## **COAL AUCTION** Transformation Over the Years



ReVal Consulting partners with businesses to tackle their most significant challenges and capture their greatest opportunities in the Mineral and Mining Sector. We work closely with our esteemed clients to embrace a transformational approach aimed at benefitting all stakeholders across the value chain and driving positive business outcomes.

Our diverse team brings deep industry experience, functional expertise, and a range of perspectives that help us deliver solutions through leading-edge management consulting, technology, and design. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, fueled by the motto of serving them with the best possible solution. ndia's energy requirement is primarily fueled by Coal and ~55% of total energy consumed is depend on Coal for commercial energy requirement. With Coal resources of over 361 billion tones, India ranks second in terms of production as well as consumption globally, despite the fact that over the years India has been dependent on Coal Import. Coal contributes ~70% in power generation and industrial processes. Coal, given its vitality to the Indian economy, serves as a cornerstone of energy production and industrial growth.

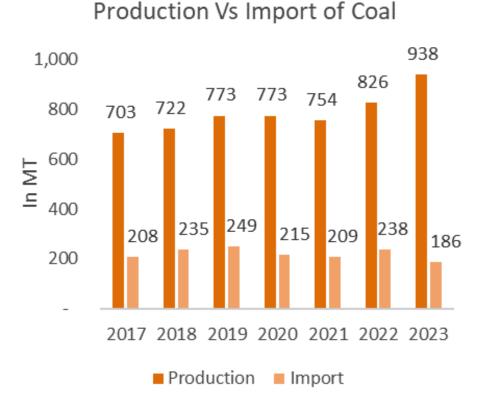
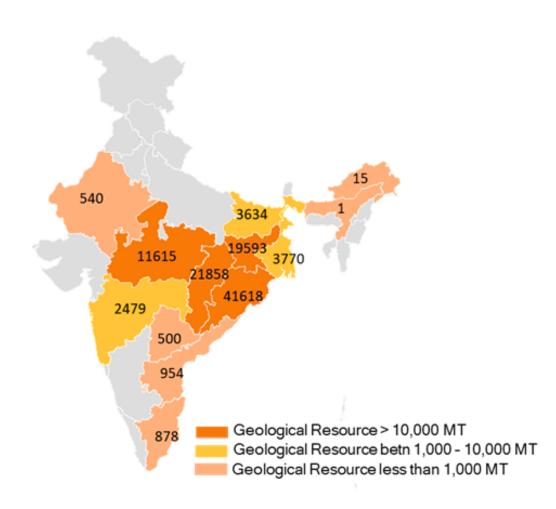
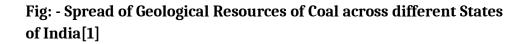


Fig: - YoY Coal Production and Import Stats

Before 2015, the allocation of coal blocks in India followed a process whereby a committee evaluated applications submitted by business houses for coal block allocation. The allocation of coal mines was based on various factors, including the financial standing of the business, its track record, proposed end use and the proposed mining. However, numerous accusations of corruption and irregularities in the allocation process led to the scrutiny of this methodology. However, following deallocation of 204 Coal blocks by Supreme Court of India and thereafter reforms introduced, coal sector in India has grown substantially with overall 1 BT of coal production recorded in FY 24. Since then, Government of India has focused on reforming the coal sector by unlocking its value. Unleashing potential, initially blocks were auctions to bring transparency which also boosted revenue.

After allocation/auction of over 90 blocks under captive and government dispensation route, now since 2019, Government of India has unleashed the coal potential by introducing commercial coal block auction in several ways such as creating market-based coal economy in the country, increase in domestic coal production & becoming self-reliance for energy supply, new investment opportunity & employment generation, incentives schemes for Coal Gasification, etc.





## COAL AUCTIONS: 2015 to 2019 SCENARIO

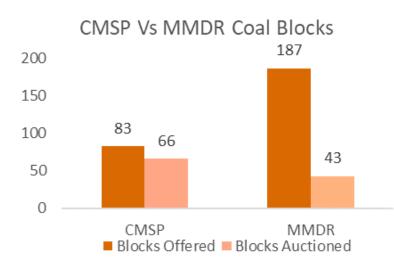


Government The Indian introduced а transparent and competitive auction process for the allocation of coal blocks to private & PSU companies. This procedure aimed improve efficiency in the coal sector & the new model for coal auction has several key measures such as identification of potential blocks, preparation of bid documents, registration of interested bidders, framing a 2-stage forward auction process, evaluation of obtained bids, & finally the award of the Coal Blocks to the winning bidder. This model was based on revenue sharing, a unique feature of the PPP framework and the auction premium was quoted in Rupees per tonne (Rs/T). With this on-going auction process, the Government introduced several new reforms for flexibility in coal utilization, commercial coal mining, coal linkage policy, coal mining development and production agreement (CMPDA).

