Phasing Coal makes Economic Sense, too

What is the issue?

India can start phasing down its coal power fleet over the next decade not because of international pressure, but because it makes sound economic and financial sense for the country.

What does India's commitment in Glasgow summit mean for the electricity sector in the next 3-5 years and beyond?

- Most significant is the direction that India has committed to "net zero" which implies first a phase down, followed by a phase out of coal.
- Fortunately Glasgow pact makes no mention of timelines for phase down and phase out of coal.
- The 2070 net zero timeline is distant enough.
- Short/medium term targets India announced are 500 GW non-fossil capacities and 50 per cent renewable generation by 2030.
- Assuming India is to achieve these targets changed economics of the electricity sector mean a massive benefit for the country.

What are the benefits of meeting these Targets?

- Cheaper and more reliable electricity,
- Greater energy security and reduced fuel imports
- Less environmental damage - cleaner air.
- The growth of new manufacturing chains feeding the energy transition and a potential boost to the competitiveness of India's exports.

How the Renewable energy targets will economically benefit India?

- Firstly India does not need any new coal power plants.
- This is because current coal fleet is running at 60% plant load factors even during pre-Covid times.
- In addition, currently around 30GW of coal power is under construction and expected to come on stream in the next 2-3 years.
- Another 27GW that are either seeking or have already received clearances and financing haven't yet started construction.
- Allowing any of the 27 GW of "zombie" plants would be a financially

ruinous mistake.
- It requires an investment value of Rs2.47 lakhs crore — scarce resources that can be more productively invested in clean energy, battery storage and grid strengthening.
- Owing to falling costs of RE and battery storage, switching investment from these coal projects to battery storage powered by renewable would save the Indian power system about Rs43,000 crore every year.

What are all the ill effects of constructing new Coal power Plants?

- Lock the consumers into expensive electricity.
- Undermine the delivery of India's renewable energy targets.
- India is no longer in a situation where it can absorb endless quantities of all types of power.
- Increasingly unpredictable struggle on the part of renewable energy developers.
- A net loss in terms of economic efficiency and the risk of fresh non-performing assets.

What should be done now?

- Old (25+ years) coal plants needs to be progressively retired, in line with the Central Electricity Authority's recommendation.
- This is because of their inefficiency, contribution to air pollution and the high costs of maintenance, pollution control retrofits etc.
- Retired ones must be replaced by a mix of renewable, battery storage and higher load factors from the rest of the power fleet, including more efficient coal units.
- All this means India will peak both its coal power capacity by 2025 and coal power generation by 2030 without sacrificing its energy security.

Reference:

1. https://www.thehindubusinessline.com/opinion/phasing-coal-makes-economic-sense-too/article37668927.ece