



ADB's Energy Transition Mechanism (ETM) and Partnerships

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Energy Transition Mechanism (ETM)

Background

- Legacy coal-fired power plants (CFPPs) constitute the single largest source of greenhouse gas (GHG) emissions from human activity. Without addressing them, **we will miss the Paris Agreement targets**. Accelerating the retirement of these plants that are dominant in grids in the Asia and Pacific region will not only abate emissions but also unlock significant investments in renewables, storage, hydrogen, electric vehicles, and other clean energy technologies.
- Renewable energy costs are rapidly declining. The cost of operating existing coal plants is expected to be higher than the levelized cost of new renewable energy plants in the next 10–15 years. However, in many developing economies, coal power plants have **secured long-term power offtake agreements**, to **avoid being stranded**. Hence, **an intervention is needed**.
- ADB launched the Energy Transition Mechanism (ETM), based on a concept originally proposed under the World Economic Forum umbrella in 2020¹, as a **replicable and scalable market-based model** to help accelerate the transition from coal and other fossil-based power and heat generation to clean and renewable energy sources.
- Retiring 50% of today's coal power plant capacity in Indonesia, Philippines and Viet Nam 10–15 years sooner could **reduce carbon dioxide emissions by approximately 200 million tons per year and 2–3 gigatons cumulatively**. The scheme could be replicated in other economies with high coal share and similar market barriers.
- ADB's role is to help crowd in **public and private sector partners**, support a **just transition** for affected communities, ensure **climate credentials**, and harness **carbon offsets**.

¹ Source: Kanak, Donald Perry (2020). [“How to replace coal power with renewables in developing countries”](#). World Economic Forum blog.

ADB's Energy Transition Mechanism (ETM)

Increasing momentum—theory to operationalization

2021

- ETM launch
- Japan's \$25M seed financing for ETMPTF

Indonesia ETM Country Platform launch on 14 Nov. 2022 during the Bali G20 by ADB and Indonesia's Ministry of Finance, with World Bank and Islamic Development Bank.



2023

- Agreement to retire Cirebon 1 CFPP ~7 yrs earlier
- New Zealand's \$25M ETMPTF contribution
- MOU with Singapore and GEAPP on the \$2B Transition Finance Platform (ETM FV)
- Approved \$500M CIF ACT concessional financing for Indonesia



ETM launch at UN Climate Change COP26, Glasgow on 3 Nov. 2021 by ADB with the Governments of Indonesia and the Philippines.

- Indonesia ETM Country Platform launch
- MOU signing for Cirebon 1, the 1st ETM transaction
- Germany's €30M ETMPTF contribution

2022



MOU signing between ADB, Monetary Authority of Singapore, and GEAPP for the Transition Finance Platform, at Dubai COP28 on 5 Dec. 2023.

ADB's Holistic 4P Approach Anchoring the ETM

People

Supporting just transition, protecting livelihoods and affordable electricity

- Just transition assessments from national to asset level, financing facility, and technical assistance
- Strategic environmental and social assessment and project safeguards
- Stakeholder engagement and communications

Policy

Supporting policies and regulations to accelerate energy transition

- Climate change policy programs
- Energy sector reform programs
- Sector analyses and advisory
- Policy-based and results-based loans

Power

Promoting scalable, market-based model for energy transition

- Investments in early retirement or repurposing of fossil-based heat and power plants, clean energy, storage and grid enhancement
- Technical, financial, and commercial analyses
- Transaction advisory

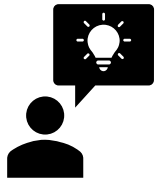
Partnership

Based on solid partnership with national and international stakeholders

- Partnering with governments; international financial institutions; private sector; commercial lenders and investors; philanthropies; CSOs
- Fund mobilization (ETMPTF, ETM FV, Indonesia ETM Country Platform, JETP, CIF ACT)

ETM's Phased Approach in DMCs

Illustrative examples of activities under each phase.



