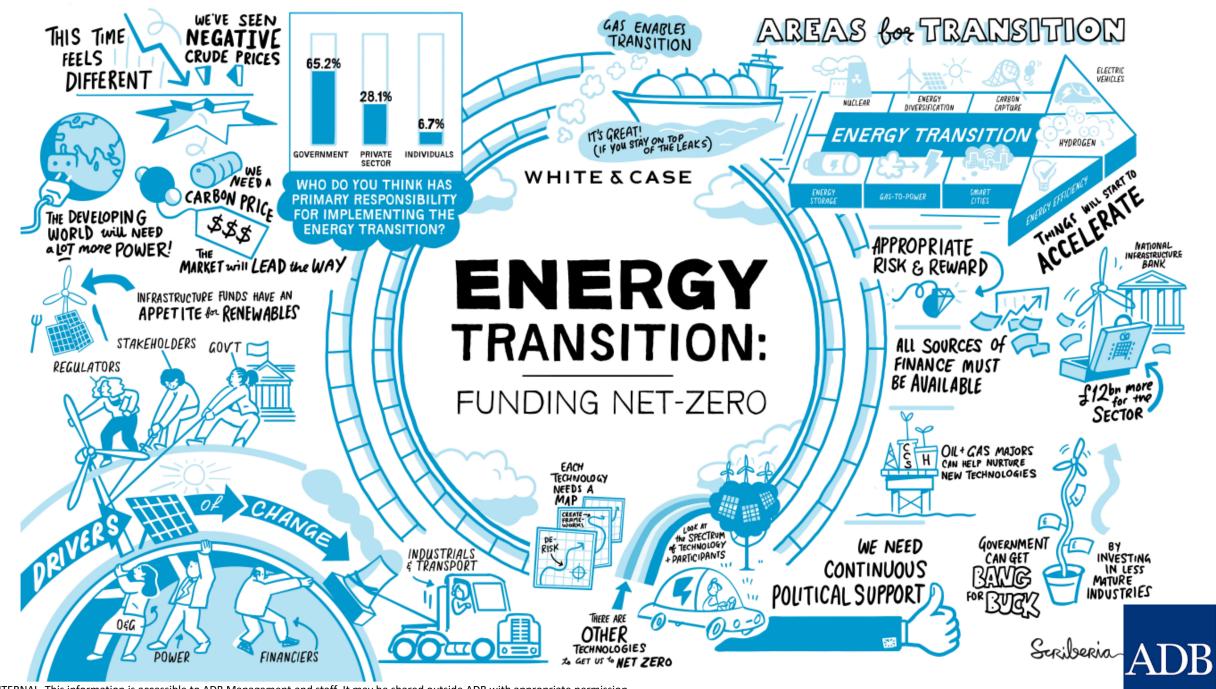


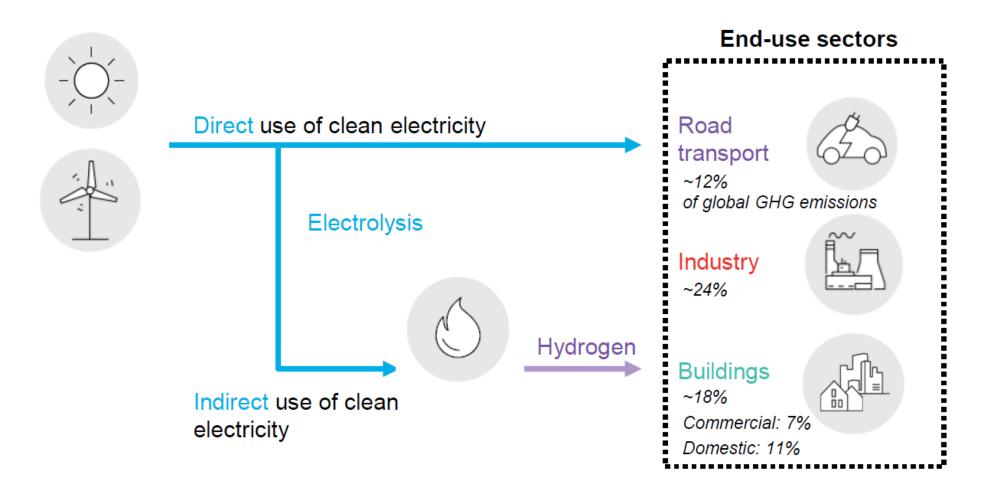
Pradeep Tharakan

Unit Head, Sovereign Energy Operations, Greater Mekong Subregion, Southeast Asia





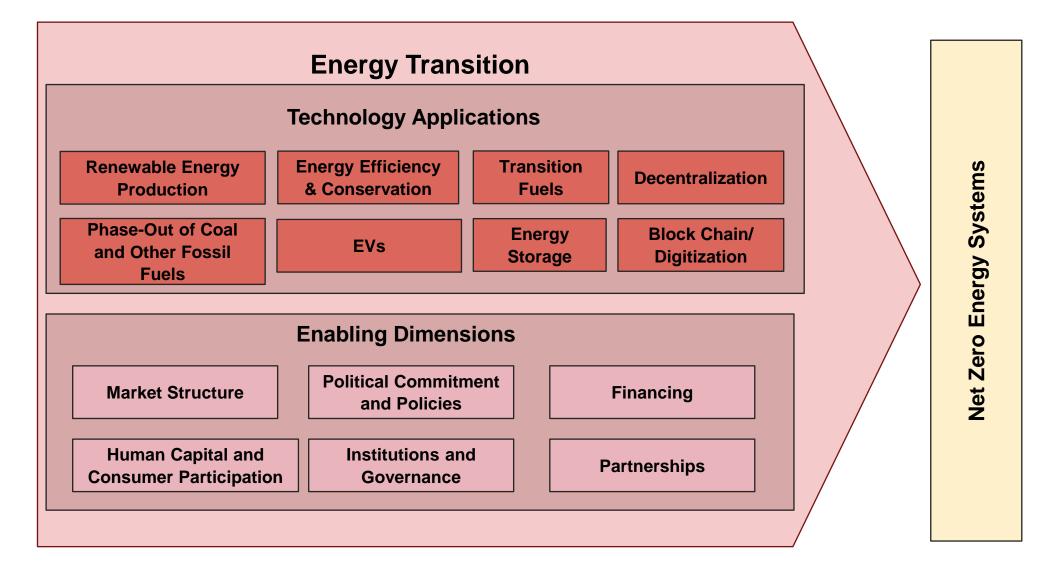
The transition needs to start with the power sector...



... which should drive decarbonization of other sectors with the view of achieving net-zero emission by mid-century









ASIAN DEVELOPMENT BANK AT A GLANCE

ADB is a multilateral development institution with 68 member countries, focused on eliminating poverty in Asia and the Pacific. Our operations are guided by 7 operational priorities and 3 approaches



Addressing remaining poverty and reducing inequalities



Accelerating progress in gender equality



Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability



Making cities more livable



Promoting rural development and food security



Strengthening governance and institutional capacity



Fostering regional cooperation and integration





At least 75% of number of ADB committed operations by 2030, total of \$80 billion from ADB's own resources from 2019 to 2030

