Phillips Carbon Black

Power-packed growth

❖ **Well-timed expansion to bolster volumes:** Phillips Carbon Black (PCBL), India's leading carbon black manufacturer, is all set to capitalise on the revival in the domestic tyre industry. The company intends to commence its carbon black capacity of 90,000mt (metric tonnes) at Mundra by the end of October '09 and expand its facility at Kochi by 50,000mt. This would take its total capacity to 410,000mt. In line with this expansion, we expect PCBL's carbon black sales volume to grow by 35% in FY10 and further by 15% in FY11. In the backdrop of an improving demand environment, we believe that this expansion is well-timed and will fortify the company's market leadership. PCBL is also expected to benefit from the imposition of anti-dumping duty on carbon black imports from China, Australia, Thailand, and Russia.

❖ **Power business will de-risk operations:** Forward integration into power generation from waste gas has de-risked PCBL's business profile, adding a steady, high-margin power business to a pure commodity play. Of the total power capacity of 44.5MW, 10.5MW is used internally and the rest is sold to state electricity boards (SEBs). PCBL recently commenced a 30MW captive power plant in Durgapur; it now intends to set up a 16MW plant at Mundra by November '09 and another 10MW plant at Kochi. Consequently, we expect revenues from the power segment to leapfrog from Rs 155mn in FY09 to Rs 1.3bn in FY11.

❖ **Operating margin in the black again:** PCBL's operating margin turned around during the last quarter, from -5.6 % in FY09 to 10.9% in Q1FY10. We expect a further improvement to 15.2% in FY11, primarily on account of a higher contribution from the power segment; a drop in raw material prices is also likely to support this expansion.

❖ **Healthy earnings trajectory:** We expect PCBL's revenues to increase at a 22.3% CAGR over FY09-FY11as against a 16.9% CAGR over FY06-FY09; this growth will be driven by a 24.6% increase in volumes during this period as expanded capacities become operational. A healthy contribution from the high-margin power segment is likely to steer profits into the positive territory; the company is expected to report a net profit of Rs 1.5bn in FY11 as against a net loss of Rs 648mn in FY09.

❖ **Initiate with Buy and target of Rs 262:** We have arrived at an SOTP-based target price of Rs 262, valuing PCBL's core carbon black business (commodity) at Rs 106 (4x FY11E PAT of the division) and power business at Rs 156 (based on DCFE of individual power plants). At this value, the implied P/BV for the power business works out to 2x FY11E power book value which, in our opinion, is attractive. We initiate coverage on PCBL with a Buy.

CMP	TARGET	RATING	RISK
Rs 172	Rs 262	BUY	MEDIUM

BSE	NSE	BLOOMBERG
506590	PHILIPCARB	PHCB IN

Company data

Market cap (Rs mn / US$ mn)	4,862 / 105
Outstanding equity shares (mn)	28
Free float (%)	19.3
Dividend yield (%)	-
52-week high/low (Rs)	189 / 24
2-month average daily volume	69,112

Stock performance

Returns (%)	CMP	1-mth	3-mth	6-mth
PCBL	172	18.2	177.4	295.9
Sensex	16,643	2.8	21.0	54.0

Valuation matrix

(x)	FY08	FY09	FY10E	FY11E
P/E @ CMP	5.0	-	4.9	3.3
P/E @ Target	7.6	(10.8)	7.3	5.0
EV/EBITDA @ CMP	6.2	(14.0)	4.7	3.4

Financial highlights

(Rs mn)	FY08	FY09	FY10E	FY11E
Revenue	10,332	11,633	14,588	17,407
Growth (%)	*3.5*	*12.6*	*25.4*	*19.3*
EBITDA	1,462	(646)	1,941	2,640
Growth (%)	*56.5*	*(144.2)*	*400.3*	*36.0*
FDEPS (Rs)	34.2	(24.1)	35.4	52.5
Growth (%)	*198.0*	*(170.6)*	*246.8*	*48.3*

Profitability and return ratios

(%)	FY08	FY09	FY10E	FY11E
EBITDA margin	14.2	(5.6)	13.3	15.2
EBIT margin	12.2	(7.2)	11.4	13.1
Adj PAT margin	8.6	(5.6)	6.9	8.5
ROE	44.7	(28.4)	38.0	39.3
ROIC	23.5	(10.2)	19.5	23.1
ROCE	21.8	(6.0)	17.6	20.4

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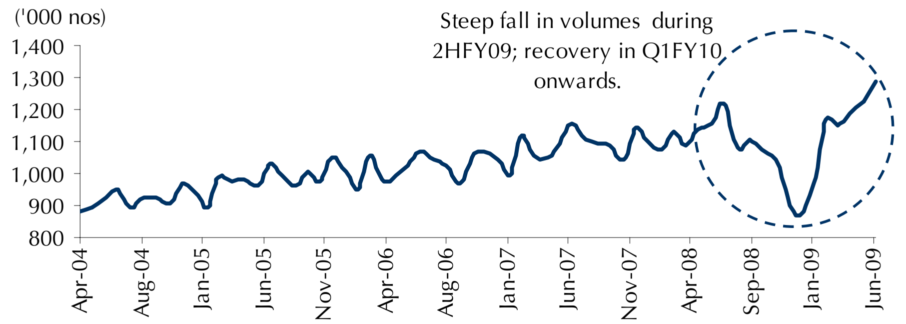
Investment rationale

Booming tyre industry to magnify demand for carbon black

Domestic tyre manufacturers to incur Rs 35bn–40bn on capacity expansion

The automotive tyre sector, the principal consumer segment of carbon black, is likely to boom as the Indian government sharpens its focus on improving the country's road network. Buoyant prospects for the domestic automobile sector have triggered capacity expansion programmes, both greenfield and brownfield, across the tyre industry. Many players are expected to commence production at their greenfield units in the next three years (see fig 2). The total capex planned by these companies ranges between Rs 35bn and Rs 40bn. Similar developments in the Asia Pacific region would also trigger demand for carbon black, both in OEM and replacement markets.

Fig 1 - Month-wise production volumes of truck and bus tyres



Source: Siam, RHH

Fig 2 - Tyre industry: capex details

Player	Tyre expansion	Investment (Rs bn)
Apollo Tyres	To set up a greenfield radial tyre plant for passenger cars, trucks, and buses in Chennai with an investment of Rs 11bn. It is also expanding its Baroda passenger car radial tyre plant by 40tonnes per day (tpd) at a capex of Rs 0.5bn.	11.5
Birla Tyres	To set up a greenfield radial tyre plant at Uttarakhand with a capacity of ~85tpd. The plant would commence production from December '09.	5.0
Ceat	To set up a radial tyre plant at Baroda, Gujarat, with a capacity of ~100tpd for truck and bus radials, and passenger cars. Plant to commence production in FY10-FY11.	5.5
Bridgestone	To expand passenger car radial capacity by 30tpd. To be operational from July '09	NA
JK Tyres	Expansion of truck and bus radial capacity from 367,000 tyres p.a. to 800,000 units. Began operations in Q1FY10.	3.2
MRF	Expanding radial tyre capacity by 350,000 tyres p.a.	4.0

