ENERGY TRANSITION PARTNERSHIP

Powering Prosperity and Enabling Sustainability in South East Asia

UNOPS

FINAL REPORT

Evaluation of the Southeast Asia Energy Transition Partnership (ETP)

DeftEdge

DeftEdge Corporation
5000 Thayer Center, Suite C
Oakland, MD 21550
care@deftedge.com
www.deftedge.com

Table of Contents

EXECUTIVE SUMMARY *3*

1. BACKGROUND *9*

Programme Context 9

Regional and Country Context 10

The Work of ETP in the Region 12

2. EVALUATION PURPOSE, OBJECTIVES AND SCOPE *13*

3. METHODOLOGY AND QUALITY ASSURANCE *14*

4. FINDINGS *16*

RELEVANCE 16

IMPLEMENTATION EFFECTIVENESS 21

EFFICIENCY 30

SUSTAINABILITY 34

IMPACT 38

CROSS-CUTTING ISSUES 42

5. CONCLUSIONS and RECOMMENDATIONS *43*

Illustrations and Tables

Figure 1: Funds Flow and Coordination of Programmes 9
Figure 2: Energy Supply Mix in Target Countries (2021) and ASEAN (2022) 10
Figure 3: Past and future energy investment in Southeast Asia) 10
Figure 4: Data Collection Methods 14
Figure 5: KAP Survey respondent distribution by sex 14
Figure 6: KAP survey results for Strategic Objective 3 23
Figure 7: Share of Contract Value per Strategic Outcome to Countries and SEA (Millions USD) 29
Figure 8: Share of Programmatic to Overall Annual Expenses 30

Table 1: ETP project distribution in numbers 12
Table 2: Number of Projects with Reported Strategic Outcome in RBMF 20

ANNEXES

ANNEX I. EVALUATION QUESTIONS ***46***
ANNEX II. EVALUATION MATRIX ***48***
ANNEX III. ETP THEORY OF CHANGE ***52***
ANNEX IV. STAKEHOLDER ANALYSIS ***53***
ANNEX V. LIST OF DOCUMENTS REVIEWED ***57***
ANNEX VI. INTERVIEW GUIDES ***59***
ANNEX VII. KAP SURVEY INSTRUMENT ***62***
ANNEX VIII. ETP PROJECT OVERVIEW PER STRATEGIC OUTCOME ***66***
ANNEX IX. KAP SURVEY RESULTS ***80***
ANNEX X. FINANCIAL DATA ***82***

ACKNOWLEDGMENT

This evaluation would not have been possible without the invaluable input and support of a wide range of ETP stakeholders. Special thanks to Philip Timothy Rose, John Robert Cotton, Trang Nguyen, and Adritha Subbiah for their generous commitment to this undertaking, offering their time and expertise throughout the evaluation process. We also thank Toan Manh Do, Aang Darmawan, Muhammad Fathahillah, Yanuar Fajari, Anna Dominique Ortiz, Yoshiko de Villa, Linda Thanaketsakul, and many other colleagues for their coordination of country visits and validation workshops, gathering of key reference documents, and provision of general logistical guidance and insights.

We are especially grateful to the steering committee members, government and implementation partners, embassy staff, and many others for their support, time, and invaluable contributions to this evaluation.

Punit Arora, PhD
Sarang Mangi
Ilham Nugraha

DeftEdge Corporation

16 December 2024

Acronyms and Abbreviations

APS	Announced Pledged Scenario
BARMM	Bangsamoro Autonomous Region in Muslim Mindanao
CBAM	Carbon Border Adjustment Mechanism
EE	Energy Efficiency
ERC	Energy Regulatory Committee (the Philippines)
ESCO	Energy Service Companies
ETP	Energy Transition Partnership
ETS	Emission Trading Scheme
EU	European Union
GEAP	Green Energy Auction Program in the Philippines
GEEW	Gender Equality and Empowerment of Women
GW	Gigawatt
JAMALI	Jawa Madura Bali
JETP	Just Energy Transition Program
KAP	Knowledge, Awareness, and Practice
KEN	Kebijakan Energi Nasional (National Energy Policy)
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organization
NZE	Net Zero Emission
OECD-DAC	The Organization for Economic Co-operation and Development's Development Assistance Committee
PLN	Perusahaan Listrik Negara (Indonesia State Electricity Company)
RBMF	Results-Based Monitoring Framework
RE	Renewable Energy
RUEN	Rencana Umum Energi Nasional (National General Energy Plan)
RUPTL	Rencana Usaha Penyediaan Tenaga Listrik (National Electricity Supply Business Plan)
SDGs	Sustainable Development Goals
ToC	Theory of Change
ToR	Terms of Reference
UNEG	United Nations Evaluation Group
UNOPS	United Nations Office for Project Services

EXECUTIVE SUMMARY

The Southeast Asia Energy Transition Partnership (ETP), established in November 2020, is a multi-donor trust fund hosted by UNOPS to accelerate the energy transition in Southeast Asia (SEA). Its efforts contribute to achieving the United Nations' Sustainable Development Goals (SDGs) and the goals of the Paris Agreement by fostering collaboration between governments and philanthropies. ETP's mission is to support energy transitions that promote environmental sustainability, economic growth, and energy security in SEA, focusing on Indonesia, Vietnam, and the Philippines. With continued member support, ETP has expanded its initiatives and extended its mandate until 2035.

ETP framed its activities using its Theory of Change (ToC) and Results-Based Monitoring Framework (RBMF), structuring them around four strategic outcomes: (1) Policy Alignment with Climate Commitments, (2) Derisking Energy Efficiency and Renewable Energy Investment, (3) Extending Smart Grids, and (4) Knowledge and Awareness building. These outcomes guide the Partnership's efforts to drive progress in the energy transition across the region by addressing barriers in policy, financial, physical, and knowledge.

The formative evaluation assessed ETP's effectiveness in advancing energy transition across Indonesia, Philippines, Vietnam, and Southeast Asia following its first three years and strengthening the program through 2035. The evaluation offers strategic recommendations to enhance program effectiveness and future outcomes based on program implementation and results against its ToC.

Methodology: The evaluation takes a theory-based, utilization-focused, and mixed-methods approach to collect primary data for the study, considering ETP's role in the identified pathways to results and providing recommendations for immediate actions that could build on the ETP's successes and lessons for further work. Evaluation questions guide the evaluation following the OECD-DAC[1] evaluation criteria of relevance, efficiency, implementation effectiveness, sustainability, and impact, and considering cross-cutting issues of gender and marginalized people, including people with disabilities. The evaluation covered Indonesia, the Philippines, Vietnam (collectively known as the 'VIP countries'), and Southeast Asia. It also reviewed ETP's RBMF and strategic roadmap, assessing the Partnership's targets in alignment with countries' ambitions and the ETP's revised mandate until 2030. This evaluation assessed the effectiveness of ETP after its first three years of implementation.

The evaluation adopted a mixed-methods approach. Data collection methods included document review of 186 ETP documents, 41 key informant interviews (KIIs), focus group discussions (FGDs), and field missions to Vietnam and the Philippines. A Knowledge, Attitude, and Practice (KAP) survey assessed the impact of ETP and implementing partners' training and workshops by examining participants' knowledge, attitudes, and practices. The evaluation was conducted from June to November 2024, culminating in a validation workshop in Bangkok and the submission and presentation of the evaluation report.

[1] The Organisation for Economic Co-operation and Development's Development Assistance Committee

EVALUATION FINDINGS

RELEVANCE: The program demonstrates strong relevance to the energy transition priorities of Indonesia, the Philippines, Vietnam, and the broader Southeast Asia region. ETP effectively aligned its interventions with national priorities while maintaining flexibility to complement existing initiatives through its demand-driven modality and strategic focus on the region's largest carbon emitters. The evidence indicates successful alignment through programmatic support to Indonesia's PLN Main and Disaster Recovery Control Center project for grid improvement, technical assistance to the Philippines' grid diagnostic and offshore wind framework development, and contributions to Vietnam's carbon market mechanisms and national green cooling program. The program's intended impacts align with broader climate goals, including reduced greenhouse gas emissions and improved air quality. However, their long-term nature necessitates assessment through contribution analysis rather than direct attribution. The ETP's support for the VIP countries in meeting international commitments, primarily through Nationally Determined Contributions (NDCs) and energy policy frameworks, validates its strategic alignment with national priorities and global climate objectives.

EFFECTIVENESS: The evaluation finds that the ETP's work is progressing well toward achieving its planned outcomes, although attribution remains challenging due to gaps in the results chain. Under Strategic Outcome 1, evidence demonstrates successful policy influence and contributions to key policy developments across target countries, including Indonesia's NDC, Vietnam's net zero 2050 commitment, and the Philippines' renewable energy targets through the Clean Energy Scenario in its Philippines Energy Plan (PEP). For Strategic Outcome 2, while mechanisms for investment attraction have been developed, particularly in renewable energy and energy efficiency, the attribution of increased investments remains complex. Strategic Outcome 3 demonstrates substantial progress in smart grid development, as evidenced by the PLN Control Center upgrade in Indonesia, the Vietnam Smart Grid Roadmap, and grid modernization efforts in the Philippines. Strategic Outcome 4 shows significant achievements in knowledge and awareness-building, though measuring long-term impact requires further systematization.

ETP's country interventions and stakeholder engagement processes have proven effective and are supported by technical expertise provision and contextually tailored approaches. However, implementation challenges were identified, including operational complexities within the UNOPS system, procurement processes averaging 90 days per cycle, and initial staffing constraints leading to workload pressures. Some of these constraints have already been addressed through enhanced flexibility, process optimization, and strategic staffing adjustments; further improvements are still necessary. While a foundation for tracking results exists, the monitoring and evaluation system needs strengthening to enable tracking project results in a systematic way and to make the technical platforms easier to access and use for all stakeholders. The Steering Committee has noted improvements in report quality and accessibility, though compatibility of technical platforms remains a constraint.

EFFICIENCY: The evaluation finds that the ETP has demonstrated strong efficiency in resource utilization despite operating with a lean Secretariat team. The proactive approaches employed by country teams have effectively ensured that interventions align with national priorities. Simultaneously, staff technical expertise in government engagement and energy transition implementation has proven instrumental to ETP's success. The evidence suggests effective financial management with expenditures aligned to strategic priorities. ETP actively fostered synergies and minimized duplication through systematic screening mechanisms, stakeholder mapping, and knowledge management platforms with other development partners. Country coordinators have played a crucial role in maintaining strong stakeholder relationships and facilitating inter-ministerial/inter-agency coordination, contributing to efficient project implementation and policy advancement.

SUSTAINABILITY: The evaluation findings indicate varying levels of potential for long-term impact across countries, influenced by national ownership, external factors, and integration into broader strategies. Strong national ownership is evidenced in Vietnam, where ETP contributions support evidence-based decision-making in policy development, particularly in offshore wind standards and carbon market regulations. In Indonesia, ETP initiatives demonstrate strong alignment with national priorities, as validated through the wind investment plan and PLN Control Center modernization efforts. The Philippines presents unique contextual challenges due to its privatized energy sector through program support to regulatory frameworks, market mechanisms, and technical standards, thus creating an enabling environment for sustainable private sector participation. While ETP has effectively integrated interventions into long-term country strategies and built partner capacities through policy alignment and knowledge transfer, several sustainability constraints were identified. Political uncertainties and high staff turnover in government partners pose risks to sustained impact, particularly affecting the retention of institutional knowledge and technical capacity. Stakeholder consultations indicate that capacity development initiatives ideally require multi-year planning to ensure lasting impact, suggesting a need for longer-term programmatic approaches.

IMPACT: The evaluation finds that the ETP is contributing to accelerating energy transition in the VIP countries and regionally through policy support, technical assistance, and enhanced stakeholder engagement. Key policy achievements include identifying additional potential for Indonesia's renewable energy targets, with PLN acknowledging the findings to support their plan for its wind power target from 600 MW by 2030 to 5 GW by 2033, contributing to Vietnam's regulatory framework for offshore wind project development survey licensing and facilitating regulatory reforms in the Philippines. ETP has effectively strengthened technical capacities through specialized training, such as the Emissions Trading System training in Vietnam, which has enhanced the understanding of carbon markets among government officials, academia, NGOs, and particularly the large emitters who will be participating in the pilot phase of Vietnam's carbon market in 2025-2030 period. Evidence indicates contributions towards indirect impact on infrastructure development through its project, the PLN Control Center upgrade in Indonesia. While direct attribution of specific policy changes remains challenging, ETP contributed to enhanced knowledge and capacity among government officials, strengthened regulatory frameworks, and increased

receptivity to transition initiatives—increased program visibility through enhanced communication, increased media coverage, and stakeholder recognition.

CROSS-CUTTING ISSUES: The evaluation found that although not an explicit guiding principle, ETP integrates gender and inclusivity considerations into its programming at least indirectly by recognizing the importance of gender balance, broad stakeholder consultations, and promoting inclusive energy transition approaches (e.g., through engagement with the Just Coal Transition Platform) or inclusive access in building design projects (e.g., *Design and Construction Supervision of PLN Main and Disaster Recovery Control Centers*). Gender requirements are systematically integrated into project Terms of Reference (ToRs) with specific targets ensuring a minimum of 30% female participation in events and activities, with some projects targeting a higher share. ETP emphasizes the engagement of women consultants and ensures implementing partners maintain gender management practices. However, explicit consideration of people with disabilities and disadvantaged communities is limited across program interventions. Given the high-level nature of the ETP's work, focusing on policy development and technical assistance, constraints on direct impact on inclusivity, gender equality, and women's empowerment are to be expected. Moving forward, ETP can leverage the Just Transition framework to strengthen these principles in future initiatives.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion 1: Strategic Planning and Responsiveness

ETP has demonstrated strong support for government partners in renewable energy initiatives through technical expertise and facilitation, with responsiveness being its key strength, though this adaptability could impact program effectiveness. ETP's initiation of a new strategic framework in April 2024 presents an opportunity to maintain both flexibility and direction while furthering partnership goals and accommodating their unique circumstances and international obligations.

> **Recommendation 1: Enhance and align the 2025+ Strategy through a Two-Pronged Approach**
> ETP should strengthen its 2025+ Strategy through a systematic approach that balances responsive engagement with strategic planning. The strategy should incorporate milestone-based monitoring of progress toward the 2030 vision, establish quantifiable metrics for climate and economic impacts, and continue to develop contingency plans for operational risks. Critical to this approach is maintaining ETP's effective balance between climate commitments and national priorities while expanding its portfolio to address emerging market and technological needs.
> Timeline: 3 Months
> Responsible Party: ETP Secretariat, Steering Committee, UNOPS

Conclusion 2: Strengthening Results-Based Management Tools

ETP's ToC and RBMF require reinforcement to better capture and reflect the work under the Just Transition framework. The varying cultural and political contexts across target countries require careful consideration in collecting and aggregating data. While maintaining standardized high-level indicators for

program-wide measurement, ETP should ensure data collection methods and tools are adapted appropriately for local contexts to ensure accurate and meaningful aggregation at the portfolio level.

Recommendation 2: Improve Theory of Change and RBMF to Strengthen Just Transition Integration

ETP should enhance its ToC and RBMF to better capture just transition work, considering Gender Equality and Social Inclusion principles. This includes developing specific indicators to measure inclusive development impacts, strengthening the integration of gender and equity principles across programs, and continuing the improvement of mechanisms to track contributions to inclusive development goals.

Timeline: 3-5 Months

Responsible Party: ETP Secretariat with the support of the steering committee

Conclusion 3: Monitoring and Reporting Systems

ETP's monitoring, evaluation, and reporting systems, including RBMF and regular reporting cycles, provide a structured approach for tracking progress across program activities. There is strong evidence of the value ETP brings through detailed reporting, which supports informed decision-making and strategic oversight by the Steering Committee. Steering Committee members expressed satisfaction with ETP's reporting depth and noted appreciation for the feedback mechanisms, such as satisfaction surveys, to refine reporting quality. Early concerns regarding report frequency and approval processes were addressed by ETP, achieving a balanced approach that enhances both the accessibility and relevance of report content. ETP's commitment to improving reporting effectiveness is clear through ongoing updates to the RBMF, particularly with the planned addition of a Strategic Objective on Just Transition. Interviews revealed a need for a secure data-sharing platform due to Google Workspace compatibility issues. Moving forward, refining reports to emphasize strategic outcomes and keeping technical specifics for supplementary reports will ensure Steering Committee members receive concise, impactful information aligned with their interests.

RECOMMENDATION 3: Strengthen Monitoring Systems and Document Management

ETP should enhance its monitoring and reporting systems to better track and report on progress milestones and indicators in the updated Results-Based Management Framework. This will help track results across strategic outcomes more effectively. Additionally, UNOPS should implement secure document-sharing systems to facilitate collaboration with stakeholders outside the secretariat.

Timeline: 6-12 Months

Responsible Party: ETP Secretariat and UNOPS

Conclusion 4: Leveraging Partnerships

ETP's dual strengths in regional and national engagement create a unique advantage in advancing energy transition initiatives. This foundation, coupled with long-term cooperation with government and

implementing partners, positions ETP to effectively scale successful practices across the region through existing networks and platforms.

Recommendation 4: Leverage Strategic Collaborations to Scale Impact and Address Gaps in the Energy Transition Sector

ETP should expand strategic collaborations to scale its impact in the energy transition landscape by enabling dialogue between national and sub-national levels, building upon effective coordination with UN agencies and development partners, and facilitating networks through established regional platforms to help realize ETP's vision.

Timeline: 12-24 months

Responsible Party: ETP Secretariat, Program Managers

Conclusion 5: Knowledge Management

ETP successfully aligns its initiatives with the national energy policies of Indonesia, Vietnam, and the Philippines, embedding these efforts within their long-term strategies. This alignment enhances the sustainability of ETP's work by contributing to developing policies and regulatory frameworks that shape the renewable energy sector. ETP's proactive approach to building partnerships has minimized project overlap, maximized resource efficiency, and enhanced its influence on the energy transition. However, maintaining the impact of capacity-building efforts remains challenging due to political uncertainties and the turnover of government partner personnel.

Recommendation 5: Prioritize Knowledge Management for Sustainable Impact

ETP should enhance its knowledge management practices by maintaining quality standards and coordinating technical training through implementing partners. This approach should ensure training materials and output remain accessible, leverage the ETP website as a central repository for program information, and facilitate continued regional knowledge exchange and peer learning opportunities.

Timeline: 12-18 months

Responsible Party: ETP Secretariat, Program Managers

1. BACKGROUND

Program Context

The Southeast Asia Energy Transition Partnership (ETP) was established and started its operations in November 2020. Hosted by UNOPS, this initiative brings together government donors and philanthropies as Members[2] of ETP and Southeast Asian governments as Partner Countries to accelerate the energy transition in the region. ETP supports Indonesia, Vietnam, and the Philippines as initial partner countries[3] and region-wide initiatives in Southeast Asia to achieve the UN's Sustainable Development Goals and the Paris Agreement targets. ETP aims to enhance joint action, coordination, and dialogue to accelerate energy transition in the region by addressing barriers to renewable energy, energy efficiency, and sustainable infrastructure.[4]

The ETP members, comprising government donors and philanthropic organizations, finance the partnership to (1) support an improved delivery environment for accelerating the energy transition in Southeast Asia, (2) improve coordination between other relevant initiatives in the region, including capital investments and technical assistance, and (3) promote communication and knowledge sharing among stakeholders on energy transition, where possible and appropriate.[5] They specifically funded its work program towards achieving four strategic outcomes as laid out in its RBMF: (1) Policy Alignment with Climate Commitments; (2) De-risking Energy Efficiency and Renewable Energy Investments; (3) Extending Smart Grids; (4) Knowledge and Awareness Building.[6]

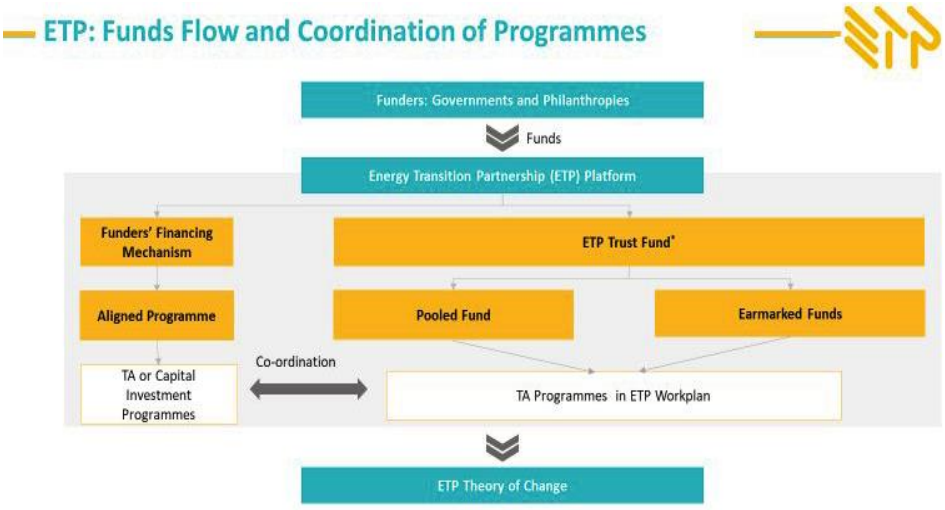
Two key pillars have driven ETP's work since its establishment in 2020. First, the engaged governance of ETP's Steering Committee has enabled swift and decisive action for the program to take bold positions in coordinating and supporting the region and priority countries. Second, the operational agility of its Secretariat pursued results to accelerate energy transitions. ETP's operation under the United Nations flag further highlights the uniqueness of this multi-stakeholder partnership, which emphasizes the importance of transparency, neutrality, and alignment with a global vision.

ETP designs and implements technical assistance programs that support governments and regional entities in creating favorable environments for renewable energy (RE), energy efficiency (EE), and sustainable infrastructure[7]. These specialized programs addressed specific needs and were financed through pooled and earmarked funds, with pooled funds being the primary mechanism. The earmarked funds, which were not limited only to ETP members, finance projects that align with ETP's program

[2] ETP Operating Manual. (September 2021). 11.
[3] Ibid. 14.
[4] ETP Concept Note. (May 2020). 4.
[5] ETP Operating Manual. (September 2021). 51.
[6] ETP Results based Monitoring Framework (RBMF). (04 August 2023). 2.
[7] ETP Operating Manual. (September 2021). 7.

objectives and specific outcomes in target countries, support specific projects in the ETP work plan and help scale up ongoing initiatives included in the work plans. Beyond these two funding mechanisms, ETP also coordinates with aligned programs that support its mission.

