

# PARTNERSHIP FOR MARKET READINESS- Thailand

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## (Ref. No. CS-14) Terms of Reference for a Study on Pricing Mechanism for EPC's surplus allowances and LCC-TVER credits, Development of EPC's Sink Fund and Incentives for LCC Program

### 1. Background and Overview

The World Bank established a Partnership for Market Readiness (PMR) programme, which is supported by a grant-based capacity building trust fund.<sup>1</sup> 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.

In this connection, **Component 1**, which has a focus on planning for establishing the voluntary EPC scheme brings to the objective of this Terms of Reference. The EPC is planned to be a “voluntary target-and-reward scheme” targeting the *Designated Factories and Buildings (DF&Bs)* of the intensive energy consumption sectors which in turn lead to intensive GHG emissions.

The PMR's support for **Component 1** will focus on activities including:

- Activity 1* Reviewing and analyzing policies, laws, regulations and institutional arrangements required in order to implement the EPC;
- Activity 2* Developing the MRV system for the EPC in Thailand;
- Activity 3* Assessing the DF&Bs energy management system and updating Specific Energy Consumption (SEC) for 11 sectors<sup>2</sup>;
- Activity 4* Verifying energy data of participating DF&Bs and setting up the baseline;
- Activity 5* Analyzing target setting methods for different industrial sectors and buildings;
- and
- Activity 6* Analyzing potential performance-based incentive and pricing model for EPC.

The *Component 2* will focus on activities like studying GHG emission, identifying potential GHG emission reduction, and developing local GHG abatement plans and guidelines for municipalities. It shall also include studying of the pricing mechanism for LCC-TVERs (Thailand

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

<sup>2</sup> (i) Cement (ii) Ceramic (iii) Iron & Steel (iv) Petro-chemical (v) Paper (vi) Food & Beverage (vii) Thermal power plant (viii) Department store (iv) Office (x) Hotel and (xi) Hospital.

# **PARTNERSHIP FOR MARKET READINESS- Thailand**

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Voluntary Emission Reduction Program credits generated under LCC program) 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 GHG emission and identifying of potential GHG emission reduction. Developing Local GHG Abatement Plans in 8 municipalities (Region 1);
- Activity 2* Study on GHG emission and identifying of potential GHG emission reduction. Developing Local GHG Abatement Plans in 8 municipalities (Region 2);
- Activity 3* Study on GHG emission and identifying of potential GHG emission reduction. Developing Local GHG Abatement Plans in 8 municipalities (Region 3). Developing GHG abatement plan guideline that include Environmental and Social Management Framework (ESMF)
- Activity 4* Study on pricing mechanism for LCC-TVERs and incentive options for LCC-TVERs buyer.

This terms of reference (ToR), therefore aims at Activity 6 of Component 1 and Activity 4 of Component 2 to set up a pricing model for EPC's surplus allowances and LCC's carbon credits as well as to develop EPC's Sink fund to buy back the EPC's surplus allowances and incentives for LCC program in order to fulfill the project module under the Market Readiness Proposal (MRP).

## **2. Objective of consultancy**

- 2.1 To develop a proposal on establishment of EPC's Sink Fund (including its institutional and legal framework, fund raising strategies and approaches, and administrative and operational structure) aiming to create demand and supply for EPC scheme in Thailand.
- 2.2 To develop and propose effective incentives for LCC Program in order to create demand for LCC-TVER credits.
- 2.3 To propose appropriate pricing model for EPC's surplus allowances and LCC-TVER's carbon credits.

## **3. Scope of Work**

- 3.1 Conduct research, documentations and reports according to tasks 4.1 – 4.2.
- 3.2 Organize stakeholder consultation meetings, experiences sharing and training, preparations of meeting materials as well as documenting the outcomes and next steps of the work.
- 3.3 Prepare concise minutes of the meetings of the different stakeholder consultation meetings carried under this work.
- 3.4 Coordinate with the key stakeholders to ensure seamless coordination and sharing data/information among stakeholders under the EPC and LCC project;
- 3.5 Provide response and take into account the stakeholders' and PMR Steering Committee's recommendations and suggestions, and revise study report accordingly.
- 3.6 Present the progress of work to TGO every 2 months.

## **4. Specific tasks to be carried out**

# **PARTNERSHIP FOR MARKET READINESS- Thailand**

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- 4.1. Develop and propose effective incentives for LCC Program in order to create demand for LCC-TVER credits.
  - 4.1.1. Conduct research literacy/review on international and domestic experiences regarding incentives, as well as price model used in voluntary GHG emission reductions schemes in other countries (at least 4 countries) to create demand for voluntary carbon credits generated from LCC Program.
  - 4.1.2. Analyze, identify and propose advantages and disadvantages of each incentive as well as appropriate pricing model for LCC-TVER carbon credits, based on the potential and cost of GHG emission reductions options of target groups and suitability in the Thai context.
  - 4.1.3. Conduct demand assessment of potential buyers including estimating potential size of market
  - 4.1.4. Propose policy recommendations/measures on appropriate and effective incentives for LCC Program in order to create demand for LCC-TVER credits.
  - 4.1.5. Organize meetings for stakeholder engagement and public consultation at least 3 times.
  - 4.1.6. Organize trainings to share experiences regarding LCC implementation in other countries at least 2 times.
  
