

# Coal India

**Mining Indian Growth Story** 



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Rating	Accumulate
Price	Rs342
Target Price	Rs366
Implied Upside	7.0%
Sensex	20,894

(Prices as on November 4, 2010)

**Major shareholders** 

Promoters Foreign

Domestic Inst.

Public & Other

Trading data	
Market Cap. (Rs bn)	NA
Shares o/s (m)	NA
3M Avg. Daily value (Rs m)	NA

# Coal India

- Indian coal markets in severe deficit: We expect severe deficit in the domestic coal market owing to an increase in the domestic supplies incommensurate with strong demand growth. Domestic supplies would grow at a CAGR of 7.2%, significantly below the growth of 8.9% in demand during FY11-FY17. Reflecting the same, the gap between demand and domestic supplies would grow at a CAGR of 19% during FY11-FY17 to 230m tonnes in FY17 against 68m tonnes in FY10.
- Coal India (CIL) commands more than 80% share of domestic supplies: Backed by sizeable operations and regulated domestic market, CIL commands share in excess of 80% of the domestic supplies. It would continue to control ~72% of the domestic supplies despite higher contribution from captive coal blocks and higher base.
- Consistent earnings growth and decent return ratios substantiate stock's attractiveness: We expect EBITDA and PAT to grow at CAGR of 19% and 17%, respectively, during FY11-FY13. Even on a longer time horizon of FY11-FY17, both EBITDA and PAT would grow at CAGR of 17% each. Despite the sizeable idle cash in the balance sheet, CIL would generate RoE and RoCE in excess of 25% on the back of higher realisations and increased capital expenditure to fuel the growth.
- Valuation: We valued the stock at Rs366 based on DCF with FY11-FY17 as period for our explicit forecasts and assumptions of derived cost of equity at 12.1% and terminal growth of 3.5%. This implies P/E (based on pure operational earnings) of 15.5x and 13.0x FY12E and FY13E, respectively and EV/EBITDA of 11.0x and 9.3x FY12E and FY13E, respectively, at a premium to global valuations. We strongly support the premium in valuations for the stock, given its strong presence in the deficit market, stable earnings, strong balance sheet and attractive return ratios. We initiate coverage with a 'Accumulate' rating on the stock.

Key financials (Y/e March)	2010	<b>2011E</b>	2012E	2013E
Revenues (Rs m)	463,132	509,399	563,176	619,147
Growth (%)	13.7	10.0	10.6	9.9
EBITDA (Rs m)	121,705	149,937	177,392	205,514
PAT (Rs m)	96,224	108,787	127,769	152,959
EPS (Rs)	15.2	17.2	20.2	24.2
Growth (%)	363.6	13.1	17.4	19.7
Net DPS (Rs)	3.5	4.3	5.1	6.1

Source: Company Data; PL Research

90.00%

3.32%

1.63%

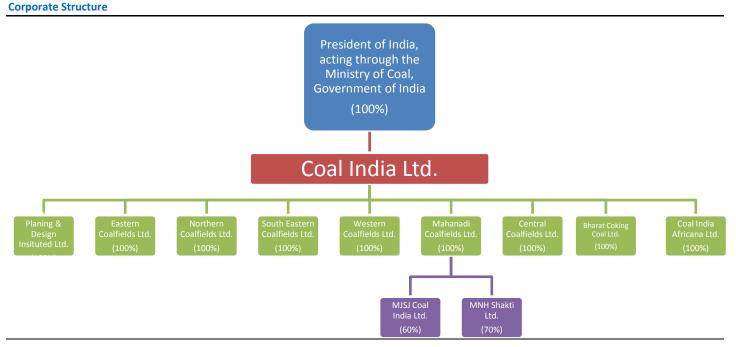
5.05%

Profitability & Valuation	2010	<b>2011E</b>	<b>2012E</b>	<b>2013E</b>
EBITDA margin (%)	26.3	29.4	31.5	33.2
RoE (%)	42.9	36.6	33.6	31.9
RoCE (%)	19.6	33.8	31.1	29.1
EV / sales (x)	3.9	3.5	3.1	2.6
EV / EBITDA (x)	14.8	12.0	9.8	8.0
PE (x)	22.4	19.9	16.9	14.1
P / BV (x)	8.4	6.4	5.1	4.0
Net dividend yield (%)	1.0	1.3	1.5	1.8

Stock Performa	nce		
(%)	1M	6M	12M
Absolute	NA	NA	NA
Relative	NA	NA	NA

## **Company Background**

CIL is the world's largest producer of coal, with production of 431m tonnes in FY10, which constitutes ~81% of India's total coal production. The company was established in 1973 as a wholly-owned subsidiary of the Government of India. It operates through 11 direct and indirect subsidiaries. Nine of its subsidiaries are engaged in coal production in India. It's another domestic subsidiary, *Central Mine Planning & Design Institute (CMPDIL)* provides technical and consultancy services for captive purposes as well as the third party. During last year, CIL formed Coal India Africana Ltd (CIAL), Mozambique based wholly owned foreign subsidiary to explore mining opportunities in Mozambique. CIL acquired prospecting licenses for two coal blocks in Mozambique during last year for further exploration and development of these coal blocks over a period of next five years.



Source: Coal India RHP

It owns the world's largest resources of 64.8m tonnes which is ~23% of India's total resources of coal. However, the feasibility studies have been carried out only for 30.4bn tonnes of its resources, while for the rest it's still pending. With regards to evaluated resources of 30.4bn tonnes, studies have estimated extractable reserves of 21.8bn tonnes.