Source: Crisil

Strong growth in PV and CV segments will boost demand for carbon black

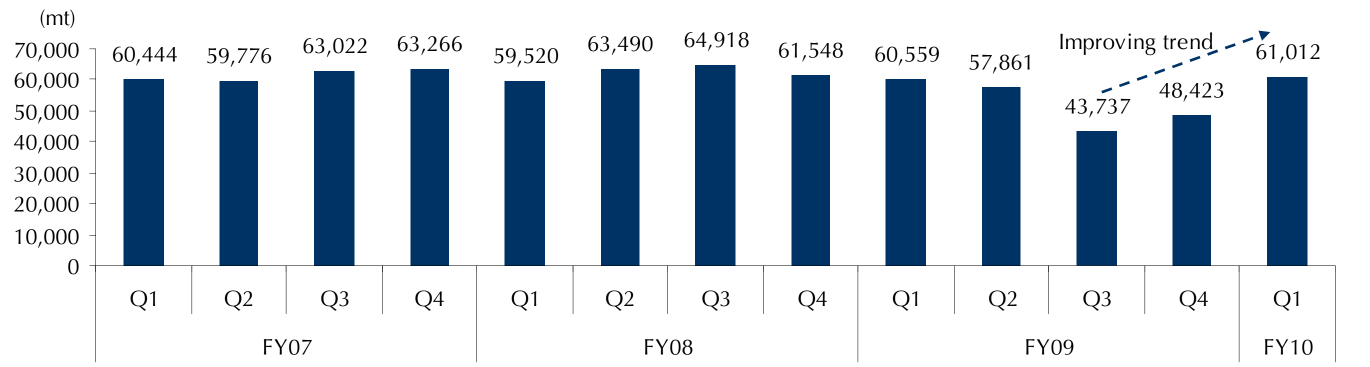
Over the last nine years, the Indian passenger vehicle (PV) segment grew by 12.9%, whereas the commercial vehicle (CV) segment grew by 14% (see Fig 3). Over FY09-FY11, the PV and CV segments are expected to log a CAGR of 13% and 12% respectively, albeit on a higher base. Phillips Carbon Black (PCBL), the market leader in carbon black manufacturing in India, is likely to emerge as one of the key beneficiaries of the revival in the domestic tyre industry due to its well-timed expansion.

Fig 3 - Auto sales

(in '000)	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	April - Aug '09
Commercial Vehicles (LHS)	**150**	**159**	**203**	**277**	**349**	**391**	**518**	**551**	**428**	**189**
LCV (LHS)	90	64	82	108	137	170	223	253	227	109
MHCV (LHS)	60	95	122	169	213	221	295	298	201	79
Passenger Vehicles (LHS)	**718**	**728**	**780**	**1,031**	**1,228**	**1,319**	**1,578**	**1,768**	**1,888**	**889**
Cars (LHS)	591	558	612	821	981	1,052	1,269	1,415	1,551	731
UV (LHS)	127	107	115	149	181	200	224	251	229	103
MPV (LHS)	-	63	53	61	66	67	84	102	108	55
Two Wheelers (LHS)	**3,746**	**4,307**	**4,992**	**5,628**	**6,577**	**7,566**	**8,467**	**8,051**	**8,416**	**4,050**
Motorcycles	2,156	2,944	3,771	4,357	5,242	6,197	7,098	6,544	6,806	3,255
Mopeds	688	427	362	331	352	376	393	432	438	225
Scooter	902	936	859	940	983	993	976	1,075	1,172	570
Total	**4,614**	**5,194**	**5,975**	**6,936**	**8,154**	**9,275**	**10,562**	**10,370**	**10,732**	**5,128**
% YoY change (RHS)		*12.59*	*15.03*	*16.09*	*17.55*	*13.75*	*13.88*	*(1.82)*	*3.49*	

Source: SIAM, RHH

Fig 4 - PCBL: Trend in quarterly carbon black volumes



Source: Company, RHH

To capitalise on buoyant industry prospects through capacity expansion

Expansion to boost volumes, strengthen international presence

Buoyed by increasing demand from the tyre OEM and replacement markets, the domestic carbon black industry is expected to grow at an 8–9% CAGR over FY07-FY12. To cater to this growing demand, PCBL has embarked on an aggressive expansion plan. The company intends to set up a 90,000mt greenfield plant at Mundra by the end of October, to take its total carbon black capacity to 360,000mt. It is further expanding its capacity at Kochi by 50,000mt, to be commissioned in December '10 (Kochi expansion not factored into our valuations at present).

When all these expansion projects come on-stream, the company's total capacity would rise to 410,000mt along with cogeneration power plants (CPP) of 70.5MW (see Fig 5). The benefits of most of these expansion projects are likely to flow in from FY11 onwards. PCBL will incur a total capex of Rs 3.8bn towards capacity augmentation: Rs 2.8bn for carbon black and Rs 1bn for the power plants. This will be funded by a mix of debt and equity in the ratio of 2:1.

Fig 5 - Proposed capacity expansion

Capacity expansion	Carbon Black(mt)	CPP(MW)	Commencement of Production	
			Carbon black	CPP
Mundra (Greenfield)	90,000	16	Oct-09	Nov-09
Kochi (Brownfield)	50,000	10	Dec-10	Dec-10
Total Domestic	140,000	26		
Existing	270,000	44.5		
Total	**410,000**	**70.5**		

Source: Company, RHH

The Mundra plant would have freight advantages, as it would cater to the western Indian markets. We estimate savings of Rs 1,500–2,000/tonne on freight costs. PCBL has been able to reduce freight costs for carbon black feed stock (CBFS), the key raw material, by changing its port of operations from JNPT to Mundra during the monsoons.

Sales volume to increase 35% in FY10 and 15% in FY11

As the largest player in the domestic market, PCBL also enjoys economies of scale. Addition of capacities will strengthen this advantage and bolster the company's sale volumes by 35% in FY10 and further by 15% in FY11. Moreover, with carbon black capacities from the US, the EU, and Japan shifting to developing countries, the export potential is immense. Before expansion, PCBL's capacities were mostly restricted to the domestic market; post expansion, the company would be able to fortify its international presence by leveraging on its established brand and leadership position.

Moreover, the imposition of anti-dumping duty on carbon black imports from China, Australia, Thailand, and Russia, is expected to improve the pricing power of domestic carbon black producers. The duty is typically placed in the US$ 78–195/tonne range.

Planned foray into Vietnam to enhance global footprint

Greenfield expansion in Vietnam to facilitate exports to the region

To cash in on Vietnam's growing attraction as a preferred location for tyre manufacturing, PCBL has formed a joint venture (80:20) with Vietnam National Chemical Corporation (Vinachem), a Vietnam-based company. The venture will set up a greenfield capacity for manufacturing 100,000mt of carbon black and 16MW of cogeneration power using fuel gases from the plant. This will be the first carbon black plant in Vietnam and serve as a hub for exports to the region. While the present demand for carbon black is in the region of 40,000–50,000tonnes, it is expected to more than double in the next two to three years as many tyre manufacturers shift base to Vietnam due to the easy availability of rubber.

The project will require an estimated investment of US$ 50mn and is likely to be funded through a mix of debt (US$ 30mn) and equity (US$ 20mn: 80% by PCBL and the rest by the JV partner). We have not factored this expansion into our numbers as of now.