## EVOLUTION OF REGULATORY FRAMEWORK FOR COAL BLOCK AUCTION

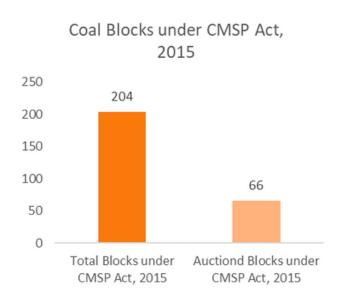
The Ministry of Coal (MoC) introduced the auction-based regime in 2014 & opened up the sector for private participation in coal mining, however, with a limitation for captive usage only, while during that period, for the Regulated industry, there was a reverse auction & for Non-Regulated sector, there was forward auction.

During 2015-19, the Government carried out 10 Tranches of Coal Block auctions, however barring initial rounds, auctions received lukewarm response. Hence, commercial Coal Mining was brought in place & in June'2020 first ever successful auction of commercial Coal Blocks happened.



### Fig: - Total number of Blocks offered versus Blocks Auctioned under MMDR & CMSP Act [2]

The **Coal Mines Special Provisions Act**, 2015 was passed in response to establish a fair and open bidding procedure for the allocation of deallocated coal mines.



## Fig: - Total Coal Blocks under CMSP Act to the blocks auctioned under CMSP Act

Under the CMSP Act of 2015, a total of 204 coal blocks were classified into Schedule I, II, and III categories. Of these, 109 coal blocks were successfully auctioned with 66 falling under the purview of the CMSP Act, 2015. This suggests that most of the blocks successfully auctioned were under the CMSP Act because they were either developed or had existing infrastructure and as a result, only 43 new blocks were successfully auctioned under the MMDR Act.

In 2020, for Commercial Coal Mining a transparent mechanism was set in place through legislation, and after 45 years from the nationalization of Coal Mines in the country the Government of India opened the Coal Sector for commercial mining by private players and enhance participation and made path for new entrants. Commercial Coal Mining Reforms 2020, aimed to attract more investment, boost production, & reduce dependency on imports, thus fostering competition and efficiency in the sector.

<sup>[2]</sup> Blocks offered are unique blocks. (In case of split of the block, new blocks are considered for fresh auction)

These reforms unleashed the true potential of Coal Block auction and gave the private players flexibility for selling coal, freedom on its usage, incentives for expediting the approvals process, incentives for Coal Gasification, Single Window system for Eauction of Coal, FDI and Technological advancements, etc. This new auction model was based on forward auction similar to the past auction model but the revenue sharing of the auction premium was in terms of the percentage (%) of revenue quoted.

Under the **Mines and Mineral (Development & Regulation) MMDR (Amendments)** for auction of Coal Mines several changes have been done over the years such as decrease in the amount of Performance Security for Underground Mines, reduction in Cap of Upfront Amount, etc.

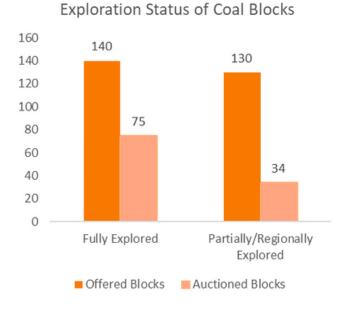
## INFERENCES OF COMMERCIAL COAL BLOCK AUCTION

Geological Resource of Coal Blocks



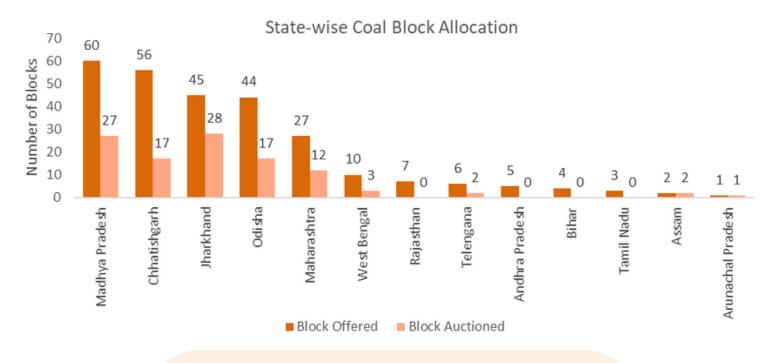
### Fig: - Total Geological Resource Offered Vs Geological Resource Auctioned[3]