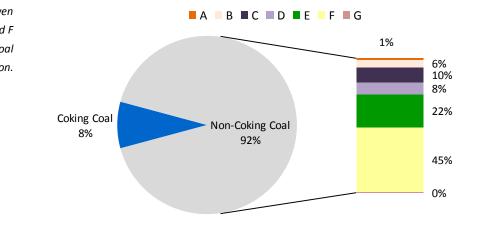
Coalfield wise total resources, Extractable res	erves, capacity and grade of coal

Coal fields	Total	Extractable	Rated	Production	Grade of coal	% of Total	% of Total		
	resources	Reserves	Capacity	in FY 2010		Production	Production		
Coalfields under production									
Korba	5,552	2,670	75.2	78.5	B, C, E, F	18.2%			
Central India Coalfields	3,681	774	28.6	24.7	SC II, A, B, C, D, F	5.7%	SECL		
Mand Raigarh	2,070	659	5.2	4.8	D, F	1.1%			
Talcher	9,929	5,893	69.3	59.7	B, C, E, F	13.9%	MCL		
IB Valley	alley 3,403 2,119 45.3 44.3 C, D, E, F				C, D, E, F	10.3%	IVICL		
Singrauli	3,482	1,891	77.4	67.7	C, D, E	15.7%	NCL		
North Karanpura	4,493	2,072	23.7	23.6	B, E, F	5.5%			
East Bokaro	3,227	692	10.5	12.7	W III, W IV, E, F	2.9%			
West Bokaro	1,762	462	6.6	5.2	W III, W IV, C, E	1.2%	<b>CC</b> 1		
South Karanpura	1,753	308	5.0	4.0	B, C, D, E	0.9%	CCL		
Ramgarh	405	138	1.4	1.1	W III	0.3%			
Giridh	18	15	0.9	0.6	E	0.1%			
Wardha-Valley	2,921	795	29.2	29.3	B, C, D, E	6.8%			
Kamptee	938	214	4.8	5.0	B, C, D, E	1.2%			
Umrer Nand Bander	558	215	4.3	4.3	C, D	1.0%	WCL		
Pench-Kanhan	936	148	5.0	3.9	W II, B, C, D, E	0.9%			
Pathakhera	218	87	3.6	3.3	D, E	0.8%			
Rajmahal/Deogarh	2,339	546	11.1	13.1	D, F	3.0%	50		
Raniganj	9,177	662	21.0	17.0	SC I, ST I, A, B, C, D	3.9%	ECL		
Jharia	7,043	1,145	32.7	27.5	ST I, ST II, W I, W II, WIII, W IV, B, C, D	6.4%	BCCL		
Makum	362	239	1.1	1.1	Α	0.3%	NEC		
Coalfields not under production									
Tatapani-Ramkola	484	-	-	-		0.0%	SECL		
Daltonganj	16	-	-	-		0.0%	661		
Hutar	-	-	-	-		0.0%	CCL		
Dilli-Jeypore	18	10	-	-		0.0%	NEC		
Total	64,785	21,754	462	431		100.0%			

Source: CIL RHP

(Explanation of coal grades and pricing shown in Annexure)

Non-coking coal constitutes in excess of 90% of its aggregate production. Even within non-coking coal, Grade E and F consitute 3/4<sup>th</sup> of the non-coking coal production.



Source: CIL RHP, PL Research

Grade-wise coal production

## **Key Investment highlights**

## Indian domestic coal markets expected to be in severe deficit

India's coal supply deficit has widened significantly during the past couple of years due to a strong growth in demand from user sectors and increase in supplies incommensurate to demand. We expect the deficit to expand incessantly during the remaining period of eleventh and upcoming five-year plan. India's total coal demand is expected to grow at a CAGR of 8.9% during FY11-FY17 (terminal year of 12th Five year plan) on the back of sizeable capacity augmentation in Power generation, Steel and Cement sector. Compared to this, growth in domestic coal supplies would lag the growth in demand by a sizeable margin with growth of 7.2% during the period. Given the existing deficit and insufficient increase in supplies relative to growth in demand, the gap would get almost tripled to 224m tonnes (21% of demand) in FY17 from 68m tonnes (12% of demand) in FY10 at CAGR of 18.6%. This would necessitate massive surge in imports to bridge the gap attributed to insufficient contribution from domestic supplies. Imports are expected to grow at CAGR of 17.1% during FY11-FY17 from the level of 68m tonnes in FY10 to 205m tonnes by FY17.

India's domestic coal demand an	d supply forecast									(m to	onnes)
	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Demand											
Coking coal*	35.2	39.0	37.7	40.7	43.3	48.6	54.4	60.6	67.2	74.0	81.4
Non-coking coal**	428.7	465.3	511.4	541.6	585.1	636.3	692.0	757.3	828.9	900.9	979.3
Total	463.9	504.3	549.0	582.3	628.5	684.9	746.3	817.9	896.1	974.9	1060.7
Growth (%)		8.7	8.9	6.1	7.9	9.0	9.0	9.6	9.6	8.8	8.8
Domestic supply											
Coking coal	17.3	17.0	16.6	17.2	17.6	18.2	19.8	21.5	22.7	25.9	26.6
Non-coking coal	403.5	437.5	473.4	497.4	521.9	555.7	605.8	659.4	711.5	759.1	804.2
Total	420.8	454.5	490.0	514.6	539.5	573.8	625.6	680.9	734.2	785.0	830.8
Growth (%)		8.0	7.8	5.0	4.8	6.4	9.0	8.8	7.8	6.9	5.8
Total Gap											
Coking coal	17.9	22.0	21.1	23.5	25.8	30.5	34.6	39.1	44.6	48.1	54.8
Non-coking coal	25.2	27.8	37.9	44.3	63.2	80.6	86.1	97.9	117.4	141.8	175.1
Total	43.1	49.8	59.0	67.7	89.0	111.1	120.8	137.0	161.9	190.0	229.9
% of demand	9.3	9.9	10.7	11.6	14.2	16.2	16.2	16.8	18.1	19.5	21.7
Imports											
Coking coal	17.9	22.0	21.1	23.5	25.8	30.5	34.6	39.1	44.6	48.1	54.8
Non-coking coal	25.2	27.8	37.9	44.3	52.1	59.1	66.6	82.4	101.2	122.4	149.9
Total	43.1	49.8	59.0	67.7	77.9	89.6	101.2	121.5	145.8	170.6	204.7
Growth (%)		15.6	18.5	14.8	15.0	15.0	13.0	20.0	20.0	17.0	20.0
Unmet demand	0.0	0.0	0.0	0.0	11.1	21.5	19.5	15.5	16.2	19.4	25.3
Growth (%)						93.8	-9.2	-20.5	4.1	20.0	30.2

