

The Big News Coal Shortage & India's Looming Power Crisis

Why is there shortage of coal in India?

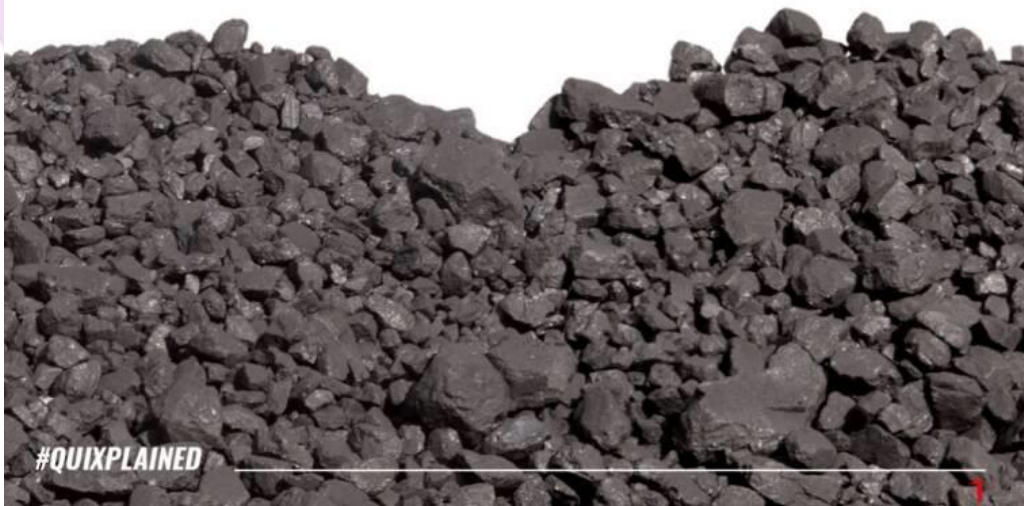
Peak shortages in some states have reached double digits. On average, coal stocks available are only good enough for about eight days' generation against a norm of 24 days. In some plants, the stocks available are just about enough to run the plant for a day or two more.



COAL SHORTAGE AND INDIA'S LOOMING POWER CRISIS

WHY IS THERE A COAL SHORTAGE?

- 108 of 173 thermal power plants have critically low levels of stock
- Power demand is hitting record highs due to economic recovery after COVID-19
- Some imported coal-based power plants are not in production due to high international prices of coal
- surges and a major heatwave spell across India

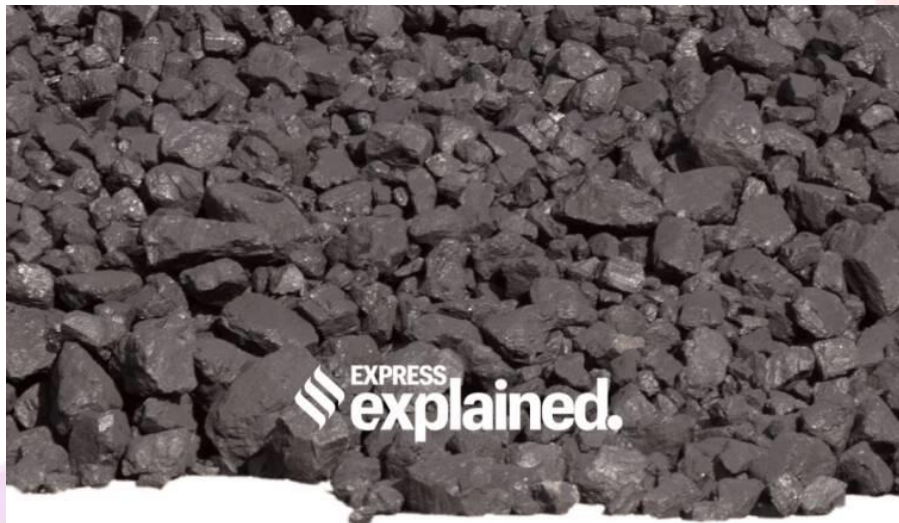


#QUIXPLAINED

Coal shortage in India

Coal fuels 70% of India's power demand. As per Central Electricity Authority (CEA) data of April 19, 2022, India's electricity production via thermal plants using domestic coal stood at 182.39 GW with an average of 34% coal stock in them. Meanwhile, power plants using imported coal are generating 16.73 GW of electricity with an average coal stock of 34%.