CPP generation to de-risk operations, augment revenues and margins

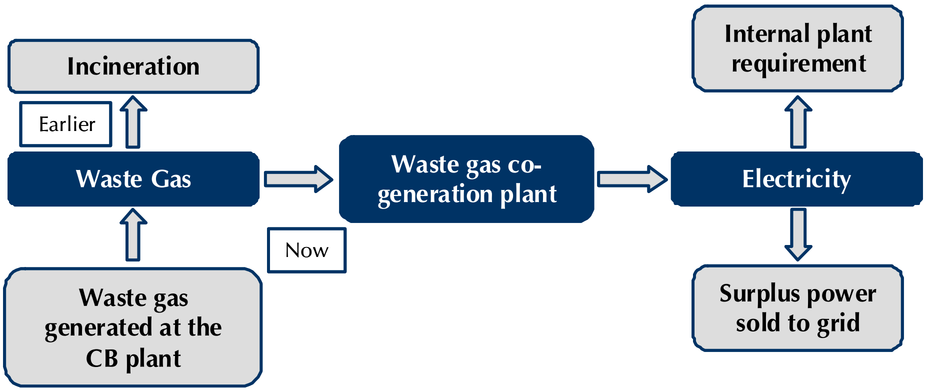
Typically, the process for carbon black manufacturing is environmentally unfriendly, since the 'off-gas', a by-product of the manufacturing process, is either released or flared. This requires additional investments in pollution control equipment to ensure uninterrupted operations. Alternately, the gas can be converted into steam that, in turn, can be used to generate power. This yields three benefits:

- Savings on expenditure associated with the flaring of gas
- Savings on power cost by captively using the electricity generated
- Increase in revenues as surplus power generated can be sold to third parties.

Baroda power plant to contribute Rs 300mn to revenues in FY10

Generating power by this technique has enabled PCBL to significantly reduce its power costs. PCBL's current power generation capacity stands at 44.5MW of which 10.5MW is used for internal consumption and the remaining is sold to SEBs. Sale of power from the Baroda plant translated into revenue inflows of Rs 155mn (8MW) in FY09. The production cost per unit of power is low at Rs 0.3/unit (in the absence of raw material costs). In FY09, the company sold power generated from this plant to third parties at an average of Rs 2.6/unit. The tariff for the Baroda plant has been increased sharply to Rs 5.5/unit since June '09. Consequently, in FY10, this unit is likely to contribute close to Rs 300mn to the topline.

Fig 6 - Conversion process – waste gas to power



Source: Company, RHH

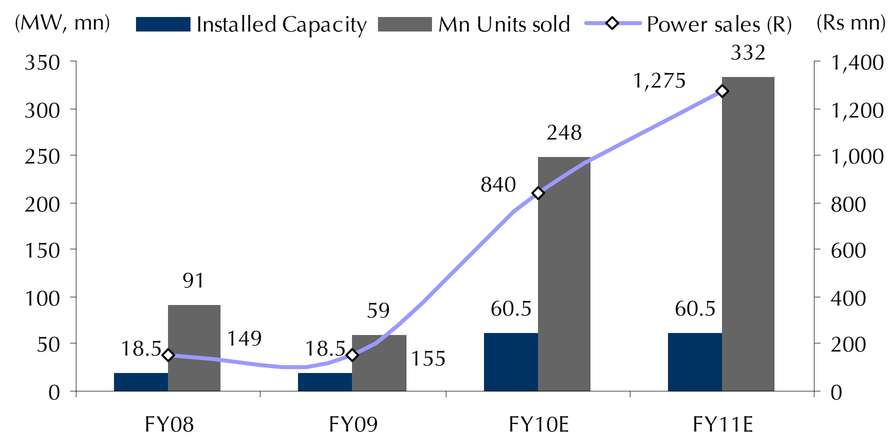
In April '09, PCBL commenced a 30MW CPP in Durgapur at a cost of Rs 1.2bn by replacing the old 4MW power plant. The carbon black facility would require ~5MW of power for internal consumption whereas the balance will be sold to CESC at an agreed price of Rs 2.5/unit. This unit is expected to generate additional revenues of Rs 424mn in FY10 and Rs 472mn in FY11. Further, the company is setting up two more power plants: one 16MW unit at Mundra to be operational by November '09 and another 10MW unit at Kochi for which equipment orders are yet to be placed. These additions would elevate PCBL's total CPP capacity to 70.5MW at a total outgo of ~Rs 1bn. Of this capacity, we expect the company to sell 28MW and 38MW in FY10 and FY11 respectively at ~Rs 2.5–5.5/unit (306 units/MT projected for internal consumption).

Total CPP capacity to expand to 70.5MW by FY12

PCBL's forward integration into the power business is expected to be margin-accretive. This is because, in the absence of feedstock costs, revenues from the power segment will directly percolate to its bottomline, contributing an EBIT margin of 80–85%. Thus, besides providing stability in earnings, sale of power would shore up the company's margins significantly.

Revenues from sale of power to increase to Rs 1.3bn in FY11

Fig 7 - Power segment: forecasted performance



Source: Company, RHH

Industry overview

What is Carbon Black?

Carbon black is a black, fluffy powder or granular substance made by burning hydrocarbons in a limited supply of air. It is derived by partial consumption of a liquid feedstock rich in carbon, and is produced through thermal decomposition of oils with high carbon content at high temperatures.

Carbon black primarily used as a reinforcing agent for rubber

Carbon black is mostly used as a reinforcing agent for rubber. The most extensive use of this product is in the manufacture of automotive tyres as it imparts high resistance to abrasion of tyres, increases their life span, and enhances their grip. Carbon black is available in three grades: soft, hard, and super hard. It is also used to colour printing ink, painting, paper, and plastics. Carbon black is an important ingredient in the manufacture of various rubber goods for applications ranging from aerospace to common household goods.

CBFS prices determined by crude prices

CBFS, a crude derivative, is a major raw material for the manufacture of carbon black and constitutes more than 90% of PCBL's total raw material costs. Typically, to produce 1mt of carbon black, 1.7mt of CBFS is needed. CBFS is the phenol/furfural extract obtained during lube oil processing.

CBFS price positively correlated with crude prices

Prices of CBFS are positively correlated with crude prices. Therefore, extreme fluctuation in crude prices impacts the margins of carbon black producers. In the past, prices of carbon black increased in line with that of crude oil. Despite this, domestic producers were unable to pass on this increase to consumers due to low bargaining power. However, with prices of crude correcting, the pressure on carbon black producers has eased significantly.

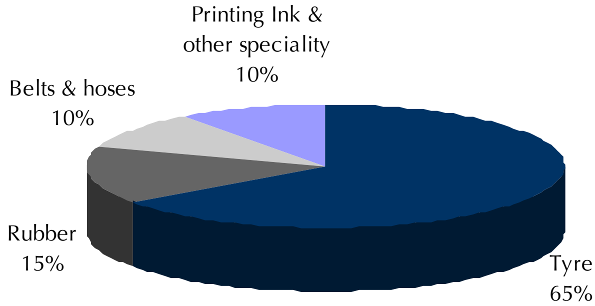
Carbon black's base material is produced by companies like IPCL and NOCIL. The quantities offered by them, however, are not adequate. The base material is also supplied by oil refineries (in the form of CBFS) but it is low in carbon content and high in sulphur; hence, it does not measure up to international specifications. Therefore, the industry is importing the base material from the US.

Uses of carbon black

The tyre industry consumes ~65% of the total carbon black production, the rubber sector 15%, the belts and horses sector 10%, and printing ink and other specialty sectors the remaining ~10%. Carbon black accounts for almost 35% (by weight) and 16% (by value) of raw material used in the manufacture of automobile tyres.

Tyre industry, followed by rubber, are biggest end users of carbon black

Fig 8 - Uses of carbon black



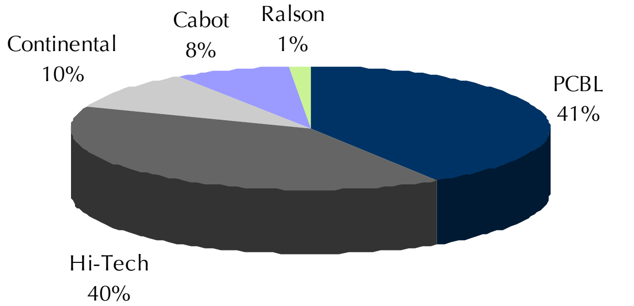
Source: Industry, RHH

Domestic market: key players

India's carbon black industry is dominated by two major players: PCBL (270,000mt) and Hi-Tech, an Aditya Birla Nuvo unit (230,000mt). Both companies together control ~81% of the domestic capacity. Other players include Continental, Cabot India and Ralson Carbon Black. PCBL will commission its 90,000mt capacity in October '09, taking its total capacity to 360,000mt. With this expansion, PCBL will become the eighth largest player in terms of capacity, globally.