Source: Industry, IPA, Ministry of Coal, PL Research

\* includes only the metallurgical coking coal \*\* includes non-metallurgical coking coal

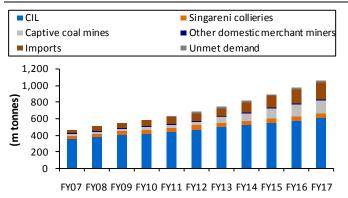
Demand break-up										(m tonn	ies)
	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Coking coal (consumed by Steel and Private Cokeries)	35.2	39.0	37.7	40.7	43.3	48.6	54.4	60.6	67.2	74.0	81.4
Non-coking coal											
Power (Utilities)	307.9	332.4	362.9	371.7	401.4	437.5	476.9	524.6	577.0	629.0	685.6
Power (Captive)	28.1	29.3	32.7	39.1	42.6	46.4	50.6	55.2	60.1	64.9	70.1
Cement inc CPP	19.7	21.3	18.9	19.0	20.5	22.5	24.8	27.3	30.0	33.0	36.3
Sponge iron	17.5	20.9	19.8	23.1	24.7	26.2	27.8	29.4	31.2	33.1	35.0
Others	55.5	61.4	77.1	88.8	95.9	103.6	111.9	120.8	130.5	140.9	152.2
Total	428.7	465.3	511.4	541.6	585.1	636.3	692.0	757.3	828.9	900.9	979.3

Source: Industry, IPA, Ministry of Coal, PL Research

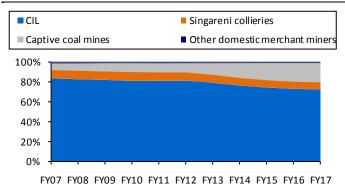
### **CIL commands 80% of domestic supplies**

Given the mammoth size of its operations, CIL would continue to command more than 70% share of domestic coal supplies by FY17 against 81% in FY10 despite increased contribution from captive blocks. However, constrained by delays and several other regulatory issues, its share in the total demand (including imports and unmet demand) would come down from 71% in FY10 to 57% by FY17. Even, CIL highlighted this aspect in its RHP, wherein it estimated a shortfall of 110m and 235m tonnes in FY11 and FY12, respectively from its production, provided all the letter of assurances (LOAs) translates into final Fuel Supply Agreements (FSAs).

#### Break-up of sources of supply



#### Break-up of domestic supply



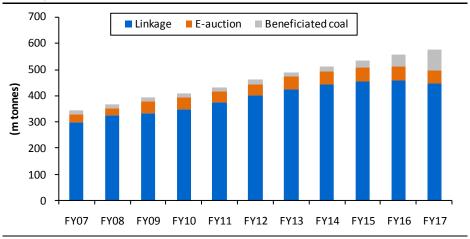
Source: Coal India, Industry, PL Research

Source: Coal India, Industry, PL Research

# Higher quantum of sales in beneficiated form to alleviate the impact of deep discounted sales in FSAs

In late 2006, CIL introduced sales through E-auction to exploit the benefit of sales to relatively less coal price in sensitive sectors like cement, sponge iron, chemical, bricks, etc. covered currently under linkages by curtailing their linkages. CIL sells 10% of its raw coal sales through E-auction at market determined prices. E-auction prices hover at a premium of 60-65% to linkage price.

To further enhance the realisation on raw coal level, CIL is investing heavily to increase its share of coal sales in beneficiated/washed coal form. CIL sells the beneficiated coal at a discount of 15% to the import parity price of imported coal adjusted for the calorific value. Beneficiated ore command premium of more than 100% of the price charged for raw coal under linkage against an additional cost of 30-32% of linkage price for conversion and yield loss. CIL is setting up 20 coal beneficiation facilities, with an aggregate feedstock intake capacity of 111.1m tonnes at an outlay of Rs23.3bn. These capacities would start coming into operation from FY14. Further to this, CIL's all new opencast mining projects with capacity in excess of 2.5mtpa would be backed by dedicated coal beneficiation facilities. This would further expand its realizations.

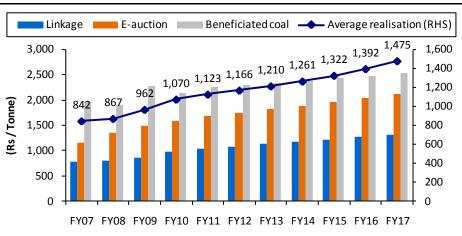




The average sales realisation (ASR) per tonne of raw coal expanded by 11% in FY09 as well as FY10 on the back of price increase emulated during those years. Realisations are expected to increase by 5% in FY11 because of a full impact of price increase undertaken during October 2009. For our forecast, we have assumed an average increase of 4% in prices of raw coal for sales through FSAs and 62% premium over FSA price for e-auction volumes. On the back of increased share of beneficiated coal volumes FY14 onwards, ASR would grow at a CAGR of 5.4% during FY15-FY17 against 4% increase assumed in FSA sales.