Figure 1: Funds Flow and Coordination of Programs



Source: ETP Concept Note, May 2020

Regional and Country Context

Southeast Asia is home to 9% of the world's population, contributes 6% to global GDP, and accounts for 4% of global energy consumption[8]. The region's population is projected to reach nearly 800 million by 2050, which, coupled with ongoing industrialization, electrification, and digitalization, are expected to drive greater electricity demand, putting more pressure on a region traditionally dependent on fossil fuels. Demand is set to increase even further, up to 41% by 2030 from the 2023 level.[9] Over the past two decades, energy demand in Southeast Asia has grown at an average rate of 3% per year. This trend is projected to continue until 2030, based on current policy frameworks outlined in the International Energy Agency's Stated Policies Scenario. The region's economy grew four-fold since 2000[10]. Although the COVID-19 pandemic temporarily disrupted growth, the region is expected to rebound, with economic expansion averaging 5% annually until 2034[11].

[8] International Energy Agency (IEA). (2022). Southeast Asia Energy Outlook 2022. https://www.iea.org/reports/southeast-asia-energy-outlook-2022, License: CC BY 4.0

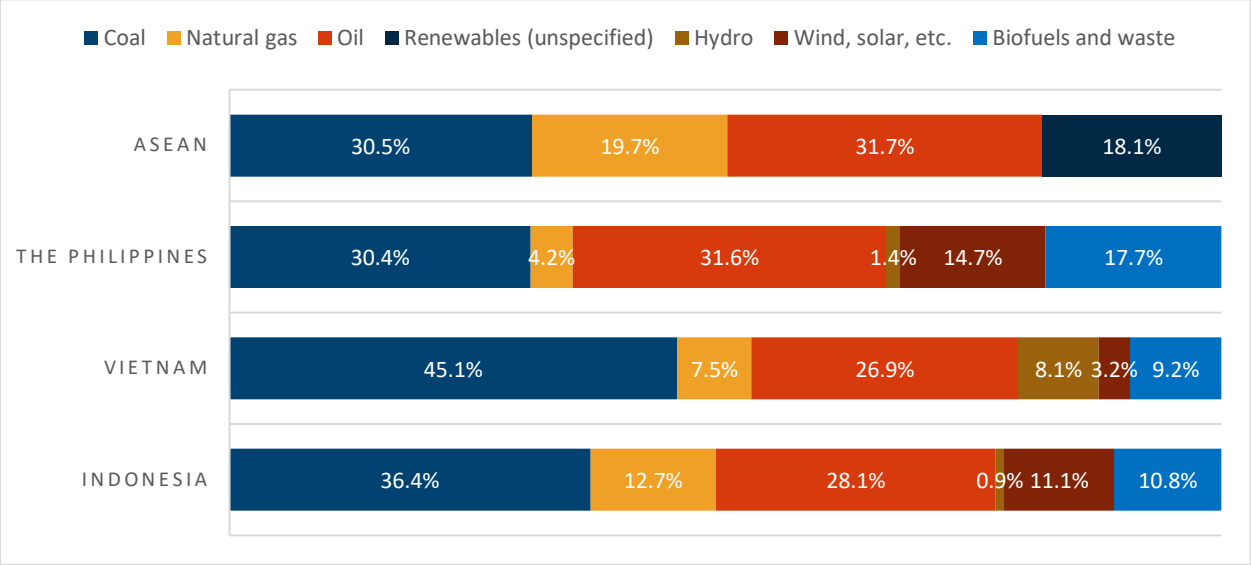
[9] Ember (2024). ASEAN's clean power pathways: 2024 insights.

[10] International Monetary Fund. (2024). World Economic Outlook— Steady but Slow: Resilience amid Divergence. Washington, DC. April.

[11] Ormiston, Charles and Baig, Taimur. (2024). Navigating High Winds: Southeast Asia Outlook 2024–34

As shown in Figure 2, the target countries remain dependent on fossil fuels. Following the Paris Agreement, these countries have yet to demonstrate a rapid reduction in fossil fuel consumption. The need to support economic growth while avoiding disruptions has pushed net-zero targets to 2050 for Vietnam and 2065 for Indonesia, while the Philippines has yet to establish a net-zero target.

Figure 2: Energy Supply Mix in Target Countries (2021) and ASEAN (2022)



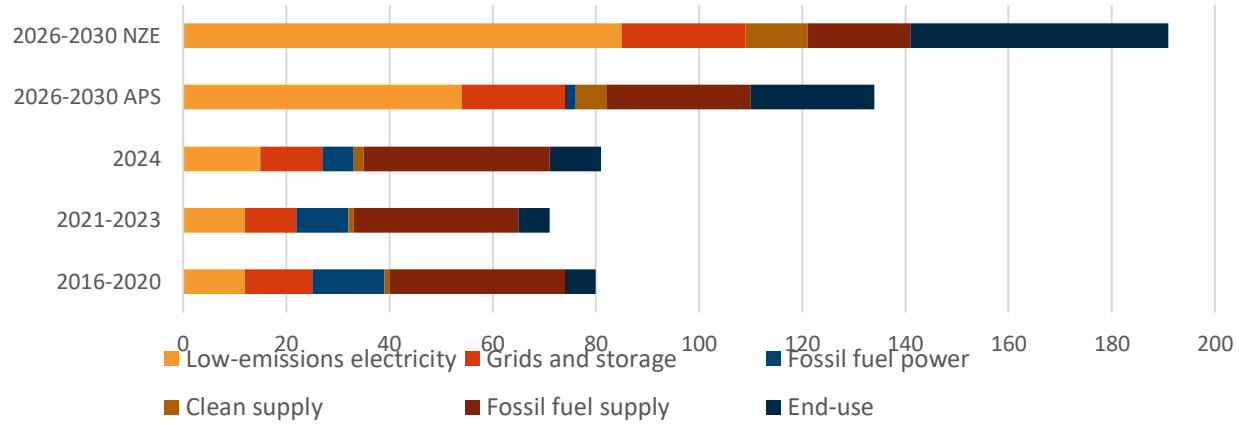
Source: IEA (2022)[12], ACE (2024)[13]

Figure 3 shows scenarios of future energy investment, with the non-binding Net Zero Emissions (NZE) scenario being the most ambitious compared to the Announced Pledges Scenario (APS). The energy investment outlook in Southeast Asia for both APS and NZE is dominated by expanding access to clean electricity.

[12] IEA (2022), Southeast Asia Energy Outlook 2022

[13] ASEAN Centre for Energy (ACE). 2024. 8th Asean Energy Outlook 2023-2059. https://aseanenergy.org/wp-content/uploads/2024/09/8th-ASEAN-Energy-Outlook.pdf.

Figure 3: Past and future energy investment in Southeast Asia



Source: IEA (2023)

The Work of ETP in the Region

ETP has developed an expansive scope of work in the ASEAN region. ETP Country Partnerships were established through a Memorandum of Understanding signed with Indonesia's Ministry of National Development and Planning in October 2021, the application for ODA approval under Decree 114/2021 and MOUs on collaboration in Vietnam, and Project Implementation Partnership Agreements signed on 24 November 2021 with the Philippines Electricity Market Corporation and the Energy Regulatory Commission to facilitate project implementation. In the Philippines, ETP informed the National Economic and Development Authority (NEDA) of its program, designating the Department of Energy as ETP's focal agency.[14] In its journey, ETP has built more partnerships through project-level agreements, formal and informal engagements with government partners, and close coordination with other regional initiatives. ETP's alignment with the Clean, Affordable and Secure Energy for Southeast Asia (CASE) project has enabled it to develop competitive renewable energy mechanisms[15] ETP's close coordination with the Southeast Asia Clean Energy Facility (SEACEF) and the TARA foundation has also enabled it to enhance knowledge-sharing and support capacity-building for evidence-based energy transitions.

As of June 2024, ETP has implemented 46 projects across Indonesia, the Philippines, Vietnam, and the broader Southeast Asian region. These projects have resulted in 26 policy recommendations, 58 reports and knowledge products, ten recommendations on de-risking instruments, three technical designs, eight recommendations for improving grid infrastructure to support energy efficiency, and 126 knowledge-sharing events hosted or attended.[16] Table 1 presents the strategic outcomes attributed to each project, including the number of implementing partners and agency or ministerial clients.

[14] ETP Annual Report 2022
[15] ETP Annual Report 2021
[16] ETP Semi-annual Report 2024

Moreover, by launching initiatives like the ASEAN Power Grid Advancement Program, ETP actively promotes cross-border electricity trading and supports greenhouse gas reduction efforts. ETP has also created a collaborative multi-stakeholder platform like the Just Coal Transition Platform that encourages cooperation among governments, businesses, and community organizations.[17] By intentionally aligning its work with internationally recognized guidelines such as the Paris Climate Agreement and UN Sustainable Development Goals, ETP's approach goes beyond mere technical interventions, including strategies that address environmental sustainability and social welfare in Southeast Asia's evolving energy landscape. ETP has leveraged its work in Southeast Asia to further discourse on just energy transitions at international forums such as the Conference of the Parties (COP). During COP28, ETP co-hosted 14 side events, organized 20 bilateral meetings, and participated in 10 networking events, driving discussions on regional energy transformation.[18]

Table 1: ETP project distribution in numbers

Country/Area	Project serving Strategic Outcomes				Implementing Partners	Clients/ Beneficiaries
	SO 1	SO 2	SO 3	SO 4		
Indonesia	6	3	1	1	10	8
Philippines	6	4	2	0	9	8
Vietnam	12	1	1	1	10	12
Southeast Asia (region-wide)	1	1	2	4	8	5

Source: ETP Semi-annual Report 2024

2. EVALUATION PURPOSE, OBJECTIVES AND SCOPE

As per the ToR, the objective of the evaluation was to assess the effectiveness of the Partnership after its first three years and to advise on how it can be strengthened in the future, given its current horizon until 2035. The overall goal was to review the Partnership's contribution to the energy transition in Indonesia, the Philippines, Vietnam, and the wider Southeast Asia region. The primary audience for this evaluation comprised the ETP Secretariat, ETP Steering Committee, UNOPS Southeast Asia, and the Pacific Multi-Country Office (EAPMCO).

The scope of the evaluation was to examine ETP's progress and performance since its commencement in November 2020 and to assess its strengths, weaknesses, opportunities, and challenges (SWOC) in realizing its ambitious outcomes. The evaluation assessed the progress in program implementation by the implementing partners (IPs), measuring it against planned outputs and outcomes outlined in the program documents and aligned with the ToC. The evaluation also sought to identify both program- and non-program-related determinants of success and challenges to strengthen ETP's approach to achieving more effective, efficient, and sustainable program interventions in the future. The evaluation findings will be used to update the program's ToC, objectives, processes, and overall approach. The immediate output of

[17] ETP Annual Report 2023

[18] ETP COP28 Round-Up

the evaluation is this report and an RBMF roadmap. The long-term goal of this evaluation is to improve ETP's likelihood of impacting climate targets and the SDGs in the region. [19]

The evaluation adhered to UNEG, OECD-DAC, and industry best practices and criteria to derive credible, reliable, and unbiased findings on the evaluation questions pertaining to relevance, effectiveness, efficiency, sustainability, impact, and coherence. As per UNEG guidelines, the ETP evaluation also assessed gender equality dimensions and considerations for disadvantaged and vulnerable populations where relevant to the program's design and outcomes. The evaluation findings and recommendations aim to strengthen ETP's strategic planning, monitoring, and learning processes to enhance its overall effectiveness and impact in accelerating the energy transition in Southeast Asia.

3. METHODOLOGY AND QUALITY ASSURANCE

The evaluation team adopted a theory-based, utilization-focused, and mixed-methods approach to collect primary data. The team applied a theory-based approach using the RBMF and ToC. The team used a utilization-focused approach to respond effectively to the needs of primary (the ETP Secretariat and Steering Committee) and secondary users (governments, IPs), foster a strong collaborative relationship and ensure learning and uptake of lessons. This approach emphasized joint learning and producing actionable recommendations to build on ETP's successes. The team identified and engaged all relevant stakeholders from the outset to ensure a participatory process that considered the intended use of the evaluation.

The team reviewed the RBMF and ToC, assessing their relevance, coherence, and effectiveness in guiding ETP's planning, monitoring, and reporting. They commenced with an initial desk review of relevant documents and collected primary data through semi-structured interviews and a Knowledge, Attitude, and Practice (KAP) survey. The interviews provided diverse perspectives on ETP's achievements, challenges, and lessons, while the KAP survey gathered insights from a purposive sample of stakeholders trained or supported by ETP activities[20]. Data analysis began concurrently with data collection, using qualitative content analysis for documents and interviews and quantitative analysis to generate descriptive statistics from survey data. No significant changes were implemented from the methodology outlined in the inception report. The evaluation questions are outlined in Annex I.

[19] ToR of ETP Evaluation, Section IV Deliverables.

[20] Given ETP's formative stage, randomization was neither feasible nor desirable at this point.

Figure 4: Data Collection Methods

41 interviews (22 female respondents, 19 male respondents)

63 survey responses (10 female, 27 male, 26 unspecified)

Field Mission (Vietnam and the Philippines) and Validation Workshop (Bangkok)

186 documents reviewed and consulted

The evaluation combined both qualitative and quantitative methods. This approach facilitated a robust triangulation process to strengthen the evidence base for all evaluation questions and ensure the reliability and validity of the key findings. These methods are summarized in Figure 4.

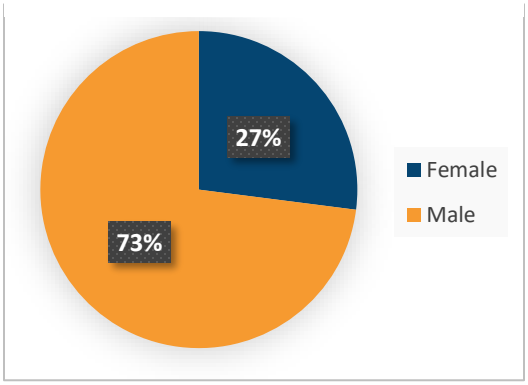
In-depth desk reviews: The evaluation team reviewed more than 186 documents, including project-related documents such as ToRs, concept notes, two-pagers, and RBMFs; partnership-level documents such as annual reports, financial statements, minutes of meetings, concept notes, and operation manuals; and published reports on the ETP website. The complete list of the documents reviewed is available in Annex V.

Individual and Group KIIs: The evaluation team conducted 41 Key Informant Interviews (KIIs), either in-person during the Field Mission or online via agreed video conference platforms, such as Microsoft Teams or Google Meet. The KIIs were transcribed and analyzed, with all identifying information removed to ensure the confidentiality of interviewees.

Field Mission: The evaluation included field missions to Vietnam and the Philippines, selected in consultation with the ETP Secretariat based on strategic relevance and contextual considerations. The evaluation team conducted individual and group KIIs with implementing partners, donor representatives, and government partners. The evaluation organized two sessions to validate findings: a presentation to the Steering Committee in October 2024 and a validation workshop with the ETP Secretariat in November 2024 in Bangkok, Thailand.

KAP Survey: The KAP Survey was conducted through the online platform Zoho, and no identifying information was collected. Participation in the survey was optional. The list of training participants was not available. Contact details for these participants were either sourced from project documents or provided by the ETP Secretariat. ETP country teams were involved in forwarding the survey questionnaires to potential respondents. It is not known how many trainees were reached, but 63 of them responded. It must be noted that the sample size of the survey participants is relatively small, and the survey is nonrepresentative. Within these limitations, the survey provided useful confirmatory evidence.

Figure 5: KAP Survey respondent distribution by sex



Data Analysis: The analysis was done according to evaluation questions and sub-questions. The evaluation used NVivo to code the data. For qualitative data cleaning, the team carefully reviewed interview notes to ensure their completeness and clarity. Raw quantitative data was exported and cleaned in Excel, looking for duplicate observations, missing data, or possible outliers. Quantitative/statistical analysis was used to generate descriptive statistics from the survey and the available M&E data. Comparative analysis was used to study and contrast findings emerging from the country field visits, documentary review, and the views expressed by different stakeholders to assess differential results. Triangulation was used throughout to ensure the reliability and quality of information to arrive at credible, reliable, and unbiased findings. The team utilized a mixture of primary and secondary data sources so that individual findings are based on several lines of inquiry and data sources.

4. FINDINGS

RELEVANCE

EQ1. To what extent are the ETP's objectives and activities aligned with the energy transition priorities and needs of its focus countries (Indonesia, the Philippines, and Vietnam)?

Finding 1: ETP demonstrates high relevance to the energy transition needs and priorities of VIP countries. This alignment is achieved through its demand-driven approach, allowing countries to propose projects based on their needs that align with ETP strategic outcomes. The strategic selection of Indonesia, Philippines, and Vietnam has contributed to addressing carbon emissions in the region's energy sector and enabled the target countries to tackle pertinent and specific bottlenecks that are faced within their countries. ETP's flexibility and responsiveness have proven instrumental in addressing country-specific needs while adhering to international commitments.

ETP's objectives and activities align closely with the energy transition priorities of its focus countries. The Paris Agreement, adopted in 2015, set a framework to limit global warming to well below 2°C[21], and all three focus countries have ratified it[22] and submitted Nationally Determined Contributions (NDCs) [23]. The Sustainable Development Goals (SDGs 7 and 13) align with these countries' energy transition goals[24]. Evidence from desk reviews and interviews indicates that ETP has supported national policy and regulatory efforts by providing technical assistance, legal and academic studies, and practical implementation guidance to help countries meet international commitments.

Due to their significant potential, Indonesia, the Philippines, and Vietnam were selected as focus countries. Analysis of regional emissions data confirms these countries rank among Southeast Asia's highest carbon emitters[25]. By concentrating efforts in these three countries, ETP aims to achieve a greater impact within its budget and timeline constraints. Document reviews and stakeholder consultations indicate that this targeted approach aligns with both donor interests and national energy commitments, further supporting ETP's relevance.

"It is still a work in progress, though. However, the matters that ETP (and the consultant) focus on strongly align with my organization's concern and responsibility." KII Respondent

The evidence from key informant interviews and program documentation demonstrates that ETP's flexibility and responsiveness were its key strengths. ETP has shown adaptability to evolving government priorities by adjusting its focus areas accordingly. ETP's demand-driven approach has led to distinct portfolios aligned with each country's context. In Indonesia and Vietnam, the emphasis has been on policy development and technical support for government agencies and state-owned enterprises, while in the Philippines, the focus has been on energy grid development by developing regulatory frameworks and standards to encourage private sector participation.

[21] United Nations Framework Convention on Climate Change (UNFCCC). (2015). Paris Agreement. https://unfccc.int/sites/default/files/english_paris_agreement.pdf

[22] The Philippines by Senate Resolution No. 320 March 14, 2018; Indonesia by Law 16 Year 2016, October 24, 2016; Vietnam by Resolution No. 39/NQ-CP, October 31, 2016.

[23] United Nations Framework Convention on Climate Change (UNFCCC). (n.d.). Nationally Determined Contributions (NDCs). https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs

[24] United Nations. (2015). Transforming our world: the 2030 Agenda for Sustainable Development. https://sdgs.un.org/2030agenda

[25] Statista. (2024). Territorial carbon dioxide (CO2) emissions in Southeast Asia from 1960 to 2022, by country. https://www.statista.com/statistics/1288198/asean-co2-emissions-by-country/#:~:text=At%20about%20619%20million%20metric,in%20the%20Asia%2DPacific%20region.

"At the initial stage, we align with the government's agenda and create an enabling environment for them." – KII Respondent.

In Indonesia, ETP's flagship *PLN Main and Disaster Recovery Control Centers* project aims to improve Indonesia's transmission and distribution grid. Indonesia faces key challenges in grid stability, dispatch optimization, and renewable energy integration. By enhancing PLN's capacity, the project supports Indonesia's shift from fossil fuels. It unlocks the technical barriers to grid integration, aligning with the National General Energy Plan's (RUEN) target of 23% renewable energy by 2025.

Further, the *Supporting Medium-term National Development Planning (RPJMN) 2025 – 2029 Background Study Indonesia* supports the prioritization of renewable energy development to be aligned with national development goals. *Assisting the Revision of the Indonesia Roadmap of Net Zero Emission (NZE) 2050* provides strategic guidance for reaching net zero for the energy sector by 2060. ETP's *Preparation of Indonesia's Enhanced Nationally Determined Contribution (NDC) Investment Roadmap for Energy Efficiency* identifies an integrated investment platform and availability of financial schemes to accelerate the adoption of energy efficiency programs in Indonesia to meet NDC targets.

Other projects include the *Study on the Financial Implications of the Early Retirement of Coal-fired Power Plants*, which supports Indonesia's coal phase-out plans. Aligned with national energy policy, the *Supply Chain Integration of Battery Value Chains for Energy Transition* project strengthens battery storage and electric vehicle initiatives. The *1 GW Solar PV Mapping and Development Plan* helps de-risk large-scale solar investments, supporting the 2021 RUPTL target of 4.7 GW solar capacity by 2030.

ETP aligns with the national priorities of the Philippines by addressing key energy regulation and efficiency challenges within the country's privatized power sector. *Upgrading the Design and Implementation of the Battery Energy Storage Market Mechanism of the Philippines Electricity Market Mechanism* project supports renewable energy integration by revising market rules for storage systems. Major initiatives, including the *Philippines Grid Diagnostic and Roadmap for Smart Grid Development* and a *Power Development Roadmap for the Bangsamoro Autonomous Region for Muslim Mindanao (BARMM),* to support the work towards enhanced grid reliability and renewable energy integration to the grid.

Moreover, the *Support to the Green Energy Auction Program (GEAP)* and two Offshore Wind Development projects - *Permitting and Consenting to Offshore Wind Energy* and *Marine Spatial Planning* - and Upgrading Energy Regulations project contributed to the strengthening of regulations to support the Philippines' 50% renewable energy target by 2040. The *Demand-Side Management (DSM) Policy* project supported the DSM Policy and Program for the electric power sector, encouraging end-users to decrease electricity consumption, adjust load patterns, and lower peak demand. The *Transcend Coal initiative provides* advisory services for coal-fired power plants in the Philippines.

ETP's alignment with Vietnam's national priorities is evident in its support of the country's 2050 net-zero emissions target, with projects contributing to this goal. ETP has shared its contribution to developing

strategic documents like the *Review and Gap Analysis of the Existing Coal Abatement Scenarios, which* supported Vietnam's coal phase-down. ETP also contributed to facilitating other key stakeholders besides governments, for example, the *Promotion of Energy Efficiency in Supporting and Food Processing Industries* and a project to support state-owned enterprises (SOEs) like EVN and Petrovietnam develop strategies for net-zero emissions, the *Roadmap for the Commission for Management of State Capital toward Net-Zero Emission in Energy State-Owned Enterprises (CMSC)* project ensures key stakeholders were engaged in the energy transition, aligned with Power Development Plan VIII (PDP8) and Decision No. 896/QD-TTg.

