

*The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.*



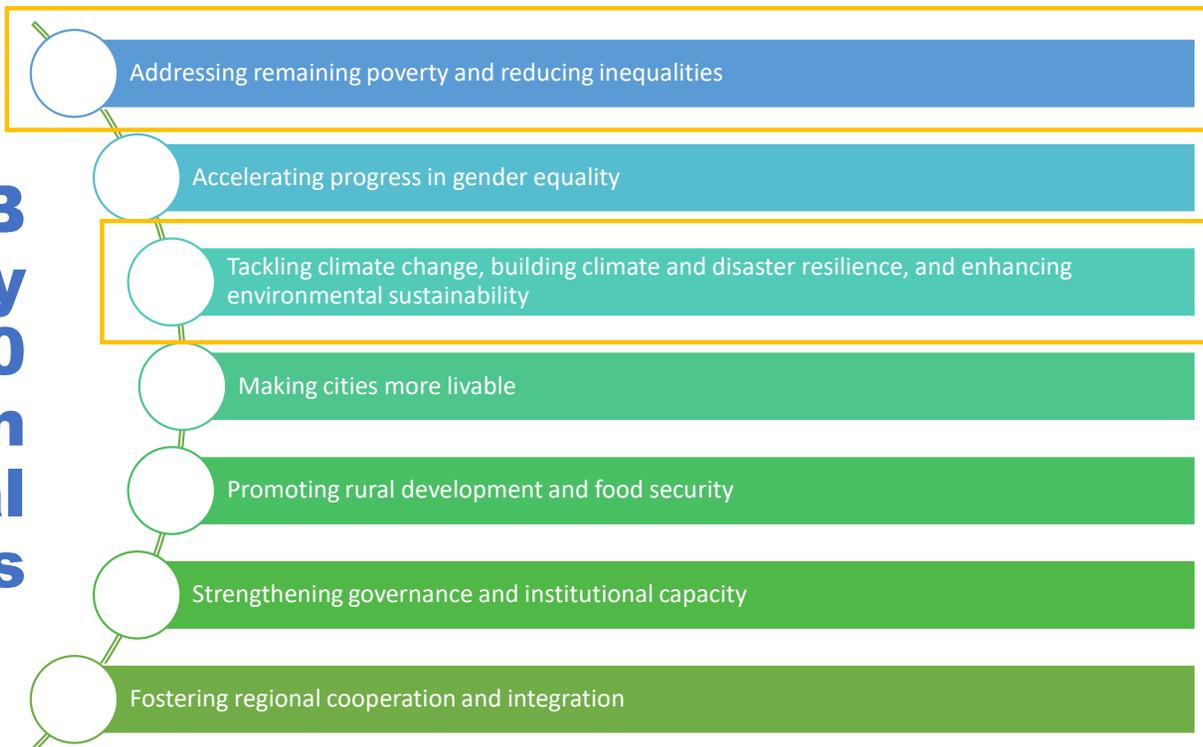
# ADB Support for a Just and Affordable Energy Transition

Toru Kubo  
Director for Energy, Southeast Asia Department  
Asian Development Bank

Indonesian MOF-ADB International Climate Change Conference  
22 July 2021

# Guiding Principles of ADB Lending

## ADB Strategy 2030 Seven Operational Areas



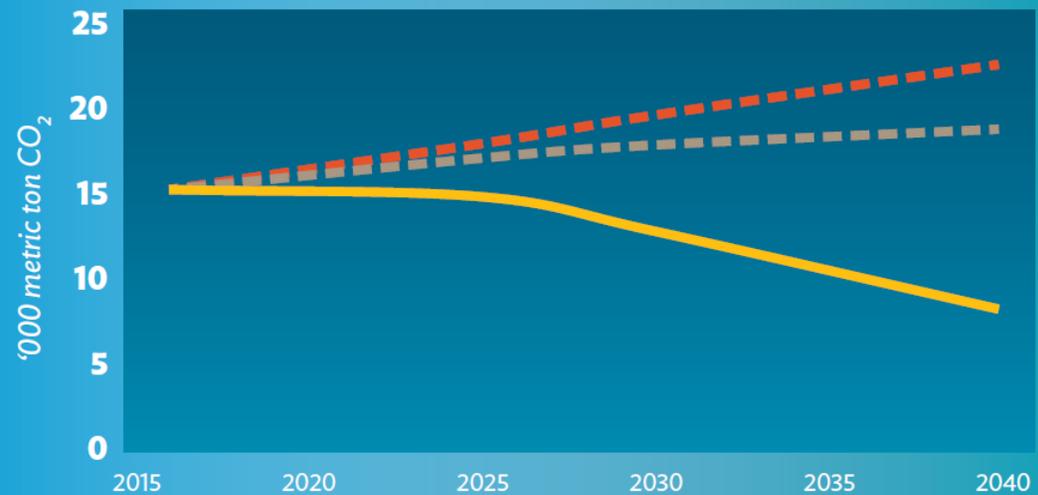
**At least 75%**  
of ADB's committed operations will support climate change mitigation and adaptation by 2030



