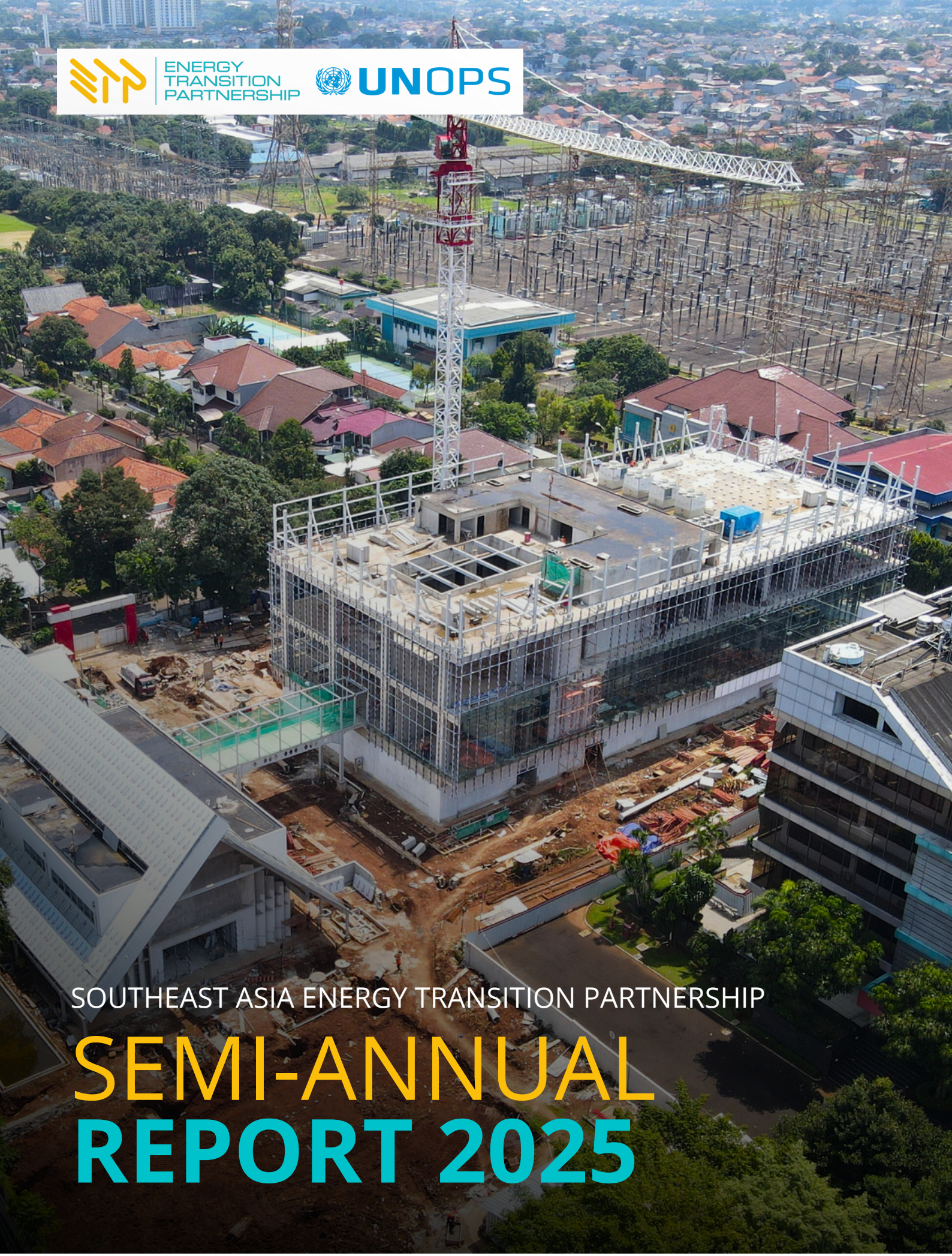


ENERGY TRANSITION PARTNERSHIP

UNOPS

SOUTHEAST ASIA ENERGY TRANSITION PARTNERSHIP

SEMI-ANNUAL REPORT 2025

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

Federal Ministry for Economic Affairs and Climate Action

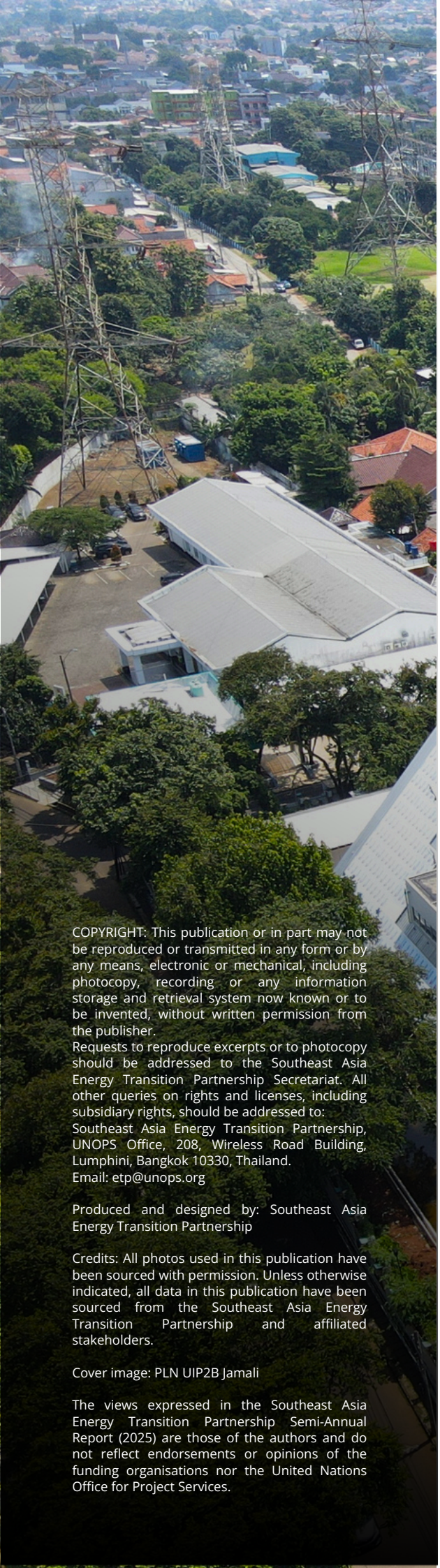
Department for Energy Security & Net Zero