PCBL and Hi-Tech together own ~81% of domestic carbon black capacity

Fig 9 - Market share (based on FY09 production)



Source: Company, RHH

Fig 10 - Global ranking of carbon black players

Capacity expansion to improve PCBL's global ranking from 10 to 8

Global Ranking - Carbon Black	Company	Capacity (mmt)
1	Cabot, USA	2.01
2	Evonik, Germany	1.45
3	Columbian, USA	1.13
4	Birla, India	0.79
5	CSRC, Taiwan	0.74
6	Sid Richardson, USA	0.45
7	Tokai, Japan	0.37
8	Omsk, Russia	0.35
9	Black Cat, China	0.29
10	**PCBL, India**	**0.27**

Source: Company, RHH

Asia Pacific region to drive demand

Global demand for carbon black is expected to grow at a 3% CAGR, from 9.2mt in CY07 to 10.8mt in CY10. The Asia Pacific region is likely to record the highest growth at a 4.4% CAGR whereas growth in the North American region is likely to remain flat. Western and Eastern Europe are expected to record a CAGR of 2.1% and 3% respectively over CY07-CY10. The total demand is projected to reach 13mmt till CY15.

Asia Pacific region to record highest growth of 4.4% CAGR over CY07-CY10

Fig 11 - Global demand for carbon black

Region (mmt)	2007 Carbon black		2010	CAGR % 2007-10	2015
	Demand	Capacity	Demand		Demand
North America	1.9	2.2	2.0	1.0	2.1
Western Europe	1.8	1.6	2.0	2.1	2.2
Asia Pacific	4.2	4.5	5.2	4.4	6.8
South America	0.5	0.6	0.6	2.8	0.7
Eastern Europe	0.6	0.9	0.7	3.0	0.9
Africa & Middle east	0.3	0.3	0.3	3.9	0.4
Overall	**9.2**	**10.1**	**10.8**	**3.2**	**13.0**

Source: Company, RHH

Financial overview

Slump in FY09…

During FY09, PCBL's capacity utilisation for carbon black registered a low of 78.5% (production of 212,150mt as against capacity of 270,000mt) as the industry saw one of the most severe recessions in history. Almost all auto companies in the US, Europe, and Japan operated at 60–75% of capacity, particularly during H1FY09. Moreover, in FY09, prices of CBFS escalated sharply, increasing PCBL's material cost (as a proportion of sales) by a whopping 1,863bps – from 61.3% in FY08 to 79.9% in FY09. Inability of the company to pass on the same to end users, along with foreign exchange fluctuations, translated into a net loss of Rs 648mn for FY09. This was despite higher an increase in sales realisation – a step taken by the company to arrest deterioration in its financial health.

…but now well on track to recovery

Lower CBFS prices and higher CPP revenues to improve performance

Since Q1FY10, PCBL has resumed its growth trajectory. CBFS prices started softening (down 20% YoY) as crude prices corrected from a peak of US$ 146/bbl in July '08 to ~US$ 70/bbl at present. Consequently, PCBL's procurement cost of CBFS dropped from US$ 469/mt in FY09 to US$ 376/MT in the first quarter. This apart, the company generated revenues of Rs 129mn and an EBIT margin of 70% from the sale of power during the quarter. This boosted its operating margin to 10.9% from 9.2% in Q1FY09 (aided by exchange gains of Rs 50mn). Overall sales during the first quarter totalled Rs 2.9bn accompanied by a PAT of Rs 205mn (EPS of Rs 7.3).

Fig 12 - Sales and production volumes (Q1FY10)

Particulars	Q1FY10	Q1FY09	*% Chg*	FY09	FY08
Production (mt)	60,273	62,112	(3.0)	212,154	250,647
Sales volume (mt)	61,012	60,559	0.7	210,625	249,655

Source: Company, RHH

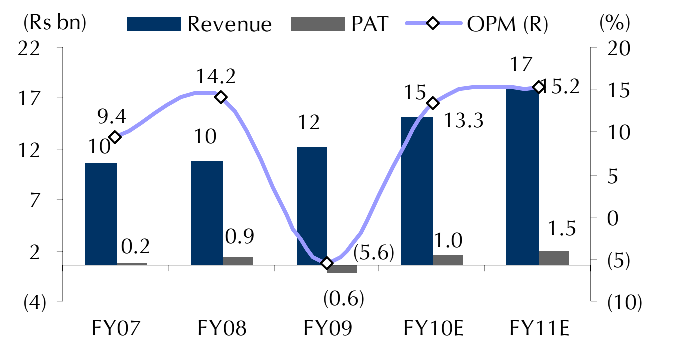
Revenues to clock 22% CAGR over FY09-FY11

To see volume-driven topline CAGR of 22.3% over FY09-FY11

We anticipate a 22.3% CAGR in revenue over FY09-FY11 as against 16.9% over FY06-FY09. This growth would primarily be underpinned by a 24.6% increase in volumes during the period to 329,059mt, led by expanded carbon black capacity. The company's utilisation level is likely to improve from an estimated 78.6% in FY10 to 91.5% in FY11. This would offset a projected drop in realisations, from Rs 60,416/mt in FY09 to Rs 53,613/mt in FY11. PCBL is likely to continue with its trend of expanding capacities to capitalise on buoyant demand in user industries and to tap the export potential to Southeast Asian countries.

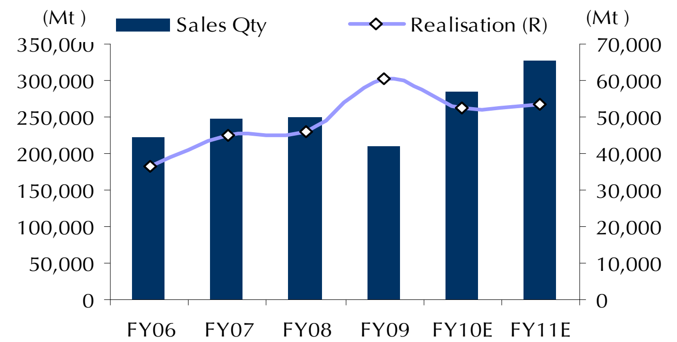
Revenues from the high-margin power segment are set to grow exponentially from Rs 155mn in FY09 to ~Rs 840mn in FY10 and further to Rs 1.3bn in FY11, as operations at the Durgapur and Mundra plants gather steam.

