



NATIONAL COAL INDEX AND REPRESENTATIVE PRICES





Background of National Coal Index

- ⊙ High Power Empowered Committee under the chairmanship of Shri Pratyush Sinha had made recommendation for development of a National Coal Index (NCI) to reflect the movement of coal prices in domestic market
- ⊙ Purpose of the Index was to determine the Premium (on a per tonne basis) or Revenue Share (on a percentage basis) based on a market based mechanism
- ⊙ Position of WPI was analysed
 - As it is based only on the Notified Prices of coal, it does not reflect the true market situation



Innovations through the Index

- ⊙ NCI is an improvement over WPI based indexation
- ⊙ Following principles were kept in view while designing the NCI:
 - Monthly Computability;
 - Forward Looking;
 - Ability to capture the coal trades in India
- ⊙ All grades of coal and all sales channels existing in 2017-18 are covered
- ⊙ Base of the NCI has been taken as FY 2017-18;
- ⊙ Grade wise Representative Prices were conceived for implementing the Revenue Sharing mechanism
- ⊙ NCI is amenable to revision as and when there is substantial change in coal sale and trading patterns in India
 - Composed of different sub-indices which may be suitably used independently



Salient Features of National Coal Index

- ⊙ NCI is the weighted average of the change in price level of coal based on the price level of FY 2017-18;
- ⊙ NCI is compiled for a group of Grades of Coal (five sub-indices)
 - Non Coking Top G1 to G6;
 - Non Coking Middle G7 to G14;
 - Non Coking Bottom G15 to G17
 - Coking Top Steel-I and Steel-II;
 - Coking Bottom Washery-I to Washery-IV.
- ⊙ Each sub-index for the group of grades is a stand-alone Index.
- ⊙ For each Sub-index, the prices of three sales channels - Notified Prices, Auction Prices and Import Prices have been taken into account, as relevant



Salient Features of National Coal Index

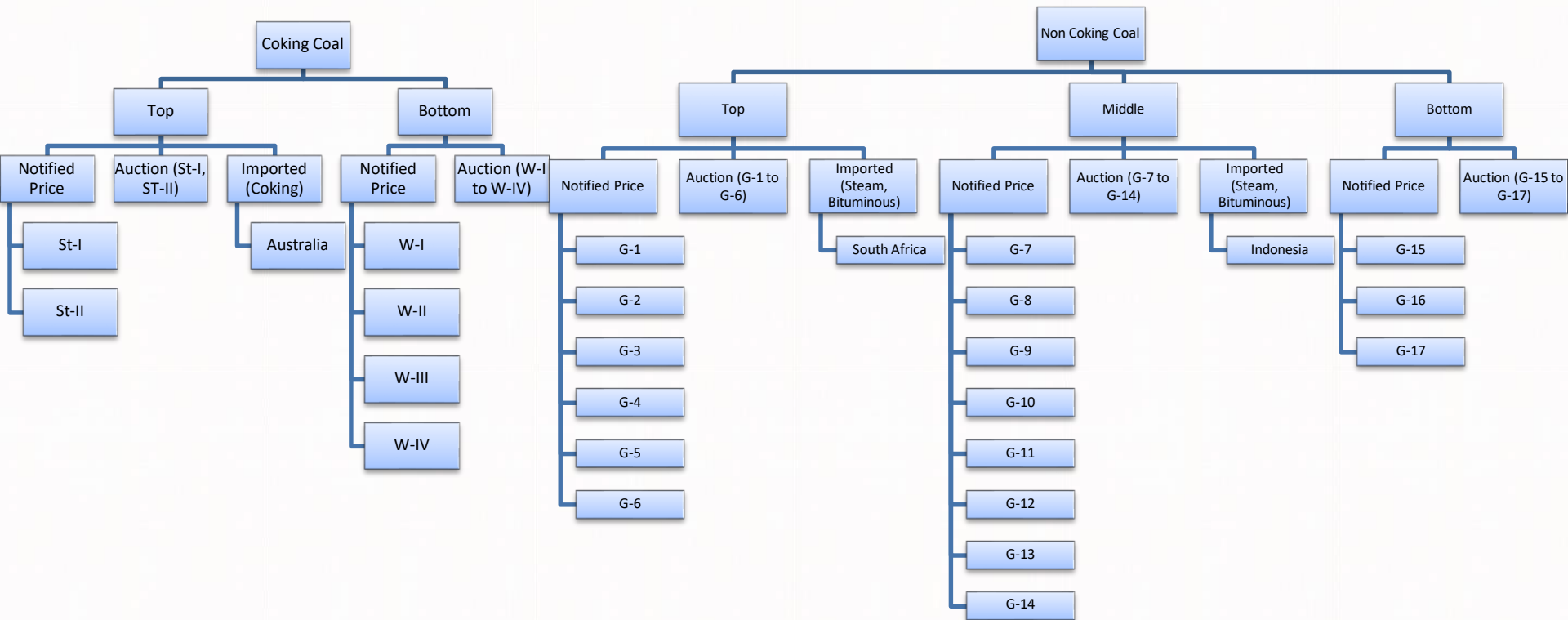
- ⊙ Weights of the respective Sales Channels are based on the Value of Transactions
 - Value = Quantity of Coal X Price
- ⊙ Weights are as follows for the different sub-indices:
 - No import component in bottom grades of coking and non-coking coal