Source: CIL RHP, PL Research



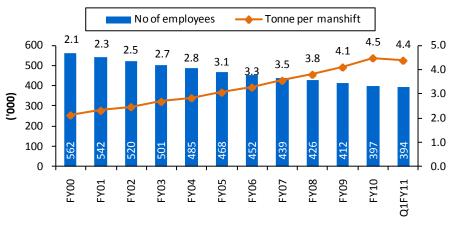


Source: CIL RHP, PL Research

# Economies of scale in full play with rising production and reducing workforce

CIL's workforce came down by ~30% (annualized rate of 3.4%) during the past ten years from 562k in FY2000 to 397k at the end of FY10. Contrary to this, CIL's coal production grew by 65% (CAGR of 5%) during the same period. This resulted in productivity (tonnes per man-shift) to double from 2.1x in FY2000 to 4.5x in FY10. We expect consistent rise in productivity (7x in FY17) on the back of natural attrition, increased mechanisation and absorption of excess manpower for expansion.



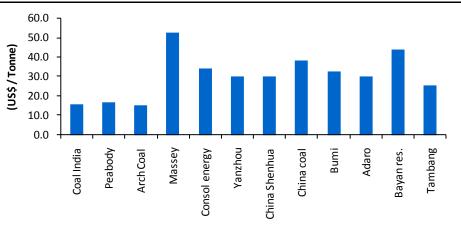


Source: CIL RHP

### CIL in the league of lowest cost global coal producers

Benefited by rich geological conditions of the opencast mines (reflected in significantly favourable strip ratio of 1.8x against global average in excess of 5x and relatively thick seam compared to global averages), higher economies of scale and excess manpower compensated by low pay levels, CIL stands among the lowest cost coal producers.

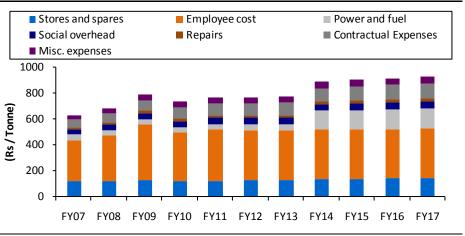




## Cash cost of production per tonne to remain flat

We expect the cash cost to remain in the broad range of Rs830-850 per tonne of raw coal on the back of expectation of 6% growth in coal production, sustainable natural attrition of 2% in the employee strength and 7% rise in employee cost per annum. The cost might seem to go up from FY14 onwards but the increase is more to do with cost push in the form of beneficiation cost and yield loss associated with increase in share of beneficiated coal.





Source: CIL RHP, PL Research

## **Key concerns**

### Miniscule price increases despite complete deregulation

Government of India completely deregulated the pricing of coal with effect from January 2000. However, there have been only four significant revisions in the prices since the implementation of de-regulation. The annualized increase in the price of its coal since January 2000 until last increase in October 2009 was 4.9%, well below the average inflation rates and relative increase in other commodities during the same period. However, the frequency of the increase relatively increased during the past three years to safeguard the earnings from the impact of wage increase, inflation and cost increases beyond the efficiency improvements.

#### Price increase history (%)

Jan-00	8.5
Jun-04	16.2
Dec-07	10.0
Oct-09	11.0

Source: Coal India RHP

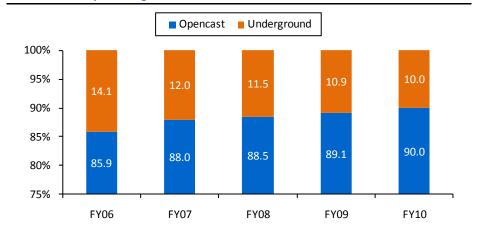
# High cost underground operations lessen the benefit of efficient opencast (OC) operations

Despite highly efficient OC mining operations, CIL's average cost per tonne of total raw coal produced remained high due to high cost of operations at underground (UG) mines. CIL currently operates 279 loss-making mines (majority are UG mines) or 59% of the total mines, accounting for 13% of its total production which were transferred to CIL as a part of the Coal Nationalization Act, 1973. Operations at these mines are economically infeasible due to excess manpower, absence of scope of mechanization and adverse geo-mining conditions. Management has various initiatives on planning board to close down many of these mines, going forward and relocate the employees to suffice the need of employees for upcoming Greenfield/Brownfield mine expansion.

#### Cost of production at OC and UG mines

	FY07	FY08	FY09	FY10
Cost/tonne produced from OC mine	447	476	507	520
Cost/tonne produced from UG mine	2,254	2,584	2,660	2,795
Average cost/tonne of coal produced	660	715	738	745

Source: CIL RHP, PL Research



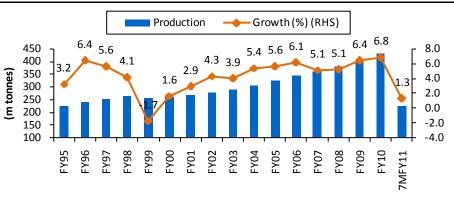
Mix between output through OC and UG mines

Source: CIL RHP, PL Research

# Management's expectation of production growth in excess of 6% hard to fetch

Given the Cll's below average execution track record, far stringent enforcement of the norms and conditions by MoEF in granting the necessary approvals compared to erstwhile times, higher base impact, extreme naxal activities near majority of its mining areas impacting the dispatches severely, we see a downside risk to the above 6% output growth expectation. The historical trend in output growth further vindicates our argument, with growth remaining below the 6% mark despite a favourable environment.





Source: MoC, PL Research

CIL has 45 ongoing projects in hand for expanding its mining capacity by 81m tonnes, involving total capital outlay of Rs59.6bn. Out of the 45 projects, 22 having an aggregate capacity of 47.5m tonnes would come into operation by the end of FY12 for a total capital outlay of Rs33.9bn. Rest of the 23 projects would become operational for an addition of 33.3m tonnes during the 12th year plan. Management has various other expansion projects on the planning board to sustain the output

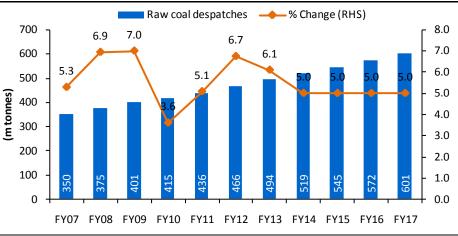
growth in the targeted range of 6-7% during the 12th Five year plan.

