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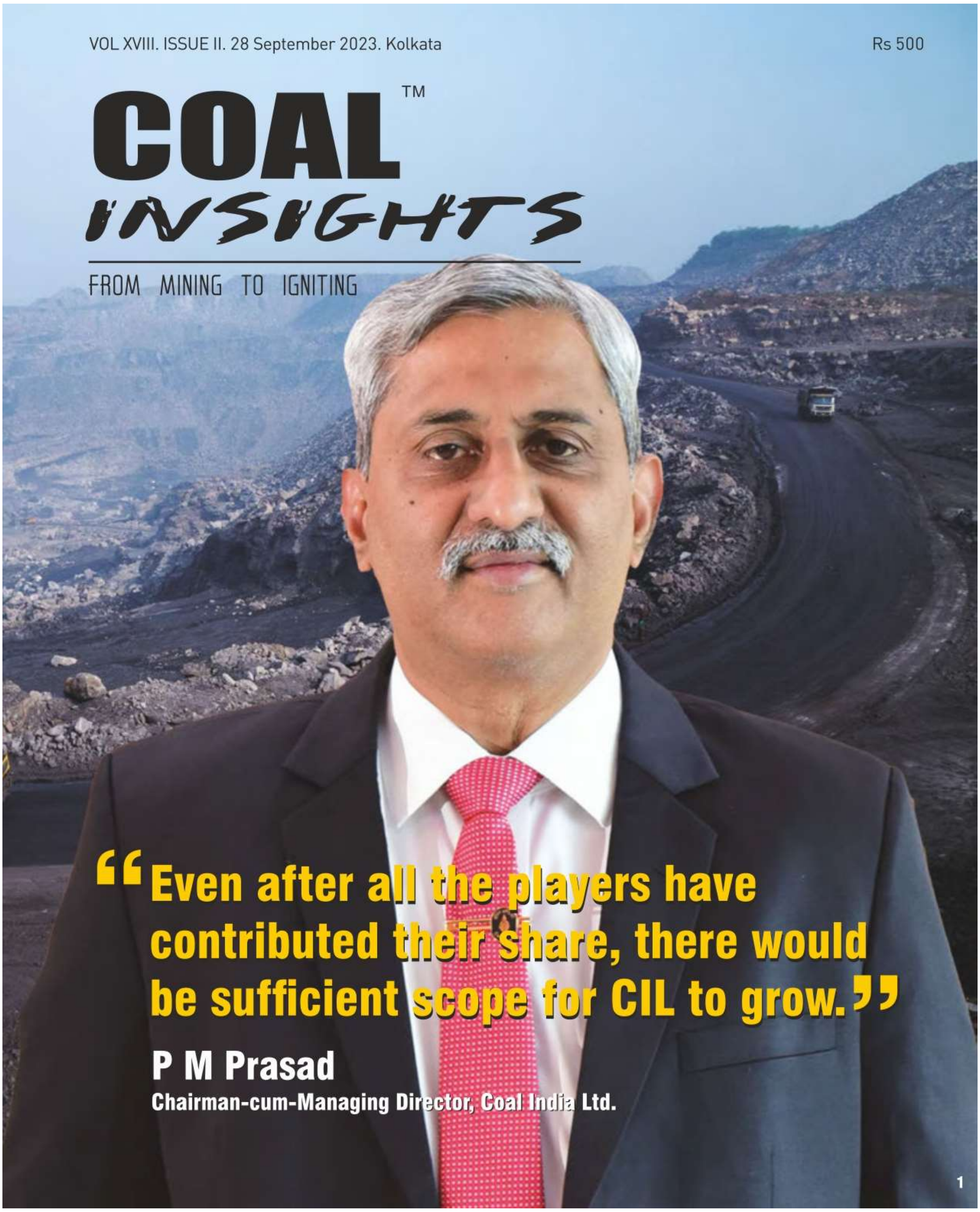

INDIA
COAL MARKET WATCH

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- Updates on India's economic performance
- Coal e-auction through coaljunction and MSTC platform