**\$80 billion**  
from 2019 to 2030  
to combat climate change

# The Alarming Gap: Asia-Pacific

## Outlook vs Paris Agreement Target



■ current policies ■ with NDCs ■ Paris Agreement targets

\* CO<sub>2</sub> emissions from fossil fuel combustion for Asia Pacific<sup>3</sup> for scenarios (Current Policies, New Policies, and Sustainable Development) in World Energy Outlook 2018

## Long-Term Planning for Low-Carbon Transition

- ADB will support developing member countries to develop **long-term roadmap and planning** for low-carbon transition in the energy sector including 3 milestones
  - Decreasing carbon intensity
  - Peaking of carbon emissions
  - Achieving carbon neutrality
- Energy sector roadmaps will dovetail into the development of national long-term strategies (LTS) which establish **sustainable, equitable, affordable, low-GHG and climate-resilient development pathways**
- The roadmap will deploy appropriate technologies:
  - Low-carbon technologies (energy efficiency, renewable energy)
  - zero carbon technologies (carbon capture, utilization and storage combined with fossil fuels)
  - negative emission technologies (sustainable bioenergy with carbon capture and storage)
- ADB will promote the development of **competition and private sector participation through market-based mechanisms**

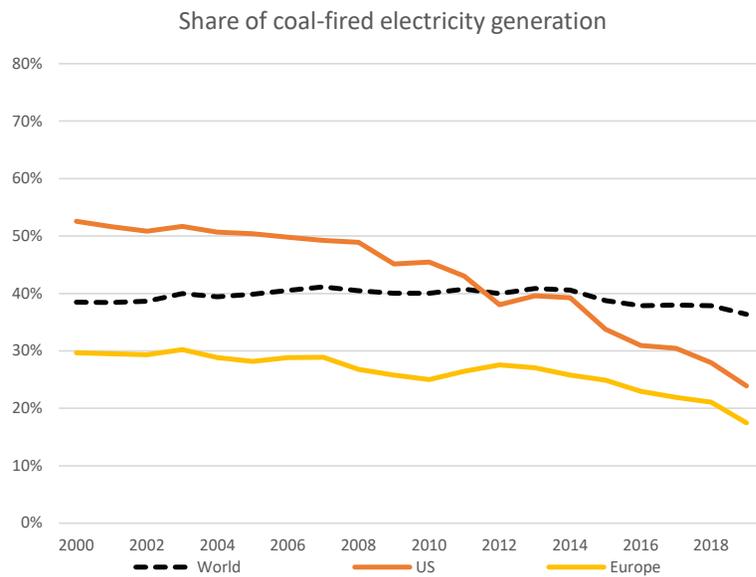
# Energy Transition Mechanism:

