

Terms of Reference for National Expert: Community-Based Waste Management Technology

IKI Ambitious City Promises project
As of 03 July 2020

1. About the Ambitious City Promises (ACP) project

The Ambitious City Promises: Commitments for low-carbon urban development in Southeast Asian large cities is a 3.5-year international project being implemented by ICLEI – Local Governments for Sustainability with support from the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU).

The project 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. “City Promises” (city’s Local Climate Change Action Plan) shall be developed in three model cities and their implementation shall be outlined and initiated. Throughout the project period, each local government will design locally-appropriate targets and action plans on the basis of their development framework and priorities.

In Indonesia, the project works with DKI Jakarta, Tangerang, and Bekasi¹. DKI Jakarta government is committed to reducing its 30% GHG emission reduction target from business-as-usual (BAU) levels by 2030, as stated in Governor Regulation No. 131 Year 2012 on Local Action Plan for DKI Jakarta’s GHG Emission Reduction. Based on the regulation and result of a series of focus group discussions and public consultation with various stakeholders and community groups, waste is one of the priority sectors of DKI Jakarta to achieve its GHG emission reduction target.

DKI Jakarta faces challenges of increasing waste volume and waste management. In 2017, DKI Jakarta generated about 7,165 tons of waste per day; 6,872.18 tons per day is transported to the final disposal site in Bantar Gebang located in Bekasi City. However, the waste in this final disposal site is mostly unmanaged and it is foreseen that the capacity of the landfill will be exhausted in about three years. There are 292.25 tons of waste per day which are not transported to the landfill site. From these, only 9-10% are managed through composting and recycling processes (Central Bureau of Statistics, 2018). Based on this data, effective waste management at source is important in the overall strategy of DKI Jakarta in significantly reducing its waste generation and disposal including its associated costs. Furthermore, DKI Jakarta seeks to implement waste management strategies that also deliver economic, social, and environmental co-benefits driven by the active engagement of communities.

Therefore, through the ACP project, the Provincial Government of DKI Jakarta and ICLEI seeks to implement a pilot project on community-based waste management to demonstrate a solution to address the current waste management challenges and to contribute to the achievement of GHG reduction targets of DKI Jakarta. In particular, the pilot project aims to implement a local and environment-friendly technology in partnership with a local community. The pilot project also aims to demonstrate the circular economy model by deploying a decentralized community-based

¹For the purposes of this ToR, the expert will only work with Jakarta

Supported by:



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waste management system in DKI Jakarta. Hence, it can offer an alternative and additional source of income for the beneficiary community, while raising awareness among the community on community-based waste management.

2. Terms of Reference for National Expert on Community-Based Waste Management (CBWM) Technology

The project requires the services of national expert on community-based waste management technologies. The expert shall suggest an appropriate and environment-friendly technology to be implemented at the project demo site, outline enabling conditions for the implementation including operational model and development of monitoring systems, and provide technical support during the implementation of the pilot project.

2.1. Scope of work

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

<p>Conduct of technology impact assessment for a community-based waste management</p>	<ul style="list-style-type: none"> ● Rapid assessment of the economic, social, and environmental impacts of the application of three potential technologies for community-based waste management against three potential demo sites. ● Based on the results of the assessment, recommend an appropriate technology to be implemented in a project site that shall deliver the highest GHG reduction potential as well as economic and social co-benefits to the community. The recommendation shall undergo further review and validation by ICLEI and DKI Jakarta prior to its implementation.
<p>Conduct of technology assessment and submission of technical viability</p>	<ul style="list-style-type: none"> ● Conduct waste analysis and characterization study (WACS) and scoping activities in the demo site to determine the recommended technology's social acceptability, technical feasibility, economic viability, environmental soundness, estimated GHG reduction potential, and political acceptability. ● Based on the results of the study and scoping activities, provide detailed recommendations to guarantee the mitigation of potential economic and environmental risks of the technology as well as to ensure the sustainability of the pilot project. ● The recommendations shall undergo further review and validation by ICLEI and DKI Jakarta prior to its implementation. In order to eliminate the risks posed by COVID-19, the consultant shall ensure that the conduct of scoping activities shall not risk the health and safety of all partners by exploring other means of facilitation (e.g.

	online survey, Zoom meetings, designing physical meetings while keeping physical distancing, small group meetings).
Technical support to the project team and service provider	<ul style="list-style-type: none"> • Support the project team in developing the terms of reference (TOR) of technology service providers. • Support the project team and DKI Jakarta in the evaluation of proposals of prospective technology service providers. • Coordinate and communicate with the technology service provider to incorporate the results of the technical viability report in the system design and operation. • Provide technical support to the project team in overseeing the implementation (installation, commissioning, testing) as well as in the monitoring and evaluation of the technology. • In cooperation with the technology service provider and CBWM technology expert, design and deliver SOP manual and capacity building workshop for the personnel to be in-charge (i.e. management, marketing, technicians) of the daily operations of the CBWM project.
Monitoring and evaluation as well as recommendations for scale-up	<ul style="list-style-type: none"> • Document the progress and highlights of the project • In cooperation with the project consultant on developing a CBWM project sustainability plan, develop a handbook on guidelines for other local communities on choosing and adopting appropriate CBWM technology.