Information covered in the Monthly Report

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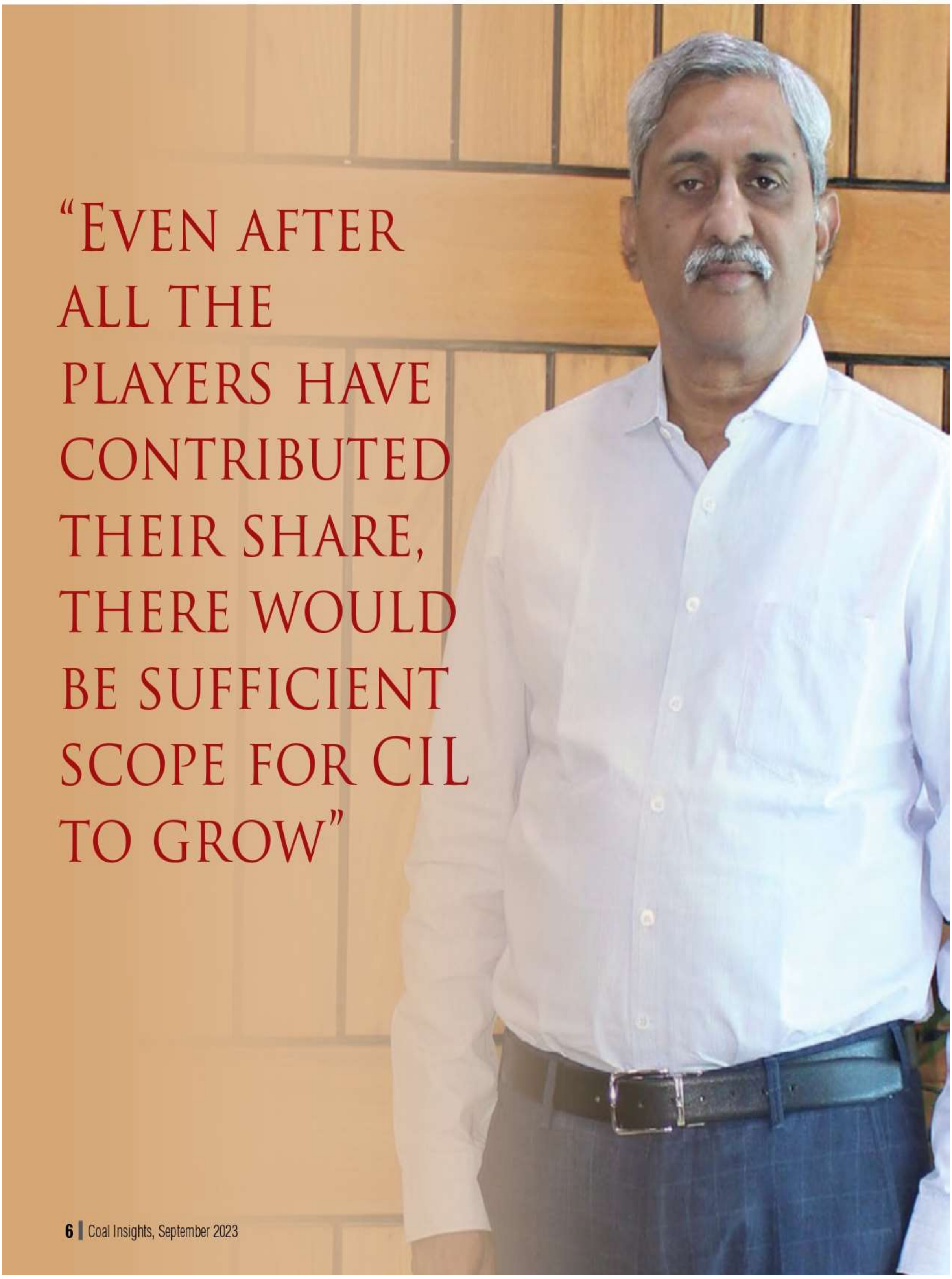

"Even after all the players have contributed their share, there would be sufficient scope for CIL to grow"

PM PRASAD, who took over as CHAIRMAN, COAL INDIA LIMITED on July 1, 2023, is a coal mining veteran with almost four decades of experience under his belt. Prior to donning the top post of the world's largest coal miner, he was CMD of CIL's Jharkhand-based coal mining arm Central Coalfields Limited.

Prasad is a post-graduate mining engineer from Indian School of Mines IIT Dhanbad. Beginning his career in CIL in 1984 as a management trainee in Western Coalfields Limited, he served in different capacities across CIL's subsidiaries. He also had a three-year stint in NTPC as Executive Director (coal mining).