Environment and Climate Change Canada
Environnement et Changement climatique Canada

Australian Government
Department of Climate Change, Energy, the Environment and Water

CIFF CHILDREN'S INVESTMENT FUND FOUNDATION

SEQUOIA CLIMATE FOUNDATION



Produced and designed by: Southeast Asia Energy Transition Partnership

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Cover image: PLN UIP2B Jamali

ENERGY TRANSITION PARTNERSHIP

TABLE OF CONTENTS

Cover Image:

Pictured here is the construction site for the Jawa, Madura, Bali (JAMALI) Main Control Centre and Disaster Recovery Control Center, in Indonesia. The facility is on track for completion by late 2025. As a key partner, the Southeast Asia Energy Transition Partnership is providing crucial technical assistance to the project, ensuring every stage —from construction and installation to final configuration and commissioning— meets the highest quality standards.

ABOUT US

ETP is a multi-donor partnership of governments and philanthropic funders. We are dedicated to supporting the energy transition in Southeast Asia in alignment with the Paris Agreement and United Nation's Sustainable Development Goals (SDGs).

Our projects span the region, with a focus on Indonesia, the Philippines, and Vietnam, where we partner with governments, the private sector and civil society, to address the complex challenges of energy transition through the design and delivery of targeted technical assistance programmes.

Our projects target 4 strategic outcomes:

- **Policy Alignment with Climate Commitments**
- **De-risking Investments on Renewable Energy, Energy Efficiency and Fossil Fuel Phasedown**
- **Sustainable and Resilient Infrastructure**
- **Just Transition**

Knowledge and awareness are critical. We empower our partners with capacity-building, sharing lessons learned, and providing the expertise they need to drive energy transition.

In 2025, ETP enters our 5th year of operation. ETP launched a new strategy for the next 5-year cycle to address the latest challenges and provide solutions for our partner countries.

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INDONESIA

PROJECTS: 25
ACTIVE: 16, COMPLETED: 9

RENEWABLE ENERGY

Developments in renewable energy (RE) have a slow adoption rate in Indonesia. To address existing barriers, ETP delivered a critical grid integration study assessing how the addition of solar photovoltaic (PV) capacity to the Jawa, Madura, Bali (JAMALI) grid can ensure grid security and reliability.

The study supports Indonesia's state-owned electricity company (PLN) to integrate solar PV without requiring major updates to the existing grid. It helps private developers identify economically viable locations near the grid to establish solar PV infrastructure and addresses gaps in the PLN National Plan by including specific substation-level location details. The project released 4 reports highlighting challenges faced by Independent Power Producers (IPPs) and provided recommendations to resolve them.

Who are Independent Power Producers (IPPs)?

IPPs are private companies that generate electricity and sell to utilities, large-scale companies or the open market. They are vital to the energy sector as they expand power generation (especially in renewables such as solar and wind) by bringing in private investment and focusing on clean energy projects.

These reports include schemes to support financial feasibility, transparency in power purchase agreements (PPAs) to expedite negotiations, environmental and social analyses focusing on land acquisition solutions, and strategies for solar PV procurement. The project is set to publish a report on the economic feasibility of floating solar PV, and a summary of the findings and outcomes of the overall project.

ETP is supporting the Ministry of Energy and Mineral Resources (MEMR) to develop a medium-term strategic plan for RE development. ETP's policy-related support is expected to de-risk initiatives and attract investments by establishing clear targets and providing better prediction of needs. The MEMR's strategic plan is expected be completed and officially released this year.

These efforts are designed to increase the availability of information for potential investors (insights on economic viability, feasibility studies) in order to encourage investments in RE projects, aligning with Indonesia's long-term goals and Net Zero Emissions (NZE) target.

ENERGY EFFICIENCY AND CONSERVATION

ETP achieved significant milestones by finalising the draft of Energy Efficiency (EE) and Electrification sector in the Comprehensive Investment and Policy Plan (CIPP) for Indonesia's Just Energy Transition Partnership (JETP) and providing support to the MEMR to develop a ministry regulation on Energy Service Companies (ESCOs).

In 2025 ETP analysed Indonesia's increasing energy demands alongside EE potential across various sectors, and identified potential EE and electrification projects in support of the JETP. Building on previous work, the first half of 2025 involved finalising analyses, conducting workshops and focus group discussions, and integrating feedback from the Indonesian government and G7+2 countries for the draft CIPP.

Looking ahead, the focus for the JETP CIPP will be on finalising agreements for potential projects and launching the official report.

ETP played a key role in developing a MEMR regulation on ESCOs. This initiative addresses the need for intermediaries to implement EE projects without requiring upfront capital expenditure from industrial clients, fostering a favorable business environment for ESCOs in Indonesia. A public consultation will take place later in the year, with the aim of finalising the draft by the end of 2025.

Additionally, an ongoing project directly supports the broader goals of ESCO growth in Indonesia, by providing grants to ESCOs for energy audits and project implementation.

