Offer- or meets the minimum qualifications/competencies described above.

Criteria	Point Allotted
I. Firm Certification and Experience	30
Accredited Centre for the North American Board of Certified Energy Practitioners (NABCEP)	10
Firm experience in delivering NABCEP certifications courses: 3 years or more	10
Firm experience in delivering NABCEP certifications courses: below 3 years	5
Online Training Platform	10
2. Qualifications and Relevant Experience	65
- Team Leader	
Master's Degree in Renewable Energy or its equivalent	15
Bachelor's degree in Renewable Energy or its equivalent	5
Practical experience delivering NABCEP certifications courses: 3 years and above	15
Practical experience delivering NABCEP certifications courses: below 3 years	5
Experience in report writing	5
- Curriculum Development Expert	
Master's Degree in Social Science, Management, Public Management or its equivalent	15
Bachelor's Degree in Social Science, Management, Public Management or its equivalent	5
Practical experience in curriculum design, development and/or review: 3 years and above	15
Practical experience in curriculum design, development and/or review: below 3 years	5
3. Language	5
All team members: Fluency in English with strong presentation, writing and analytical skills	5
Technical Score (Passing rate 70%)	100 points
Financial 30 % To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.	