



Ministry of Coal



## Year End Review 2022: Ministry of Coal



Achieves Record Coal Production of 780 Million Ton; 64 Coal Mines Auctioned so far Under Commercial Auction

Coal Ministry Ensures Adequate Coal Supply to Thermal Power Plants & Other Sectors

Introduces Innovative Policy Reforms in Coal Sector

Launches 141 Coal Mines' Auction in November 2022

13 Railway Projects Under PM Gati Shakti for Faster Transportation of Coal

Focus on Mission Coking Coal; Aims 140 Million Ton Production by 2030

Coal India Signs Four MoUs for Coal Gasification Projects

Special Focus on Environment & other CSR Initiatives

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Achieving record coal production and thereby ensuring adequate coal supply to thermal power plants and other sectors across the country, bringing about innovative policy reforms to give further fillip to India's energy security were some of the remarkable achievements of our Coal Sector during the year 2022. Record coal production of 780 million ton (provisional), successful auctioning of 64 coal mines so far under transparent commercial coal mine auction, holding Investors' Conclave in different parts of



the country, signing of crucial MoUs for Coal Gasification projects with premiere organizations like BHEL, IOCL, GAIL (India) were some of the other major highlights of Coal Ministry's achievements during the year.



Under Asset Monetization, the Ministry achieved Rs.40,104.64 crore, way above NITI Aayog target of Rs. 3394 crore during 2021-22. In areas like land acquisition, adoption of new technology, stepped up focus on sustainable development & just transition, CSR initiatives etc Coal Ministry has recorded note-worthy achievements during the year 2022.



## REFORMS & POLICY: -

### Coal Linkage Policy implementation



**Policy for Auction of Coal Linkages to Non-Regulated Sector:** Coal India Ltd(CIL) has completed five tranches of linkage auctions so far, where total 131.19 Million Tonne per annum of linkages have been booked by the successful bidders.

**Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India (SHAKTI) Policy:** 209.614 Million Tonnes coal linkage have been booked / allocated under different provisions of the SHAKTI Policy.

### New Policy Initiatives

i):- **New sub-sector under the Policy for Auction of coal linkages of Non-Regulated Sector (NRS):-** A new Sub-sector '*Production of Syn-Gas leading to coal gasification*' has been created in 2022 under the NRS linkage auctions in order to encourage coal gasification technology so that new consumers requiring coal for gasification are incentivized. This will also mitigate the adverse impacts of the conventional use of coal on the environment.

(ii) **Single window for e-auction of coal:-** Government has recently approved a new mechanism for e-auction of coal by the coal companies. The erstwhile sectoral e-auction windows of Coal India Limited has been done away with and henceforth, all the non-linkage coal of the coal companies would be sold through one e-auction window of Coal India Limited / Singaren Collieries Company Limited. This single e-auction window will cater to all the sectors like power & non regulated sector included traders. Therefore, coal of any particular grade would be sold in the market to all consumers at one rate (one nation – one coal grade- one rate).

A single e-auction window would enable the coal companies to sell coal through the market discovered price mechanism and thus, implementing this policy will lead to the removal of Market distortions. It shall also increase operational efficiencies and lead to an increase in domestic coal demand.

(iii) **Amendment to NCDP:** To promote optimum utilization of coal resources in the national interest, enabling provisions has been made by way of amendment to the New Coal Distribution Policy (NCDP), 2007, in order to allow the coal produced from Closed / Abandoned / Discontinued mines of CIL / SCCL to be sold through a transparent and objective manner as per the guidelines issued by Ministry of Coal from time to time.



(iv) **Coal linkages for gasification plants of the coal companies:** CIL / SCCL have been allowed to provide long term allotment of coal to their own gasification plants at prices as may be decided by the coal company. This move will encourage coal gasification technology in the country and will help in early establishment of this new use of coal.



## Land Acquisition

### Policy Guidelines for use of land acquired under the Coal Bearing Areas (Acquisition & Development) Act, 1957:

Ministry of Coal has issued Policy Guidelines for use of land acquired under the Coal Bearing Areas (Acquisition & Development) Act, 1957 vide OM No. 43022/1/2022-LAIR dated 22<sup>nd</sup> April, 2022.

Main features of the Policy Guidelines are as follows:

1. Only the following types of lands will be considered:
  - a. Lands which are no longer suitable or economically viable for coal mining activities; or
  - b. Lands from which coal has been mined out / de-coaled and such land has been reclaimed.
2. The lands will be considered for the following coal infrastructure development activities and for such period of lease as mentioned against each activity:
  - a. To set up Coal Washeries (maximum lease period 30 years);
  - b. To set up Conveyor Systems (maximum lease period 30 years);
  - c. To establish Coal Handling Plants (maximum lease period 30 years);
  - d. To construct Railway Sidings (maximum lease period 30 years);
  - e. Rehabilitation and Resettlement of Project Affected Families due to acquisition of land under the CBA (A&D) Act, 1957 or other land acquisition laws (maximum lease period 99 years);
  - f. To set up the  d renewable power  projects (maximum  period 35 years); 



- g. To set up or provide for coal development related infrastructure including afforestation (maximum lease period 99 years), hospitals (maximum lease period 99 years), project office (maximum lease period 30 years), etc.
- h. To provide Right of Way (in case of railway line and highways 99 years, and in other cases maximum lease period 30 years or life of infrastructure whichever is lower);
- a. Coal gasification and coal to chemical plants (maximum lease period 35 years);
- j. Coal bed methane (CBM) extraction (maximum lease period 30 years or as may be allowed by the Government to the CBM concession holder); and
- k. To set up or provide for energy related infrastructure.

During the period from 01.01.2022 to 20.12.2022, a total of 1428.191 acres lands have been acquired under section 9 (1) of the Coal Bearing Areas (Acquisition and Development) Act, 1957 for subsidiaries of Coal India Limited. A total of 1195.78 acres lands have been vested to subsidiaries of CIL under section 11(1) of the CBA (A&D) Act, 1957.



### Mineral Concession (Amendment) Rules, 2022

The Ministry of Coal has amended Mineral Concession Rules, 1960 (MCR) by notifying Mineral Concession (Amendment) Rules, 2022 vide notification dated 07.09.2022 with a view to decriminalize its provisions. MCR regulates the application and grant of mineral concessions such as reconnaissance permit, prospecting license and mining lease. These concessions are pre-requisites for development and operationalization of mines entailing several compliances on the part of businesses.

