

PARTNERSHIP FOR MARKET READINESS- Thailand

(Ref. No. CS-12) Terms of Reference for Study on GHG emission and identify potential GHG emission reduction. Develop Local GHG Abatement Plans in 8 municipalities (Region 2)

1. Background and Overview of the Partnership for Market Readiness

The World Bank established a Partnership for Market Readiness (PMR) program, which is supported by a grant-based capacity building trust fund.¹ The PMR aims to provide financial and technical support to developing countries to build their capacity and pilot market instruments that would allow them to scale up their mitigation efforts. In addition, the PMR will provide a platform for technical discussions, and collective innovation on new market instruments. The PMR will also create and share, including with the UNFCCC, a body of knowledge on market instruments and lessons learned.

Thailand Greenhouse Gas Management Organization (Public Organization) (TGO)- under the Ministry of Natural Resources and Environment, the Royal Thai Government - as an Implementing Country Participant has proposed to the PMR to explore potential new domestic market mechanisms on four main components that cover several activities for the preparation and implementation phases. These components include:

- Component 1* Preparation of key market components for the voluntary Energy Performance Certificate scheme (EPC);
- Component 2* Development of Local Greenhouse Gas Abatement Plans and a study on Low Carbon City (LCC) Pricing and LCC Fund for the LCC program;
- Component 3* Policy recommendation on legal framework to establish the Emission Trading Scheme (ETS);
- Component 4* Project management.

The Low Carbon City (LCC) program will support the national goal to promote and assist municipalities and local communities to implement GHG mitigation actions while achieving sustainable development and low carbon society goals through domestic market mechanism. The emission reduction projects under LCC program may apply to the Thailand Voluntary Emission Reduction Program (T-VER), and the credits generated under the LCC program (LCC-TVERs) can be used for offsetting carbon footprints in voluntary market. Once the domestic emission trading scheme in Thailand is established, the LCC-TVERs credits will be eligible for compliance purpose in the scheme with a possibility to export to other countries' ETS. The PMR's support for **Component 2** will focus on activities including the study on GHG emission, identify potential GHG emission reduction, and develop local GHG abatement plans and guidelines for municipalities. It shall also study on the pricing mechanism for LCC-TVERs and incentive options for LCC-TVERs buyers respectively.

The LCC program consists of four main activities for the preparation and operation phases including:

- Activity 1* Study on city carbon footprint;
- Activity 2* Identify the potential greenhouse gas emission reduction activities;
- Activity 3* Develop greenhouse gas abatement plans in accordance with local municipality context; and
- Activity 4* Develop the local GHG abatement plan guidelines which include environmental and social management framework;

¹ More information on the PMR is online available at: <http://www.thepmr.org>

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This term of reference (ToR) therefore aims at Activity 1, 2, and 3 to study on GHG emissions, identify potential GHG emission reduction activities and develop local GHG abatement plans for municipalities.

2. Objective of consultancy

To support municipalities in developing the appropriate greenhouse gas mitigation action plan while achieving sustainable development and low carbon society goals.

3. Scope of Work

- 3.1 The consultant must review the conceptual design of the LCC program and Thailand Market Readiness Proposal (MRP) and design the system/process based on the principles/concepts provided in the MRP.
- 3.2 Organize stakeholder consultations including the LCC working group, PMR steering committee and participating municipalities, preparations of meeting materials as well as documenting the outcomes and next steps of the work. The consultant shall take gender-sensitive aspects into account when organizing stakeholder consultations that perspective of men and women on GHG and its mitigation actions are taken into account.
- 3.3 Assist TGO to organize invitation seminars to persuade municipalities or local communities to this project and also setup the criteria for selecting the participating municipalities.
- 3.4 Organize a kick off meeting for participating municipalities.
- 3.5 Carry out tasks 4.1 - 4.3 for 8 participating municipalities.
- 3.6 Generate documents as outlined in tasks 4.1 - 4.3.
- 3.7 Coordinate with the key stakeholders, such as participating municipalities, local communities and the other consultants in order to ensure seamless coordination and data/information sharing between all stakeholders under the LCC program.
- 3.8 Provide response to comments of LCC Working Group, PMR Steering Committee and the World Bank then revise study report accordingly.
- 3.9 Present progress of works to TGO once every two (2) months including active consultation and data sharing with other relative consultants.
- 3.10 Organize training/knowledge sharing for the TGO staffs, municipalities and relevant agencies at least once as shown below. The seminar will be held in Bangkok. The expenses for representatives from participating municipalities to attend the seminar including travel (air ticket/fuel charge) and accommodation will be covered in this ToR budget.

