



UK Government



Technical Assistance Programme for Energy Efficiency Pilot Projects in Thailand

Expression of Interest (EOI) – Guidance Note

These guidelines are designed to support submission of an Expression of Interest (EOI) for receiving technical assistance services from the UK-ASEAN Low Carbon Energy Programme, in developing an energy efficiency pilot project in Thailand

The Carbon Trust is seeking applications from interested organisations with the technical expertise and capacity to develop and implement innovative energy efficiency (EE) projects in Thailand. Target sectors are (1) industry, focusing on the manufacturing sector, and (2) buildings, including industrial sites. These pilot projects must showcase existing commercial, yet previously unseen energy efficiency technologies and/or business models in Thailand.

The Carbon Trust is offering support in the form of technical assistance to enable successful applicants to prepare investment grade proposals and secure project finance for implementing their proposed energy efficiency pilot project.

Deadline for submission of EOI: 10 July 2020 at 1800 hrs (GMT +7)

Date of decision: 17 July 2020 at 1800hrs (GMT +7)

Application should be submitted to: hazim.rosli@carbontrust.com

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1. BACKGROUND

1.1 About the Carbon Trust

The Carbon Trust's mission is to accelerate the move to a low carbon economy. We provide specialist support to business and the public sector to help cut carbon emissions, save energy and commercialise low carbon technologies. By stimulating low carbon action, we contribute to the key goals of lowering carbon emissions, developing low carbon businesses and associated jobs, and increasing energy security.

We help to cut carbon emissions by:

- Providing specialist advice and finance to help organisations cut carbon;
- Setting standards for carbon reduction.

We reduce potential future carbon emissions by:

- Opening markets for low carbon technologies
- Leading industry collaborations to commercialise technologies
- Investing in early-stage low carbon companies.

1.2 Introduction to ASEAN Low Carbon Energy Programme (LCEP)

The Prosperity Fund was announced in 2015 as part of the UK Aid Strategy, and is a cross-government Fund that aims to reduce poverty through inclusive economic growth. The ASEAN Low Carbon Energy Program (“LCEP”) is providing policy support, capacity building and technical assistance to facilitate green finance flows and improve the regulatory, policy and practical conditions for energy efficiency measures across South East Asia.

It supports four broad types of activity: capacity building of government, institutions and business; policy reform of energy frameworks and standards; market development by strengthening connections between project developers and investors; raising awareness of available technologies to increase the uptake of energy efficient products and services; and partnership coordination and commercial ventures. All components of the programme aim to improve energy security and inclusive access to clean and reliable energy sources, with direct benefits for the most vulnerable populations, including women.

The LCEP focuses on two topics – Green Finance (GF) and Energy Efficiency (EE). The Carbon Trust is leading the delivery of the EE component in five countries: Malaysia, Myanmar, the Philippines, Thailand, and Vietnam.

In Thailand, the Carbon Trust is running a Technical Assistance Programme for Energy Efficiency Pilot Projects between February 2020 to March 2022. As part of this, the Carbon Trust will provide technical assistance services to organisations offering promising energy efficiency pilot project concepts such that these can be further developed into bankable project proposals that can secure financing to support implementation.

2. OVERVIEW OF THE TECHNICAL ASSISTANCE PROGRAMME FOR ENERGY EFFICIENCY PILOT PROJECTS

As part of the ASEAN LCEP, the Carbon Trust is running a technical assistance programme to support energy companies, technology companies, industrial companies, research organisations, or joint consortia to develop project proposals on existing commercial, yet previously unseen energy efficiency technologies or business models in Thailand.

2.1 Technical Assistance Programme Objectives

To offer technical assistance support to pilot projects in the following activities:

- i. Preparation of bankable proposals for projects showcasing existing commercial, yet previously unseen, EE technologies, business and/or financial models.
- ii. Guidance to help secure project finance for these proposals, including identification and introductions to potential funding sources*

***Please note that the Technical Assistance Programme will not offer direct funding to successful applicants.**

2.2 Technical Assistance Programme Offerings

The technical assistance offered to successful applicants will include any of the following services which will be tailored to the organisation's key needs:

- i. Energy efficiency technology expertise (industry and buildings);
- ii. Investment Grade Audit (IGA) capability, including financial modelling, to international standards;
- iii. Development of business models and associated business plans;
- iv. Brokering of conversations with relevant funds/funders/investors;
- v. Energy savings monitoring and verification, to international standards;
- vi. Potential certification of both Energy Services Companies (ESCOs) and auditors, to international standards;
- vii. Additional market analysis and strategy for future expansion.

2.3 Applicant Eligibility Requirements

- i. Types of eligible organisations:
 - Energy companies;
 - Technology companies;
 - Industrial companies;
 - Research organisations;
 - Partnership or consortium of any of the above organisations.
- ii. Types of eligible pilot project concepts:
 - Pilot project concepts must showcase technologies, processes or business models that are at a Technology Readiness Level (TRL) 9, whereby the technology or process is proven in an operational environment and therefore fully commercial;
 - The pilot project concept must include a technology or process that has not been implemented in Thailand;

- The pilot project concept must create demonstrable impact on women, minority and/or other vulnerable groups in Thailand.

iii. Project concepts with the following attributes will be considered favourably:

- Pilot project concepts may propose the use of energy efficiency technologies or processes that allow for (i) the creation of new economic opportunities in Thailand, (ii) as well as for international, including UK business, and (iii) mutually beneficial economic relationships.
- The Carbon Trust is especially interested to receive pilot project concepts on low-carbon cooling. However, we are open to all energy efficiency-related project concepts and will give all strong project concepts fair consideration.