Besides, the ETP's work on the *Emission Trading System (ETS) Piloting* and *Impact Assessment of the EU's Carbon Border Adjustment Mechanism (CBAM)* supports Vietnam's integration into global carbon markets. Recent projects have also focused on technical solutions of national standards, such as the *Development of National Standards for Offshore Wind Power (OWP)*, the Development of National Standards for *Battery Energy Storage Systems (BESS)*, and *the Development of 9 Key National Standards for E-vehicle Charging Infrastructure* to address post-policy implementation needs directly.

ETP's regional coordination efforts included collaborating with platforms like SIPET, ETC, and VPEG[26] and aligning activities to reduce duplication across countries. *The Diagnostic Review of Energy Efficiency Development in Southeast Asia* and the *Donor Assistance Mapping on Energy Transition in SEA* provided insights that allowed ETP to adopt a targeted approach in Indonesia, the Philippines, and Vietnam. Other collaborative platforms established at the regional level include the *Energy Transition Round Table,* the *Just Coal Transition Forum*, and a remarkable step to revive the regionally agreed ASEAN Power Grid Advancement Program (APG-AP) through two projects: *APG-AP Output Roadmap Development* and the *Strengthening Regional Cooperation for the Implementation of the APG-AP towards Accelerating Energy Transition*.

However, maintaining relevance within ETP's mandate and resources faces challenges as countries adopt broader energy transition approaches beyond the program's current focus on renewable energy and energy efficiency. Indonesia, for example, is expanding its strategy to include nuclear[27] – as reflected in its current[28] and upcoming 2024 National Energy Policy – along with hydrogen, carbon capture and storage (CCS/CCUS), and biomass from sources like palm oil, rice husks, and wood chips. Vietnam incorporates biogas and green hydrogen[29], while the Philippines uses biomass for co-firing with coal and producing

[26] The Southeast Asia Information Platform for Energy Transition (SIPET), The Energy Transition Commission (ETC), Visionary Private Equity Group (VPEG)

[27] Indonesia Business Post. (2024). https://indonesiabusinesspost.com/insider/pln-to-continuously-develop-community-based-biomass-ecosystem/

[28] Government of Indonesia. (2014). National Energy Policy. Government Regulation of the Republic of Indonesia No. 79 Year 2014 on National Energy Policy

[29] *The National Energy Master Plan For The Period 2021 - 2030, With A Vision To 2050* Decision Number 893/ QD-Ttg

biofuels[30]. These evolving country contexts will require ETP to balance strategic goals with flexibility while preserving government trust.

Overall, the evaluation found that ETP's demand-driven approach and strategic focus on major carbon-emitting countries demonstrate high relevance to immediate regional priorities and broader international climate commitments across Southeast Asia. Desk review and stakeholder consultations indicated that ETP's technical assistance and policy support activities have established effective engagement pathways with government stakeholders in VIP countries. The program's ability to align strategically with national energy transition goals while adapting to country-specific contexts enhances its value proposition for member states. However, as documented through triangulated evidence from interviews and program documentation, maintaining this relevance will require careful consideration of balancing ETP's core mandate with evolving country needs and priorities.

EQ2. Are the ETP's intended impacts aligned with broader goals such as reducing greenhouse gas emissions, increasing access to clean energy, and creating green jobs?

Finding 2: ETP's intended impacts demonstrate clear alignment with broader climate goals. The desk review and KII findings show these impacts - including GHG emissions reduction, air quality improvement, and green job creation - are well-positioned to contribute to climate action. However, due to the inherent long-term nature of these impacts, their realization will take time, and contribution rather than direct attribution is more appropriate for measurement. Redesigning ETP's ToC and RBMF would help establish more precise results chains and ensure all necessary immediate and intermediate outcomes are in place to achieve these long-term impacts.

Triangulated evidence from interviews and document reviews indicated that ETP has made considerable efforts to align its intended impact with broader objectives, such as reducing greenhouse gas emissions, increasing access to clean energy, and creating green jobs. Analysis of project ToRs demonstrates how ETP aligns its portfolios with target countries' needs by facilitating government efforts through tailored technical assistance and capacity-building initiatives. ETP provided resources as mandated by its members, supporting the partnership's broader goal of a universal energy transition. The hosting arrangement with UNOPS and the focus on global goals contributed to ETP's perceived neutrality, which made it well-received across the participating countries.

The evaluation found that ETP has effectively contributed towards technical inputs to inform two draft Prime Ministerial Decisions advancing Vietnam's National Green Cooling Programme. The first, issued as Decision 496/QĐ-TTg on June 11, 2024, establishes a National Plan for phasing out ozone-depleting substances and controlled Greenhouse Gases (GHGs)[31], in alignment with the Montreal Protocol's

[30] Philippines Energy Plan 2023-2050

[31] Law Net. (2024). Roadmap for eliminating ozone-depleting substances and controlled greenhouse gases in Vietnam. https://lawnet.vn/thong-tin-phap-luat/en/legal-counselling/roadmap-for-eliminating-ozone-depleting-substances-and-controlled-greenhouse-gases-in-Vietnam-138732.html

timeline. The second decision sets environmental criteria for green credit and bond issuance[32] to ensure the ecological integrity of green-financed projects.

Similarly, *PLN Main and Disaster Recovery Control Centers* support PLN's delivery of cleaner electricity to nearly 165 million people across Java, Madura, and Bali. The project features advanced Supervisory Control and Data Acquisition (SCADA) and Energy Management Systems (EMS) for real-time grid management, integrates renewable energy sources, including solar and wind, and enhances Disaster Risk Reduction (DRR) capabilities. These upgrades aim to strengthen energy security, reduce electricity costs, generate employment, and advance the decarbonization of Indonesia's energy system.

While not always explicitly highlighted, the creation of green jobs is an inherent part of ETP's impact. By promoting renewable energy and energy efficiency, ETP supports the growth of new industries and employment opportunities in the green economy. For example, the *Wind Energy Development in Indonesia Investment Plan* aims to boost renewable energy capacity, develop skills, and create jobs in the sector. The assessment of the permitting and regulatory framework resulting from the project,[33] contributed to the facilitation of renewable energy transition and green job expansion across project stages, including planning, construction, operation, and maintenance.

Overall, the evaluation found that ETP's intended impacts - reducing greenhouse emissions to boost renewable energy capacity and gas emissions, increasing clean energy access, and creating green jobs - align with broader development goals outlined in the RBMF and program documents. While current activities and outputs were progressing, chiefly through technical assistance initiatives, assessing their contributions to the intended outcomes and impacts is too early. The desk review and stakeholder consultations indicated that the ToC and RBMF could be strengthened to better track how ETP's activities contribute to intended impacts.

IMPLEMENTATION EFFECTIVENESS

EQ3. To what extent were the planned outcome-level changes achieved in each target country?

Finding 3: ETP is advancing toward its planned outcomes across strategic objectives, though attribution remains challenging as gaps in the ToC and RBMF limit the demonstration of causal linkages between interventions and outcomes, and the program is still in its early phase. Document review shows progress in policy adoption and investment mechanism establishment, and stakeholder interviews confirm increased capacity and knowledge. Evidence of results is clearer in some areas. than others (e.g., grid modernization shows tangible country-level changes).

[32] Vietnam Law Magazine. (2022). MONRE proposes environmental criteria for green credit projects https://Vietnamlawmagazine.vn/monre-proposes-environmental-criteria-for-green-credit-projects-48937.html
[33] ETP. (2024). Permitting and Regulation Assessment for Onshore Wind. https://www.energytransitionpartnership.org/wp-content/uploads/2024/06/Permitting-and-Regulation-Assessment-for-Onshore-Wind-v3.0-Final.pdf

Table 2 shows the distribution of interventions across strategic outcomes and countries. The data from project RBMFs reveals a strong focus on policy development (SO1) and knowledge and awareness building (SO4), particularly in Vietnam.

Table 2: Number of Projects with Reported Strategic Outcome in RBMF

Country/Area	Strategic Outcomes			
	SO 1	SO 2	SO 3	SO 4
Indonesia	8	4	1	11
Philippines	8	5	2	12
Vietnam	15	1	1	15
Southeast Asia (region-wide)	1	2	1	8

Source: ETP Projects RBMF

Document review and stakeholder interviews show varying levels of progress toward ETP's planned outcomes in supporting countries' clean energy transition. For Strategic Outcome 1 on policy alignment, while ETP's technical assistance has influenced energy policy development, measuring concrete improvements is challenging due to lengthy government approval processes. For instance, renewable energy integration studies in Vietnam and Indonesia have informed policy discussions, though final adoption remains pending.

Evidence shows ETP's targeted support for climate policy adoption across Indonesia, the Philippines, and Vietnam. In Indonesia, ETP contributed through the *Streamlining Government of Indonesia Plans as a Pathway to Achieve Net Zero Emissions Target* in which it became an instrumental contribution by assessing existing government plans that guide the energy transition and providing comprehensive input from national plans alignment with climate commitment to that of communication strategy and mitigation measures. The Philippines benefited from ETP's work on *Upgrading Energy Regulations for the Energy Regulatory Commission of the Philippines (ERC), which* contributed to the provision of a strategic context of the evolving role of power sector regulation and the regulator and the emerging objectives to enable and maintain a course for the development of low-carbon electricity systems. The *Accelerating the Clean Energy Scenario (ACES)* further contributed to the Philippines coal phase-out scenario within the context of increasing renewable energy (RE) to the grid and drafting the necessary transmission plan. In Vietnam, ETP supported the implementation of the Carbon Border Adjustment Mechanism (CBAM) and the Emission Trading Scheme. It assessed the *country's readiness and international experience in carbon trade exchange design* to reduce carbon emissions through market-supporting policies. Interviews with government stakeholders highlighted that ETP's holistic understanding of context, flexibility, and technical expertise has established it as a 'preferred' partner in energy transition.

The evaluation found that ETP contributed towards key policy developments by facilitating policy drafting and providing recommendations, such as Indonesia's NDC[34] and the 2024-2029 Medium-term National Development Plan. In Vietnam, ETP contributed to the provision of technical inputs for government policies, particularly through *Review and Gap Analysis of the Existing Coal Abatement Scenarios*[35], the *Diagnostic Study on Net-Zero for the Energy Sector*[36] and the *National Green Cooling Program*[37], supporting the country's net zero 2050 commitment. The support for policy development in Vietnam was also implemented through some other projects, such as *Consultancy Services for ETP of Wind Development, Legal Support to the Development of Power Generation Projects (EREA),* and the *Diagnostic Study on Net-Zero for the Energy Sector*. In the Philippines, ETP's contributions to grid codes, green energy auctions, and energy efficiency strategies aim to catalyze private sector engagement in the country.

At the regional level, ETP's *Diagnostic for Competitive Arrangements for Energy Transition (DCAT)* initiative supported policy alignment by examining current power purchasing systems in Indonesia, the Philippines, and Vietnam. Through identifying barriers and conducting consultations, DCAT developed actionable guidance and templates to help regional authorities adopt market mechanisms that enhance the integration of competitive renewable energy into the overall energy supply.

Stakeholder interviews indicate that despite initial challenges as a new UNOPS-hosted partnership, ETP's country coordinators effectively built trust with government stakeholders. As a result, governments began using ETP's technical outputs in their planning and policy processes.

> *"This report and study have been reported to the government, and they liked it very much. They told us that they will try to share this study with the electricity company and include it as part of the company's electricity supply business plan and the national electricity plan. – KII Respondent*

ETP's smart grid development work supports the Philippines in addressing grid interconnection risks, though attracting large-scale private sector investments remains challenging. Regarding Strategic Outcome 2 on de-risking energy efficiency and renewable energy investments, document review and key informant interviews demonstrated progress across countries with challenges that persist in attribution. Completing wind power pre-feasibility studies in Indonesia has created clearer pathways for private sector

[34] Energy Efficiency Investment Roadmap TOR - https://drive.google.com/file/d/1vjFLwoKnznt29_zgakt1ETn4bnH8kRAz/view

[35] United Nations Vietnam. (2023). Press Release: Supporting Viet Nam's energy transition ambitions. https://Vietnam.un.org/en/236315-supporting-viet-nam%E2%80%99s-energy-transition-ambitions

[36] ETP. (2023). Diagnostic Study on Net-Zero for The Energy Sector in Vietnam. https://www.energytransitionpartnership.org/wp-content/uploads/2024/06/20231127_Final-Report.pdf

[37] ETP. (2024). The Vietnam Green Cooling Programme. https://www.energytransitionpartnership.org/2024/06/26/the-Vietnam-green-cooling-programme/

engagement as intended by the project's output[38]. The *Catalyzing Energy Efficiency as A Service* project, which is ongoing, has so far developed a pipeline of energy efficiency projects through 5 investment-grade audits selected from the pool of level 1 audits. In Vietnam, ETP's support for stakeholder consultation and input for policy development has contributed to published government decisions and frameworks that strengthen the enabling environment for green investments. ETP's *Enhancing the Spot Market to Attract Investments to Renewables* supports the Philippines in attracting private sector investments, and the other programs such as ESCO-in-a-box for Southeast Asia and the Investment-grade Audit (IGA) Financing Program contributed towards the provision of market-based solutions for the EE/RE investments.

Key stakeholders note that attributing certain increased energy investments to ETP's interventions is difficult, given that ETP operates within a broader landscape of development partners and government stakeholders working toward similar objectives. Although ETP has developed effective mechanisms like the renewable energy project pipeline in the Philippines, measuring success through Foreign Direct Investment (FDI) is complex. While the multifaceted nature of investment decisions makes it challenging to attribute increased FDI to ETP's initiatives directly, ETP's contribution was evident.

Document review shows substantial progress across countries for Strategic Outcome 3 on extending smart grids. The contribution of a detailed engineering design for Indonesia's PLN Main and Disaster Recovery Control Center marked a key step toward enhanced renewable energy integration. In Vietnam, ETP's technical recommendations for the smart grid roadmap align with Power Development Plan VIII and await the government's adoption[39]. In the Philippines, ETP supports progress by updating the grid codes and regulations and recommending institutional and governance strategies to strengthen the government's capability to manage the grid. At the regional level, the APG-AP projects continue efforts initiated under the 2007 APG MoU[40].

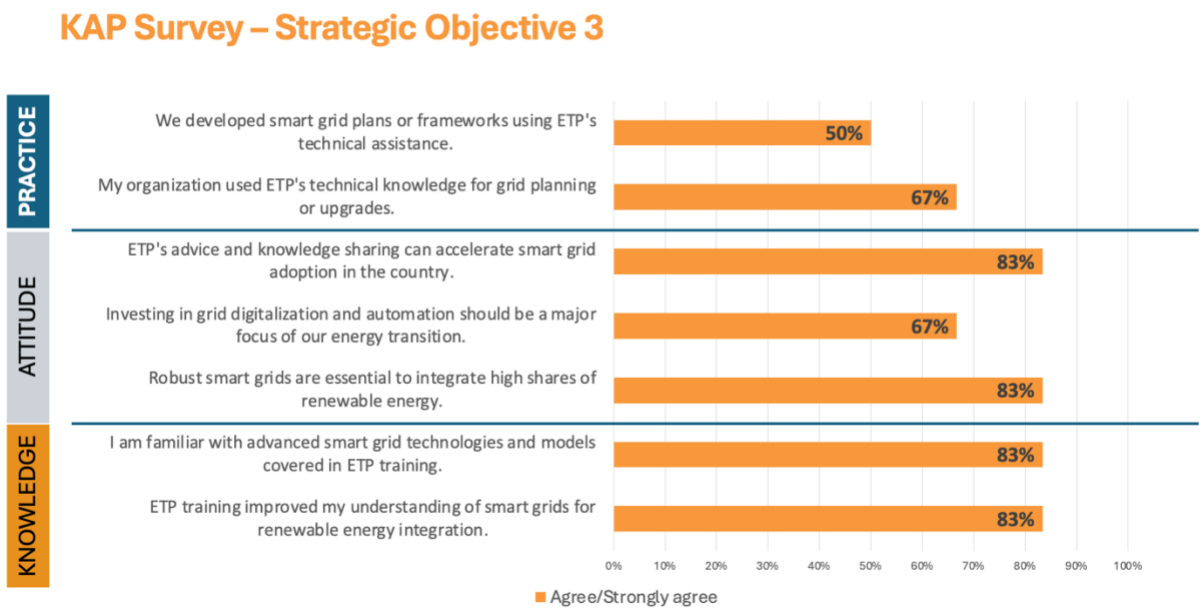
Evidence from the KAP survey (Figure 6) suggests that training participants were confident in their knowledge of grid technologies and renewable energy integration (83% of respondents) and that they are beginning to see that ETP technical assistance and training are contributing towards grid planning, with 50% and 67% of respondents agreeing or strongly agreeing that ETP technical assistance and knowledge provision has contributed to developing smart grid plans, frameworks or upgrades.

[38] ETP. (2022). Wind Energy Development in Indonesia: Investment Plan Concept Note. https://drive.google.com/file/d/1753qbLFf_YUiqrsGrs8Mo_Vj4-nXiz_O/view

[39] Project "Vietnam Smart Grid Roadmap for Period up to Year 2030, with a Vision to 2050"

[40] ACE (2023). Press Release: ASEAN Launches the ASEAN Power Grid Advancement Programme (APG-AP). https://aseanenergy.org/post/asean-launches-the-asean-power-grid-advancement-programme-apg-ap/

Figure 6: KAP survey results for Strategic Objective 3



Similarly, ETP made significant progress under SO4 in raising energy transition awareness among local governments and stakeholders in Indonesia, Vietnam, and the Philippines. In Indonesia, ETP's knowledge dissemination and stakeholder engagement improved understanding of renewable energy and energy efficiency among government and private sector actors and broader audiences, such as students in East Java[41]. In Vietnam, ETP engaged media outlets to raise public awareness of energy transition issues, although more efforts were needed to ensure widespread engagement[42]. In the Philippines, ETP focused on building government and private sector capacity to increase energy efficiency and grid modernization awareness. At the regional level, ETP developed a knowledge bank that is accessible to various stakeholders and that supports their energy transition efforts[43].

"In working on renewable energy planning projects, we have utilized knowledge from ETP to ensure that energy transition technologies can be implemented effectively."
- KII Respondent.

KAP survey evidence across the four SOs (See Annex IX) indicates that although respondents were less likely to agree or strongly agree with statements related to putting knowledge and attitudes into practice,

[41] Project "Energy Efficiency and Energy Conservation Awareness Raising in the Education Sector"

[42] Project "Energy Efficiency and Energy Conservation Awareness Raising in the Education Sector"

[43] Project "Energy Transition Round Table"

the fact that stakeholders are already starting to see knowledge gained being put into practice is a very positive outcome, especially considering that ETP was only established in 2020.

EQ4. How effective were the ETP's processes and mechanisms for developing country interventions, engaging stakeholders, and facilitating implementation?

Finding 4: ETP effectively advanced the energy transition agendas of its focus countries by developing tailored interventions, engaging stakeholders, and facilitating implementation. The Partnership tailored interventions for each country and engaged stakeholders strongly, enabling effective implementation with expert support and strong communication. However, the evaluation identified areas for improvement in monitoring and reporting. ETP should develop better project coding and tracking systems to improve impact measurement and stakeholder communication. Additionally, ETP needs to build greater flexibility into its processes to respond more effectively to rapid changes in market dynamics, especially in countries with evolving energy sectors.

Document review and stakeholder interviews demonstrate that ETP has managed country projects effectively despite a small team. Success stems mainly from its network of country coordinators who maintain strong communication and trust with government agencies. This direct engagement has fostered ongoing cooperation and effectively enabled ETP to address country-specific needs. Triangulated evidence confirms consistent delivery of quality outputs and technical assistance, even under challenging political conditions. ETP's success builds on its technical expertise and alignment with each country's energy priorities.

> *"I think it comes from how well-connected they are. That is something that always impresses me. It started small, but they talked with the right people about the right topic at the right time." - KII Respondent.*

ETP implemented effective mechanisms for project execution, emphasizing knowledge dissemination and technical support. The document review shows initiatives like the Philippines Grid Diagnostic and Smart Grid Development Roadmap, including targeted workshops that enhanced stakeholders' capacity, benefiting regulatory advancement and private sector engagement in the energy market. In Indonesia, projects such as the Wind Energy Development Investment Plan helped de-risk investments and provided clear implementation pathways. While full policy adoption is still pending, official statements[44] have commended the work of ETP as a significant contributor towards facilitating wind energy development in Indonesia.

[44]Republic of Indonesia. (2024). Press Release: Government aims to add 5 GW of installed capacity by 2030 https://www.esdm.go.id/id/media-center/arsip-berita/hingga-2030-pemerintah-bidik-tambahan-kapasitas-terpasang-pltb-5-gw-

"Creation of Roadmap for wind energy in Indonesia to support the Ministry of Energy and Mineral Resource is helpful in terms of understanding the complexity and improving the policy for energy transition within the sector."
- KII Respondent

The evaluation also found strong evidence suggesting improved inter-ministerial coordination and stakeholder engagement through ETP's country coordinators. Stakeholder interviews highlight the effective engagement of various stakeholders—including government agencies, state-owned enterprises, private sector entities, and civil society organizations—across national and regional projects. In Vietnam, ETP's tailored interventions through projects like the *Emission Trading System Piloting* built institutional capacity for sustaining initiatives beyond the project lifecycle. ETP successfully navigated complex regulatory environments in the Philippines and facilitated alignment between public and private sector interests through initiatives like *Philippines Grid Diagnostic and Roadmap for Smart Grid Development*.

With regard to country-specific approaches, document review and stakeholder interviews demonstrate ETP's effectiveness in adapting interventions to each context. In Vietnam and Indonesia, where state-owned enterprises dominate the energy sector, ETP focused on technical, financial, and legal reviews of policy alignment and de-risking of EE/RE respectively. These projects were designed collaboratively with government partners to support greener energy supply systems. In contrast, ETP's work in the Philippines' privatized energy sector emphasized regulatory frameworks and standards to encourage private sector participation. This context-specific approach enabled ETP to maintain effectiveness while addressing each country's unique energy transition needs.

EQ5. What challenges and bottlenecks did the ETP face in implementing its projects and activities, and how were these addressed?

Finding 5: The evaluation identified three main implementation challenges: operational complexities within the UNOPS system, lengthy procurement processes for projects, and initial staff resource constraints. ETP streamlined procurement issues through alternatives like Blanket Purchase Agreements (BPAs), Long-Term Agreements, and workload adjustments. While these responses showed effectiveness, procurement efficiency and workload distribution continue to need attention.