The Government has been taking initiatives for reducing compliances for business and citizens. To further promote 'Ease of doing business' policy of the government, the amendment in MCR decriminalized sixty-eight (68) provisions whereas penalty has been reduced for ten (10) provisions of MCR.

Express provision has been introduced for adjustment of additional or shortfall royalty. Further, rate of penal interest on delayed payment of rent, royalty, fee, or other sums due to the Government has been reduced from twenty-four percent (24%) to twelve percent (12%). It is expected that these provisions shall afford the much-needed economic relaxation in the coal mining sector.



## Guidelines for mine closure for mines closed before 2009

 Large number of mines were discontinued/abandoned/closed before 2009 when 1<sup>st</sup> mine closure guidelines were issued by the Ministry of Coal. There is a need to close these mines scientifically in such a manner that they provide benefit to the community, prevent illegal mining, ensure safety and repurposing of the mined-out land. Therefore, the mine closure guidelines were issued in October, 2022, which will provide guidance to all coal companies (including lignite) having discontinued/abandoned/ closed mines after the nationalization of coal mines till 27<sup>th</sup> August 2009 (date of issuance of first coal mines closure guidelines). The guidelines intend to only provide an overall framework for the closure of mines and the details of final implementation plans are to be approved by respective company boards. Overall goal of the guidelines is to restore the mined-out land as far as possible to its pre-mining stage.

### Amendment in timeline in CIMS Portal

After stakeholder consultations on functioning of CIMS portal and other related issues, an amendment was effected in the timeline of registration in CIMS portal. The importer can apply for registration not earlier than 60th day and not later than five days before the expected date of arrival of import consignment. The Automatic Registration Number shall remain valid for a period of 75 days. Importer shall have to enter the Registration Number and expiry date of Registration in the Bill of Entry to enable Customs for clearance of consignment.

### COAL STATISTICS:-

#### Increase in Coal Inventory

Total increase in resources of coal inventory (as on 1.4.2022) in comparison to last year is 9285.49 Million Ton. The Measured/Proved resources has increased by 9926.38MT. The details are as follow:

Item	Inventory as on	Proved (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)
A	1 <sup>st</sup> April 2022	187105.32	147252.18	27053.96	361411.46
B	1 <sup>st</sup> April 2021	177178.94	146949.04	27997.99	352125.97
<b>Difference (A-B)</b>		<b>9926.38</b>	<b>303.14</b>	<b>-944.03</b>	<b>9285.49</b>





### Coal Production and dispatch

i. the year 2022 (up to November, 22), all India Coal production (CIL, SCCL & Captive mines) is **779.108 MT** (Provisional) and Coal off take is **781.973 MT** (Provisional). Coal dispatch to Power Sector is **662.562 MT** (Provisional). the year 2022 (up to November, 22), E-Auction by CIL and SCCL is **56.45 MT**.

### Production Growth:

The all India coal production in the Financial Year 2021-2022 was 778.19 Million Tonne (MT) in comparison to 716.083 MT in the year 2020-2021. Further, in the current financial year upto November'22, the country has produced about 524.2 MT of coal as compared to about 448.1 MT during the same period of last year with a growth of about 17%.



### Growth:



The supply/dispatch of coal in the country during financial year 2022-2023 (up to November' 22) was 558.24 MT (provisional) in comparison to 521.08 MT during the same period of last year with a growth of about 7.33 %. To meet the increased demand of power sector during the year 2022-23, CIL & SCCL has dispatched 414.221 MT (up to November' 22) (Provisional) in comparison to 375.147 MT during the same period of last year with a growth of about 10.42%.

### Ensuring Coal quality by Third Party Sampling

For enhanced customer satisfaction, special emphasis has been given to Quality Management of coal from mine to dispatch point. Now, all the consumers of CIL have the option for quality assessment of the supplies through independent third-party sampling agencies (TPSA). Apart from Central Institute of Mining & Fuel Research (CIMFR) and Quality Council of India (QCI) two more agencies namely M/s SGS India Private Ltd (by CIL) for power & non-power sectors & M/s Mitra S K Pvt. Ltd. for power sectors are empanelled to provide more choices of Third-Party Agencies to consumers. All consumers of power /non-power sectors are free to take services of any of the empanelled agencies. Due to various initiatives taken by CIL like use of mobile crushers, procurement of online ash analysers first mile connectivity etc. for better governance of quality of coal, the grade conformity of coal (Third Party Sampling) supplied during Apr 22-November 22 has enhanced up to 69% (provisional) compared to 65% of April 2021 to March 2022 last year for CIL.



### Mission Coking Coal

With these transformative measures taken by Ministry of Coal under 'Atmanirbhar Bharat' initiative of the Prime Minister, domestic raw Coking Coal production is likely to reach 140 Million Ton by 2030, CIL has planned to increase raw coking coal production from existing mines up to 26 MT and identified nine new mines with PRC of about 22 MT by FY 2025. Also, CIL has offered eight discontinued coking coal mines, out of the total 30 discontinued mines, on an innovative model of revenue sharing to the private sector with a Peak Rate Capacity of 2 MT.

The Ministry has also identified four coking coal blocks and the Central Mine Planning and Design Institute (CMPDI) also will finalize GR for 4 new coking coal blocks in the next two months. The blocks may be offered in subsequent rounds of auction for private sector to further up

domestic raw coking coal supply.

## **Setting up of Washeries**

 At present, domestic raw coking coal washing capacity is about 23 MT per annum including 9.26 MT of the private sector. Coal India Ltd. (CIL) is planning to set up and operationalize nine more new washeries with a capacity of 30 MTPA. With setting up of new washeries, it is estimated that CIL will  be able to supply about 15 MT of washed coking coal to the steel sector, thereby reducing import of coking coal. During FY 22, CIL supplied 1.7 MT washed coking coal to the steel sector and has set a target of 3.45 MT during FY23. Status of 9 Coking Coal Washeries-



- Two Coking Coal washeries constructed and operational
- Three under construction (3 Coking + 1 Non-coking)
- LoI/WO issued for one washeries
- Three tendered and bid opened - Price Bid under evaluation
- Two Washeries are to be tendered.

Additionally, 1 Non-coking Coal Washery is under construction.