RESILIENT POWER GRID AND ENERGY STORAGE

ETP is promoting Battery Energy Storage Systems (BESS) as a solution to stabilising the national grid and absorbing RE fluctuations. The BESS project is conducting technical and financial assessments for BESS integration and developing essential battery safety standards for Indonesia. The project will deliver a replicable model for BESS integration, including a regulatory framework, a business model and PPA guidelines.

In 2024, ETP completed the detailed engineering design for the JAMALI grid and is now providing advisory services to establish and implement a new control center. This involves assessing systems development and conducting factory acceptance testing.

The project expects to complete all required testing (point-to-point testing, acceptance testing) by the end of 2025, ahead of the potential launch of the control centre early next year.

SUSTAINABLE SUPPLY CHAIN

ETP's ongoing project on battery supply chain for Electric Vehicle (EV) and RE applications (solar and wind) is contributing to the development of sustainable supply chains in Indonesia, aligning with a national mandate to prioritise domestic value chains. The project focuses on identifying investment opportunities and triggers to establish a domestic battery supply chain. ETP supported the development of a comprehensive guide and roadmap for investors, stakeholders, and the government, aiming to foster a self-sufficient battery ecosystem that meets national net-zero emission targets.

ETP is set to deliver an environmental and social impact assessment of the battery supply chain to ensure that upstream and downstream operations comply with international standards. Other deliverables, focusing on social and environmental impact analysis, are expected to be completed by the end of 2025. ETP also completed a round of discussions with government representatives on aligning ETP's broader strategy in Indonesia with government priorities as part of an upcoming 5 year plan.


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JUST TRANSITION

ETP is providing operational guidance for Standard 9 of the Just Transition Framework which addresses economic diversification and transformation for communities affected by energy transition projects.

Various stakeholders were engaged in this initiative through workshops and discussions to gather input on implementation and supervision. The draft for the Just Transition Chapter 6 of the CIPP was finalised. A second phase will pilot the guidance provided to refine applicability. Expected outcomes include increased community acceptance of RE projects, improved

local economic growth, and a stronger national policy framework for a just transition.

ETP is supporting PLN to achieve its energy transition targets through capacity development initiatives that transform existing business models to accommodate low-carbon pathways. This is carried out through the delivery of training modules for senior management on change management and business innovation, and for mid-management/technical staff on technical skills, including international capacity-building opportunities.

COAL PHASEDOWN

ETP is leading a project on decarbonising Indonesia's captive power plants, which contribute significantly to industrial emissions. These plants, which are predominantly coal-fired and critical for industries in remote areas, require transition to RE sources like solar PV, despite challenges posed by intermittency and storage costs.

The project conducted initial assessments which included data mapping of over 400 captive power assets and macroeconomic impact analysis. It is focused on Eastern Indonesia and has selected 10 industrial sites for case studies to assess decarbonisation options.


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In collaboration with the Ministry of Industry, ETP produced an internal report on macroeconomic impacts. The project, expected to run until April 2026, will analyse captive power plant business models. Its long-term objective is to develop national and sectoral decarbonisation strategies, potentially influencing government regulations on this critical energy transition aspect.

MARKET MECHANISMS

ETP is developing new incentive mechanisms to improve existing policies for phasing out coal and promoting large-scale RE projects. In the first half of 2025, 2 key deliverables were finalised: an assessment of existing regulations and a report on international best practices. The long-term objective is to ensure these recommendations are formally integrated into government policies, fostering a more rapid and efficient energy transition.

ETP is supporting efforts to leverage Carbon Border Adjustment Mechanism (CBAM) as a catalyst for industrial decarbonisation in Indonesia. This effort, aligned with similar initiatives in Vietnam, aims to accelerate EE and electrification within high emission industries by addressing international trade compliance requirements. 2 reports were finalised in the first half of 2025, assessing the macroeconomic and subnational impacts of CBAM on Indonesia, including potential effects on GDP and regional employment from similar carbon tariffs in the future. The next phase of the project will focus on increasing industrial readiness in sectors such as aluminum, iron and steel, cement, and fertiliser through capacity-building activities. The long-term vision for this project is to prepare Indonesian industries to effectively navigate international carbon tariffs, ensuring the nation's readiness for evolving global trade regulations.

KNOWLEDGE AND AWARENESS-RAISING

ETP is providing specifically designed support enhance the capabilities of PLN staff. This includes developing policy for workforce roadmaps and establishing certification programmes. This provides the necessary expertise required to complement Indonesia's energy infrastructure development including strengthening worker certification, developing technical curriculums, and creating training modules for priority jobs. These efforts will equip Indonesia with the human capital required to meet future demands and establish self-reliance within the sector. The roadmap was launched at the annual MEMR Human Capital Summit this year.

The project seeks to build PLN's internal capabilities to drive Indonesia's energy transition,

with particular focus on leadership development, technical upskilling, and exposure to international best practices. Gender equality and social inclusion (GESI) principles are integrated across all activities.

41 Studies Published

119 Training, Workshops and Consultations

6353 Audience Reach

1873 Female Participants

62 articles and press releases (social media)

10 Entities Supported

Note: All targets and results are cumulative from inception to date (2020 - 2025)

PHILIPPINES

PROJECTS: 21
ACTIVE: 10, COMPLETED: 11

RENEWABLE ENERGY

In support of the Philippines' ambitious RE target of 50% by 2040, ETP developed a guidebook with details on permitting and consenting processes and requirements for Offshore Wind (OSW) projects. This is a crucial step as OSW is increasingly becoming a government priority due to its immense potential. Complementing the guidebook, ETP also released the Green Energy Auction Programme - Fourth Round (GEA-4) Toolkit for the Philippines' Green Energy Auction Programme (GEAP). The toolkit provides guidance on GEA-4 processes and pricing for RE developers.

What is GEAP?