0 | PRE-FEASIBILITY STUDY

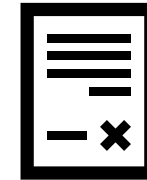
- Policy and regulatory assessment
- Multicriteria analysis to identify priority plants for retirement
- Financial and economic analysis

Country-level



1 | FULL FEASIBILITY STUDY

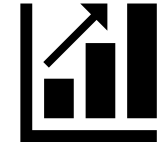
- Technical feasibility (grid impacts, replacement power, etc.)
- Policy and regulatory feasibility, policy-economy dynamics
- Broad just transition impacts
- Contractual and financial feasibility
- Strategic environmental and social assessment



2 | PILOT TRANSACTIONS

- Technical feasibility (grid impacts, replacement power, etc.)
- Financial and commercial modeling (termsheet)
- Just transition impacts at asset-level
- Project-level safeguards

Transaction-level

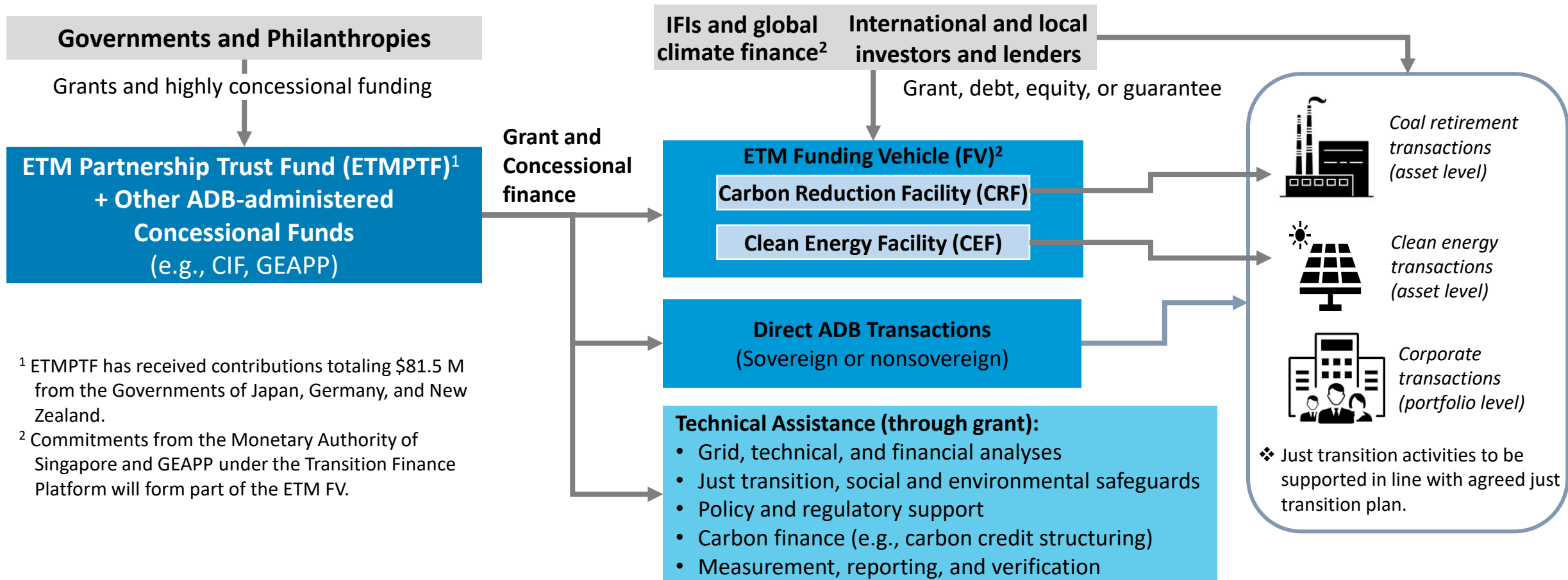


3 | SCALE UP

Replicating ETM transactions in other plants. This will only be done once the country has in place a robust policy framework that irreversibly commits them to a decarbonization path consistent with Paris targets.

The ETM Program Overview

- Accelerate the retirement or repurposing of coal-fired power plants using public and private finance through refinancing, acquisition, or sustainability-linked corporate loans
- Scale up investment in clean energy and energy storage
- Aim to achieve just and affordable transition, addressing impacts of coal retirement on people and communities



¹ ETMPTF has received contributions totaling \$81.5 M from the Governments of Japan, Germany, and New Zealand.

² Commitments from the Monetary Authority of Singapore and GEAPP under the Transition Finance Platform will form part of the ETM FV.

