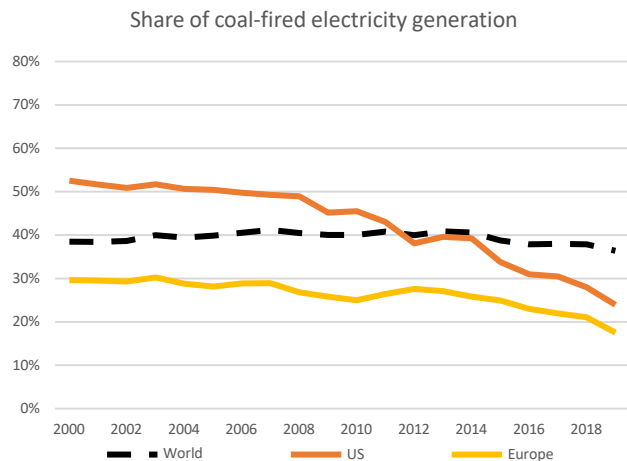


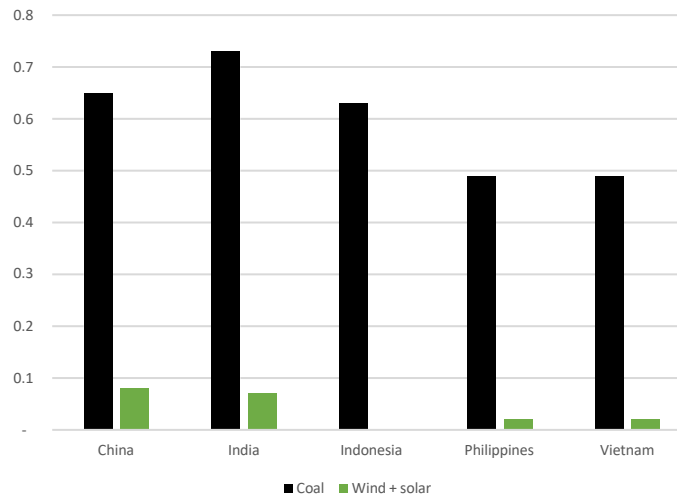
Energy Transition Mechanism(ETM) Introduction

Coal-fired electricity must drop radically, but has continued to be significant in developing Asia

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



But remains very high in Asia (2019)



Large-scale solution needed to simultaneously rapidly decarbonize and build-up clean energy in Asian developing countries

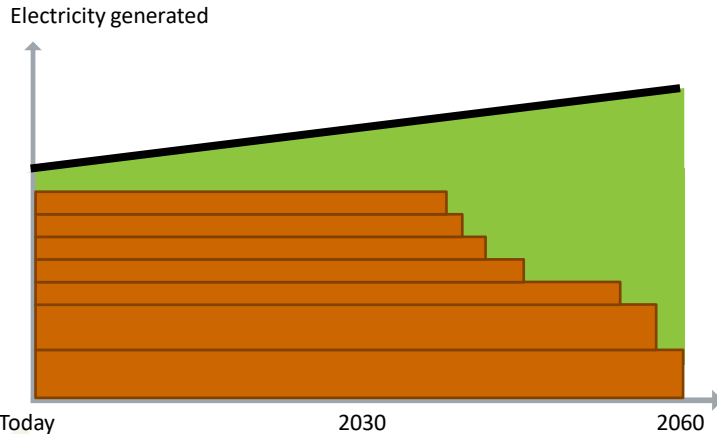
Source (left): Carbon Action Tracker 2020 and calculations based on IEA Data

Source (right): BP "Statistical Review 2020"; IPCC "Special Report on Global Warming of 1.5°C"

Author: Donald Kanak (WEF blog "How to accelerate the energy transition in developing economies" <https://www.weforum.org/agenda/2021/01/how-to-accelerate-the-energy-transition-in-developing-economies>)

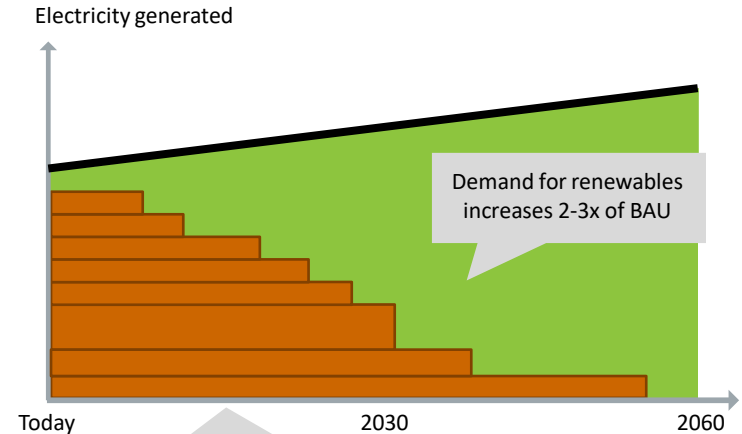
Speeding up the retirement of coal-fired power plants can increase the demand for clean energy investment, reduce emissions, and lower generation costs in the long run

Business as usual



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

With the Energy Transition Mechanism



Existing coal-fired power assets retired early, creating additional demand for renewables

ETM Southeast Asia Partnership Launch at COP26, Glasgow UK

- Joined by Indonesia and Philippines as key partners to launch the pilot study for ETM.
- \$25 million grant announcement by Japan's Ministry of Finance, the first seed financing for the mechanism.
- The partnership was endorsed by senior cabinet-level officials from Denmark, the United Kingdom, and the United States, as well as leading global financial institutions and philanthropies.
- MOU signed with Rockefeller Foundation, with a % of support towards the ETM



Philippine Finance Secretary Carlos G. Dominguez, Indonesian Finance Minister Sri Mulyani Indrawati and ADB President Masatsugu Asakawa during the ETM Launch at COP26, Glasgow on 3rd Nov, 2021



"I am pleased by the Asian Development Bank's work to accelerate the decommissioning of coal facilities. The world needs forward-thinking creative approaches to financing, especially from the multilateral development banks. And we need to find creative solutions so that our public funds crowd in additional private investment, as the bank is aiming to do here."

- Janet Yellen, Secretary, US Department of the Treasury

"I want to thank the Asian Development Bank for its work, which will help bring many benefits. Cutting coal use doesn't just reduce the risks we face from climate change, it also reduces air pollution that kills so many people, including in Asia. Today's announcement will help to jumpstart more climate finance that helps to retire coal plants faster and improve many lives."

- Michael Bloomberg, UN Secretary General's Special Envoy on Climate Ambitions and Solutions



ETM Program: ADB's commitment to urgent climate action in Asia and the Pacific

- *ETM is a scalable, collaborative initiative developed in partnership with developing member countries that will leverage a market-based approach to accelerate the transition from fossil fuels to clean energy.*
- *Public and private investments—from governments, multilateral banks, private sector investors, philanthropies, and long-term investors—will use low-cost capital to incentivize early retirement of coal power assets .*

ETM Fund/vehicle

Direct Transactions (IPP/State owned assets)

Sustainability Linked Corporate Finance (e.g. PLN)



Accelerate climate action

Countries participating in ETM will be able to reach more ambitious emissions targets than under their current commitments.



Just Transition and Safeguards

ETM will contribute to just transition of developing economies by managing direct socio-economic impacts, ensuring health and safety of communities and catalyze finance for longer term just transition needs.



Drive investment

ETM will help unlock or “crowd in” investment in cost-effective renewable generation and support and enable clean technologies, such as smart grids, hydrogen, and electric vehicles.



Provide a scalable model

ETM has the potential to be scaled up to other parts of Asia and the Pacific, as well as Latin America and Africa, which could drive significant reductions in global emissions.

ETM will explore various funding/transaction models to achieve earlier retirement

01

Acquisition Model (SPV Level)

ETM acquires share capital in CFPP

ETM to take role as owner and operator of the coal plant

ETM agrees an early termination date with the utility and operates the plant until that date and then closes it or repurposes

Most suitable for **IPP plants with international bankable PPA**

02

Synthetic Model (SPV Level)

ETM invests senior/junior debt and/or other mezzanine capital to the CFPP

Equity ownership and operational responsibility kept with the current asset owner

Investment conditional on early termination being contractually agreed with owner and utility and appropriate security being provided

Most suitable for **IPP plants with international bankable PPA**

03

Portfolio Model (Corporate Level)

ETM provides funding to the corporate sponsor with CFPPs and greenfield clean energy projects

Sponsor guarantees greenfield clean energy projects will be built and coal plants retired ahead of schedule

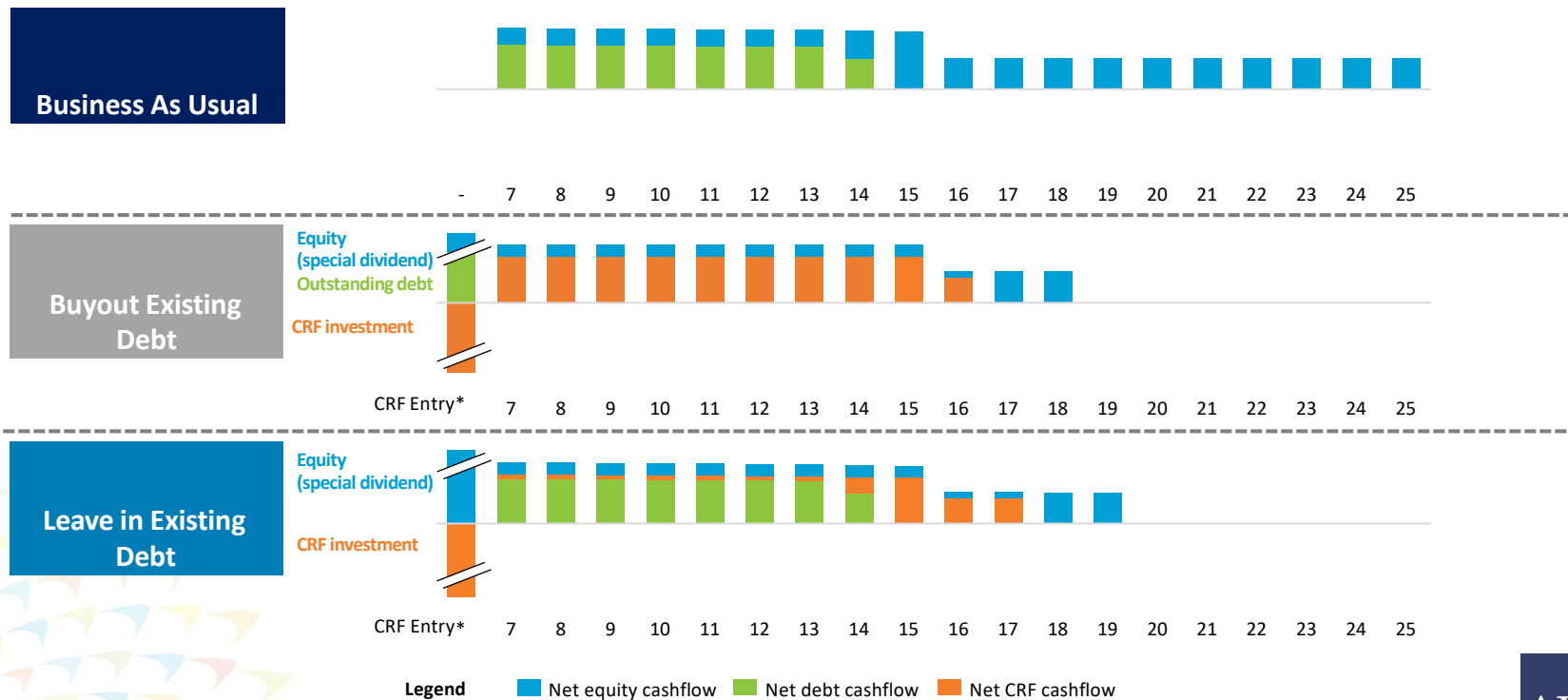
Incentives (such a penalty interest) can be used to ensure that the transition occurs

Most suitable for **Utilities with a portfolio of plants**

While multiple transaction options exist, ETM will seek commitments from current project investors to not develop any new coal and host country commitment to energy transition as a pre-condition for any deal

Re-leveraging with a lower cost of capital has the potential to significantly reduce asset lifetime

Preliminary IPP Synthetic Transaction Structure (Illustrative Future Cash Flow – assuming CRF transaction in Year 6)



Note: The above analysis is for illustration and discussion purpose only. *not to scale for illustration

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

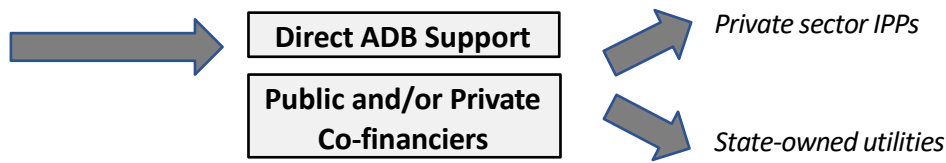
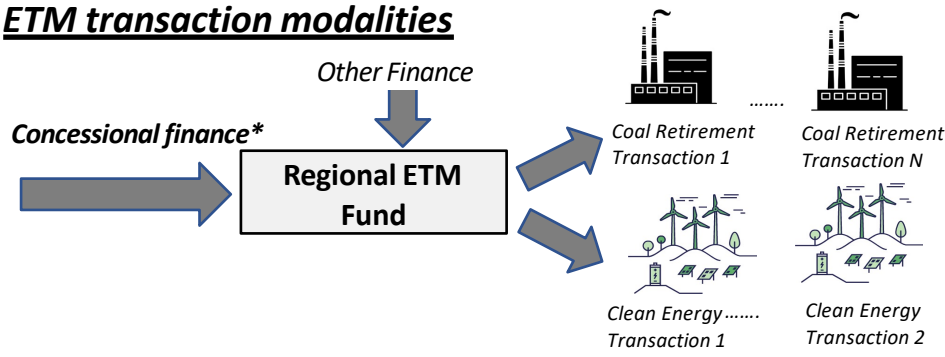


ETM Partnership: evolving and practical to accelerate coal retirement

ETM Partnership Trust Fund (ADB managed)

- *Steering committee with donors and developing countries*
- *Oversight to ensure climate credentials*
- *Just Transition specific activities and coordinated with ADB Just Transition Facility*

ETM transaction modalities



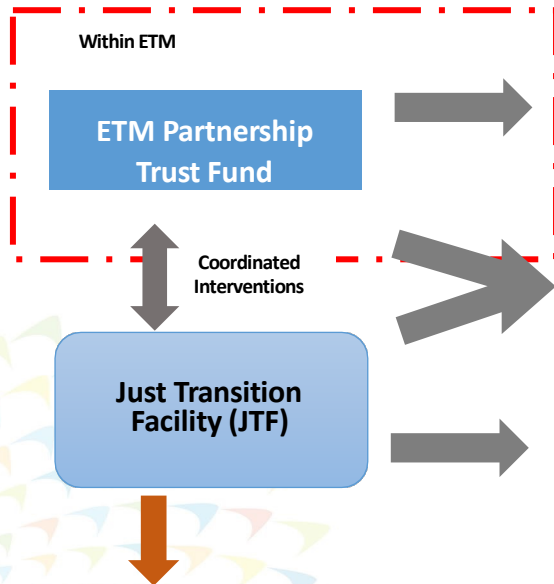
Technical Assistance (e.g.):

- *Grid analysis/Technical, financial analyses*
- *Skills and livelihood development*
- *Policy and regulatory support*
- *Carbon finance, e.g. carbon credit structuring*
- *Measurement, reporting and verification (MRV)*

Just Transition as an Integral Part of the ETM and Coordinated with ADB JTF

ETM will coordinate with ADB Just Transition Facility (JTF) to support targeted and broad-based Just Transition activities in pilot countries

- **ETM:** Support for workers, communities, and regions impacted by coal retirement and clean energy interventions
- **JTF:** Support for Country and Regional Just Transition activities extend beyond scope and time of operation of ETM. JTF also supports ADB's Just Transition across operations.



ETM specific interventions:

- ensuring decent work opportunities and fair treatment
- promoting green development opportunities
- assisting the development of social support systems
- supporting policy and institutional development

Technical assistance:

- providing advice on the Just Transition program development for energy transition
- capacity building
- policy development

JTF supports broad based country and regional Just Transition policy and programs:

- promoting industry diversification.
- climate- and clean energy-innovation and entrepreneurship
- active labor policies with focus on gender and disadvantaged groups
- social support systems reform or new developments
- education, TVET

Feasibility study is investigating how best to tackle the key questions that the ETM poses

01



Project Selection

- Critical factors to focus on when selecting power plants
 - Grid stability
 - Utility vs IPP
 - Utilization
 - Plant Age
 - Renewable replacement potential
 - Transactional appetite

02



Environmental, Social and Governance

- Replacement plan for retired capacity to ensure the ETM has positive climate impacts
- Assessment of Employee, Community and Supply Chain (including informal sector) related concerns
- Assessment of Just Transition activities over short- and long-term
- Funding source for Just Transition activities to be enacted by the ETM

03



Transaction Structuring and Financial Analysis

- Commercial and legal structure to efficiently retire the assets
- Valuation approach
- Role of existing stakeholders
- Cost of capital needed to achieve a significant lifetime reduction
- Potential additional revenue sources/costs (e.g. carbon, decommissioning)

04



Fund/Vehicle Structuring

- Legal structure of ETM entity
- Capital structure and sources of funding
- Management structure
- Incentive structure
- Return expectations
- Major risks
- Safeguard policy
- Governance requirements

Climate Investment Funds



CIFs was established in 2008 with total \$10.5b donor contributions

- CIFs supports low-carbon and resilient investments in 72 countries

At recently G7 Summit in 2021 donors announced their support to the new CIFs funding programs

- Accelerating Coal Transition (ACT) Investment Program
- Renewable Energy Integration (REI) Investment Program

Pledged their commitments in order of \$2 billion to kickstart these programs

- \$1.5b towards ACT program
- \$500m towards REI program

Key Work streams for CIF ACT

1. Asset Selection and Project pipeline development

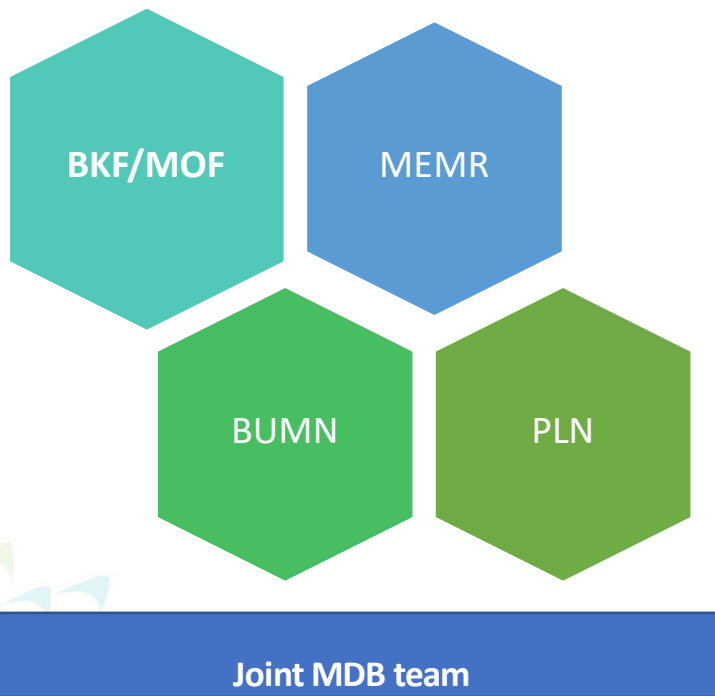
2. Short term regulatory changes for near-term transactions

3. Long term energy transition/decarbonisation strategy & Just transition Framework

4. Safeguards

5. Drafting the IP

Set up a Task Force to identify CIF ACT project pipeline



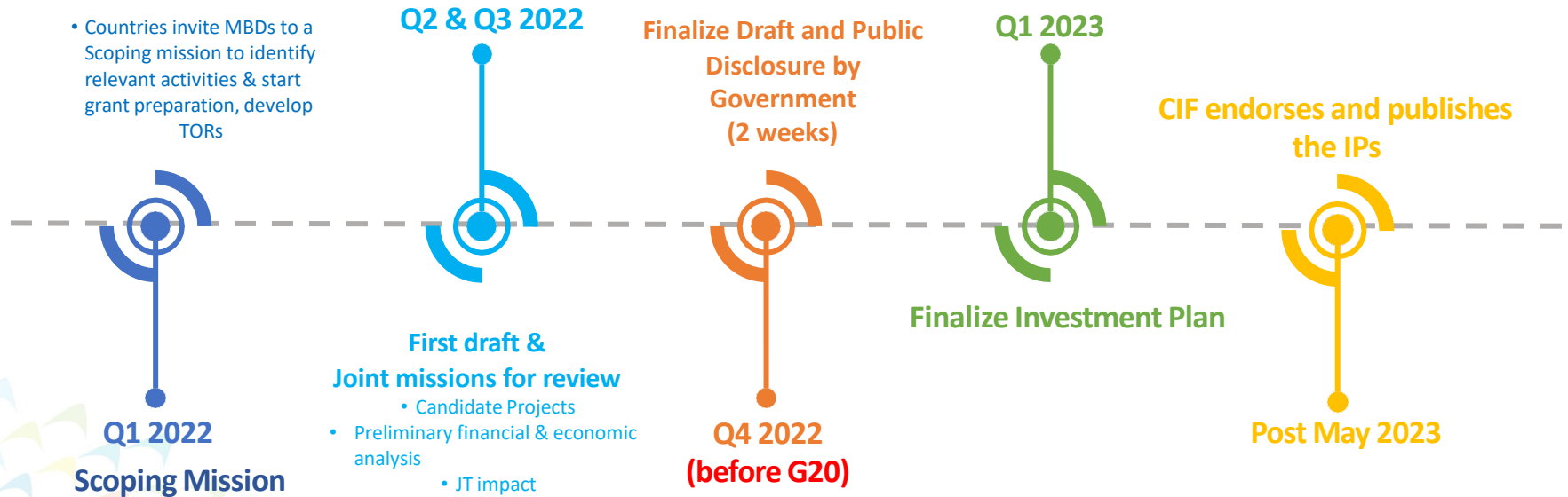
A joint task force (with members from BKF / MOF, BUMN, PLN, MEMR, ADB, IFC and World Bank) to be set-up for the following activities:

- Screen and identify projects pipeline
 - Early retirement & repurposing / RE investment support
 - Transaction models
- Review policies and plans
- Identifying risks and mitigation measures

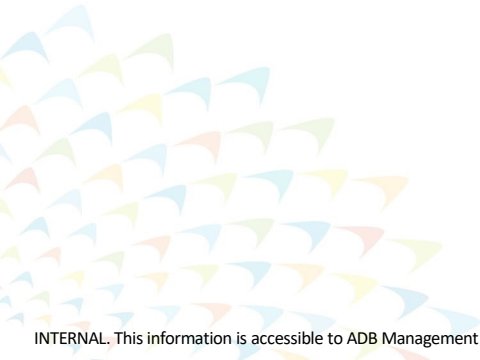
1. Asset Selection and Project Pipeline Development

- MEMR and PLN have proposed pipeline projects for early retirement / repurposing
 - MEMR has proposed 22 CFPPs covering both Jawa Bali and Sumatra islands
 - PLN has proposed 7 CFPPs covering only Jawa island
- Task force to finalize the **multi-criteria framework** for identifying the pipeline projects for early retirement and / or repurposing
- The multi-criteria framework shall be based on, amongst others, demand-supply scenario, grid impact, emission intensity, cost of retirement, environmental and social impact of the project.
- Task force to target finalization of pipeline projects **by May 2022**, post which transaction models for early retirement / repurposing will be developed

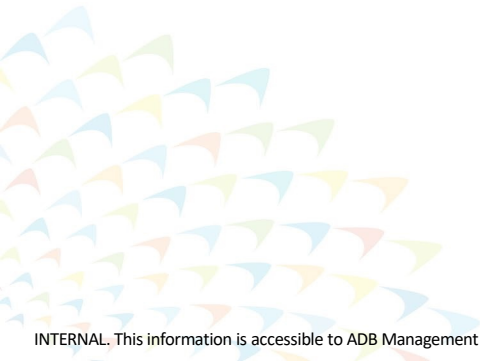
5. Drafting the IP – Timeline & Next steps



Thank you!



Appendix



Indicative timeline to operationalize ETM

Planning and Validation

Structuring and Pipeline Development

Fund/ Vehicle and Transaction implementation

Pilot Operation And Full ETM

COP 26

Announcement of partnership for joint feasibility study and investigating the potential for a pilot ETM

G20 and COP 27

Targeting US\$2.5 – 3.5 billion from public and private investors; as well as grants and highly concessional funds from philanthropies and governments

Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	From Q3 2023
Preliminary market sounding with wide group of stakeholders	Finalize ETM Fund/Vehicle structure options based on market sounding feedback	Recruit Fund manager, and Develop pipeline of pilot power plant retirement deals		Funding commitment for ETM Fund/Vehicle and/or transactions	Due diligence and financial close		Learn from the pilot and first transactions, adjust and scale

Early coal retirement transaction is commercially viable, and ADB ETM brings a unique proposition

Commercial feasibility of early coal retirement

- Debt focus CRF is viable at sub 5% blended IRR to deliver meaningful reduction in coal plant life
- Consistent with strong market feedback and some parties moving forward with or without concession capital

ADB ETM brings a very unique proposition to the market

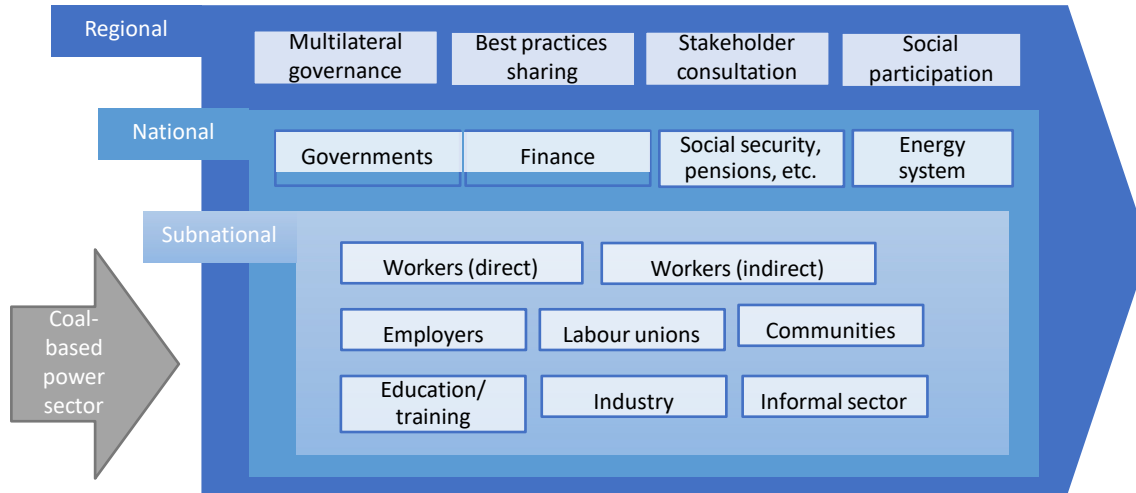
Use of **concessional capital** is expected to **enhance credit / pricing of commercial capital** to deliver greater impact

ADB enhances **credibility** and brings high **standards in ESG and safeguards** that can attract global ESG/IMPACT capital

Host country government stakeholder engagements to support alignment with energy transition policy and create **certainty of abatement impact**

Assist in **pipeline origination** and facilitating discussion and negotiation with **state utilities and government** counterparts to enable early coal retirement transactions

A comprehensive approach to Just Transition is being developed to support workers, communities, regions impacted by the intervention of the ETM and associated projects



Just Transition Activities

- **Technical assistance** includes, but is not limited to, providing advice on the Just Transition, capacity building, and policy development.
- **Financial support** to identify needs, gaps, and funding opportunities, and coordinates its disbursement for ongoing and future Just Transition activities.

ADB's commitment to Safeguards and Just Transition are critical parts of ETM work

Regional Feasibility Study (SE Asia)

- Legal and regulatory assessments
- Technical and financial assessments
- ETM Fund/Transaction Structures

Safeguards

- Regional Strategic Environmental and Social Assessment (SESA) Scoping Study
- Country-level SESAs for Pilot countries (PHI, INO)
- Asset level environmental and social audits and assessments

Country Feasibility Study (INO, PHI, VIE)

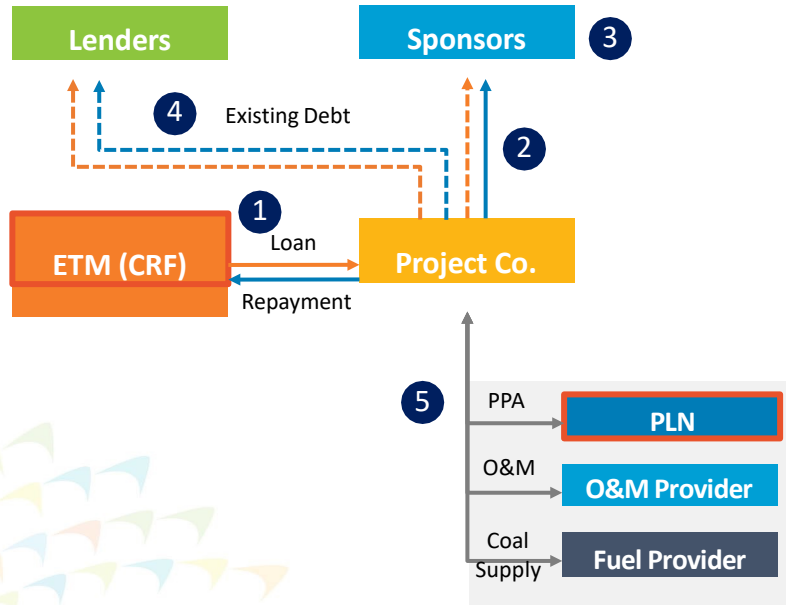
- Identification of pilot assets
- Techno-financial analysis
- Country-level transaction vehicles

Just Transition

- Quantitative socio-economic impacts assessments (regional, country and local/province levels)
- Plan mitigation measures and financing of direct impacts
- Technical assistance and coordination of concessional finance through the ADB Just Transition Facility

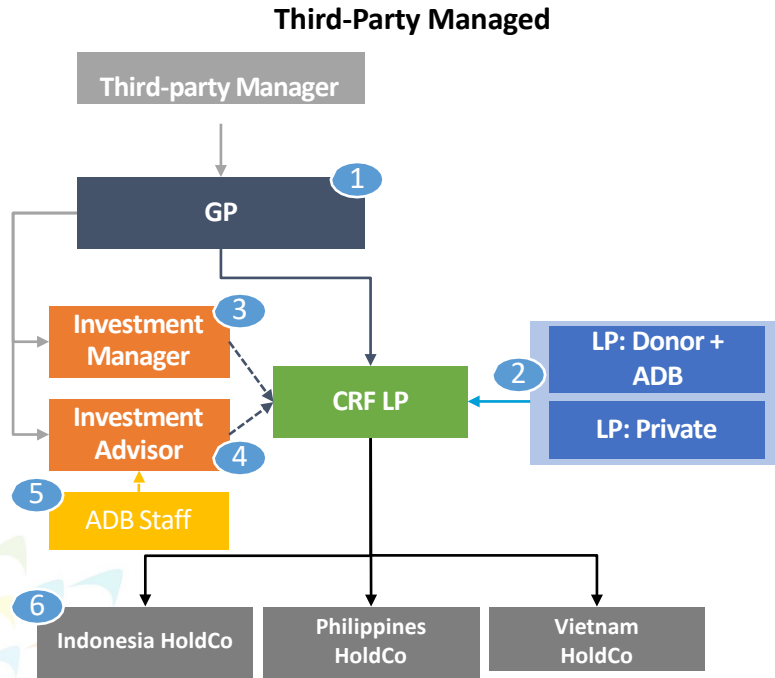
Base proposition is for first CRF to be a debt fund to re-leverage CFPPs with low cost capital while keeping existing owners involved as equity owner and operator

IPP Synthetic Transaction Structure (SPV Level)



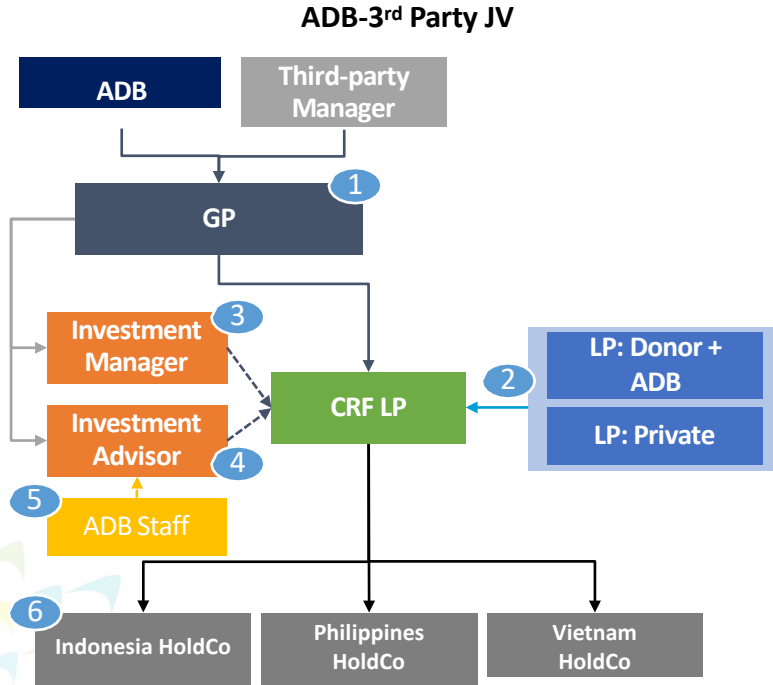
- 1 **CRF invests in debt like instrument** into the project company and receives repayment based on sculpted cash flow (% of CFADS) over the investment horizon
- 2 **Proceeds from CRF investment are paid to existing shareholders as a special dividend** as a form of equity return. Existing shareholders continue to receive equity dividends (but at a lower level than without CRF)
- 3 **Existing shareholders continue to remain as 100% common shareholders** until the end of the shortened PPA tenure
- 4 Transaction to be structured for **existing financing arrangement to remain** (e.g. pari-pasu with CRF) **or fully exit**
- 5 **Shortening of PPA tenure to be contractually agreed with the utility;** major project agreements (O&M, Fuel) to remain as is but with shorter tenor

Recommended Option: third-party sole GP (with ADB seconded staff)



- 1 Third party fund manager is the sole GP
- 2 ADB participates as an LP. ADB remains responsible for raising donor capital by acting as a trustee of donor capital
- 3 Investment Manager is appointed by the third party Manager/GP and provides license required
- 4 Investment Advisor is appointed by Third Party Manager/GP and Investment Manager and is responsible for deal origination, assessment and negotiation.
- 5 ADB, seconded staff to Investment Advisor to assist in transactions with focus on government discussions and in assessing JT, safeguards and ESG requirements.
- 6 Country HoldCo structure remains the same

Alternate Option: Co-GP (with ADB seconded staff)



* ADB's stake limited to maximum 25% stake by charter

- 1 **ADB and third party fund manager formally partner*** to establish a GP that sets up the CRF Partnership. ADB, as co-GP, provides a strong signaling effect. Third party to hold majority stake
- 2 **CRF Partnership** to be established as LLP and receives investment from LPs. ADB, participates as an LP, leading on raising donor capital while third party raises private capital. LPA to have strict qualifying criteria for investments (including impact and ESG).
- 3 **Investment Manager** is appointed by Third-party Manager and provides license required
- 4 **Investment Advisor** is appointed by Third Party Manager and Investment Manager and is responsible for deal origination, assessment and negotiation.
- 5 **ADB, seconds staff** to Investment Advisor to assist in transactions with focus on government discussions and in assessing JT, safeguards and ESG requirements.
- 6 Investment Advisor directs investments to **individual holding companies at the country level**

Other market sounding feedback summary

GP-LP vs. Other vehicles

- GP-LP structure is well understood by the market and easier for due diligence

CRF and CEF

- Overall transition story is likely critical for investors participation in CRF
- See benefit of bundling CRF and CEF but would also increase complexity – critical to define CEF activities to solicit detailed feedback on benefits of co-management

Timeline and Precedent Transactions

- Securing seed investments at agreed term sheet / in principle commitment stage would be tremendously helpful to CRF first close given it is a first of its kind

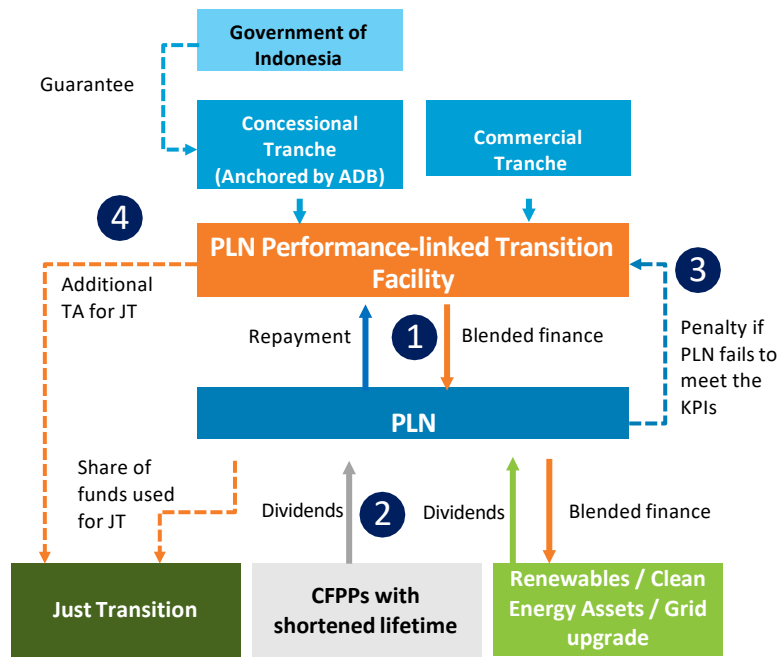
Management Fee (Incentives)

- Many parties are keeping their cards close to chest but general acceptance that this would not be a traditional 2/20 PE model.
- 1-2% fee structure is common for credit fund. Fee level will be dependent on expected active involvement / value add from the GP.
- Detailed structuring of fee mechanism including KPI (e.g. carbon abatement) linked incentives to be further explored during RFP process

More details can be found in the appendix and full notes have been shared

Proposal for a Performance-linked Transition Facility whereby Financing is provided at the Corporate Level

PLN Corporate Loan Facility



- 1 ETM to provide a corporate loan facility to PLN. KPIs could include items such as:
 - Individual coal plant shutdown (identified CFPP(s) to close)
 - Overall GW of coal plants closure by a certain date (PLN choose CFPP(s) to close)
 - CO2 reduction achievement - PLN and ADB/Financiers to agree a mechanism for calculating current emissions baseline and achieved CO2 reductions vis-à-vis this baseline
- 2 PLN uses cash receipt to shut CFPPs over time and use funding for renewable energy and grid upgrade projects
- 3 PLN to pay penalty for not meeting KPIs which may include
 - Penalty interest – level of concessionality of the loan would be reduced if KPIs are not met by applying a penalty interest (potentially cumulative since the inception of the loan)
 - Default – inappropriate use of funds or failure to meet KPIs could provide financiers the right to withhold future drawdowns and/or immediate repayment
- 4 Additional concessional capital/TA could be provided to help fund Just Transition (“JT”) activities