Gold Standard®
for the Global Goals

A Just Transition through the Early Phase Out of Coal-Fired Power Plants

Methodology motivation

Emissions from burning fossil fuels are the dominant cause of global warming

— "*The 1.5 °C limit is only possible if we ultimately stop burning all fossil fuels*" – António Guterres.

Clean energy is needed to meet climate goals

— >60% of global electricity generated is produced using fossil fuels.
— We cannot simply switch this power off...
— Fossil fuel energy must be replaced by at least an equal amount of clean and renewable energy.
— A 1:1 energy generation replacement is essential for :
  — **Protecting energy security:** With 1.2 billion people facing energy poverty, a 1:1 phase-in of renewable energy as fossil fuels are phased out is crucial to prevent worsening energy deficits.
  — **Ensuring real emission reductions:** Without adequate renewable energy replacement, energy deficits may be filled by fossil fuels, negating emission reduction efforts.
  — **Facilitating a just transition:** The fossil fuel sector employs about 32 million people worldwide. A carefully managed phaseout with renewable energy replacement is necessary to protect these livelihoods.

The GS team developed this methodology independently, with assistance from subject matter experts, without external funding or involvement from any outside entity.

Applicability & Emissions reductions

- Eligible renewable energy sources - e.g., wind power, solar power, wave power, or tidal power - other sources may be considered based on technology maturity level. Biomass or WtE are **not eligible**.
- Grid-connected projects are **eligible**; captive or off-grid projects are **not eligible**.
- REP shall have **an equivalent capacity** to the baseline CFPP plant and shall be implemented and made **fully operational within five years of the CFPP** phase-out—that is, the closure of electricity generation.
- **CFPP phase-out** can be spread over a period of time five years. The phase out must be completed by 31/12/2035 (developed and emerging economies) or 31/12/2040 (LDCs & SIDs).
- **Issuance of carbon credits** happens only when the **REP starts supplying at least 50% of the baseline capacity** provided by the CFPP prior to its phase-out (annual average basis).
- Maximum crediting up to end of remaining life of the CFPP in countries where RE is ineligible for crediting; 15 yrs where RE is eligible for crediting (emission factor is updated to Grid emission factor for extended life).
- The baseline emissions are calculated as
  - **Minimum(net electricity delivered by the REP (MWh), electricity generated by the CFPP).**
  - The emission factor the coal-fired power generation (tCO2/ MWh)
- The historical operating efficiency of the baseline power plant shall be adjusted to be more conservative i.e., aligning with the best efficiency baseline plant operating or best efficiency plant that is financially viable and commercially available in the region.

Leakage considerations

Repurposing of infrastructure

- No repurposing of the CFPP infrastructure is allowed.
- The baseline plant shall made redundant/inoperative with no possibility of power generation in future.

Supply-demand gap

- Transition phase: CFPP has stopped producing energy and the REP has not yet become fully operational.
- The gap may lead to the deployment of – or increased demand from – other sources of energy.
- If the GHG emission-intensity of the other source(s) is (are) higher than that of the baseline CFPP then leakage emissions shall be considered.

Market leakage

- If closure of the CFPP leads to an increase in coal supply to the market, there may be market leakage.
- Therefore, developers shall either:
  - Demonstrate that the coal which would have supplied the CFPP will not be distributed to the market (e.g., the mine closes down). or
  - Apply a conservative default factor to account for market leakage (e.g., 18.5% for China; Ye et al., 2020)

Just Transition elements

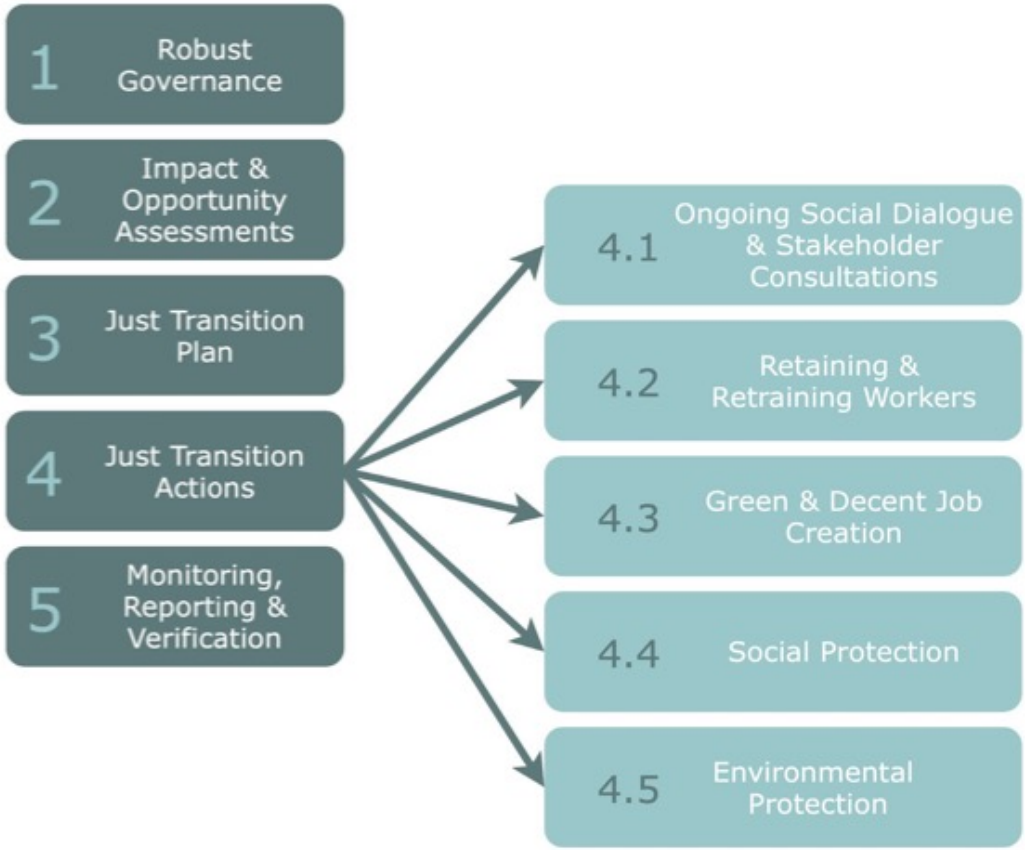
Project shall demonstrate compliance with

— Stakeholder consultation following the Stakeholder Consultation Engagement Requirements.

— Safeguarding Principles & Requirements.

— National and subnational regulations and policies, where exists.

— Just Transition requirements as described in this document.



Next steps

- Public consultation (Nov 1st Week)
- Revisions following public consultation
- Final version to be published by end of Q1 2025

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