

INITIATING COVERAGE



PCBL Limited



Aditya Khetan

Sector Lead – Chemicals
9004126470/022 4200 5512
aditya.khetan@smifs.co.in

Awanish Chandra

Head - Institutional Equities
8693822293/ 022 4200 5508
awanish.chandra@smifs.com

PCBL Ltd

A carbon black giant, set to grow at a fast clip!

PCBL is a proxy play on tyre growth story. Over the longer term, growth is expected to be robust led by expansion in normal and speciality grade Carbon black (CB) and rising exports. As speciality volumes inch up, exports would gain traction because 70% of speciality volumes are export oriented. However, volatile crude oil & CBFS prices & incremental supply addition of CB in domestic market would keep the realization of carbon players in check. With speciality grade CB ramp up over the next few years, the gross spreads are expected to remain robust. Near term pain in exports is visible and the same is expected to resolve in a couple of quarters, the company's long term outlook is bullish considering the capex announced by tyre players which bodes well for carbon black players. We assign 12.5x P/E on FY25E EPS and arrive at Rs 183 per share, recommending BUY rating on the stock.

Expansion to lead visibility in volume growth for the next 2-3 years

- Historically, the company's volume grew at a CAGR of 3.3% from FY17-22. The reason for slower growth was because of slowdown of automobile industry in FY20, covid-19 related disruptions & supply chain disruptions. Now, tyre manufacturers are increasing their investment to cater to increased demand and gain additional market share. As the demand outlook remains favourable, the tyre industry is seeing a revival in capex spend towards capacity additions. The proposed capex by the tyre companies is estimated at more than Rs214bn over the next three years and this bodes well for carbon black manufacturers.
- To capitalize on the opportunity, PCBL is adding 1.47 lakh tonnes in normal grade CB & 40,000 tonnes in the speciality grade CB which is expected to start by end of December 2022 & by FY25E respectively. With this capacity addition, the total installed capacity of the normal grade CB would stand at 7.5 lakh tonnes & speciality grade CB capacity would be at 1.12 lakh tonnes.
- The capex for capacity addition would be Rs~9.7bn (Rs6.5bn for CB capacity & Rs3.2bn for power capacity). We expect peak utilization to be achieved in 1.5-2 years' timeframe considering the competitive intensity in the carbon black space for the next 2-3 years.
- Post expansion we expect the company to be a dominant player in the domestic industry and to report robust CAGR volume growth of 8.5% in normal grade CB over FY22-25E vs 3.5% from FY19-22 & speciality grade CB CAGR volume growth is expected to be 21% CAGR over FY22-25E.

Increase in value added segment would likely improve EBITDA spreads going ahead

- EBITDA has been nearly ~3x from Rs 4 per kg in FY13 to Rs ~13 per kg in FY22. This was majorly led by declining imports from China which helped Indian manufacturers to become competitive, rising share of speciality black & improvement in yields led by changes in manufacturing process.
- The performance chemicals is a value added segment of carbon black application which is roughly 30% of total sales volume. The contribution margins are nearly 20-25% higher in performance segment. The end user industries of performance segment are generally the non-tyre rubber goods like conveyor belts, hoses and pipes etc.
- Speciality black has the highest contribution margin which is nearly 2-2.5x of normal grade carbon black application.
- Going ahead with the rise in speciality black contribution and increasing volume mix towards performance chemicals segment, we expect EBITDA spreads will increase to Rs ~14 per kg by FY25E.

Ramping up product portfolio will increase greater visibility

- The company has been developing new speciality chemical grades, thereby, moving up the value chain in the tyre and performance chemical grades and simultaneously focusing on customisation of grades.
- The company's research and innovation centres in India and Belgium have led the company to expand its product portfolio, as well as undertake process innovations to cater to the evolving needs of customer. The company's R&D and innovation division has helped the company to develop a strong foundation for customised offerings and innovative solutions for customers.
- The company is confident & planning of developing 6-7 new grades over the period of two-three years with focus on developing the highest value chain of Specialty products.
- During 2021-22, the company ventured into the less pursued markets in Latin America and Africa. The company has also focussed on strengthening its position in Europe and North America. The company is focussed on penetrating new geographies and increasing its customer base.

Valuation

- Currently, the stock is trading at inexpensive valuation on FY25E P/E of ~9.3x. We value the stock on forward P/E multiple of 12.5x owing to increasing share of speciality business, robust volume growth & rising exports share and, thereby, arrive at target price of Rs 183 per share which offers upside of 35% from current valuations.
- Therefore, we assign **BUY** rating on the stock.

Y/E Mar (Rs mn)	Revenue	YoY (%)	EBITDA	EBITDA (%)	Adj PAT	YoY (%)	Adj EPS	RoE (%)	RoCE (%)	Adj P/E (x)	EV/EBITDA (x)
FY21	26,595	-18.0	5,180	19.5	3,144	9.0	8.3	17.2	13.2	7.4	5.1
FY22	44,464	67.2	6,530	14.7	4,267	35.7	11.3	18.7	14.5	9.7	6.5
FY23E	61,329	37.9	6,982	11.4	4,260	-0.1	11.3	15.6	12.3	12.1	8.3
FY24E	65,969	7.6	8,269	12.5	5,019	17.8	13.3	16.8	13.1	10.2	6.7
FY25E	71,019	7.7	9,009	12.7	5,531	10.2	14.6	13.6	13.6	9.3	5.8

Source: Company, SMIFS Research Estimates



Rating: **BUY** Upside: **35%**
 Current Price: **136** Target Price: **183**

| Market data

Bloomberg:	PHCB: IN
52-week H/L (Rs):	154/89
Mcap (Rs bn/USD bn):	51.4/0.63
Shares outstanding (mn):	377.5
Free float:	31.2%
Daily vol. (3M Avg.):	1.52mn
Face Value (Rs):	1
Group:	S&P BSE 500

Source: Bloomberg, SMIFS Research

| Shareholding pattern (%)

	Sept-22	Jun-22	Mar-22	Dec-21
Promoter	51.4	51.4	51.4	51.4
FIIs	10.9	10.2	9.5	9.1
DIIs	6.5	7.3	6.4	6.0
Public/others	31.2	31.1	32.8	35.5

Pro. Pledging

Pledging	0.0	0.0	0.0	0.0
----------	-----	-----	-----	-----

Source: BSE

| Price performance (%)*

	1M	3M	12M	36M
S&P BSE 500	-0.3	2.4	5.0	60.9
PCBL	2.1	-7.9	22.5	143.6

*as on 16th Dec 2022; Source: AceEquity, SMIFS Research

Aditya Khetan

Sector Lead- Chemicals

+91 9004126470

aditya.khetan@smifs.co.in

Awanish Chandra

Head - Institutional Equities

+91 8693822293

awanish.chandra@smifs.com

Index

Investment Rationale.....	(3-10)
Speciality grade share to inch up post expansion of capacity by FY25E.....	(3)
Capacity expansion at Chennai plant to fuel the growth in normal grade carbon black..	(4)
EBITDA per ton to improve led by increasing speciality black share and improving input output yield.....	(5)
Operating spreads has expanded consistently led by rising value added mix.....	(6)
Exports growth to remain robust over the long term, led by speciality.....	(7)
Power segment to add incremental benefit to EBITDA per ton.....	(8)
Ramping up product portfolio will increase greater visibility.....	(8)
Strong cash generation augur well.....	(9)
Robust return ratios to benefit the company.....	(9)
Continuous innovation in process design to yield better result and focus on developing new grades.....	(10)
Industry Overview.....	(11-15)
Global carbon black industry: A snapshot.....	(11)
Have you ever looked at a vehicle and wondered why its tyres are black?.....	(12)
What if there’s a carbon black shortage: Can the tyre industry adapt?.....	(13)
Domestic carbon black industry – A Snapshot.....	(14)
Robust capex by tyre manufacturers improves visibility in sight.....	(15)
Speciality Black Segment– low volume, high value & providing highest value proposition.....	(16)
Corporate Governance.....	(17-20)
Promoters’ Shareholding.....	(17)
Promoter’s Compensation.....	(17)
Independent Director’s Compensation.....	(18)
Board Composition.....	(18)
Contingent Liabilities.....	(18)
Related Party Transaction.....	(18)
Key management personnel.....	(19)
CSR Activities.....	(19)
Auditors.....	(19)
Key milestones.....	(20)
Company Background.....	(21-22)
What is PCBL all about?	(21)
Varied product basket of carbon black would lead to stronger visibility in end user market.....	(22)
Valuations & Recommendations.....	(23)
Quarterly financials, operating metrics and key performance indicators.....	(24)
Industry Comparison.....	(25)
Financial Statements.....	(26)