## Accelerating the Transition from Coal to Clean Energy

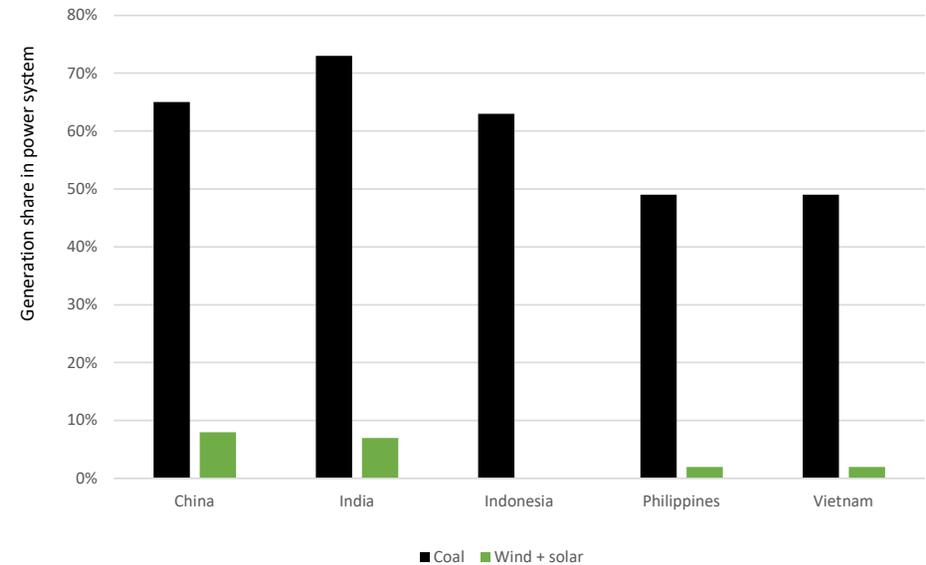
- Legacy coal-fired power plants constitute the single largest source of greenhouse gas (GHG) emissions from human activity. Without addressing them, **we will miss the Paris Agreement targets**.
- Renewable energy costs are rapidly declining. It is estimated that in the next 10–15 years, it will be more costly to operate **existing** coal plants compared to the levelized cost of new renewable energy plants. However, in many developing countries the coal plants have **secure long-term power purchase agreements**, so **they will not be stranded**. Hence, **a mechanism is needed**.
- ADB is exploring the Energy Transition Mechanism (ETM), originally proposed under the World Economic Forum umbrella in 2018, that is a **replicable and scalable market-based model** to help accelerate the transition from coal to clean power.
- Removing coal plants that are so dominant in these grids can **unlock significant investment** in renewables, storage, hydrogen, electric vehicles, and other clean technologies.
- **Technical and financial feasibility work is underway** focusing on three Southeast Asian countries with high share of coal power – Indonesia, Philippines, and Viet Nam. The scheme could be applicable to other countries with similar market characteristics.
- ADB will help crowd in **public and private sector partners**, support a **just transition** for affected communities, ensure **climate credentials**, and harness **carbon offsets**.
- Subject to confirmation of feasibility and interest of both fund contributors and partner countries, this could lead to a high-profile announcement at COP26, with the first country fund launch to follow in 2022.

# Coal-power has continued to dominate in Asian developing countries

Share of coal-fired power has dropped in US and Europe...



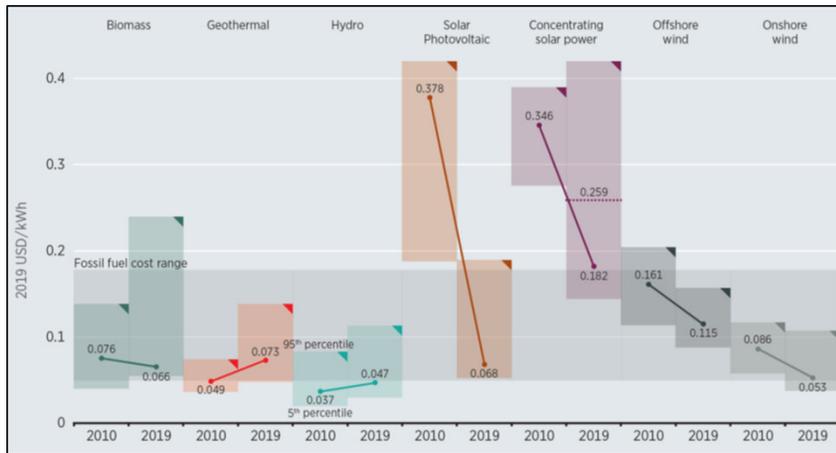
...but remains very high in developing Asia (2019)



