



## Risks Associated with the Decommissioning of Coal Plants

**For Prelims:** Risks Associated with the Decommissioning of Coal Plants, Transition towards Cleaner Energy, Risks of Stranded Assets, Public sector banks and Non-Banking Financial Institutions (NBFCs).

**For Mains:** Risks Associated with the Decommissioning of Coal Plants.

[Source: TH](#)

### Why in News?

India is progressing slowly towards [Cleaner Energy](#). However, this noticeable shift towards cleaner energy sources in electricity generation is causing apprehensions about the risks associated with the decommissioning of [Coal Plants](#).

### What are the Current Trends in Transition towards Cleaner Energy?

- Financing for new coal power projects has declined over the past five years, while there has been a steady rise in financing for projects based on [Renewable energy sources](#).
- Coal continues to dominate the energy mix, there has been a notable increase in renewable energy generation capacity in India.
- Renewables constituted **41% of the total capacity in 2022-23**, marking an increase from 32% in 2011-12. Moreover, the yearly increase in renewable energy capacity has **surpassed that of coal power since 2017**.
- While clean energy in the electricity mix has increased to **about 23%**, **over 55% of India's current energy needs are still being met by coal**. The acceleration of this transition towards greener energy is essential to keep the global temperature increase below 1.5°C.

### What are the Economic Implications of Transition Towards Cleaner Energy?

- **Risks of Stranded Assets:**
  - Stranded assets are at risk of losing value and **becoming liabilities due to unforeseen shifts in market conditions**, regulatory changes, evolving consumer preferences, and technological advancements.
    - Stranded assets are assets that have suffered from unanticipated or premature write-downs, devaluations or conversion to liabilities.
  - This poses potential risks to banks and financial institutions that have direct or indirect ties to the fossil fuel sector.
- **Financial Implications:**
  - The financial risk associated with **decommissioning coal plants** in India is relatively high due to the average age of these plants being only 13 years.
  - Public sector banks and [Non-Banking Financial Institutions \(NBFCs\)](#), bear a **substantial 90% of the loan burden associated with coal projects**.
    - Moreover, private banks have reduced their financing to coal-fired thermal power plants significantly.

- **Regional Vulnerabilities:**

- Regions like **Chhattisgarh, Odisha, and Jharkhand** have a **high share of stressed assets** (to the tune of 58%,55% and 27%) in state coal power capacities.
  - This places them at a heightened risk of facing financial losses due to asset devaluation as India moves towards sustainable energy practices.

## Way Forward

- Governments need to create robust policies and regulations that provide **clarity and predictability for investors** transitioning away from coal. Clear guidelines and supportive policies can incentivize the shift towards renewable energy sources while mitigating risks for stakeholders.
- Conducting **thorough risk assessments, including stress testing** and scenario planning, can help financial institutions and **Investors** anticipate potential impacts of stranded assets. This proactive approach allows for better risk management and mitigation strategies.
- **Financial institutions should diversify their investment portfolios** by gradually reallocating funds from fossil fuel-dependent assets to renewable energy projects. This step can help minimize the risks associated with stranded assets and align with global sustainability objectives.

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