

TERMS OF REFERENCE (TOR)

CONSULTANT

PROJECT NAME:

"Investment Pathways for ASEAN Low-Carbon Energy (INSPACE)"

I. Project Name:

Investment Pathways for ASEAN Low-Carbon Energy (INSPACE)

II. Post Title:

Technical Expert Consultant

III. Background

The Association of Southeast Asian Nations (ASEAN)¹ is home to about 680 million people in 2022, accounting for about 8.6% of the global population². As the population grows, there is a direct increase in the number of people needing energy for their daily activities, such as heating, cooling, transportation, and electricity usage. Meeting the energy demands of a growing population requires expanding energy infrastructure such as power plants, transmission lines, and distribution networks. This can strain resources and require substantial investments. Half of ASEAN Member States (AMS) have not yet reached a 100% electrification rate, with difficulties in reaching the last miles. In developing regions, rapid population growth can outpace infrastructure development, leading to energy shortages and unreliable supply. In addition, urbanisation also leads to higher concentrations of energy-intensive activities in cities, including industries, transportation networks, and residential buildings. Meeting the energy needs of a growing population creates environmental pressures, such as higher carbon emissions from fossil fuel use unless offset by cleaner energy sources. Besides the target of meeting accessibility, and security, diversifying energy sources is aimed at meeting sustainability through low-carbon or clean energy sources.

Energy diversification for a low-carbon future in ASEAN requires advanced technologies and massive investments. AMS have acknowledged the key roles of sustainable financing and private investments in the <u>ASEAN Plan of Action for Energy Cooperation (APAEC) 2021-2025</u>, with strategies including the promotion of enabling regulatory framework to attract more investments in the ASEAN energy infrastructures and technologies, to support reaching the national and regional targets. As the current phase of APAEC is ending soon, and the new cycle will be introduced in 2025, there needs to be a strategic analysis to recommend investment-related action plans. Therefore, this study is timely relevant and aims to provide the inputs for the investment-related action plans based on the empirically based strategic analysis with the following scope of the study set below.

The scopes of the study are as follows:

- One (1) Review Report on the ASEAN Capacity Building Roadmap on Energy Investment, which was launched in 2023, in order to support the implementation of the APAEC's Regional Energy Policy and Planning (REPP) programme area, especially Outcome-Based Strategy (OBS) 5: Attract investment and financing to accelerate ASEAN's energy infrastructure growth, Action Plan (AP) 5.1: Develop a Roadmap for 2021-2025 to enhance capabilities in enabling regulatory environments to attract investment in energy infrastructure and technologies. The Report will include:
 - a. The achievements of each AMS on their energy investment development, by comparing to the annual topics and activities laid out in the existing Roadmap.
 - b. The evaluation of the Roadmap in terms of the frameworks, comprehensiveness, policy, and technology updates, as well as room for enhancement.
 - c. The proposed action plans as the inputs for the APAEC 2026-2030, related to sustainable finance and investment for energy infrastructure and technologies in the region.

¹ ASEAN includes ten Member States: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam

² Data source from the World Bank

- One (1) Strategic Report called ASEAN Energy Investment 2025 (AEI 2025), as the continuation from the first edition of AEI in 2024 and the implementation support for the APAEC REPP programme area, especially OBS 1: Enhance the Profile of ASEAN's Energy Sector Internationally, AP 1.2: Publish regular regional energy outlooks and strategic reports on thematic issues. The publication will include:
 - a. Updated comprehensive analysis of trends, opportunities, and challenges of domestic and foreign direct investments in the ASEAN energy sector, including from partner countries, such as China.
 - b. The latest inventory of incentives, financial schemes, and all support measures implemented in AMS impacting energy investment, including energy transition and low-carbon or clean energy in the region.
 - c. Deep dive case study on the investment situation and measures for decarbonising the energy supply chain industries, such as the industrial complex of batteries (especially their efficiency) and other emerging and advanced energy technologies.