Operationalizing ETM

Updates on country workstreams

Indonesia

 Phase 2 | PILOT TRANSACTIONS

- Support for the Indonesia ETM Country Platform
- Completed studies (captive power, grid impact)
- MOUs for precedent transaction (Cirebon 1) signed in 2022 G20 and COP28; Legal documentation ongoing
- CIF ACT IP approved in June 2023 (\$500M concessional leveraging \$4.5B of cofinancing); \$1M JT TA approved in Jan. 2024; \$100m IPP program approved in March 2024
- Lead the support to the JETP Secretariat which manages the \$20B International Partners Group pledge

Philippines

 Phase 1 | FULL FEASIBILITY STUDY

- Progressed from pre-feasibility to full ETM study
- CIF ACT IP approved in May 2024 (\$500M concessional funding to leverage \$2.3B of cofinancing)
- Transaction Advisory for pilot ETM transaction for SOE-owned CFPP

Viet Nam

 Phase 0 | PRE-FEASIBILITY STUDY

- Ongoing discussions with government for launching a feasibility study
- Technical support for JETP ongoing

Kazakhstan

 Phase 0 | PRE-FEASIBILITY STUDY

- Completed pre-feasibility study
- Ministry of Energy agreed to proceed with full feasibility on combined heat and power transition

Pakistan

 Phase 0 | PRE-FEASIBILITY STUDY

- Completed pre-feasibility study with stakeholder consultation
- Awaiting government direction for full feasibility

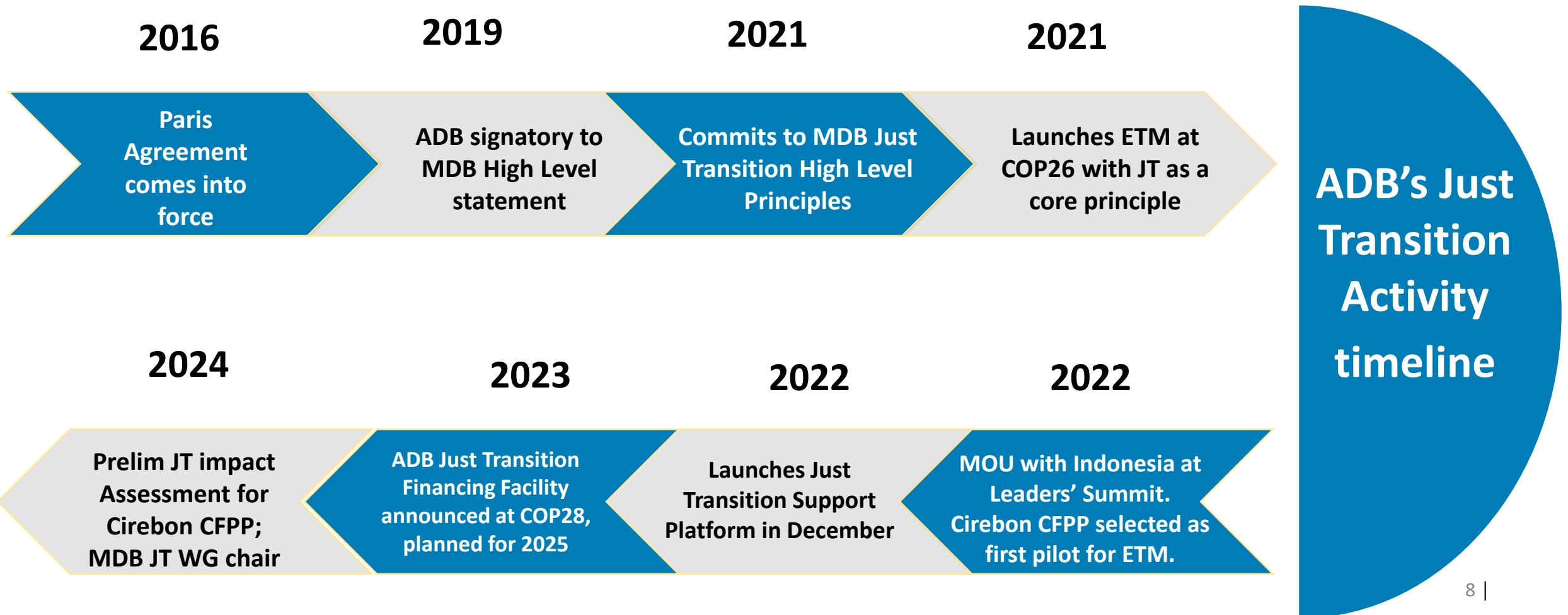
Expanding to new DMCs

- Exploring private sector transactions
- Preliminary discussions for combined heat and power efforts

