



PEKB Becomes First Solar-Powered Coal Mine in Chhattisgarh

Why in News?

Parsa East and Kanta Basan (PEKB) has become Chhattisgarh's first coal mine to run entirely on **solar power**, achieving full energy self-reliance.

Key Points

- **About PEBK Mine:** The Parsa East and Kanta Basan (PEKB) coal mine plays a vital role in supplying coal for electricity generation to nearly 80 million consumers.
 - The solar plant in PEBK is **expected to reduce nearly 400,000 tonnes of carbon emissions over 25 years**—equivalent to planting 2.5 million trees.
 - Environmentalists see this initiative as a major step toward energy security and environmental protection, combining coal mining with clean energy solutions.
- **Coal Reserves in Chhattisgarh:** The state holds **16% of India's total coal reserves**, making it one of the richest in coal resources.
 - The **state ranks second in the country in coal production**, contributing over 18% of India's total output. The majority of these **reserves consist of power-grade coal, suitable for electricity generation.**
 - An estimated 44,483 million tonnes of coal have been identified across 12 coalfields, mainly located in the districts of Raigarh, Surguja, Koriya, and Korba.
 - **Chhattisgarh-based Coal India subsidiary South Eastern Coalfields Limited's (SECL) Gevra and Kismunda coal mines ranked 2nd and 4th globally** among the largest coal mines.
 - Located in **Korba district**, they jointly produce over 100 million tons annually, about 10% of India's coal output.
 - Both mines use **advanced, eco-friendly technologies** like surface miners for blast-free operations.

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