The Green Energy Auction Program (GEAP) was established by the Department of Energy (DOE) to accelerate the growth of RE. GEAP promotes RE as a primary energy source through a transparent and competitive selection process in which qualified developers bid to supply power at the lowest possible fixed rate.
This approach attracts private sector investments and ensures cost-effective energy procurement, contributing to energy security and price stability

Both the offshore wind guidebook and GEA-4 Toolkit were recognised as significant achievements, as the guidebook will support the 5th round of the GEAP which specifically focuses on fixed-bottom offshore wind. ETP also provided policy guidance on the GEAP by reviewing Department of Energy (DOE)-issued guidelines to ensure alignment with existing policies. The guideline was issued by the DOE in March 2025. This has resulted in improved coordination between the DOE and the Department of Environment and Natural Resources, confirming further efforts to streamline the environmental permitting process.

Official hand-over to the Department of Energy Asst. Secretary Mylene Capongcol

ETP initiated an assessment for the voluntary trading of RE Certificates, which provide renewable power generators with financial incentives; the option to be paid for every Mwh of clean energy produced. This incentivises both RE generators and energy end-use companies, as it provides additional revenue to the former and allows the latter to meet their sustainability goals. This dual revenue stream encourages further investment in new RE projects.

ETP is supporting the DOE to update the National RE Programme (NREP) which outlines the programmes, achievements, priorities and targets for RE. This will be a key reference for the government RE developers and agents in energy transition. ETP's support includes providing technical guidance, facilitating coordination among DOE units and delivering a publishable draft programme.

RESILIENT POWER GRID AND ENERGY STORAGE

While there is a need to accommodate greater variable RE (VRE) such as solar and wind, the country's transmission grid must also be able to keep up with generation-side developments. ETP is addressing these challenges by supporting the DOE, ERC, and National Transmission Corporation (TransCo) of the Philippines via capacity building support to utilise platforms for integrated power generation and transmission planning.
Such support will also provide insights into how the Philippine clean energy targets can replace fossil fuels, its effect on power supply and costs, and the investments needed for renewables, storage, and transmission.

A key component of ETP's overall grid work is the study on pump storage hydro (PSH) development; a long-term grid management solution to balance VRE integration. To attract further investments ETP is identifying and analysing potential sites for commercial viability. The project has identified 37 technically-suited sites located near existing substations and grids, with the findings incorporated into ongoing modeling and simulations.

ETP launched the Smart Grid Distribution Project which will assist 15 electric cooperatives to develop Geographic Information System (GIS) maps of their distribution networks. This will serve as a foundation for a smart grid and enable efficient development of RE projects and Demand-side Management strategies. The project will facilitate a phased approach to smart grid development, taking into consideration both technical and financial frameworks.

As part of its strategic support to the Philippine energy sector, ETP is assisting both the ERC and the DOE to develop and align their respective microgrid rules to maintain consistency and avoid policy overlaps.

of the Microgrid Systems Act. The revised IRR, which incorporated ETP's feedback, was published in April 2025. ETP is presently assisting ERC to update the draft ERC rules for microgrid system service providers, covering licensing and authority to operate. For the DOE, ETP played a key role in reviewing the revised Implementing Rules and Regulations (IRR).

SUSTAINABLE SUPPLY CHAIN

The Philippines holds significant reserves of 4 critical minerals (copper, cobalt, nickel, chromium) however, they are currently exported in unprocessed forms, resulting in reduced economic benefits.

ETP engaged with the government on a study that identifies investment opportunities in domestic processing. Expected results include the completion of a cost-benefit analysis study and an investment plan framework focusing on the domestic market.

MARKET MECHANISMS

ETP is providing support to enhance the Philippines' Wholesale Electricity Spot Market (WESM) by updating existing price caps to reflect contemporary market conditions. The updated price caps will maintain consumer protection while ensuring fair returns for investors.

These efforts are expected to enable the WESM governing body to publish new price cap values reflecting current market conditions and in anticipation of increased participation of RE in the spot market.

KNOWLEDGE AND AWARENESS-RAISING

ETP is supporting integrated power generation and transmission by training DOE, TransCo, and ERC on advanced modelling software. The resulting scenarios will also be shared with other stakeholders to ensure the outputs are relevant and useful in RE and transmission grid planning.

ETP completed a carbon pricing analysis assessing policies that either support or hinder carbon pricing. The insights from this assessment were directed to the Department of Finance and the World Bank, and were recognised as a crucial awareness-raising activity; bridging knowledge-gaps and improving understanding of regulations

impacting carbon pricing.

ETP is also providing capacity-building for the Ministry of Environment, Natural Resources, and Energy (MENRE) of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) to establish clean energy planning and governance of the region's energy sector.

The project includes conducting energy supply and demand modelling, and empowering the BARMM government in RE and EE project development.

The project will build capacity for utilising clean energy sources, and the draft Sustainable Energy Master Plan is slated for submission to parliament and will be announced during the inaugural Bangsamoro Energy Summit.

38 Studies Published

101 Training, Workshops and Consultations

2886 Audience Reach

866 Female Participants

44 articles and press releases (social media)

9 Entities Supported

Note: All targets and results are cumulative from inception to date (2020 - 2025)

Community members in Palawan receive a hands-on training session focused on the benefits and practical use of smart solar home systems.

VIETNAM

PROJECTS: 24
ACTIVE: 13, COMPLETED: 11

GRID RELIABILITY AND ENERGY SECURITY

Between 2020 and 2024, publicly documented curtailment in Vietnam totals ~2.0–2.2 TWh (≈0.36–0.40 TWh in 2020 plus ~1.6–1.8 TWh projected for July–December 2021). The risk of energy curtailment is a barrier to RE adoption in Vietnam, which undermines investor confidence and stalls project development.