Investment Rationale

Speciality grade share to inch up post expansion of capacity by FY25E

- The speciality carbon black business has grown much faster than normal grade carbon black with CAGR of 33% vs 3% for normal grade over FY17-22.
- Currently, the company has 72,000 tonnes capacity which is operating at 50% utilization levels which is ~7% of overall volumes share in FY22.
- Considering the robust growth from key end user industries likes plastics and increasing battery applications, the company is expanding by 40,000 tonnes in two phases of 20,000 tonnes each. The first phase is expected to commission by Q4FY23 & second phase is expected to commission by Q4FY24. The capex on speciality grade carbon black is Rs3bn for 40,000 tonnes which implies per ton cost of Rs75 per kg which is roughly 40% premium than normal grade carbon black.
- Post expansion, we expect the speciality grade volumes to ramp up to ~10% by FY25E and still has the potential to reach 15% in the next 4-5 years beyond FY25E. Also, the revenue is expected to grow by 21% CAGR over FY22-25E. Hence, we believe speciality grade carbon black would be growth compounder for the next 7-8 years.

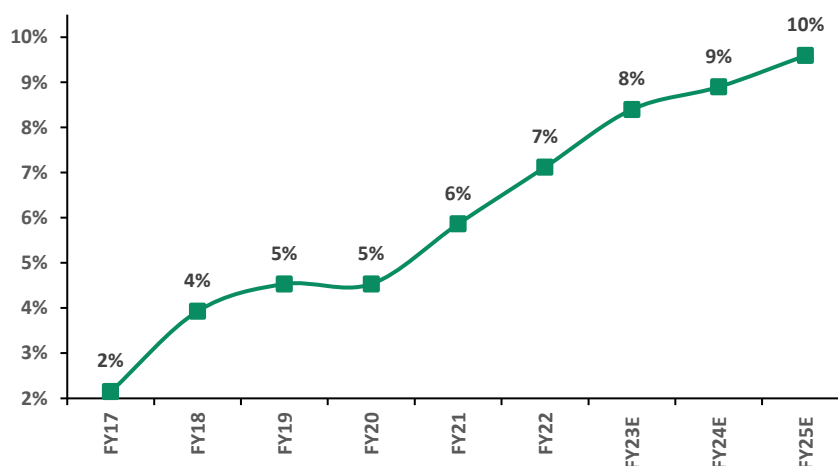
What is so special in speciality grade carbon black?

- Speciality carbon blacks are produced through the partial combustion of hydrocarbons to meet rigorous specifications and deliver important functionality according to end-user performance requirements. These properties of carbon black enable its unique characteristics that deliver critical value to end-users through a range of functionalities including colour, UV protection and conductivity.

Applications of speciality grade carbon black

- Speciality grade applications are only to non-rubber applications like plastics, paints and coatings, inks and toners, battery applications etc. which has shown resilience in demand over the past few years.
- Plastics industry is the largest end-user industry for specialty carbon black, where it is used to impart colour, improve thermal insulation and impart UV resistance to plastic products such as pipes, engineering plastics, cables and synthetic fibres. In automotive sector, specialty carbon black is used to provide aesthetic appeal to vehicles, improve durability of components and provide protection against corrosion.
- Power cables are one of the most demanding applications for specialty carbon blacks as they provide critical performance in semicon shields.
- In automotive sector, specialty carbon black is used to provide aesthetic appeal to vehicles, improve durability of components and provide protection against corrosion.

Fig 1: Speciality volumes share to be at 10% of overall volumes in FY25E

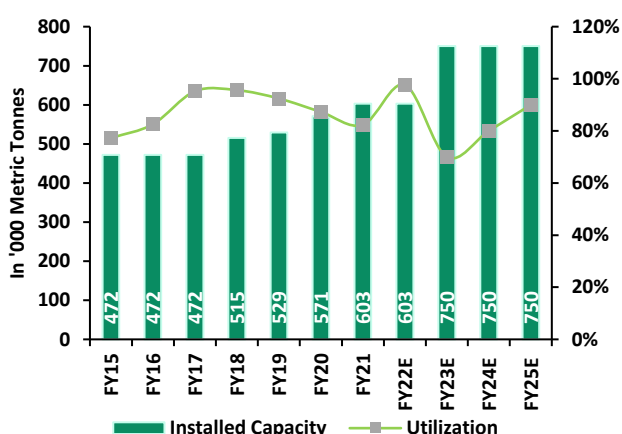


Source: Company, SMIFS Research Estimates

Capacity expansion at Chennai plant to fuel the growth in normal grade carbon black

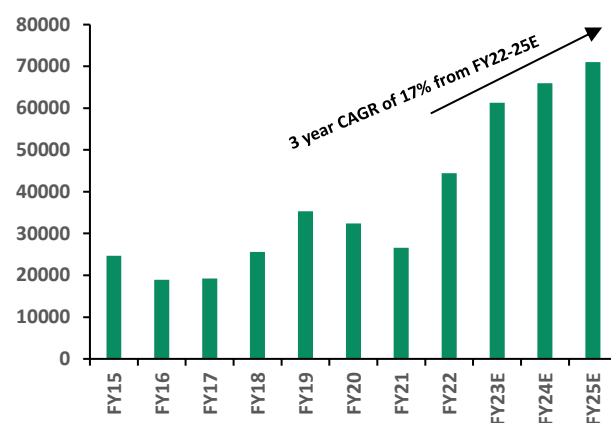
- Historically, the company's volume grew at a CAGR of 3.3% from FY17-22. The reason for slower growth was because of slowdown of automobile industry in FY20, covid-19 related disruptions & supply chain disruptions. Despite slower volume growth the company is operating at peak utilization levels in FY22, however, with stronger than expected demand growth of tyre in the coming years, we expect volume growth at 8.5% CAGR during FY22-25E.
- Tyre manufacturers are increasing their investment to cater to increased demand and gain additional market share. As the demand outlook remains favourable, the tyre industry is seeing a revival in capex spend towards capacity additions. The proposed capex by the tyre companies is estimated at more than Rs210bn over the next three years and this bodes well for carbon black manufacturers.
- Hence, to capitalize on the opportunity the company is adding 1.47 lakh tonnes in normal grade CB & 25 MW power plant in Chennai which is expected to start by end of December 2022. With this capacity addition, the total installed capacity of the normal grade CB would stand at 7.5 lakh tonnes & power capacity would be 122MW.
- The capex for capacity addition would be Rs8bn (Rs6.5bn for CB capacity & Rs1.5bn for power capacity). We expect peak utilization to be achieved in 1.5-2 years timeframe considering the competitive intensity in the carbon black space for the next 2-3 years.

Fig 2: Capacity addition (Normal Grade CB) to fuel growth



Source: Company, SMIFS Research

Fig 3: Revenue growth to be led by volume growth (Rs in mn)



Source: Company, SMIFS Research

- At peak utilization the new CB capacity would generate ~3x asset turnover (at current realizations). However, we feel current realizations are at the peak hence it would be prudent to normalize our expectations on realizations. Consequently, we have modelled decline in realizations from the peak of H1FY23.
- We expect revenue to grow at 17% CAGR from FY22-25E.