\$ = United States dollar, ADB = Asian Development Bank, CIF ACT = Climate Investment Funds Accelerating Coal Transition, CFFP = coal-fired powerplant, COP = Conference of the Parties, DMC = developing member country, ETM = Energy Transition Mechanism, IP = investment plan, JETP = Just Energy Transition Partnership, JT = just transition, M = million, MDB = multilateral development bank, MOU = memorandum of understanding, NOL = no objection letter, SESA = strategic environmental and social assessment, SOE = state-owned entity, TA = technical assistance.

What is Just Transitions?

A multi-dimensional approach which **maximizes social, economic, institutional, and societal opportunities** of climate action while **minimizing and carefully managing negative consequences** on the **livelihoods of workers, businesses and local communities and economy** linked to fossil fuel economies, while also **managing the broader indirect and induced impacts**



MDB Just Transition High-Level Principles

Principle 1

Deliver climate objectives while enabling socio-economic outcomes, **accelerating progress towards both the Paris Agreement and the SDGs**

Principle 2

Move away from GHG emissions-intensive economic activities through financing, policy engagement, technical advice, and knowledge sharing, **including NDCs and long-term strategies**

Principle 3

Encourage support for a just transition by building on existing MDB policies and activities; plans deliver long-term, structural economic transformation

Principle 4

Seeks to mitigate negative socio-economic impacts and increase opportunities associated with the transition to a net zero economy

Principle 5

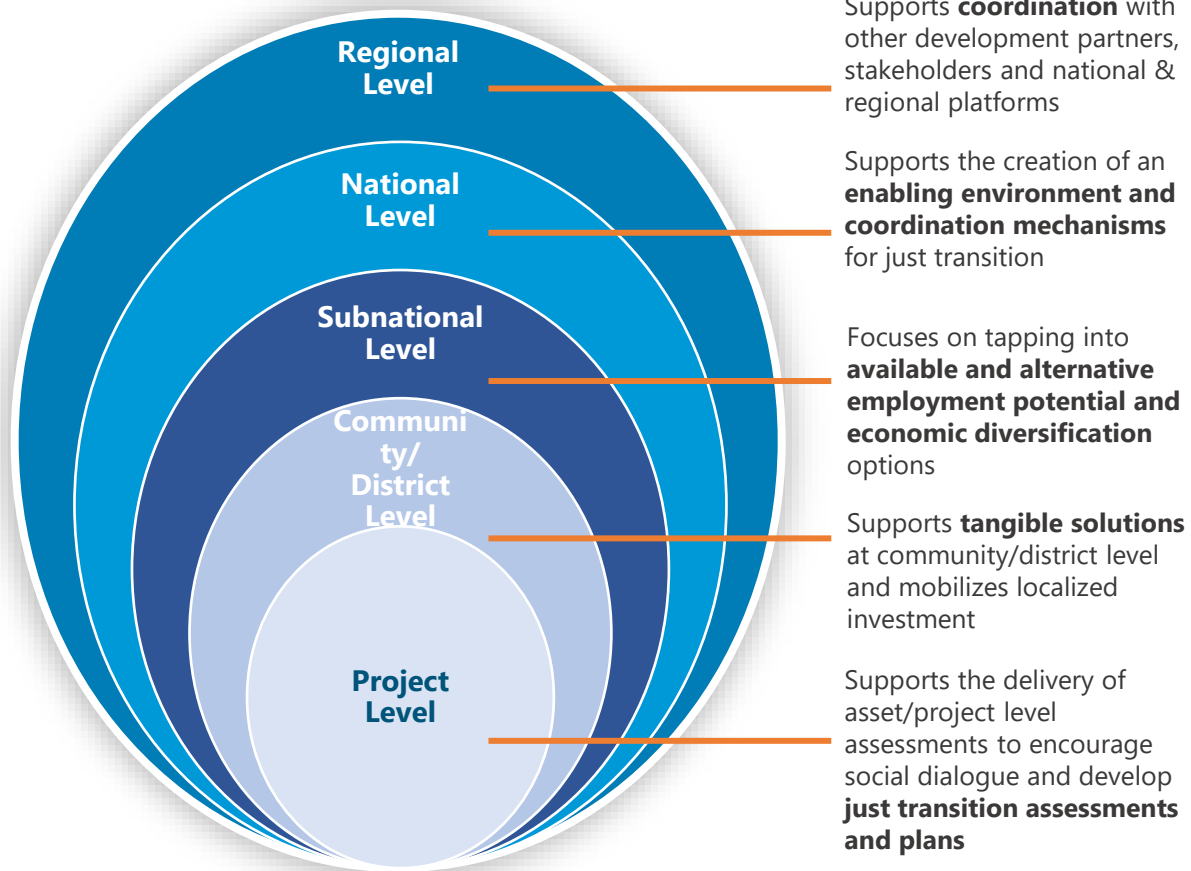
Transparent and inclusive planning, implementation and monitoring processes that involve all relevant stakeholders