## **Mining Developers cum Operators**

Ministry of Coal intent to engage reputed MDOs in coal mines, through open global tenders, and to ramp up domestic coal output and reduce import dependency to extent possible. The contract period of engagement is for 25 years or life of mine whichever is less.

The state-owned coal miner is tracking a total of 15 greenfield projects for implementation through MDOs with investment component to the tune of around Rs. 20,600 crores largely spread on land acquisition, rehabilitation and resettlement issues, and in some cases on railway sidings.

Having total rated capacity of around 169 MT eleven of the fifteen projects, are opencast and four underground. While the capacity of opencast projects is 165 MTY, underground projects add up to the rest.

The MDOs would excavate and deliver coal to coal companies in accordance with the approved mining plan. MDOs would bring to the table mutually beneficial technology infusion, economically viable operations and increased production. Since contracts offered to them are on long-term basis, allied infrastructure at mine projects also would be developed by these private players. They shall facilitate R&R issues, land acquisitions, green clearances and coordination with State and Central Pollution Boards.

Coal India Limited (CIL) has issued letters of acceptance for seven coal projects to be pursued through engagement of Mine Developer cum operator mode. Cumulatively, these projects have production capacity of close to 100 million tonne per year.

Out of balance 8 projects, LoA for two projects will be issued shortly. The remaining 6 projects are at different stages of tendering.

## **Reopening of discontinued mines on Revenue sharing modal**



There are numerous abandoned mines with appropriate volumes with sufficient mineable reserve and suitable depths, which were previously used to extract coal. However, these mines were closed for safety reasons and primarily due to unprofitable operations which posed hindrance in providing for the wages of the employees.

Discontinued mines pose as a national loss because large amounts of reserves cannot be extracted therefore; Ministry of Coal planned to offer these mines in revenue Sharing model. The Ministry of Coal is attempting to build a vision that includes private sector participation in order to bring these abandoned mines back into operation. The fundamental premise is that the private sector will bring in much needed efficiency through lower overhead expenses and state-of-the art technology. Subsequently, CIL has offered 20 Mines in Tranche-I and 10 mines in Tranche-II to promote an optimum utilisation of coal resources in the national interest.

## COAL TRANSPORTATION: -

### First Mile Connectivity [FMC]

Ministry of Coal takes up 71 First Mile Connectivity Projects for seamless evacuation of coal. Eight projects (6-CIL & 2-SCCL) of 95.5 MTPA capacity have been commissioned.



To strengthen India's energy security and to realise *Atma Nirbhar Bharat* by replacing imported coal with domestically mined coal, Ministry of Coal has set a target to produce 1.31 Billion Ton in FY25 and 1.5BT in FY30. Development of coal transportation that is cost efficient, fast and environmental friendly manner is important goal of the country.

Keeping in view of increase in coal evacuation in future, the Ministry is working on the development of National Coal Logistic Plan including First Mile Connectivity through railway sidings near coal mines and strengthening of Rail Network in coalfields.

MOC has formulated a strategy to develop an integrated approach for eliminating road transportation of coal in mines and has taken steps to upgrade mechanized coal transportation and loading system under 'First Mile Connectivity' projects. Coal Handling Plants (CHPs) and SILOs with Rapid Loading System will have benefited from crushing, sizing and speedy coal and speedy coal aided loading.

The Ministry has undertaken 51 first mile connectivity (FMC) projects (44 – CIL, 5- SCCL & 3 – NLCIL) of 522 MTPA capacity, out of which 8 Projects (6-CIL & 2-SCCL) of 95.5 MTPA capacity have been commissioned. 51 projects will cost Rs. 18000 crores and will be commissioned by FY2025. Additional 19 FMC projects of CIL & SCCL with capacity 330 MT will be taken up and to be implemented by FY26-27.

Study was undertaken through National Environmental Research Institute (NEERI), Nagpur in 2020-21. NEERI Report has established yearly carbon emissions saving, reduction in truck movement density and diesel savings of Rs 2100 crore per year.

With reduced manual intervention, precise pre-weighed quantity and better quality of coal can be loaded. Improved loading time will bring down the wagon idling increasing their availability. Easing the load on road networks promotes cleaner environment and savings on diesel. It will be an all-round win-win situation for the company, railways and the consumers.

### **Initiatives under *PM GatiShakti*:-**

The Ministry of Coal, in view of cleaner environment in coal transportation has given momentum in rail evacuation and also initiating new efforts to gradually move away from road movement of coal in country. Planned construction of new broad gauge rail lines in Greenfield coal bearing areas, extending rail links to newer loading points and doubling and tripling the rail lines in some cases will enhance rail capacity considerably.

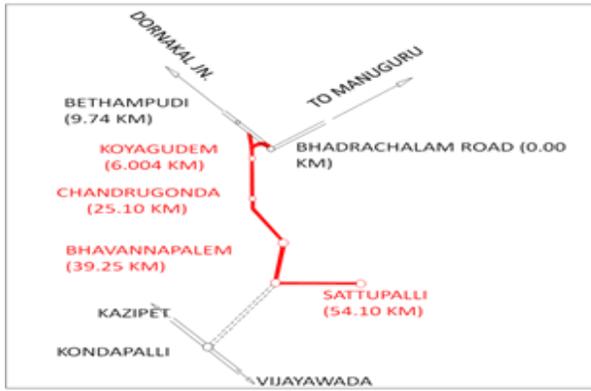
PM launched Gati Shakti- Nation Master Plan for Infrastructure development in October 2021 with the objective to bring different Ministries together and for integrated planning and coordinated implementation of infrastructure connectivity Projects. It will incorporate the infrastructure schemes of various Ministries and State Governments and will also leverage technology extensively including spatial planning tools.

In line with the goal of PM Gati Shakti, the Ministry of Coal has undertaken 13 railway projects to develop multimodal connectivity and identified missing infrastructure gaps for each projects. Four Railway projects are successfully mapped in the NMP portal under High Impact projects which will be developed in the States of Jharkhand and Odisha and will facilitate movement of coal with rapid logistics and wider connectivity for all the commercial miners.

### **Railway Projects Commissioned during 2022**

#### **Bhadrachalam Road-Sattupalli New BG rail Line**





To ease the faster, safer and environmental free transportation of coal, 54 Km length new rail line costing 927.94 Crore is being constructed and connects Bhadrachalam Road to Sattupalli including stations Sarvaram, Chandrugonda & Pardhasaradhi Puram.