2.4 Expected Timelines

Deadline	Activity
10 July 2020	Complete and submit EOI
17 July 2020	EOIs assessed, successful applicants invited to submit an RFP
23 July 2020	Webinar with successful applicants for clarifications
5 August 2020	Complete and submit RFP application form
6 – 14 August 2020	Applications assessed and evaluated
17 August 2020	Applicants informed of decision
25 August 2020	Memorandum of Understanding drafted and agreed
1 September 2020	Technical assistances services begin
31 Mar 2022	Target programme completion

3. EOI GUIDELINES

The following sections provide specific guidance to completing the Expression of Interest form. Applicants should read this guidance prior to completing the EOI form. If applicants need any further guidance or have questions on completing the form, they are encouraged to contact the Carbon Trust team at hazim.rosli@carbontrust.com.

The structure of this section follows the EOI Form with further explanation of requirements for each section of the form.

Please note, the application must be no longer than 5 pages, with size 11 Calibri font.

1. Lead Organisation Details

Please describe briefly for the lead applicant: company name, type of organisation, year in which the organisation started operations and core business model. (In the case where more than one company is applying in the form of a partnership/consortium, the organisation responsible for securing the commitment of other partners and agreeing to lead the delivery of the pilot project will be considered the lead applicant.)

Organisation Name	
Type of organisation	<i>Please mention (i) legal form – for profit, not for profit etc; (ii) type – corporation, government, international organisation, research etc</i>
Start of operations (Month, Year)	
Summary of organisation operations, including core business model and geographic scope	
<i>Please include your company's mission, all revenue generating operations, type of customers, geographic reach</i>	
Please describe your organisation's Gender and/or Inclusion policy.	
<i>Gender and inclusion policies relate to any workplace guidelines, programs or policies that aim to promote gender equality and diversity (in terms of age, language, cultural background, sexual orientation, religion, physical ability etc)</i>	
Name and title of contact person	
Email of contact person	

2. Project Aims and Objectives

a) Define the problem you are trying to solve. Specify the local context, the stakeholder groups affected, existing technologies or business models that are currently solving the problem and why they are insufficient.

Provide a high-level description of the problem that your proposed pilot project is trying to solve. Please include how this problem affects the region you are planning to work in as well as how different stakeholders are affected.

Where possible, include an overview of other projects and businesses trying to solve the problem, and why their technologies or business models are not sufficient.

b) Please describe how the pilot project aims to tackle the problem statement mentioned above.

Please outline and explain the aims and objectives that the proposed pilot project plans to achieve. Explain how this will allow the pilot project to address the problem statement.

Explain how the Carbon Trust can help you achieve these aims and objectives.

3. Technical Overview

a) Describe the type(s) of technology used by the proposed business model as well as how this technology will reduce energy consumption in the target sector(s).

Please describe the basic underlying principles of the process/technology. What is the scientific theory underpinning the technology?

Please provide a narrative of how deployment of the technology will reduce energy consumption on site and throughout the target sector.

4. Project Description and Business Model Overview

a) Please describe your proposed business model.

You may include diagrams if necessary to explain your business model.

b) What are the foreseeable challenges and risks that might be faced in the implementation of the project?

List any barriers that you anticipate to face in the implementation of the pilot project as well as the level of risk they present.

5. Technology Readiness Level (TRL)

If available, please provide supplementary evidence / data that the TRL is at level 9 as an attachment to this application.

a) Describe how the technology used in the proposed pilot project is at TRL9 – fully commercial.

The project should be at Technology Readiness Level (TRL) 9, recognising that the technology and/or business model will not yet have been demonstrated in Thailand.

6. Partner Organisations (if any)

a) Please describe briefly: names of partner organisations and type of organisation, and the role each partner will have in the pilot project.

Please indicate whether the organisations have already committed to a partnership in the delivery of the pilot project. If commitment is pending, include details on any next steps and the status of engagement with the intended partner(s).

7. Impact

a) Please estimate how much energy your technology/process change will save. Provide calculations to show the typical savings expected.

Please detail the energy savings expected to be achieved by implementation of the technology. Please explain how these savings are derived and provide supporting calculations. You may describe the % savings that can be achieved per tonne of product produced, and/or the savings potential at a typical, representative site. Please state all assumptions.

Applicants should differentiate between electrical and thermal energy, and note any fuels consumed.

b) Estimate the total number of final beneficiaries that the pilot project will reach by the end of the project duration. Describe the type of impact the project will have on different stakeholder groups (especially women, poor and/or vulnerable groups).

Only direct beneficiaries should be included, i.e., any individual or organisation receiving the product or service from the pilot project and receive some benefit from it. This can be in the form of environmental benefits such as reduced energy use and emissions savings, economic benefits in the form of reduced cost savings, and social benefits such as employment, increased income, or improved health.

8. Required Funding and Technical Assistance

a) Describe the source and use of funding that has been received to date. State any funding that has been secured for future activities, including the proposed project

It is important to know that pilot projects have a good chance of commercialisation. Understanding continued funding sources (beyond the grant funding stage) is important. Please indicate secured funding to date for the proposed pilot project.

b) Please indicate any technical assistance support you will require (please refer to the 2.2 Programme Offerings for the type of support offered by this programme).

The Carbon Trust can provide the following technical assistance services:

- i. Energy efficiency technology expertise (industry and buildings)
- ii. Investment Grade Audit (IGA) capability, including financial modelling, to international standards
- iii. Development of business models and associated business plans
- iv. Arrangement of project financing
- v. Energy savings monitoring and verification, to international standards
- vi. Potential certification of both Energy Services Companies (ESCOs) and auditors, to international standards
- vii. Additional market analysis and strategy for future expansion