2.2. Deliverables and time frames

The work will entail providing on-ground support and expertise during the implementation of the pilot project from August to December 2020.

A maximum of **50 man-days** are estimated to complete the deliverables as stated below. The engagement and consultation with ICLEI and Jakarta Provincial Government will be made both in-person and online (e.g. via e-mail). The following table lists the deliverables and their respective delivery date.

Deliverables	Indicative number of working days	Indicative timeframe
CBWM technology impact assessment report: Recommendations for a specific CWBM technology to be adopted in a demo site and ToR for CBWM Technology Service Provider	15	4 th week of August 2020
Technical Viability Report	10	2 nd week of September 2020

Provide technical support in the oversight of pilot project implementation and submission of activity report	15	1 st week of December 2020
Guidelines for local communities on choosing CBWM technology	5	1 st week of December 2020
Final report	5	2 nd week of December 2020
TOTAL	50	

3. Payment

Yayasan ICLEI Indonesia shall pay the web developer for the services herein stipulated. Payment will be made in cheque following the schedule of tranches.

PERCENTAGE (%)	MILESTONE
15	Upon contract signing (Mobilization Fund)
30	Upon the performance and/or submission, acceptance and approval by ICLEI of all of the following reports/documents: <ul style="list-style-type: none"> • CBWM technology impact assessment report • ToR for CBWM Technology Service Provider
40	Upon the performance and/or submission, acceptance and approval by ICLEI of all of the following reports/documents: <ul style="list-style-type: none"> • Technical Viability Report • Technical support in the oversight of pilot project implementation and submission of activity report
15	Upon the performance and/or submission, acceptance and approval by ICLEI of all of the following reports/documents: <ul style="list-style-type: none"> • Guidelines for local communities on choosing CBWM technology • Final report

4. Service provider requirements

The successful national expert must fulfill the following requirements:

- At least 3-5 years of professional experience in implementing community-based solid waste management projects with technical expertise on various solid waste management technologies and infrastructures.
- Completed a university degree in environmental science with specialization in solid waste management, environmental engineering, chemical engineering, or other related fields.
- Have flexibility and a shared vision for the project outcome, since the work will be undertaken in close cooperation with National Expert for the Development of a Community-Based Waste Management (CBWM) Project Sustainability
- Background on working in climate change issues particularly low emission development
- Proficiency in MS Office, email programs.
- Excellent command of written and spoken English.

- Excellent writing, presentation, communication, and facilitation skills.
- Able and willing to travel domestically.

Additionally, advantageous criteria for prospective service providers include:

- Background on community organizing and development

5. Reporting requirements and management

- The expert will report to Mr. Selamat Daroyni, Project Officer for Ambitious City Promises (ACP) Project of Yayasan ICLEI Indonesia and the activities in Jakarta will be implemented in close collaboration with Ms. Happy Tiara Asvita, Project Assistant for Ambitious City Promises (ACP) Project of Yayasan ICLEI Indonesia, and Ms. Pamela Cabacungan, Senior Project Officer of ICLEI Southeast Asia Secretariat..
- Regular meetings/calls to report on progress on specific tasks and deliverables will be required.
- Payment of the service provider will be contingent on the timely submissions of deliverables listed in this term of references.

6. Requirements for the proposal

The following information must be provided in the proposal:

- Letter of Intent addressed to Mr. Selamat Daroyni, Project Officer for Ambitious City Promises (ACP) Project of Yayasan ICLEI Indonesia
- Latest CV
- Organization profile and individual CVs of potential team members, if applying as an organization/company.
- Technical (including a work plan) and financial proposal. Financial proposal should outline professional fee (day rate in IDR) and breakdown of direct costs

7. Closing date for submission

To apply, please submit a **Letter of Intent** that demonstrates your experience, qualifications, and proposed professional fee along with your **latest CV, proposal** (work and budget plan), and supporting documents

Please send all materials in one PDF document via email with subject “National Expert on CBWM Technology ACP” to iclei-indonesia@iclei.org no later than Monday, 03 August 2020

For any queries related to submission, please contact Yayasan ICLEI Indonesia via the e-mail address above.

Please use English for all communications. Only successful candidates will be contacted. Due to the volume of applications being received, our office would not be able to entertain phone calls. For more information about ICLEI Southeast Asia Secretariat and ICLEI Indonesia Office, visit <http://icleiseas.org/>.