Prime Minister Narendra Modi virtually inaugurated the new BG rail line from Ramagundam in November 2022 to facilitate unconnected areas of Telangana and coal transportation.

2. Angul — Balaram — Putagadia — Jarapada along with the link from Putagadia to Tentuloi (68 Km)- (MCRL Rail Corridor in Odisha)

Talcher Coalfield of Mahanadi Coalfield is one of the largest coal with about 52 BT of coal resources, which is ~15% of total prognosticated coal resource in the country. Of the available resources in Talcher Coalfield, more than 63 % of coal resource (~33 BT) lies within 300 m depth, presenting significant potentiality for open cast mining.

Talcher coalfields has produced ~90 MT Coal in FY22 and planned to enhance production to ~190 MT in FY 2024-25 and ~280 by FY 2030 from Mahanadi Coalfields Limited and Allotted Coal blocks. To curb the hurdle of coal evacuation, construction of rail line started in phase-manner in Talcher Coalfields namely MCRL (Mahanadi Coal Railway Limited).

The Alignment of the project traverses through Angul districts in Odisha. Angul and Jarapda are existing stations of IR network. Balram is existing loading station in Talcher –Balram private siding of MCL.

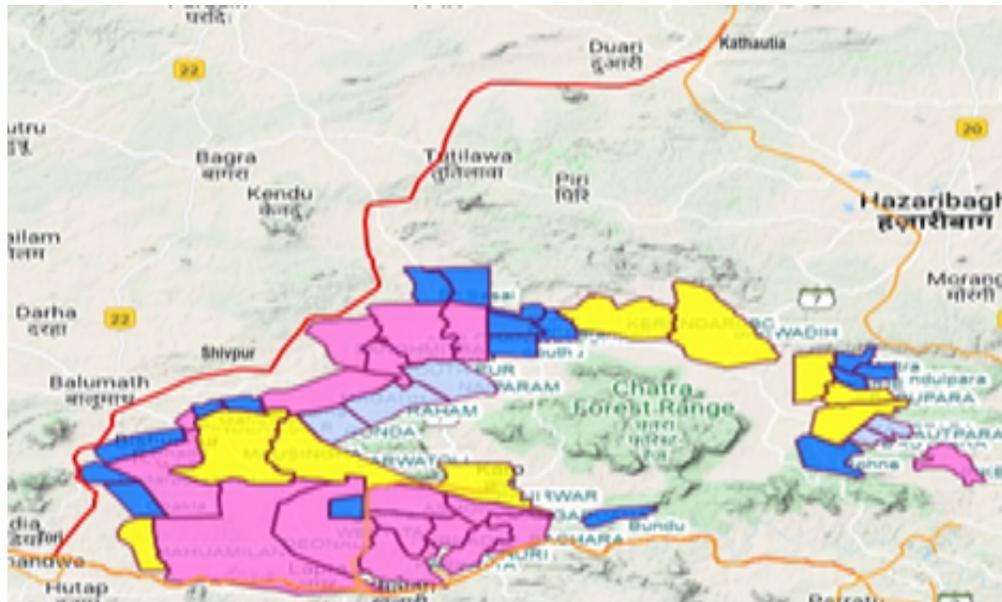
MCRL Phase-I (Angul-Balram) of 14 Km length is commissioned in Nov'2022. This railway line will cater evacuation of 25 MT coal from MCL mines in Talcher Coalfields.

MCRL Phase-II (Balram-Jaapada-Tentuloi) of 54 Km is expected to be commissioned by Dec'2025. It provided connectivity to allocated coal blocks on the southern side and central part of Talcher Coalfields. Notification for Land acquisition and Forestry Clearances has been obtained. This railway line will cater evacuation of coal from CIL & Non-CIL Coal Blocks in Talcher Coalfields ~58 MT.

This rail line will provide proximity to Talcher coalfields to nearby Paradip and Damra port and make it amenable to provide cheaper and alternative means of coal supply to distant location on east and west coast power plants and other users through sea route and ships relieving the existing congestion in upcoming rail routes.



## Tori-Shivpur-Kathautia Railway Line



North Karanpura Coalfield is a major coalfield in Jharkhand State, falling within the command of Central Coalfields Limited (CCL) having coal resource of about 19 billion tonnes. CCL has projected production contribution of about 135 Million tonne by FY25, out of which about 85 MT is likely to be produced from North Karanpura Coalfield from several Greenfield/brownfield coal mining projects, like Amrapali (25 MT), Magadh (51 MT), Chandragupta (15 MT), Sanghmitra (20 MT), etc.

Presently, coal evacuation from the North Karanpura coalfield is covered by Barkakana-Daltonganj branch railway line of the East Central Railway connecting Gomoh and Dehri-on-Son via Barkakana loop. Additional railway line has been created by CCL, i.e. Tori - Shivpur (44.37km) double railway line. The development of third line on the same alignment is under construction at an additional capital of Rs. 894 Crores, which is likely to be operationalized by May, 2023.

Further, Shivpur-Kathautia, new rail line of 49km, has been envisaged and is being constructed through formation of project specific SPV, which shall provide another exit for coal evacuation via Koderma to the trunk railway line from Howrah to Delhi.

Construction of Tori-Shivpur-Kathautia Rail line envisaged by Ministry of Coal under PM - Gati Shakati initiative is likely to provide coal evacuation capacity of about 125 MT by rail and play major role in eliminating coal transportation by road.

### COAL BLOCK ALLOCATION

#### Mines and Minerals (Development and Regulation) Act, 1957

Under the provisions of Mines and Minerals (Development and Regulation) Act, 1957 and the Rules made thereunder, 22 coal blocks of Madhya Pradesh, Odisha, Chhattisgarh, Jharkhand, Assam and Telangana have been successfully auctioned.



To reduce import of coal and to promote domestic production, auction-based regime introduced in 2014 allowed private sector participation, however, it was limited to captive usage in own end use plants. The sector has been opened up for commercial coal mining by private players in 2020 and first ever successful auction of commercial mining was launched by the Prime Minister in 2020 and concluded with allocation of 19 coal mines.

Commercial coal block auctions are conducted in a two-stage online bidding process, which involves technical screening and submission of competitive initial price offer in the first stage, and a second and final stage where better price offers are intended to be received.