After taking over, he underlined his priority of achieving the 780 million tons (mt) output target in FY 2024 with all efforts and means available. On supply side, ensuring uninterrupted and quality coal supply to the power sector is another priority area.

Building upon the strong base of FY 2023, CIL is surging ahead successfully in production and supplies, so far, under his leadership.

In an exclusive interview to ARINDAM BANDYOPADHYAY, Prasad shared his views about the current state of affairs in the Indian coal sector and the road ahead for the country's largest coal miner.

Let's begin with the impact of India's Net Zero aspirations on the coal industry. How will CIL sustain its energy leadership once coal's role starts to wane? What is your preparedness for this impending transition?

Though we are a fossil fuel producer, we are committed to Net Zero aspirations of the country. Net Zero aspirations and getting 500 GW non-fossil fuel-based energy capacity by 2030 and meeting 50 percent of energy with renewables would impact the use of fossil fuels, especially coal. But, as long as the demand for coal sustains, our endeavour shall be to mine it in an environment-friendly manner.

To reduce carbon emissions in our mining areas, we are fast-tracking eco-friendly coal transportation through First Mile Connectivity projects with large internally funded investments.

Our energy efficiency measures and increased plantation in coal mining areas are resulting in sizeable reductions in CO_2 emissions.

We are also embracing many environment-friendly mining technologies and progressively increasing our opencast (OC) production through surface miners which entail blast-free selective mining with minimal damage to the environment.

During FY23, production through surface miners was 378 million tons (mt), about 56 percent of our entire OC output, representing a robust 21 percent year-on-year growth.

We are also increasing further our surface miner fleet. Inpit crushers already operational help reduce the movement of dumpers, minimising diesel exhaust and lessening air pollution.

Coal remains our core business. To get future ready, once coal's role starts to weaken, we have begun our diversification plans into allied energy arenas like solar power where we are already taking large strides. Our efforts are underway in setting up two pithead thermal power generation plants and surface coal gasification ventures. Acquiring and mining of critical minerals is another area we are keen on.

Several studies, including that of NITI Aayog, indicate that India will reach its peak coal in (or around) 2030. What are CIL's production growth roadmap till that time? What is the long-term vision on using surplus volume, as India is expected to produce more coal than required from FY26 onwards?

NITI Aayog and even independent international agencies estimate that coal's use in India is set to peak by early to mid-2030s.

For the ongoing fiscal year, we are pursuing a production target of 780 mt which we are confident of achieving. For the next two fiscal years, the output goals are 850 mt and 1 billion tons, respectively. Beyond that, it would depend on how coal demand shapes up and for now it is looking too far into the future.

If one looks at the coal consumption pattern and the demand, the situation of surplus coal availability may occur much beyond FY26.

Whatever coal is produced will be consumed till the next decade and half. May be after 2040 the amount of coal required will taper downwards but still be comparable to current levels of consumption because of higher overall energy demand.

While the share of renewables in power generation and other industrial activity is expected to increase at the expense of coal, the overall demand for energy is also expanding.

It effectively means that coal requirement will increase in quantum terms though its percentage in the energy share will shrink. With the country mandating net zero commitment by 2070, we have to maximise the available resources.

Any excess coal could be effectively used for coal gasification purposes. Through surface coal gasification (SCG) route coal is converted into syngas. This can be subsequently processed for downstream production of value added chemicals which are otherwise produced through imported natural gas or crude oil at enormous cost.

For setting up 4 large scale coal-to-chemical projects through SCG route, CIL has signed three separate Memorandums of Understanding, one each with Bharat Heavy Electricals Ltd, Indian Oil Corporation Ltd, and GAIL (India) Ltd.

It would be a move towards self-reliance and capitalisation of indigenous resources.

What is the feasibility of exporting surplus coal to other countries? Is there any key initiative under way?

On this front, we have already commissioned a study by IIM, Ahmedabad where a few countries which could be potential destinations were identified. Coal consumption pattern and requirement of these countries have been mapped.

Also, the Neighborhood First Policy is a core component of the government's foreign policy. We are exploring the possibility of connecting with these countries for business on government to government basis. The only issue that needs a closer look is the grade of coal. Normally, the coal availability here is for the grades between G10 and G16 whereas the requirement of the other countries ranges in G4 to G8 grades. Depending on the response and after fulfilling the domestic demand we are open to the idea.

Keeping in view the future course of business, what internal restructurings could one expect to see at CIL?

