

2024 Global Methane Forum

Mobilizing Methane Action

18-21 March 2024, Geneva, Switzerland

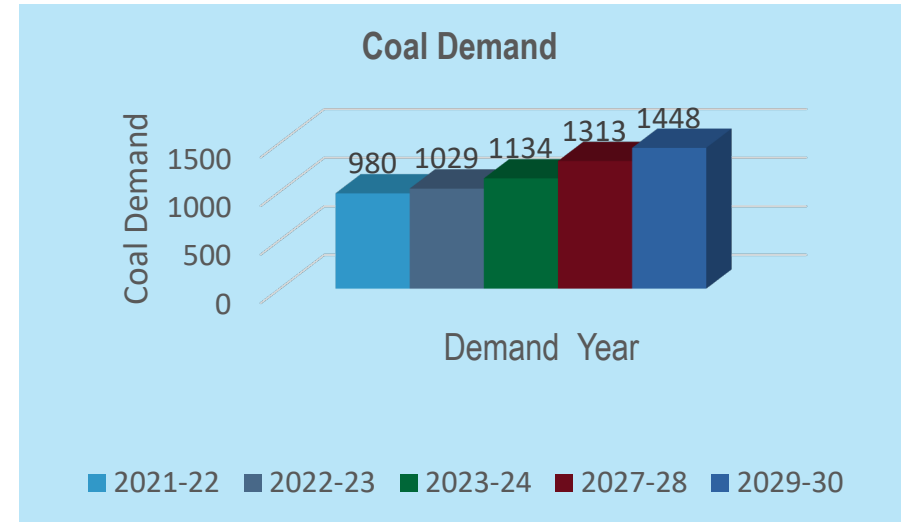
India Country Update

Chiranjib Patra

Central Mine Planning and design Institute

Coal Sector Demand (India)

- Coal is the most important and abundant fossil fuel in India. It accounts for 55% of the country's energy need.
- The Coal Demand in India in 2019-20 was 956 Mt and was increased to 1029 Mt by 2022-23 and it is expected to be in the range of 1.3 -1.5 Billion tonnes by 2030.

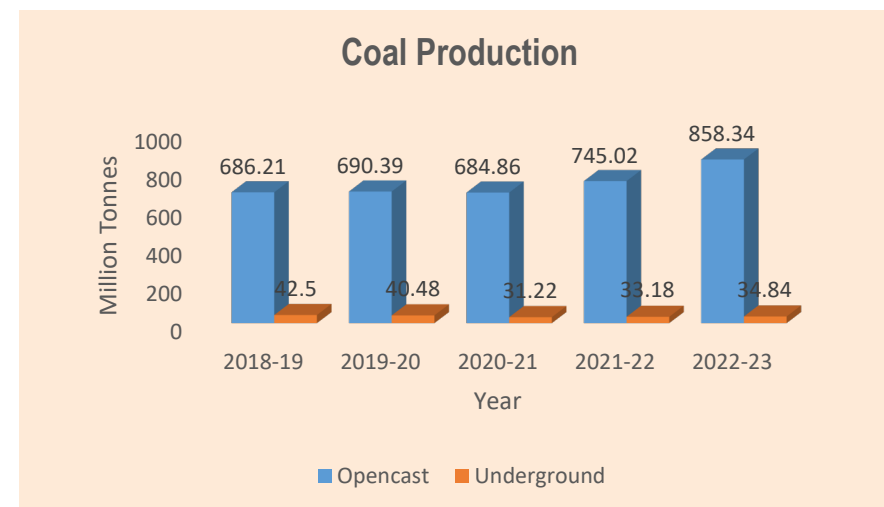


Source: Ministry of Coal (India)

Coal Production Over the Past 5 Years

- Coal Production in India:

Year	Open Cast Production (Mt)	Underground Production (Mt)	Total Coal Production(Mt)
2018-19	686.21	42.5	728.71
2019-20	690.39	40.48	730.87
2020-21	684.86	31.22	716.08
2021-22	745.02	33.18	778.21
2022-23	858.34	34.84	893.19



Source: Ministry of Coal (India)

- Coal India Limited (CIL) is at the forefront of the nation's coal production. CIL alone produces around 79% of the country's entire coal output.

Coal India Limited :Fuelling India's energy needs

- Coal India Limited (CIL), operating under the aegis of the Ministry of Coal, Government of India.
- CMPDI is one of the subsidiaries of CIL, providing almost all the consultancy services prior to mining, during the mining operation and after the mining operations under one roof.
- Key highlights of CIL:
 - Coal Production: 703.20 MT
 - Employees: 239210
 - Net Worth: ₹57,224.76 Crore(6893Million USD)
 - Profit Before Tax: ₹38,000.81 Crore (4578 Million USD)

Coal Mine Methane Outlook

- India has published the 3rd Biennial Update Report to the UNFCCC in 2021, which contains the inventory of Green House Gases (GHG) for the year 2016.
- India, Third National Communication and Initial Adaptation Communication to UNFCCC submitted by MoEFCC in Dec 2023.
- It brings out the various initiatives of Govt. of India for mitigation and adaptation.
- The total fugitive emissions in the year 2019 were 35,898 GgCO₂e, of which 47 per cent were from coal mining and post mining operations and 53 per cent were from oil and natural gas production and handling systems.
- Between 2016 and 2019, fugitive emissions to the atmosphere decreased by 3 per cent

Coal Mine Methane Emission

- CMPDI in collaboration with USEPA working to establish a methodology to estimate Fugitive Emission from Opencast mines of India.

India's commitments in COP26

- India is committed to playing an active role in combating climate change through a reduction in greenhouse gas emissions.
- India's Five Commitments at COP26:
 - Develop capacity to generate 500GW of non-fossil fuel based energy by 2030.
 - Meet 50% of the country's energy needs with renewable energy by 2030
 - Significant reduction in estimated carbon emissions from the current level by one billion tonnes, by the year 2030.
 - Minimise the economy's carbon intensity by 45% till 2030, from 2005 levels.
 - Goal of achieving net zero emissions by 2070.

Ways Ahead

- CIL is diversifying its business into various sectors such as solar power and New and renewable energy resources (Non-Conventional) to achieve country's vision of net zero emission.
- India is taking all efforts to make coal mining sustainable to environmental, social and economic dimensions.
- Identifying areas where AMM projects can be taken up.