

Terms of Reference

Short-Term Consultancy

Consultant for Energy Modelling and Grid-tied Rooftop Solar PV Study for the Bohol Provincial Capitol Building

Position Title: Energy Efficiency and Renewable Energy Consultant for Bohol Province
Direct Supervisor/s: Project Officer – Energy and Built Environment (ICLEI SEAS) and contact person in Bohol Province
Location: Bohol, Philippines, remote work
Classification: Consultancy
Conditions: Engagement until 28 February 2021
Working hours: Output-based
Starting Date: Earliest 27 November 2020
Payment: fixed total cost, payment is according to project milestones, inclusive of applicable taxes and government mandatories

I. ABOUT THE PROJECT

ICLEI – Local Governments for Sustainability Southeast Asia Secretariat (ICLEI SEAS) serves as the co-implementor of the European Union-funded Access to Sustainable Energy in the Philippines - Clean Energy Living Laboratories (ASEP-CELLs). The three-year project is being implemented by the Ateneo de Manila University as the lead implementor, along with the ICLEI SEAS, Manila Observatory, University of San Carlos, and Xavier University. The ASEP-CELLs aim to (1) develop a sustainable knowledge management system; (2) create learning opportunities and build capacities of various stakeholders; and (3) increase public awareness and engagement. The ASEP- CELLs support ASEP’s three goals of increasing rural electrification (or energy access for all), energy efficiency, and the share of renewables in the energy mix (i.e., “EA, EE, and RE”). ICLEI SEAS brings its strong partnership with local governments and strength on sustainable development solutions to help achieve the goals of the ASEP-CELLs. The organization’s tasks mainly revolve on capacitating demonstration local government units to mainstream energy plan in their local planning and development and support the advocacy and knowledge management pillars of the ASEP-CELLs.

II. OBJECTIVES

The consultancy’s overall objective is to implement research activities in consultation with the Provincial Government of Bohol.

Specifically, this consultancy is intended to cover the following; however, the consultant is free to

propose additional activities as long as the budget permits:

1. *Building Energy Modelling for the Bohol Provincial Capitol Building*
2. *Study of a Grid-tied Rooftop Solar PV for the Bohol Provincial Capitol Building*

III. DURATION AND LOCATION

The short-term consultancy shall start by **27 November 2020 (earliest)** and end by **28th of February 2021**. The consultancy shall be done remotely in consultation with the Provincial Government of Bohol.

IV. SCOPE OF WORK AND EXPECTED OUTPUTS

At the end of the consultancy period, the following outputs are expected:

1. *Building Energy Modelling for the Bohol Provincial Capitol Building*

Deliverables	Indicative Number of Working Days
a. Create a building energy model for the Bohol Provincial Capitol Building	7 days
b. Provide a list of energy efficiency and conservation measure recommendations	3 days
c. Write a simulation report of typical energy use scenarios	10 days
d. Summary report on the building's energy performance	12 days

2. *Study of a Grid-tied Rooftop Solar PV for the Bohol Provincial Capitol Building*

Deliverables	Indicative Number of Working Days
e. An estimate of the building's rooftop solar PV energy potential	3 days
f. Solar PV capacity-sizing based on the building's electricity demand	3 days

g. Solar PV system design/model	5 days
h. Solar PV system techno-economic analysis	3 days
a. Bill of components and project cost estimate	3 days
b. Study report	10 days

The consultant is likewise required to participate in virtual meetings to update contact persons in ICLEI SEAS and the Bohol Province regarding the progress of the study and to gather feedback. The consultant shall also join ICLEI SEAS in holding a virtual workshop in relation to deliverables 1 & 2 for Bohol's technical working group for the ASEP-CELLs project.

Deliverables	Indicative Number of Working Days
Meetings and final workshop (including preparations)	3 days

Expected Outputs: A report on building energy modelling and techno-economic study of the grid-tied rooftop solar PV system for Bohol Provincial Capitol Building

V. DELIVERABLES AND PAYMENT SCHEDULE

The consultancy will be paid upon the completion of the following milestones:

TASKS AND ACTIVITIES	OUTPUTS	TIMELINE	PAYMENT
1. Mobilization Fund	Signed contract	Upon signing of contract	25%
2. Present to Bohol Province and ICLEI SEAS on the progress of building energy modelling and solar PV grid-tied study	Draft report	On or before 22 January 2021	25%
3. Provide completed report on building energy modelling and solar PV grid-tied study	Final report	05 February November 2021	25%
4. Final presentation cum workshop with ICLEI SEAS and the Provincial Government of Bohol	Final report for all deliverables	08 – 26 February 2021	25%
Total			100%

Note:

- Inclusive of applicable taxes and government mandates;
- ICLEI SEAS will provide a mobilization fund equivalent to 25% of the total contract as the first milestone upon signing of contract to organize the first set of activities.
- For written outputs especially the reports, the consultant must submit a draft for comments of the Provincial Government of Bohol ICLEI SEAS. After which, the consultant shall revise the report incorporating the comments, if any.

VII. CONFIDENTIALITY

All data, documents, reports, and any purchased equipment such as laptops or camera shall be the property of ICLEI SEAS, and shall be turned over upon completion of the assignment. The consultant shall not pass on to any third party any data, documents, reports, or other materials prepared or obtained during the assignment and three (3) years thereafter.

VIII. QUALIFICATIONS

- A local individual consultant from a university-affiliated research group/foundation/organization or consultancy firm is required for this consultancy.
- Individual consultants must have at least a bachelor's degree in electrical or civil engineering, architecture, urban planning, or other related fields. Master's degree would be an advantage.
- Firms must be a legal entity in the Philippines.
- The consultant should have previous work experience research related to energy modelling, energy audit, and techno-economic study for RE projects.
- Experience with international and/or bilateral/multilateral development institutions would be an advantage, as well as prior work in advisory/consulting with local governments, non-government organizations, and international organizations;
- Excellent presentation as well as oral and written communication skills; and
- Familiarity with Microsoft Office applications and tools/software relevant to this project.
- Familiarity with the local language (Cebuano) is a must.
- Network in and previous coordination with Bohol Province is an advantage.

IX. REPORTING

The consultant will report directly to ICLEI SEAS Project Officers for ASEP-CELLs and in close collaboration with the Provincial Government of Bohol's contact person.

XI. APPLICATION

Interested individuals/firms are requested to apply before **20th of November 2020** by sending the following documents to **Ms. Nikki Ortiz** via nikki.ortiz@iclei.org

- Expression of Interest and confirmation of availability for the consultancy's duration;
- Latest CV (if an individual); one-page company profile and CVs of team members (if firm);
- Written proposal that includes budget and work plan corresponding with the required deliverables;
- Two-page summary outlining relevant previous work engagements in relation to this consultancy. Previous work engagement must be supported with proof, e.g. project agreement, certificate of completion, website or news article, or project report.

For any queries, please contact ICLEI SEAS via email address above or at (632) 8426-0851.