What is 'Energy Curtailment'?

This refers to wasted potential of renewable energy generation due to system constraints. For example, a wind farm may have to reduce their output (even though they are capable of producing more power), because a power-grid lacks the infrastructure to transport the full supply of electricity, which could lead to an overload and a blackout. In this situation, clean energy is essentially wasted.

To mitigate this, ETP developed a roadmap to increase grid reliability across multiple regions in Vietnam, recognising the need to develop a sustainable grid system with the capacity to seamlessly integrate RE.

Several recommendations from the roadmap are reflected in a draft government policy on Smart Grid Development Roadmap for the Period 2023-2030, Vision to 2045, marking a critical step towards institutionalising long-term grid refinement.

Building on this foundational work, an upcoming project is set to roll out energy planning and investments for green industrial parks in Vietnam's Northern, Central and Southern regions. The project will align with green investment requirements to enhance electricity supply infrastructure, optimise regional power distribution, and encourage investment to ensure stable and sustainable energy systems. The project will align with green investment requirements to enhance electricity supply infrastructure, optimise regional power distribution, and encourage investment to ensure stable and sustainable energy systems.

Industrial Parks - why are they important?

Vietnam's Industrial parks currently account for approximately 15% of the country's electricity consumption, yet many face power shortages, limited access to clean energy, and difficulties in the green transition.

MARKET AND FINANCE

ETP aims to unlock and mobilise private capital by strengthening Vietnam's investment environment to accommodate a just and inclusive energy transition. This is being delivered through 4 ongoing projects, aligned with goals set by Vietnam's Just Energy Transition Partnership (JETP).

ETP provided policy recommendations to unlock market-based investments, including proposals

for flexible pricing mechanisms, enabling the transition from outdated feed-in tariffs (FIT).

This is a critical step as the expiration of previous FIT regimes have stalled more than 100 wind and solar projects, amounting to over USD 13 billion in combined investments. The project broadens priority investment sectors to include BESS and green hydrogen; offering tax incentives, legal clarity and streamlining procedures to protect investor interests and retain affordability for consumers.

Vietnam has a significant demand for a localised battery supply chain, however the current market is captured by a singular domestic entity, resulting in fragmented investments. To address this challenge and support the development of Vietnam's battery supply chain for EVs and BESS, ETP organised a series of public workshops and targeted policy recommendations to enable increased investments. These efforts contributed to Decision No. 1131/QD-TTg which was issued by the Prime Minister in June 2025.

ETP provided strategic advisory services across key areas of green finance, including green bonds, green indexes, taxes and Environment, Social and Corporate Governance Data (ESG) reporting. Recommendations from this project informed the revision of the National Green Growth Action Plan and supported the Ministry of Finance to structure strategies shaping Vietnam's green financial market. These efforts will enable policy and institutional environments to be able to mobilise green capital with improved efficiency. The project will be showcased at the upcoming Vietnam Finance and Economics Forum; the country's largest policy dialogue on finance and economics.

ETP is set to support unlocking investments and capital for RE projects, with a focus on leveraging Vietnam's newly adopted green taxonomy, and exploring opportunities for green credit schemes for RE projects at a sub-national level.

CARBON MARKET DEVELOPMENT

What are Carbon Markets?

A carbon market is a trading system in which carbon credits are purchased and sold. Companies can use carbon markets to offset their greenhouse gas emissions, by purchasing carbon credits from entities that remove or reduce GHG emissions.

ETP achieved key milestones in this area, including significant contributions to Decree 119 (Updating Decree 06/2022 on GHG emission reduction and ozone layer protection) and Vietnam's National Scheme for Carbon Market Development (Decision 232). This establishes the roadmap for Vietnam's Emission Trading Scheme (ETS), which is being piloted until December 2028. ETP is currently providing recommendations to the Ministry of Finance on the design and operational aspects for the ETS.

ETP established an essential regulatory framework for ETS operations, including analytical support and recommendations to set effective emission caps. This is crucial to incentivize emitters to reduce emissions and transition towards cleaner technologies. ETP's support is enabling the promotion of carbon pricing mechanisms and unlocking vital green finance for investments in new technologies, EE and RE integration.

ENERGY EFFICIENCY

ETP delivered an in-depth study on active cooling for Vietnam's National Cooling Action Plan. This was integrated with research on passive cooling components (in collaboration with the United Nations Economic and Social Commission for Asia and the Pacific [ESCAP]) and incorporated into the country's Sustainable Cooling Plan. The study provided a significant contribution towards the Prime Minister's (Decision 496/QD-TTg) approval of a national plan on management and elimination of ozone-depleting substances; aiming to cut 11.2 million tons of CO2 emissions by 2045. The completed draft of the National Cooling Action Plan (NCAP) will set improved standards for the management of cooling devices, and outlines a roadmap to decarbonise the cooling sector. These efforts aim to cease importing ozone-depleting substances into Vietnam by 2045.

ETP also facilitated dialogues between government and businesses on the topic of ESCOs and green energy for industrial parks. ETP established an ESCO network and developed the

ESCO Association Roadmap, to support a private sector request that the government help grow ESCO businesses in Vietnam.

Through a collaborative project with the Vietnam Chamber of Commerce and Industry (VCCI), ETP provided energy audit and efficiency training for 200 enterprises, of which 13 enterprises received direct energy audit support, and 3 were selected for further feasibility studies and investment project development. The project directly contributes towards the promotion of EE in food processing industries in Vietnam.

On-site at a factory survey. ETP is providing technical support to upgrade their energy management from a basic system to a more sophisticated model that includes utility energy savings.