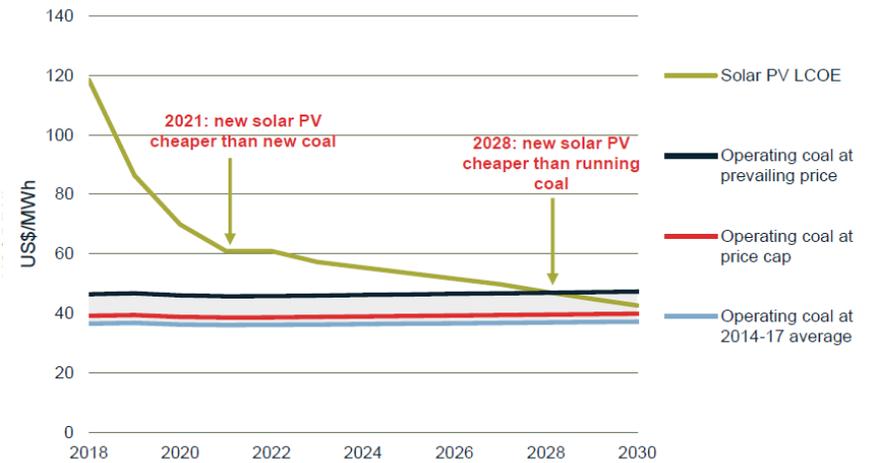
Source (left): Carbon Action Tracker 2020 and calculations based on IEA Data  
 Source (right) : BP "Statistical Review 2020"; IPCC "Special Report on Global Warming of 1.5°C"  
 D. Kanak. 2021. [How to accelerate the energy transition in developing economies](#). *World Economic Forum*. 25 January.

# Coal-fired power will become more expensive than renewables

LCOE for Renewables Continues to Drop . . .