KEY APPROACHES



Expanding private sector operations



Catalyzing and mobilizing financial resources for development



Strengthening knowledge services



1/3 of number of ADB committed operations by 2024

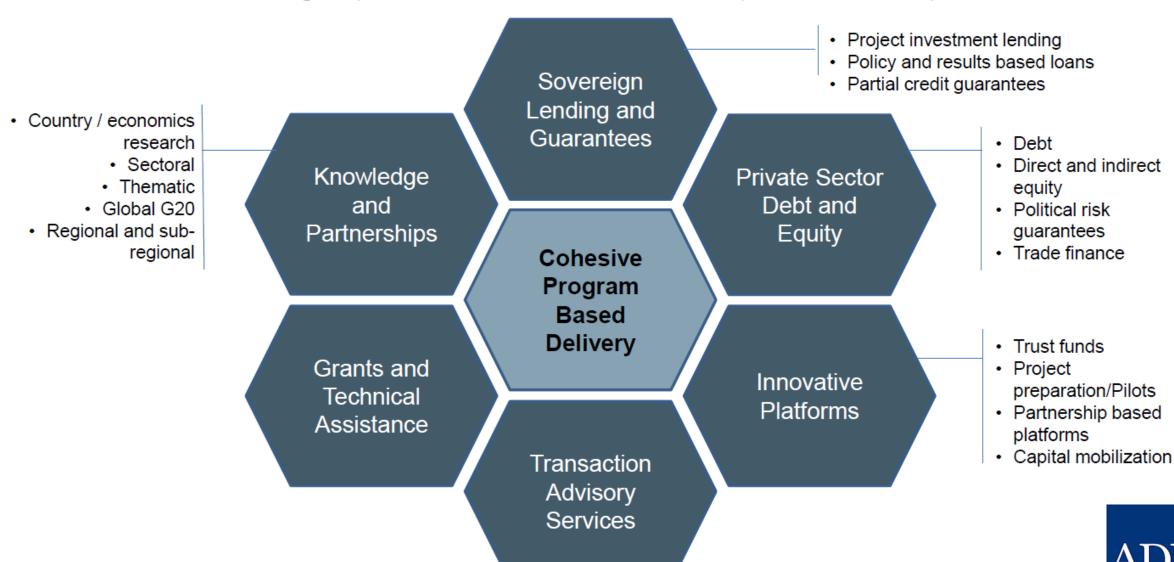


\$1 in private sector operations financing matched by \$2.50 of cofinancing



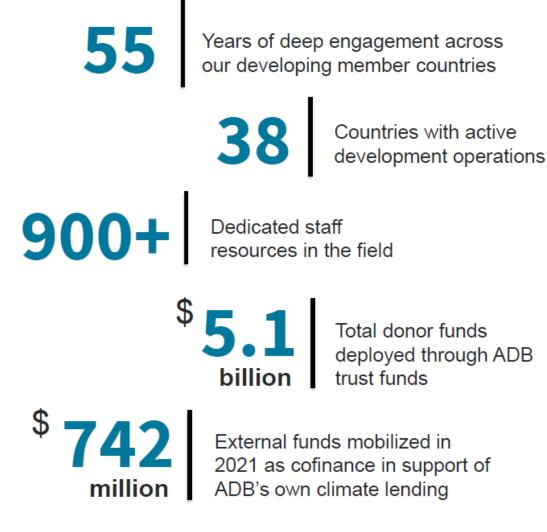
WHAT WE DO

ADB utilizes a wide range of products and services to affect a comprehensive development mandate



DELIVERING A WIDE-REACHING DEVELOPMENT MANDATE

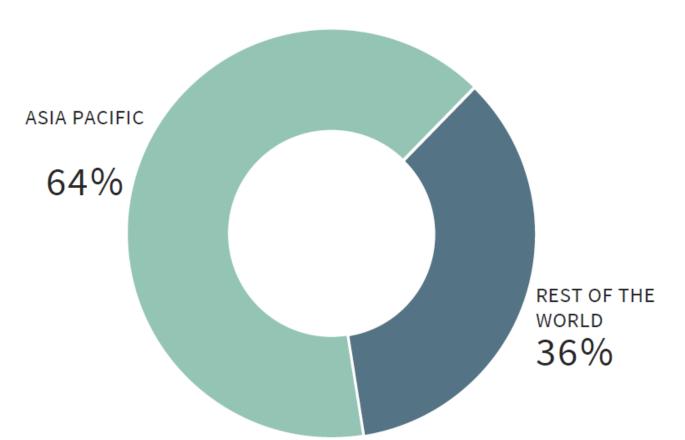
ADB has established a deep network and track record across Asia and the Pacific, built on decades of deep engagement, with extensive experience in deploying donor funds, and leveraging impacts through external fund mobilization





THE BATTLE AGAINST CLIMATE CHANGE WILL BE WON OR LOST IN ASIA AND PACIFIC

GHG emissions under Business-as-Usual scenario (2060)