ETP is set to collaborate with the Ministry of Industry and Trade to update Decree 21, which will expand the scope of emitters required to submit emission reports and tighten regulations on energy auditor licensing. ETP will provide recommendations to update Vietnam's energy labeling program, enhance Minimum Energy Performance Standards (MEPS), and establish a dedicated EE fund. ETP was specifically requested to develop the operational and management mechanisms for this fund, as stipulated in a newly approved law on EE.

RENEWABLE ENERGY DEVELOPMENT

ETP drafted 20 national standards for offshore wind aligned with international best practices. The draft standards were approved by the Vietnam National Committee for Standard Evaluation and will be published during the latter period of 2025.

ETP is set to begin development of comprehensive offshore wind licensing and permitting guidelines, including a specific component for offshore wind exports, aligned with Vietnam's ambition to become a leading regional offshore wind hub. ETP launched the clean energy complex investment package, supporting local state-owned enterprises to conduct initial studies for large-scale RE complex investments. This has the potential of unlocking up to USD 3.2 billion in clean energy investments.

Over the next 6 months, ETP will deliver an assessment of floating solar potential in 700 irrigation reservoirs and 630 hydro power reservoirs in Vietnam. This assessment together with a set of standardised technical criteria for selection of sites for investment and licensing will support the acceleration of floating solar investment in Vietnam.

KNOWLEDGE AND AWARENESS-RAISING

Recognising that transition efforts in Vietnam largely follow a top-down model, often with limited direct public engagement, ETP was requested by the Ministry of Finance and the Ministry of Culture, Sports, and Tourism to improve policy communication to foster public action. In response to this, ETP developed a multi-media campaign targeting rural and marginalised communities, reaching diverse range of groups including youth, women, ethnic minorities, and informal workers. The project produced over 50 articles (published across 10 broadcast platforms), 30 broadcast segments and 30 social media posts. This contributed to 1200 energy transition articles identified in the Ministry of Culture Sports and Tourism's database. A total of over 2.1 million views were obtained across all broadcast products.

The campaign achieved tangible results in shifting perspectives and improving pro-energy transition behaviours, such as using clean energy sources, saving energy, and choosing low-carbon transport options. Following this success ETP was requested to support an inter-ministerial project; collaborating to convey a unified message on just energy transition to communities, aligning with the country's JETP framework.

ETP contributed to the "Earth Hour 2025" in Hanoi, which drew thousands of people in a vibrant celebration of environmental awareness and sustainable energy.

42 Studies Published

100 Training, Workshops and Consultations

5880 Audience Reach

2447 Female Participants

379 articles and press releases (social media)

12 Entities Supported

Note: All targets and results are cumulative from inception to date (2020 - 2025)

On-site at a materials supplier in Quang Ninh, Vietnam. While the company has implemented some initial technical solutions ETP is providing support to help them develop a formal energy management policy and establish a dedicated energy manager.

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REGIONAL

PROJECTS: 17
ACTIVE: 11, COMPLETED: 6

EXPANDING AND STRENGTHENING REGIONAL ENERGY TRANSITION COOPERATION

The ASEAN Power Grid (APG) is an expansive regional effort to integrate electricity grids across Southeast Asia in order to enable cross-border power trade, and enhance energy security and affordability. ETP is aligning actions with expected outcomes by strengthening coordination among stakeholders and developing a roadmap to actualise the APG. Through the ASEAN Interconnection Masterplan Study (AIMS III) Phase 3 ETP is delivering crucial analytical work to form the basis for multilateral power trade arrangements.

Based on the AIMS III recommendations, ETP will support pilot projects for multilateral power trade.

What is the ASEAN Interconnection Masterplan Study (AIMS III) Phase 3?

The ASEAN Interconnection Masterplan Study (AIMS III) Phase 3 was commissioned to lay the groundwork for setting up multilateral electricity trading across the ASEAN region. Its primary goals are to enable cross-border power trade and improve the resilience of the electricity grids, ensuring a reliable and affordable power supply and facilitating the integration of more renewable energy (RE) sources.

During the first half of 2025, ETP delivered 2 workshops for the APG, including a validation workshop to finalise the AIMS III Phase 3 reports that will be formally endorsed by the ASEAN member states. This is a critical step to ensure that the provided recommendations align with the requirements set by ASEAN member states.

ETP aims to expand support for ASEAN's energy cooperation efforts beyond the power grid; aiming to build confidence among ASEAN countries in implementing multilateral power trade. In 2025, ETP, in partnership with UNESCAP and working closely with the ASEAN Secretariat, launched a technical assistance to establish the ASEAN School of Regulation.

The project aims to enhance the knowledge and technical expertise of energy regulators in Southeast Asia, to facilitate regulatory harmonisation for multilateral power trade. In its first phase of implementation, ETP will assess the needs for capacity building initiatives, design the School of Regulation for ASEAN, and deliver a pilot summer school for ASEAN energy regulators in September 2025.


©Association of Southeast Asian Nations

ETP delivered the Diagnostic for Competitive Arrangements for Energy Transition (DCAT) project in 2024. In 2025, inputs derived through the DCAT project supported Indonesia's MEMR to formalise Regulation No. 5/2025 in the Guidelines for RE PPA. By aiding the increase of incentives for developers, the new regulation is expected to improve the competitiveness of RE projects in Indonesia.

SUPPORTING COAL PHASE-DOWN AND DECARBONISATION

ETP's ongoing work on coal phase down and decarbonisation will create space for more renewables by accelerating RE adoption and reducing the use of fossil fuels. Efforts include coal phasedown and improving EE to promote clean energy.

ETP is currently exploring retirement pathways for coal plants. Using an existing coal power plant as a prototype, ETP is creating a financial model for early retirement, and conducting technical assessments to identify viable repurposing options.