Document review and stakeholder interviews revealed several operational challenges in ETP's implementation. ETP's institutional arrangement, particularly its reliance on UNOPS for essential management functions, presented both opportunities and risks. The evaluation found that the 2022 S3i issue[45] and subsequent restructuring highlighted significant external risks for ETP due to its reliance on UNOPS for essential management functions[46]. This dependence exposes ETP to vulnerabilities in oversight and operational continuity. In response, ETP is exploring opportunities to increase flexibility and

[45] UNOPS Management Reforms. https://www.unops.org/about/governance/management-reforms

[46] ETP. (2023). Annual Report, p. 37

responsiveness while maintaining oversight.[47] Strengthening these areas will be crucial for mitigating risks and ensuring operational resilience.

The evaluation also identified challenges in ETP's procurement processes, particularly the lengthy average cycle of 90 days[48], which proved inefficient for smaller or short-term projects. Standard contract processes for small projects were time-consuming and costly, affecting disbursement rates and delaying implementation. Multiple stakeholders highlighted the need for a streamlined approach for small contracts to improve operational efficiency without compromising quality.

In response to these procurement challenges, ETP implemented several measures. ETP initiated Long-Term Agreements (LTAs) to streamline procurement by providing advanced cost knowledge and leveraging negotiation opportunities, reducing time and resource demands for each cycle. LTAs were set up with a pool of Implementation Partners (IPs) and a roster of retainers to expedite resource deployment and reduce administrative burdens by avoiding repetitive procurement processes. It also optimized internal processes to lower transaction costs and improve efficiency.
Staff resources emerged as another key challenge. Early in implementation, staff capacity constraints posed challenges to work-life balance, particularly in Vietnam where limited UNOPS presence required local staff to manage both programmatic duties and security-related obligations with authorities. This required country coordinators and local staff to have meetings beyond work hours to gain more trust from government partners from different lines of authority. While stakeholder feedback shows that subsequent staffing adjustments by ETP helped create a more manageable work environment, increased attention and institutional support by UNOPS still remain important.

The evaluation identified a strategic challenge regarding ETP's institutional positioning within UNOPS. While UNOPS provided the administrative framework, stakeholder feedback emphasized the importance of maintaining ETP's distinct partnership model involving donors, government representatives, and philanthropies. In response, ETP utilized UNOPS's administrative support to address these issues to maintain its distinct identity. This approach lets ETP leverage UNOPS's infrastructure while keeping its unique collaborative model. Enhancing communication about ETP's role was also highlighted as necessary to reinforce its identity and ensure partners recognized its value beyond its affiliation with the UN.

Overall, the evaluation found that ETP has made progress in addressing key implementation challenges. The program's efforts to streamline procurement processes through LTAs with potential implementing partners demonstrated a systematic approach to reducing procedural delays. The program also took steps to strengthen coordination while maintaining its partnership approach within the UNOPS framework. However, continued attention to procurement efficiency, workload distribution, and strategic alignment remains important for the effective implementation of projects.

[47] ETP. (2023). Annual Report, p. 37

[48] UNOPS Procurement Manual, p. 68

EQ6. How effective and useful are the ETP's monitoring, evaluation, and reporting systems?

Finding 6: ETP's monitoring, evaluation, and reporting systems show mixed effectiveness and utility. The RBMF exhibits weaknesses in output-outcome logic and attribution, limiting its ability to track progress toward strategic objectives. While recent improvements to reporting formats have enhanced accessibility for donors and internal learning, the systems struggle to capture results and establish clear attribution of ETP contributions. Platform compatibility issues also constrain effective information sharing among partners.

A review of ETP's Results-Based Management Framework revealed systematic gaps in measuring strategic objectives, with the framework containing ambitious indicators needing transparent data collection methodologies. An analysis of the ToC showed a need for clearer results chains linking outputs to intended outcomes, with missing key assumptions necessary for program effectiveness. Key Informant Interviews with program staff and technical specialists confirmed these findings, particularly highlighting challenges in monitoring complex indicators such as greenhouse gas emissions and air quality improvements. While recruitment of M&E expertise has strengthened technical capacity, measurement and attribution issues persist, as corroborated by document review and stakeholder feedback.

The evaluation found that ETP had undertaken measures to strengthen its reporting, including conducting a Steering Committee survey to assess information needs. While Steering Committee stakeholders acknowledged subsequent improvements in reporting quality, KIIs indicated opportunities to enhance the presentation of high-level results and attribution to ETP interventions. KIIs with donor representatives further identified needs for enhanced analytical content, including more synthesized and actionable insights and evidence-based case studies to demonstrate program effects. The evaluation found that strengthening storytelling and analytical depth could effectively communicate ETP's complete impact, making reports more appealing to non-specialist stakeholders. KIIs with donors, government stakeholders, and ETP staff revealed varying reporting requirements across different philanthropies and governments, creating challenges for standardized reporting.

Interviews with key stakeholders revealed information management challenges as ETP's portfolio grew. The current Google Workspace system presented access limitations, particularly for government partners. Steering Committee members noted difficulties in tracking projects due to the absence of a standardized numbering system.[49] These findings suggest the need for a more robust information management approach that ensures both accessibility and systematic project tracking. Migrating to a more commonly used platform will help improve access, data management, collaboration, and reporting coherence. Facilitating alternative file-sharing mechanisms will help improve secure access, data management, collaboration, and reporting coherence.

[49]A standardized numbering system was being established at the time of writing this report with 2025 workplans updated to include new project codes.

"One thing they might want to consider is migrating to Microsoft Office. A lot of firms work with Office, and then you have to work with Google Docs and Google Meet. You can get used to it, but if they could either use our SharePoint structures or consider it in the future, it might be easier."
– KII Respondent

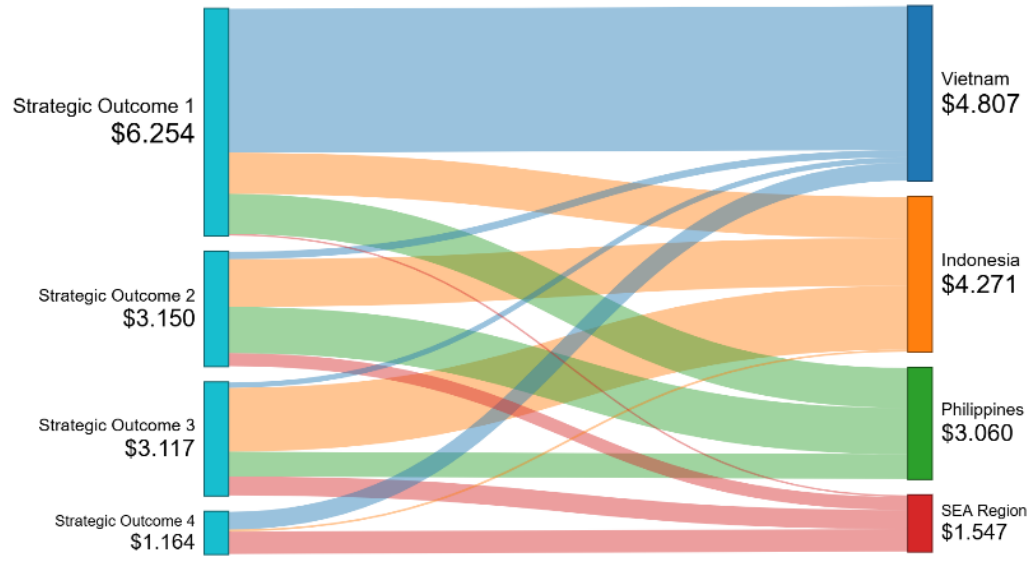
EFFICIENCY

EQ7. How efficiently were the ETP's resources (funds, expertise, time) utilized to achieve outputs and outcomes?

Finding 7: The evaluation found that ETP has effectively optimized its resources—funding, expertise, and time—to deliver outcomes. The program strategically allocated funding, leveraged staff expertise, and used local knowledge for context-driven interventions. However, challenges emerged in balancing funding across diverse country contexts, particularly in adapting to the Philippines' private-sector focus. While initial staff workload issues have improved through adjustments, the program still needs enhanced technical rigor through specialized expertise and improved procurement efficiency.

Desk review and financial analysis showed that ETP managed funding efficiently with a lean operational structure. Stakeholder interviews consistently confirmed careful resource use through strategic staffing and allocation decisions. However, a review of financial data reveals higher transaction costs during the startup phase after multiple small activities and complex recruitment processes. The programmatic-to-overall expenses ratio improved as ETP matured, showing increased allocation to core activities.

Figure 7: Share of Contract Value per Strategic Outcome to Countries and SEA (Millions USD)

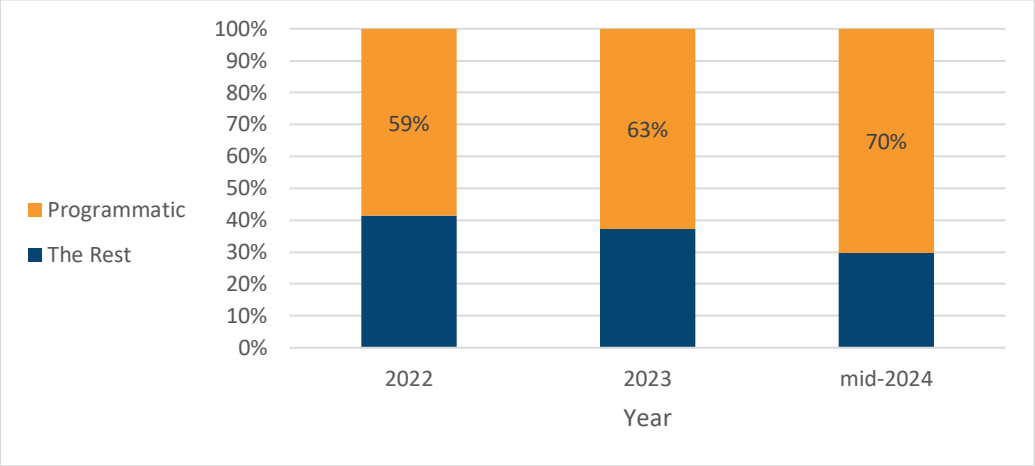


Source: Own illustration based on Semi-Annual Report 2024

A systematic review of internal processes showed that ETP follows stringent UNOPS procedures to ensure cost-effectiveness. All documents, reports, and funding requests undergo thorough reviews in line with UNOPS procurement standards. Internal stakeholders noted that these processes ensure high-quality outcomes by securing the best technical offers at reasonable costs. However, in-depth interviews described the procurement process, which can take up to 90 days[50], as lengthy.

As shown in Figure 8, ETP faced a relatively high programmatic-to-overall expenses ratio due to initial challenges in resource allocation, including high transaction costs from numerous small activities and complex UN recruitment processes. However, data demonstrates improvement over time as ETP shifted toward greater programmatic spending, indicating enhanced operational efficiency.

Figure 8: Share of Programmatic to Overall of Annual Expenses



Source: Own illustration based on ETP Annual Reports

The evaluation found that ETP has effectively leveraged its human resources, drawing on staff dedication and specialized skills. The team's expertise, particularly in government engagement and energy transition, was highlighted as a key asset, with much of this strength coming from hands-on experience. In-depth interviews emphasized the importance of country teams and a bottom-up approach in developing contextually relevant projects.

ETP demonstrated strong timeliness and efficiency, especially for significant initiatives, but faced challenges with smaller projects. The standard procurement process, averaging 90 days per cycle, as highlighted in Evaluation Question 5, created inefficiencies when uniformly applied to smaller projects, where extended timelines were disproportionate to the scope. These delays caused bottlenecks and affected overall efficiency. Streamlining procurement for smaller projects could enhance time efficiency, maintain momentum, and ensure timely, impactful results.

[50] UNOPS Procurement Manual, p. 68

EQ8. Did the ETP create synergies and avoid duplication with other actors to optimize resource use?

Finding 8: The evaluation team found that ETP actively creates synergies with other actors while avoiding duplication of efforts. Document review shows the program employs screening mechanisms during project design and presents initiatives biannually to the Steering Committee to ensure alignment. Each Terms of Reference addresses specific gaps identified through stakeholder mapping and analysis. While governments sometimes request similar projects from multiple agencies, stakeholder interviews with government stakeholders indicate this reflects ETP's distinct technical expertise and approach. The program's responsive engagement with government priorities has built a strong trust and complementary support to existing initiatives.

The evaluation indicated that ETP actively forged partnerships to amplify its initiatives' effectiveness by utilizing various organizations' strengths. Stakeholder interviews and project documentation show that ETP's approach begins with government agencies pinpointing renewable energy (RE) and energy efficiency (EE) projects for ETP to pursue. Thorough screening processes during project design and semi-annual presentations to the Steering Committee help prevent overlap and ensure alignment. Each Terms of Reference (ToR) addresses specific gaps, while stakeholder mapping and working with partners foster coherence and optimize resource utilization.

Document review and key informant interviews indicate that ETP systematically seeks to maximize complementarity with other initiatives. ETP starts with governmental agencies identifying their renewable energy and energy efficiency priorities, followed by comprehensive screening during project design. Evidence from stakeholder interviews confirms that ETP's technical contributions were often explicitly sought for their unique value, even in areas where other development partners were active.

> *"We ask the government whether any other actors doing something in the field. We ask for government notification letters to ensure no other development partners are doing that. We conduct a stakeholder mapping and analysis when making specific TOR. When there is overlap, we confirm to the development partners specifically."- KII Respondent.*

Evidence from triangulated sources demonstrated that ETP significantly fostered proactive collaboration among various UN agencies by clearly defining roles and responsibilities. For instance, in Vietnam, ETP invited UNEP to participate in cooling initiatives, with ETP concentrating on active cooling, while UNEP focused on passive cooling, which avoided overlap and maximized complementarity. In Indonesia, ETP collaborated effectively with Sustainable Energy for All (SEforALL) through the UNRC, with ETP supporting SE4All with opportunity mapping in the country. Meanwhile, ETP's efforts in the Philippines were coordinated through support from the DOE and ERC as they continued to map the landscape and align with the UNOPS country manager for collaborative opportunities. Additionally, ETP provided quarterly updates to the DOE Planning Bureau to monitor the development support in the energy sector, effectively

minimizing any potential overlap. At the regional level, the ASEAN Power Grid Advancement Program (APG-AP) demonstrates effective collaboration between ETP, the ASEAN Centre for Energy (ACE)[51], and Clean, Affordable, and Secure Energy for Southeast Asia (CASE)[52] in supporting the APG initiative.

ETP also collaborates with the government to avoid duplication through initiatives. For example, the *Streamlining Government of Indonesia Plans as a Pathway to Achieve the Net Zero Emissions Target* in partnership with Niras. ETP published a report to align energy transition programs and donor coordination strategies with existing government plans.

Governments often request similar projects from various development agencies, potentially creating overlaps beyond ETP's direct control. Document review and stakeholder interviews indicate that governments value ETP's distinct technical expertise and approach. While ETP's responsive approach ensures government support, the evaluation found opportunities to strengthen coordination mechanisms. Regular stakeholder meetings, joint planning sessions, and shared monitoring frameworks enhance the complementarity of efforts.

> *"When we conceptualize a project, we hold several discussions with potential beneficiaries. In this process, we also ask them if there's already a development partner working on this and why they requested this specific project in the first place. We're more responsive rather than pushing a specific agenda." – KII Respondent.*

The evaluation reviewed the coordination aspects of ETP's integration efforts. While some stakeholders raised concerns about potential overlap in Indonesia and Vietnam, others noted strategic complementarity rather than duplication, as demonstrated through clear differentiation of roles in initiatives such as green cooling.

ETP's strong responsiveness to government input has enabled tailored approaches to country-specific requirements. The evaluation found that while this occasionally creates an initial impression of overlap with existing initiatives, ETP's established processes for engagement with development partners and careful assessment of technical requirements help ensure its interventions remain strategically complementary. Continued attention to coordination capacity and resources will help maintain this effective approach.

[51]ACE. (2023). Press Release: ACE-CASE-ETP Forged Strong Partnership to Propel ASEAN Power Grid Advancement . https://aseanenergy.org/post/ace-case-etp-forged-strong-partnership-to-propel-asean-power-grid-advancement/

[52] CASE for South East Asia. (2023). Press Release: ACE-CASE-ETP forged strong partnership to propel ASEAN power grid advancement https://caseforsea.org/ace-case-etp-forged-strong-partnership-to-propel-asean-power-grid-advancement/

SUSTAINABILITY

EQ9. What is the likelihood of sustaining the ETP's benefits and impacts after funding ends, considering external factors and national ownership?

Finding 9: The evaluation found that the sustainability of ETP's benefits post-funding varies by country and is shaped by national ownership and external factors. In Indonesia, alignment with national priorities, like the wind investment plan, supports a sustained impact reinforced by firm climate commitments. In the Philippines, the privatized energy sector limits ETP's influence, but extending the Energy Plan to 2050 presents an opportunity to integrate ETP's initiatives into national strategies. Substantial ownership and policy integration in Vietnam—such as offshore wind standards and carbon market regulations—suggest high sustainability potential, though political instability presents risks. Across all countries, political shifts, changing priorities, and high turnover of trained personnel challenge the lasting effectiveness of capacity-building.

Document review and stakeholder interviews demonstrate that early alignment with government agendas has facilitated the creation of an enabling environment for sustainable impacts. However, each country's unique political and structural contexts present different opportunities and challenges for maintaining results beyond the program's lifespan.

"This means the impact of our technical assistance will last, even after the funding period ends, because the regulations and policies we influence will stay in place." – KII Respondent.

The evaluation found strong evidence of national ownership in Vietnam, where government decisions increasingly reflect ETP's technical contributions. Document review shows this in national standards for offshore wind, battery energy storage, and carbon market regulations, with impacts expected to continue through 2050. However, stakeholder interviews indicate challenges from turnover among trained officials that could affect long-term sustainability.

In Indonesia, ETP has been invited to contribute to key initiatives like the Just Energy Transition Partnership (JETP) as one of the Working Group Leads. This contribution demonstrated the role of ETP in supporting the country's mission in energy transition[53], which is expected to contribute to energy transition efforts beyond the scope of ETP.

The Philippines presents a distinct sustainability context due to its highly privatized energy sector. While the extension of the Energy Plan to 2050 offers an opportunity to embed ETP's contributions in national priorities, document review indicates inherent limitations in sustaining impact through technical

[53]Sequoia Climate Foundation. (2024). Building capacity for higher energy ambition https://sequoiaclimate.org/grantees/building-capacity-for-higher-energy-ambition/

assistance alone in this market-driven environment. In the Philippines, a highly privatized energy sector creates a distinct sustainability context that may limit the long-term influence of technical assistance. Although the extension of the Energy Plan to 2050 and ETP's recognition as a development partner in its last two iterations present opportunities to align with national priorities, the document review suggests that such acknowledgment alone is insufficient to ensure sustained impact in this market-driven environment. Hence, the projects utilizing a market-driven approach have a good standing to ensure sustainability.

Some stakeholders expressed concerns about ETP's growth pace, which has been remarkable in recent years after its inception. The document review shows that ETP has addressed this through measured growth that is aligned with actual country needs.

External factors significantly influence sustainability efforts. Frequent government staff turnover, reshuffling, and reorganization can interrupt ongoing initiatives and weaken the effectiveness of capacity-building. This is particularly evident in the Philippines, where the private sector attracts promising junior officials with higher salaries. According to stakeholders, long-term engagement—spanning multiple years—is needed to ensure enduring impact.

> *"To be really sustainable, these capacity-building efforts should last for four or five years... You end up with a large pool of trained people who can bring their expertise elsewhere." – KII Respondent.*

Moreover, ETP as a partnership currently needs a formal exit strategy, which may affect the sustainability of benefits once funding ceases, particularly from an institutional standpoint. For example, interviews in the Philippines revealed that government agencies were interested in sustaining ETP's support; however, the unclear funding timeline and absence of a defined exit strategy create uncertainty regarding future commitments. While the lasting impact of each project is the responsibility of respective governments, the portfolio as a whole is the responsibility of ETP. If the portfolio, in general, is not sustainable, then ETP would need to devise new strategies to ensure it can achieve its results.

Demonstrating lasting results helps justify donor investments and reinforces the credibility of ETP's interventions. ETP can support enduring climate commitments that meet donor expectations and provide a more stable foundation for future governmental ownership by integrating clear exit strategies, strengthening institutional capacity, and aligning with evolving government structures.

Overall, while the integration of ETP's contributions into the long-term energy strategies of VIP countries indicates a strong potential for sustainability, the evaluation found this depends on several factors. Document review shows that sustained impact requires continued national ownership, including program fit with current policy and market environments. Stakeholder interviews highlight the importance of stable political support. Developing formal exit strategies would also help ensure that ETP's benefits continue after the program's completion. This is particularly important in the Philippines, where

government agencies have expressed interest in continued support but face uncertainty due to unclear funding timelines and transition plans.

EQ10. How well has the ETP integrated its work into long-term country strategies and built partner capacities?

Finding 10: The evaluation team found that ETP effectively integrates its work through two key approaches. First, systematic alignment of each project with national energy policies ensures interventions support country strategies, from Indonesia's Enhanced NDCs to Vietnam's Power Development Plan VIII. Second, targeted capacity building enhances partner institutions' ability to carry forward initiatives. However, while technical skills transfer shows success, institutional capacity building needs further strengthening through more formalized, long-term approaches.

The evaluation found that the ETP employs a systematic process for aligning interventions with national priorities. Document review shows each project's Terms of Reference explicitly connects to high-level country goals. For example, in Indonesia, ETP's initiatives assisted the government in enhancing energy efficiency by implementing the enhanced NDC and the Medium-Term National Development Plan. In Vietnam, projects link to Power Development Plan VIII and carbon market regulations. The Philippines' interventions align with grid modernization goals and renewable energy targets.

Document review and key informant interviews indicate that ETP uses three main approaches to build capacity in its technical assistance. First, working-level officials gain hands-on experience with advanced tools and analytical techniques through project implementation. Second, targeted training activities enhance specific technical skills, as demonstrated in Vietnam's Emissions Trading System workshops, where officials gained a practical understanding of carbon market operations. Third, ETP facilitates knowledge exchange across countries, enabling stakeholders to learn from regional experiences.

The effectiveness of these approaches is evident in how government partners apply new skills. Stakeholder interviews indicate that trained officials increasingly lead technical discussions and make informed decisions about energy transition options. However, the evaluation found that institutional mechanisms to retain and transfer this knowledge need strengthening, particularly given the high staff turnover in partner organizations.