The peak in demand has been met with load shedding and planned outages by states like Andhra Pradesh, Gujarat, Maharashtra, Jharkhand, Bihar, Haryana and Uttarakhand. Since the start of April, Jharkhand has been facing an average supply shortage of 10-12%, the worst in the country, followed by Andhra Pradesh (10%), Uttarakhand (8-10%), Madhya Pradesh (6%) and Haryana (4%).



- Poor financial performance of distribution companies has left some of them unable to resume supply at higher prices
- Some states, including Jharkhand and Maharashtra, have large outstanding dues to coal companies
- The railways has thus far been unable to transport sufficient coal to thermal power plants to meet current demand and build up stock

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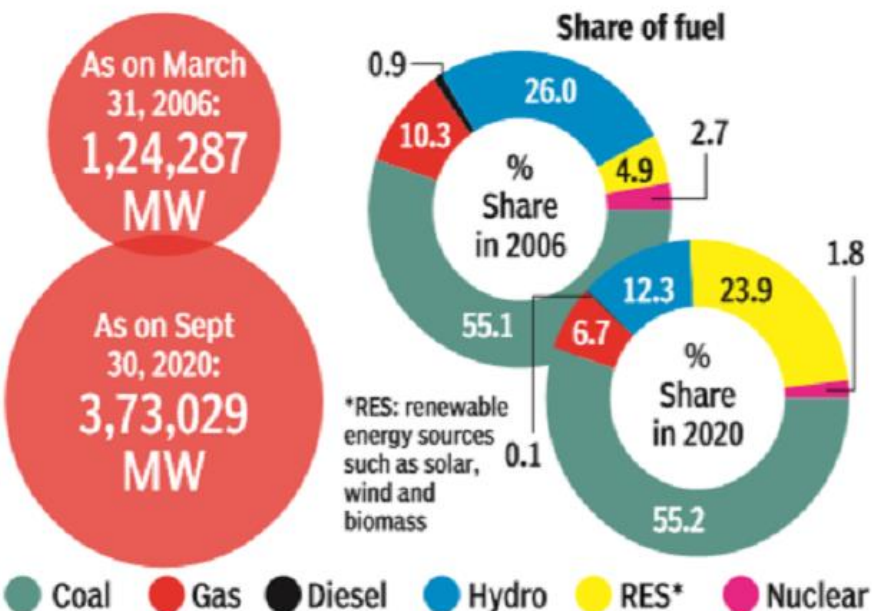
Why coal shortage now?

Coal contributes to over 70 per cent of India's power generation. Of this, over 12 per cent is import-based coal. the Russia-Ukraine war has led to a disruption in international coal supply, making the coal import much more expensive and affecting India's coal import. The cost of imported coal in India is expected to rise 35 per cent in the fiscal year 2022-23 compared to the past year. Power producers had to pay premiums of up to 300 per cent in March to secure coal supplies in the domestic spot market.

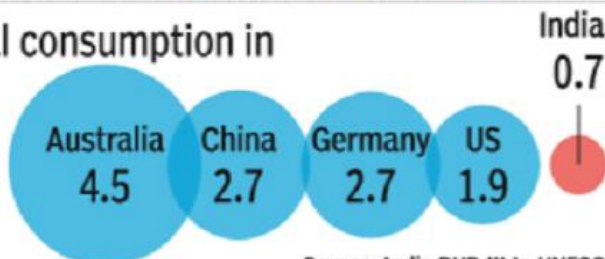
India witnessed a sudden rise in energy demand in March — the hottest in its recorded history. This pushed peak power demand to 199 GW in the middle of March. The last week of March saw a 13 per cent higher demand over past year. Biggest reason - Increasing power demand over the years. As per a report by the Hindu, in 2021, demand increased to 124.2 BU per month from 106.6 BU per month in 2019. In 2022, the demand has further increased to 132 BU.

DESPITE GREEN PUSH, COAL IS VITAL

Installed power generation capacity in India:



Per-capita coal consumption in major coal consuming countries in 2019



Source: India BUR-III to UNFCCC

How is the government reacting?