ETP is developing an evaluation of multisectoral perspectives on coal phase-out in the Philippines, in order to better understand potential regulatory impediments and drivers. These combined efforts will build confidence in early retirement initiatives and mainstream discussions related to the transition process.

A guidebook for the technical analysis of coal plants and a framework for selecting repurposing options, specifically tailored for the ASEAN context are under development. Comprehensive publications will be released later in the year.

ETP launched a twinning project, focused on industrial decarbonisation and EE in Indonesia, Vietnam and the Philippines. Following the project kick-off this year, ETP will host a matchmaking event to foster connections among industries, clean technology providers and local governments. The project will promote collaboration through knowledge-sharing and shared experiences to drive transformative change.

MAINSTREAMING JUST ELEMENTS OF THE TRANSITION

ETP's Just Coal Transition Platform Southeast Asia aims to create a space for Southeast Asian countries to exchange learnings and experiences for a just and equitable transition. The platform will provide peer-to-peer learning specific to the regional socio-political and economic contexts. With the increasing urgency to meet climate commitments, ETP proactively responds to the country level requests to deliver just transition focused technical assistance.

Through this, ETP is providing support to the Just Energy Transition Partnership Secretariat in Indonesia by operationalising economic diversification and transformation within their investment planning framework, including a pilot project on floating solar PV.

ETP is initiating an upcoming project on the Just Transition Pathways for the Coal Mining Sector in the Philippines in collaboration with the Department of Energy.

ENHANCING CAPACITY AND KNOWLEDGE-SHARING ACROSS SOUTHEAST ASIA

ETP is producing a stock-take report examining the progress of Vietnam, Philippines and Indonesia within the regional and global energy transition context. Another report on coal phase-down in Asia and the Pacific is also being developed in collaboration through a UN issue-based coalition led by the United Nations Environment Programme (UNEP) and UNESCAP. This report builds on a version from 2021 with a focus on economic and just aspects of energy transition.

ETP is also developing a third report which explores the workforce implications of the energy transition. It examines programmes for skilled labour, relevant policies, and opportunities for regional integration of the workforce, including harmonised certification and labour mobility incentives for RE projects.
These reports aim to provide updated information in support of policymaking and engage a broader range of stakeholders in the energy transition discussions.

ETP's recently launched SPARK Project is contributing to ETP's focus on enabling capacity building and knowledge-sharing. SPARK is designed to create peer-to-peer learning opportunities from seniors to mid-level policymakers on pressing energy transition issues in Southeast Asia.

SPARK will facilitate closed-door discussion on topics ranging from carbon pricing to coal phase-down financing. The project will produce policy briefs and a synthesis report, with key takeaways from the discussions and progress in literature. The first phase of the project will focus on finance and investment for energy transition.

28 Studies Published

55 Training, Workshops and Consultations

2210 Audience Reach

764 Female Participants

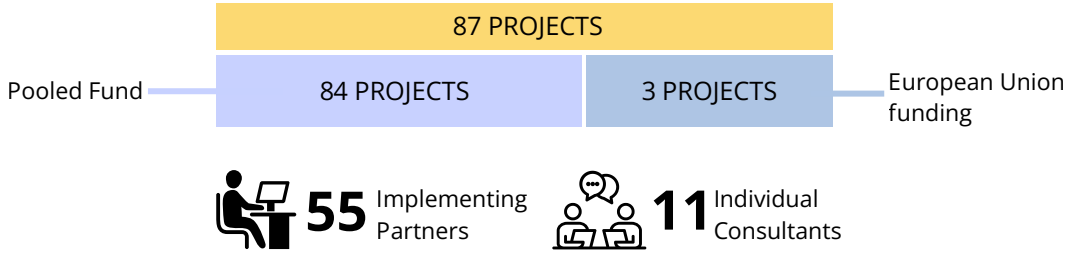
8 articles and press releases (social media)

3 Entities Supported

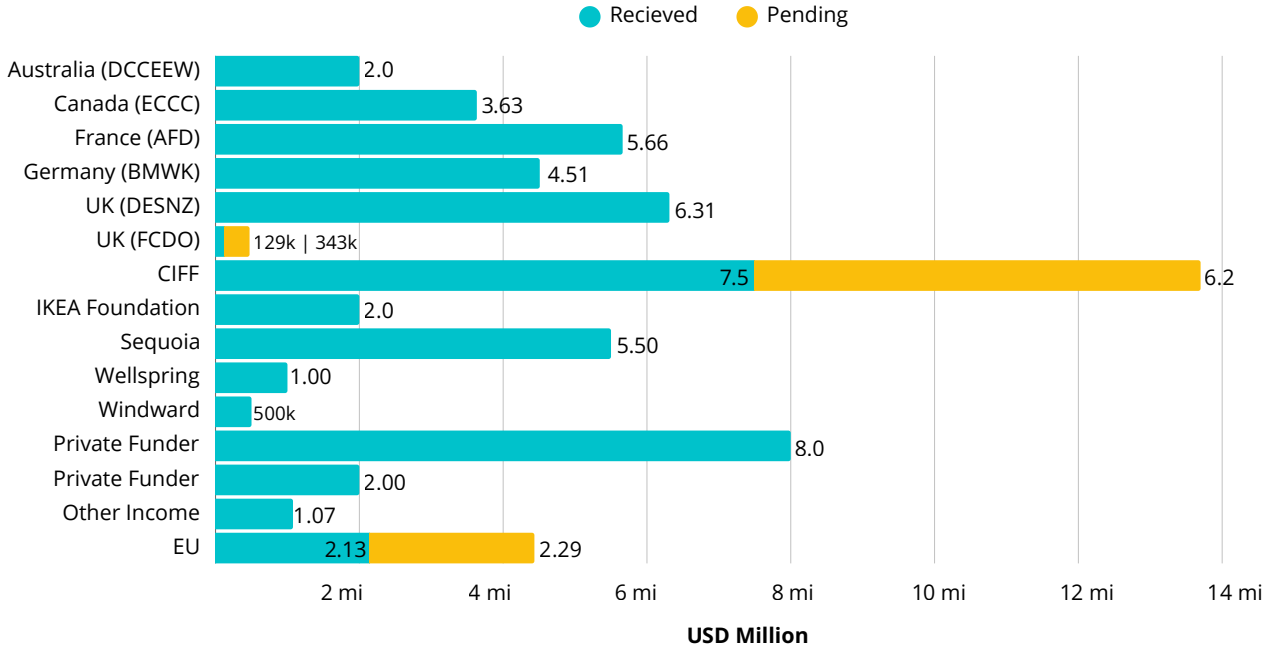
Note: All targets and results are cumulative from inception to date (2020 - 2025)