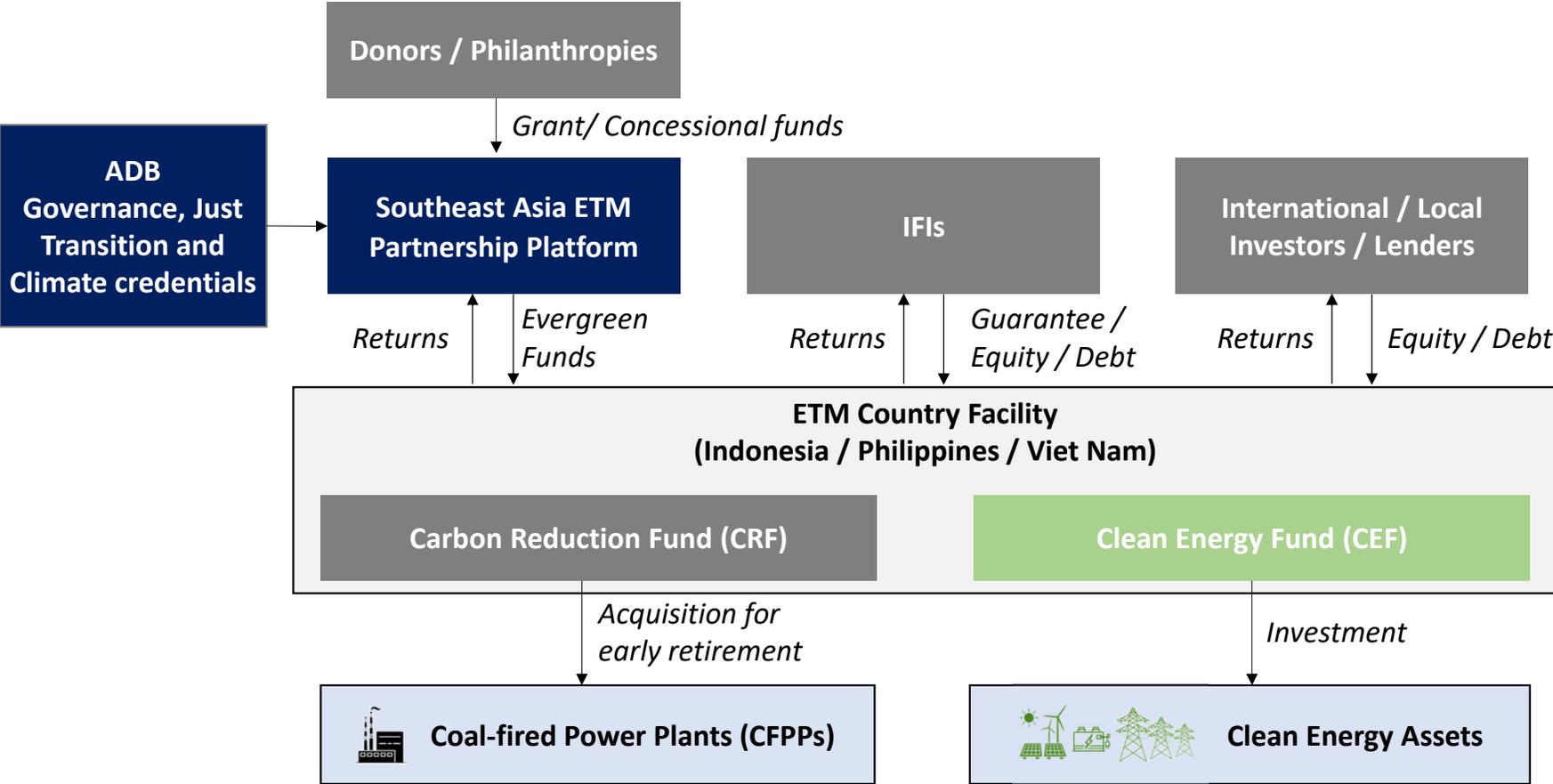
. . . Leaving Coal less competitive



**There is both an environmental and economic imperative to address the coal power conundrum.**

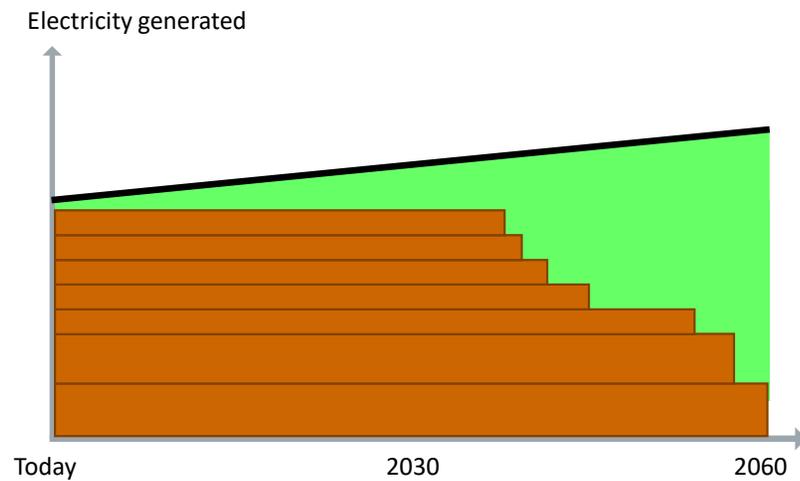
Source (left): IRENA, 2020  
 Source (right): Carbon Tracker Initiative, 2018

# ETM Structure (Draft)



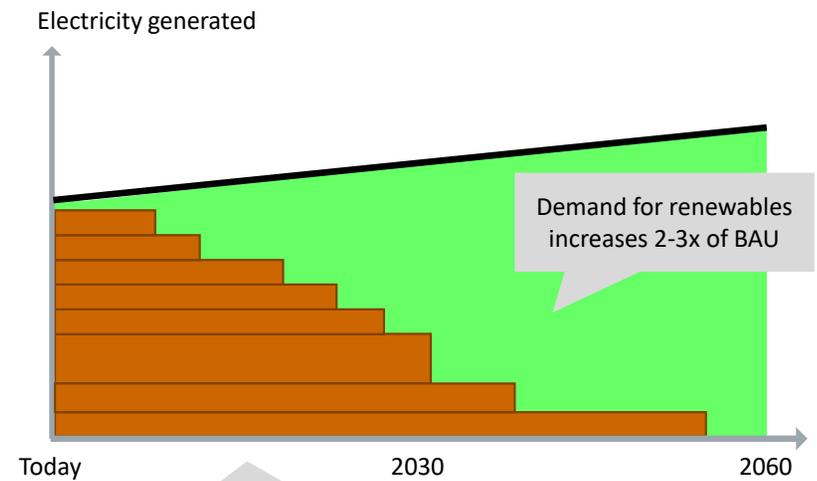
# Accelerating the phase out of coal-fired power can unlock clean energy investment, reduce emissions, and lower generation costs in the long run