	No. of projects	Capacity (m Tonnes)	Capital outlay (Rs bn)	Commissioning period
	22	47.5	33.9	FY2012 end
	23	33.3	25.8	FY2013-FY2017
Aggregate	45	80.8	59.6	

Source: CIL RHP, PL Research

We forecast raw coal despatches to grow at 5%, 7% and 6% in FY11, FY12 and FY13, respectively. Post FY13, we expect growth to come down to 5% for FY14-F17 due to higher base and delay in commissioning of expanded capacities.

#### **Despatches and growth**



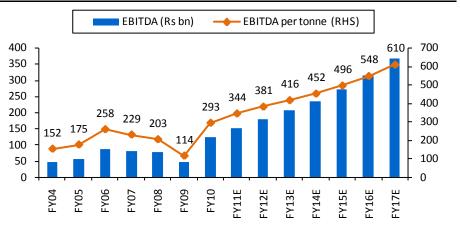
Source: CIL RHP, PL Research

## **Financial Analysis**

## EBITDA to grow at CAGR of 22% during FY11-FY13

On the back of 4% realisation growth, 6% volume growth and flat cost of production at Rs830 per tonne, CIL's EBITDA is expected to grow at a CAGR of 19% during FY11-FY13. EBITDA per tonne would grow at a CAGR of 12% to Rs416 per tonne in FY13 as against Rs293 per tonne in FY10.



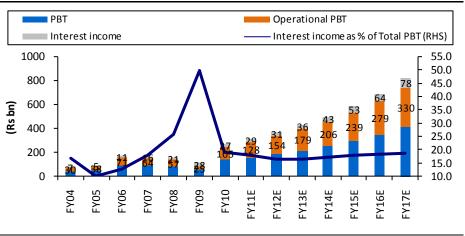


Source: CIL RHP, PL Research

# PBT growth at CAGR of 16% during FY11-FY13 with interest income contribution at 17-18%

Operational PBT (OPBT) would grow at a CAGR of 20% during FY11-FY13 on the back of strong EBITDA growth. Strong growth in OPBT would contribute 95% of the growth in total PBT during the period. Lower yields on the deployment of excess cash would keep the growth in interest income muted. Nevertheless, interest income would continue to constitute 17-18% of total PBT.



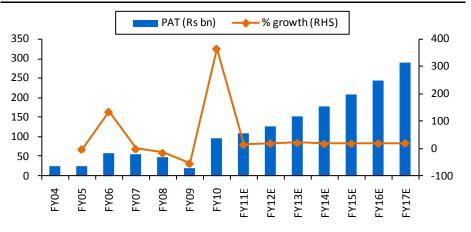


Source: CIL RHP, PL Research

## PAT at long-term growth trajectory of 17-18%

We expect PAT to grow at CAGR of 17% during FY11-FY13 and the trajectory is expected to be maintained for a long term on the back of strong fundamentals of the sector.



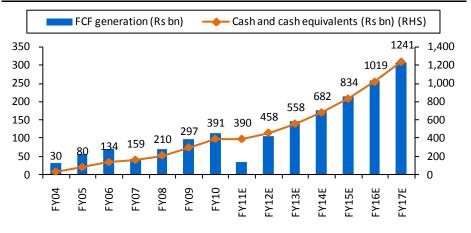


Source: CIL RHP, PL Research

### Huge cash built-up on the back of strong free cash flow generation

CIL would generate substantial free cash flows (FCF) during FY12-FY17 despite sizeable capital expenditures of US\$1bn every year against an average of US\$0.4-0.5bn per annum in earlier periods. Clearly, the focus has shifted to expand the earnings through sweetening both the drivers of growth, volume and realisation. FCF generation is lower in FY11 due to payment of liabilities related to previous year's wage pay hike arrears, gratuity and other employee benefits, amounting Rs60bn.



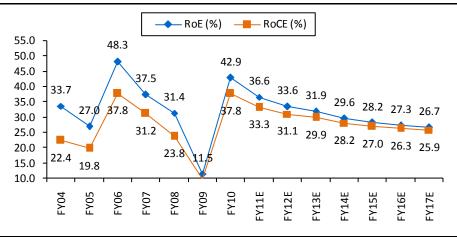


Source: CIL RHP, PL Research

Led by robust FCF generation, cash and cash equivalents are expected to grow at a consistent pace. Huge idle cash reserves would necessitate serious and quick actions by company to use these resources for growth through inorganic route. CIL has earmarked Rs60bn for the acquisition of foreign coal assets in its annual plan for FY11.

### Strong return ratios substantiates the attractiveness of operations

Despite sizeable idle cash in the balance sheet, CIL would be able to demonstrate RoE and RoCEs in excess of 25% on the back of higher realizations and increased capital expenditures to fuel the volume growth.





