

Terms of Reference for Portable Biogas Digester Service Provider: 1000-liter Portable Biogas Digester System (Pasig City, Philippines)

IKI Ambitious City Promises project As of 16 September 2020

1. About the Ambitious City Promises Project

The Ambitious City Promises (ACP) is a 3.5-year international project which aims to support selected large cities in Indonesia, the Philippines, and Vietnam to establish strong greenhouse gas (GHG) reduction commitments, local climate action plans directed by concrete targets, enhanced multi-stakeholder engagement, and integrated strategies. The ACP project has the overall objective of contributing to ambitious GHG mitigation targets at the national level through their own ambitious mitigation plans and activities (called the "City Promise").

The ACP project is implemented by ICLEI – Local Governments for Sustainability in close cooperation with the Seoul Metropolitan Government (SMG). In 2015, SMG launched the "Promise of Seoul," a comprehensive strategy and climate action plan which also includes a strong citizen engagement component. Under this plan, SMG committed to reducing 20 million tCO₂e by 2030. Through the ACP, selected cities in Southeast Asia will adopt this model of inclusive, ambitious climate action, mainstreaming low emission development strategies (LEDs), and creating new climate leaders. The project is funded by the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU) through the International Climate Initiative (IKI) Program.

Taking into consideration the results of project activities, a small-scale infrastructure pilot demonstration project shall be implemented by the ACP project in Pasig City. The pilot project aims to showcase a proof of concept that responds to the principles and objectives of the Local Green Building Ordinance (LGBO) and further go beyond its minimum requirements while contributing to efforts to reduce GHG emissions in the energy and waste sectors as well as in improving the general welfare of Pasigueños. Further, the pilot project aims to establish data and inspire further research and studies resulting from the proof of concept that will influence sustainability and continuing enhancement of the Ordinance. In







particular, the pilot project aims to empower key stakeholders to effectively carry out proper solid waste management and to make use of organic/food wastes. Collected organic/food will be stored in the digestion chamber to decompose and produce biogas. The project seeks to hire an accredited local service provider of portable biogas digester system to support the overall implementation of the pilot project.

The proposed pilot project site for the solar panel installation is in **Barangay Sta Rosa Hall** (Address: Lopez Jaena, Brgy. Sta. Rosa Hall, Pasig City, Metro Manila). The biogas digester system is regarded to support low income households in the community to be able to cook food for personal consumption or for livelihood.

2. Terms of Reference for the Service Provider

The project requires the services of a biogas digester service provider to undertake detailed design, procurement of unit components and other materials, components, installation, testing and commissioning of a 1000L biogas digester system, and capacity building training for the community and the personnel-in-charge of operations and maintenance. The services rendered shall ensure that appropriate unit scale and installation are adopted with due consideration to factors such as the amount and type of collected organic/food waste, installation location, and the safety measures.

2.1. Scope of Work

The following activities will need to be undertaken in order to help meet the objectives of the project.

Detailed design and structural safety assessment	On-site assessment of the civil structure of the building where the biogas digester will be installed to take into account safe distance from and logistics of waste sources (i.e. from households, restaurants).
Procurement of unit components and other materials, fabrication, set up and installation	 Procurement and fabrication of 1000-liter¹ biogas digester system not limited to the following: 1000-liter digester tank Pipes Gas stove Any other relevant components that are needed Facilitation of complete set-up and installation of the portable biogas digester system in the project site.

 $^{^{1}}$ 1000-liter biogas digester system is the maximum reference size for the aforementioned project site.







Testing and commissioning (including warranty period)	 Monitoring and regular maintenance for at least 3 months after completion of set-up and installation.
	The contractor also assumes liability for the manufacturer warranties of the respective system components/parts.
	 Quality control inspection test and trial run shall be conducted with the oversight of a representative of the Department of Science and Technology Industrial Technology Development Institute (DOST-ITDI).
Capacity building training for personnel in charge	 Conduct capacity building training for personnel (barangay representative) in charge of maintenance of facilities on proper use and maintenance of the technology to ensure optimum efficiency.
	Develop and handover operations manual for personnel in charge.
	 Establish coordination mechanisms (i.e. focal persons) to facilitate on-site and remote assistance in the operation and troubleshooting of the technology after installation and testing period.

2.2. Deliverables and time frames

A maximum of **five (5) months** is estimated to complete the deliverables as stated below. The following table lists the deliverables and their respective delivery date.