Fig 4: Carbon black capacity breakup region wise (Normal grade and Speciality grade)

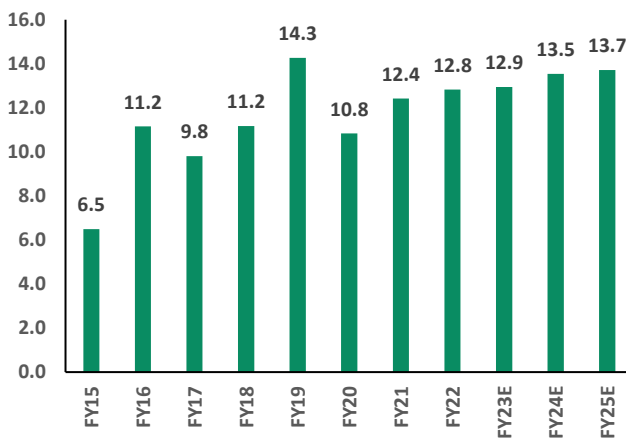
Plant location	Normal Grade CB		Speciality Grade CB
	Installed Capacity	Effective Capacity	Effective Capacity
Durgapur	163500	140610	
Palej	142250	122335	72000
Kochi	92500	79550	
Mundra	204750	176085	40000*
Chennai	147000*	126420*	
Total	750000	645000	112000

Source: Company, SMIFS Research, * indicate capacity addition is not yet commercialized

EBITDA per ton to improve led by increasing speciality black share and improving input output yield

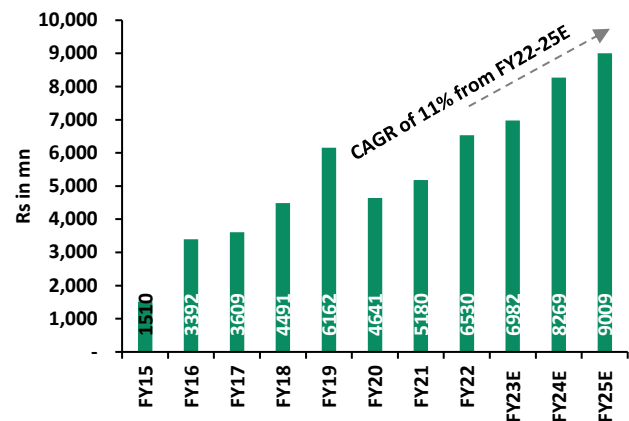
- EBITDA has been nearly ~3x from Rs 4 per kg in FY13 to Rs ~13 per kg in FY22. This was majorly led by declining imports from China which helped Indian manufacturers to become competitive (as seen in fig below), rising share of speciality black & improvement in yields led by changes in manufacturing process.
- Going ahead with the rise in speciality black contribution and increasing volume mix towards performance chemicals segment, we expect EBITDA spreads will increase to Rs ~14 per kg by FY25E.

Fig 5: EBITDA per kg to grow by ~2% CAGR from FY22-25E



Source: Company, SMIFS Research Estimates

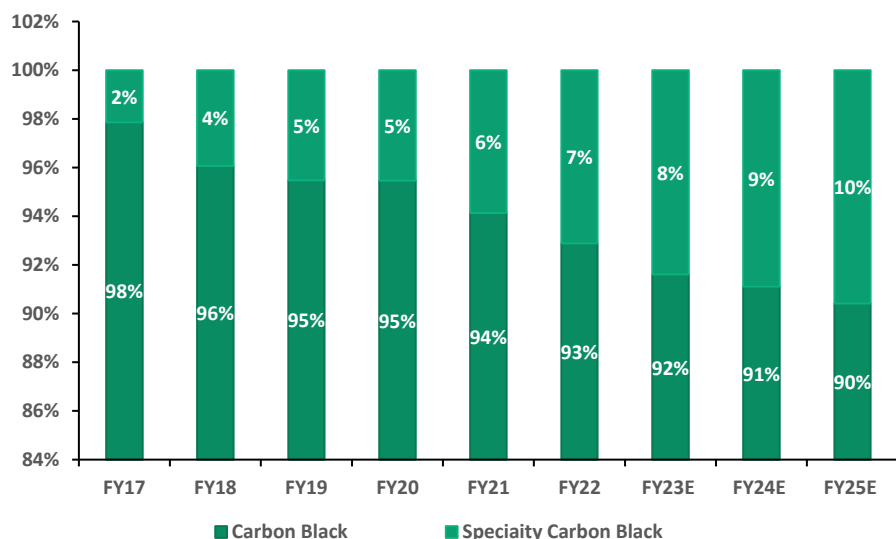
Fig 6: EBITDA to grow 11% CAGR from FY22-25E



Source: Company, SMIFS Research Estimates

- The performance chemicals is a value added segment of carbon black application which is roughly 30% of total sales volume. The contribution margins are nearly 20-25% higher in performance segment. The end user industries of performance segment are generally the non-tyre rubber goods like conveyor belts, hoses and pipes etc.
- Speciality black has the highest contribution margin which is nearly 2-2.5x of normal grade carbon black application.
- As company increases its proportion from value added segments, the EBITDA per ton is sought to increase. However, normal grade carbon black EBITDA per ton might normalize in the coming months because of excess capacity and demand normalization but increased contribution from value added segments will offset the decline and also provide some room to the margins.

Fig 7: Increase in value added speciality segment to provide stability to margins

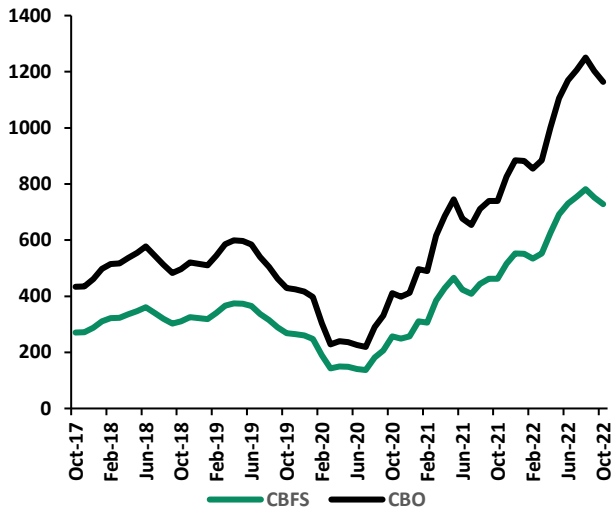


Source: Company, SMIFS Research Estimates

Operating spreads has expanded consistently led by rising value added mix

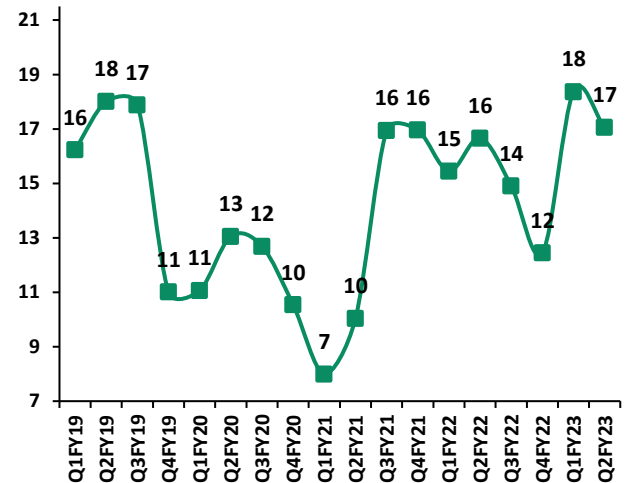
- We analysed the company’s spreads over the 18 quarters and found that except during COVID-19 uncertain times, the EBITDA spreads averaged around Rs 14 per kg. We have conservatively modelled our future estimates of EBITDA spreads per kg of Rs 14 (in line with long term average) by FY25E, factoring in competitive intensity which can impact the realizations despite rising contribution from speciality black segment.

