

Terms of Reference

Programme: Indonesia-UK PACT

Project: De-risking energy efficiency in Indonesia: Pilot project for guarantees

Subject: Energy auditing to selected industries under the pilot project for guarantees

Date: 2024.04.30

1. Background

In the IEA Net Zero Emissions 2050 Scenario, energy efficiency (EE) is the key factor that enables growth in clean energy sources to outpace the growing demand for energy services. To achieve net zero goals an unprecedented transition towards greater EE in buildings, transport, and industry is needed. This needs to be supported by trillions of dollars in investments.

Energy Services Companies (ESCOs) are critical players to support investment in EE projects. Currently in Indonesia, ESCOs and their potential clients have difficulty in securing bank loans to implement projects. This is due to a systematic lack of understanding of the risk and business model of EE among financiers.

As such the three-year MENTARI project – powered by UK PACT – brings together an expert consortium led by the Carbon Trust to develop and pilot an EE guarantee mechanism that will support the scaling-up of EE project investment in Indonesia. This project will:

1. Pilot a financial instrument to support the energy efficiency projects and ESCO market to access finance,
2. Provide broad-ranging and inclusive capacity building to the key market players, and,
3. Create the tools that support the development of the guarantee ecosystem for energy efficiency and eventual scale-up and roll-out of a financial instrument to different types of businesses including SMEs and women-owned businesses.

With local implementation partners, the project seeks to support the application of an energy efficiency guarantee – a credit guarantee or a guaranteed savings business model – that will reduce the perceived risk of lending to EE that is typically held by the loan providers.

2. Scope of Work

The objective of the tender is to engage Indonesia-based ESCOs for the provision of energy audit services to companies in the light industry, such as, but not limited to, packaging, textiles, and food & beverage. Through this tender, we will shortlist several ESCOs to present their credentials via a 45-minute virtual interview with the industrial site. The shortlisted ESCOs will undergo interviews with up to three industrial sites identified by the Carbon Trust consortium. Each site will then make the final decision on the ESCO to be engaged to conduct an energy audit on their site. Up to three ESCOs may therefore be selected.

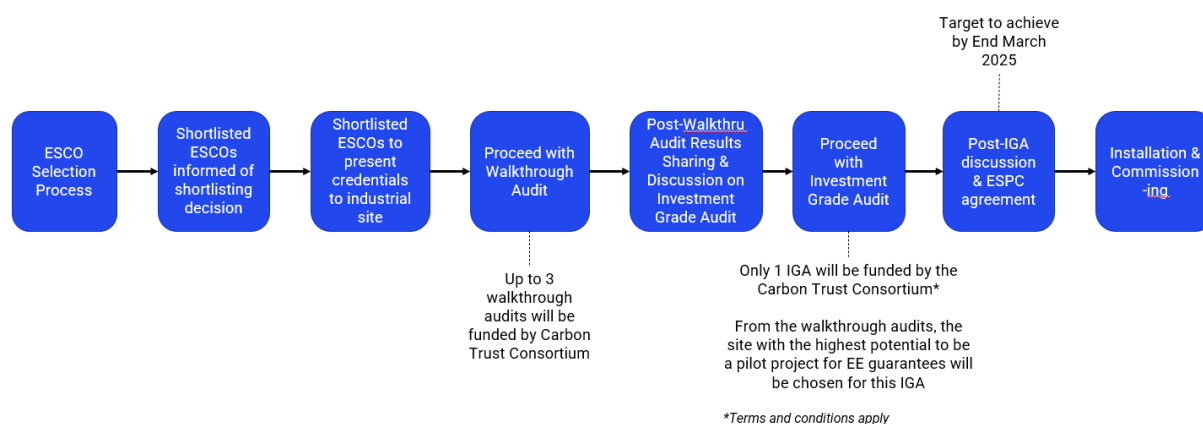
Once a decision has been made by the industrial site, the selected ESCO will proceed to conduct a walkthrough audit on the identified site. Upon completion of the walkthrough audit, the Carbon Trust

consortium will facilitate discussions between the ESCO and industrial site to review the results of the audit, including energy savings potential identified and the potential for the site to be part of the EE guarantee pilot. Should the site be identified as having high potential as an EE guarantee pilot, discussions will move into proceeding with an investment grade audit (IGA).

For the avoidance of doubt, the Carbon Trust consortium will be funding the following activities:

- Walkthrough audits in up to 3 industrial sites
- Investment Grade Audit in 1 industrial site.

The below schematic summarises the flow of activities:



The selected ESCO(s) will be responsible for the following:

- **Data Questionnaire:** Send a pre-audit questionnaire to capture any key data prior to the site visit, to maximise the value of time spent on the site.
- **Site Visit:** Visit the selected facility to carry out an energy audit of all major energy-using systems throughout the site. Capture the data necessary to assess the energy performance of each system.
- **Site Assessment:** Analyse the data to assess how inefficient systems could be improved to meet best practice. Once the optimised energy requirements for the facility have been established, assess the most cost and energy efficient solutions available to fulfil the facility needs.
- **Recommendations on Energy Efficiency Project Opportunities:** Based on the site assessment, provide the following:
 - Recommendations on the EE project opportunities across the site and quantify the cost savings potential for each project opportunity;
 - Prioritisation of EE projects based on level of impact and provide guidance on implementing the recommended projects.
 - Evaluation of the facilities' current metering and reporting strategy and recommendations on how this could be improved to identify even more energy savings opportunities.
 - Findings to be presented in a written energy audit report (full report in English and summary in Bahasa), and a de-brief should be conducted.

3. Qualifications and Requirements

ESCOs interested in participating in this tender should meet the following criteria:

- Be registered and able to conduct on-site audits in Indonesia.

- The team leader should have international certifications such as CIGA, CMVP, IPMVP or the equivalent national certifications, and at least 10 years of experience in energy efficiency project implementation and in energy auditing.
- The team must have at least one fluent English speaker/writer. All communication with the Carbon Trust shall be in English. The final documents should be in English and a summary in Bahasa to be provided.

4. Time Schedule

The energy audits shall be conducted in line with the following time schedule:

- Walkthrough audits (Level 1): late May to June 2024
- IGA: August–October 2024

5. Fee

For the assignment of the ESCO panel, a maximum fee of:

10,000 GBP	per facility for walkthrough energy audits (up to 3 facilities)
40,000 GBP	for IGA (one site only)
2,000 GBP	For expenses per walkthrough audit or IGA
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78,000 GBP	in total

In total, the value is GBP 78,000, which is approximately IDR 1,592,248,272 (converted 30/4/2024). Payment will be paid only for the services delivered.

6. Submission Guidelines

Interested ESCOs are invited to submit a tender with the following information:

- Company profile
- Up to 4 case studies of previous energy audits in light industries from the last five years. These can be anonymised to safeguard commercial sensitivities of the clients. [0.75 page per case study]
- Brief description of how the assignment will be performed based on this ToR, including the methodologies and tools used for conducting energy audits, and the approach to identifying and assessing energy conservation measures. [Not more than 4 pages]
- Summary of proposed team composition and qualifications, including CVs of the staff that will be allocated to the assignment.
- Budget split based on (i) Manhours for energy audit (ii) Manhours for analysis and reporting (iii) Other expenses costs if applicable

All tender submissions should be sent electronically by **15 May**, to Wei Yang Lee (weiyang.lee@carbontrust.com) with Hazim Rosli (hazim.rosli@carbontrust.com) in copy.