FINANCIAL OVERVIEW

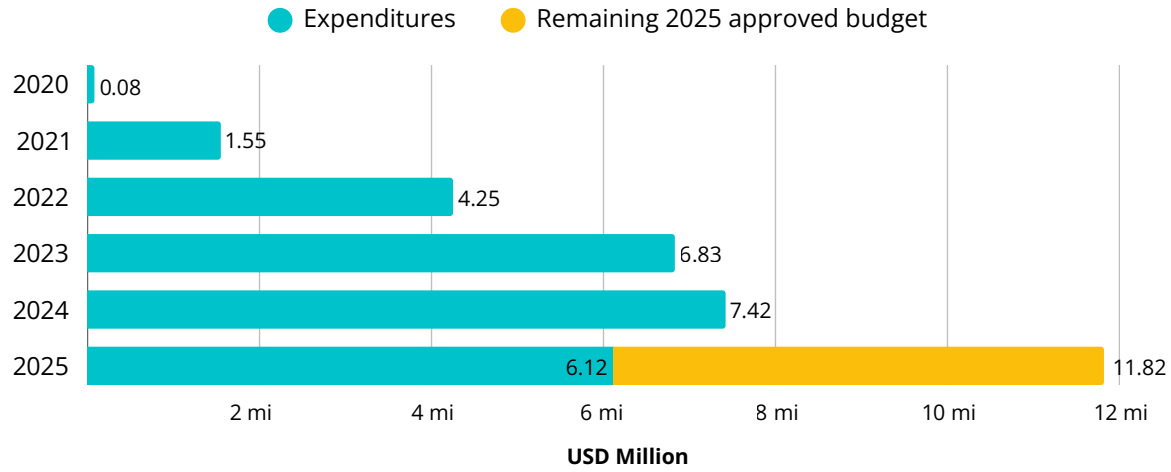
Portfolio Overview
As of June, 2025



Funder Contributions



Programme Expenditures
By year as of June, 2025 (pooled fund)



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This diverse network of governments, industry leaders, philanthropies, and technical experts has worked alongside us, and it is their dedication and collaborative spirit that has enabled us to advance policy discussions, provide essential technical assistance, and build key partnerships.

Their unwavering support has been vital in our mission to create a just and sustainable energy transition.

ABBREVIATIONS

AIMS - ASEAN Interconnection Master Plan Study
APG - ASEAN Power Grid
ASEAN - Association of Southeast Asian Nations
BARMM - Bangsamoro Autonomous Region in Muslim Mindanao
BESS - Battery Energy Storage Systems
CBAM - Carbon Border Adjustment Mechanism
DCAT - Diagnostic for Competitive Arrangements for Energy Transition
DOE - Philippines Department of Energy
CIPP - Comprehensive Investment and Policy Plan
EE - Energy Efficiency
ERC - Energy Regulatory Commission
ESCAP - Economic and Social Commission for Asia and the Pacific
ESCO - Energy Service Company
ESG - Environmental, social, and governance
ETS - Emissions Trading System
ETP - Southeast Asia Energy Transition Partnership
EV - Electric Vehicles
FIT - Feed-in-Tariff
GDP - Gross Domestic Product
GEA-4 - Green Energy Auction Programme - Fourth Round
GEAP - Green Energy Auction Programme
GESI - Gender Equality and Social Inclusion
GIS - Geographic Information System
IPP - Independent Power Producer
IRR - Implementing Rules and Regulations
JAMALI - Jawa Madura Bali
JETP - Just Energy Transition Partnership
KwH - Kilowatt-hour
MEMR - Ministry of Energy and Mineral Resources
MENRE - Ministry of Environment, Natural Resources, and Energy
MEPS - Minimum Energy Performance Standards
Mwh - Megawatt-hour
NGCAP - National Green Cooling Action Plan
NREP - National Renewable Energy Programme
NZE - Net Zero Energy
OSW - Offshore Wind
PLN - PT Perusahaan Listrik Negara/ Indonesia State Electricity Company
PPA - Power Purchase Agreement
PPP - Public-Private Partnership
PSH - Pump Storage Hydro
PV - Photovoltaic
RE - Renewable Energy
SDG - Sustainable Development Goal
TransCo - National Transmission Corporation
UNEP -United Nations Environment Programme
UNESCAP - United Nations Economic and Social Commission for Asia and the Pacific
VCCI - Vietnam Chamber of Commerce and Industry
VRE - Variable Renewable Energy
WESM - Wholesale Electricity Spot Market

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AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

Federal Ministry for Economic Affairs and Climate Action

Department for Energy Security & Net Zero

Environment and Climate Change Canada
Environnement et Changement climatique Canada

Australian Government
Department of Climate Change, Energy, the Environment and Water

CIFF CHILDREN'S INVESTMENT FUND FOUNDATION

SEQUOIA CLIMATE FOUNDATION