In a bid to unlock the untapped potential of the Jharkhand-based Bharat Coking Coal Ltd (BCCL) and Central Mine Planning and Design Institute, CIL in FY22 cleared the decks for listing of these two subsidiaries.

In January 2023, the Ministry of Coal gave the nod for divestment up to 25 percent equity shareholding of CIL in BCCL through issuance of public offering in the domestic market.

In one more endeavor, CIL is probing the possibility for merger of MECL with CMPDI for which their respective Boards have given an 'in-principle' approval for the merger. Currently, the matter is under consideration at the Central level.

What about the closure of unprofitable mines and greater operational independence for the subsidiaries?

Mines are abandoned not because of only unviability. Other reasons include safety and technical. Underground mines are being planned and pursued with introduction of mass production technologies like continuous miners etc. Wherever feasible UG mines are also converted into opencast mines. However, where the reserves are fully exhausted, production is not feasible through either mass technologies or conversion into OC mines and where the mines become economically unviable only those mines are being closed. And the manpower is gainfully utilized in other projects.

Our subsidiaries enjoy operational independence to take decisions for improving productivity of mines under their respective command areas.

Now that the commercial miners and the coal exchange project are nearing fruition, how is CIL bracing up to continue with its domination over the market?

Allowing commercial mining is a welcome move in the interest of the nation, as the much-needed energy fuel can be produced indigenously reducing its imports. In any case, these upcoming players will supplement CIL's role rather than substitute it.

With decades of core competence, we are fulfilling the demand commitment expected from us to the best of our ability.

We believe in having a collaborative approach with all the players. Already the country is importing about 200 mt of coal. So, the foremost priority is to arrest the imports of this mineral which is available in abundance in the country.

"We are working on the formation of a dedicated cadre for Land and Rehabilitation for further strengthening the land management team."

The large forex outgo on this account has to stop. Even after all the players have contributed their share, there would be sufficient scope for CIL to grow. The rate at which the energy consumption is increasing, and as per the projections given by the Ministry of Power, around 80 percent of our coal would be used by the power plants.

In future, power consumption will increase in absolute numbers though the relative percentages may reduce. This increase has to be met by a 6-8 percent growth in coal production.

From CIL's perspective, we view the emerging demand for coal as a collaborative market rather than any single player vying for dominance.

Also, sale of coal is location specific because of the logistic costs involved. The new commercial miners who are coming outside CIL domain areas will definitely help in meeting the local demand and easing the infrastructure constraints on the system.

With coal availability improving substantially over next 5-6 years, do you foresee a shift in consumers' preference from long-term linkages to spot buying?

In India, the spot market for power is in the process of development. The volumes at present are 4 percent to 6 percent of the total power which is being traded.

However, over a period of time as the power markets develop and move up, the alignment of coal supplies will also have to be made accordingly with their requirement. So, basically what we are envisaging is that slowly the long-term requirement of power will make way for medium term or short-term.

That is why probably the long term PPAs lately have been very less in the market. The Discoms are now relying and going toward medium term to short term PPAs.

This being the trend, we feel, going ahead in the next 4 to 5 years, our requirements will have to be met as per the PPAs which are going to materialise. And these PPAs are going to be more of medium term or spot market. In such a scenario, CIL and all coal producers have to align their supply strategies as per the developing markets.

Coming to e-auction, what is the reason for the sharp fall in premium this year? What is your outlook for the current year?