Sub-Sector	Weights in Each Sales Channels			
	NP	Auction	Import	Total
Non-coking, top grade	38.33	11.42	50.25	100.00
Non-coking, middle grade	51.38	13.05	35.56	100.00
Non-coking, bottom grade	45.43	54.57	XX	100.00
Coking, top grade	1.04	1.12	97.84	100.00
Coking, bottom grade	79.68	20.32	XX	100.00



Overview – National Coal Index

- ⊙ Weighted sum of prices from transactions in different channels for different quality grades and coal sources
 - Washed coal and coal products are not included





Salient Features of Representative Price

- ⊙ Representative Price (RP) is the weighted average of the prices of coal from all the Sales channels
 - Notified Prices
 - Auction
 - Imported
- ⊙ RP is compiled for each Grade of Coal
 - This is used at the time of launch of tender process for coal mines based on the grade of coal in those mines
- ⊙ Weights of the respective Sales Channels are based on the **Volume of Transactions (Volume means Quantity)** at each Grade



Weights in the Representative Prices for NC Top

Grade	Domestic Component	Distribution of Domestic Component		Import Component	Total
		NP	Auction		
G1	56.44	0.00	100.00	43.56	100.00
G2	56.44	95.51	4.49	43.56	100.00
G3	56.44	93.67	6.33	43.56	100.00
G4	56.44	74.33	25.67	43.56	100.00
G5	56.44	75.16	24.84	43.56	100.00
G6	56.44	67.71	32.29	43.56	100.00



Weights in the Representative Prices for NC Middle

Grade	Domestic Component	Distribution of Domestic Component		Import Component	Total
		NP	Auction		
G7	86.76	90.75	9.25	13.24	100.00
G8	86.76	88.09	11.91	13.24	100.00
G9	86.76	88.36	11.64	13.24	100.00
G10	86.76	82.20	17.80	13.24	100.00
G11	86.76	91.60	8.40	13.24	100.00
G12	86.76	73.73	26.27	13.24	100.00
G13	86.76	87.96	12.04	13.24	100.00
G14	86.76	85.68	14.32	13.24	100.00



Weights in the Representative Prices for NC Bottom

Grade	Domestic Component	Distribution of Domestic Component		Import Component	Total
		NP	Auction		
G15	100.00	67.86	32.14	0.00	100.00
G16	100.00	1.03	98.97	0.00	100.00
G17	100.00	60.27	39.73	0.00	100.00