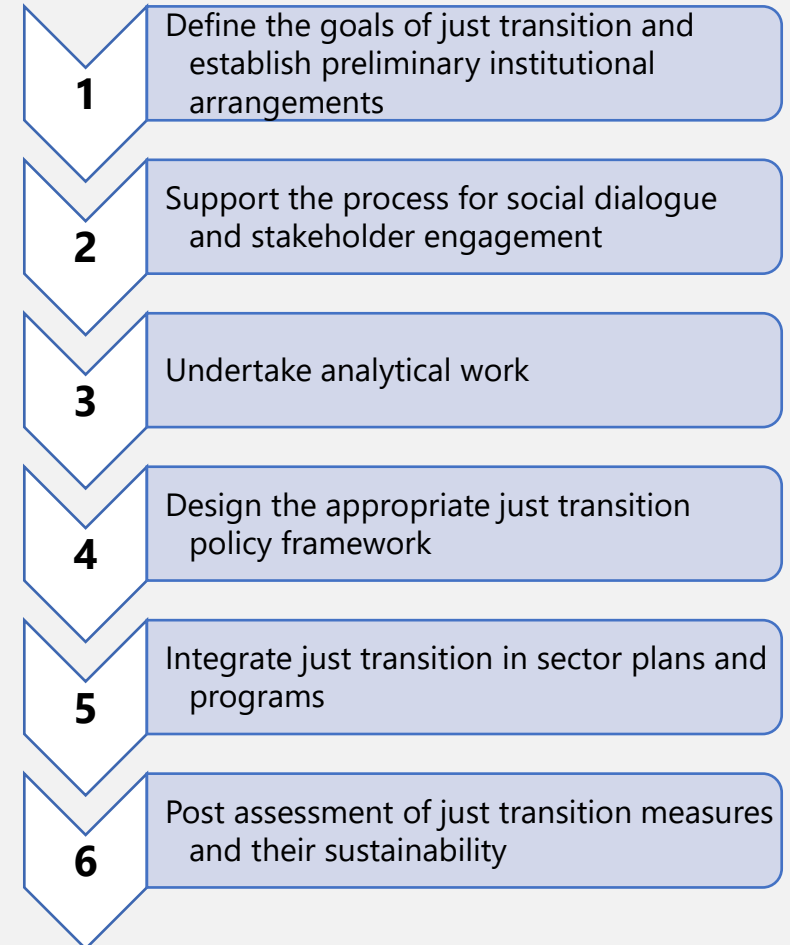
- Mobilizing resources to support countries through dedicated technical assistance and financing
- Aligning relevant initiatives and programs, and delivering just transition support through operations
- Mainstream just transition in ADB's operations, policies, and strategies
- Providing knowledge and collaborating with other stakeholders and development partners