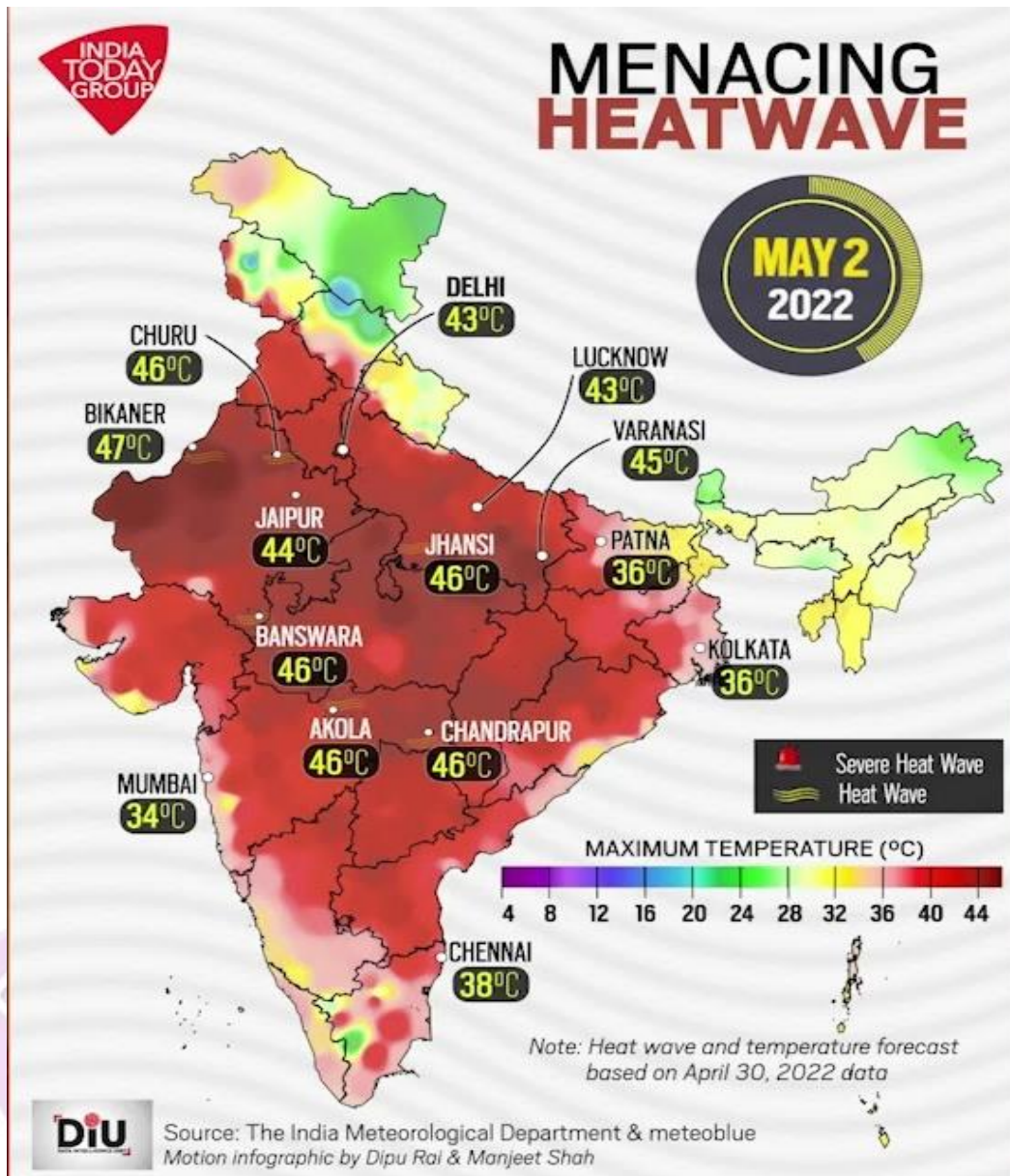


WHAT HAPPENS NOW?

- The railways has cancelled trips to prioritise the delivery of coal rakes across the country
- Some states are looking to blend domestic and imported coal to augment stocks
- Peak power demand is expected to set a record high of 215-220 GW in May-June. The low stocks could signal a worse crisis in September-October when monsoon makes production and transportation of stocks difficult



Heat wave in India



Role played by Railways in the crisis?

The railways have about 2,500 rakes which can be used for coal transportation. With a turn-around time of about four-and-a-half days (which goes up to nine days for coastal regions), the railways can provide only about 525 rakes on any single day. Of this, about 100 rakes are used for transporting imported coal and therefore, only about 425 rakes are available on a daily basis for transporting domestic coal. But only 380 rakes were being provided in the first half of April this year.

The railways prefer to transport coal over short distances in order to save on the turn-around time. Consequently, coal stocks in faraway power stations are good enough for only two days of generation or less, whereas for plants nearer to the mines it can go up to nine days also. It is not just the non-availability of rakes which is causing the problem. There is also the issue of availability of tracks since they are being used on a back-to-back basis. In order to transport more rakes for transporting coal, the railways are cancelling passenger trains. About 42 trains have been cancelled for a month involving about 750 trips.