Commercial coal mining auctions are completely different from the earlier regime of restricted sectors, use and price. Now, there are no such restrictions at all. The auctions have terms and conditions which are very liberal, allowing new companies to participate in the bidding process.

Reduced upfront amount, adjustment of upfront amount against royalty, liberal efficiency parameters to encourage flexibility to operationalize the coal mines, transparent bidding process, 100% FDI through automatic route is allowed and reasonable financial terms and revenue sharing model based on the National Coal Index.

#### **Auction Achievement of 2022: -**

- 5<sup>th</sup> round of commercial mining launched on March 30, 2022 offering 109 coal/ lignite mines along with Second attempt of 4<sup>th</sup> round and Second attempt of 3<sup>rd</sup> round of commercial auction offering 4 coal mines and 9 coal mines respectively. A total of 17 coal mines with PRC of 51 MTPA has been successfully auctioned under these three tranches.
- Ministry of Coal has completed the forward auction of 3<sup>rd</sup> round which was launched on October 12<sup>th</sup>, 2021 with successfully auctioning 10 coal mines having PRC of 22 MTPA and 4<sup>th</sup> round which was launched on December 16, 2021 with successfully auctioning 5 coal mines having PRC of 15 MTPA.
- Ministry of Coal has launched the biggest ever commercial coal mining auction offering 141 coal and lignite mines on November 03, 2022. 133 coal/lignite mines were put up for auction in the 6<sup>th</sup> round of commercial auctions. Additionally, 8 coal and lignite mines under 2<sup>nd</sup> attempt of 5<sup>th</sup> round of commercial auctions were also launched where single bids were received in the first attempt.
- As of now total 64 coal mines have successfully been auctioned under commercial mining having PRC of 152 MTPA. Once fully operational these mines will generate employment potential of more than of 2 lakh persons and would attract capital investment of more than 22,000 Crores.
- During 2022, eight coal mines have started production adding to production capacity of 30.8 MTPA.
- Annual Coal production in 2022 has been achieved as 100 MT (till 22.12.2022), against production of 81 MT during last year 2021.
- Directions have been issued for declaration of successful bidder and issuance of vesting order in respect of twenty coal mines auctioned for sale of coal.



- From 6th round of commercial auction, upfront amount has been reduced to 0.20 % of estimated geological reserve from 0.25% of value of estimated geological reserve and for mines having Geological Reserves upto 200 MT, the upper ceiling of Upfront amount may be reduced to Rs. 75 Cr. from 100 Crores.
- From 6th round of commercial auction, partial relinquishment of coal blocks by the successful bidders has been allowed
- Government Company which is allottee of a CBM block may be allotted the overlapping coal blocks for simultaneous/ sequential extraction of coal and to apply conditions like bank guarantee or performance security, efficiency parameters, upfront payment, etc. when the coal block becomes operational.

## ASSET MONETIZATION

In the year 2021-2022 against the NITI Aayog Target of ₹ 3394 crore Ministry of Coal achieved ₹ 40,104.64 crore. Details are as follows:

S. No.	Assets Monetized	Approx. value of Assets (₹ Crore)
1.	Coal Blocks-MDO (5 Nos.)	9592.64
2.	CBM (1 Project)	1512
3.	Coal Block Auction (fig computed by NITI Aayog)	29000
	<b>Total</b>	<b>40104.64</b>

Status of Asset Monetization in FY 2022-23 till date against NITI Aayog Target of ₹ 30000 crore is as follows:

S. No	Assets Category	Amount in ₹ crore
1	MDO	390
2	Coal Blocks auctioned in FY 22 & monetized in FY 23	16,383.15
	<b>Total</b>	<b>16,773.15</b>



 Ministry of Coal achieved Capex Target for the FY 2021-22 of ₹ 19547.33 Cr which is 104.27% of the annual capex target. Detail of Capex Achieved in FY 2021-22 and in FY 2022-23 till November 2022 is given below:

 ₹ Crore

 Particulars	CIL	NLCIL	SCCL	Total
 <b>FY 2021-22</b>				
 MoU Target for 2021-22	14685	2061	2000	18746
Achievement of FY 21-22	15400.96	2541.76	1604.61	19547.33
% achievement in FY 21-22	104.88%	123.33%	80.23%	104.27%
<b>FY 2022-23</b>				
MoU Target for 2022-23	16500	2920	2,000	21,420
Progressive Achievement till Nov 22	9751.12	1299.01	700.45	11750.58
% achievement till Nov 22	59.10%	44.49%	35.02%	54.86%

## Corporate Social Responsibility

- **Two subsidiaries of CIL won the National CSR Awards (2020), declared on 18th August 2022:**
  - **MCL – Winner in sub-category “Agriculture & Rural Development” under the category “CSR Awards for contribution in National Priority Areas”**
  - **MCL – Honourable mention in sub-category “Women and Child Development” under the category “CSR Awards for contribution in National Priority Areas”**
  - **CCL – Winner in sub-category “Promotion of Sports” under the category “CSR Awards for contribution in National Priority Areas”**
- **Major projects sanctioned during the period**
  - **Construction of Institute of Mining Technology in Singrauli, Madhya Pradesh**
  - **Electrification of 10253 nos. households in Chitrangi block, Singrauli**
  - **Establishment of Centralized kitchen for providing MID Day Meal to 50,000 students in Ramgarh,**

Jharkhand



## Construction of 5000 seated State Library at Ranchi University Campus

## School transformation program under 'Mo School Abhiyan' in Angul district, Odisha

Financial assistance for procurement of high-end neurosurgery equipment 'Gamma Knife' for better diagnostic and operative facilities at Kolkata

## CSR & Sustainability Conclave 2022

Jointly CIL and CCL successfully organized "CSR & Sustainability Conclave 2022" at Ranchi on 5th & 7th May 2022. Twelve thought leaders shared their valuable insights with the audience.

About 250 participants attended the event which included top management and senior executives of the company, CSR executives from all across CIL and students of reputed colleges such as IIM.

## Fight against COVID-19

CIL published a Coffee Table Book "Coal India wins over COVID" documenting the efforts of Coal Indians to fight off challenges posed by the Covid-19 pandemic. The book was inaugurated by the Hon'ble Minister (Coal).