Source: CIL RHP, PL Research

# **Relative valuation**

#### **Global valuations**

C	Mitteen (UCCha)	P/E (X	)	EV/EBITDA (X)			P/BV (X)	
Company name	Mkt cap (US\$bn) —	FY11	FY12	FY11	FY12	FY11	FY12	
US								
Peabody Energy Corp	14.4	17.2	11.7	8.4	6.5	3.2	2.6	
Consol Energy Inc	8.2	15.9	12.2	8.2	6.6	2.5	2.1	
Arch Coal Inc	4.3	22.4	10.0	8.0	5.5	1.9	1.6	
Massey Energy Co	4.2	17.1	12.1	12.8	5.2	2.0	1.8	
China								
China Shenhua Energy Co	85.7	16.5	14.6	8.5	7.4	3.1	2.7	
Yanzhou coal Mining	18.8	12.8	11.3	11.2	9.5	2.7	2.3	
China Coal Energy Co	24.7	15.9	13.1	8.8	7.2	2.2	1.9	
Shanxi Xishan Coal and Electric Co	13.0	17.7	12.7	14.5	11.2	5.8	4.4	
Shanxi Luan Environmental Development Co	9.4	21.1	18.2	10.7	11.1	5.8	4.7	
Indonesia								
Bumi Resources Tbk PT	5.1	13.5	9.4	7.2	5.2	2.5	2.0	
Adaro Energy Tbk PT	7.7	22.3	12.6	8.7	6.0	3.5	2.9	
Bayan Resources Group	4.4	63.4	19.8	26.1	12.1	13.7	9.8	
Tambang Batubara Bukit	4.8	18.9	12.7	13.1	8.3	6.4	4.8	
Australia								
Centennial Coal Company	2.4	16.2	13.1	7.8	6.9	2.8	2.5	
Macarthur Coal	3.7	13.9	10.9	8.8	7.2	2.1	1.9	
Gloucester Coal	1.5	19.7	13.2	12.3	8.3	2.2	2.0	
Whitehaven Coal	3.4	32.4	17.4	18.6	10.7	3.1	2.8	
New Hope Corp	4.1	20.3	17.9	8.4	9.2	1.6	1.5	
Riversdale Mining Company	2.6	153.6	41.4	120.7	22.8	2.8	2.4	
Others								
Xstrata PLC	60.4	11.2	8.7	6.8	5.4	1.6	1.4	
Banpu Public Company	7.1	11.9	11.2	12.5	7.7	3.2	2.7	
Average valuations		17.7	12.8	10.3	7.6	3.1	2.6	

Source: Bloomberg, PL Research

Global coal stocks trade at an average P/E of 17.7x and 12.8x CY10E and CY11E, respectively, while on EV/EBITDA, the average quotes at 10.3x and 7.6x CY10E and CY11E, respectively.

## Valuation

We believe discounted cash flow (DCF) is the most suitable valuation technique for valuing CIL, given the utility cum mining nature of its business. We have assumed risk free rate of 8%, beta of 0.8 and premium over market risk at 5.5% for deriving the cost of equity. We used FY11-FY17 as explicit period for our forecasts. Incorporating the derived cost of equity of 12.1% and terminal growth rate of 3.5% (FY17 the terminal year) on the future cash flows, we arrive at an intrinsic value of Rs366 per share. This implies operational P/E of 15.5x and 13.0x FY12E and FY13E, respectively and an EV/EBITDA of 11.0x and 9.5x FY12E and FY13E, respectively at a premium to global valuations. The premium is warranted for the stock, given its presence in the most deficit market, impressive return ratios, efficient operations, strong balance sheet and stable earnings.

#### Internals of DCF valuation

Basic assumptions for DCF		DCF valuation	(Rs bn)
Rf (%)	8.0	PV of cash flows generated during FY11-FY17	563
Rm (%)	5.5	PV of terminal cash flows to equity	1,372
Beta (x)	0.8	Total PV of future cash flows	1,935
Re (%)	12.1	Cash*	376
Terminal growth rate (%)	3.5	Total Equity Shareholder's value	2,311
Terminal year	FY17	Value per share (Rs)	366

Source: PL Research \*Adjusted for shifting and rehabilitation fund

#### Sensitivity analysis

	_	Risk Free Rate (%)						
		5.0	6.0	7.0	8.0	9.0	10.0	11.0
a	2.0	475	415	368	331	301	276	255
Rate	2.5	500	433	382	341	309	282	260
Growth (%)	3.0	529	454	397	353	318	289	266
Gro (%)	3.5	564	478	414	366	328	297	272
inal	4.0	605	505	434	380	339	306	279
Terminal	4.5	656	538	457	397	351	315	286
μ.	5.0	718	577	483	415	365	325	294