Fig 13 - Trend in financial performance



Source: Company, RHH

Fig 14 - Trend in volumes and realisations (carbon black)



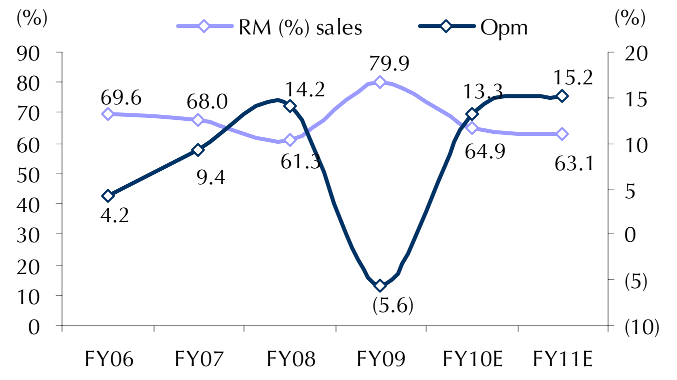
Source: Company, RHH

Operating margin turn around from -5.6% in FY09 to 10.9% in Q1FY10

Operating margin turnaround to fuel healthy earnings growth

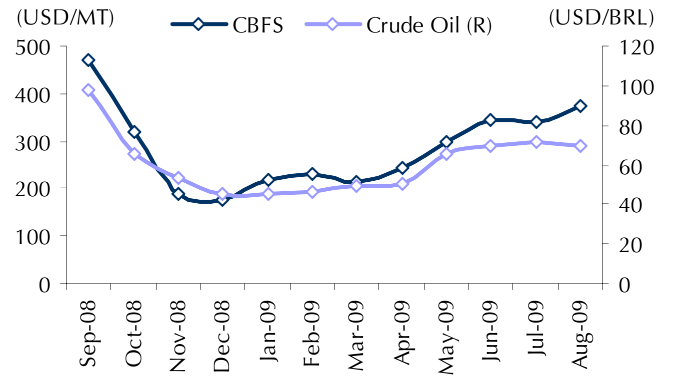
We expect a higher contribution from the power segment and a continued decline in raw material costs (as a proportion of sales) to drive further expansion in EBITDA margin to 13.3% and 15.2% in FY10E and FY11E respectively. Consequently, we expect the company to report a net profit of Rs 1bn in FY10 and Rs 1.5bn in FY11 as against a loss of Rs 648mn in FY09. PCBL will avail certain tax benefits (u/s 80-IA) this fiscal due to its new power project at Durgapur. This would bring down the effective tax rate to 25% this year, as well as the next.

Fig 15 - Improving OPM trend



Source: Company , RHH

Fig 16 - Correlation between CBFS and crude prices

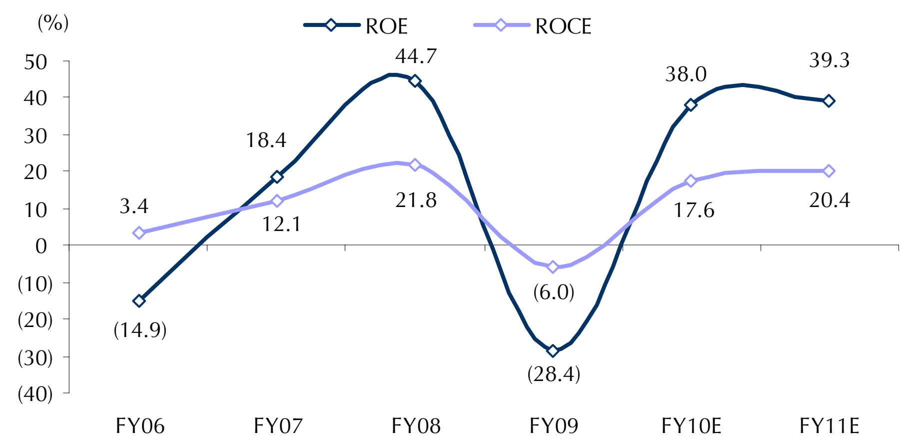


Source: Company, Bloomberg

Return ratios to rebound sharply

PCBL's return ratios were in the red during FY09. However, improving economic conditions and de-risking of operations have shored up the company's bottomline and improved its return ratios significantly. We expect ROE to increase to 38.0% in FY10 and further to 39.3% in FY11. ROCE is likely to stand at 17.6% in FY10 and 20.4% in FY11.

Fig 17 - Return ratios



Source: RHH

Valuation

Scope for re-rating

Strong industry outlook and power business – potential upsides

Barring the past two fiscals, the automobile industry in India has witnessed strong growth of ~10% over the years; this trend is expected to continue, boosting demand for tyres in the OEM and replacement markets. Consequently, the domestic carbon black industry is estimated to grow at an 8–9% CAGR over the next five years. PCBL, the market leader with strong economies of scale, stands to benefit from this emerging demand and the continued migration of tyre capacities from the US and EU to emerging markets to save on emission compliance costs

We see sufficient scope for re-rating of the stock due to the company's leadership position, strategic initiatives, operational turnaround, capacity expansion, and its transformation from a commodity business to a steady, high-margin power business.

Carbon black business valued at Rs 106

In line with most domestic commodity businesses, we have valued PCBL's carbon black division at 4x FY11E earnings.

Fig 18 - Segment wise PAT breakup

Particulars (Rs mn)	FY10E	FY11E
Carbon black PAT	422.9	737.0
Power PAT	577.6	746.8
Power contribution to Topline (%)	5.3	6.8

Source: RHH

Power business valued at Rs 156

We have valued all the power plants on DCFE basis, wherein we have discounted cash flows from the external sale of power. The underlying assumptions for the same are:

- Cost of equity of 15%
- Cost of power at 25ps/unit escalating by 4% every year
- Short-term realisation of Rs 5.5/unit for the Baroda plant (rate at which the company has tied up with Tata Power's trading arm for selling the surplus 8MW power from this plant). We have reduced this rate to Rs 4/unit from FY12 onwards (same rates assumed for upcoming Mundra power plant).
- Realisation for the 30MW Durgapur power plant assumed at Rs 2.5/unit (tied up with CESC on a short-term basis), with a 4% escalation over the years. The company is in the process of getting open access for this power plant; if this happens, it will be able to sell at a much higher rate.

Fig 19 - DCFE of Baroda power plant

(Rs mn)	Mar-10E	Mar-11E	Mar-12E	Mar-13E	Mar-14E	Mar-15E	Mar-16E	Mar-17E	Mar-18E	Mar-19E
Sale to open MKt (Mn Units)	60	60	60	60	60	60	60	60	60	60
Tariff rate (Rs/unit)	5.0	5.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Revenue (Rs mn)	298	331	241	241	241	241	241	241	241	241
Power cost	21	21	22	22	23	24	25	26	27	28
Depreciation	30	30	30	30	30	30	30	30	30	30
EBIT	247	280	190	189	188	187	186	185	184	183
EBIT Margin (%)	83	85	79	78	78	78	77	77	76	76
Interest	17	17	11	3	-	-	-	-	-	-
PBT	231	264	179	186	188	187	186	185	184	183
Tax	39	45	30	62	32	32	32	32	31	31
PAT	**191**	**219**	**149**	**125**	**156**	**156**	**155**	**154**	**153**	**152**
FCFE	**221.1**	**248.5**	**128.3**	**104.6**	**186.0**	**185.2**	**184.4**	**183.6**	**182.7**	**181.8**
Discounting factor (15%)	**1.0**	**0.9**	**0.8**	**0.7**	**0.6**	**0.5**	**0.4**	**0.4**	**0.3**	**0.3**
PV of cash flow	**221**	**216**	**97**	**69**	**106**	**92**	**80**	**69**	**60**	**52**
Cumulative PV of FCFE	1,061									
PV of terminal (equity value)	17.7									
NPV	**1,079**									
Value/Share	38									