## Coal India Limited Monetary Support

- Rs. 269 cr. were spent in FY 20-21 on COVID-19 related CSR projects which was 48.6% of total CSR spend of the year
- Rs. 244 cr. were spent in FY 21-22 on COVID-19 related CSR projects which was 41.8% of total CSR spend of the year
- Rs. 221.03 cr. were contributed to PM-CARES Fund in FY 19-20
- Total spend of Rs. 734 cr. during FY 19-20 to FY 21-22 on COVID-19
- Rs. 90 cr. in total as financial support to state govt. of Maharashtra (Rs. 20 cr.), West Bengal (Rs. 20 cr.), Jharkhand (Rs. 20 cr.), Madhya Pradesh (Rs. 20 cr.) and Chattisgarh (Rs. 10 cr.)

## Major Infrastructure Created



- 1200 bedded dedicated COVID hospital (Level 3) at Bhubaneswar by MCL
- 150 bedded dedicated COVID hospital at Talcher, Odisha by MCL
- Conversion of govt. hospitals at Bilaspur and Ambikapur, Chattisgarh into 100 bedded dedicated COVID hospitals by SECL
- 200 bedded COVID hospital at Hasdiha, Godda, Jharkhand by ECL
- 150 bedded makeshift COVID hospital at Bokaro, Jharkhand by CCL



### Equipment Support



- 64 slice CT scan machine at District hospital, Baikunthpur, Chattisgarh by SECL
- Cold Chain Equipments for vaccine transport to Govt. of Chattisgarh (by SECL), Govt. of West Bengal and Govt. of Meghalaya (by CIL)
- Oxygen concentrators and Pulse oximeters at different places in Bihar and Jharkhand by CIL



### Mission Praanvayu

- CIL and its subsidiaries are setting up 31 oxygen plants in 28 hospitals at a total cost of Rs. 46 crores and a combined capacity of more than 35,000 liters per minute. These plants will support a total of 5000 beds.

### Material Support

- More than 5.5 lakh cooked food/dry ration packets distributed (71,000 on Shramik Special Trains)
- More than 19.59 lakhs masks and more than 84,000 liters of hand sanitizer distributed in nearby areas of mines

### Livelihood Support

- Employment to people of nearby areas of mines in civil construction projects which were implemented under CSR. Despite lockdown restrictions, CIL and subsidiaries were able to spend much more (Total exp. – Rs. 553.85 cr) than their statutory requirement (Rs. 434.51 cr.) in FY 20-21
- Income generation opportunities through CSR projects
  - Women trained in Khadi and handloom by NCL sold masks to different agencies
  - MCL procured 3.10 lakh masks from women SHGs in Odisha benefitting about 200 women
  - CIL executed “Bharat KeKaladharmi” project to help performing artists who lost their livelihoods due to closure of tourist places in lockdown

### Other support

- v. CIL provided laptops to 150 underprivileged girl students of Kasturba Balika Vidyalaya, New Delhi to enable them to get digitally educated as schools were closed during lockdown

### Major CSR projects taken up in FY 22-23

S. No.	Company	Project	Outlay (Rs. Cr.)	Theme

1	CIL	Construction of 7 nos. of Public Toilet Complexes in operational areas	2.10	Sanitation
2	CIL	Distribution of ration to flood affected people of Assam	0.63	Nutrition Disaster Management
3	CIL	Improvement of Education & Health in aspirational district Darrang, Assam	1.98	Education Healthcare
4	CIL	Procurement of Gamma Knife medical equipment for better diagnostic and operative facilities at a major neuro hospital in Kolkata	10.00	Healthcare
5	CIL	Construction of 5000 seater library in the campus of Ranchi University	30.00	Education
5	NCL	Electrification of 10,000 households in Singrauli, Madhya Pradesh	55.00	Rural Development
6	NCL	Construction of Institute of Mining Technology at Singrauli, Madhya Pradesh	76.55	Education
7	NCL	Providing assistive aids and appliances to all Divyangs of Singrauli, Madhya Pradesh	2.84	Welfare of the differently abled
8	MCL	Renovation of existing Govt. schools in Kandhamal, Odisha	6.00	Education
9	MCL	Transformation of 66 nos. of Govt. high schools in the State of Odisha	10.00	Education
10	MCL	Urban tree plantation in Chandaka	5.77	Environment Conservation
11	BCCL	RO based drinking water solutions to water scarce villages near operational Areas	1.00	Water supply





12	CCL	Construction/strengthening of rural road	8.02	Rural Development
3	CCL	Centralized Kitchen at Ramgarh for supply of 50,000 meals/day in Govt./Govt aided schools of district including gap funding for operation during initial period of one year	22.24	Nutrition Education
4	SECL	Providing 113 Nos. of Smart Class at various Govt. Schools in Raigarh, Chattisgarh	4.69	Education
15	SECL	Construction of 43 Nos. of Cement Concrete Roads in 26 Villages of Kharsia Block, Raigarh District, Chattisgarh	4.37	Rural Development

#### NLC INDIA LIMITED (NLCIL) :-

#### MEASURES TAKEN TOWARDS PREVENTION OF COVID-19

NLCIL has been at the forefront in tackling the adverse effects of the pandemic since March 2020. During the FY 2021-22, NLCIL has spent Rs 1614.10 Lakh towards various COVID 19 preventive measures for the benefit of public at various locations of the Country. The following initiatives are undertaken.

- Setting up of 17 Oxygen Plants of 30 Nm<sup>3</sup>/Hr capacity in Tamil Nadu, Rajasthan & Karnataka at a cost of Rs 1113.65 Lakh.
- Supply of 184 Nos of Oxygen Concentrators of capacity 10 lit/Min in Tamil Nadu at a cost of Rs 218.02 Lakh
- Supply of 86 Nos of Oxygen Concentrators of capacity 10 lit/Min in Rajasthan at a cost of Rs 108.13 Lakh
- Sparring of 10 Nos of Hired Basic Life Support Ambulances to Cuddalore District Administration for 3 Months at a cost of Rs 58.34 Lakh
- Financial Assistance to M/s Socio Economic Research Institute (SERI) towards distribution of PPE Garments, Surgical Masks, Hand Sanitizers, Infrared forehead Thermometer, Oxygen concentrators and Probass UV-C disinfection systems for Cuddalore District at a cost of Rs 32.20 Lakh
- Providing food packets to the needy people through Sneha Opportunity Services, Neyveli at a cost of Rs 24.78 Lakh.
- Soap solution, Sanitizer, Cold chain equipment, Electrical connection to PSA Oxygen Plants at a cost of Rs 17.40 Lakh



ndesivir Injection



overnment Hospi



a cost of Rs 11.1



- Distribution of medical equipments to combat COVID -19 for Govt. Hospitals at Kattumannarkoil&Kurinjipadi at a cost of Rs 10.41 Lakh.
- Financial Assistance to M/s SANTHIGIRI ASHRAM towards distributing Ration & cleaning and personal hygiene kits to 300 families for COVID Prevention at a cost of Rs 10.00 Lakh
- Financial Assistance to M/s Sri Aurobindo Society, Puducherry for COVID relief activities at a cost of Rs 10.00 Lakh.