To achieve the specific objectives of the project, the main activities of the study will include:

Activities		Month						
		2	3	4	5	6	7	8
Kick-off Meeting								
Preparation and Data Requirement Mapping								
Data Collection and Validation								
Data Processing and Analysis								
Two (2) Reports Writing								
Support on Reports Revisions, Editing, and Design								
Support on Reports Publication and Launching								
Development of Policy Brief and Academic Paper								

Table 1 Activities Schedule

Therefore, to support the project activities, ACE is seeking an experienced technical expert(s) to deliver the outputs of the study.

III. Duration of Engagement

- a) The Consultant awarded with the assignment will be hired from April 2025 until November 2025 (exact dates will be finalised in the contract), and obliged to work within the required deadlines and be available for a call if needed.
- b) The Technical Expert will undertake this study for a period of eight (8) months (<u>Table 2</u>) with the stated Consultation Fee (<u>9</u>), which can be continuous or intermittent due to further discussion between ACE and the Consultant.

IV. The task to be undertaken

The Consultant will be assigned to provide technical assistance to the ACE project team in delivering the study as per the following details:

- a. Scope of work
 - The scopes of the assignment for the technical experts are:
 - i. Development of Technical Reports
 - 1. Assisting with the development of two reports with the ACE team
 - 2. Collecting the latest investment and other related data required for the

reports

- 3. Compiling the additional data needed (primary and secondary sources)
- 4. Improving and writing the report drafts
- 5. Incorporating inputs and revisions from the language editor and the related stakeholders
- 6. Finalising the reports to be sent out for design and publication
- ii. Findings Dissemination
 - 1. Preparing materials and supporting the launching event in October 2025
- iii. Development of Policy Briefs and academic paper
 - 1. Writing three (3) Policy Briefs, each 4-5 pages max, jointly with the ACE team, based on the findings from the study
 - 2. Writing one (1) academic paper manuscript jointly with the ACE team to be submitted to a minimal Q2 journal.
- b. Expected Deliverables

Expected deliverables and timelines to be submitted by the experts are:

Table 2 Scope of Work and Deliverables of External Consultant

Deliverables	Timeline	Person-Days
1. Kick-off Meeting	April 2025	
 Data Collection and Validation Review notes and recordings from FGD conducted by ACE Collect the investment and other related data iii. Data gaps requirement mapping FGDs Literature reviews 		
 3. Technical Reports Laying out the Reports outline and content Improving and writing the Reports draft Incorporating inputs and revisions from the language editor and related stakeholders iv. Finalising the Reports for publication 	July- September 2025	
4. Policy Briefs	September 2025	
 Findings Dissemination Preparing materials and supporting the launching event 	October 2025	
6. Academic Paper	November 2025	
Total Person-Days		

7. Work Mechanism

The implementation of the study will involve various parties, as below, but not limited to:

a. ACE is in charge of the study's implementation. It is led by the Energy Modelling and Policy Planning (MPP) Department, under the commission of the Executive Director of ACE. ACE will manage and facilitate the work and communication on all official consultations with the official AMS Focal Points, if necessary.

b. The External Consultant is to provide the technical expertise as described in TOR. During the work period, the Consultant is required to do regular conference call meetings, mostly online, with ACE to discuss and monitor the progress in every single step of work. The Consultant should be fully dedicated to the tasks and be ready for direct discussion with ACE and reply to any inquiry from ACE within a maximum of 24 hours.

All reports and studies are to be submitted in English. The Reports will be made feasible to be uploaded on the ACE website and social media.

8. Qualification & Relevant Experiences Technical skills:

- a. A Master's degree in engineering, energy policy and planning, energy economics, or another appropriate specialist discipline. A Ph.D. degree is an advantage.
- b. At least **five (5) years of working experience** in the energy sector or in another relevant field in a technical capacity is preferred. Experience in energy policy and energy economics research is an advantage.
- c. Experienced in ASEAN energy-related official discussions is an advantage.
- d. Excellent command of English and capacity to write high-quality reports and deliver high-quality discussions and presentations in the language.
- e. Capacity and flexibility to complete the Assignment within the required time frame.