Business as usual

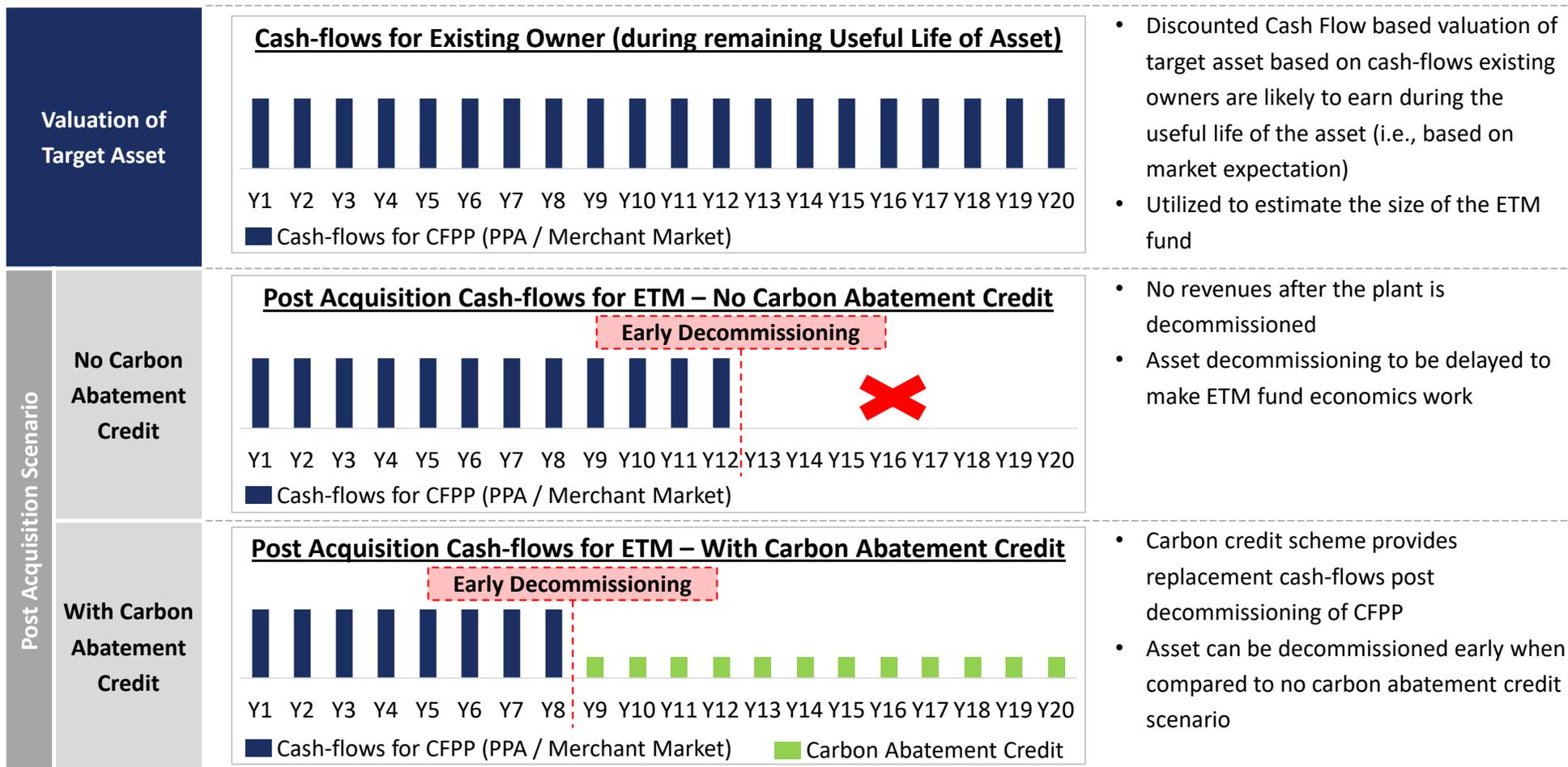


- Total energy demand
- Coal-fired assets generation and retirement over time
- Renewable energy generation over time