- 4.2. Develop a proposal on establishment of EPC's Sink Fund in Thailand, including its institutional and legal framework, fund raising strategies and approaches, and administrative and operational structure.
  - 4.2.1. Conduct research literacy/review international experiences on existing sink funds in terms of institutional and legal framework, fund raising strategies and approaches, and administrative and operational structure as well as existing pricing model of energy performance certificates scheme in other countries (at least 4 countries)
  - 4.2.2. Study institutional and legal framework of existing energy and environmental funds in Thailand and propose appropriate pricing model for EPC's surplus allowances
  - 4.2.3. Analyze and propose policy recommendations on establishment of EPC Sink Fund in Thai context, including its institutional and legal framework, fund raising strategies and approaches, and administrative and operational structure as well as propose appropriate pricing model for Energy Performance Certificates in Thailand based on potential and cost of GHG emission reductions options of target groups. This should also consider linkages and coordination with existing financial support to energy savings with an aim to avoid overlaps and complement existing incentives mechanism overseen by Ministry of Energy.
  - 4.2.4. Organize meetings for stakeholder engagement and public consultation at least 3 times.
  - 4.2.5. Organize trainings to share experiences regarding EPC schemes and sink funds in other countries at least 2 times.

## **5. Contract Supervision**

The consultant shall conduct and achieve tasks according to this term of reference under supervision of the Thailand Greenhouse Gas Management Organization (Public Organization) or "TGO", and in close cooperation with The World Bank.

## **6. Timeline and Key Deliverables**

The Consultant shall prepare the reports as following:

# PARTNERSHIP FOR MARKET READINESS- Thailand

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- 6.1 **Inception report** 10 copies and CD recording 3 copies within a 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 3 copies within 7 months from the date of the contract. This report should cover tasks 4.1.1, 4.1.2, some part of 4.1.5 and 4.1.6
- 6.3 **Progress report (2)** 10 copies and CD recording 3 copies within 11 months from the date of the contract. This report should cover tasks 4.2.1, 4.2.2, some part of 4.2.4 and 4.2.5.
- 6.4 **Draft final report** 10 copies and CD recording 3 copies within 14 months from the date of the contract. This report should cover tasks 4.1.1-4.1.4, 4.2.1-4.2.3, some part of 4.1.4-5 and 4.2.4-5
- 6.5 **Final report** 10 copies and CD recording 3 copies within 15 months from the date of the contract. This report should cover tasks 4.1-4.2

## **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 consultant will be selected through Consultant's Qualifications Selection (CQS) process.

The consulting firms expected to meet the following minimum qualifications:

- Minimum 5 years of substantive experience in carbon pricing/modelling, market mechanism, carbon/climate finance, MAC;
- Familiarity with Thai circumstances, especially Thai industries and energy sector, urban management, energy efficiency policies and finance, GHG reductions, carbon market, carbon finance, relevant laws and regulations, as well as policies and strategies on energy and climate change mitigation or related issues;
- Direct experiences on designing pricing model/incentives/demand creation of voluntary/mandatory carbon market / carbon finance.

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

In addition to committed availability, eligible key staffs of the project consultant shall have English proficiency and have qualifications/ experiences as follows;

- Team Leader's minimum requirement:
  - (i) Master's Degree or higher in Economics or related fields;
  - (ii) Minimum 15 years of substantive experiences in energy, urban, environmental economic, climate finance, climate change mitigation policy and action or related issues.
  - (iii) Extensive experiences on pricing, funding mechanism of market-based scheme.
- GHGs reduction specialist's minimum requirement:
  - (i) Master's Degree or higher in Environment, Energy, Engineering or related fields;
  - (ii) Minimum 10 years of substantive experiences in energy and GHGs reduction technologies.
- Environmental Economic specialist's minimum requirement:
  - (i) Master's Degree or higher in Environmental Economics, Economics, Finance or related fields;

## **PARTNERSHIP FOR MARKET READINESS- Thailand**

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- (ii) Minimum 10 years of substantive experiences in Environmental economic, carbon pricing mechanism in policy research and implementation project.
- Finance specialist's minimum requirement:
  - (i) Master's Degree or higher in Economics or Finance or related fields; Minimum 10 years of substantive experiences in Environmental finance, carbon finance or related field in research and implementation project.
  - (ii) Experiences on funding mechanism of market-based scheme
- Legal specialist's minimum requirement:
  - (i) Master's Degree or higher in Laws;
  - (ii) Minimum 10 years of substantive experiences in energy, environment, public finance, public policy, or related fields.
  - (iii) Strong international experiences on legal framework of funding mechanism
- Technical officer's minimum requirement:
  - (i) Bachelor's Degree or higher in Environmental Science, Engineering, Economics, Finance or related fields;
  - (ii) Minimum 5 years of substantive experiences in energy and GHG reduction technologies, environmental economics, finance, laws and regulations or energy and climate change policies and strategies.
  - (iii) Excellent in communication and inter-personal skill.