

Coal Gasification Incentive Scheme

April 5, 2026 • vajiramandravi.com



Coal Gasification Incentive Scheme Latest News

Recently, the Union Minister unveiled India's roadmap to reduce dependency on imported petroleum, ammonia, and fertilizers, highlighting the ₹8,500 crore coal gasification incentive scheme.

About Coal Gasification Incentive Scheme

- It was **approved on January 24, 2024**, for promotion of coal and lignite gasification projects for **PSUs and private sector** with an **outlay of ₹ 8,500 crore**.
- It aims to achieve **100 million tonnes of coal gasification by 2030**, leveraging India's abundant domestic coal reserves to promote sustainable industrial development.
- It encourages participation from **both public and private sector players** to establish coal gasification projects across the country.
- This initiative is a key component of India's clean coal transition strategy.
- **Significance:** It is expected to **reduce environmental impact, enhance energy security**, and drive economic growth through technological innovation and infrastructure development.

- **Category of Projects**

- **Category I:** PSU-led projects
- **Category II:** Private and PSU projects
- **Category III:** Demonstration and small-scale projects

What is Coal Gasification?

- It is a **thermo-chemical process** that **converts coal into syngas**,
- A synthetic gas composed mainly of carbon monoxide (CO), hydrogen (H₂), carbon dioxide (CO₂), methane (CH₄), and water vapour (H₂O).
- Coal is **reacted at high temperatures** (1000–1400°C) with a controlled amount of oxygen and steam, producing syngas.
- **Process of Coal Gasification**
 - **Preparation:** Coal is finely crushed to increase surface area.
 - **Gasification reactor:** The powdered coal is fed into a reactor with limited oxygen/air and steam.
 - **Chemical reactions:** Coal breaks down into syngas components due to partial oxidation.
 - **Gas cleaning:** Impurities like tar, sulfur, and dust are removed from raw syngas.

Source: ET

Source: <https://vajiramandravi.com/current-affairs/coal-gasification-incentive-scheme/>

© Vajiram & Ravi. For personal use only.