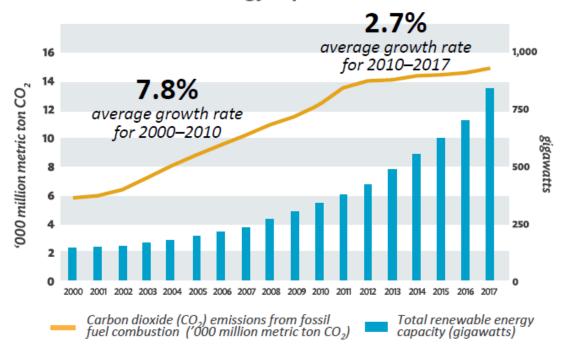
- Per capita emissions rising
- Reliance on coal-fired power remains significant
- Harder-to-abate sectors shifting to Asia
- Highly vulnerable to the impact of climate change



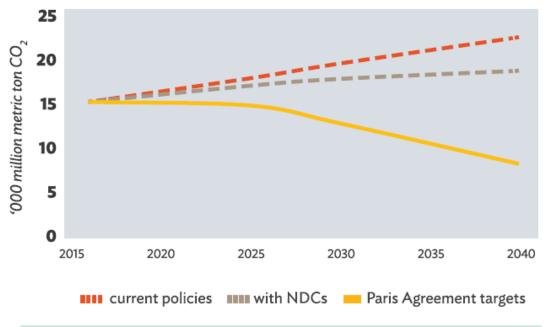
Source: ESCAP (2021) Is 1.5oC in reach for the Asia-Pacific Region?

CURRENT EFFORTS IN ASIA AND THE PACIFIC ARE INSUFFICIENT

Carbon dioxide emissions from fossil fuel combustion and total renewable energy capacities in ADB DMCs



The Emissions Gap in Asia and the Pacific Outlook vs. Paris Agreement Target



* CO₂ emissions from fossil fuel combustion for Asia and the Pacific for scenarios (Current Policies, New Policies, and Sustainable Development) in World Energy Outlook 2018

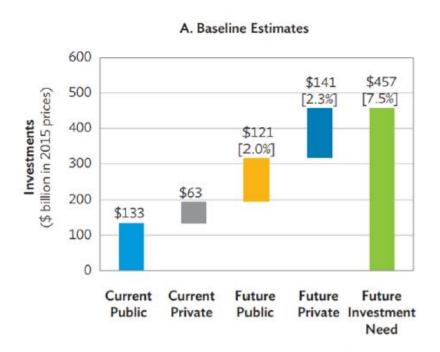
CO₂ emissions from Asia and the Pacific are rising, but the region has also made strides in investing in renewable energy Despite investments in clean energy, the current commitments in NDCs will not take us to the temperature goals of the Paris Agreement.

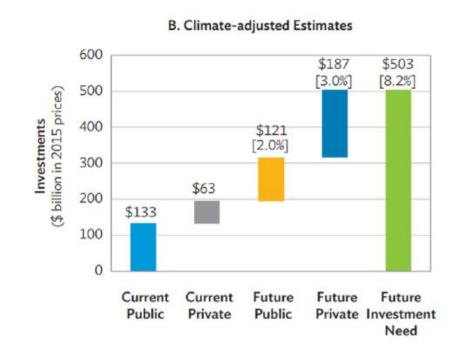


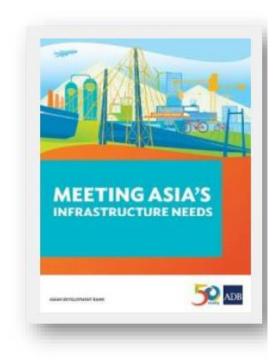
CLIMATE INVESTMENTS IN ASIA MUST GROW

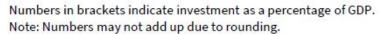
Developing Asia will need to invest \$26 trillion from 2016 to 2030, or \$1.7 trillion per year, if the region is to maintain its growth momentum, eradicate poverty, and respond to climate change (climate-adjusted estimate).