Source: PL Research

# **Financials**

### Income Statement (Rs m)

Y/e March	FY06	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E
Net operating revenue	298,218	306,891	339,756	407,245	463,132	509,399	563,176	619,147
% Change		2.9	10.7	19.9	13.7	10.0	10.6	9.9
Cost of Sales								
Consumption of stores and spares	38,888	41,256	43,786	48,613	49,269	51,841	56,992	62,278
as a % of Sales	13.0	13.4	12.9	11.9	10.6	10.2	10.1	10.1
Employees' Remuneration & Benefits	97,880	100,975	126,352	197,421	166,555	173,788	182,234	191,091
as a % of Sales	32.8	32.9	37.2	48.5	36.0	34.1	32.4	30.9
Power & Fuel	15,513	16,003	15,937	15,951	17,396	19,360	21,284	23,258
as a % of Sales	5.2	5.2	4.7	3.9	3.8	3.8	3.8	3.8
Social overhead	13,677	14,780	16,229	18,851	20,175	21,587	23,098	24,715
as a % of Sales	4.6	4.8	4.8	4.6	4.4	4.2	4.1	4.0
Repairs	6,502	6,649	7,097	7,861	8,479	8,751	9,527	10,410
as a % of Sales	2.2	2.2	2.1	1.9	1.8	1.7	1.7	1.7
Contractual Expenses	19,745	20,934	26,333	33,399	37,318	39,267	43,587	48,555
as a % of Sales	6.6	6.8	7.8	8.2	8.1	7.7	7.7	7.8
Miscellaneous Expenses	13,281	12,640	14,873	19,285	19,336	20,150	22,152	24,206
as a % of Sales	4.5	4.1	4.4	4.7	4.2	4.0	3.9	3.9
Overburden Removal Adjustment	12,099	16,866	15,640	21,772	30,539	24,718	26,910	29,121
as a % of Sales	4.1	5.5	4.6	5.3	6.6	4.9	4.8	4.7
Total Cost of Sales	212,343	226,704	263,567	361,517	341,427	359,462	385,784	413,633
EBITDA	85,875	80,186	76,189	45,728	121,705	149,937	177,392	205,514
as a % of Sales	28.8	26.1	22.4	11.2	26.3	29.4	31.5	33.2
Depreciation	13,154	13,116	15,299	16,629	13,138	16,618	18,598	20,743
Impairment and write-off	764	1,630	2,627	2,040	2,250	2,345	2,577	2,816
EBIT	71,957	65,440	58,262	27,059	106,317	130,974	156,216	181,954
Interest	1,192	1,081	1,693	1,788	1,560	2,557	2,593	2,676
PBT (before other income)	70,765	64,359	56,569	25,271	104,757	128,418	153,623	179,279
Other Income	16,491	21,283	24,224	31,839	35,429	31,563	34,272	39,233
PBT before extraordinaries	87,257	85,642	80,793	57,110	140,186	159,981	187,896	218,512
Extraordinary (income)/expense	343	162	5,274	33	-	-	-	-
Adj pertaining to previous year	285	221	1,111	277	(537)	-	-	-
PBT after extraordinaries	87,885	86,025	87,178	57,420	139,649	159,981	187,896	218,512
Provision for Taxation	28,970	28,937	34,745	36,632	43,425	51,194	60,127	65,554
as a % of PBT	33.0	33.8	43.0	64.1	31.0	32.0	32.0	30.0
Reported PAT	58,915	57,087	52,433	20,788	96,224	108,787	127,769	152,959
Adjusted PAT	58,572	56,925	47,159	20,755	96,224	108,787	127,769	152,959
Reported EPS - Basic & Diluted (Rs)	9.3	9.0	8.3	3.3	15.2	17.2	20.2	24.2
Adjusted EPS - Basic & Diluted (Rs)	9.3	9.0	7.5	3.3	15.2	17.2	20.2	24.2

#### Balance Sheet (Rs m)

Y/e March	FY06	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E
Sources of funds								
Share Capital	63,164	63,164	63,164	63,164	63,164	63,164	63,164	63,164
Reserves & Surplus	79,373	98,968	108,843	126,918	195,289	272,362	362,884	471,252
Net Worth	142,536	162,131	172,007	190,082	258,453	335,526	426,047	534,415
Debt	23,190	21,439	18,839	21,485	20,869	17,269	16,269	15,269
Deferred Tax Liability	4,469	2,331	1,801	-	-	-	-	-
Minority Interest	-	-	-	19	236	236	236	236
Shifting and Rehabilitation Fund	4,859	6,881	9,459	12,238	14,774	17,038	19,478	22,089
TOTAL	175,054	19 <mark>2,782</mark>	202,105	223,824	294,332	370,069	462,030	<b>572,00</b> 9
Application of funds								
Fixed assets								
Gross Block	296,734	307,017	318,592	332,550	349,453	389,107	437,470	484,446
Less: Depreciation	177,916	199,310	210,095	218,028	224,911	241,529	260,127	280,870
Less: Provision for Impairment	15,520	3,777	4,106	4,430	4,228	4,391	4,570	4,765
Less: Other provisions	-	5	4	4	4	4	4	4
Net Block	103,298	103,925	104,387	110,088	120,310	143,183	172,769	198,807
CWIP	10,988	12,377	15,392	18,223	20,909	21,000	21,000	21,000
Surveyed off assets	228	241	291	972	1,198	1,198	1,198	1,198
Total Fixed assets	114,515	116,543	120,071	129,283	142,416	165,381	194,967	221,005
Investments	22,445	20,259	17,179	15,052	12,821	12,821	12,821	12,821
Current Assets, Loans & Advances								
Inventories	29,134	31,250	34,074	36,669	44,018	45,180	48,761	52,514
Debtors	18,841	16,822	16,572	18,475	21,686	26,941	29,836	32,852
Cash & Bank balances	134,272	159,293	209,615	296,950	390,778	390,310	458,354	558,418
Loans and Advances	65,004	78,184	102,663	117,271	86,762	87,162	87,562	87,962
Total Current assets	247,252	285,549	362,923	469,364	543,244	549,594	624,513	731,746
Less: Current Liabilities and provisions								
Current liabilities	180,975	178,541	231,497	282,691	331,428	328,895	341,437	364,730
Provisions	35,463	57,631	74,448	116,733	82,396	38,508	38,508	38,508
Total current liabilities and provisions	216,438	236,171	305,945	399,423	413,825	367,403	379,946	403,238
Net Current Assets	30,814	49,378	56,978	69,941	129,419	182,191	244,567	328,507
Miscellaneous Expenditure	-	-	-	-	15	15	15	15
Deferred Tax Assets	7,281	6,602	7,878	9,548	9,658	9,658	9,658	9,658
TOTAL	175,054	192,782	202,105	223,824	294,332	370,069	462,030	572,009