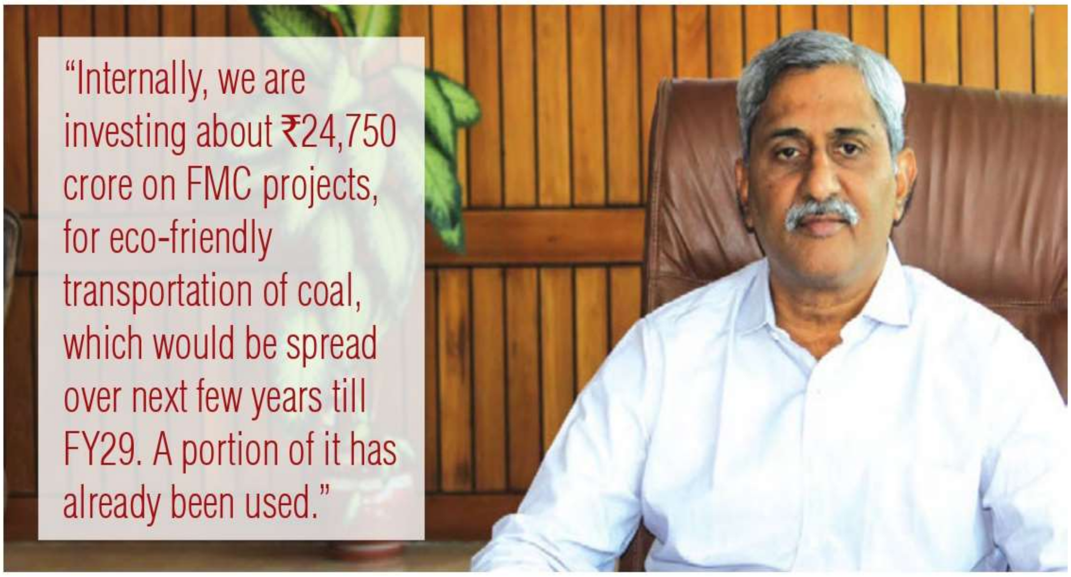
The decline is in premiums only but not in volumes of coal offered.

Our e-auction offer of 35.6 mt during April-August 2023 was more than twice as that of 17.3 mt offered during the comparable period of last fiscal.

Booked quantity was 31.3 mt, near two-fold increase as compared to 16.6 mt recorded for the similar period last year.

If you recall, there was a high demand for coal from the power sector last year with the generation peaking high. Large quantities of our supplies were prioritized to this sector. So, the Non-Regulated Sector (NRS) opted for more coal through e-auction rather than importing because the international coal prices were simmering high. This fetched high e-auction premiums then.

The situation is different now from the last year. Currently, imported coal prices have cooled off considerably which is the primary reason for e-auction premiums plummeting.



Our supplies to NRS, a major importer, are also at an all-time high averaging 3.7 lakh tons per day this fiscal with a healthy 44 percent growth.

With the increased supplies, there is a feeling of coal adequacy in the market. CIL puts 10 percent of its total production under e-auction hammer with an option of increasing it to 20 percent after fulfilling power sector's requirement.

We are putting more coal in e-auction platform but booking is dependent on the market dynamics and the demand.

Please tell us about CIL's current portfolio of mines with break-up for mine types. How many new/expansion projects are in the pipeline and what is their combined capacity?

CIL began the current fiscal year with 322 working mines. Of this, 138 are underground and 171 opencast. The rest 13 are mixed mines having both underground and opencast workings.

We have approved 76 coal mining project reports which include 23 greenfield and 53 expansion (brownfield) projects during the last 3 years. The incremental capacity addition from these projects will be to the tune of 333 million tonnes per year.

These are under different stages of progress and implementation.

What are the major projects scheduled to be commissioned in the current fiscal?

Plans are in motion to commission 4 mining projects of 43 mtpa capacity and 2 washery projects of 12 mtpa capacity during the current fiscal year.

We are also sharply focusing on completion of three railway lines of about 220 km length which would add 130 mtpa evacuation capacity to the existing Indian Railway network.

In addition, for environment-friendly mechanised coal loading, we are fast tracking the commissioning of 17 First Mile Connectivity projects of 178 mtpa capacity by FY24 end.

What is the current scenario for land acquisition for the new and ongoing projects?

Land is a critical resource for any industrial activity and especially so for coal mining that requires large tracts of land. Ensuring physical possession of land is the first and foremost priority in ensuring seamless mining operations.

As on date a total of 116 projects with total sanctioned capacity of 907 mtpa coal production are underway. Of these, 24 projects with 140.35 mtpa capacity have been sanctioned in FY23 while 4 projects of 59.50 mtpa capacity have been cleared in the current fiscal so far.

Land has always been a major challenge in acquisition. Among the major causes that lead to inordinate delays in land possession are non-availability of authenticated land records that puts a break on preparation of compensation process and the final disbursement of the same. And then the delay in identification of land owner due to erroneous or disputed land records, land transfer without mutation, missing records and illegal occupation is another hurdle. Disagreement amongst villagers regarding the choice of resettlement site and shifting is yet another hiccup in the process.

However, we untangle the land acquisition and possession issues with patience and resolve, devising different solutions by taking the stakeholders on board. We hold regular meetings with State governments, district authorities and monitor the situation internally. We are working on the formation of a dedicated cadre for Land and Rehabilitation for further strengthening the land management team.