Source: RHH

Fig 20 - DCFE of Durgapur power plant

(Rs mn)	Mar-10E	Mar-11E	Mar-12E	Mar-13E	Mar-14E	Mar-20E	Mar-21E	Mar-22E	Mar-23E	Mar-24E
Sale to open MKt (Mn Units)	167	186	186	186	186	186	186	186	186	186
Tariff rate (Rs/unit)	2.5	2.5	2.6	2.7	2.9	3.6	3.8	3.9	4.1	4.2
Revenue (Rs mn)	424	472	491	510	531	671	698	726	755	785
Power cost	52	56	61	63	66	83	87	90	94	98
Depreciation	63	63	63	63	63	63	63	63	63	63
EBIT	309	352	366	384	401	525	548	573	598	625
EBIT Margin (%)	72.9	74.6	74.7	75.2	75.7	78.2	78.5	78.9	79.2	79.5
Interest	89	89	100	89	79	14	4	-	-	-
PBT	221	264	266	294	323	510	545	573	598	625
Tax	37	45	45	50	55	168	180	189	197	206
PAT	**183**	**219**	**221**	**244**	**268**	**342**	**365**	**384**	**401**	**418**
FCFE	**246.3**	**282.0**	**219.3**	**242.4**	**266.2**	**340.2**	**363.2**	**447.0**	**464.0**	**481.7**
Discounting factor (15%)	**1.00**	**0.87**	**0.76**	**0.66**	**0.57**	**0.25**	**0.21**	**0.19**	**0.16**	**0.14**
PV of cash flow	**246**	**245**	**166**	**159**	**152**	**84**	**78**	**83**	**75**	**68**
Cumulative PV of FCFE	1,998									
PV of terminal (equity value)	61.4									
NPV	**2,060**									
Value/Share	73									

Source: RHH

Fig 21 - DCFE of Mundra power plant

(Rs mn)	Mar-10E	Mar-11E	Mar-12E	Mar-13E	Mar-14E	Mar-20E	Mar-21E	Mar-22E	Mar-23E	Mar-24E
Sale to open MKt (Mn Units)	21	86	86	86	86	86	86	86	86	86
Tariff rate (Rs/unit)	5.5	5.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Revenue (Rs mn)	118	473	344	344	344	344	344	344	344	344
Power cost	8	27	30	31	32	40	42	44	46	47
Depreciation	35	35	35	35	35	35	35	35	35	35
EBIT	75	410	279	278	276	268	266	265	263	261
EBIT Margin (%)	63.4	86.8	81.2	80.8	80.5	78.0	77.5	77.0	76.5	76.0
Interest	16	49	69	62	54	10	2	(0)	-	-
PBT	58	361	210	216	222	258	264	265	263	261
Tax	10	61	36	37	38	85	87	87	87	86
PAT	48	299	174	179	184	173	177	177	176	175
FCFE	83.6	334.6	164.6	169.8	174.9	163.4	167.2	212.6	211.4	210.2
Discounting factor (15%)	1.00	0.87	0.76	0.66	0.57	0.25	0.21	0.19	0.16	0.14
PV of cash flow	84	291	124	112	100	40	36	40	34	30
Cumulative PV of FCFE	1,252									
PV of terminal (equity value)	23.6									
NPV (Rs mn)	**1,275**									
Value/Share	45									

Source: RHH

PCBL also stands to benefit from the sale of carbon credits. The company has already sold CERs worth Rs 28mn in FY07; we, however, have not factored this in our model.

Group company investments not factored in

In addition, PCBL has equity investments in its group companies which, at current market price, are valued at Rs 774mn. We have not considered this in our valuations since it is a group company investment.

Fig 22 - Value of investments

Investment	Number of Shares	Cost of Investment (Rs mn)	CMP	Current Value of Invest (Rs mn)
Bank of Baroda	7,186	1.6	490	3.5
CEAT	4,155,743	261.5	154	640
CESC	344,130	111.6	375	128.9
Total		**~400.1**		**~774**

Source: Company, RHH *Prices as on 9th Oct 09*

Initiate with Buy and target of Rs 262

At Rs 172, the stock trades at a P/E of 4.9x FY10E and 3.3x FY11E, and EV/ EBITDA of 4.7x FY10E and 3.4x FY11E. We have arrived at a SOTP-based target price of Rs 262, valuing PCBL's core carbon black business (commodity) at Rs 106 and power business at Rs 156. At this value, the implied P/BV for the power business works out to 2x FY11E power book value which, in our opinion, is attractive (see fig.19-21 for details). We initiate coverage on PCBL with a Buy.

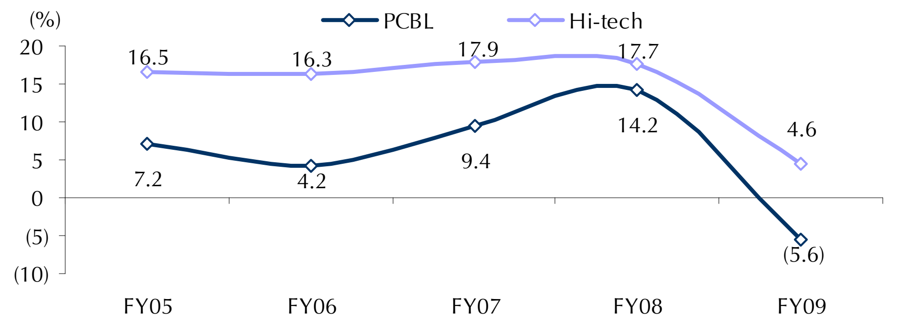
Key risks

Stiff competitive environment

Key competitors include Hi-Tech, Continental, Cabot, and Ralson

PCBL faces competition from Hi-Tech (the carbon black division of Aditya Birla Nuvo – ABN), Continental, Cabot, and Ralson in the domestic market. Further, Hi-Tech is also in an expansion mode; any execution delays from PCBL would result in Hi-Tech capturing a larger market share. Moreover, unlike PCBL, Hi-Tech owns CBFS storage tanks near ports and, hence, saves on rentals. The company has also announced a greenfield expansion of 75,000mt in Western India by March '10. With these expansions, Hi-Tech's capacity will increase from 230,000mt to 305,000mt and the gap between PCBL and Hi-Tech will narrow down. Hi-Tech has reported comparatively good results for FY09. The company sold 203,827mt of carbon black against 214,617mt in FY08.

Fig 23 - Comparison in margin trend: PCBL vs. Hi-Tech



Source: Industry, RHH

As depicted in fig 23, Hi-Tech's operating margins have historically been higher than PCBL's on account of its own storage facility. Moreover, Hi-Tech has targeted the domestic market due to better realisations, resulting in margin improvement. Nevertheless, PCBL's margins will move closer to that of Hi-Tech in the near future due to PCBL's de-risking initiatives.

Volatility in crude oil prices

Sharp increase in crude prices may impact margins significantly

PCBL imports around 90% of its CBFS requirement. Prices of CBFS, the key raw material for the production of carbon black, have a strong co-relation with that of crude oil. Though there is a pricing mechanism in place, any sharp increase in crude oil prices would strain PCBL's margins if the entire hike in cost cannot be passed on to the end customer. Nevertheless, with the escalation clause built into the contract, we believe that the company has now partially passed on the risk to consumers.

Under utilisation of capacities

PCBL is about to commence its new greenfield plant at Mundra with an installed capacity of 90,000mt. If the company is unable to optimally utilise its capacity, profitability will be impacted as even the off-gas power plant would not be able to operate at full capacity.

Fluctuation in exchange rates

High raw material imports expose PCBL to the risk of fluctuation in exchange rates. Since exports contribute ~20% to PCBL's revenues, any further appreciation of the Rs/US$ could have a negative impact on PCBL's natural hedge against the appreciating Rupee.

Slowdown in the automobile sector

Fortunes linked to tyre industry; delays in project implementation a concern

A slow down in the demand of carbon black from global and international automobile/tyre industry could have an unfavorable impact on PCBL. It, however, may be noted that the company derives maximum demand from the tyre replacement segment. Also, the company's brownfield venture is targeting the exports market.