ADB's Just Transition Support to DMCs

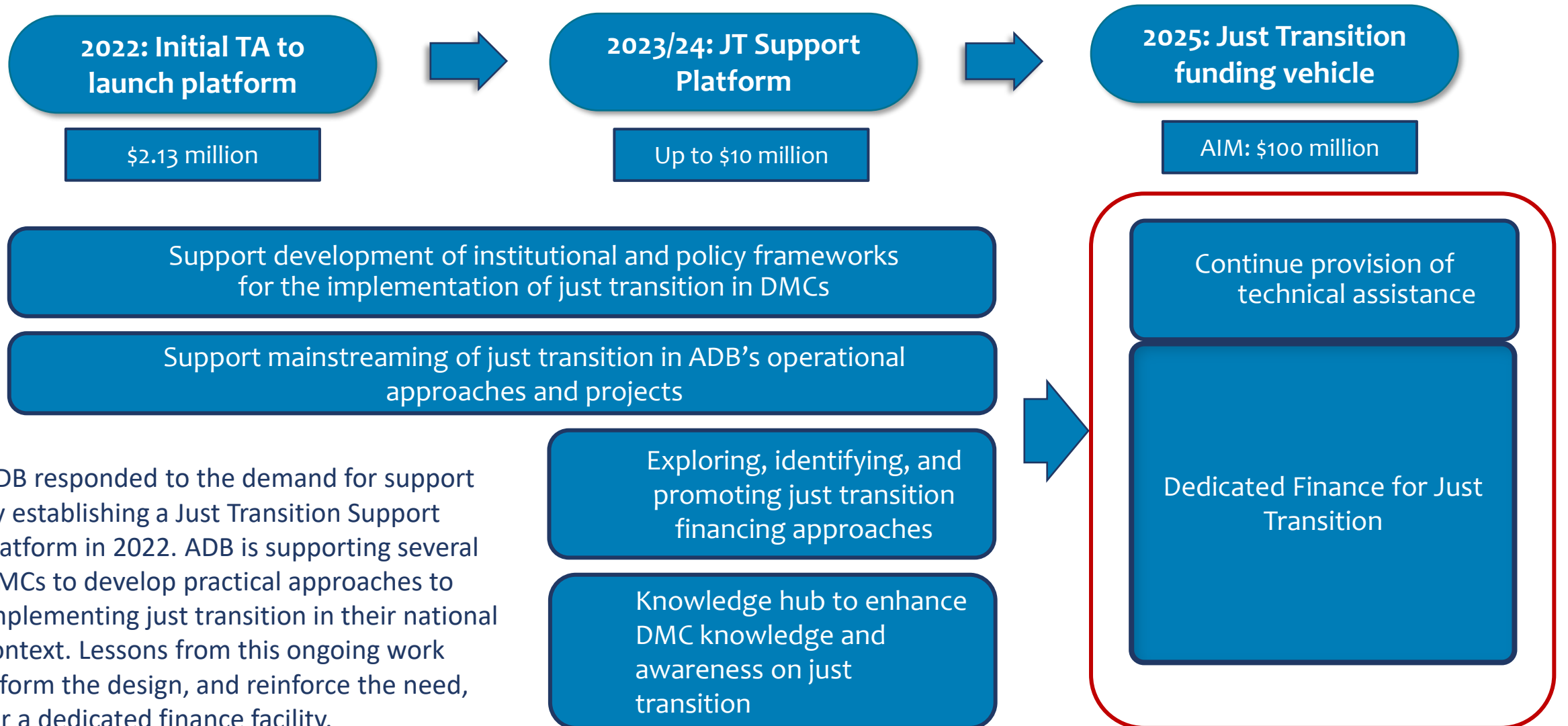
Just Transition activities and impacts extend beyond the scope and time of individual projects



Process



ADB's Just Transition Support to DMCs



Understanding Just Transition Impacts in ETM Transactions

Just Transition goes beyond direct impacts and includes indirect and induced impacts in the community, district and along the coal value chain. Indirect and induced impacts likely to increase with multiple transactions.

Direct Impacts

Impacts typically associated with the workforce (formal [contractual or outsourced], informal), and other vendors associated with the project.

Indirect Impacts

Impacts typically associated with the supply and value chain. This can be in the form of loss of revenue to businesses and/or loss of employment as a result of the asset level transition.

Induced Impacts

Impacts on local communities and businesses who benefit from the operation of the asset, through revenue or employment. For example, a local grocer whose revenue may be impacted as workers move away from the community due to early asset retirement. This will negatively impact grocer's income and expenditure. This also includes impacts on public budgets. National, provincial, local governments earn revenues from the asset (through taxes, royalties, cess etc.) and a portion of that revenue may be used for funding social sector schemes. Decline in these revenues may impact the government's ability to operate as well as fund these schemes.

The definitions and boundary conditions for the impacts is tailored to the specific circumstances of the transaction and will be developed based on further assessments.