## SUSTAINABLE DEVELOPMENT & JUST TRANSITION



### Greening Initiatives: Bio-Reclamation/Plantation:-



Bio-reclamation of mined-out areas and plantation in free areas in and around coal mines:-

- Cumulative achievement of 7986Ha and plantation of 179 lakh saplings (up to Nov 2022) against the target of 7600 Ha & 176 lakh plants for FY2019-20 to FY2022-23.
- Coal/Lignite PSUs have planted around 47 lakh saplings on 2300 Ha land during January 2022 to November 2022.



### Development of Eco-Parks on Reclaimed Land& Mine Tourism :-

- Improve public perception of coal mining via Coal Mine Tourism- 8 eco-parks completed and two more Eco- parks to be completed in 2022-23.
- Hon'ble Minister of Coal has inaugurated Jhurey/Bal Gangadhar Tilak Eco-Park, WCL on 13.10.2022.
- NLCIL signed MOU with Pondicherry Tourism Development Corporation (PTDC) on 05.10.2022 to promote eco-tourism at Mine-I and Mine-II and showcase sustainable mining activities.
- NCL signed MOU with Madhya Pradesh Tourism Board to boost Singrauli Eco-Tourism Circuit.
- WCL signed MOU with Directorate of Tourism, Maharashtra to promote Eco-tourism.





### Utilization of Mine water for Community Use:

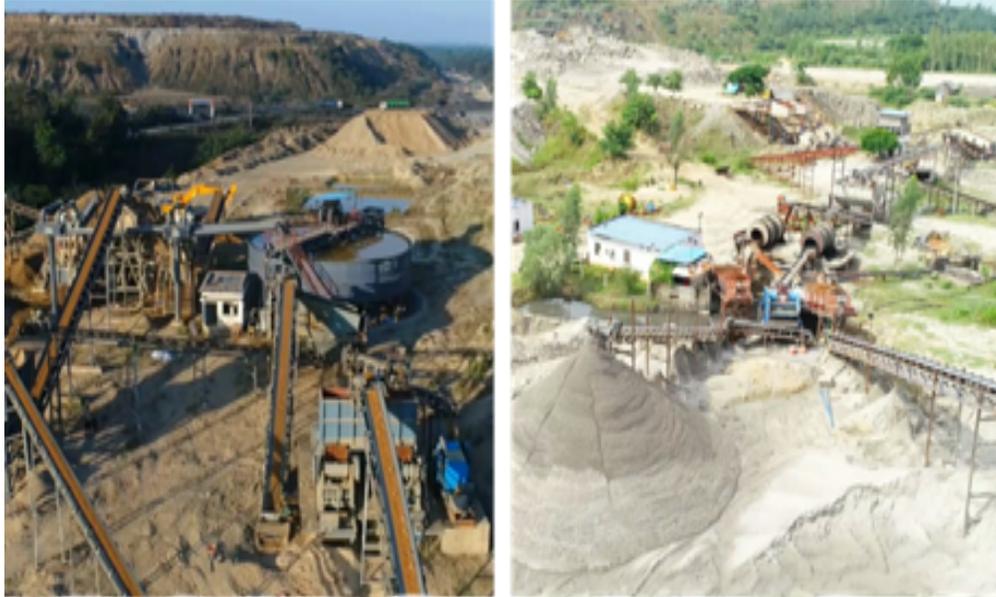
- Mine water supply by coal/lignite PSUs for community use (for 2021-22) has grown to 3703 LKL (Lakh Kilo Litre) registering a rise of about 17% over the quantity achieved in 2020-21.
- In FY 2021-22, More than 16 lakh population spreads in 871 villages of 9 States have been benefitted by domestic/drinking water supply. Also, irrigation potential (@ 100 acres/LKL) of about 2.71 lakh acres has been created by community water supply irrigation.
- Potential created in FY 2021-22 for 49 Lakh People to use mine water for domestic/drinking purpose @ 55 lpcd.
- Coal/Lignite PSUs have made available 2468 LKL mine water for community use till November 2022.



### Alternative Usage of Overburden (OB)



- Promotion of waste to wealth (circular economy) in coal sector - overburden to sand.
- 3 OB processing Plants functional in SCCL & 1 in ECL – UG Stowing purpose.
- 3 OB to Sand Plant installed in WCL.
- 9 more such Plants (CIL - 6, SCCL - 1 and NLCIL – 2) have been taken up for installation.



### **Energy Efficiency Measures**

Efficient use of energy resources and their conservation assume tremendous significance as one unit of energy saved at the consumption level ultimately translates into equivalent reduction of carbon footprint. Coal/lignite PSUs are taking various energy conservation & efficiency measures such as use of LED lights, energy efficient ACs, E-vehicles, DC Super Fans, Efficient Water Heaters, Auto timers in street lights, capacitor banks, installation of distributed and rooftop solar projects and promoting use of LNG in heavy duty mining machineries, etc.

### **Air Quality Management in Mining Areas in Coal Sector**

To minimize dust generation during mining processes, modern technologies are adopted and regularly monitored – surface miners, fog canons, mist sprayer, wheel washing, mechanised road sweeper, CAAQMS.





### FUTURISTIC AGENDA :-

#### Coal Gasification Project

With comfortable coal availability in the country, the Government of India has decided to promote gasification of coal in a big way. Coal gasification can yield multiple energy, chemical and petro-chemical products, most of which are presently being imported.