Fig 8: CBFS & CBO price chart *(In \$ per tonne)*



Source: Industry, SMIFS Research

Fig 9: PCBL CB EBITDA spreads *(Rs per kg)*



Source: Company, SMIFS Research Estimates

- The company uses CBFS which is primarily imported from US gulf coast, Singapore & Middle East. Imports of raw materials is roughly 80% and remaining is procured from domestic sources. In domestic market, the company sources raw material from IOCL, Haldia Petrochemicals & Reliance etc. About 90% of the foreign currency transactions are in USD while the rest are in Euro, JPY and GBP. The company generally hedges its natural foreign currency exposure.

Fig 10: Global carbon black prices *(Rs per kg)*



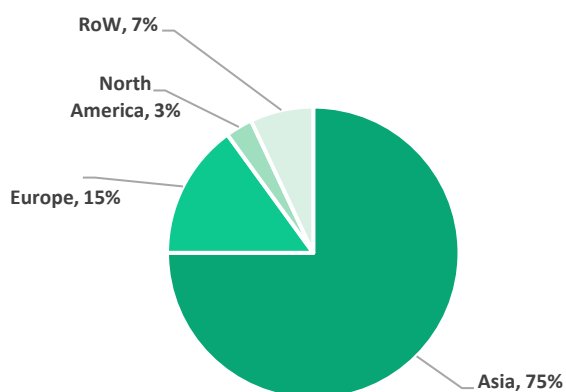
Source: Industry, SMIFS Research

- Current prices of carbon black are at an all time high since 2010 as depicted in above chart. This is primarily because of decline in carbon black production in China & Russia & robust demand from tyre manufacturers. We are with the view that rising usage of carbon black in performance chemicals and speciality segment is here to stay and this would drive the growth story of carbon black further.

Exports growth to remain robust over the long term, led by speciality

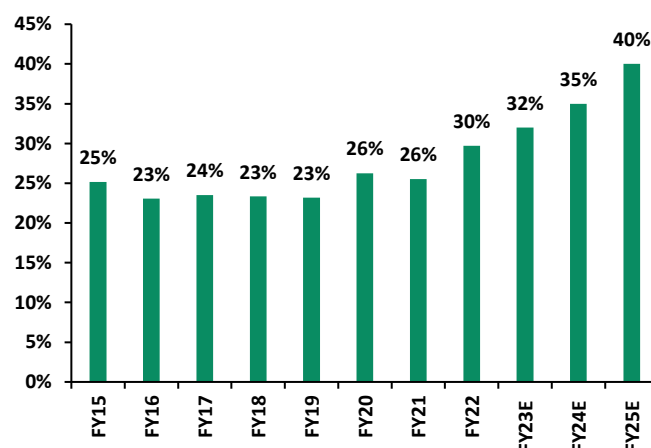
- The company exports to ~40 countries and have developed very strong relationships with its exports counterparts. Earlier the company used to sell on spot basis in the export market but then PCBL has strategically realigned its strategy and nurtured its relationship with international tyre companies. Currently, the company enters into long term agreements having fixed volume offtake and also increasing its wallet share with existing clients.
- The core strength of the company is its 60 years of rich experience in carbon black manufacturing which helps in attracting new clients and retaining its existing clients.

Fig 11: Exports breakup of PCBL (FY22)



Source: Company, SMIFS Research

Fig 12: Exports share to increase in the long term

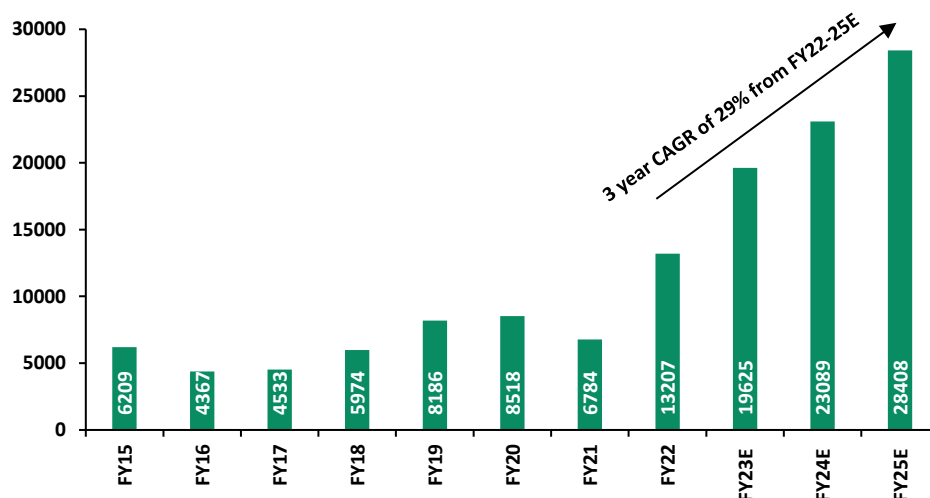


Source: Company, SMIFS Research Estimates

- The company exports North America, Europe, Middle East, Asia & Africa.
- Speciality black segment is expected to grow at a CAGR of 21% from FY22-25E which will drive exports because almost 70% of speciality black is exported to global markets. Hence, as speciality mix increases further exports will gradually increase. We expect exports share to be at 40% by FY25E.
- Also, increase in normal grade carbon black volumes led by capacity expansion will support exports growth. We expect exports to grow at CAGR of 29% from FY22-25E.

Fig 13: Exports growth to remain robust

(In Rs mn)

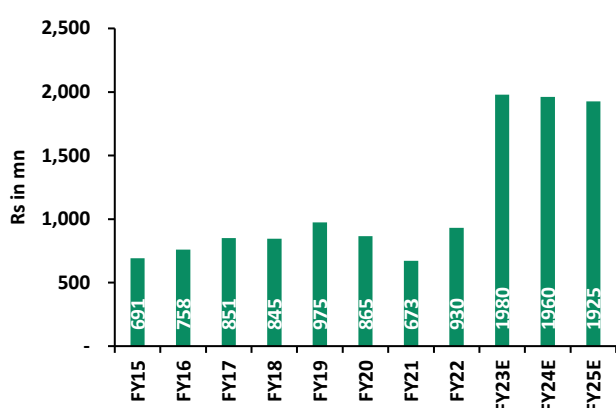


Source: Company, SMIFS Research Estimates

Power segment to add incremental benefit to EBITDA per ton

- The company has power generation capacity of 91MW. The company is also consuming in-house its power requirements and remaining is sold after its captive consumption is fulfilled. The company part of the power is sold to the group company CESC Ltd. The company also enters into medium term agreements for the power offtake.
- Alongside carbon black expansion, the company is also increasing its power capacity to 122 MW (adding 24 MW capacity in Chennai plant). Power business is margin accretive and it adds EBITDA per ton above the carbon black business.
- The current utilization is 55% and with increase in carbon black capacity, captive consumption of power would also increase. However, we do not foresee growth in topline for power business majorly because volume growth would be offsetted by decline in realization per unit for next 3 years.

Fig 14: Power segment revenues to be doubled in FY23E



Source: Company, SMIFS Research Estimates

Fig 15: Power capacity breakup

	Co generation Capacity (in MW)	Remaining claim on tax benefits
Durgapur (West Bengal)	30	3
Mundra, Gujarat	32	16MW - 3 years 8MW - 6 years
Palej, Gujarat	19	-
Kochi, Kerala	17	5
Chennai, Tamil nadu*	24	10
Total	122	

Source: Company, SMIFS Research , * indicates have not commercialized yet

- The power generation process recovers the thermal energy of the waste gas that is produced during the manufacturing of carbon black. This waste gas also known as tail gas is then utilized to generate steam, which in turn is used to generate electrical energy. This business accounts for 2-3% of revenue while providing stability to the bottom line.