Since the inception of the Commercial Coal Block auction, a total of 107,457 million metric tons (MMT) of coal resources have been made available for auction. However, only 20% of this offered resource has been successfully auctioned as of the 19th Tranche of Commercial Coal Block Auction. Hence, there remains significant untapped potential in utilizing coal as a resource, indicating ample opportunities for maximizing its utilization.



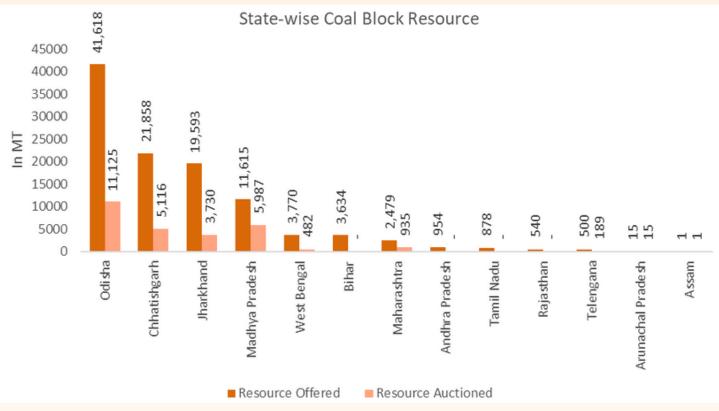
## Fig: - Fully Explored to Partially/Regionally Explored Blocks

Out of the total coal blocks offered under auction, approximately 52% are fully explored, while the remaining 48% are partially or regionally explored. Interestingly, from the successful coal blocks auctioned, approximately 69% are fully explored blocks.



### Fig: - Number of Blocks allocated to States Vs the Blocks auctioned

Out of the total Blocks tabled in commercial coal block auction, majority of the Blocks have been offered in Madhya Pradesh (60 Blocks), followed by Chhattisgarh (56 Blocks). However, it's worth noting that in Jharkhand State, over 50% of the blocks offered have been successfully auctioned, totalling 28 blocks out of the 45 blocks offered.



#### Fig: - Geological Resource offered Vs Geological Resource Auctioned State-wise

Out of the total geological resource offered under the Commercial Coal Block Auction, approximately 39% of the resource has been offered in Odisha, with Chhattisgarh following at around 20%.

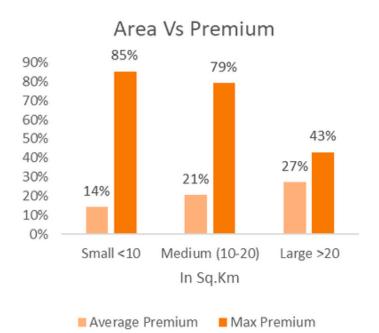
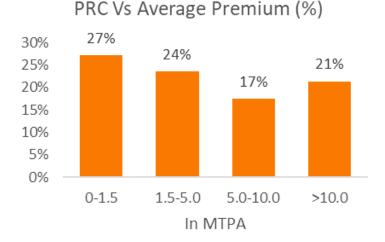


Fig: - Geological Block Area Vs Bid Premium

The average bid premium for small blocks (less than 10 Sq.Km) stands at 14%, with the maximum premium reaching up to 85%. Similarly, for medium-sized blocks (10-20 Sq.Km), the average bid premium is 21%, with the maximum premium reaching up to 79%. Larger blocks have an average premium of around 27%, with the maximum premium reaching up to 43%. Thus propensity to quote higher premium is high for small and mid size blocks.



### Fig: - Peak Rated Capacity (PRC) Vs Bid Premium[4]

Over the past Commercial Coal Block Auction Tranches, there is a noticeable trend in bid premiums concerning the Peak Rated Capacity (PRC) of the blocks. Blocks with a PRC of up to 1.5 million tons per annum (MTPA) command an average bid premium of approximately 27%. As the PRC increases to the range of 1.5 to 5 MTPA, the average bid premium slightly decreases to about 24%. Similarly, for blocks with a PRC between 5 to 10 MTPA, the average bid premium further reduces to around 17%. Finally, for blocks with a PRC exceeding 10 MTPA, the average bid premium stands at approximately 21%. This trend indicates that as the PRC increases, there is corresponding changes of lower premium as more bidders are competing for smaller blocks.