Meeting the Investment Gaps: 25 Selected ADB Developing Member Countries,* 2016–2020 (annual averages, \$ billion in 2015 prices)



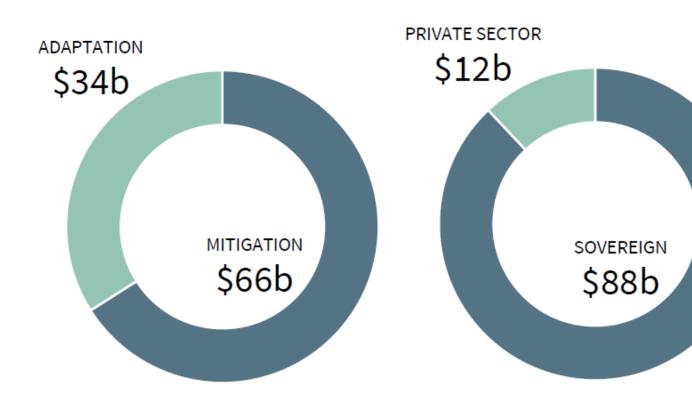








ADB IS ASIA AND THE PACIFIC'S CLIMATE BANK





"The climate crisis is worsening daily, prompting many to call for increased climate finance. We are taking action to meet this call by elevating our ambition to \$100 billion in cumulative climate finance from our own resources by 2030."

\$100 billion

ADB 2030 CLIMATE AMBITION

- ADB President Asakawa (COP26)



ADB's Approaches to Climate Finance Mobilization

Deploying Concessional Funds

Internally managed resources (ADB donor trust funds and special funds)

- Climate Change Fund (CCF)
- Clean Energy Financing Partnership Facility (CEFPF)
- Urban Climate Change Resilience Trust Fund (UCCRTF)
- Asia-Pacific Climate Finance Fund (ACliFF)
- High Level Technology Fund (HLTF)
- Others with bilaterals
 - » Ireland Trust Fund for Building Climate Change and Disaster Resilience in Small Island Developing States

Multilateral funds

- Climate Investment Funds (CIF)
- Global Environment Facility (GEF)
- Green Climate Fund (GCF)

Maximizing Market Mechanisms

- Upfront carbon finance
 - » Future Carbon Fund
 - » Japan Fund for the Joint Crediting Mechanism
- Article 6 Support Facility
 - » Carbon Pricing / Carbon Markets
 - » Article 6 of the Paris Agreement
 - Carbon Market Technical Support Facility
 - » Joint Crediting Mechanism
 - » domestic emissions trading Systems
 - » Lifecycle Management of Fluorocarbons
- Green and Climate Bonds
- ASEAN Catalytic Green Finance Facility

Catalyzing Private Capital

- Direct project finance (lending, guarantees, syndications), and equity investment
- Public private partnerships: (PPPs) working with client DMCs across stages of PPPs

Facilities for Private Sector

- Canadian Climate Fund for the Private Sector in Asia (I and II)
- Australian Climate Finance Partnership
- ADB Ventures Financing Partnership Facility





Scaling-up Climate Finance by Leveraging Private Sector Investments



ASSURE: Scaling-up Renewables + Storage in ASEAN

ADB provides End-to-End Support for Renewables in Southeast Asia through the ASSURE program

Lack of well-structured and efficiently procured projects

Transaction advisory services
(Office of Public-Private Partnership, OPPP)

Need to enhance credit worthiness of off-takers

Strengthen SOE financial management through policy dialogue, set-up guarantees, and results-based loans (Southeast Asia Department, SERD)

Need for competitive funding mechanism

Private Sector Funding from ADB (Private Sector Department, PSOD) and Access to Climate Financing for Sovereign and Private Investments



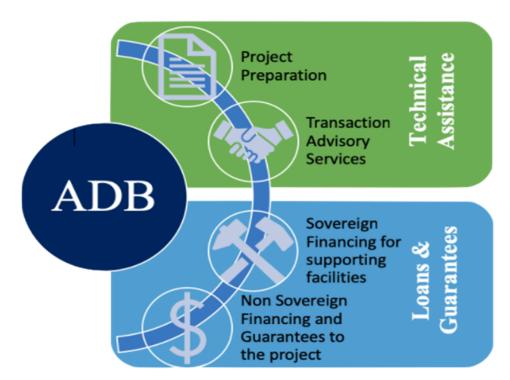
ASSURE: Scaling-up Renewables + Storage in ASEAN (cont'd)

ADB has initiated a new regional program called the ASEAN Scaling UP Renewables + Storage initiative (ASSURE). ADB will work with ASEAN countries to deploy renewables on a large scale by supporting project development and facilitating private sector participation.