9. Consultant Fee

- a. The arrangement of components for working days for every personnel must be specified using the template in *<u>Table 2</u>*.
- b. For the satisfactory performance of the Assignment, the Consultant will be paid a fixed fee of a maximum of **USD 15,000** (Fifteen Thousand Dollar).
- c. Payment will be made to the Consultant's nominated bank account.
- d. ACE is an intergovernmental organisation and is not liable for any taxes. You shall file and settle any payment for income tax arising from the income from ACE. ACE shall not be responsible for any consequences of your failure to fulfil your obligation relating to the income tax laws of your respective country.
- e. The technical expert consultant is not required to travel to the ACE office or the meeting venue; however, this might change over time.

10. Curriculum Vitae (CV)

Interested Technical Expert(s) are invited to submit a proposal in response to this TOR (Max. 10 pages).

a. The Technical component should present the following information:

- A brief discussion indicating the bidder's understanding of the needs of the study.
- A brief analysis of key issues as well as a methodological discussion of how the bidder proposes to address those needs, including an assessment of key issues, analytical strategies that will underlie the project, specific tools/ methods/ techniques to be utilised, and practical discussion of possible limitations in carrying out the project.
- A detailed work plan that specifies activities to be undertaken, expected

outputs and deliverables, resources to be utilised, and timing.

- A discussion on how measures will be taken to ensure the future sustainability of the outcomes of the project.
- CVs of the proposed expert(s) and a brief discussion of the candidate's experience undertaking similar work, and summaries of all projects undertaken.

b. The Financial component should specify the following information:

Please complete and submit the financial proposal, including cost estimates and payment schedule, following <u>ANNEX 1</u> (one) to this TOR. The financial component should specify all direct and indirect costs, inclusive of applicable taxes, for undertaking the project, including but not limited to:

- Professional fees of expert(s) for completing all deliverables in unit cost and the number of hours/days. Please provide person-days for each deliverable work in the table format below.
- Travel costs, if any.
- Miscellaneous charges, if applicable.
- Justification for the allocation days and/or total days should also be provided if more than the estimation in <u>Table 2 Scope of Work and</u> <u>Deliverables of External Consultant</u>.

Table 3 Format of Person-days Proposed by External Consultant

Deliverables	Planned Activities to comply with the deliverables	Deadline	Proposed Expert(s)	Involved Working Days
1.1				
1.2				

11. Submission of Application

You may apply by sending your proposal to <u>procurement@aseanenergy.org</u> and <u>mpp@aseanenergy.org</u> on or before 23 April 2025. Please indicate the subject heading: **Application for Technical Expert Consultant for INSPACE.**

12.Amendment to TOR

This TOR may be amended in writing only, subject to the agreement of both parties.

13.Confidentiality Agreement

Without written permission from ACE, the consultants shall, in no case, disclose any data or information to external parties.

14.Copyright and intellectual property

All material produced under this assignment will belong to ACE and remain the property of ACE. The consultants will not have any control over copyright claims and intellectual property.

ANNEX 1 Fees and Payment Schedule (To be submitted as part of the Financial Proposal)

A. FEES

No	Description	Unit	Total estimated cost (USD)
1	Professional Services		
	- Input days for each expected output	(# of days)	
2	Travel Expenses (if any)		
3	Other Expenses (if any)		
	TOTAL		

B. PAYMENT SCHEDULE

ACE shall make payment in the following manner of the total contract amount after completing the deliverables by the Consultant:

- First payment (down payment): 20% (within one month after signing the contract)
- Second payment: 60% (after conducting data collection, reports writing, policy briefs, and supporting launching event)
- Final payment: 20% (after submitting the academic paper)

The payment shall be remitted to the following bank account: Name of Bank: Address of Bank: BIC* (Swift Code): Account No.: Beneficiary's Name: