

Managed Phaseout of Coal Power Generation in APAC: Expression of Interest

Dec 2022

DRAFT

GFANZ
Glasgow Financial Alliance for Net Zero

AGENDA



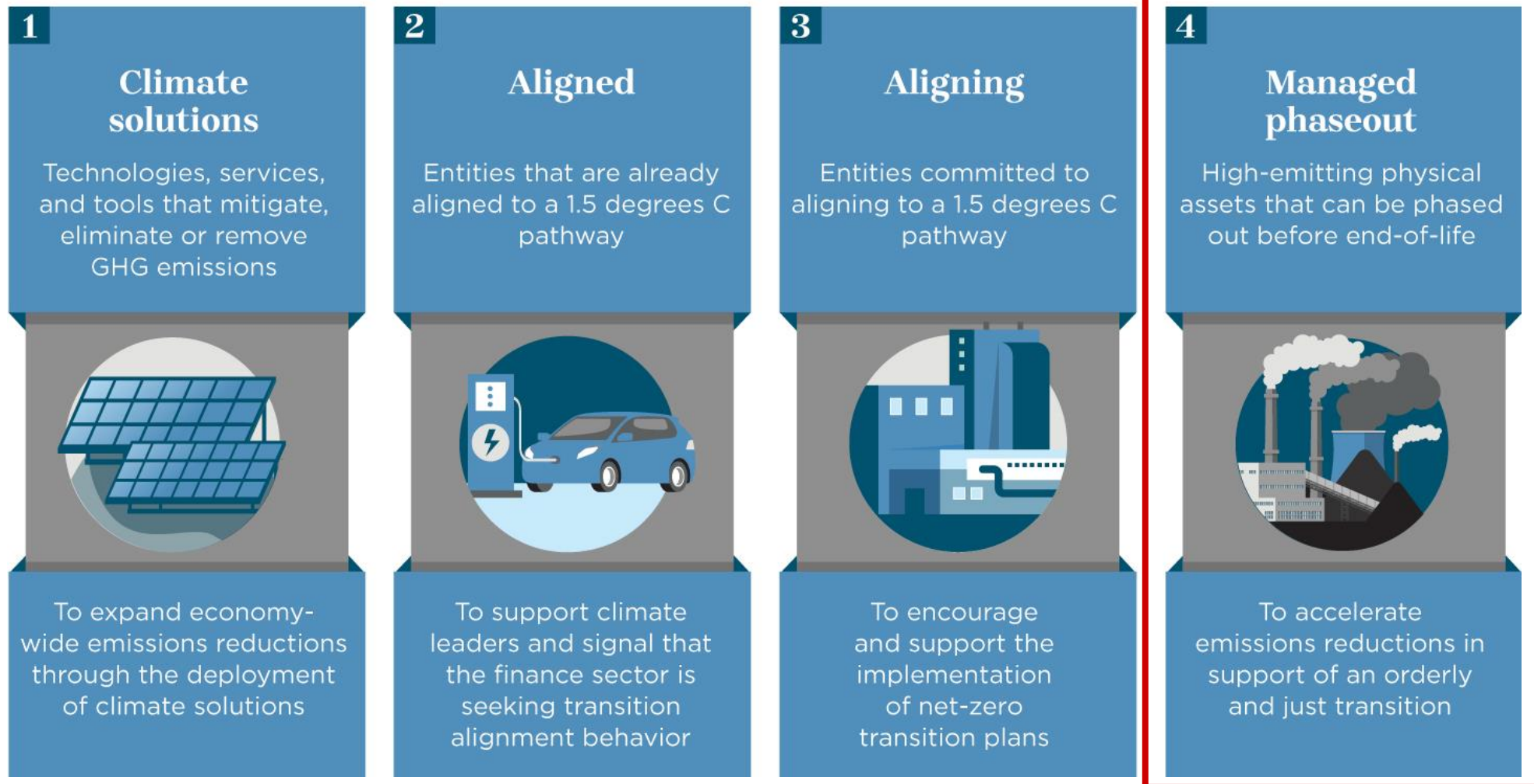
Rationale

Approach and set-up

How to participate

GFANZ has identified four key financing strategies to enable the net-zero transition; this Workstream is focused on Managed Phaseout

RATIONALE



Note: GFANZ uses the term "orderly transition" to refer to a net-zero transition in which both private sector action and public policy changes are early and ambitious, thereby limiting economic disruption related to the transition (e.g., mismatch between renewable energy supply and energy demand). For reference, the Network for Greening the Financial System (NGFS), which develops climate scenarios used by regulators and others, defines "orderly scenarios" as those with "early, ambitious action to a net-zero GHG emissions economy," as opposed to disorderly scenarios (with "action that is late, disruptive, sudden and / or unanticipated"). In an orderly transition, both physical climate risks and transition risks are minimized relative to disorderly transitions or scenarios where planned emissions reductions are not achieved

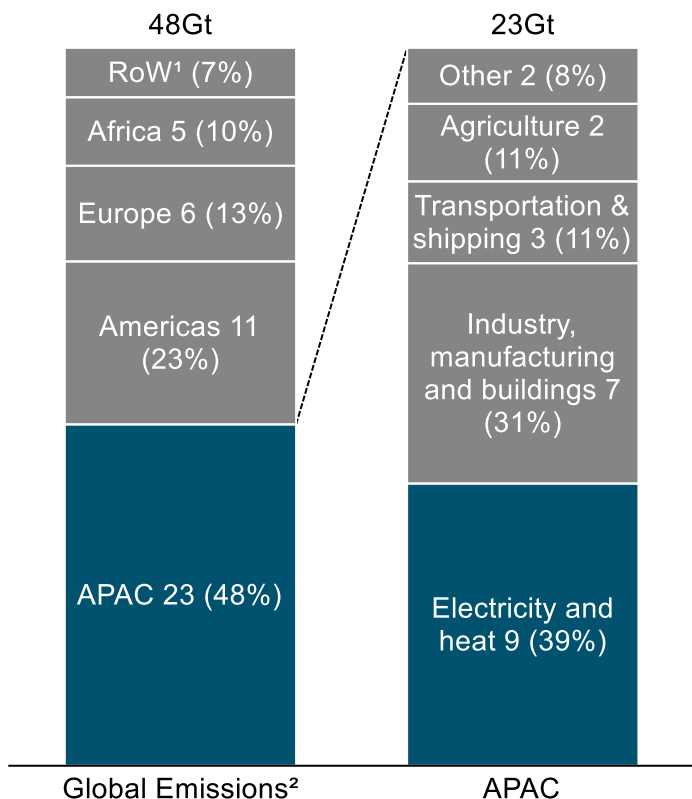
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Driving the managed phaseout of coal power generation in the Asia Pacific is considered critical for decarbonization

R A T I O N A L E

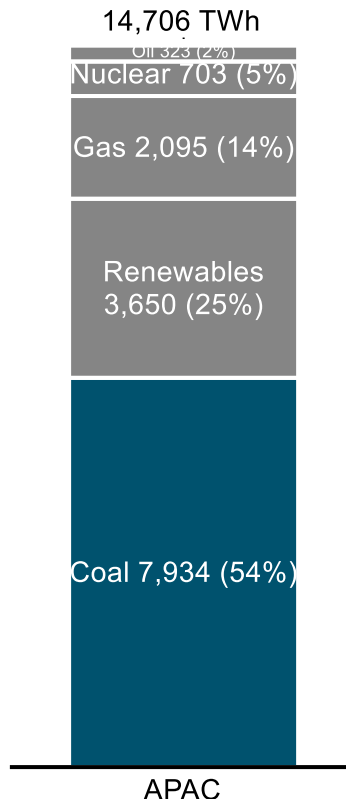
APAC accounts for ~50% of global emissions; electricity largest contributor

CO₂ emissions by region and industry
(Gtons of CO₂, 2019)



~55% of all electricity in APAC is generated from coal

Electricity Production by Source in APAC
(TWh, 2021)

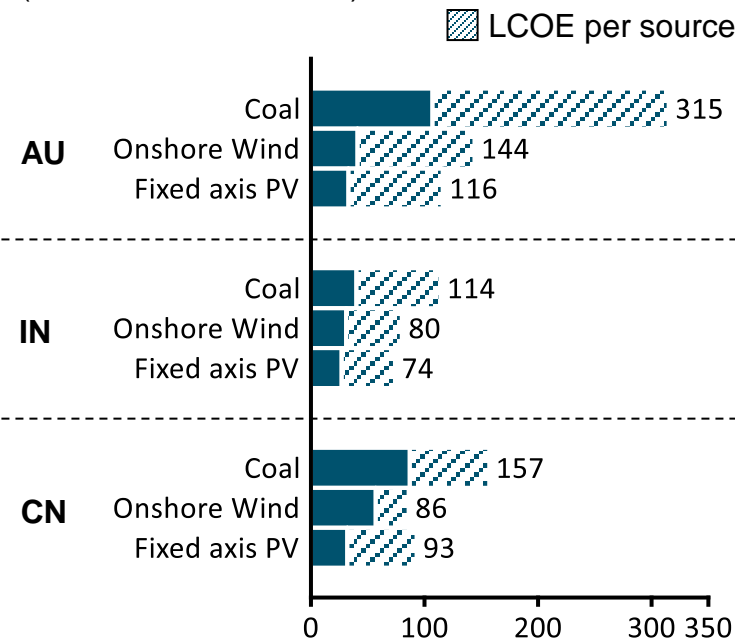


5,500
Active coal-fired power plants (CFPPs) in APAC

1
Coal is the top source of electricity across all major Asian economies³

Other coal abatement levers exist, but phase-out remains an important lever

Levelised Cost of Electricity in key APAC Ctrys
(\$/MWh, nominal, 2022)



Coal is already relatively more expensive than renewables; investing to make coal 'cleaner' (e.g. CCUS) will further widen this gap

Note: (1) Rest of the world includes Middle East and Eurasia (2) Land use excluded, as it includes potential offsets; (3) Japan the exception with gas marginally higher than coal
Source: Graphics produced by GFANZ APAC using publicly available data from IHS Markit, Climate Watch (CAIT database), OWID (leftmost graph); BP, MAS, IEA (middle graph); BNEF (rightmost graph)

However, challenges exist from both “supply” (capital sources) and “demand” (coal asset owners)

R A T I O N A L E

Supply side (financial institutions, philanthropies, etc.)



Reputation risks

- **Greenwashing allegations:** potentially seen as a ‘cover’ to continue financing fossil fuels



Compliance risks

- **Existing frameworks:** Need to work within current legal and regulatory frameworks (e.g. policies on only financing certain types of transaction)
- **Financed emissions:** Short-term spike in financed emissions from financing phaseouts

“While we do want to explore managed phaseout of coal, it’s not currently rewarded – it puts us further away from our short-term emission targets, and exposes us to all sorts of greenwashing allegations.”

Managing Director, global bank operating in Asia

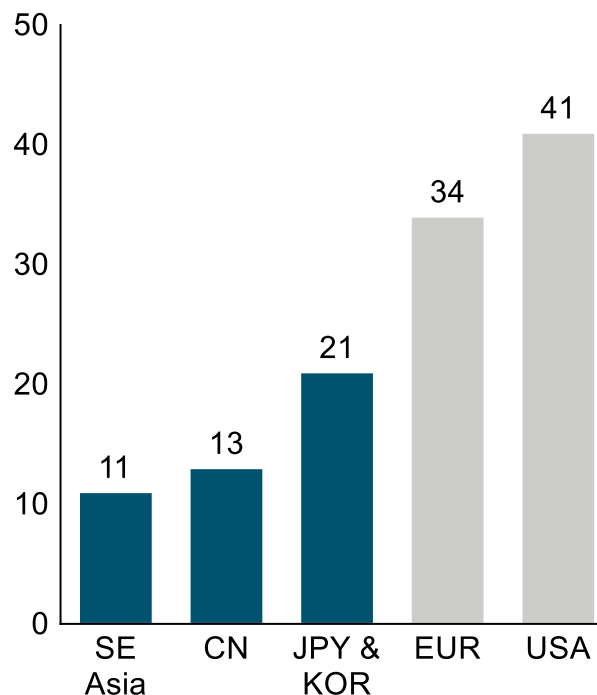


Solving for transition credibility is key

Demand side (coal asset owners, utilities, etc.)

Average age of CFPPs in selected regions

(No. of years, 2020)



- **Youthfulness of coal fleet:** CFPPs in APAC are relatively young compared to peers in Europe and N. America making a ‘natural’ retirement difficult
- **Government priorities:** Unlike in developed countries (e.g. Germany), governments in emerging Asia have neither the capacity nor willingness to ‘subsidise’ a large-scale phaseout of CFPPs



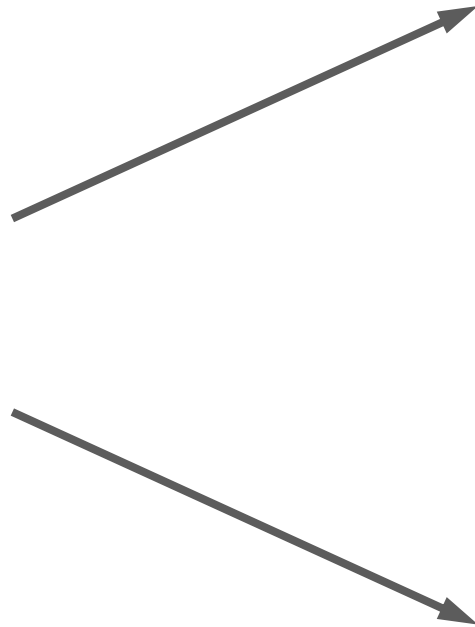
Solving for financial viability is key

Source: Industry practitioner interviews undertaken by GFANZ APAC as part of its external engagement for workstream scoping purposes. Graphics produced by GFANZ APAC using publicly available data obtained from IEA for rightmost graph

While multiple pieces of research attempt to tackle these challenges, most do not bridge the nexus between transition credibility and financial viability

R A T I O N A L E

**Managed
phaseout of
coal power
generation**



Transition credibility focused

- Research primarily driven by NGO and think-tanks
- Focused on ensuring specific “criteria” are met

Financing viability focused

- Research primarily driven by deal teams / learnings from past transactions
- Focused on mechanism or tools that make transactions bankable



**Fragmented research
landscape gives little
practical guidance to FIs
seeking to finance actual
transactions**



AGENDA

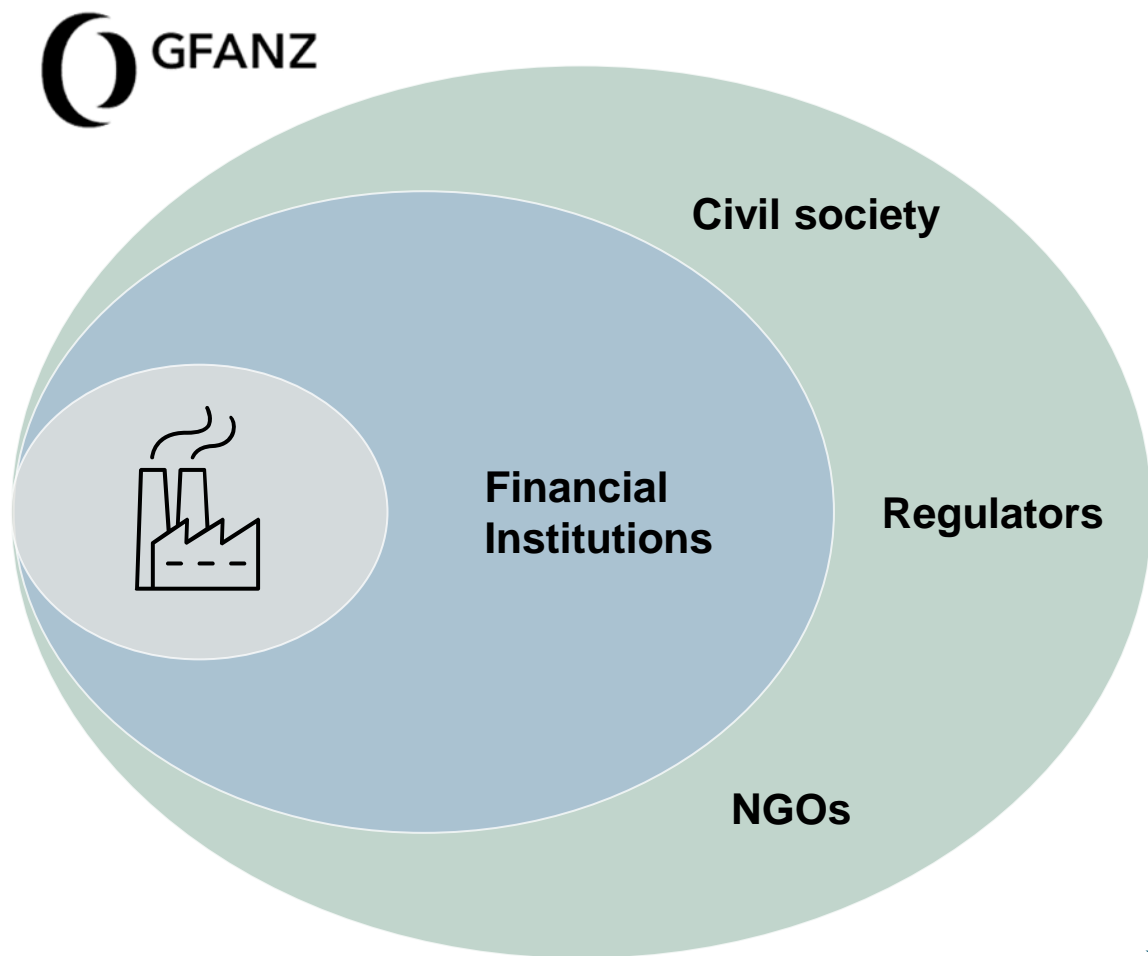
Rationale

Approach and set-up

How to participate

To bridge this gap, the GFANZ APAC Network will act as a knowledge integrator to help develop a holistic, voluntary approach to coal phaseouts in the region

OBJECTIVES



Objectives

- 1 Provide clarity and confidence** to financial institutions interested in participating in managed phaseouts
- 2 Build alignment across key stakeholder types** (financial institutions, philanthropies, civil society, public sector) on what a credible managed phaseout could look like
- 3 Streamline research priorities** and minimise duplication of work amongst stakeholders



GFANZ will develop practical voluntary guidance to support coal power phaseout transactions in APAC

GFANZ's approach to managed phaseout integrates three key dimensions: credibility, viability, and inclusivity

APPROACH

① Transition Credibility

- Ensuring **impactful** early retirement of assets
- Building-in **safeguards** to ensure the early retirement occurs
- FIs unilaterally deciding to **adjust their policies and measurement** to account for transition / phaseout projects



② Financial viability

- Uncovering major **levers** to drive viability
 - Asset valuation
 - Cost of capital (including concessionary finance)
 - Revenue replacement
- Developing a perspective on **“appropriate” risk-adjusted returns** when blended finance is deployed

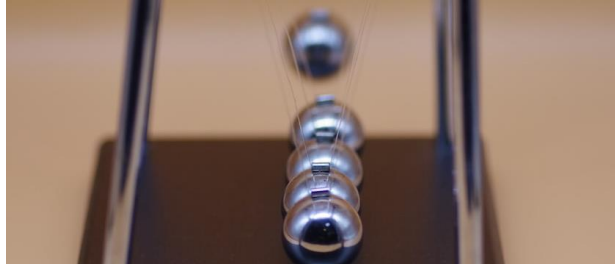
③ Socioeconomic inclusivity

- Ensuring a **“just” transition** across various dimensions:
 - Access to affordable replacement energy
 - Employment and livelihoods

① Transition credibility comprises three key aspects: impact, safeguards and metrics & targets

APPROACH

Transaction-level factors



Impact

- What are **credible pathways** for coal phaseouts in APAC?
- How can **additionality** be ensured?
- Is there a **role for gas** as a replacement power source?



Safeguards

- What **provisions/covenants** should be put in place if the aim is to ensure CFPPs are turned off?
- What provisions should be in place at the **entity** (asset owner) and **asset** level?

Org-level factor



Metrics & targets

- What **complementary metrics** can be used alongside portfolio financed emissions?
- How could **forward-looking metrics** or other metrics be incorporated to facilitate this?
- What is the impact on the FI's **other climate commitments** (e.g. SBTi, regulatory, etc.)

Key questions to address

① Directionally, perspectives obtained to-date show a seeming disconnect between international capital and asset owners

APPROACH

/ DIRECTIONAL

Examples of perspectives gathered from international capital

- **What good looks like:** Shutting down coal plants in order to achieve a 1.5C pathway; failing which transaction is seen as less credible
- **Measuring success:** Delta between the asset phaseout plan and a credible 1.5C pathway; the narrower, the better

“A 4-5 year reduction in operating life is going to be a tough sell to our management... it could be easily construed as greenwashing”
Managing Director, Global bank operating in Asia

Examples of perspectives gathered from coal asset owners and/or transaction advisors

- **What good looks like:** Reducing operating life of the plant, even if the reduction is less ambitious (e.g. 4-5 years over a 30 year operating life)
- **Measuring success:** absolute CO2 abatement and delta between operating life and early retirement

“When it comes to coal retirement transactions, the perfect is the enemy of the good”
Managing Partner, Asian transactions advisor

“We are making real reductions in CO2, we don’t understand why we are getting pushback on this”
Vice President, Southeast Asian utility company

② Financial viability is critical for ensuring transactions actually close; three broad financial levers identified

APPROACH

Outcome

'Early' retirement of coal power generation

Early decommissioning of plants ahead of their useful life – both operational (technical life) and financial (PPA) resulting in a premature termination of cashflows

Levers

Asset valuation & pricing

Factoring material climate risks (e.g. stranded assets) into valuation

Cost of capital

Lowering capital costs to maintain an acceptable risk-adjust return to investors

Alternative revenue streams

Alternative revenue streams that can make-up for loss revenue from sale of coal-generated electricity

Equity

Debt

Potential tools

- Public sector signaling and/or regulations against the use of coal
- Engagements with coal asset owners to highlight financial risks
- Educating valuers/auditor of risks associated to stranded assets
- Tap concessionary sources of capital that can accept lower risk-adjusted returns
- Access wider international capital base
- Transaction-level financial engineering (longer tenures, lower rates, higher D/E ratios)
- Climate/transition-linked bonds to reward phaseout
- Concessionary debt/tools (e.g. first loss, credit enhancement, hedges, etc.) such as the ETM
- Carbon credits from avoided emissions
- Renegotiate existing PPAs to offtake (new) renewable energy
- Sale/lease of site/grid connection for renewable power





Key to address viability concerns due to often-negative correlation between viability and credibility

② Directionally, GFANZ has identified four main tools being pursued to drive financial viability in managed phaseout transactions in APAC

APPROACH

/ DIRECTIONAL

Main tools being explored in APAC

			Market readiness	Potential impact	Scalability
	Valuation haircuts <i>Asset purchases at discounts to book</i>	<ul style="list-style-type: none"> Increases IRR due to low purchase price 	Mid – common lever used, but limited pressure on asset owners to discount	Mid – Strong return driver but potentially limited by willingness of asset owner / state to accept discount	High – common lever that can be used across transactions
	Financial engineering <i>Improving D/E ratios, cost of debt, etc.</i>	<ul style="list-style-type: none"> Increases IRR by reducing cost of capital 	High – common lever used in infrastructure transactions	Low-mid – adds an incremental impact to overall returns	High – common lever that can be used across transactions
	Blended capital <i>Blending of concessionary capital</i>	<ul style="list-style-type: none"> Increases IRR due to lower cost of equity/debt Reduces IRR hurdles if de-risking tools used 	Low-mid – conceptually robust but still new in APAC	Mid – potentially catalytic but concessionary capital unlikely to drive transaction	Mid – Limited ability to scale across large portfolios due to high amounts required
	Carbon credits <i>Generated from “avoided” emissions</i>	<ul style="list-style-type: none"> Increases IRR by creating alternative revenue from sale of carbon credits 	Low – no established standards exist	Mid-high – potential key driver if credits are priced closer to \$10-15/ton of CO2	High – Likely applicable to most, particularly younger, CFPPs

Source: Industry practitioner interviews undertaken by GFANZ APAC as part of its external engagement for workstream scoping purposes

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③ Socio-economic inclusivity is crucial to ensure a just-transition for impacted communities, particularly in EM&DEs

APPROACH



Access to electricity

Key questions to address

- What **impact assessments/studies** are required at commercial/ financial close?
- What are acceptable forms of **replacement power sources**?
- How can replacement power be **structured into PPA renegotiations**?



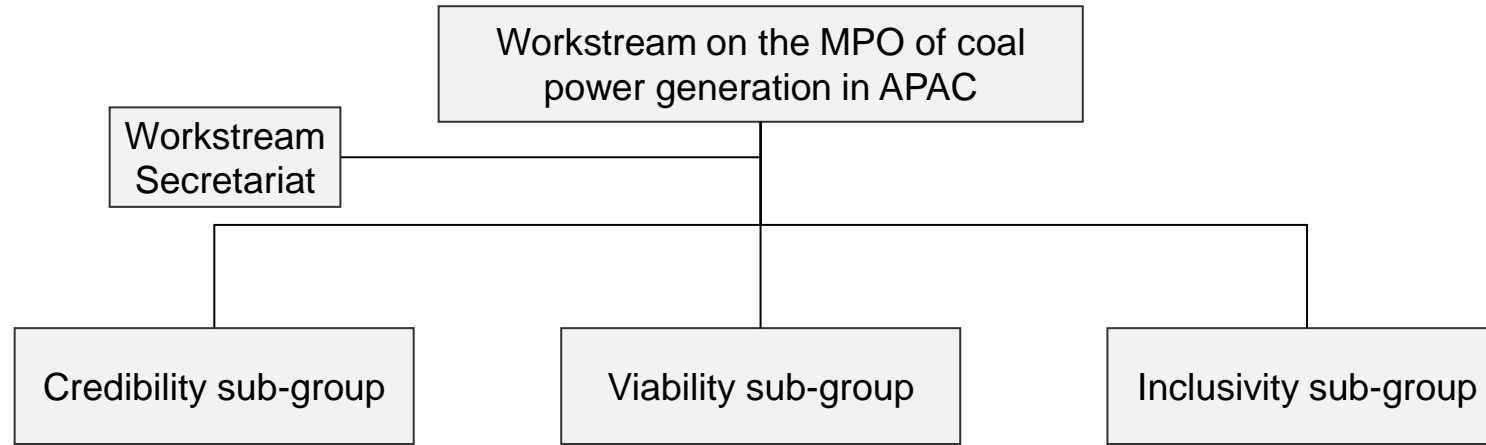
Livelihoods

- What is the **impact** of CFPP phaseouts on communities across the supply chain?
- How is this **responsibility** divided across key stakeholders (unions, governments, asset owners, investors, etc.)?
- What **components of a reskilling/transition plan** need to be in place at commercial/financial close (esp. when asset retirement is likely a decade away)?

GFANZ APAC will establish a core working group of financial institutions, supported by a consultative panel and knowledge partners

SET-UP

/ ILLUSTRATIVE



FI Working Group

Financial institutions

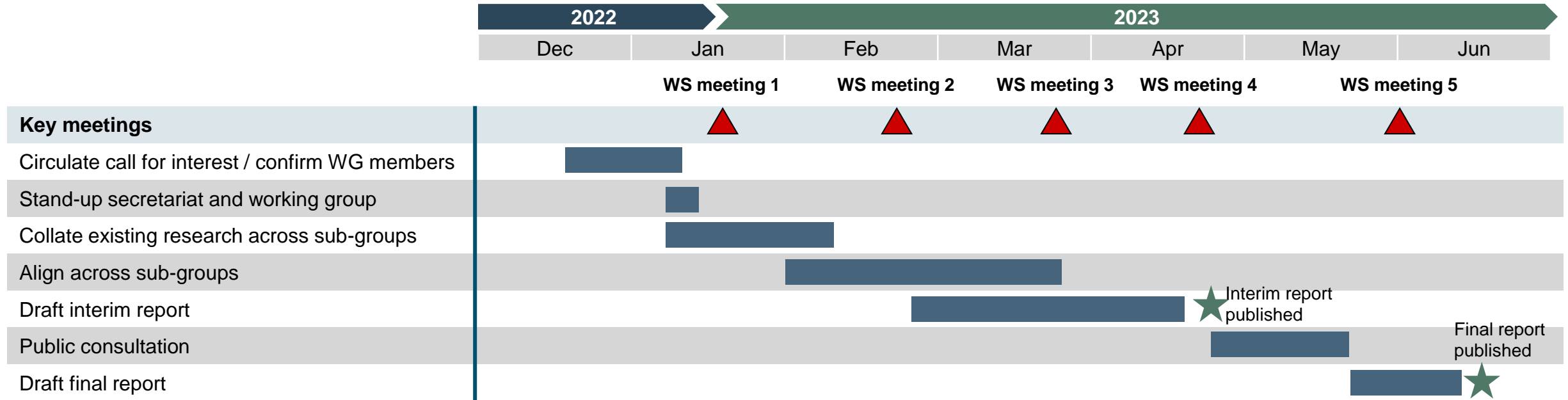
Consultative Panel

Relevant local/regional stakeholders

Knowledge partners

The working group will aim to develop interim guidance by Apr 2023, and publish final guidance by June 2023

SET-UP



AGENDA

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How to participate

There are currently 3 ways to participate in the initial phases of GFANZ's MPO workstream for Asia Pacific



FI Working Group (WG)



Consultative Panel



Knowledge Partners

Description

Core team of financial institutions that will help to **shape the direction and content** of the workstream

Panel of **local/ regional stakeholders** that will provide **input and perspectives** on guidance development

Partner entities with deep **technical / science-based expertise** and perspectives from civil society to enrich the discussions at the FI WG

Criteria for participation

Member of GFANZ sector-specific alliances (e.g. NZBA, NZAM, NZAOA, etc.) with meaningful APAC operations

APAC regulators, development finance institutions, and other relevant local financial institutions

Think-tanks, NGOs, or institutes with deep expertise in managed phaseouts, decarbonisation, and/or guidance-development

FI Working Group Members are expected to commit to a minimum level of engagement to ensure delivery against a set of ambitious workplans

Description

- **About:** Core team of financial institutions selected based on their expertise and operating knowledge in APAC
- **Purpose:** Primary body in the Workstream providing their perspectives on the direction and content of the output (guidance to FIs on their interactions with the real economy, policymakers and other stakeholders)
- **Cadence:** Meets every 3-4 weeks
- **Governance:** Led by 1-2 financial institutions appointed as the Workstream Lead and supported by the Workstream Secretariat

Expectations of a FI Working Group Member

Responsibilities

Organisations interested in participating as a Working Group Member must **nominate a specific individual to be the representative of the organisation**. This individual is expected to regularly attend task force meetings and help carry out the work of the task force, such as:

- Offer their **expertise, capabilities and experience** to support the Workstream;
- **Proactively engage in Working Group working sessions** and, where relevant, be willing to lead on specific subsets of work which may include supporting the drafting of materials or engaging with external parties; and
- **Attend Working Group meetings** which occur, on average, every ~3-4 weeks across 1H 2023, in addition to interim ad hoc meetings with the GFANZ APAC Network and other Working Group Members / Consultative Panel Members / Knowledge Partners as required to progress the work.

Working Group Members should be ready to **commit 2-3h a week to this workstream**, accounting for formal attendance at meetings, and internal alignment/ review of materials.

Profile of representatives

The individual representative of the Working Group Member must:

- Be employed by a financial institution that is a member of a GFANZ sector-specific alliance (e.g. NZAOA, NZBA, etc.)
- Have **relevant technical expertise** related to managed phaseouts;
- Typically have **senior leadership responsibility** within their organisations; and
- Be able to **speak on behalf of their firm** within the task force and have a regular reporting relationship to their Executive-level leadership for the topics under discussion.

Selected representatives can only delegate their role to an alternate under exceptional circumstances (which should be agreed with the GFANZ APAC Network Central Office and Workstream Leads in advance).

Consultative Panel Members are expected to offer local/regional perspectives, and review Workstream outputs

Description

- **About:** A panel of relevant local & regional stakeholders that advise on Workstream outputs
- **Purpose:** Ensure perspectives from local / regional stakeholders are incorporated into guidance development
- **Cadence:** Ad-hoc or as invited by the Workstream Secretariat / Leads, and consulted prior to any publication release

Expectations of a Consultative Panel Member

Responsibilities

Organisations interested in participating as a Consultative Panel Member should expect to:

- Offer their **expertise, capabilities and experience** to support and elevate Workstream discussions;
- Attend **interim meetings** with the GFANZ APAC Network and other Working Group Members / Consultative Panel Members / Knowledge Partners, including Working Group Meetings where invited, as required to progress the work; and
- **Review and provide input** to Workstream outputs (both interim and final guidance report) ahead of formal publication.

Consultative Panel Members are not expected to attend all Working Group Meetings, unless requested / invited by the Workstream Leads and/or Secretariat

Profile of Consultative Panel Member Organisations

Organisations interested in participating as a Consultative Panel Member should:

- Be a **local/regional stakeholder** involved in / impacted by the early retirement of coal power generation such as:
 - Development finance institutions;
 - Financial regulators and/or central banks;
 - Utilities companies;
 - Local / regional financial institutions involved in managed phaseout transactions;
 - Companies (state-owned or otherwise) driving phaseout efforts within a country in the Asia Pacific; or
 - Relevant civil society entities
- Ideally, possess **relevant expertise and/or oversight** related to managed phaseouts

Knowledge Partners are expected to support the Workstream by providing deep technical expertise and perspectives from civil society

Description

- **About:** Relevant think-tanks, NGOs, or institutes that can support the Workstream by providing domain expertise
- **Purpose:** Provide deep **technical / science-based expertise** and perspectives from civil society to enrich Workstream discussions
- **Cadence:** Ad-hoc or as invited by the Workstream Secretariat / Leads

Expectations of a Knowledge Partner

Responsibilities

Organisations interested in being a Knowledge Partner should expect to:

- Offer their **expertise, capabilities and experience** to support and elevate Workstream discussions;
- Where relevant, **be willing to lead on specific subsets of work** which may include supporting the drafting of materials or engaging with external parties; and
- Attend **interim meetings** with the GFANZ APAC Network and other Working Group Members / Consultative Panel Members / Knowledge Partners, including Working Group Meetings where invited, as required to progress the work.

Knowledge Partners are not expected to attend all Working Group Meetings, unless requested / invited by the Workstream Leads and/or Secretariat

Profile of a Knowledge Partner

Organisations interested in participating as a Knowledge Partner must either:

- Possess **deep technical expertise** related to managed phaseouts, decarbonisation, and/or guidance-development; or
- Be able to represent or speak on behalf of key segments of **civil society** on the topic of net-zero and/or managed phaseouts

For avoidance of doubt, Knowledge Partners choose to get involved on a voluntary (non-commercial) basis

Organisations interested in participating in the Workstream can express their interest through this online form

Expression of Interest survey form

Scan QR:



Go to link:

<https://tinyurl.com/3hrh53k9>

Note: Please be cautious of identifying any information which you consider to be potentially competitively or commercially sensitive, so that we can ensure that such information is handled appropriately

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GFANZ

Glasgow Financial Alliance for Net Zero