To set up **four more Gasification projects** and one lignite gasification project and to promote indigenous gasification technology, Coal India Limited has signed MOUs with BHEL, GAIL and IOCL on 12.10.2022 and NLCIL has signed MOU with BHEL under the aegis of Ministry of Coal to set up coal gasification projects at MCL **Odisha** to produce ammonium nitrate using high ash coal, Synthetic Natural Gas at ECL **West Bengal** with low ash coal and SNG/Methanol/ DME at **Jharkhand/Chhattisgarh and DME (Di-methyl Ether) from Lignite in Tamilnadu respectively.**

#### Details of Coal Gasification Projects:-

	CIL Subsidiary				NLCIL
	ECL	WCL	SECL	MCL	
<b>Partnering with</b>	GAIL	-	IOCL	BHEL	BHEL
<b>Product*</b>	Synthetic Natural Gas	Ammonium Nitrate	DME	Ammonium Nitrate	Methanol



 <b>Product Quantity</b>	633.6 Mn Nm3	0.66 MMTPA	0.72 MMTPA	Subject to PFR	0.396 MT
 <b>Mines</b>	SonepurBazari (G4-G5)	Niljai Mines (G9-G10)	Mahamaya Mines (G4)	Lakhanpur Mines (High ash)	Lignite
 <b>Coal (MT)</b>	1.4 MMTPA	0.8 MMTPA	1.35 MMTPA	1.3 MMTA	2.26 MMTPA Lignite
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### Coal to Hydrogen Mission

- Roadmap of Coal to Hydrogen has been prepared by **Expert Committee**.
- Roadmap of Coal to Hydrogen has been launched by **Hon'ble Minister of Coal in May'2022 at Mumbai**.
- Initiatives for the 500 TPD demo scale coal to hydrogen plant has been taken by M/s EIL with technically support from BHEL. The study would be conducted with indigenous gasification technology (M/s BHEL) as directed by the Ministry.

### Technology Roadmap for coal sector

Ministry of Coal has prepared Technology Roadmap for coal sector. This was launched at Mumbai on 06.05.2022. The objective is to implement new technologies and build digital infrastructure to support current and future ramp-up for the mines. This involves a strong, multi-speed backbone information technology and infrastructure system that allows rapid deployment of new technologies. Creation of such system would require access to new-age ecosystems (e.g., start-ups, established vendors, research institutes, etc). The technological transformation will also entail creation of a new culture in the organisation. A new way of thinking will be inculcated in the entire organisation. A technology transformation team to be set in place to drive impact and sustain the program with established Centre of excellence. A robust tracking and change management mechanism to be deployed to ensure timely resolution and delivery. The scope of this roadmap is as follows:

§ Technology enablement in coal mines for transformation across business value chain.

§ Leveraging "Digital Technology" as an accelerator for demonstrating performance enhancement from in the coal mines.

§ Defining Coal sector's technology transformation ambition and prepare workforce in Coal Sector for Industry 4.0 Digital Technology.

§ Increasing productivity, safety & sustainability while mean time reducing environmental impact by upgrading conventional technologies to new technologies.

Application of New Techno



In new technology adoption, CMPDI has introduced Drones for surveying and mapping applications in CIL. CMPDI has two survey grade drones which are equipped with LiDAR, optical and thermal sensors. It is presently being used for various applications in SECL, BCCL, CCL & MCL. Twelve (12) Drone Service Providers have been empanelled by CMPDI based on qualitative assessment as the number of Drone based jobs are high and spread over various subsidiaries of CIL. CMPDI is using the services of these agencies on regular basis. Some major projects executed using drone include Sand Replenishment Studies in the State of UP, Terrain Mapping of Unstable Sites in Jharia Coalfield, Drone based real time footage videography in four projects of CCL as per mandate of MoEF, Soil Moisture Conservation Studies for NALCO, VEDANTA & SCCL in Odisha, Thermal Survey, etc.

#### **Other Activities:-**

##### **Azadi ka Amrit Mahotsav**

Ministry of Coal celebrated its AKAM Iconic Week from 7<sup>th</sup> -11<sup>th</sup> March 2022 with strict COVID-19 protocols in place (<https://coal.gov.in/azadi-ka-amrit-mahotsav>). The inaugural programme was held on 7<sup>th</sup> March, 2022 at Dr Ambedkar International Centre, New Delhi. Various activities including blood donation camp in Ministry of Coal, talks by eminent speakers, quiz contest, slogan writing contest, painting competition for school children, distribution of books/brochures/pamphlets on Freedom Struggle/Independence were conducted. All Coal PSUs also celebrated AKAM Iconic week in respective subsidiaries spread across the country in tandem with Ministry of Coal Iconic Week Programme. All CPSUs are conducting week wise AKAM activities as per annual action plan and these activities are regularly being uploaded on AKAM portal of Ministry of Culture (<https://amritmahotsav.nic.in/ministries-and-departments.htm>).

#### **Special Campaign for disposal of pendencies 2.0**

Special Campaign 2.0 was undertaken this year from 2nd October 2022 to 31st October 2022. During this campaign, special attention was given to field/outstation offices in addition to the ministries/department for monitoring and implementation of the campaign. MOC had cleaned more than 3023788 sq. ft. area at 340 identified sites. More than 5409.5 MT of scrap has been disposed off which generated revenue of Rs. 48.5 cr. MOC was highlighted by DARPG for being in top 5 ministries to achieve 100% in PMO reference & Ease Of Rule targets. MOC was ranked 2nd amongst 85 Ministries/Departments to generate highest revenue from disposal off of scrap during special campaign 2.0

As part of the celebrations of Special Campaign 2.0 under Swachh Bharat Abhiyan, a garden [“Kachra Udyan ] was developed by Team CCL at a guest house in the B&K area from scrap,disposed items, tyres, pipes, cart etc The unique initiative was appreciated as a step towards waste management.





Trolleys are made up of scrap sheets and wheels of disposed mine carts taken from Regional Stores, Jarangdh



Stand made by using scrap taken from Kargali Washery



Oil drum being used as big flower pot was taken from Regional Stores, Jarangdh



Mine carts wheels with axle used as Flower Pot Stands



### **Blood Donation Camp:**

Four rounds of Blood Donation Camps have been organised during the period wherein more than 150 donors voluntarily donate blood.

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**AKN/RKP**

(Release ID: 1887132) Visitor Counter : 820