What are the primary reasons for diversifications from your core area? CIL has earmarked large investments for diversification and other projects? What would be these investments? What is the revenue visibility for these new ventures, which include power, solar power, gasification, fertilizers, chemicals, etc.?

Presently, CIL leads India's energy matrix and as I said earlier coal is our core business. But, India's COP commitment for de-carbonisation would put pressure on all fossil fuels including coal. Eventually coal's contribution would come down in the percentage terms in the primary energy mix.

The reasons for venturing into diversification projects are to stay committed to country's sustainable developmental goals.

Diversification into new business verticals also signifies the company's willingness to adapt to changing market dynamics. CIL will be pumping in sizeable investments into these ventures.

CIL's viewpoint is to exploit what we have and evolve in what we don't have, aligning with the global and domestic need.

We will be leveraging our financial strength and large manpower and appropriately skill them in our diversification projects. We will do forward integration to maintain the top and bottom lines while continuing the energy leadership in the country. Under alternative use of coal we want to create energy resources internally and reduce India's import dependence and forex.

The 3,000 MW solar power venture is our major diversification project where we will be investing heavily.

Conservatively, at ₹5.5 crore per MW the capex would be to the tune of ₹16,500 crore.

We are pursuing pithead thermal power plants on forward integration and venturing into setting up two such plants. One is through a joint venture between CIL's subsidiary SECL and Madhya Pradesh Power Generating Company Ltd of 1X660 MW capacity.

The other is a wholly-owned subsidiary of MCL called Mahanadi Basin Power Ltd

"As part of building assets overseas, CIL's current focus is on critical minerals where the country is fully import-dependent. Lithium lists high on our priority."

where our investment is around of ₹4,800 crore.

These are under designing and implementation stage and are scheduled to be operational by FY29.

In critical minerals we want to represent in the entire value chain right from acquiring, mining and till leading up to lithium batteries.

In coal-based fertilizer plant Talcher Fertilizers Ltd, a JV company, CIL has invested a little over ₹2,100 crore.

This is under construction scheduled to come up in FY25.

CIL as a joint venture partner in Hindustan Urvarak & Rasayan Ltd has identified an investment of around ₹3,200 crore. The three natural-gas based fertilizer plants of HURL have already commenced the urea production.

In both these ventures, driven by CIL, a portion of investment has already been utilised.

CIL's surface coal gasification projects are being pursued at an identified investment of ₹5,400 crore. We have signed bilateral MoUs with three other Maharatna CPSEs for mutual collaboration in the coal-to-chemicals sector. The pre-feasibility studies of the projects have been completed and the tendering shall be initiated soon.

Internally, we are investing about ₹24,750 crore on FMC projects, for eco-friendly transportation of coal, which would be spread over next few years till FY29. A portion of it has already been used.

To dovetail these projects we have identified 24 rail connectivity projects at an investment of about ₹4,000 crore. Besides these, we are setting up 21 railway sidings at a capex of ₹3,500 crore to be completed by FY26. To have in place a strong coal evacuation infrastructure, investment of approximately ₹20,000 crore on three major rail lines is being pumped. Some part of it has been utilised already.

At a time when Indian steelmakers are chasing assets in Canada and Mozambique, what is CIL's thought process on building assets overseas?

As part of building assets overseas, CIL's current focus is on critical minerals where the country is fully import-dependent. Lithium lists high on our priority.

The aim is to enhance the raw material security of the country and reduce the import dependency. Critical minerals will play a pivotal role in accelerating the transition towards a greener and more sustainable future.

Lastly, Coal India is digitising its mining operations in 7 mega mines and aims at over 30 percent production growth through digital intervention in these mines. What are the key operational and sustainability benefits that can flow from this initiative?

Digitalisation and automation of processes is not a choice but a need to compete in the market and cut down operational costs.

In a first-of-its-kind venture, CIL has formally engaged a consultant for complete digitalization of 7 select mega opencast mines.

Basically, the objective is to extract higher volumes of coal at lower costs.

Work is in progress to fit together and use the available data analytic techniques to raise mine productivity and efficiency from planning, project monitoring, operations till despatch, through effective system management and dynamic monitoring.

Among many measures, the HEMM deployed in these mines are fitted with digital sensors to monitor the efficiency of their performance at every level. ■