Detailed Feasibility Analysis

End-to-end Tender Process
Management

Financing (Sovereign, Private
Sector and Climate Finance)



Work in ASEAN: solar PV auctions under **national solar park project** and solar PV+storage in Cambodia (planned); ground-mounted solar PV auction in Indonesia (early discussions); offshore wind power in Thailand (pre-feasibility study);

ASEAN Catalytic Green Finance Facility (ACGF)

Regional, country-owned \$1.7 billion facility under **ASEAN Infrastructure Fund,** administered by ADB

CAPITAL

\$1.7 billion in cofinancing pledged for green infrastructure

ACGF

2019-2021

INTERNAL **CAPACITY**

Run by Southeast Asia Innovation Hub & specialist ACGF **Project Structuring** team

GREEN PIPELINE

25 green projects & concepts being structured



GREEN PROJECTS

AIF Board approval of 3 ACGF-eligible projects + 1 project with green co-benefits



KNOWLEDGE

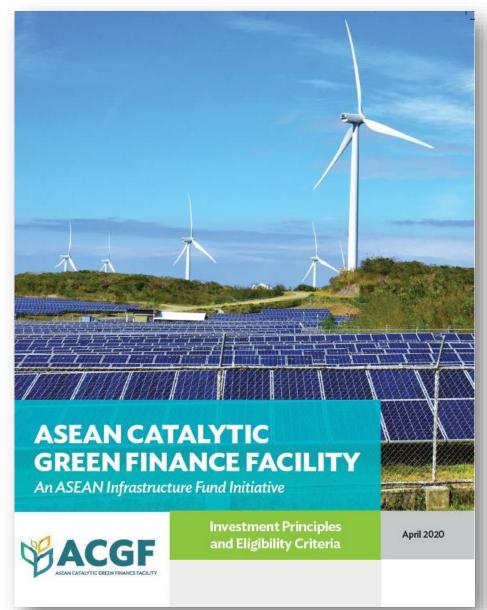
Developing platforms and knowledge products on green recovery, green infrastructure pipelines, innovative finance

PARTNERSHIPS

13 co-financing & knowledge partners



ASEAN Catalytic Green Finance Facility (ACGF) (cont'd)



ACGF Eligibility Criteria: linking funds to green impact

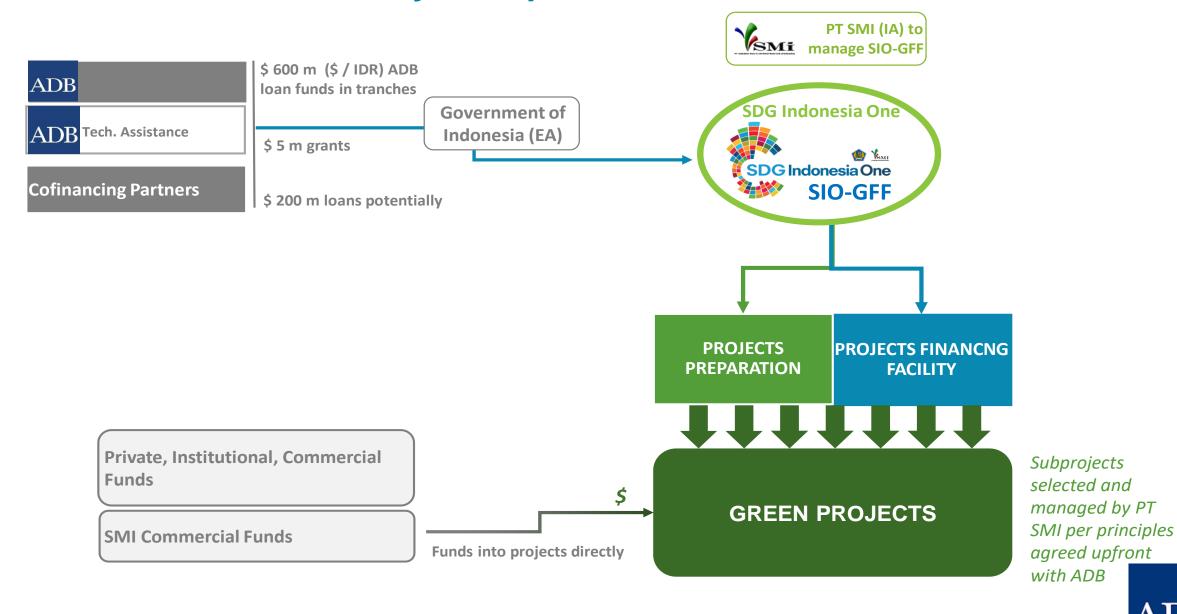
- All green projects must show:
 - Contribution to climate change mitigation and / or climate change adaptation

