Energy Transition and Climate Financing in Southeast Asia

Priyantha Wijayatunga, Chief of Energy Sector Group
Asian Development Bank

16 February 2023

Outline

- 1. Key Energy Challenges in Asia and the Pacific
- 2. Opportunities and Changing Energy Landscape
- 3. Southeast Asia's Energy & Climate Finance Imperative
- 4. ADB's Energy Transition & Climate Approach for Southeast Asia
- 5. ADB's Financial Products & Lending Modalities
- 6. ADB's Regional Energy & Climate Initiatives in Action
- 7. ADB's Energy and Climate Projects in Southeast Asia
- 8. Delivering Regional Technical at Scale



Key Energy Challenges in Asia and the Pacific







Energy Access	Energy Security	Environmental Sustainability
 Roughly 350 million people remain without adequate supply, and 150 million people still have no access to electricity About 1.6 billion people without access to clean cooking 	 IEA scenarios suggest doubling of electricity demand in the region by 2040 Cumulative renewable energy investments of \$6.0 trillion by 2040 Cumulative electricity grid investments of \$6.4 trillion by 2040 	 About 50% of global CO₂ emissions from fossil fuels Approximately 25% of CO₂ emissions from coal power generation





Opportunities and Changing Energy Landscape







Energy Landscape	Global Commitments	ADB's Commitment
Profound changes in Asia and the Pacific:	Global commitments to universal access and climate action:	ADB is the Asia and the Pacific Climate Bank:
 Falling cost of renewable energy vs. conventional energy Emerging new and innovative low- 	 Sustainable Development Goal 7: Universal Energy Access by 2030 Paris Agreement: Nationally 	 \$100 billion of cumulative climate finance by 2030 from our own resources
carbon energy technologies	 Determined Contributions (NDCs) Southeast Asia can take a leadership role in the energy transition in Asia and the Pacific 	 At least 75% of our operations support climate action for the period 2019 to 2030



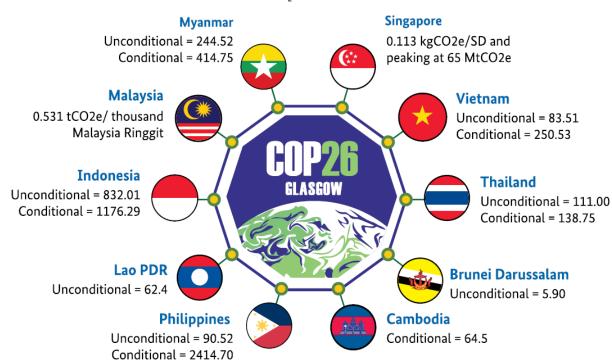
Southeast Asia's Energy & Climate Finance Imperative

COP26 created momentum, but delivering greater financing for clean energy transition and climate will be key to meeting Paris targets

- Increasing cost of climate impact on the economy (~15-37% of GDP by 2050)
- Developing Member Countries committed to updated NDCs & net zero pledges
- But public budgets constrained due to persisting investment gaps coupled with COVID-19 impact and energy crisis
- Most accelerated energy transition and climate plans heavily dependent on international finance
- Clean energy technology costs decreasing, but acceleration requires policy, innovation, demonstration and support for rapid scale-up to meet climate goals

ASEAN Emission Reduction targets

MtCO₂e as of 2021

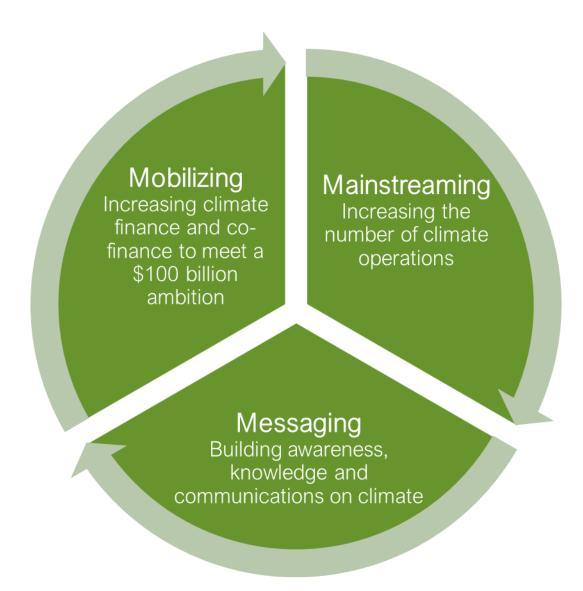


Source: ACE (2022) 7th ASEAN Energy Outlook





ADB's Energy Transition & Climate Approach for Southeast Asia



Vision:

To position ADB as the 'go-to' for clients in the region to support just energy transition, net-zero and climate resilience

Principles:

- Integrated policy & investment support
- Differentiated country / sector approaches
- Demand-driven through client dialogues / awareness
- Transformational—focused on climate outcomes and just / affordable energy transition
- One-ADB—leveraging both public and private sector





ADB Financial Products & Lending Modalities

Sovereign and Non-Sovereign Financial Products:

- Loans
- Grants
- Technical Assistance
- Guarantees
- Funds
- Others

Lending Modalities:

- Project lending
- Sector lending
- Financial intermediation
- Emergency assistance lending
- Multitranche financing facility
- Policy-based lending
- Sector development program
- Results-based lending
- Others



ADB's Regional Energy & Climate Initiatives in Action

ADB has launched several special initiatives to mobilize green finance in Southeast Asia

These address several lessons learned:

- Pressing need to better leverage public and mobilize private funds
- Disaggregated, immature pipelines, with many small disaggregated projects, not yet robust or bankable
- Need for awareness and capacity on green and innovative finance, especially in ministries of finance and energy

Selected Southeast Asia Energy and Climate Initiatives

Energy Transition Mechanism

Coal phaseout/retirement & clean energy scale up

ASEAN Catalytic Green Finance Facility

\$1.4 billion funds from ASEAN Infrastructure Fund and partners

ACGF Green Recovery Platform

\$665 million loans + Technical Assistance (TA) with GCF, EU, UK and CDP

Platform for Sustainable Infrastructure Investment

Debt financing platform with Temasek / HSBC / Clifford Capital for renewable energy, energy storage and other sectors

Climate Innovation and Development Fund

Concessional finance with grant commitments from Goldman Sachs / Bloomberg Philanthropies for climate mitigation and adaptation including renewable energy and energy efficiency

Accelerating Climate Transitions through Green Finance in Southeast Asia (ACT)

Regional Technical Assistance platform to mobilize public and private finance to meet Paris Agreement goals





Energy Transition Mechanism (ETM)

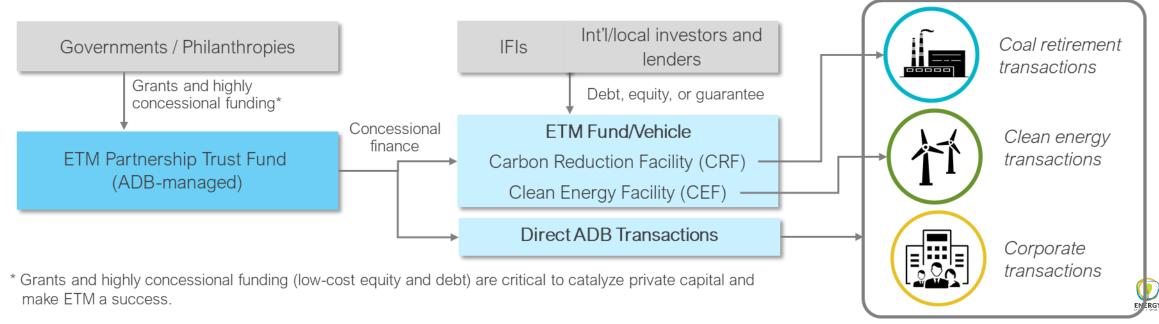
Background

An innovative mechanism is needed to intervene and accelerate the switch from coal to clean energy.

- Asia is responsible for over half of global GHG emissions and 80% of coal consumption.
- Once coal plants are built and commissioned, they operate for decades, locking in carbon emissions in the long-term.