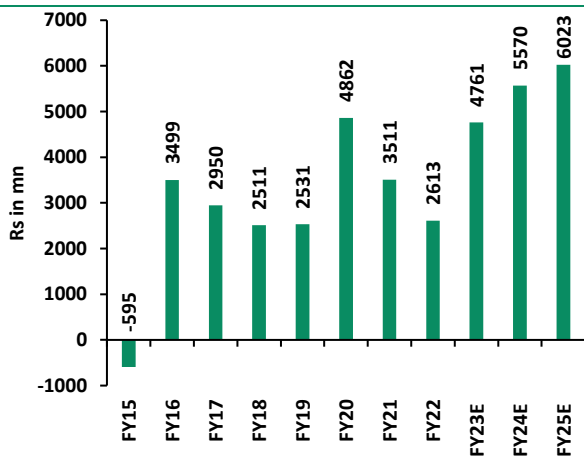
Ramping up product portfolio will increase greater visibility

- The company has been developing new speciality chemical grades, thereby, moving up the value chain in the tyre and performance chemical grades and simultaneously focusing on customisation of grades.
- The company's research and innovation centres in India and Belgium have led the company to expand its product portfolio, as well as undertake process innovations to cater to the evolving needs of customer. The company's R&D and innovation division has helped the company to develop a strong foundation for customised offerings and innovative solutions for customers.
- The company is confident & planning of developing 6-7 new grades over the period of two-three years with focus on developing the highest value chain of Specialty products.
- During 2021–22, the company ventured into the less pursued markets in Latin America and Africa. The company has also focussed on strengthening its position in Europe and North America. The company is focussed on penetrating new geographies and increasing its customer base.

Strong cash generation augur well

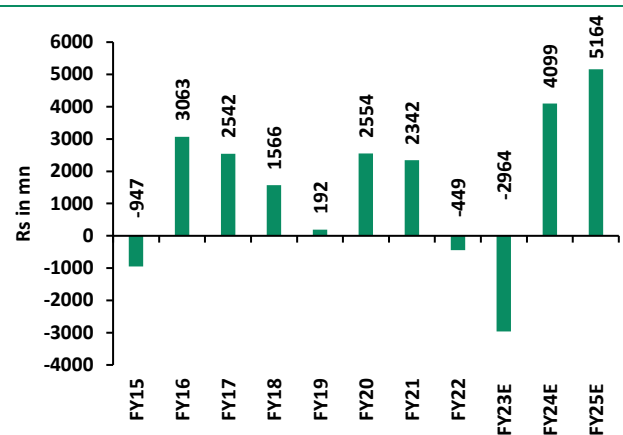
- The company is generating strong operating cash flows. The cumulative OCF generated from FY16-22 stood at Rs25.6bn and PAT cumulatively stood at Rs20.7bn during the same period indicating company has generated higher operating cash from operations and successfully converted converted profits into OCF. Going ahead we expect OCF to remain robust and cumulatively.
- FCF generation has been very robust over the last few years. The cumulative FCF generated from FY16-22 stood at ~Rs15bn which is almost 60% of OCF generated in the same period. Despite heavy capex from FY19-22, the company has been generating FCF except in FY22. Going ahead volume growth kicking in will drive the revenue and profits & consequently OCF and FCF of the company.

Fig 16: Cash generation to remain robust from FY22-25E



Source: Company, SMIFS Research Estimates

Fig 17: Consistent FCF generation from FY16-22

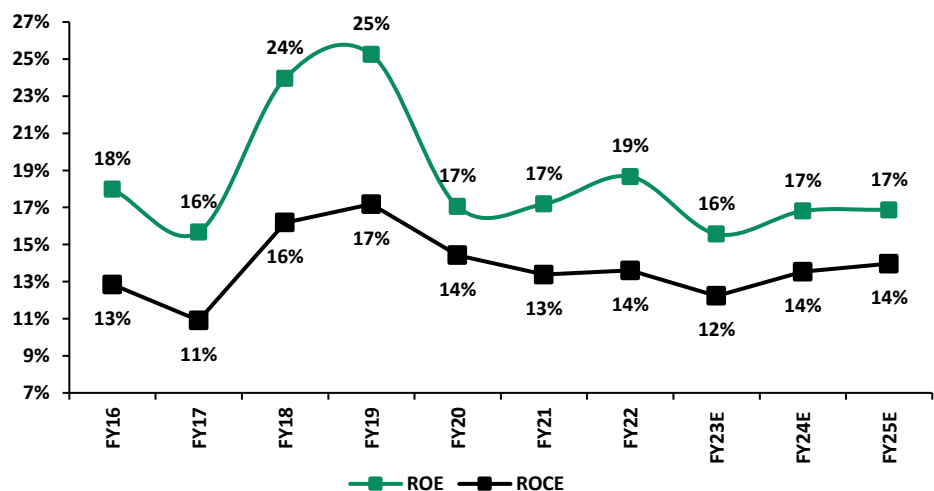


Source: Company, SMIFS Research Estimates

Robust return ratios to benefit the company

- Return ratios peaked in FY19 during the commodity price boom and thereafter has been almost in downward phase. Also, the company was in capex mode since FY19 which suppressed the return ratios, however, with capacity expansion benefits set to kick in from FY24E, we expect return ratios to remain robust going ahead.

Fig 18: Return ratios to remain robust

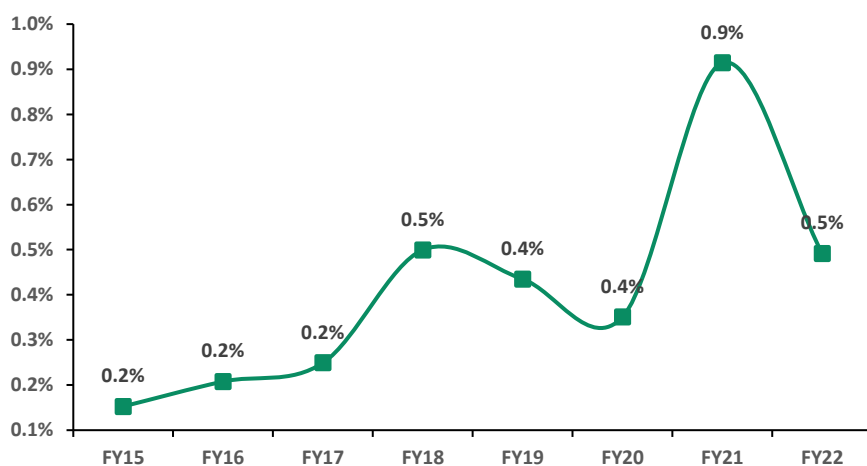


Source: Company, SMIFS Research Estimates

Continuous innovation in process design to yield better result and focus on developing new grades

- The company's is focussed on developing new grades through its strong research and development. The company has a very large portfolio consisting of over 75 grades of carbon black, out of which over 40 grades are of specialty carbon black. The aim of the company is to develop 6-7 new grades every year to cater to increasing needs of its end customer needs.
- Modifications in process design:** The company evaluates the existing carbon black manufacturing processes and technologies to improve the process technology, product features and versatility, in order to produce cleaner carbon black grades. This enables the company to enhance the carbon black manufacturing process, along with improving the reactor efficiency, productivity, yield, and pellet quality etc.
- Feedstock CBFS Research & Development:** The company has in house CBFS team which analyses inbound feedstock to ensure the effectiveness for the manufacturing of carbon black. They evaluate the nature of the CBFS based on carbon black grade to be produced in with respect to its yield, quality, designated impurity level & process efficiency with diverse environmental and regulatory norms.
- Improving production yield:** The company has in house dedicated R&D team which constantly work on improving the input output yield. The company per ton metrics over the years has witnessed improvement led by increasing share of speciality and finished product yield. As per management, the company has been successful in bringing down its input output ratio from 1.9:1 to 1.85:1. The company is constantly working on bringing it down further which will enhance the yield further.
- R&D facilities:** As rightly said, the backbone of any company is its innovation in technology to rightly adapt to constantly changing needs of the customers. PCBL also boasts its strength on its R&D as its major success over the years. The company has its own R&D facilities at Palej in Gujarat & at Belgium which is equipped with some of the latest technology and equipments in the field of research and development of carbon black, performance chemicals and specialty black. The company's focus from R&D facilities is yield improvement, feedstock efficiency, customization of grades and new product development. The R&D facility employs more than 40 technical professionals including scientists and engineers engaged in the development and process of the technology.