Delay in implementation of power projects

The high-margin power project is the main driver for margin improvement. Hence, delays in implementation of the power projects would impact PCBL's overall margins significantly. We, however, have factored in delays of one-two months in the implementation of these projects.

Company background

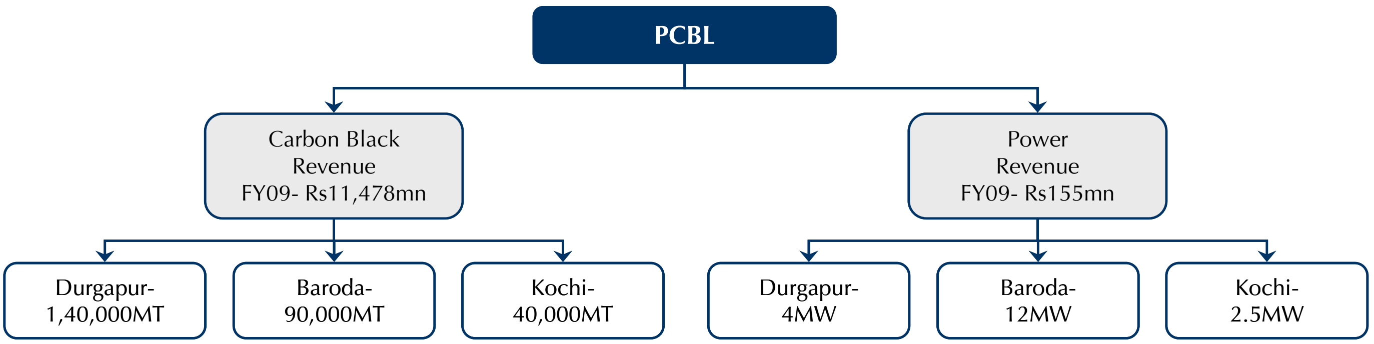
PCBL, headquartered at Kolkata and part of the RPG Group, is India's leading producer of carbon black. Besides being the largest exporter of carbon black from India, it is one of the largest in Asia in its field and the tenth largest in the world. Not surprisingly, though the company exports only 20% of its annual production, these constitute 58% of the industry exports.

Part of the RPG group, PCBL contributes 58% of industry exports

PCBL started production in 1962 through oil furnace, the then most widely accepted manufacturing process of carbon black, patented by its collaborator and world carbon black leader Phillips Petroleum Company, USA. In 1988, PCBL entered into a technical agreement with Columbian Chemicals Company, USA, and acquired access to state-of-the-art carbon black technology, helping the company gain flexibility, product range, production capacity, and energy conservation.

The company has two business verticals: carbon black and power. It generates power from the waste heat (off-gas) emitted while producing carbon black. Part of the power generated is used internally and the remaining is sold to SEBs.

Fig 24 - Business overview



Source: Company, RHH

The company has an installed capacity of 270,000mt across three locations in India (Durgapur, Cochin, Baroda). Production capacity of the three units put together is almost 47% of India's total installed carbon black capacity. The production capacity of Durgapur unit alone accounts for ~20% of the domestic carbon black capacity. The company supplies carbon black to the world's leading tyre companies. PCBL's top international clients include the Bridgestone Group, Goodyear, Trellebrog, and Loadstarand Danang Rubber. In the domestic market, the company supplies to Apollo, MRF, and Ceat, which together contribute 10% of its total revenues; revenue contribution of Birla and JK Industry stands at 5%. Hence, concentration risk arising out of dependence on a single client is ruled out.

Manufactures 23 grades of carbon black; installed capacity 2,70,000MTPA

PCBL manufactures 23 grades (15 hard, 8 soft) of carbon black to cater to the automobile and plastics industries, as well as for specialty applications. It manufactures all four soft grades for the plastic industry. Currently, the domestic carbon black industry comprises five players, viz., PCBL, Aditya Birla Nuvo, Continental, Cabot India, and Ralson. PCBL enjoys an edge over Continental, Cabot and Ralson as these companies together have less than a quarter of PCBL's capacity. Moreover, these companies operate in the different segment of printing ink and carbon for photocopying. In the export market, PCBL does not face competition from these players.

PCBL is the first carbon black company in the world to receive carbon credits. The company has taken advantage of the Electricity Act, 2003 to set up a 12MW co-generation power plant at its Baroda unit using off-gas in October '04. After meeting the internal demand for production of carbon black, the surplus power of around 8MW has been sold to the GEB Grid from March '05 end. Encouraged by the success of the Baroda co-generation power plant, the company, in April '09, has replaced its 4MW power capacity with a 30MW cogeneration power plant at Durgapur.

Fig 25 - Current installed capacities

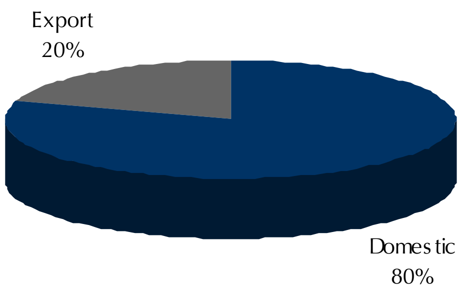
Location	Carbon black (MTPA)	Power (MW)
Durgapur	140,000	30
Baroda	90,000	12
Cochin	40,000	2.5
Total	**270,000**	**44.5**

Source: Company, RHH

In FY09, 80% of PCBL's revenues came from the domestic market with exports constituting the remaining.

Domestic market contributed majority of revenues in FY09

Fig 26 - Contribution from export and domestic markets (FY09)



Source: Company, RHH

PCBL's operating margins were negatively impacted last year due to high volatility in raw material cost. However, the company has taken adequate steps and de-risked its business model by setting up captive power plants. PCBL, therefore, is no longer the carbon black (commodity) story alone – it is a play on the power segment as well.

Financials

Profit and Loss statement

Y/E March (Rs mn)	FY08	FY09	FY10E	FY11E
Revenues	**10,332**	**11,633**	**14,588**	**17,407**
Growth (%)	*3.5*	*12.6*	*25.4*	*19.3*
EBITDA	**1,462**	**(646)**	**1,941**	**2,640**
Growth (%)	*56.5*	*(144.2)*	*400.3*	*36.0*
Depreciation & amortisation	201	196	276	353
EBIT	1,261	(843)	1,665	2,286
Growth (%)	*72.6*	*(166.8)*	*297.6*	*37.3*
Interest	194	294	385	370
Other income	61	163	54	63
EBT	1,128	(973)	1,334	1,978
Income taxes	235	(325)	333	495
Effective tax rate (%)	*20.8*	*33.4*	*25.0*	*25.0*
Extraordinary items	-	-	-	-
Min into / inc from associates	-	-	-	-
Reported net income	893	(648)	1,000	1,484
Adjustments	-	-	-	-
Adjusted net income	**893**	**(648)**	**1,000**	**1,484**
Growth (%)	*279.5*	*(172.6)*	*254.3*	*48.3*
Shares outstanding (mn)	25.3	28.3	28.3	28.3
FDEPS (Rs) (adj)	**34.2**	**(24.1)**	**35.4**	**52.5**
Growth (%)	*198.0*	*(170.6)*	*246.8*	*48.3*
DPS (Rs)	4.0	-	3.0	3.0