Deliverables	Indicative Timeline
Detailed engineering design and structural safety assessment	November 2020
Procurement of unit components and other materials, fabrication, set-up and installation	November to December 2020
Testing and commissioning	December 2020 to March 2021
Development and handover of operations manual and delivery of capacity building training for personnel-in-charge of operations	December 2020







and maintenance	

3. Service provider eligibility

The service provider must provide evidence of:

- Eligible portable biogas digester service provider, in conformation to relevant national/international standards and regulations;
- Necessary documentation of accreditation from relevant government authorities for the installation of biogas digester in the Philippines;
- Prior experience in completed supply, installation, testing, commissioning, and handing over of the biogas digester;
- Use of environment-friendly, cost-effective, and genuine equipment and materials from reputable equipment/component suppliers that conform with available and appropriate national and international standards;
- Safety construction solution and overall aesthetics consideration in the design and implementation.

Additionally, advantageous criteria for prospective service providers include:

- Prior work experience in Pasig City;
- Flexibility and a shared vision for the project outcome are essential, since the work will be undertaken in close cooperation with the project team members

4. Proposal requirements, general conditions, and procurement process

4.1. Prequalification documents

The following information must be provided together with the Letter of Interest:

- Certified copy of valid business registration certificate with respective competency required for biogas digester system design and installation;
- Certified copy of respective Value-added tax (VAT) registration certificate, and other relevant financial and registration documents required for the organization to operate in the Philippines.
- A portfolio of similar projects previously undertaken including information on the Beneficiary, Capacity of Installation, Contract Value, Date of Commencement, Date of Commissioning, Contact Details.
- Details of tools, tackles, machinery available to perform the work.
- Testing certificates for system components to showcase conformance to applicable international and national standards.
- A detailed CV and proof of certification (i.e. certified technician) of technical personnel to be engaged for this project.
- The bidder shall produce original documents for cross verification as and when requested by ICLEI Southeast Asia.

4.2. General conditions







The following conditions shall apply to this project contract:

- The service provider is not allowed to subcontract other firm(s) to carry out the project.
- The quotation shall be inclusive of all costs including taxes associated with the project. Furthermore, the service provider shall adhere to the following requirements:
 - The price quoted shall be fixed and firm and not subjected to any escalation or variation. The price should be inclusive of all transportation, communications, per diem, and installation charges including all required material to successfully complete tasks, duties & taxes, and insurance.
 - Bill of materials for the biogas digester system as indicated should be provided along with the price bid.
 - ICLEI Southeast Asia reserves the right to add/delete to the final size and components of the biogas digester system at the unit rate quoted by the bidder.
 - All or any accessories/consumables/items required for satisfactory commissioning of work shall be deemed to be included in the contract and shall be provided by the bidder without extra charges.
- It should be noted that the project is being implemented by ICLEI in partnership with the City Government of Pasig. Hence instructions to bidders will be given by ICLEI Southeast Asia in consultation with officials of the Barangay and the City Government of Pasig. This also applies in the conduct of structural safety inspection before, during, and after construction.
- Once the system is installed, commissioned and operated successfully for 3 months, this will be handed over to Brgy. Sta Rosa, Pasig City as the beneficiary of the system.
- Bidders shall submit bids that satisfy every condition outlined in this Terms of Reference (ToR), failure to do so will make the tender liable to be rejected.

4.3. Procurement process

The following information shall serve as guidance for prospective bidders:

- Based on the prequalification documents listed in 4.1, prospective bidders will be shortlisted and will be requested by ICLEI to visit the site.
- Provide analysis of the proposed system's treatment capacity.
- The submitted system design proposal, work plan, and financial bid, together with the
 prequalification documents, shall be the basis for the overall evaluation of proposals
 and bids and subsequently the selection of the preferred/winning bidder.
- The selected bidder shall submit a revised detailed work plan (if necessary) while submitting the initial system design report which gives details about the procurement of system components and the installation.

5. Closing date for submission of proposals

Kindly submit your system design proposal, work plan, and financial bid. As much as can be provided, certifications, and other supporting documents. Submissions should be made via e-mail to Mr. Ricardo Marfiga Jr. <ric.marfiga@iclei.org> and Ms. Kristianne Jemi Santos <jemi.santos@iclei.org> until 16 October 2020. For any queries related to







submission, please contact via the email address above. The consultant is expected to commence work on **03 November 2020.**