Fig 19: R&D as a % of sales



Source: Company, SMIFS Research

Industry Overview

Global carbon black industry: A snapshot

- The global carbon black market is estimated to grow at a CAGR of 4.4% from 138 lakh tonnes in 2022 to 157 lakh tonnes by 2025. In terms of revenue, the market was valued at USD 17,558 million in 2022 and is expected to reach USD 22,890 million by 2027, registering a CAGR of 5.4%. The major factors driving the growth of the market is largely the tyre and industrial rubber product application segment accounted for the largest share, holding more than 70% of the total market in 2022 & remaining led by speciality segment applications like plastics, Toners & printing inks, coating, textile fibres & others.

Fig 20: Global carbon black demand supply dynamics

	CY18	CY19	CY20	CY21	CY22E	CY23E	CY24E	CY25E
Carbon Black Capacity Globally in lakhs tonnes	171	173	176	182	185	190	192	196
Carbon Black Utilization	78%	76%	69%	74%	75%	77%	78%	80%
Carbon Black Production in lakhs tonnes	133	131	121	136	138	145	150	157
Carbon Black demand globally in lakhs tonnes	136	134	125	138	148	154	161	167

Source: Notch Report, SMIFS Research Estimates

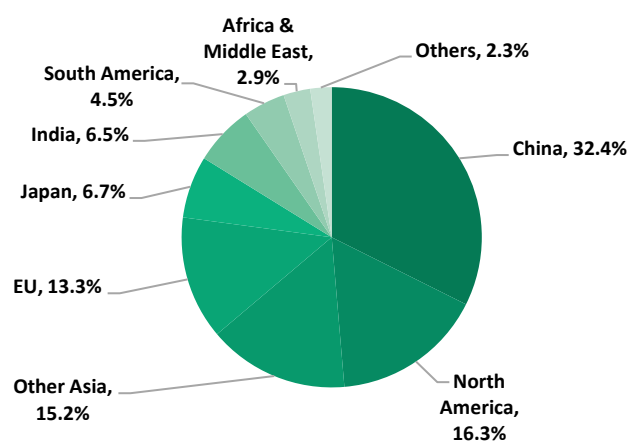
- Global carbon black demand totalled ~15 million tons in 2022, a growth of ~7% from 2021. Carbon black demand is forecast to grow ~4% per year from CY21-25E to reach 16.7 million tons in CY25E. The primary driver of the growth would be the new demand from the tyre industry, based upon \$20 billion in new investments that will be spent on new tire production capacity worldwide from 2020 to 2025. The global carbon black industry is concentrated, with 10 players accounting for almost 60% of the global production capacity.

Fig 21: Top 10 global carbon black manufacturing companies market share

Particulars	% Market Share
Cabot Corporation (US)	14%
Birla Carbon (India)	12%
Orion Engineered Carbons (US)	9%
Jiangxi Black Cat Carbon Black (China)	6%
Tokai Carbon (Japan)	5%
CSRC Group (Taiwan)	3%
Phillips Carbon Black (India)	3%
Longxing Chemical Group (China)	3%
Omsk Carbon Group (Russia)	2%
OCI Corporation (Korea)	2%
Total	60%

Source: Industry, SMIFS Research

Fig 22: Global carbon black demand breakup



Source: Notch Report, SMIFS Research

Carbon black fortunes are linked to tyre industry

- About 93% of global carbon black demand related to its use as a reinforcing filler in rubber, so the fortunes of the carbon black market are linked with the rubber and tyre industries. Worldwide, about 46 parts of carbon black are consumed for every 100 parts of rubber. In addition to the total volume of rubber used worldwide, carbon black demand is affected by the product mix of the rubber industry, particularly the percentage of rubber used in tyre applications versus non-tyre applications. This is because tyre compounds on average require higher carbon black loadings than non-tyre rubber goods.

Have you ever looked at a vehicle and wondered why its tyres are black?

- Carbon black is the material used in tyres that makes it black. Nevertheless, it also has other properties. Carbon black is a large, global commodity used in tire production and other industrial rubber products. It is composed of fine particles consisting mainly of carbon and is a by-product of the combustion of various petroleum products. It is used in various applications from being the black pigment in newspaper inks to serving as an electric conductive agent in various technologies.
- In tyres, carbon black serves as a reinforcing filler that greatly increases the tyre's resistance to wear and abrasion. In short, it helps with longer-lasting tread life.
- Carbon black also helps to conduct heat away from the parts of the car and tyre that tend to get hot during driving, such as the tyre belt areas and tread. In addition, it protects the tyre from UV light and ozone, two elements that contribute to tyre deterioration and cracking. Carbon black makes up about one-fourth of the weight of a standard automobile tire, and the amount of carbon black in a tire depends on its application.
- Various studies have found that a tyre made without carbon black would likely last 5000 miles (~8000km) or less which is definitely not desirable considering the cost of ownership of vehicle.

Fig 23: The black shine in tyre is because of carbon black



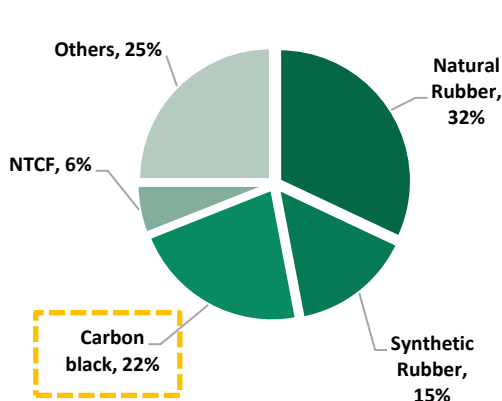
Source: Company, SMIFS Research

Fig 24: Carbon black image



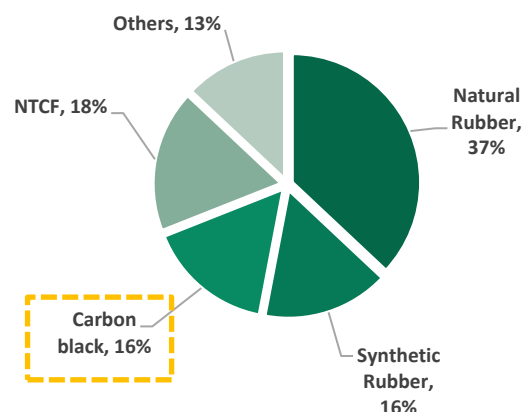
Source: Company, SMIFS Research

Fig 25: Raw Material breakup of tyre in volume



Source: Industry, SMIFS Research

Fig 26: Raw Material breakup of tyre in value



Source: Industry, SMIFS Research

What if there's a carbon black shortage: Can the tyre industry adapt?