The evaluation team found that ETP's capacity-building approach varies effectively according to the country's context. In Indonesia and Vietnam, where state-owned enterprises dominate the energy sector, capacity building strengthens government agencies' technical capabilities for policy implementation. The document review shows that this includes hands-on training in areas like grid modernization in Indonesia and emissions trading in Vietnam. In the Philippines, where the energy sector is largely privatized, consultations between ETP and governments and engagements with the private sector stakeholders helped inform and refine regulatory capacity. Stakeholder interviews indicate that these targeted

approaches help address specific countries' needs. According to stakeholder interviews, this collaborative approach ensures that support is better tailored to country-specific needs.

The document review reveals ETP's systematic approach to project integration, which helped align new initiatives with existing government frameworks. ETP begins with comprehensive policy mapping, followed by explicit alignment of ToR with national strategies. Stakeholder consultation processes ensure interventions complement existing government initiatives rather than duplicate them. This systematic approach was evident in Vietnam's emissions trading work, where ETP first mapped existing carbon market initiatives before designing its support package.

In Indonesia, ETP has aligned initiatives with the Enhanced Nationally Determined Contributions (NDCs) and the Medium-Term National Development Plan (RPJMN), such as supporting the *revision of the Roadmap for Net Zero Emission (NZE) 2060*. In Vietnam, ETP's contributions to offshore wind standards, battery charging, and carbon market regulations align with key policies like the Power Development Plan VIII (PDP8). ETP has supported grid modernization and renewable energy integration in the Philippines through initiatives like the Green Energy Auction Programme (GEAP), updating national grid codes, and facilitating energy storage participation in the electricity spot market. These targeted interventions help shape energy transition strategies and ensure long-term sustainability.

The evaluation highlights how uncertainty in the national context can challenge the sustainability of some ETP projects. Initiatives may achieve short-term objectives, but evolving political dynamics and regulatory shifts can complicate long-term efforts. For instance, frequently updated national energy plans might initially appear to create unpredictability. However, these regular revisions are also a standard part of responsive governance, intended to adapt to changing conditions and improve strategic direction. Furthermore, overarching laws and policies—such as renewable energy legislation and power sector reform acts—offer a stable framework guiding these plan updates. While fluctuating political interest remains a valid concern, the routine realignment of national plans can present opportunities for ETP to stay relevant, influence evolving priorities, and ultimately strengthen sustainability.

Stakeholder feedback highlights that ETP's responsive approach has effectively built government trust. However, to ensure sustainability, a shift toward proactive, long-term planning is necessary to ensure sustainability. By developing a strategic approach that anticipates future needs, ETP can better align with changing national contexts and ensure its projects have a lasting impact.

> *"We have to develop a long-term planning. ETP style of work has been a little bit reactive, we build the relationship first, then do the job. … A long-term plan is needed to make the partnership more focused." –KII Respondent*

The evaluation found that ETP takes a selective approach to government project proposals to be aligned with its strategic goals. This approach prioritizes sustainability and focuses on projects with long-term

impact potential. This ensures that ETP's efforts align with evolving energy transition needs while maintaining relevance and impact.

ETP's capacity-building initiatives were integral to nearly all its projects, focusing on training and workshops to enhance technical skills and ensure knowledge transfer to local stakeholders. These initiatives helped build local capacities, ensuring that expertise is retained and applied beyond project completion.

The evaluation highlighted that a key success of ETP's capacity-building efforts was creating a network of trained professionals, bolstering human resource capacity in the energy sector, and advancing the transition to renewable energy. Strengthened technical skills among government partners have also improved policy implementation and decision-making, addressing foundational issues that hinder energy transition.

"We see a lot of turnovers in ministries or state enterprises that ETP works with... These capacity-building campaigns should last for several years" – Respondent.

Overall, ETP has effectively integrated its initiatives into long-term country strategies and aligned them with national policies by closely collaborating with government agencies. Capacity-building initiatives have enhanced local technical skills and created a growing network of trained professionals, strengthening the energy sector's human resource capacity. Political uncertainties, regulatory changes, and high staff turnover pose risks to the sustainability of ETP's impact. While these issues were beyond ETP's control, they also provide opportunities for the organization to remain relevant, influence changing priorities, and enhance sustainability. While ETP's responsive approach has built trust and aligned well with government priorities, adopting a more proactive strategy could further enhance sustainability. Long-term approaches to capacity-building and maintaining institutional knowledge will be crucial to sustaining the benefits of ETP's contributions beyond its funding period.

IMPACT

EQ11. How catalytic, complementary, and value-adding were the ETP's interventions in accelerating the energy transition?

Finding 11: Evidence from document review and stakeholder interviews demonstrates that ETP has served as an effective catalyst for energy transition in Southeast Asia through three key channels: (1) influencing national policy frameworks, particularly in renewable energy and carbon markets, (2) strengthening technical and institutional capacities of key stakeholders, and (3) facilitating regional cooperation on shared infrastructure. While attribution remains challenging given the complex policy

environment, triangulated evidence confirms ETP's distinct value addition in accelerating energy transition initiatives across its focus countries.

The evaluation's assessment of ETP's impact drew on multiple evidence streams, including document review, key informant interviews, and analysis of policy changes across the focus countries. While significant positive impacts were identified, four key factors affect the program's ability to maximize its catalytic role: (1) attribution challenges in complex policy environments, (2) gaps in translating technical recommendations into implementable actions, as noted in stakeholder interviews, (3) limited direct engagement with private sector investors despite the program's policy influence, and (4) sustainability challenges in capacity building due to high staff turnover in partner institutions.

Document review and stakeholder consultations demonstrate ETP's catalytic effect on national policy frameworks. In Indonesia, ETP's wind power investment roadmap has contributed to the consideration of PLN's national electricity planning. Similarly, in Vietnam, ETP's technical inputs contributed directly to Prime Minister Decision No. 496/QD-TTg on greenhouse gas emissions control. The Philippines case illustrates ETP's ability to catalyze regulatory reforms, particularly in enabling private sector participation in renewable energy markets.

Market transformation evidence is particularly strong in the Philippines, where ETP's support for addressing regulatory barriers contributed to creating a more enabling investment environment and enhanced ease of doing business. Its work on the Wholesale Electricity Spot Market (WESM) exemplifies its role in expanding market mechanisms for renewable energy deployment.

"We want to highlight... that by participating in the market, even without a contract, you can still earn and get a return on your investment." – KII Respondent.

ETP's catalytic influence extends to regional coordination through strategic platforms. A key example is the *Just Coal Transition Platform* (JCTP), which serves as the primary convening mechanism for governments, communities, and development partners across Southeast Asia. Stakeholder feedback indicates that this platform has enhanced dialogue and coordination efficiency in advancing regional energy transition goals.

ETP's catalytic role is supported by its complementary approach, ensuring its work supplements rather than substitutes other development partners and aligns with each country's existing conditions. ETP complemented existing donor programs by aligning its work with policy dialogues and development assistance, proven by the regular meetings and detailed stakeholder analyses in project ToRs. These efforts ensured its technical assistance directly supports the broader impact of donor initiatives and streamlines collective efforts toward coordinated energy transition outcomes.

ETP has established itself as a facilitator of capacity building and knowledge exchange and a key enabler of catalytic changes. Through targeted training programs and cross-country knowledge sharing, ETP has

equipped stakeholders with technical expertise and fostered networks to address common challenges. A notable example is the Emissions Trading System (ETS) training, which enhanced government officials' understanding of carbon markets, particularly in Vietnam, strengthening their ability to implement renewable energy policies effectively. ETP also promotes regional cooperation by facilitating workshops that enable stakeholders from different countries to share insights and best practices, such as through the *Energy Transition Roundtable.*

ETP's value proposition stems from its distinct technical expertise and strategic positioning in the region. Document review reveals three key channels through which ETP delivers impact: (1) provision of specialized technical assistance in markets with underdeveloped regulatory frameworks, (2) establishment of multi-stakeholder dialogue platforms connecting government departments, regulators, and other stakeholders, and (3) facilitation of knowledge exchange between local stakeholders and international counterparts. Stakeholder interviews confirm that this approach has been particularly effective in building foundational policies for ambitious energy targets.

Implementation challenges identified through stakeholder consultation merit consideration for future programming. First, attributing specific policy changes to ETP interventions remains complex due to multiple actors in the policy space. Second, the Knowledge, Attitudes and Practices (KAP) survey reveals that government officials seek more actionable recommendations with clear implementation pathways rather than broad technical studies. Third, staff turnover in partner agencies necessitates continuous capacity-building efforts to maintain institutional knowledge and skills.

Overall, triangulated evidence demonstrates ETP's significant catalytic role in accelerating energy transition across Southeast Asia, mainly through policy influence, capacity strengthening, and regional coordination. While the program's technical contributions were well-documented through stakeholder feedback and policy adoption, maximizing impact requires addressing identified challenges in attribution, implementation guidance, and institutional capacity retention. The evaluation finds that ETP's value proposition is strongest where it combines targeted technical expertise with effective stakeholder convening, though sustained impact will depend on strengthening pathways from technical recommendations to practical implementation.

EQ12. What were the key intended and unintended impacts achieved, including findings from the KAP assessment?

Finding 12: Given ETP's relatively early implementation stage, the evaluation found emerging evidence of both intended and unintended impacts through document review and stakeholder consultations. Initial impacts are most evident in policy development, capacity enhancement, and stakeholder collaboration across focus countries. While attribution of specific policy changes remains challenging at this stage, evidence demonstrates improved understanding and application of energy transition concepts among government officials. Early unintended positive impacts include expanded discourse

on coal phase-out financing and community impacts, though administrative constraints have limited private sector engagement opportunities, particularly for Energy Service Companies (ESCOs).

The assessment of ETP's contribution to the intended impacts draws on a comprehensive document review and in-depth stakeholder interviews. The analysis reveals promising policy advancements across the region. ETP projects have furthered the development of the carbon market in Vietnam by providing resources and training to support the roll-out of the domestic ETS system. In Indonesia, ETP's technical input has contributed to the upward revision of wind power targets to 5 GW by 2033.

Document review and stakeholder feedback indicate that ETP's work has broadened the scope of coal phase-out discussions beyond emissions reduction to encompass financing mechanisms and community impacts. In its convening role, ETP has created new channels for dialogue among previously disconnected stakeholders, facilitating more comprehensive approaches to coal transition strategies.

The program's enhanced communication strategies have raised awareness of its initiatives beyond its planned level of outreach by making information more accessible and engaging. By presenting its work in simpler language and a more audience-friendly manner, ETP improved outreach and increased media coverage beyond initial expectations. This approach boosted visibility without added promotional costs, with ETP's projects gaining attention from media outlets and endorsements through coverage by partner institutions like PLN and MEMR in Indonesia[54].

ETP's active role in the region has also invited high levels of interest from investors and businesses in the energy transition sector, reflecting their recognition of ETP as an emerging catalyst in this domain. This surge of enthusiasm underscores that ETP's initiatives have successfully opened opportunities and attracted significant private-sector engagement. While many companies were eager to collaborate with ETP, administrative limitations complicate partnerships with private sector organizations.

ETP's training and capacity-building programs have improved government officials' understanding of critical energy transition concepts, clarifying and dispelling misconceptions about complex issues like Vietnam's carbon markets. Furthermore, ETP's facilitation of cross-border knowledge-sharing enabled ASEAN representatives to gain valuable insights from international practices through the APG-AP technical assistance. ETP's facilitation of cross-border knowledge-sharing enabled ASEAN representatives to gain valuable insights from international practices through the APG-AP technical assistance. These exchanges provided new ideas on approaching multilateral power trading, highlighting a transformative impact on regional energy strategies. As a result, government agencies have shown increased openness to collaboration with ETP, recognizing the value of partnership in advancing an effective energy transition. ETP has established itself as a supportive and trusted entity, leading to greater receptivity to energy

[54] Republic of Indonesia. (2024). Press Release: Government aims to add 5 GW of installed capacity by 2030. https://www.esdm.go.id/en/media-center/news-archives/hingga-2030-pemerintah-bidik-tambahan-kapasitas-terpasang-pltb-5-gw-

transition initiatives and more collaboration requests directed at it. In addition to these advancements, ETP is helping member countries develop policies and regulatory reforms in the sector. While direct attribution to ETP's work can be challenging, its impact is evident in policy discussions and regulatory shifts. For instance, its work in Vietnam has been discussed at high levels within the government, and more concrete policy changes linked to ETP's efforts were expected to emerge as its work continues.

Overall, evidence demonstrates emerging impacts across multiple dimensions. ETP has influenced policy frameworks, enhanced stakeholder capacities, and catalyzed broader energy transition discussions beyond initial expectations. KAP survey among stakeholders also indicates strong positive changes in understanding and attitudes towards energy transition. While administrative constraints, particularly around private sector engagement, have posed some limitations, the evidence points to ETP's growing effectiveness in advancing energy transition goals as the program matures.

CROSS-CUTTING ISSUES

How well were inclusivity principles integrated into the ETP's strategies, operations and interventions, including consideration of vulnerable groups such as persons with disabilities?

Inclusivity principles provide a backdrop for work conducted across UN agencies. These principles were directly addressed within the mandate of other agencies and were not at the forefront of what ETP does; therefore, projects were not expected to integrate them in planning or reporting explicitly. However, ETP projects do contribute to promoting inclusivity, at least indirectly. In the Philippines, initiatives such as the Grid Diagnostic and Roadmap for Smart Grid Development positively impact the broader population. These initiatives indirectly support vulnerable groups, including low-income households, by facilitating the integration of renewable energy into the national grid. By supporting the integration of more variable renewable energy into the grid, ETP contributes to reducing dependence on volatile fossil fuel markets, safeguarding low-income families from energy price fluctuations, and ensuring energy security for the public. ETP also facilitates the Just Coal Transition Platform (JCTP), which strives to promote an inclusive transition. Additionally, it explicitly incorporates accessibility features in its requirements for site planning in Indonesia,[55] ensuring the inclusive design for all building users, including disabled access and welfare facilities, and gender considerations, as mentioned in the project's ToR.[56]

Beyond these examples, specific details regarding support for people with disabilities or marginalized groups were not consistently included in project documents, which is expected because they fall outside the formal ETP mandate. However, project ToRs do call for broad stakeholder inclusivity, and UNOPS does have gender and inclusion policies that were integrated into ETP's overall operations (e.g., non-discrimination in participant selection based on gender or disability status (PWD).

[55] Schedule I Terms of Reference, Case No.: RFP/2021/21201, Section III.4.1

[56] Ibid

To what extent did the ETP effectively address gender equality and women's empowerment across its programming and internal practices?

The evaluation identified efforts to integrate gender equality and women's empowerment (GEEW) into programming. Discussions with different stakeholder groups uncovered several strategies, including gender criteria in Terms of Reference and benchmarks for women's participation in events, starting with baseline participation of 30%, with some having even higher standards. However, document review and stakeholder feedback suggest that more systematic integration of GEEW is needed beyond compliance with basic requirements.

There was also an emphasis on featuring women consultants and ensuring that implementing partners have gender management practices in place, thus integrating gender considerations into the process and technical aspects of projects where relevant. Gender requirements, in general, have been streamlined into all ToRs of the projects. Despite these efforts, there may be limitations in how deeply gender equality and inclusivity were embedded in the organizational culture. The high-level nature of much of ETP's work, which often focuses on policy development and technical assistance, can sometimes limit the direct impact on GEEW. Key stakeholders also highlighted this. Focusing on compliance rather than proactive empowerment initiatives might mean that while ETP meets minimum requirements, there is room for a more substantial impact while still paying attention to the context of countries.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusion 1: Strategic Planning and Responsiveness

ETP has demonstrated strong support for government partners in renewable energy initiatives through technical expertise and facilitation, with responsiveness being its key strength, though this adaptability could impact program effectiveness. ETP's initiation of a new strategic framework in April 2024 presents an opportunity to maintain both flexibility and direction while furthering partnership goals and accommodating their unique circumstances and international obligations.

> **Recommendation 1: Enhance and align the 2025+ Strategy through a Two-Pronged Approach**
> ETP should strengthen its 2025+ Strategy through a systematic approach that balances responsive engagement with strategic planning. The strategy should incorporate milestone-based monitoring of progress toward the 2030 vision, establish quantifiable metrics for climate and economic impacts, and continue to develop contingency plans for operational risks. Critical to this approach is maintaining ETP's effective balance between climate commitments and national priorities while expanding its portfolio to address emerging market and technological needs.
> Timeline: 3 Months
> Responsible Party: ETP Secretariat, Steering Committee, UNOPS

Conclusion 2: Strengthening Results-Based Management Tools

ETP's ToC and RBMF require reinforcement to better capture and reflect the work under the Just Transition framework. The varying cultural and political contexts across target countries require careful consideration in collecting and aggregating data. While maintaining standardized high-level indicators for program-wide measurement, ETP should ensure data collection methods and tools are adapted appropriately for local contexts to ensure accurate and meaningful aggregation at the portfolio level.

> **Recommendation 2: Improve Theory of Change and RBMF to Strengthen Just Transition Integration**
> ETP should enhance its ToC and RBMF to better capture just transition work, considering Gender Equality and Social Inclusion principles. This includes developing specific indicators to measure inclusive development impacts, strengthening the integration of gender and equity principles across programs, and continuing the improvement of mechanisms to track contributions to inclusive development goals.
> Timeline: 3-5 Months
> Responsible Party: ETP Secretariat with the support of the steering committee

Conclusion 3: Monitoring and Reporting Systems

ETP's monitoring, evaluation, and reporting systems, including RBMF and regular reporting cycles, provide a structured approach for tracking progress across program activities. There is strong evidence of the value ETP brings through detailed reporting, which supports informed decision-making and strategic oversight by Steering Committee. Steering Committee members expressed satisfaction with ETP's reporting depth and noted appreciation for the feedback mechanisms, such as satisfaction surveys to refine reporting quality. Early concerns regarding report frequency and approval processes were addressed by ETP, achieving a balanced approach that enhances both the accessibility and relevance of report content.

ETP's commitment to improving reporting effectiveness is clear through ongoing updates to the RBMF, particularly with the planned addition of a Strategic Objective on Just Transition. Interviews revealed a need for a secure data-sharing platform due to Google Workspace compatibility issues. Moving forward, refining reports to emphasize strategic outcomes and keeping technical specifics for supplementary reports will ensure Steering Committee members receive concise, impactful information aligned with their interests.

> **RECOMMENDATION 3: Strengthen Monitoring Systems and Document Management**
> ETP should enhance its monitoring and reporting systems to better track and report on progress milestones and indicators in the updated Results-Based Management Framework. This will help track results across strategic outcomes more effectively. Additionally, UNOPS should implement secure document-sharing systems to facilitate collaboration with stakeholders outside the secretariat.
> Timeline: 6-12 Months
> Responsible Party: ETP Secretariat and UNOPS

Conclusion 4: Leveraging Partnerships

ETP's dual strengths in regional and national engagement create a unique advantage in advancing energy transition initiatives. This foundation, coupled with long-term cooperation with government and implementing partners, positions ETP to effectively scale successful practices across the region through existing networks and platforms.

> **Recommendation 4: Leverage Strategic Collaborations to Scale Impact and Address Gaps in the Energy Transition Sector**
>
> ETP should expand strategic collaborations to scale its impact in the energy transition landscape by enabling dialogue between national and sub-national levels, building upon effective coordination with UN agencies and development partners, and facilitating networks through established regional platforms to help realize ETP's vision.
>
> Timeline: 12-24 months
>
> Responsible Party: ETP Secretariat, Program Managers

Conclusion 5: Knowledge Management

ETP successfully aligns its initiatives with the national energy policies of Indonesia, Vietnam, and the Philippines, embedding these efforts within their long-term strategies. This alignment enhances the sustainability of ETP's work by contributing to developing policies and regulatory frameworks that shape the renewable energy sector. ETP's proactive approach to building partnerships has minimized project overlap, maximized resource efficiency, and enhanced its influence on the energy transition. However, maintaining the impact of capacity-building efforts remains challenging due to political uncertainties and the turnover of government partner personnel.

> **Recommendation 5: Prioritize Knowledge Management for Sustainable Impact**
>
> ETP should enhance its knowledge management practices by maintaining quality standards and coordinating technical training through implementing partners. This approach should ensure training materials and output remain accessible, leverage the ETP website as a central repository for program information, and facilitate continued regional knowledge exchange and peer learning opportunities.
>
> Timeline: 12-18 months
>
> Responsible Party: ETP Secretariat, Program Managers

ANNEX I. EVALUATION QUESTIONS

In line with the ToR and evaluation matrix, the evaluation responded to the following overarching evaluation questions (EQs), organized around the evaluation criteria of relevance, effectiveness, efficiency, coherence, impact, and sustainability. Questions on equity and gender equality are mainstreamed, as relevant, within these other criteria. The overarching EQs, together with the specific sub-questions that operationalize them, are listed in the table below.

Criteria from the ToR	Evaluation Questions
Relevance	
● To what extent are the programme's objectives and lessons learned valid? Are the activities and outputs of the programme consistent with the overall goal and the attainment of its objectives? Are the activities and outputs of the programme consistent with the intended impacts?	○ To what extent are the ETP's objectives and activities aligned with the energy transition priorities and needs of its focus countries (Indonesia, the Philippines, and Vietnam) and the region? ○ Are the ETP's intended impacts aligned with broader goals such as reducing greenhouse gas emissions, increasing access to clean energy, and creating green jobs?
Implementation effectiveness	
● This dimension focuses on the in-country strategy and process that led to the implementation plan and how effectively programmes were implemented. This will include examining the types of analysis, discussions, and decision-making processes that led to developing the country's log frame and associated financing request. It will seek to understand the various mechanisms and platforms countries adopt to facilitate programme implementation across multiple stakeholders. It will evaluate some of the challenges and bottlenecks that hampered rapid implementation and identify good practices. It will also evaluate financing flows and the administrative effectiveness of the ETP's funding context.	○ To what extent were the planned outcome-level changes achieved in each target country? ○ How effective were the ETP's processes and mechanisms for developing country interventions, engaging stakeholders, and facilitating implementation? ○ What challenges and bottlenecks did the ETP face in implementing its projects and activities, and how were these addressed? ○ How effective and useful are the ETP's monitoring, evaluation, and reporting systems?
Efficiency	
● This dimension will assess whether the practices used to achieve the objectives were the most efficient. For example: were objectives achieved on time? How effectively are resources/inputs (funds,	○ How efficiently were the ETP's resources (funds, expertise, time) utilized to achieve outputs and outcomes?

expertise, time, etc.) converted to outputs? In view of a better use of resources at the country level, were there any effects from creating synergies among government, aligned partners and sector stakeholders? Has the programme avoided duplication of efforts between actions financed by different sources or actors in the region?	○ Did the ETP create synergies and avoid duplication with other actors to optimize resource use?
Sustainability	
● This will examine the likelihood that programme results/benefits will continue after funding is ended. This will also include looking at the external environment conducive to the maintenance of focusing on the effort made to channel the achievements and the follow-up of the unfinished business into new strategies and plans. Recommendations are invited on how ETP can make its interventions more strategic and impactful going forward.	○ What is the likelihood of sustaining the ETP's benefits and impacts after funding ends, considering external factors and national ownership? ○ How well has the ETP integrated its work into long-term country strategies and built partner capacities?
Impact	
● This dimension will examine the extent to which interventions were catalytic, complementary, and clearly added value, allowing for a leveraged impact. In seeking to understand the implementation gains, it will also consider the counter-factual question: what if these funds had not been available and compare with the objectives of this fund. The evaluation is expected to collect qualitative information and other evidence from the programme implementing partners on the outcome criteria. This will assess ETP's contribution to each strategic outcome and where feasible, conduct a KAP assessment for the sector stakeholders trained/upskilled or supported.	○ How catalytic, complementary, and value-adding were the ETP's interventions in accelerating the energy transition? ○ What were the key intended and unintended impacts achieved, including findings from the KAP assessment?
Cross-cutting questions:	
a. To what extent did ETP consider diverse groups, including vulnerable populations and people with disabilities? b. To what extent did the ETP effectively address gender equality and the empowerment of women across its programming and internal practices?	