ETM

- Accelerates the retirement or repurposing of coal-fired power plants and scales up investment in clean energy and energy storage using public and private finance.
- Aims to achieve just and affordable transition by addressing impacts to people and communities from accelerated coal power plant retirements.
- Launched in 2021 at COP 26, Indonesia is aiming to announce its first transactions at G20 in November; Feasibility study
 is on-going in the Philippines and pre-feasibility study completed in Viet Nam



ASEAN Catalytic Green Finance Facility

ACGF is an ASEAN-owned regional green finance vehicle, managed by ADB. It leverages \$2 billion in support from 9 partners.

ACGF enables access to:

- Technical assistance
- Financing from ADB and development partners
- ~\$500 million in lowinterest loans through ADB-administered trust funds with GCF, UK, EU

How ACGF helps

National-level

 ACGF supports policy, knowledge and capacity building (technical assistance)

Pipeline-level

ACGF supports
 origination and
 preparation of
 green projects,
 development of PPPs,
 support for bonds
 (technical assistance)

Project-level

 ACGF provides concessional loan financing for green projects, and leverages partial cofinancing

Example outputs

To date, 30 knowledge products, 25 knowledge events, and 4 trainings organized by ACGF with partners

To date, 30 pipeline projects or concepts supported with structuring or technical support (20 in 2022) To date, approved \$1.9 billion in ADB project financing, and \$504 million earmarked for cofinancing by 4 ACGF partners

Cofinancing Partners































Energy Transition Sector Development Programme in Cambodia

ADB's first comprehensive policy reform package for the energy sector in Cambodia covering both renewable energy and energy efficiency

11

Policy Component

Development of New Policies Supporting the Energy Transition

Asian Development Bank (\$40 million loan)

ASEAN Infrastructure Fund (\$10 million loan)

\$50 million USD

Technical Assistance Grant of US\$1.70 million to support:

- Program Management Unit of Executing Agency (MME)
- Design of additional policy actions for inclusion under subprogram 2
- ➤ Due diligence of project investment components planned for inclusion under subprogram 2
- > Improve gender aspects of the program

Project Component

Output 1 - Battery Energy Storage System

Climate Investment Funds SREP Grant (\$2.3 million)

Climate Investment Funds SREP Concessional Loan (\$6.0 million)

ACGF Green Climate Fund (\$12.0 million)

Government Counterpart Funds (~\$3.7 million)

~\$24 million USD

Output 2 – Energy Efficient Streetlighting

Climate Investment Funds SREP Grant (\$2.7 million)

Government Counterpart Funds (~\$0.3 million)

~US\$3 million USD





Philippines Climate Change Action Program (CCAP)

- Philippines critically vulnerable to climate change, 4th on Global Climate Risk Index for most affected by extreme weather events over the past two decades.
- Low per capita emissions but increasing year-on-year, energy and transport sectors contribute majority.
- Challenge: misaligned national and sector climate actions, including regulatory barriers affecting clean energy and transport

ADB's first dedicated climate change policy-based loan will support implementation of the Philippines Nationally Determined Contribution (NDC).

Three reform areas

Strengthening planning, financing and institutional linkages for climate action

Enhancing **resilience** to climate impacts

Strengthening low-carbon pathways

Outcome

Actions to transform key sectors towards a climate resilient and low carbon economy increased and intensified

CCAP promotes policy reforms for mitigation in energy and transport, and will contribute to accelerate uptake of renewable energy capacity in the country





Delivering Regional Technical (TA) at Scale

There is no silver bullet ...

Building pipeline requires integrated action across multiple fronts



Enabling environments

Place policy, regulatory and institutional frameworks to drive decision making and attract green investment



Upstream planning

Plan and identify potential for green investment and integrate climate risk



Origination

Demonstrate, test and trial new technologies and approaches, innovative finance concepts and models



Downstream project preparation

Bring early ideas to project preparation and beyond



Capacity

Awareness and capacity to design projects at subnational levels, in SOEs and in line ministries

Accelerating Climate Transitions through Green Finance in Southeast Asia

- \$15 million regional TA facility
 - ... to leverage \$750m in climate finance by 2029
- Mobilizes public and private finance to support commitments under the Paris Agreement (including NDCs) and the SDGs
- Generates climate pipelines for Southeast Asia
- Enables client partnerships with ADB's sector, country,
 PPP and private sector teams
- Funded under ASEAN Catalytic Green Finance
 Facility (ACGF) and GCF





Thank you!