With the Energy Transition Mechanism



## Example: Business-as-usual and with-ETM cash flow for power plants



## Ongoing Global Dialogue on Coal Phase-out and sample National Initiatives

<b>World Economic Forum (ETM Concept Introduction)</b>	<ul style="list-style-type: none"> <li>The ETM concept was first proposed in 2018 by Donald Kanak, Chairman, Prudential Insurance Growth Markets and Co-Chair of Steering Group of the World Economic Forum, Sustainable Development Investment Partnership for ASEAN at: <a href="#">How to accelerate the energy transition in developing economies.</a></li> </ul>
<b>Powering Past Coal Alliance</b>	<ul style="list-style-type: none"> <li>Created in November 2017 to accelerate the phase out of coal-fired power plants. Founding members include Canada, UK and several other governments and private entities. ETM has been discussed in the workshops and annual summits.</li> </ul>
<b>G7 Commitment</b>	<ul style="list-style-type: none"> <li>In May 2021, the G7 reaffirmed their stance to end the support for new overseas coal development. The group members have committed to de-carbonize their energy sectors in the 2030s.</li> <li>The US, the UK, Canada &amp; Germany, in June 2021, pledged a USD 2 Billion support to the Climate Investment Funds, part of which will go to financing coal phase out - ( Accelerating Coal Transition window – ACT)</li> </ul>
<b>Germany</b>	<ul style="list-style-type: none"> <li>The coal exit law was adopted in July 2020 which mandates the retirement of the German coal fleet by 2038.</li> <li>The government has planned investments of EUR 40 BN in the affected areas to promote economic activity.</li> </ul>
<b>Chile</b>	<ul style="list-style-type: none"> <li>In June 2019, partnered with the major power producers in the country to retire its entire coal fleet by 2040 as part of its larger effort to become carbon neutral by 2050. Financing support from the Inter-American Development Bank.</li> </ul>
<b>South Africa</b>	<ul style="list-style-type: none"> <li>Announced in 2020 that it intends to become a net zero carbon economy by 2050.</li> <li>A Presidential Climate Change Coordinating Commission has been set up to advise the government on how to ensure a just and fair transition away from coal. AfD engaged in policy dialogue.</li> </ul>
<b>Philippines</b>	<ul style="list-style-type: none"> <li>Philippines announced a moratorium in October 2020 on new coal-fired power plants.</li> </ul>
<b>Indonesia</b>	<ul style="list-style-type: none"> <li>PLN announced in May 2021 that it is aiming to phase out coal-fired power as part of its larger efforts to achieve carbon neutrality by 2060.</li> </ul>

# ETM Timeline

2021: Due diligence, Consultation, Structuring, Declaration of intent

**Prefeasibility**  
Phase 1: 3 country  
Prefeasibility Analysis  
begins  
Mar 2021



**Partnerships**  
Form partnerships  
with possible fund  
manager and  
founding investors  
May 2021



**Technical Feasibility**  
Phase 2: legal,  
financial  
assessment  
August 2021



**CRF Concept & Principle Terms**  
Marketing document to secure letter  
of intent for investments and form  
the basis of fund info memorandum;  
Draft term sheet for first power plant  
transactions  
Oct 2021



**COP 26**  
Announcement of intent  
for fund launch and  
founding partners,  
potential 1<sup>st</sup> deals  
Nov 2021



2022: CRF launch, First close, First acquisitions; preparation of CEF and Just Transition facility

**CRF First close**  
Fund reaches first close  
Q2 2022



**First acquisitions**  
Fund closes first power plant  
acquisition deals  
Q2/3 2022



**G20**  
Indonesian leadership  
highlighted and  
momentum increased  
during G20 process  
Oct 2022

**COP 27**  
CRF close and first  
deals, call for CEF  
investments, launch of  
Just Transition facility  
Nov 2022



Mar  
2021

Apr

May

Jun

Jul

Aug

Sep

Oct

Nov

Dec

Jan  
2022

Apr

Jul

Oct

Jan  
2023

Thank you