### Fig: - Analysis of Successful Bidder in Coal Auction

Over the past successful auctions, approximately 60% of the blocks won by big/large players or those with existing market know-how. Conversely, the remaining 40% consisted of new entrance/ Small players or traders. This trend suggests that following government reforms and initiatives, there has been increased enthusiasm among new players to enter the coal market.

# Trends: FPO IN COAL BLOCKS

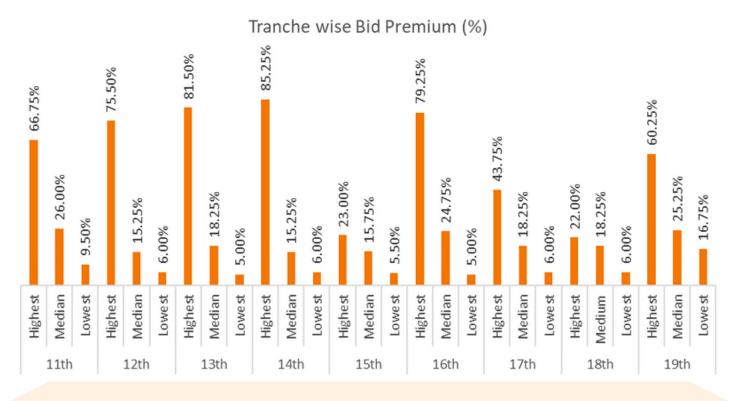


Fig: - Tranche wise Bid Premium as a percentage (%) of the revenue obtained.

Since the adoption of the revenue-sharing model in the Commercial Coal Block Auction from the 11th tranche onwards, significant bid premiums have been evident. In the 14th tranche of the auction, the highest bid premium was witnessed, where one of the coal block was auctioned with an 85.25% Revenue Share. Following closely, another block was auctioned for Revenue Share of 81.50% in the 13th tranche while highest Revenue Share received of 79.25% in the 16th tranche. Notably, bid premiums across all tranches have consistently ranged between 15.0% to 25.0%. This analysis underscores the robust demand in sectors such as power, cement, and steel, with successful bidders demonstrating a willingness to pay high revenue share for a stable coal supply, thereby mitigating potential disruptions in the national supply chain. From the Commercial Coal Auction Data analysis, several key outcomes emerge regarding the auctioned coal blocks in India. Firstly, bidders have a clear preference for non-coking coal resources, which dominate the auctioned blocks, indicating the alignment of resource availability with the country's energy demands. Secondly, most auctioned blocks are suitable for open-cast mining methods, reflecting a tendency among bidders towards this more accessible and potentially cost-effective extraction method. Additionally, the analysis highlights a trend wherein smaller-sized coal blocks attract greater bidder interest than medium and large-sized blocks, possibly due to lower investment requirements and fewer operational complexities associated with smaller blocks.

• Final Price Offering (FPO)

## Way forward

As evident from the analysis that 40% of the blocks auctioned have been taken by players who are new or lack the past expertise of mine development and operations. Hence, strategic developmental initiatives will guide the future trajectory of commercial coal blocks auctioned, focusing on sustainability, infrastructure enhancement, technological innovation, efficient planning, monitoring & governance. In the next part of this article, we will delve deeper into these parameters to outline a comprehensive approach for maximizing the value & efficiency of coal block development in India focusing on development of the blocks in shorter timelines and in cost effective way.

## Author:

## ADITYA DAPKI

Senior Associate Consultant: Strategy & Mgmt. Consulting aditya.dapki@revalconsult.com

## **Co-Author:**

## JYOTIRMOY SAHA

Senior Consultant: Strategy & Mgmt. Consulting jyotirmoy.saha@revalconsult.com

## SHIVAM DESAI

Consultant – Project Management shivam.desai@revalconsult.com

## **Project Director:**

## Guide :

## **PUKHRAJ SETHIYA**

Managing Director - India pukhraj@revalconsult.com

## **KUMAR RAJESH SINGH**

Managing Director - Global krsingh@revalconsult.com