Weights in the Representative Prices for Coking Top

Grade	Domestic Component	Distribution of Domestic Component		Import Component	Total
		NP	Auction		
St-I	0.48	49.99	50.01	99.52	100.00
St-II	0.48	100.00	0.00	99.52	100.00



Weights in the Representative Prices for Coking Bottom

Grade	Domestic Component	Distribution of Domestic Component		Import Component	Total
		NP	Auction		
W-I	100.00	62.47	37.53	0.00	100.00
W-II	100.00	68.58	31.42	0.00	100.00
W-III	100.00	56.27	43.73	0.00	100.00
W-IV	100.00	89.20	10.80	0.00	100.00



Uses of NCI and RP

- Upfront Amount
- Performance Security
- Monthly Payments in Commercial Auction



Upfront Amount

- 0.25% of the value of estimated geological reserves of the coal mine
 - capped at Rs. 100 crore for mines with geological reserves up to 200 MT
 - capped at Rs. 500 crore for geological reserves above 200 MT
- Value of estimated geological reserves shall be equal to the product of
 - Geological reserves in the coal mine as given in the Geological Report; and
 - Representative price of relevant grade of coal based on National Coal Index



Upfront Amount - Illustration

Case 1		
Geological Reserves in Coal Mine (Million tonnes)	A	2000
Coal price based on National Coal Index for G13 grade of coal (Rs./ tonne)	B	1257
Value of Estimated Resources (Rs. Crore)	$C = A \times B/10$	2,51,400
Quantum (In Percentage)	D	0.25%
Quantum (In Amount) (As per formulation) (Rs. Crore)	$E = C \times D$	628.50
Upfront Amount (Rs. Crore)	Min (E, 500)	500

Case 2		
Geological Reserves in Coal Mine (Million tonnes)	A	1100
Coal price based on National Coal Index for G13 grade of coal (Rs./ tonne)	B	1257
Value of Estimated Resources (Rs. Crore)	$C = A \times B/10$	1,38,270
Quantum (In Percentage)	D	0.25%
Quantum (In Amount) (As per formulation) (Rs. Crore)	$E = C \times D$	345.68
Upfront Amount (Rs. Crore)	Min (E, 500)	345.68



Performance Security

Particulars	Fully Explored Mines	Partially Explored Mines
Amount	65% of aggregate of:- i. One year royalty, based on PRC; and ii. One year revenue share computed on the basis of PRC of mine as per approved Mining Plan (PRC X Final Offer X Representative Price after adjustment with latest available sub-index of National Coal Index)	Before in-principle approval of Mining Plan:- 25% of estimated exploration expense After in-principle approval of Mining Plan:- Same as fully explored mines
Mine Plan not available (in case of fully explored mines)	To be estimated on the basis of an indicative PRC as provided in the Tender Document Upon in-principle approval of Mining Plan, a revised Performance Security to be submitted on the basis of approved Mining Plan	
Performance Security to State Govt	Upon grant of mine opening permission, PBG to be submitted to the State Government for the same amount. The Agreement shall be terminated and the Performance Security submitted to the Nominated Authority shall be returned	
Annual Revision	Change in: (i) National Coal Index (ii) Rate of Royalty (iii) Peak Rated Capacity	
Appropriation	As specified in the Agreement	



Performance Security - Illustration

Particulars			
Peak Rated Capacity	A	MTPA	10
Representative Price for the average grade G10 of the Coal Mine (Rs./tonne)	B	Rs./tonne	1600
National Coal Index of the relevant basket of coal grade - latest available as on the date of issuance of Tender Document	C		110
National Coal Index of the relevant basket of coal grade - latest available on the date of execution of Agreement	D		118
Rate of Royalty	E	%	14%
One Year Royalty	$F = A \times B \times D/C \times E/10$	Rs. Crore	240.29
65% of One Year Royalty	$G = 65\% \text{ of } F$	Rs. Crore	156.19
Final Offer	H	%	25%
One Year Revenue to the Government	$I = A \times B \times D/C \times H/10$	Rs. Crore	429.09
65% of One Year Revenue to the Government	$J = 65\% \text{ of } I$	Rs. Crore	278.91
Total Performance Security	$K = G + J$	Rs. Crore	435.10