ANNEX II. EVALUATION MATRIX

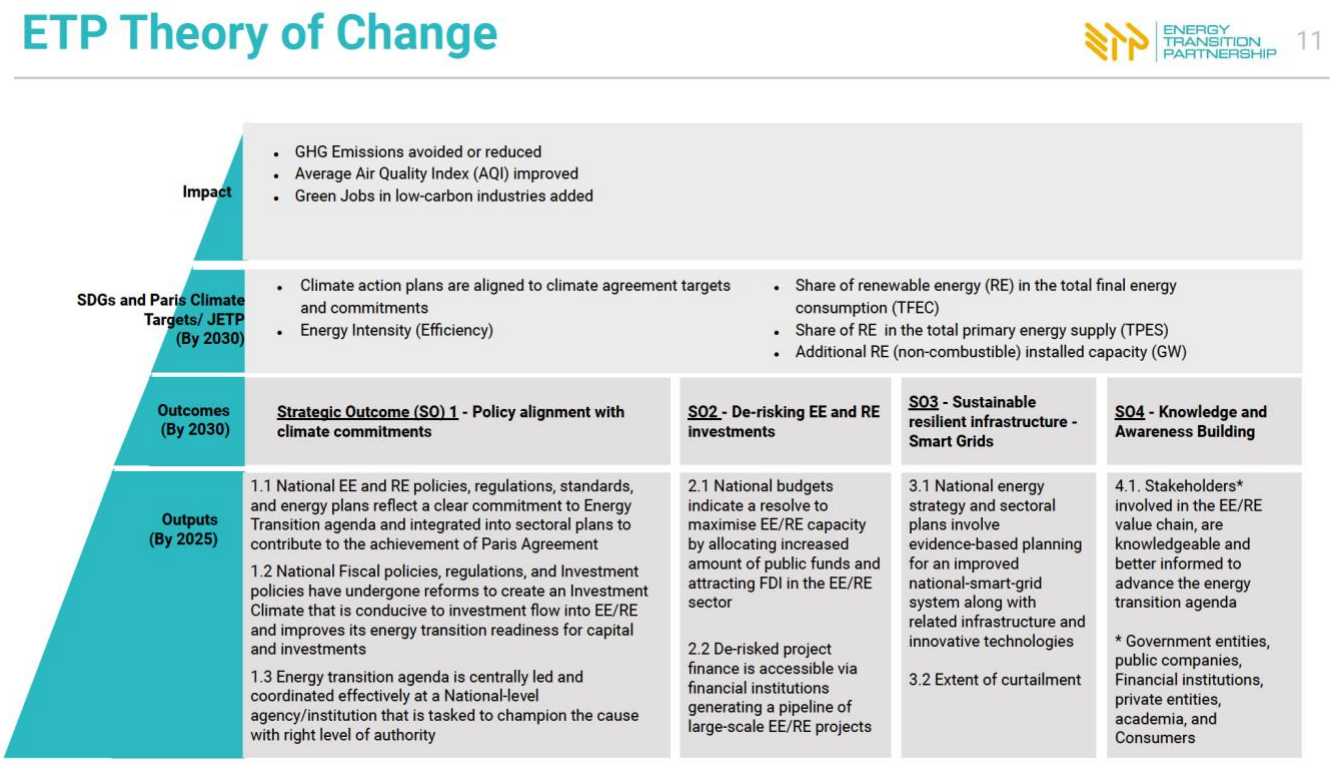
Outputs	Performance Indicators	Targets	Data Sources and Means of Verification	Data Collection Methods
Strategic Outcome 1: Strengthened EE and RE policy enabling environment				
1.1 National EE and RE policies, regulations, standards, and energy plans reflect a clear commitment to Energy Transition agenda and integrated into sectoral plans to contribute to the achievement of Paris Agreement	IN 1.1-01 - National energy plans reflect an ambition towards increasing the share of RE/VRE, improving EE, and phasing-out fossil fuels	Revised energy plans reflect an increased ambition towards RE in line with the transformation scenario and targets sooner	Documents and stakeholder consultations	Content analysis, interviews, FGDs, and archival data analysis
	IN 1.1-02.1 - No. of EE and RE policies, laws, regulations, and/or technical standards developed and **presented** to the government entities	Six recommendations per country, summed to 18 total recommendations.	Documents and stakeholder consultations	Content analysis, interviews, FGDs, and archival data analysis
	IN 1.1-02.2 - No. of EE and RE policies, laws, regulations, and/or technical standards revised and **adopted** by the government entities	Four adopted recommendations per country, summed to 12 total adoptions.	Documents and stakeholder consultations	Content analysis, interviews, FGDs, and archival data analysis
1.2 National fiscal policies, regulations, and investment policies have undergone reforms to create an Investment	IN 1.2-01 – No. of EE and RE related financing frameworks and fiscal reforms developed and presented to the government entities	Two presented drafts per country, summed to six total drafts.	Documents and stakeholder consultations	Content analysis, surveys, interviews, FGDs, and archival data analysis

Climate that is conducive to investment flow into EE/RE and improves its energy transition readiness for capital and investments	IN 1.2-02 – No. of fiscal policy adjustments, investment framework instruments, established and enacted/adopted by the government entities	Two adopted policies per country, summed to six total adoptions.	Documents and stakeholder consultations	Content analysis, surveys, interviews, FGDs, and archival data analysis
1.3 Energy transition agenda is centrally led and coordinated effectively at a National-level agency/institution that is tasked to champion the cause with right level of authority	IN 1.3-01 – Presence of an effective National-level agency/institution	One national level agency/institution per country, summed to three agencies/institutions.	Documents and stakeholder consultations	Content analysis, surveys, interviews, FGDs, and archival data analysis
	IN 1.3-01 – Improved dialogue among government ministries and departments for a coordinated response to Energy Transition	One Technical Working Group established /Energy Transition Roundtable/sessions in each country and regional level, summed to four.	Documents and stakeholder consultations; Internal reports on dialogues	Content analysis, surveys, interviews, FGDs, and archival data analysis
Strategic Outcome 2: Increased flow of public and private investments to EE and RE projects in the power and end-user sectors				
2.1 National budgets indicate a resolve to maximise EE/RE capacity by allocating increased amount of public funds and attracting FDI in the EE/RE sector	IN 2.1-01 - Amount of Public funding allocated to EE/RE projects	At least 40% of Fossil fuel investments shifted to RE Increased allocation of funds into EE/RE projects	Documents and stakeholder consultations	Content analysis, surveys, interviews, FGDs, and archival data analysis
	IN 2.1-02 - Amount of FDI inflow into EE and RE sector initiatives	Fossil fuel investments minimised, and EE/RE investments maximised	Documents and stakeholder consultations; Online sources from	Content analysis, surveys, interviews, FGDs, and archival data analysis

			business and financial sectors	
2.2 De-risked project finance is accessible via financial institutions generating a pipeline of large-scale EE/RE projects	IN 2.2-01 - No. of new and existing, national and international, financing options / instruments de-risked and opened for private and blended financing	Five derisking instruments per country, summed to 15 total instruments.	Documents and stakeholder consultations	Content analysis, surveys, interviews, FGDs, and archival data analysis
Strategic Outcome 3: Increasing the amount of RE integrated in smarter grids				
3.1 National energy strategy and sectoral plans involve evidence-based planning for an improved national-smart-grid system along with related infrastructure and innovative technologies	IN 3.1-01 - No. of technical recommendations and solutions implemented by the grid operators for planning and operation, leading to smart grid	Minimum one technical recommendation implemented in each country, summed to three.	Documents and stakeholder consultations	Content analysis, surveys, interviews, FGDs, and archival data analysis
	IN 3.1-02 - No. of technical design, demo, modelling projects supported for smart infrastructure	Minimum one technical design, demo, modelling projects supported for smart infrastructures; summed to three.	Documents and stakeholder consultations	Content analysis, surveys, interviews, FGDs, and archival data analysis
3.2 Extent of Curtailment	IN 3.2-01 - Extent of Curtailment	Reduce Curtailment issues in partner countries with baseline of 0% in Indonesia and the Philippines and 4% curtailment on the national renewable fleet in Vietnam.	Documents and stakeholder consultations	Content analysis, surveys, interviews, FGDs, and archival data analysis

Strategic Outcome 4: Increased development of and accessibility to EE/RE knowledge				
4.1 Stakeholders involved in the EE/RE value chain, are knowledgeable and better informed to advance the energy transition agenda	IN 4.1-01 – No. of studies, research, new evidence gathered and published, for raising awareness, improving knowledge base, driving decisions, and dissemination	a. Minimum six studies for each country, summed to 18; b. Online dissemination providing information and knowledge capacity consumed by an increasing number of stakeholders	Reports published on ETP's website along with analytics on unique views number.	Documentary evidence.
	IN 4.1-02 - No. of trainings, knowledge sharing events, and/or awareness workshops organised at national and regional levels building institutional capacity and knowledge networks	Minimum six knowledge sharing events for each country and 10 events for regional level, summed to 28	Reports on project activities with evidence	Documentary evidence, surveys
	IN 4.1-02A - Total no. of attendees IN 4.1-02B - Total no. of female attendees	No target, tracking purpose.	Registration and attendance information	Documentary evidence.
	IN 4.1-03 - No. of articles, press-releases on social-media, and mass-media, for outreach	A minimum two articles/press release/social media post/ photo stories/newsletter per month.	Repository of relevant links and media archives with analytics on number of views	Documentary evidence.
	IN 4.1-04 - Total no. and listing of entities supported through Technical Assistance	No target, tracking purpose.	Entities as identified in the project RBMF and documents (Concept Note and ToR)	Documentary evidence.

ANNEX III. ETP THEORY OF CHANGE



Source: RBMF Approved on 04 August 2023

ANNEX IV. STAKEHOLDER ANALYSIS

The inception phase involved identifying the major stakeholder groups to be included in the evaluation. This included both those to be consulted during data collection and those with managerial roles. The tables below map out stakeholders whose participation was sought at each organizational level, outlining their interests, roles in the evaluation, and the intended sample for each group.

ETP Secretariat

Name	Title
Country Programme Team	
Regional Programme Team	
Fund Management Team	

ETP Steering Committee

Name	Title	Country Agency/Philanthrophy

Government Offices

Country	Agency
Indonesia	Directorate General of New, Renewable Energy, and Energy Conservation (DGNREEC) of Ministry of Energy and Mineral Resources (MEMR)
	Coordinating Ministry for Maritime and Investment Affairs
	Directorate of Energy, Mineral, and Mining Resources of Ministry of National Development Planning (Bappenas)
	PT Perusahaan Listrik Negara (PLN)

Philippines	Energy Regulatory Commission
	Department of Energy
Vietnam	Department of Climate Change, Ministry of Natural Resources and Environment
	Legal Department, Ministry of Finance
	Directorate of Standards, Metrology and Quality, Ministry of Science and Technology
	Vietnam Chamber of Commerce and Industry

Interviewee List

No.	Stakeholder Type	Country
1	Staff	ETP
2	Staff	ETP
3	Staff	ETP
4	Staff	ETP
5	Staff	ETP
6	Staff	ETP
7	Staff	ETP
8	Staff	ETP
9	Staff	ETP
10	Staff	ETP
11	Staff	ETP
12	Staff	ETP
13	Staff	ETP
14	Staff	ETP
15	Steering Committee	France
16	Steering Committee	France
17	Government	the Philippines
18	Government	the Philippines
19	Government	the Philippines
20	Implementing partners	the Philippines
21	Implementing partners	the Philippines
22	Implementing partners	the Philippines
23	Implementing Partners	the Philippines
24	Steering Committee	United States
25	Embassy of Australia	Vietnam
26	Embassy of Canada	Vietnam
27	Embassy of Canada	Vietnam
28	GIZ	Vietnam
29	GIZ	Vietnam

30	Government	Vietnam
31	Government	Vietnam
32	Government	Vietnam
33	Implementing Partners	Vietnam
34	Implementing Partners	Vietnam
35	Implementing Partners	Vietnam
36	Implementing Partners	Vietnam
37	Implementing Partners	Vietnam
38	Implementing Partners	Vietnam
39	Steering Committee	Australia
40	Steering Committee	Australia
41	Steering Committee	Canada

ANNEX V. LIST OF DOCUMENTS REVIEWED

The evaluation made systematic use of documents with information about how the Partnership has been implemented. These range from published reports, two-pagers, project ToR, RBMF, project deliverables, reports of relevant meetings, and reports of internal discussions. In each case, information relevant to the evaluation was extracted and analysed. Documents reviewed included:

Financial reports

One expected result of the Partnership is the production of certified and interim financial reports for responsibility reporting from the Secretariat to the Steering Committee. To assess this, the evaluation team examined financial reports relevant to the implementation of the Partnership, as detailed in the four available reports from 2020 to 2023.

Project documents

The evaluation reviewed project documents, which summarize key aspects of the Partnership's initiatives. These documents provide concise overviews of project goals, activities, and outcomes, offering valuable insights into the implementation process. The projects to be evaluated were randomly selected from each Partner Country: Indonesia, the Philippines, and Vietnam, and the region-wide projects.

Other documents

Much of the work on designing means to implement the Partnership has been undertaken by working groups. The reports of these groups are internal documents and, to the extent that they were available, were examined to see what they show about issues relating to the Partnership.

Type of Document Reviewed	Number
Project Documents (Available TORs and Two-Pagers)[57]	65
Project RBMFs[58]	45
Reports	5
Financial Statements	5
ETP Concept Note 2020	1
ETP Operating Manual 2021	1
RBMF Revision February 2023	1
Meeting Summary 2021	1
Reporting Plan RBMF 2021	1
Compilation of One-Pagers Project 2023	1
RBMF August 2023	1
RBMF Glossary	1
RBMF Results by Country SO as of 2023	1
Indonesia TA Programs	4
Vietnam TA Programs	4
Philippines TA Programs	4
Published Docs and Studies (excl. Press Releases)	45
Total	**186**

[57] Some projects were associated with the Energy Efficiency Innovation Window (EEIW) with no separate TORs

[58] No RBMFs available for Diagnostic Review of and Analysis of Energy Efficiency Development in SEA

ANNEX VI. INTERVIEW GUIDES

Interview Details	
Name, organization and position	
Gender	
Stakeholder type	
Location of interviewee	
Date and time	
Interviewer(s)	
Mode of interview	

The following interview protocol for in-person or telephonic interviews was comprehensive. Interviewers customized and adapted questions for each interview based on the interviewee's role, time constraints, response, and level of knowledge/ familiarity with topics revealed during interviews. (Note that all interviews should start with informed consent.
Stakeholder type (S= staff, C=Country Partners, P=Implementing Partners, RC=Resident Coordinator office, D=Donors, O=others)

Introductions:

- This is a formative evaluation with a forward-looking focus. We understand that the Partnership will be an ongoing process, so the overarching purpose is to help the Organization learn from its experience to date so that it can ensure that the work you all have done to date is as impactful and enduring as possible.
- Be assured that this is a completely confidential conversation. Only the evaluation team will have access to the interview notes, and we will never mention you by name (or title) in the evaluation report.

Thank you for taking the time to speak with me today. As mentioned, I'm part of the independent evaluation team reviewing the Southeast Asia Energy Transition Partnership program hosted by UNOPS. This evaluation aims to assess the ETP's performance and results since its launch in 2020, identify lessons learned, and provide forward-looking recommendations to strengthen the program's future impact.

Relevance

• From your perspective, how well aligned are the ETP's objectives and activities with the energy transition priorities of [country]? Can you provide some examples?
• In what ways do you think the ETP's intended impacts like reducing emissions and increasing clean energy access are relevant for [country]?

• How logical and coherent is the ETP's theory of change in your view? Are there any gaps or missing links?

Effectiveness

• Can you walk me through the processes used by the ETP to design its interventions and allocate resources in [country]? What worked well and what were the challenges?

• How effectively did the ETP engage and coordinate with different stakeholders like government, private sector, civil society for implementation? Any good practices or challenges to highlight?

• To what extent were the ETP's planned outputs and outcome-level results achieved so far in [country]? Can you give some specific examples?

• How would you assess the quality and usefulness of ETP's monitoring, reporting and evaluation systems?

Efficiency

• From your experience, how efficiently were the ETP's financial, human and technical resources utilized to deliver results?

• Did the ETP's coordination with other actors help optimize resource use and avoid duplication of efforts? Can you elaborate?

• Considering the outcomes achieved, how would you rate the cost-effectiveness of the ETP's interventions?

Sustainability

• What is your assessment of the likelihood that ETP's benefits will continue after its funding ends? What factors enhance or hinder sustainability?

• How well has the ETP integrated its work into the country's long-term energy strategies and plans? Have sufficient capacities been built?

• Can you share any recommendations to bolster the strategic impact and sustainability of the ETP's work going forward?

Impact

• To what extent did the ETP's support add value and accelerate the energy transition in [country]? What were the key catalytic or complementary impacts?

• Based on the monitoring data or your interactions, what were the key intended and unintended impacts achieved by the ETP so far?

• From the capacity building efforts, what shifts in knowledge, attitudes and practices have you observed among the stakeholders supported?

Cross-cutting

• In your view, how effectively did the ETP promote gender equality and empowerment of women through its activities?

• To what extent were the needs and participation of vulnerable groups, including persons with disabilities, adequately considered by the ETP?

Wrap-up

• From your vantage point, what were the major enabling or constraining factors that influenced the ETP's performance and results?

• Do you have any other reflections, recommendations or suggestions for improving the ETP's work going forward?

ANNEX VII. KAP SURVEY INSTRUMENT

Southeast Asia Energy Transition Partnership (ETP) Knowledge, Attitude, and Practice (KAP) Survey

The purpose of this KAP survey was to assess the knowledge, attitudes, and practices related to the Southeast Asia Energy Transition Partnership (ETP) and its efforts to accelerate the energy transition in Southeast Asia. The survey gathered insights from key stakeholders who have been trained, upskilled, or supported through ETP's project activities to inform the independent evaluation of ETP after its first three years of operation from 2021-2023.

Rating Scale:

Questions use a 5-point scale to assess agreement or frequency:

1 - Strongly disagree / Never
2 - Disagree / Rarely
3 - Neutral / Sometimes
4 - Agree / Often
5 - Strongly agree / Always

Respondent Information:

Please select your country:
- Indonesia
- Philippines
- Vietnam

Please select the stakeholder group you represent:

- Government
- Public sector company
- Private sector company
- Financial institution
- Academia
- Civil society organization
- ETP management/staff/consultant
- Other (please specify)

Please indicate your primary area of engagement with ETP (select all that apply):

- Policy alignment with climate commitments
- De-risking investments in energy efficiency and renewable energy
- Extending smart grids
- Knowledge and awareness building

Please estimate the number of ETP events, trainings, or workshops you have directly participated in:

- None
- 1-2
- 3-5
- 6-10
- More than 10

How would you rate your overall level of engagement with ETP and its activities?

- Deeply engaged
- Somewhat engaged
- Aware but not directly engaged
- Not previously aware of ETP

Section 1: Policy alignment with climate commitments (SO1)

1. I have a clear understanding of [country's] current energy policies, regulations, and plans and how they align with its climate goals.
2. I am well-informed about the specific policy recommendations provided by ETP to strengthen [country's] clean energy targets.
3. Ambitious clean energy targets and policies aligned with the Paris Agreement are very important for [country's] sustainable growth.
4. Fiscal policies and tax reforms are essential to create an enabling environment for clean energy investments in [country].
5. There is a strong commitment from policymakers in [country] to adopt ETP's recommendations to enhance the clean energy policy framework.
6. My organization has directly utilized data, analysis, or recommendations from ETP to develop or improve [country's] clean energy policies.
7. We have adapted our energy strategies, plans, or regulations based on best practices shared by ETP to align with [country's] climate commitments.

Section 2: De-risking investments in energy efficiency and renewable energy (SO2)

8. ETP's workshops have deepened my understanding of the policy and regulatory barriers to financing clean energy projects in [country].

9. I am aware of the innovative financing instruments and frameworks being developed by ETP to mobilize clean energy investments in [country].
10. Increasing both public and private financing is very important to scale up [country's] clean energy transition.
11. De-risking investments should be a key focus for ETP to accelerate renewable energy and energy efficiency deployment in [country].
12. ETP's finance initiatives can play an influential role in creating a more attractive clean energy investment environment in [country].
13. My organization has utilized market intelligence from ETP to identify new investment opportunities in clean energy in [country].
14. We have adopted new clean energy financing models, instruments, or risk mitigation approaches promoted by ETP.

Section 3: Extending smart grids (SO3)

15. ETP's training has improved my understanding of the functions and benefits of smart grids for renewable energy integration.
16. I am familiar with the advanced technologies, practices, and business models for smart grid development covered in ETP's training.
17. Robust smart grid infrastructure is essential for [country] to reliably integrate a high share of renewable energy.
18. Investing in grid digitalization and automation should be a major focus of [country's] energy transition strategy.
19. ETP's technical advice and international knowledge sharing can accelerate the adoption of cutting-edge smart grid solutions in [country].
20. My organization has used the technical knowledge from ETP's training to inform our grid planning, operations, or infrastructure upgrades.
21. We have developed smart grid roadmaps, investment plans, or regulatory frameworks utilizing ETP's technical assistance.