### Cash Flows (Rs m)

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Y/e March	FY06	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E
Cash flow from operating activities								
Net profit before tax	87,542	85,862	81,904	57,387	139,649	159,981	187,896	218,512
Depreciation	12,987	12,285	13,800	10,630	6,795	16,780	18,777	20,939
Net Non Operating (Income)/Expenses	2,906	(17,689)	(14,791)	22,723	4,389	2,353	2,368	2,428
Other Adjustments	343	162	5,480	54	-			
Operating profit before working capital changes	103,778	80,621	86,393	90,794	150,833	179,114	209,040	241,879
Change in working capital	9,559	2,636	31,594	54,307	22,183	(53,239)	5,668	16,124
Inventories	(4,620)	(2,232)	(2,869)	(2,829)	(7,189)	(1,162)	(3,581)	(3,753)
Sundry debtors	1,881	1,222	(708)	(1,904)	(3,425)	(5,255)	(2,894)	(3,016)
Investments	-	2,186	3,080	-	-	-	-	-
Loans and advances	(14,413)	(15,403)	(20,744)	(14,228)	25,683	(400)	(400)	(400)
Current liabilities and Provisions	28,213	16,651	51,941	75,015	7,503	(46,422)	12,543	23,292
Deferred Taxes Assets/Liabilities	(1,502)	211	894	(1,748)	(390)			
Cash generated from operations	113,337	83,258	117,987	145,101	173,016	125,875	214,708	258,002
Direct taxes paid	(29,661)	(23,325)	(29,297)	(27,907)	(39,990)	(51,194)	(60,127)	(65,554)
Net cash inflow from operating activities	83,677	59,933	88,690	117,194	133,026	74,681	154,581	192,449
Cash flow from investing activities								
Investment in fixed assets	(12,446)	(15,342)	(18,350)	(18,746)	(19,804)	(39,745)	(48,363)	(46,976)
Redemption of Power Bond	-	-	-	2,127	2,230			
Net cash used in Investing activities	(12,446)	(15,342)	(18,350)	(16,619)	(17,573)	(39,745)	(48,363)	(46,976)
Cash flow from Financing activities								
Increase/(Decrease) of Loan	(4,191)	(1,611)	(2,600)	2,646	(616)	(3,600)	(1,000)	(1,000)
Redemption of Bond	(110)	(140)	-	-	-			
Interest Paid	(295)	(965)	(44)	(1,610)	(1,445)	(2,353)	(2,368)	(2,428)
Shifting and Rehabilitation Fund	1,923	2,021	2,578	2,780	2,536	2,264	2,440	2,610
Dividend paid	(14,154)	(18,875)	(19,953)	(17,054)	(22,100)	(31,714)	(37,247)	(44,591)
Net cash used in Financing activities	(16,828)	(19,570)	(20,018)	(13,239)	(21,625)	(35,403)	(38,175)	(45,408)
Net change in cash and cash equivalents	54,403	25,020	50,322	87,335	93,828	(467)	68,043	100,064
Opening cash and cash equivalents	79,869	134,272	159,293	209,615	296,950	390,778	390,310	458,354
Closing cash and cash equivalents	134,272	159,293	209,615	296,950	390,778	390,310	458,354	558,418

## Annexure

Non-coking Coal	Price Range (Rs. per ton) with effect from October 16, 2009
Α	Rs.1,280 to Rs.2,580
В	Rs,1,130 to Rs.2,120
С	Rs.950 to Rs.1,860
D	Rs.790 to Rs.1610
E	Rs.620 to Rs.1,090
F	Rs.480 to Rs.870
G	Rs.350 to Rs.700
Coking Coal	
Steel Grade I	Rs.3,750
Steel Grade II	Rs.3,140
Washery Grade I	Rs.1,710 to Rs.2,740
Washery Grade II	Rs.1,410 to Rs.1,990
Washery Grade III	Rs.1,200 to Rs.1,480
Washery Grade IV	Rs.1,120 to Rs.1,370
Others (SC-I/II/SLV)	Rs.1,450 to Rs.2,150

Source: CIL RHP, PL Research

## **Grade of Raw Coal**

#### Non Coking Coal

Grade	UHV (Kcal/Kg) UHV= 8900-138 (A+M)	Gross Calorific Value GCV (Kcal/Kg) (at 5% moisture level)
А	Exceeding 6,200	Exceeding 6,401
В	Exceeding 5,600 but not exceeding 6,200	Exceeding 5,800 but not exceeding 6,401
С	Exceeding 4,940 but not exceeding 5,600	Exceeding 5,400 but not exceeding 5,801
D	Exceeding 4,200 but not exceeding 4,940	Exceeding 4,800 but not Exceeding 5,401
E	Exceeding 3,360 but not exceeding 4,200	Exceeding 4,200 but not exceeding 4,801
F	Exceeding 2,400 but not exceeding 3,360	Exceeding 3,600 but not exceeding 4,201
G	Exceeding 1,300 but not exceeding 2,400	Exceeding 3,200 but not exceeding 3,601

Source: CIL RHP, PL Research

### **Coking Coal**

Grade	Ash Content
Steel Grade I ("ST I")	Ash content < 15%
Steel Grade II ("ST II")	15% < = Ash content < 18%
Washery Grade I ("W I")	18% < = Ash content < 21%
Washery Grade II ("W II")	21% < = Ash content < 24%
Washery Grade III ("W III")	24% < = Ash content < 28%
Washery Grade IV ("W IV")	28% < = Ash content < 35%

Source: CIL RHP, PL Research

Semi-Coking Coal

Grade	Ash + Moisture Content
Semi-coking Grade I ("SC I")	Ash + moisture content < 19%
Semi-coking Grade II ("SC II")	19% < = Ash + moisture content < 24%

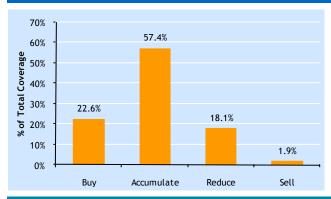
Source: CIL RHP, PL Research



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#### **Rating Distribution of Research Coverage**



#### **PL's Recommendation Nomenclature**

BUY	:	Over 15% Outperformance to Sensex over 12-months	Accumulate	:	Outperformance to Sensex over 12-months
Reduce	:	Underperformance to Sensex over 12-months	Sell	:	Over 15% underperformance to Sensex over 12-months
Trading Buy	:	Over 10% absolute upside in 1-month	Trading Sell	:	Over 10% absolute decline in 1-month
Not Rated (NR)	:	No specific call on the stock	Under Review (UR)	:	Rating likely to change shortly

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