- Carbon black is a vital component for the tyre industry. Virtually every tyre on the road uses carbon black as a filler and helps to dissipate heat and protect against UV damage. An average tyre contains around 3 kg of carbon black, which is roughly 20-25% weight by volume in a car tyre, hence tyre manufacturers consumes the carbon black in bulk.
- This means that if the carbon black supply dries up, tyre manufacturers simply cannot make any more tyres.
- This has become more prominent today since the world's second largest supplier of carbon black is Russia. Manufacturers throughout Europe and the world rely on Russian carbon black since they have large amount of feedstock available. A survey states, around 54% of Europe's carbon black supply comes from Russia.
- Since the Russia invasion of Ukraine, its carbon black supply has been choked through a combination of sanctions, logistical problems, and manufacturers withdrawing from the country. In addition, natural gas prices touching unimaginable levels has become a serious problem throughout Europe because natural gas is a key ingredient for the production of carbon black.
- A similar shortage of carbon black situation occurred in 2018 in India when demand from the tyre industry was strong but because of lack of carbon black supply, the domestic tyre manufacturers were under severe crisis. At that time, all domestic carbon black players were operating at peak utilization levels due to which they were unable to ramp up output and on the other side imports from China, Russia and other countries were restricted owing to duty imposition by the government. However, import restrictions were eased a bit, which saved the tyre industry facing production constraints at that time.

Fig 27: Largest countries manufacturing CB and their exports to global market

Particulars	CY17	CY18	CY19	CY20	CY21
Russia Exports of Carbon Black	17.3%	17.7%	18.1%	18.6%	18.9%
China Exports of Carbon Black	19.0%	20.9%	27.5%	19.2%	17.9%
South Korea Exports of Carbon Black	5.2%	5.4%	8.4%	8.1%	7.2%

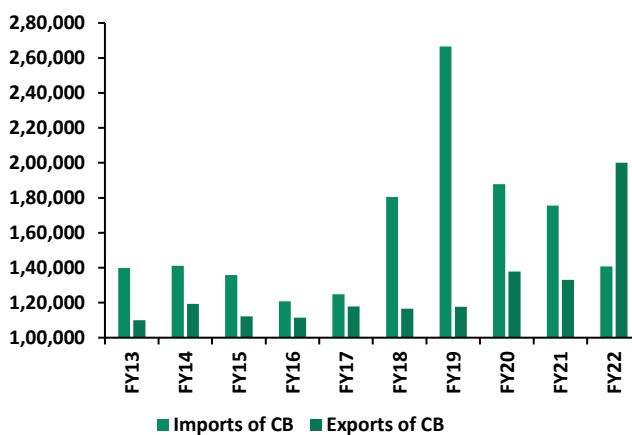
Source: Notch Report, SMIFS Research Estimates

- We identify China, Russia, Korea, Japan, and US as the players having large capacities of carbon black currently. We present an export trend analysis of Russia, China and Korea. Out of the pack, China exports to global market peaked in CY19 and thereafter is continually in declining mode. In addition, Russia, export share is increasing marginally since CY18-21, a noticeable change should be witnessed in CY22E. South Korea is also increasing its exports share from CY18-21.
- The main trigger point we want to highlight is the declining China's competitiveness in carbon black space despite having large capacities of feedstock. Earlier, China used to dump carbon black in India due to which government imposed an Anti-Dumping Duty (ADD), which was removed in Jan 21, and currently the industry is not in threat of dumping. Also, roughly 2mn tonnes capacities has shutdown in China because of government crackdown on chemical companies for non-compliance on pollution norms which has led to global demand supply dynamics relatively better placed.

Domestic carbon black industry – A Snapshot

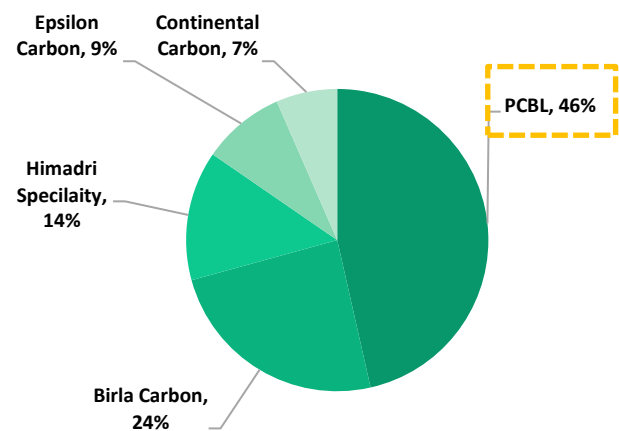
- The domestic carbon black industry is dependent on tyre industry and supported by its favourable base the carbon black players has expanded its capacity commensurately with the tyre industry.
- Over 70% of carbon black demand is met by tyre industry as it acts as an effective reinforcing agent and binds key inputs like NR and SR in tyre production process. Carbon Black is a key raw material for tyre manufacturing and accounts for ~15-25% of total RM costs (in both volume and value). It also finds its application in non-tyre rubber products like hoses, belts and anti-vibration products.
- Carbon black is an elemental carbon manufactured through incomplete combustion or thermal decomposition of heavy hydrocarbons. It generally comprises of two variants - Rubber Black (high volume, standard grade products) and Specialty Black (high margin, value added products).

Fig 28: CB domestic import export data (In metric tonnes)



Source: Trade Data , SMIFS Research

Fig 29: Domestic CB players market share (In %)



Source: Industry, SMIFS Research, Note: Here we have excluded Balkrishna because it consumes the entire capacity for captive consumption

Fig 30: Indian carbon black capacity addition details (In metric tonnes unless mentioned)

Company	Current Capacity	Estimated Addition	Final Capacity	Capex (Rs in bn)	Replacement Cost (Rs per kg)
PCBL	603000	187000	790000	9.5	51
Birla Carbon	315000	80000	395000	NA	NA
Himadri Speciality	180000	140000	320000	7.0	50
Epsilon Carbon	115000	100000	215000	5.0	50
Continental Carbon	85000	150000	235000	6.6	44
Balkrishna Tyres	140000	140000	280000	6.5	46
Total	1438000	797000	2235000	35	48

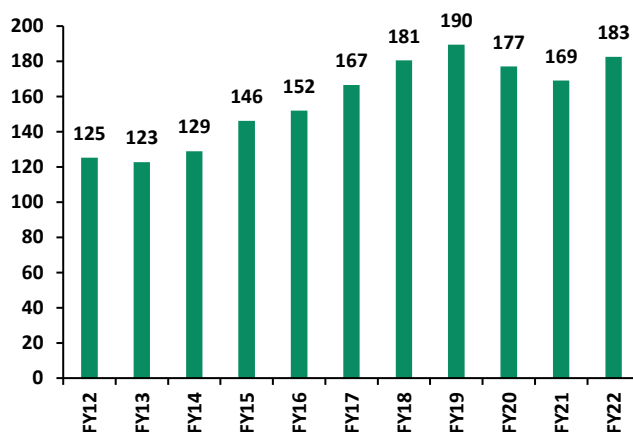
Source: Industry, SMIFS Research Estimates

- The domestic carbon black industry will witness capacity addition of nearly ~8 lakh tonnes over the next 3 years. Of this Balkrishna tyres capacity of 1.4 lakh tonnes would entirely be captively consumed hence, the net addition in capacity would be ~6.5 lakh tonnes.
- While a large part of CB requirements is met through domestic production, the domestic tyre industry also imports CB from countries like China, Russia and South Korea etc. Imports have declined and exports have increased substantially for the last 3 years indicating global players are more serious towards China+1 & Europe+1 and we feel this will remain a trend for the coming decade. This structural change will directly increase demand for carbon black and accordingly PCBL will be a biggest beneficiary of the same.