Monthly Payments in Commercial Auction

Revenue Share shall be the product of:

- ⊙ Final Offer (% revenue share quoted)
- ⊙ Quantity of coal on which statutory royalty is payable during the month
- ⊙ Notional Price or Actual Price, whichever is higher, where
 - Notional Price is the price arrived at after adjusting the Representative Price with sub-index of National Coal Index of the relevant basket of coal grade(s) on the date on which royalty becomes payable.
 - Representative Price shall be a product of:
 - weights of the Base year; and
 - Latest available prices of these components at the time of issuance of the Tender Document
 - Actual Price shall mean the sale invoice value of coal, net of statutory dues
- ⊙ Royalty payment shall be as per extant gazette notification on royalty of coal; other statutory dues shall be additionally payable



Monthly Payments - Illustration

- ⊙ Assuming that the Successful Bidder has quoted Final Offer of 10%

Particulars	G11	G12	G13
Representative Price (Rs./tonne) (A)	1474	1369	1270
National Coal Index of the relevant basket of Coal Grade – latest available as on the date of issuance of Tender Document (B)	105	105	105
National Coal Index of the relevant basket of Coal Grade on the date on which royalty becomes payable (C)	115	115	115

Grade of Coal	Quantity of coal on which the statutory royalty is payable during the month (MT) (D)	Notional Price (Rs./tonne) (A x C/B)	Actual Price (Rs./tonne)	Max of Notional Price & Actual Price (Rs./tonne) (E)	Revenue Share (Rs. Crore) (D x E x Final Offer/10)
G11	0.50	1,614	1650	1650	8.25
G12	0.70	1,499	1400	1499	10.50
G13	0.60	1,391	1300	1391	8.35
Total	1.80				27.09



Thank You





Upfront Amount

- Upfront Amount shall be payable by the Successful Bidder in four equal installments of 25% each

Installment	Fully Explored Mines under MMDR Act and CMSP Act (other than Schedule II)	Partially Explored Mines under MMDR Act and CMSP Act	Payable to
First	Upon of execution of the Agreement	Upon in-principle approval the mining plan	Nominated Authority
Second	Upon execution of the mining lease or order by the Central Government under Section 11 (1) of CBA Act 1957, as the case may be		State Government
Third	Upon grant of the mine opening permission		State Government
Fourth	Upon commencement of coal production		State Government



Upfront Amount

- Upfront Amount shall be adjusted in full against monthly payments to the State Govt
 - Adjustments shall not exceed 50% of aggregate Monthly payments for the year
 - Adjustment of Upfront Amount towards Monthly Payments shall be on a monthly basis
 - Upfront Amount shall not be adjusted against other statutory dues including taxes, levies, royalty, contribution to NMET and DMF etc.
- Upfront Amount, including the first instalment, provided in the Tender Document may undergo revision pursuant to finalisation of the provisional Representative Price
 - On account of this finalisation of Representative Price, any upward or downward revision in the first instalment of the Upfront Amount shall be adjusted in the second instalment payable by the Successful Bidder to the State, along with revision in all the subsequent instalment



RP	NCI
RPs are used to calculate revenue share based on market mechanism	NCI is used to measure movement of prices of coal
Total number of notified prices considered to formulate RPs is 148	Total number of notified prices considered to formulate NCI is 100
Total number of Auction prices is 23	Total number of Auction prices is 5 (23 auction prices have been clubbed into 5 groups)
Total number of import prices is 3	Total number of import prices is 3
Weights of the respective Sales Channels are based on the Volume of Transactions (Volume means Quantity) at each Grade	Weights of the respective Sales Channels are based on the Value of Transactions at each Grade
RP is the weighted average of Prices of different grades	NCI is the weighted average of Price relatives of different grades of Coal