Section 4: Knowledge and awareness building (SO4)

22. ETP's events have significantly increased my awareness of the latest clean energy technologies, policies, and market trends globally and in [country].
23. I have learned valuable international best practices from ETP's knowledge sharing that are relevant to my work on clean energy in [country].
24. ETP plays a vital role in raising awareness and building the capacity of stakeholders for [country's] clean energy transition.
25. Strengthening local institutions' capacity to lead clean energy initiatives should be a continued focus for ETP in [country].
26. ETP is a trusted knowledge partner for clean energy in [country] and should further expand its role and resources.

27. I have applied data from ETP's research to analyze clean energy planning, policymaking, or investment decisions.
28. My organization has used ETP's knowledge products in our research, assessments, strategies, or outreach on clean energy in [country].

Open-ended questions:

29. Can you please provide any examples of how ETP's support has directly contributed to advancing clean energy in your country or organization?

30. What specific recommendations do you have for ETP to enhance its impact on accelerating the clean energy transition in your country over the next 2-3 years?

ANNEX VIII. ETP PROJECT OVERVIEW PER STRATEGIC OUTCOME

Strategic Outcome 1: Policy Alignment with Climate Commitments

- Indonesia

Supporting Medium-term National Development Planning (RPJMN) 2025-2029 Background Study

Delivered by Sureco in collaboration with ETP, this project conducted a background study for the Ministry of National Development Planning (BAPPENAS), focusing on the implementation of energy transition programs. The study reviewed current policies, project pipelines, and existing literature to assess the alignment of Indonesia's current pathway with its energy transition targets. It introduced the Technological Innovation System (TIS) framework, complemented by the Levelized Cost of Electricity (LCOE), to assist BAPPENAS in identifying key renewable energy projects for the RPJMN 2025-2029 development plan.

The study identified mini and micro hydropower as the most cost-efficient and reliable solutions for rural electrification, while on-grid solar PV emerged as having the highest potential to meet Indonesia's growing electricity demand. Additionally, the study provided both regulatory and non-regulatory recommendations to help Indonesia achieve its net-zero targets. Two focus group discussions were conducted, attended by 230 participants (including 78 female participants), bringing together government bodies and organizations to explore the renewable energy landscape and address its challenges.

Assisting the Revision of the Indonesia Roadmap of Net Zero Emission (NZE) 2060

Delivered by Neyen and Cagar Bentara Sakti in collaboration with ETP, this project supports the Indonesian Ministry of Energy and Mineral Resources (MEMR) in reviewing the country's NZE 2060 Roadmap, following Indonesia's commitment to achieving net zero emissions by 2060, declared at COP26. The project provides strategic recommendations for reaching NZE, divided into six time periods between 2021 and 2060. Early strategies focus on accessible technologies and feasible initiatives, while strategies requiring emerging technologies are planned for later periods.

The proposed revisions to the Roadmap emphasize the need for policy and fiscal reforms, infrastructure development, funding support, and research and development of technology to facilitate the clean energy transition. These recommendations aim to strengthen Indonesia's pathway to NZE and ensure a sustainable, renewable energy future.

Preparation of Indonesia's Enhanced NDC Investment Roadmap for Energy Efficiency

Delivered by Trama TecnoAmbiental, S.L. (TTA) in collaboration with ETP, this project assists the Directorate of Energy Conservation (DEC) at the Ministry of Energy and Mineral Resources (MEMR) in drafting a strategic investment roadmap for the energy efficiency sector. The roadmap is designed to help Indonesia meet its Nationally Determined Contributions (NDC) targets.

The project focuses on assessing Indonesia's energy efficiency financing and investment framework, with particular attention to Heating, Ventilation, and Air Conditioning (HVAC) systems in commercial buildings, the use of efficient air conditioners (ACs)—which hold the highest potential for emissions reduction—and one industrial sector, the Food and Beverage industry, selected by DEC. The analysis will provide financial strategies and investment plans, outlining the costs of implementing energy efficiency projects needed to achieve Indonesia's emission reduction targets under the Enhanced Nationally Determined Contributions (ENDC).

Assessment of the Financial Implications of the Early Retirement of CFPPs

Delivered by Hartree Consultores in collaboration with ETP, this project aimed to support Indonesian ministries in developing a roadmap for the sustainable energy transition. The roadmap outlines various scenarios for the phased retirement of coal-fired power plants (CFPPs) in Indonesia and explores funding mechanism options for early CFPP retirement. The project also integrates complementary policies and regulatory frameworks. The expected outcome is the finalization of policy recommendations for relevant ministries and fostering interministerial collaboration to accelerate the transition from coal to renewable energy by 2030, contributing to Indonesia's goal of reducing greenhouse gas emissions.

Streamlining Government of Indonesia Plans as a Pathways to Achieve Net Zero Emissions Target

Delivered by Niras International Consulting in collaboration with ETP, this project supports the development of Indonesia's new National Energy Policy (KEN). The initiative involved conducting a peer review of related academic manuscripts and the Government Regulation Draft of KEN, which was approved by the Indonesian Parliament following a presentation by the National Energy Council on September 6, 2024. The project also stimulated discussions on carbon taxation as a potential pathway for decarbonization. The expected outcome is the establishment of a shared vision among government and energy stakeholders, reflected in KEN, to help Indonesia achieve its GHG reduction targets and transition from fossil fuels to renewable energy by 2030.

Supply Chain Integration of Battery Value Chain for Energy Transition

Implemented by Hartree Consultores, this project produces a comprehensive analysis of Indonesia's existing battery supply chain and investor roadmap to outline opportunities for a battery-driven energy transition fuelled by solar PV and other renewables. By assessing the current state and growth potential of the battery sector, ETP intends to support the movement beyond resource extraction, and instead utilize a domestic supply chain to promote the use of batteries for electric vehicles (EVs) and other renewables. The expected outcome is to stimulate national ownership and increase potential of the national battery sector, taking a step up from resource extraction and pushing energy consumption from fossil fuel to more sustainable sources

Philippines

Upgrading Design and Implementation of Battery Energy Storage Market Mechanism of the Philippines Electricity Market Mechanism

Delivered by NEL Consulting Limited and Intelligent Energy Systems in collaboration with the Philippines Electricity Market Corporation, this project aims to develop rules for the participation of battery energy

storage systems (BESS) and other energy storage technologies in the Wholesale Electricity Spot Market (WESM). Previously, energy storage systems were classified as generators, which only partially reflected their function in the grid. The project seeks to adjust WESM rules to optimize the role of energy storage systems in integrating variable renewable energy (VRE) generation into the market. These changes will encourage private-sector investments in energy storage, facilitating greater VRE integration into the power grid.

The project has also provided recommendations for conformance standards to ensure fairness and competitiveness in the electricity market. Additionally, a knowledge session on international governance experiences related to energy storage systems was held, with more than 300 participants, including a gender-inclusive panel of three speakers. The expected outcome is to create a fair and competitive environment for energy storage technologies, supporting the increased participation of hybrid systems and aligning with new energy storage policies.

Power Development Roadmap for the Bangsamoro Autonomous Region for Muslim Mindanao

Delivered by Aquatera Ltd., this assignment aims to create a unified understanding and vision for the development of the energy sector in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) in alignment with its regional economic growth. Following the region's autonomy granted by the National Government of the Philippines, BARMM has experienced significant economic growth. The project seeks to understand current power supply and demand scenarios, analyze existing energy policies, evaluate the energy governance structure and stakeholders, assess energy transition challenges, and identify key drivers of energy transition. Ultimately, the assignment led to the development of the BARMM Power Sector Development Plan, charting the region's pathway for sustainable energy growth.

Support to the Green Energy Auction Program (GEAP)

Delivered by an expert consultant, ETP is addressing regulatory gaps and defining a payment framework for winning bidders in the Green Energy Auction Program (GEAP) and Competitive Selection Process (CSP). ETP is assisting in the preparation of a contract template for a new “opt-in” auction mechanism for utilities and is developing the regulatory framework for the Microgrid Act to simplify renewable energy-hybrid systems. Additionally, ETP has finalized and submitted a draft CSP Exemption Guideline for electric cooperatives to the Government and is supporting the review of draft guidelines for Renewable Energy Embedded Generation Facilities. These measures are expected to increase renewable energy generation, enhance competition in the sector, lower electricity rates, and contribute to achieving a 50% renewable energy target by 2040.

Permitting and Consenting to Offshore Wind Energy

Delivered by Niras Asia Manila, this project focuses on updating the existing permitting framework for offshore wind (OSW) projects in the Philippines. Drawing from Good International Industry Practice and established OSW markets, the project conducted case studies and held consultations with relevant agencies to map out the permitting requirements and process flow. These updates will be integrated into the Government’s online application platform for energy projects. The expected outcome is to boost

investor confidence in the Philippine OSW sector, contributing to the country's goal of reaching 6.72GW of OSW capacity by 2028 and achieving a 50% renewable energy target by 2040.

Demand Side Management Policy

Delivered by the International Institute for Energy Conservation, this project supports the development of a Demand-Side Management (DSM) program through several technical capacity-building sessions for energy policymakers and distribution utilities, who are expected to lead the implementation of DSM program options. The project has completed six case studies linked to capacity development for the Department of Energy (DOE), Energy Regulatory Commission (ERC), and National Electrification Administration, with additional training planned for distribution utilities. The expected outcome is to increase the adoption of DSM programs, improving grid efficiency, reducing energy consumption on a wide scale, and enhancing the penetration of variable renewable energy (VRE).

Accelerating the Clean Energy Scenarios

Delivered by Intelligent Energy Systems, this project supports further research into clean energy scenarios, including the phased retirement of coal, while outlining the necessary upgrades to transmission network. A technical working group has been established to guide the project's implementation and enhance the government's capabilities in integrated generation and transmission expansion planning. The goal is to support informed policymaking, set ambitious clean energy targets, and attract investments in renewable energy infrastructure. The expected outcome is to strategically upgrade the transmission network, ensuring efficient grid connectivity for new renewable energy plants, thereby displacing fossil-based power generation and reducing greenhouse gas emissions.

Legal Assessment for Preparing the Carbon Pricing Instrument

Delivered by NEL Consulting, this initiative undertakes a comprehensive evaluation of the Philippines' policy landscape and institutional frameworks to assess their suitability for adopting a carbon pricing instrument (CPI). The evaluation will identify gaps, inconsistencies, and potential synergies within the existing policy regime, with a particular focus on compatibility with potential new policies such as a carbon tax or an emissions trading scheme.

The analysis will cover relevant existing policies, including national fiscal policy and sector-specific regulations in key sectors like power, transport, and industry. Additionally, it will consider upcoming sector-specific regulations. The scope of the assessment will include both major CPIs: emissions trading schemes and carbon taxes.

- **Vietnam**

Review and Gap Analysis of the Existing Coal Abatement Scenarios

Delivered by the Vietnam Initiative for Energy Transition (VIETSE), this project, commissioned by ETP, developed scenarios exploring the emissions reduction potential for Vietnam's power sector, launched ahead of COP26. Following the Government of Vietnam's declaration of a net zero emissions target by 2050, the planned coal-fired power capacity outlined in the draft Power Development Plan 8 was

significantly reduced—from 40.64 GW by 2030 and 50.69 GW by 2035 to 30.1 GW by 2030 and 23.1 GW by 2035. VIETSE disseminated the findings through four workshops attended by over 100 organizations, including state entities, state-owned enterprises, private companies, development partners, civil society organizations, and research institutions. The expected outcome is to inform and influence Vietnam's power sector planning, supporting the country's net zero emissions target.

Consultancy Services for ETP of Wind Development

Delivered by Intelligent Energy Systems (IES), this project focuses on offshore wind as a key energy source to replace coal-fired power generation plans under Vietnam's draft Power Development Plan 8. Offshore wind power is central to the government's efforts to meet its Nationally Determined Contributions, net-zero emissions target, and Just Energy Transition Partnership commitments. IES arranged a review and workshop to familiarize the Vietnam Administration of Islands and Seas (VASI) under the Ministry of Natural Resources and Environment with international best practices for survey licensing criteria. These criteria will enable developers to access survey licenses, helping the government pursue its goal of 7 gigawatts of offshore wind development.

Findings from the VASI workshop were synthesized to assist the Ministry in developing criteria for reviewing and granting permits for offshore wind development surveys, which have been incorporated into the draft Decree 11. The decree is expected to be approved and implemented in April 2023. The anticipated outcome is to facilitate offshore wind development, contributing to Vietnam's energy transition and emissions reduction goals.

Roadmap for the CMSM toward NZE in Energy State-Owned Enterprises

Delivered by the Vietnam Initiative for Energy Transition Social Enterprise (VIETSE), this project, contracted by ETP, aims to develop recommendations for a net-zero emissions (NZE) roadmap for the Commission for State Capital Management (CMSC). These recommendations will enable CMSC to support energy state-owned enterprises (SOEs) in developing strategies aligned with Vietnam's NZE target. Through detailed scenario analysis, focusing on energy security, affordability, and emissions reduction, ETP has proposed emission reduction solutions for three key power generation SOEs: Vietnam Electricity (EVN), PetroVietnam (PVN), and Vietnam Coal and Mining Corporation (TKV). Implementing these recommendations is expected to reduce emissions from 28 MtCO2e to 57 MtCO2e by 2030, helping the SOEs achieve the country's net-zero target by 2050.

Impact Assessment of EU's Carbon Border Adjustment Mechanism

Delivered by Green Climate Innovation Company, this project evaluates the impacts of the EU's border carbon tax on Vietnam's energy-intensive export products and provides inputs for the development of a carbon tax in Vietnam. Several recommendations have been proposed to integrate a carbon tax into Vietnam's Environmental Protection Fee and the Law on Environmental Protection Tax. The expected outcome is to recommend a legal framework and institutional mechanism to develop a decarbonization strategy and introduce a carbon tax by 2025, with CBAM serving as a key driver, aligning government policies and large emitters toward common goals.

Legal Support to the Development of Power Generation Projects

Delivered by NHQuang & Associates in collaboration with ETP, this project, requested by the Electricity and Renewable Energy Authority (EREA) under the Ministry of Industry and Trade (MOIT), aims to assist in the development of a new legal framework for selecting developers for power generation projects. Drawing on international best practices, the project formulated key considerations and recommendations to unlock investment in renewable energy, estimated at up to USD 143 billion for the 2021-2030 period.

The project aims to accelerate Vietnam's energy transition by enabling a more efficient review and approval process for new power generation projects. Recommendations include tailored normative guidance for implementing the amended Law on Bidding, outlining bidding instructions for selecting investors in power generation and transmission projects. These cover scope, methods, mechanisms, processes, evaluations, and relevant regulations. ETP also proposed amendments to the Law on Electricity and the Law on Natural Resources and Environment of Sea and Islands, and possibly the development of a dedicated Law on Renewable Energy, to address legal barriers and further facilitate investment.

Diagnostic Study on Net-Zero for the Energy Sector

Delivered by E4SMA S.r.l in collaboration with ETP, this comprehensive study aimed to review more ambitious pathways aligned with Vietnam’s new net-zero target by 2050. The study provided the Vietnamese government with a detailed analysis of net-zero scenarios, identifying potential roadblocks and highlighting key challenges in sectors such as industry and transportation. It emphasized the crucial role of renewable energy, the temporary role of gas, and the need for innovative technologies to achieve these targets.

The analysis significantly influenced Vietnam’s net-zero declaration and the updated Power Development Plan 8 (PDP8). The study’s findings were disseminated through workshops involving diverse stakeholders, and the final report, titled "Assessing Energy Sector Net Zero Scenarios by 2050," supports the government in achieving its National Energy Master Plan and in designing just transition strategies for the oil, gas, and coal industries.

National Green Cooling Program

Delivered by the Energy and Environment Consultancy Joint Stock Company, this project addresses the cooling sector in Vietnam, a significant source of energy consumption and greenhouse gas (GHG) emissions. In June 2024, ETP’s recommendations on controlling global warming substances and increasing energy efficiency (EE) in the cooling sector were incorporated into the Prime Minister's Decision No. 496/QD-TTg on the National Plan to eliminate ozone-depleting substances and control GHG emissions. Two consultation workshops were held to gather feedback from government entities and industry associations to finalize the program and its implementation roadmap. ETP is fostering strong stakeholder coordination among government agencies, manufacturers, and sector players to drive this transformation. The anticipated impact is improved energy savings and emissions reductions in the cooling sector through the promotion of high-efficiency, low-carbon technologies.

Development of 8 Key National Standards for Electric Vehicle Charging Infrastructure

Delivered by Bao Loc Technology Joint Stock Company (BLT Cert,), this project supports the drafting of eight key national standards for electric vehicle (EV) charging stations, based on international standards. These standards cover critical aspects such as safety measures, maintenance procedures, and environmental considerations for EV charging systems. The implementation of these standards aims to strengthen local EV infrastructure and development, facilitating the transition from fossil fuel vehicles to EVs and reducing environmental pollution. The expected outcomes are to encourage EV adoption by improving the charging infrastructure and reducing greenhouse gas emissions, supporting Vietnam's ambitious targets to gradually reduce the use of conventional fossil-fuel based vehicles and achieve 100% electric and green energy-fuelled vehicles by 2050.

Assessment of Country's Readiness and International Experience for Carbon Trade Exchange Design

Delivered by the Environment and Ecology Institute, this project provides recommendations for the establishment, operation, and management of a carbon market in Vietnam. National readiness assessments have been completed, identifying key legal and infrastructural gaps. Drawing on international best practices, the project recommended the most suitable design for the carbon market. Additionally, a masterclass was developed to equip government officials with the necessary expertise to effectively design and manage the carbon market. The expected outcome is to enable organizations to trade credits earned from emission reduction projects, incentivizing sustainable practices. A well-established carbon market would also attract foreign investments to support sustainable projects, leading to a reduction in greenhouse gas emissions.

Emission Trading System Piloting and Simulation

Delivered by the Energy and Environment Consultancy Joint Stock Company, this project provides the necessary resources and training to support the rollout of a domestic Emissions Trading System (ETS) as a carbon pricing tool in Vietnam. Significant progress has been made in developing policy recommendations, with a comprehensive report outlining these recommendations nearing completion. A series of simulation training sessions have also been conducted to further strengthen the ETS implementation process. The expected outcome is to establish a framework for designing an effective ETS in Vietnam, with the simulation training supporting the smooth rollout of the domestic ETS as a carbon pricing instrument by 2027.

Development of National Standards for OSW Power

Delivered by the Institute for Standard and Quality Development Studies, this project aims to establish a comprehensive set of national standards for offshore wind (OSW) power in Vietnam, aligning with the country's standardized processes. The first consultant workshop brought together over 100 representatives from ministries, industry, project developers, and academia, both international and local, to discuss principles for the standards' development and how to align Vietnam's national standards with international benchmarks. The expected outcomes are to boost OSW investments, enhance environmental protection, streamline regulations, foster innovation, and position Vietnam as a clean energy leader.

Development of the National Standards for BESS

Delivered by the Institute for Standard and Quality Development Studies, this project aims to establish a set of national standards specific to Battery Energy Storage Systems (BESS). The standards will include recommendations on legal frameworks and institutional mechanisms to improve the safety, reliability, and efficiency of BESS. A study report analyzing existing regulations and proposing new standards has been completed, with a finalized list of standards to be delivered following a review by government and private sector stakeholders. The expected outcome is to unlock the BESS sector in alignment with Power Development Plan 8, enhancing reliability, fostering industry growth, and supporting the integration of renewable energy into the grid.

- **Regional**

Diagnostic Review of and Analysis of Energy Efficiency Development in SEA

Delivered by EPS Capital Corp., this project, commissioned by ETP, conducted a comprehensive review of the impediments to achieving energy efficiency targets in Indonesia, the Philippines, and Vietnam. The review identified areas for improvement in energy efficiency policy frameworks, access to finance, training, and facilitation of energy efficiency, and proposed a program of interventions to address these gaps. ETP is working to establish technical working groups among stakeholders to take action on these barriers and capitalize on opportunities to reduce bottlenecks in energy efficiency across Southeast Asia. In Indonesia and the Philippines, ETP held consultations with financial sector institutions to better understand the reluctance within the national finance industry and the challenges in accessing finance for energy efficiency investments.

Strategic Outcome 2: De-risking Energy Efficiency and Renewable Energy Investments

- **Indonesia**

Wind Energy Development in Indonesia – Investment Plan

Delivered by Pondera Consult, this project involves a comprehensive assessment of permitting and regulations, identifying wind potential across eight sites, and developing detailed project prospectuses. A roadmap for onshore wind development is also in progress. In addition, ETP is gathering insights from financiers and investors to create an Investment Opportunities Guide, designed to de-risk potential projects by listing opportunities and identifying funding sources and pathways. In 2023, three TWG sessions were held to gather feedback, during which ETP formally presented a draft wind energy development roadmap to the Ministry of Energy and Mineral Resources (MEMR). The roadmap outlined proposed activities, key stakeholders, and timelines for wind energy development. The project also conducted an analysis of national and local regulations to improve the existing policy framework for wind energy development.

In 2024, the project presented a comprehensive analysis of wind energy potential mapping for 8 sites in Java and Sumatra. Additionally, an investment opportunity guide was developed as a de-risking instrument to attract potential investors to the wind energy sector.

Catalyzing Energy Efficiency as a Service

Delivered by Synergy Efficiency Solutions, this project aims to facilitate the growth of a sustainable energy efficiency (EE) market in Indonesia by testing various business models on bankable projects to attract greater investment in the sector. Phase 1 of the project has been completed, identifying high-impact opportunities through 25 level-1 audits, resulting in a prioritized pipeline of potential energy-saving initiatives. Promising projects will advance to more in-depth Investment Grade Audits to assess their full financial viability. The expected outcome is to address the current lack of data for policymakers and financiers, enabling energy service companies (ESCOs) to build a project pipeline and establish a well-functioning EE market in Indonesia by 2030.

1 GW Solar PV Mapping and Development Plan

Delivered by Trama TecnoAmbiental, this project supports the Ministry of National Development Planning (BAPPENAS) in boosting solar energy investments by addressing regulatory challenges, developing a roadmap for solar photovoltaic (PV) development, and compiling a database of solar irradiance data. The project also prepares a report assessing grid-integration requirements for incorporating solar PV into the Java-Madura-Bali (JAMALI) grid. A comprehensive report on lessons learned will cover technical, regulatory, and financial aspects, as well as identified opportunities. The expected outcome is to unlock 208 GW of potential solar power generation capacity and contribute 1 GW of utility-scale solar power to Indonesia's renewable energy mix. The project will create a development and investment plan for integrating 1 GW of solar power into the JAMALI grid and provide solar irradiance data mapping and assessment for at least 100 potential production sites through a publicly accessible database.