Balance sheet

Y/E March (Rs mn)	FY08	FY09	FY10E	FY11E
Cash and cash eq	151	71	1,039	847
Accounts receivable	2,176	1,808	2,198	2,575
Inventories	1,553	1,210	1,556	1,806
Other current assets	618	844	999	1,097
Investments	281	378	378	378
Gross fixed assets	4,507	4,405	7,855	7,855
Net fixed assets	2,449	2,280	5,454	5,100
CWIP	1,305	3,828	700	1,400
Intangible assets	-	-	-	-
Deferred tax assets, net	(353)	(17)	(17)	(17)
Other assets	9	7	7	7
Total assets	**8,188**	**10,407**	**12,315**	**13,193**
Accounts payable	2,695	3,917	3,949	3,943
Other current liabilities	42	53	53	53
Provisions	118	-	99	99
Debt funds	2,904	4,256	5,130	4,630
Other liabilities	-	-	-	-
Equity capital	253	283	283	283
Reserves & surplus	2,175	1,899	2,801	4,185
Shareholder's funds	2,428	2,182	3,083	4,468
Total liabilities	**8,188**	**10,407**	**12,315**	**13,193**
BVPS (Rs)	104.4	87.2	119.1	168.1

Cash flow statement

Y/E March (Rs mn)	FY08	FY09	FY10E	FY11E
Net income + Depreciation	1,101	(447)	1,276	1,837
Non-cash adjustments	(73)	(648)	-	-
Changes in working capital	(609)	1,793	(860)	(730)
Cash flow from operations	419	698	416	1,107
Capital expenditure	(1,090)	(2,424)	(322)	(700)
Change in investments	1	14	-	-
Other investing cash flow	13	-	-	-
Cash flow from investing	(1,076)	(2,410)	(322)	(700)
Issue of equity	0	402	-	-
Issue/repay debt	368	2,061	874	(500)
Dividends paid	(59)	(117)	-	(99)
Other financing cash flow	33	(734)	-	-
Change in cash & cash eq	(315)	(99)	968	(192)
Closing cash & cash eq	151	71	1,039	847

Financial ratios

Y/E March	FY08	FY09	FY10E	FY11E
Profitability & Return ratios (%)				
EBITDA margin	14.2	(5.6)	13.3	15.2
EBIT margin	12.2	(7.2)	11.4	13.1
Net profit margin	8.6	(5.6)	6.9	8.5
ROE	44.7	(28.4)	38.0	39.3
ROCE	21.8	(6.0)	17.6	20.4
Working Capital & Liquidity ratios				
Receivables (days)	80	62	50	50
Inventory (days)	78	54	53	56
Payables (days)	156	130	152	131
Current ratio (x)	1.6	1.0	1.4	1.6
Quick ratio (x)	0.8	0.5	0.5	0.6
Turnover & Leverage ratios (x)				
Gross asset turnover	2.3	2.6	2.4	2.2
Total asset turnover	1.4	1.3	1.3	1.4
Interest coverage ratio	6.5	(2.9)	4.3	6.2
Adjusted debt/equity	1.2	2.0	1.7	1.0
Valuation ratios (x)				
EV/Sales	0.9	0.8	0.6	0.5
EV/EBITDA	6.2	(14.0)	4.7	3.4
P/E	5.0	-	4.9	3.3
P/BV	1.6	2.0	1.4	1.0

Economic Value Added (EVA) analysis

Y/E March	FY08	FY09	FY10E	FY11E
WACC (%)	9.8	9.1	9.8	10.7
ROIC (%)	23.5	(10.2)	19.5	23.1
Invested capital (Rs mn)	4,994	5,966	6,873	7,950
EVA (Rs mn)	687	(1,156)	667	989
EVA spread (%)	13.7	(19.4)	9.7	12.4

Quarterly trend

Particulars	Q1FY09	Q2FY09	Q3FY09	Q4FY09	Q1FY10
Revenue (Rs mn)	2,993	3,370	2,874	2,415	2,914
YoY growth (%)	*27.4*	*35.1*	*4.6*	*(11.9)*	*(2.6)*
QoQ growth (%)	*9.2*	*12.6*	*(14.7)*	*(16.0)*	*20.7*
EBITDA (Rs mn)	225	234	(513)	(778)	253
EBITDA margin (%)	*7.5*	*6.9*	*(17.8)*	*(32.2)*	*8.7*
Adj net income (Rs mn)	229	154	(460)	(571)	204
YoY growth (%)	*4*	*(36)*	*(290)*	*(399)*	*(11)*
QoQ growth (%)	*20*	*(33)*	*(399)*	*24*	*136*

DuPont analysis

(%)	FY07	FY08	FY09	FY10E	FY11E
Tax burden (Net income/PBT)	52.8	79.2	66.6	75.0	75.0
Interest burden (PBT/EBIT)	61.0	89.4	115.5	80.1	86.5
EBIT margin (EBIT/Revenues)	7.3	12.2	(7.2)	11.4	13.1
Asset turnover (Revenues/Avg TA)	145.7	136.4	125.1	128.4	136.5
Leverage (Avg TA/Avg equtiy)	527.2	370.8	403.4	431.6	337.8
Return on equity	**18.1**	**43.7**	**(28.1)**	**38.0**	**39.3**

Company profile

PCBL, headquartered at Kolkata and part of the RPG Group, is India's leading producer of carbon black with an installed capacity of 2,70,000 MTPA across three locations (Durgapur, Cochin, Baroda). The company, with its 23 grades of carbon black, is the largest exporter from India and the eighth largest carbon black company, globally. PCBL company has recently diversified into the power segment by setting up three captive power units.

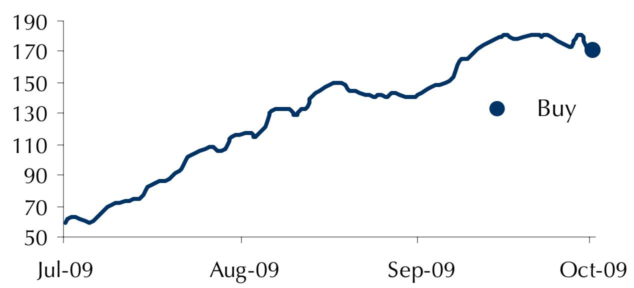
Shareholding pattern

(%)	Dec-08	March-09	June-09
Promoters	53.7	53.9	53.9
FIIs	5.2	4.6	6.2
Banks & FIs	28.0	25.1	23.8
Public	14.8	16.4	16.1

Recommendation history

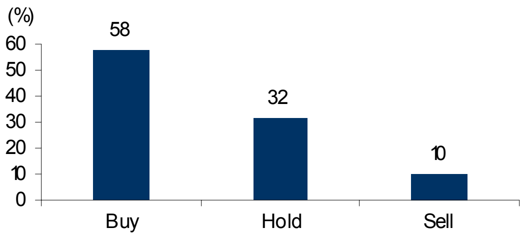
Date	Event	Reco price	Tgt price	Reco
09-Sep-08	Initiating coverage	172	262	Buy

Stock performance

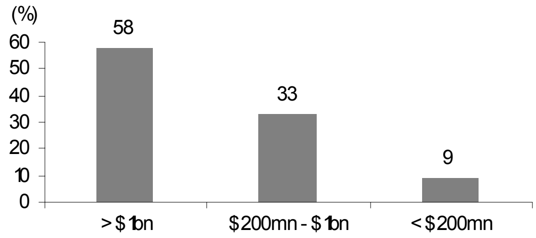


Coverage Profile

By recommendation



By market cap (US$)



Recommendation interpretation

Recommendation	Expected absolute returns (%) over 12 months
Buy	More than 15%
Hold	Between 15% and –5%
Sell	Less than –5%

Recommendation structure changed with effect from March 1, 2009

Expected absolute returns are based on share price at market close unless otherwise stated. Stock recommendations are based on absolute upside (downside) and have a 12-month horizon. Our target price represents the fair value of the stock based upon the analyst's discretion. We note that future price fluctuations could lead to a temporary mismatch between upside/downside for a stock and our recommendation.

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Disclaimer