

For a greater energy transition, repurposing of coal plants for generation of renewable energy ensures huge benefits for the country. Explain.

India is admitted to Paris climate deal 2015 and 450GW renewable energy by 2030.

But the fund requirements needs careful handling in energy transition, where India has target of 5 Trillion by 2024 and thus repurposing of coal plants for generation of renewable energy is a promising feature.

Benefit of reduced decommissioning costs:

1. Decommissioning of existing coal plants cost remediation cost and degenerated land cost which is 58 MUSD/GW in India
2. Thus repurposing allows partial re-use of asset like generators, land, grid connection etc,
3. Further the cost of commissioning new greenfield renewable projects can be used.
4. (e.g) Assam coal plants are now re-purposed to use its land and asset to improve the environment of the Eastern Himalayas.

Economical benefits of repurposing:

1. Repurposing of coal plants in urban and semi-urban areas will create economic diversification, industrial rejuvenation and employment of local work force.
2. (e.g) Indian solar reduced tariff can use the industrial rejuvenation setup of coal plants through International Solar Alliance

Benefits of stressed coal Sector:

1. India is the largest importer of coal from China and Europe.
2. Further climate change assurance and renewable energy targets made coal sector more stressful.
3. Payment through PRAAPTI failures thus can be rejuvenated through repurposing
4. (e.g) PRAAPTI payments can be routed through asset management of the new repurposed coal mines to existing customers.

Thus India can hugely benefit from the repurposing of coal plants, but the work force, land degeneration has to be properly studied and examined to create a win win situation in India's coal sector.