PLUS

- Contribution to other environmental objectives (e.g. air quality, resource use efficiency, biodiversity etc.)
- Combines use of climate finance + impact indicators (e.g. GHG reductions)
- Links funding to performance green projects vs. priority green projects
- Additional criteria: bankability, private sector mobilization, green jobs



Indonesia SDG 1 – Facility to Expand Access to Finance



Cambodia Energy Transition Sector Development Program

To support the roll-out of energy efficiency opportunities, ADB and the Ministry of Mines and Energy are preparing an Energy Transition Sector Development Program for approval in 2022

Policy Component Project Component Policy Matrix Energy Efficiency Revolving Fund Output 2 **Policy Action 1** – National Energy Efficiency Policy (2022)Investments in Public Infrastructure **Output Policy Action 2** – Power Development Masterplan (2021-2040)**Battery Energy Storage System to Smooth** Output 3 **Out Renewable Energy Production Policy Action 10** – Other policies **Streetlight Infrastructure to Support Green Tourism**

Loans, Grants, and Technical Assistance

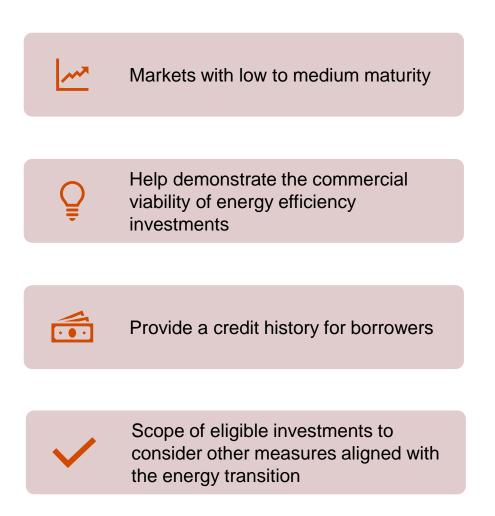


Green Climate Fund

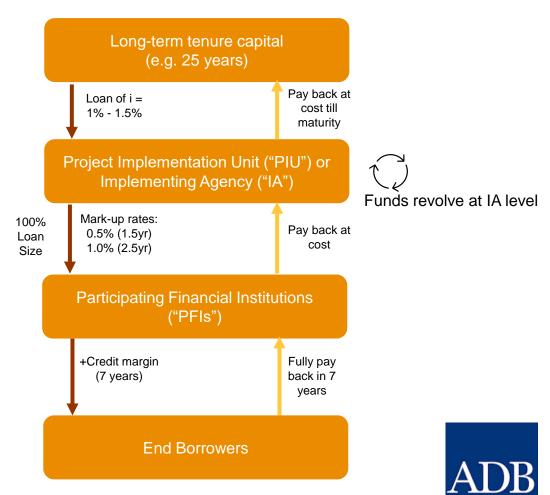


Cambodia Energy Transition Sector Development Program – EERF

An Energy Efficiency Revolving Fund (EERF) would provide access to financing to private entities to facilitate their investments in energy efficiency interventions



Revolving Fund Basic Design





Themes/Activities identified under the ETTF

Sustaining GMS cooperation on Regional Power trade; planning and executing future bilateral or multilateral interconnections, including a multi-country pilot.

Technology capacity Building Programs on Renewable Energy, Energy Storage (BESS and pump storage hydro) in improving grid stability; leveraging electric vehicles.

Accelerating Energy Efficiency programs to promote more competitive industries through energy cost savings.

Training on Green financing and Green bonds to support GMS countries in raising finance for their transition to cleaner energy.



Energy



Training plan timeline over the next year







6 July 2022