ETM Project Activity Timeline for Cirebon 1

- Between 2029 and 2031, GOI (PLN and MEMR) will determine decommissioning and/or repurposing options for Cirebon 1.
- This will be called the development of a Post PPA Plan.
- Stakeholder consultations will take place in 2031-32 to explain and get inputs for the Post PPA Plan and it will be finalized in 2032
- The Post-PPA Plan outline includes the need to provide:
 - How CEP will terminate power plant operations permanently, decommission, and/or repurpose the site after 2035
 - Related requirements for environmental, social, and just transition planning pertaining to Post-PPA termination activities.

Post-PPA Plan Development	2024	2024–2030	2029–2031	2031–2032	2033–2035	2035 Onwards
Agreement on Post-PPA plan outline and development process.	Pre-Financial Close					
Disclosure of the Preliminary Just Transition Assessment with JTP Outline.						
<u>Ongoing just transition-related activities:</u> Ongoing inclusive stakeholder engagement, women’s meaningful participation, and assessment of legal, regulatory, and institutional capacity for JTP implementation.						
<u>Ongoing activities:</u> Government of Indonesia (PLN and MEMR) analyses on viable repurposing options (i.e., updated grid impact and replacement power analyses).						
Active discussion and gender-responsive and inclusive stakeholder engagement that realize women’s meaningful participation to reach agreement on Post-PPA plan and JTP between ADB and CEP by end of 2032.						
Post-PPA plan and JTP implementation period.						

Cirebon 1: ADB's Just Transition Plan

FOUR-STAGE PROCESS FOR JUST TRANSITION IN CIREBON 1

Stage 1 2023-2024

- ❑ ADB initial site visit, labor and community engagement and baseline data collection
- ❑ ADB Disclosure: Preliminary just transition methodology and assessment (PJTA) (inclusive of the just transition process between 2024-2035)
- ❑ Stakeholder consultations to socialize and seek inputs on the PJTA

Stage 2 2024-2030

- ADB will lead active engagement with stakeholders on the following:
- ❑ Economic, regulatory, institutional, labor market assessments and analyses at national, subnational level and district level;
 - ❑ Gender-disaggregated data collection and update on socio-economic indicators and analysis;
 - ❑ Stakeholder engagement with core groups.
 - ❑ Technical feasibility studies to understand repurposing options

Stage 3 2030-2032

- ❑ Assimilate analyses from stage 2 and update PJTA methodology and prevailing laws and policies
- ❑ ADB prepares the Just Transition Plan (JTP) based on actual Just Transition impact assessment
- ❑ Conduct stakeholder consultations to get inputs on Post PPA Plan and JTP
- ❑ Consultations to finalize JTP and Post PPA Plan.

Stage 4 2033 onwards

- ❑ Implementation of Post-PPA Plan and JTP (ADB monitoring and evaluation ongoing)
- ❑ Implementation of JTP will likely extend beyond plant closure in 2035.

Cirebon 1 ADB's Just Transition Plan: Proposed Next Steps

Programmatic Just Transition Intervention

Just Transition Lens

Meeting Indonesia's NDC Commitments

Opportunities

Funding sources and needs

UPSTREAM

- Assessing national impacts of the transition – labor, socio-economic, public finance economic diversification, transition risk analyses
- Institutional coordination and capacity development
- Stakeholder mapping and coordination

- **TA sources through JTSP** to support these analyses which will help develop a national level framework.
- Some of the upstream diagnostics can be conducted in collaboration with other sector/issue specific TAs (e.g. skill analysis)

MIDSTREAM

- Translating national level analyses to the sub-national level/vulnerable regions
- Technical and financial support to local governments/FIs
- Institutional capacity building at the sub-national level
- Developing a communication strategy

- **TA sources** through JTSP
- **Grants, guarantees, debt management products** for budgetary support, avoiding transition risk, creating financial instruments for social infra projects (e.g., seed fund for a JT facility, co-funding/guarantees for social infra bonds etc.)
- **Concessional loans** for market development activities

DOWNSTREAM

- Aligning with ADB project pipeline
 - Education, health, social protection
 - Women & vulnerable-focused investments
 - Infrastructure investment
 - Private sector finance
- Ensuring implementation of just transition strategy through creation of a JT agency

- **Co-financing options** with other ADB financing sources
- **Providing guarantees and concessional loans** for social sector and development goals
- **Grants** directly targeting vulnerable groups

Thank you!

For more information, visit:

[https://www.adb.org/what-we-do/
energy-transition-mechanism-etm](https://www.adb.org/what-we-do/energy-transition-mechanism-etm)