Indicative training/knowledge sharing	Participant	Number of participant (at least)
Dissemination seminar	TGO staff, municipalities and relevant agencies	40

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4. Specific tasks to be carried out

4.1 Study on city carbon footprint in 8 participating municipalities

The consultant shall study on the local context of greenhouse gas emissions of each participating municipality. This study should (i) identify the major of greenhouse gas emission activities within local context, (ii) estimate the emission amount of those activities, and (iii) predict the emission trend in Business as Usual (BAU) scenario to setup a baseline of each participating municipality. Study of the city carbon footprint would follow procedures outlined in the draft city carbon footprint guideline developed by the Consultant of CS-13.

4.2 Identify the potential greenhouse gas emission reduction activities in 8 participating municipalities

The consultant shall find the emission potential of each participating municipality or local community through consultation with local stakeholders. The consultant shall suggest the potential abatement activities with appropriate technology solution to suit the local need. The suggested potential abatement activities shall be screened for environmental and social benefits and impacts per guidance developed in the ESMF. The consultant shall also arrange consultations on suggested abatement activities with local stakeholders to ensure the sustainable development of participating municipalities or local communities. Gender-sensitive aspects e.g. perspective of men and women on GHG and its mitigation actions shall be taken into account when organizing stakeholder consultations.

4.3 Develop greenhouse gas abatement plans in accordance with local municipality context

The consultant shall demonstrate selecting or screening criteria and also the rational to prioritize those abatement measures. The list of criteria should include but not be limited to technical feasibility, financial, co-benefit, implementation readiness, community acceptance, environmental and social aspects and sustainable development. The criteria shall discuss among consultants of CS-11, CS-12, CS-13 and TGO to ensure work consistency. The consultant shall develop the appropriate greenhouse gas abatement plans for each participating municipality and arrange consultations on abatement plans with local stakeholders to ensure the sustainable development and prioritize the reduction activities for short-term, middle-term and long-term implementation plan. In addition, the consultant shall conduct the financial analysis of each abatement option which also considers environmental and social aspects. This can support financial feasibility of the implementation plan and feasible technology options. Development of greenhouse gas abatement plan shall follow ESMF guidance in order to enhance environmental and social benefits and minimize impacts.

5. Contract Supervision

The consultant will work under the overall oversight of the Thailand Greenhouse Gas Management Organization (Public Organization: TGO), and in close cooperation with The World Bank.

6. Timeline and Key Deliverables

The Consultant shall prepare the reports as following:

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- 6.1 Inception report 10 copies and CD recording 10 copies within **1 month** from the date of the contract. This report should include the work plan and timeline.
- 6.2 Progress report (1) 10 copies and CD recording 10copies within **7 months** from the date of the contract. This report should cover tasks 4.1.
- 6.3 Progress report (2) 10 copies and CD recording 10copies within **12 months** from the date of the contract. This report should cover tasks 4.1-4.2.
- 6.4 Draft final report 10 copies and CD recording 3copies within **16 months** from the date of the contract. This report should cover tasks 4.1 - 4.3.
- 6.5 Final report 10 copies and CD recording 10 copies within **18 months** from the date of the contract.

All reports should be submitted both in Thai and English.

- Reports as mentioned in 6.1-6.3 should be full report in Thai and summary in English.
- Draft final report and final report should be submitted both in Thai and English.

7. Minimum Qualifications Requirement

The consultants will be selected through Consultant's Qualifications Selection (CQS) process.

The consulting firm is expected to meet the following minimum qualifications:

- Minimum five (5) years of substantive experience in greenhouse gas management, energy planning, waste management and social and community engagement;
- Familiar with Thai' circumstances, especially energy legal and regulations, policies and strategies, and/or related issues;
- Experience in consultation and need assessments; and

Key staff: (The qualifications of the proposed key staff will be evaluated at the proposals stage)

- Key staff of consultant and their committed availability to have experience in similar projects.
- Team Leader's minimum requirement:
 - (i) Advanced degree in energy engineering, environmental engineering, environmental science, environmental management, and environmental economic, urban management and planning, or other related field.
 - (ii) At least 10 years experience in related field.
 - (iii) Experience in strategic planning for local community.
 - (iv) Proved coordination skill in project management.
- Energy management specialist's minimum requirement:
 - (i) Advanced degree in energy engineering, or other related field.
 - (ii) Experience at least 5 years and expertise in energy planning at local community level.
 - (iii) An experience in strategic planning for local community is advantageous.
- Environmental management specialist's minimum requirement:
 - (i) Advance degree in energy engineering, environment engineering, environmental science, environmental management, and environmental economic, urban management and planning, or other related field.

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- (ii) Experience for at least 5 years and expertise in environment and energy planning at local community level.
- (iii) Experience in strategic planning for local community is advantageous.
- (iv) Familiarity with World Bank Safeguards policies is advantageous.
- Social engagement specialist's minimum requirement:
 - (i) Degree in environmental science, environmental management, and environmental economic, urban management and planning, or other related fields.
 - (ii) At least 3 years experience in social engagement.
 - (iii) Experience in conducting a consultation workshop is advantageous.
 - (iv) Familiarity with World Bank Safeguards policies is advantageous.