



# Coal Crunch in India

## Why in News

India's thermal power plants are facing a severe coal shortage, with **coal stocks having come down to an average of four days of fuel** across an increasing number of thermal stations.

## Key Points

- **Reasons:**
  - **Eruption in Power Demand:**
    - Economy recovering from the [Covid-19 pandemic](#) coupled with supply issues have led to the current coal shortage.
    - India is suffering from the impacts of a sharp surge in electricity demand, a squeeze on domestic mine output and surging prices of seaborne coal.
  - **Increased Share of Thermal Power Plants:**
    - Coal fired thermal power plants have also supplied a higher proportion of the increase in demand leading the share of thermal power in India's power mix increasing to 66.4% from 61.9% in 2019.
  - **Flooding and Rainfall:**
    - Lower than normal stock accumulation by thermal power plants in the April-June period and continuous rainfall in coal bearing areas in August and September which led to lower production and fewer despatches of coal from coal mines.
  - **Lowering Imports:**
    - A consistent move to lower imports coupled with high international prices of coal have also led to plants cutting imports.
- **Impact:**
  - If Industries face electricity shortages, it could **delay India's economic reopening**.
  - Some businesses **might downscale production**.
  - Providing India's population and underdeveloped energy infrastructure, the **power crisis could hit long and hard**.
- **Steps that can be Taken:**
  - **Ram-up Mining:**
    - Government is working to closely monitor stocks and also State run Coal India and NTPC are working to raise output from mines to boost supply.
  - **Supply Controls:**
    - Rationing domestic power supplies, especially in rural and semi-urban areas, may emerge as one of India's easiest solutions.
    - Indian power distributors do typically cut supplies to certain areas on a rotational

basis when generation is lower than demand, and an extension of load-shedding would likely be considered if power plants take any further hits.

- **Increase Imports:**

- India will need to amplify its imports despite the financial cost. From Indonesia for instance, the price rose from USD 60 per tonne in March to 200 per tonne in September.

- **Hydro-Power Generation:**

- The same monsoon rains that have flooded coal mines are likely to boost hydro-power generation.
- Large hydro-electric projects on dams are India's major electricity source after coal and the sector performs at its peak around the rainy season which typically extends from June to October.

- **Turn to Natural Gas Powered Generators:**

- There could be a larger role for natural gas to play, even with global prices currently surging.
- In a desperate situation, the gas-powered fleet could help prevent any widespread power outages. State-run generator NTPC Ltd., for example, has idle capacity that can be fired up in around 30 minutes if needed and is connected to a gas grid.

## Coal

- This is the **most abundantly found fossil fuel**. It is used as a domestic fuel, in industries such as iron and steel, steam engines and to generate electricity. Electricity from coal is called **thermal power**.
- The coal which we are using today was formed millions of years ago when giant ferns and swamps got buried under the layers of earth. Coal is therefore referred to as **Buried Sunshine**.
- The **leading coal producers of the world** include China, US, Australia, Indonesia, India.
- The **coal producing areas of India** include Raniganj, Jharia, Dhanbad and Bokaro in Jharkhand.
- Coal is also **classified into four ranks**: anthracite, bituminous, subbituminous, and lignite. The ranking depends on the types and amounts of carbon the coal contains and on the amount of heat energy the coal can produce.

[Source: TH](#)

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