- **Philippines**

ESCO-in-a-box for Southeast Asia

Delivered by EP Group under ETP's Energy Efficiency Innovation Window, this project aims to set up the ESCO-in-a-Box (EIAB) platform in the Philippines, with plans for regional expansion. The platform will provide local energy service companies (ESCOs) with tools, including technical methodologies and contract templates, to help them develop and finance bankable energy efficiency projects. By supporting the growth of local ESCOs, the project contributes to building a stronger energy efficiency industry in the region. EP Group has already conducted ESCO development training for three potential partners—Stratcon, TriSky Link, and Exora—and engaged with seven financial institutions to explore potential financing sources for newly trained ESCOs.

Investment-grade Audit (IGA) Financing Program

Delivered by Climargy from the Philippines, this project, funded through ETP's Energy Efficiency Innovation Window, aims to conduct investment-grade energy audits to increase the bankability of energy efficiency and conservation measures. These audits are expected to generate a pipeline of projects for implementation by local energy service companies (ESCOs).

Climargy has initiated exploratory conversations with 20 potential project host entities and completed an investment-grade audit for an aviation company's hangars. This audit has the potential to reduce energy

consumption by 2.823 GWh, equivalent to a reduction of 70 million tCO2e emissions. The project pipeline includes audits for commercial establishments and manufacturing plants, further expanding energy efficiency opportunities in the region.

Marine Spatial Planning

Delivered by BVG Associates, this project aims to foster a more favorable environment for offshore wind (OSW) development in the Philippines through the creation of a Marine Spatial Planning (MSP) tool. The tool identifies suitable OSW farm sites while minimizing conflicts with other marine space users by addressing biodiversity, social, and technical sensitivities. Extensive stakeholder engagement was conducted to gather feedback, collect data, and validate these sensitivities, raising awareness of the considerations involved in OSW development and the use of the MSP tool. The expected outcome is to increase OSW project development by de-risking projects and addressing Environment and Social Impact Assessment (ESIA) concerns, leading to the first 6.72 GW of OSW farms by 2028.

Enhancing the Spot Market to Attract Investments to Renewables

Delivered by Intelligent Energy Systems, this project addresses market barriers that hinder investments in renewable energy (RE) by assessing and updating current methodologies. The project aims to implement price mitigation measures and recommend new cap values to offset the existing low-price caps, which are currently discouraging RE investments. The expected outcome is to increase investment in RE by providing a clearer understanding of potential opportunities for RE generators within the wholesale electricity spot market.

- **Vietnam**

Promotion of Energy Efficiency in Supporting and Food Processing Industries

Delivered by the Vietnam Chamber of Commerce and Industry, this project aims to increase efficiency in resource utilization and promote responsible production practices in Vietnam's energy-intensive food processing and supporting manufacturing industries. Compliance guidelines have been developed, and a working group was established to address energy efficiency (EE) challenges. The group has conducted studies, organized workshops, and developed training materials for industry stakeholders. The expected outcome is the development of an Energy Service Company (ESCO) sector, supported by an aligned regulatory framework and a pipeline of bankable projects.

- **Regional**

Transend Coal – Provision of Advisory Services for a Coal Phase Out Initiative

Delivered by Molo Sia Dy Tuazon and Coloma Law Offices, this project aims to facilitate the early retirement of coal-fired power plants (CFPPs) in the Philippines, replacing them with more sustainable energy solutions to reduce harmful emissions like sulfur dioxide, which contribute to acid rain and air pollution. A key output of the project is the Transition Advisory Revolving Facility Demand Assessment Report, a foundational document guiding the facility's development. A comprehensive Policy and Regulatory Review on Early Retirement of CFPPs is currently underway, with plans to launch a pilot project

in the Philippines being explored. The expected outcome is to accelerate the Philippines' transition to a cleaner energy future by establishing replicable models for early CFPP retirement.

Diagnostic for Competitive Arrangements for Energy Transition

Delivered by Kuungana Advisory, this project provided tailored recommendations for market-based mechanisms to increase renewable energy (RE) procurement in Indonesia, Vietnam, and the Philippines. The project identified optimal procurement methods and commercial terms to facilitate increased access to RE while ensuring reliable grid integration. Additionally, RE power purchase agreement guidelines, based on international best practices, were delivered to Indonesia's Ministry of Energy and Mineral Resources. The expected outcome is the implementation of competitive arrangements and greater transparency in the energy sector, leading to a significant increase in RE deployment across Southeast Asia and opening opportunities for private and blended financing.

Strategic Outcome 3: Extending Smart Grids

- **Indonesia**

PLN Main and Disaster Recovery Control Centers

Delivered in collaboration with ELC Electroconsult (ELC) and Debarr, this project provides technical assistance and detailed engineering design to upgrade PLN's Java-Madura-Bali Control Centre, which serves over 160 million people in Java and Bali. The upgrade will include the construction of a Main Control Centre (MCC) building in Gandul (near Jakarta) and a Disaster Recovery Centre (DRC) in Ungaran (Central Java), both equipped with advanced Supervisory Control and Data Acquisition/Energy Management System (SCADA/EMS) technology. These enhancements will enable the seamless integration of renewable energy into the grid, ensuring a reliable electricity supply. The installation of SCADA/EMS platforms and the construction of the facilities are expected to begin in 2024.

- **Philippines**

Upgrading Energy Regulations for the Energy Regulatory Commission of the Philippines (ERC) and Design

Delivered by Ricardo AEA, this project aims to establish a modern and effective regulatory framework to enhance the integration of Variable Renewable Energy (VRE) into Indonesia's grid. The existing grid codes and regulations are inadequate for accommodating and managing VRE and lack clear guidelines for the connection of energy storage systems and other smart grid technologies. A strategic review of the current energy transition regulatory framework has been completed, including an evaluation of Distribution System Loss caps and power reliability standards to improve distribution grid efficiency. ETP will support public consultations to finalize the updated grid codes. The expected outcome is the creation of a flexible, dynamic, and innovative regulatory framework that facilitates VRE integration, enhances system efficiency, and promotes a competitive investment environment by 2030.

Philippines Grid Diagnostic and Roadmap for Smart Grid Development

Delivered by Ricardo AEA, this project addresses the technical and governance challenges within Indonesia's transmission grid to improve the integration of renewable energy (RE), reduce power interruptions, and support new renewable projects. Recommendations for the establishment of a national Strategic Transmission Network Planner are under consideration, and roadmaps for smart grid solutions and the energy transition have been presented to the government. Additionally, work is underway to enhance energy storage policies through the development of a Battery Energy Storage System (BESS) roadmap. The expected outcomes are to establish a flexible and reliable transmission grid capable of connecting large-scale Variable Renewable Energy (VRE) projects, ensuring a sustainable power supply, and helping Indonesia achieve its 35% RE target by 2030.

- **Vietnam**

Vietnam Smart Grid Roadmap for Period up to Year 2030 with a Vision to 2050

Delivered by Intelligent Energy Systems (IES) in collaboration with ETP, this project supports phase 3 of Vietnam's Smart Grid Development Roadmap. The project aims to enhance the dependability of Vietnam's power system through demand-side management and energy efficiency measures. It will deliver a Smart Grid Development Roadmap for the period up to 2030, with a vision toward 2050, focusing on increasing the quality and reliability of the power supply and improving electricity use efficiency.

The project will also offer recommendations to address policy, legal, economic, and technical challenges, along with proposed solutions for implementation. A comprehensive report has been developed, which reviews and assesses the current state of smart grid development in Vietnam. This includes an evaluation of policies, legal frameworks, the national power system, market conditions, and the outcomes of Phase 1 and Phase 2 under Decision 1670/QD-TTg. Additionally, the report highlights opportunities and challenges while addressing Vietnam's specific needs for smart grid development.

- **Regional**

ASEAN Power Grid Advancement Program (APG-AP) – Output 2 Roadmap Development

Delivered by Delphos International, this project aims to develop a financing framework to facilitate a functional and unified Multilateral Power Trade system within ASEAN. The financing framework has been completed, and the next steps include the production of policy briefs and thought leadership pieces. ETP conducted two stakeholder consultations to build widespread support and understanding of the project's value, with a final dissemination workshop planned. The expected outcome is to ensure a systematic approach to strengthening the ASEAN Power Grid (APG), promoting transparency and progress in power trading, and enabling increased renewable energy uptake across the region.

Strengthening Regional Cooperation for the Implementation of the APG-AP towards Accelerating Energy Transition

Delivered by ESCAP, this project aims to finalize products that foster knowledge and raise awareness about the initiatives of the ASEAN Power Grid – Asia Pacific (APG-AP), with the goal of engaging broader support both within the APG and beyond. To drive collaboration and define a path for implementation,

an inception stakeholder consultation meeting is scheduled for September 2024 to map out the project's future trajectory. The project is also preparing for bilateral consultations in eight countries. The expected outcome is to enhance the readiness of key stakeholders for the next stage of APG-AP implementation, leading to a more collaborative and effective approach to delivering APG-AP outputs, including the pilot multilateral power trade project.

Strategic Outcome 4: Knowledge and Awareness Building

- **Indonesia**

Energy Efficiency and Energy Conservation Awareness Raising in the Education Sector

Delivered by ETP in partnership with the Foundation of Indonesian Institute for Energy Economics, this project assists the Government of Indonesia in achieving its 17% energy efficiency target by 2025. The initiative focuses on changing energy conservation behaviors among 145 students and teachers in 24 schools in East Java. The program developed three tailored training modules for different education levels—Elementary, Junior, and High School. It successfully reduced energy consumption in the 24 schools by 34.5%, from 107,972 kWh in April to 70,722 kWh in June 2022, contributing to significant emissions reductions.

- **Vietnam**

Public Awareness Campaign on Energy Transition on Multimedia Channels

Delivered by Art Times, this project, in collaboration with key government ministries, aims to enhance the general public's fundamental knowledge about Vietnam's energy transition. Two consultation workshops were held to gather inputs on the proposed campaign execution methodology, dissemination strategies, and key thematic areas to address. A comprehensive audience mapping and analysis report was completed, identifying current knowledge gaps, levels of interest, and effective communication methods. The expected outcome is to ensure the public has access to accurate information and essential skills, empowering them to actively participate in achieving energy transition targets. This will build support for clean energy initiatives and accelerate the adoption of sustainable practices.

- **Regional**

Energy Transition Round Table

Delivered by ETP in collaboration with leading institutions such as the Australian National University, the Mekong Partnership for Environmental Resources and Energy Systems, Ateneo School of Government, University of San Carlos, the Institute for Economic and Social Research, Faculty of Economics and Business at the University of Indonesia, and the Indonesia Research Institute for Decarbonisation, this project provides practitioner-level training on energy transition issues in the region.

ETP aims to enhance understanding of international experiences and best practices in energy transition through modern educational facilitation. The educational series, which culminated in country deep-dives in 2022, helps expand regional expertise on energy transition strategies and knowledge.

Donor Assistance Mapping on Energy Transition in SEA Study on Net-Zero for the Energy Sector

Delivered by Asia Clean Energy Partners (ACE Partners) in collaboration with ETP, this project conducted a comprehensive review and data collection on donor assistance in Southeast Asia, focusing on Vietnam, Indonesia, and the Philippines. Along with donor mapping reports, ACE Partners developed an issue-based paper on blended finance for energy transition in these three countries.

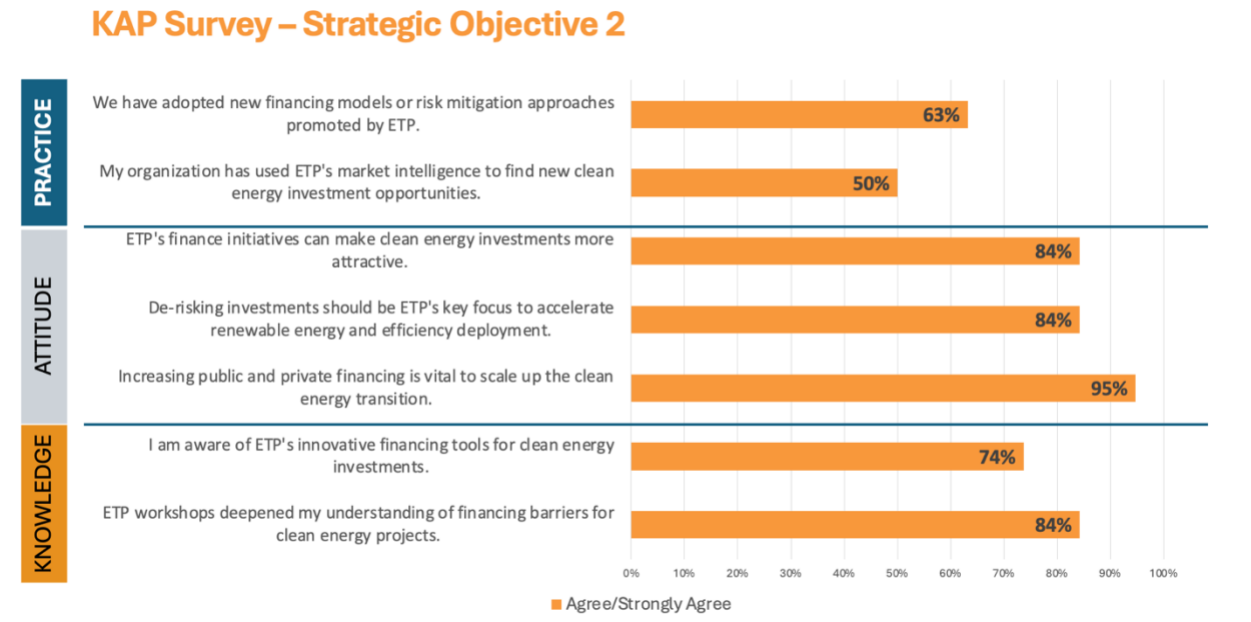
The project's objective was to improve ETP's donor mapping methodology, identifying gaps and overlaps in donor activities related to energy transition. This ensures better alignment and prevents duplication of efforts, allowing for more streamlined strategies for energy transition projects. The donor mapping outputs are shared with the Southeast Asia Information Platform for Energy Transition (SIPET), which hosts a public database of donor activities across the region.

Just Coal Transition Forum

Delivered by Ecorys Brussels and co-funded by the World Bank and ETP, this regional platform convenes stakeholders from coal regions impacted by the energy transition in Southeast Asia, with a focus on Indonesia, the Philippines, and Vietnam. The platform emphasizes knowledge sharing, capacity building, and resource access. Currently, it is conducting a needs assessment of stakeholders and strengthening its understanding of the Just Transition context through a series of analytical papers. The platform will also pilot dialogue mechanisms at both the regional level, through the annual forum, and the community level, through peer dialogues in each focus country. The expected outcome is to support coal regions in Southeast Asia in managing an equitable and inclusive coal phase-down.

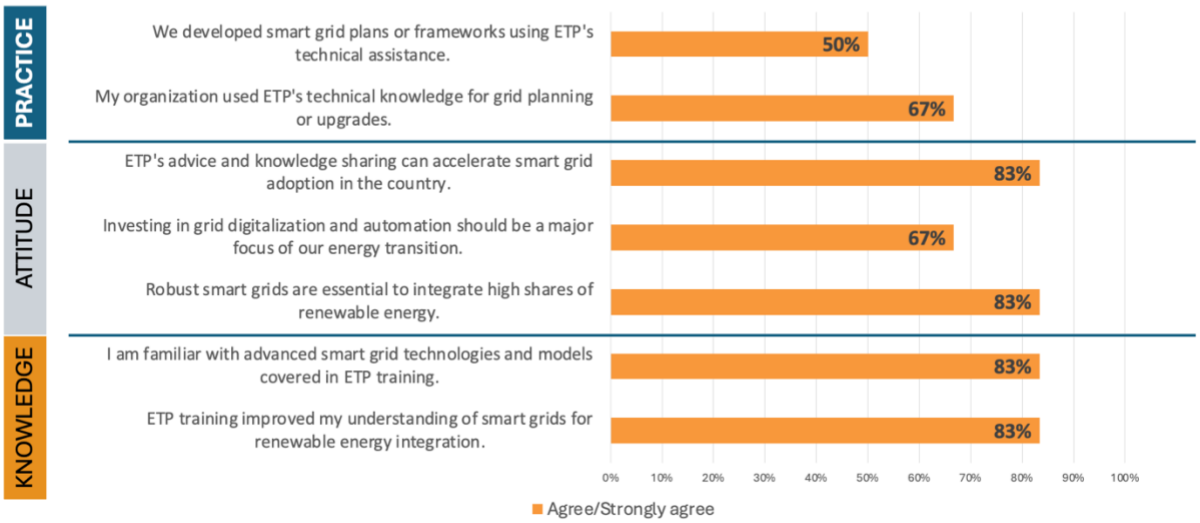
ANNEX IX. KAP SURVEY RESULTS

N=31



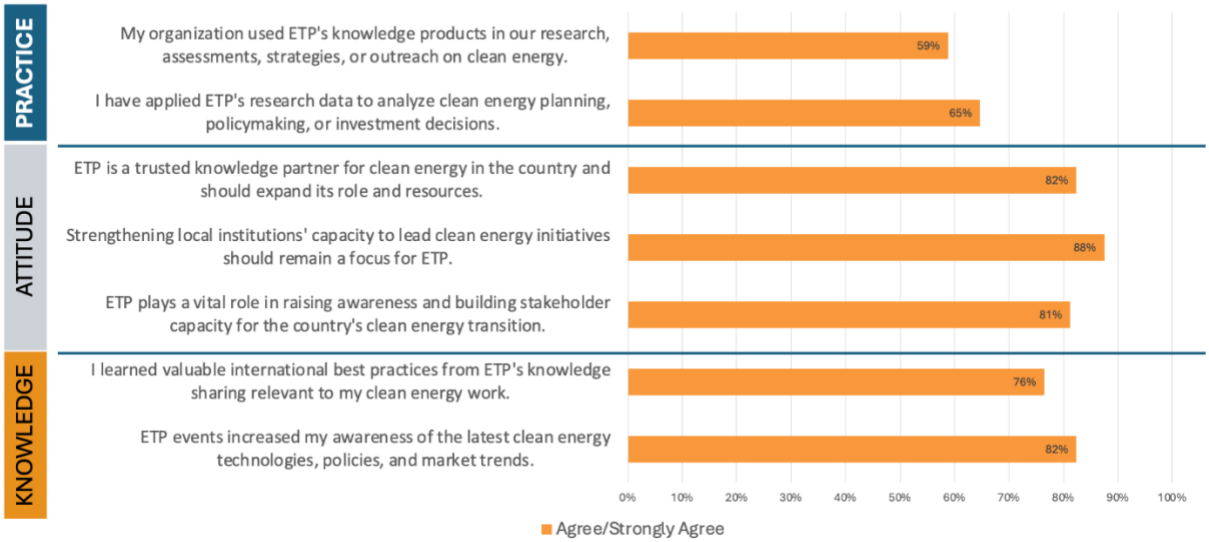
N=26

KAP Survey – Strategic Objective 3



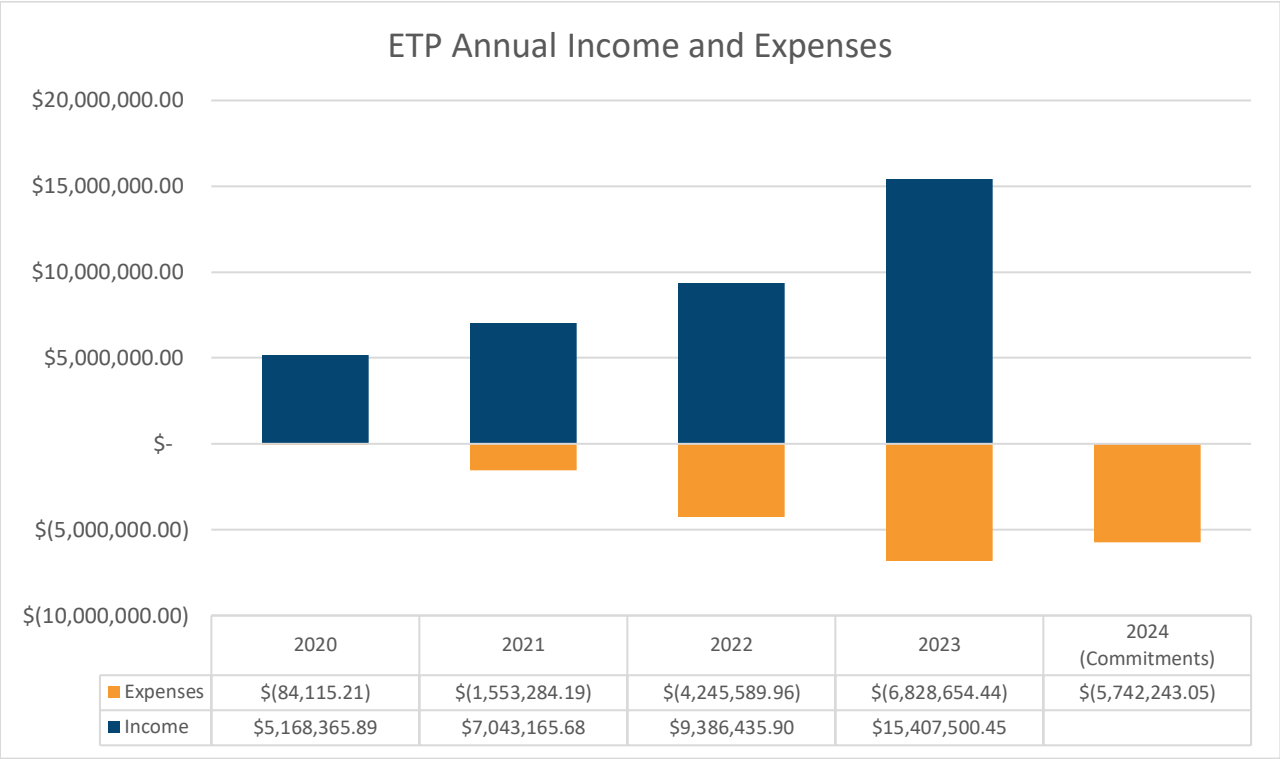
N=9

KAP Survey – Strategic Objective 4



N = 23

ANNEX X. FINANCIAL DATA



	2020	2021	2022	2023	2024 (Commitments)
Expenses	$(84,115.21)	$(1,553,284.19)	$(4,245,589.96)	$(6,828,654.44)	$(5,742,243.05)
Income	$5,168,365.89	$7,043,165.68	$9,386,435.90	$15,407,500.45	

Source: 2023 Certified Annual ETP Financial Statement