Robust capex by tyre manufacturers improves visibility in sight

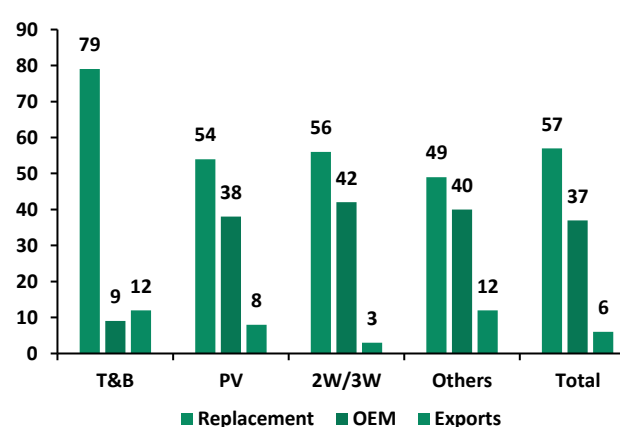
- Indian tyre industry has almost doubled in size from clocking Rs300bn in 2011 to Rs700bn in 2022. It contributes 3% of the manufacturing GDP and 0.5% of the overall GDP.
- The largely cyclical nature of OEM demand is mitigated by a substantial replacement market and this has proved during COVID times wherein OEM took a hit but replacement remained largely flattish.
- In tonnage terms, MH&CV segment is the largest segment constituting ~55% of overall production and has registered 10 year CAGR of 3%.
- The PV segment is the second largest contributor with a tonnage share of 18% and it has registered a 10-year CAGR of 9.3%. Similarly, the 2W & 3W tyre segment witnessed a 10-year CAGR of 9.7%.

Fig 31: Rising domestic tyre production (In mn units)



Source: Industry, SMIFS Research

Fig 32: Higher replacement share augurs well (In %)



Source: Industry, SMIFS Research

- Although the tyre sector have went through challenges on the demand side during COVID, supply issues etc the demand has largely remained stable owing to strength in the replacement market. Replacement and export markets have done far better. We expect OEM demand to remain robust going ahead with easing shortages of chip supply and robust demand. Also, with the government focus on creating infrastructure we expect T&B tyre demand will remain robust in the medium term and this segment contributes ~55% of the overall tyre industry.

Fig 33: Tyre players outlined robust capex provides visibility for carbon black players

Company	Capex (Rs in bn)	Comments
Apollo tyres	38	Greenfield capacity at Andhra plant with capacity to manufacture 15,000 passenger car tyre & 3,000 truck bus radial tyre per day
CEAT	18	Greenfield plant at Chennai, Further ramp up of Nagpur, Halol
MRF	45	The company announced to set up new facility in Gujarat of capex spend roughly around Rs45bn
TVS Srichakra	10	Upgradation and expansion Madurai & Pantnagar manufacturing plant of 2-3 wheeler tyres capacity by 25-30%.
Maxxis	30	Announced phase 1 expansion of Sanand plant to increase capacity by 40,000 units of 2 wheeler tyres per day
Continental	10	Plans to raise capacity at the existing facility for TBR tyres
Yokohoma	24	Plans to set up an off-highway tyre plant in Andhra Pradesh
Bridgestone	20	Expanding in Indore & Pune plant with capacity of 15,000 tyres per day
Balkrishna	8	Expansion in Bhuj plant for production capacity of 50,000 tonnes
JK Tyre	11	The company is expanding passenger car radial capacity & TBR tyre
Total	214	

Source: Industry, SMIFS Research

Speciality Black Segment – low volume, high value & providing highest value proposition

Key drivers of specialty black demand include consumer spending on both durables and non-durables, construction activity and automotive builds and the servicing of vehicles in use. Specialty markets account for only 7% of the carbon black industry’s volumes but 11% of market value due to the higher average prices typical for pigment grades

The largest single market for carbon black outside the rubber industry is plastics, which accounts for about 70% of volume demand for special blacks. Major applications for specialty blacks in the plastics industry are film, blow moulding and injection moulding, wire and cable jacketing, pipe, engineering plastics, fibre and conductive plastics and ESD (electrostatic discharge). In plastics, carbon black is used as a colorant and to improve properties such as UV resistance and electrical conductivity. Demand for specialty blacks in plastics markets is forecast to grow 3% from 2019 to reach 781 KT in 2024.

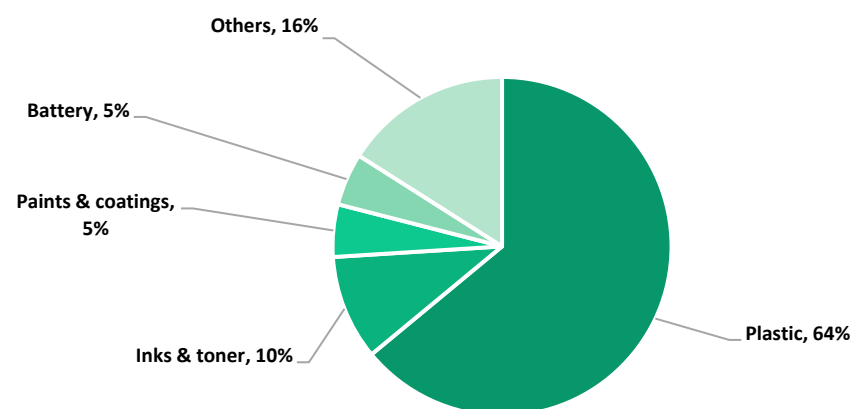
Printing inks, paints & coatings together accounts for another 16% of speciality blacks demand. The inks market is diverse, encompassing a mix of commodity (newspaper ink) and high value (inkjet colorants) applications. Paints and coatings market is very small market, totalling just 36 KT in 2020, though it’s a highly challenging and high value market.

Fig 34: Speciality Black demand supply dynamics (In '000 tonnes)

Particulars	CY19	CY20	CY21	CY22E	CY23E	CY24E
Speciality Black Global Demand	960	847	955	1013	1065	1096
Speciality Black Indian Demand	40	45	52	60	63	69
PCBL Speciality Black Volumes	19	24	35	41	50	62
PCBL global market share	2%	3%	4%	4%	5%	6%

Source: Notch Report, SMIFS Research

Fig 35: Plastics segment constitutes larger chunk of pie in speciality black segment



Source: Notch Report, SMIFS Research

Globally not many players are known to manufacture speciality black. The market is fairly consolidated with top 3 manufacturers like Cabot Corp, Birla Carbon and Orion Carbon constituting ~60% global market share. In Indian domestic market, PCBL and Himadri speciality have capacities for the same in which PCBL is expanding very aggressively to be at the forefront in providing value proposition to its clients.

The main benefit in speciality CB lies in its quality, which is used for specific purpose application. The input output spreads in speciality CB is almost 2-2.5x of normal grade and enjoys 25-30% margin on average basis as compared with 12-15% on normal grade CB.

Corporate Governance

We believe that good corporate governance is necessary for enhancing the trust of the shareholders. Hereby, we present a detailed framework on corporate governance for the comfort of the investors of PCBL considering board of directors, remuneration of key managerial personnel, contingent liability etc.

Promoters' Shareholding

The promoters currently hold ~51.4% of the equity capital. Rainbow Investments holds the highest equity capital (45.8%) in the company. Smaller investment firms hold cumulatively 5.5% of the equity capital. The details of the shareholding and its movement are indicated in the following table and chart:

Fig 36: Latest Promoter Shareholding

Particulars	% Holding
Rainbow Investments Limited	45.8
Dotex Merchandise Private Limited	2.8
Quest Capital Markets Limited	1.9
Stel Holdings Limited	0.8
Total	51.40

Source: Company Annual Report FY22, SMIFS Research

Fig 37: Promoter Shareholding



Source: Company Annual Report, SMIFS Research

The above graph shows decline in promoter shareholding from 53.6% in FY21 to 51.4% in FY22. This decline as mentioned in the annual report was because the company has allotted and issued 1,63,93,442 equity shares of Rs 2 each at an issue price of Rs 244 per equity share (Pre bonus issue) aggregating to Rs4bn.

Promoter Compensation

The promoter compensation is at ~2% of PBT.

Fig 38: Remuneration of promoter

	(Rs in mn)				
	FY18	FY19	FY20	FY21	FY22
Dr. Sanjiv Goenka	0.2	86.8	156.5	51.4	57.7
Mr. Shashwat Goenka	0.2	0.8	0.9	51.4	57.6
Mrs. Preeti Goenka	0	0.3	0.9	0.9	1.1
Total Remuneration	0.4	87.9	158.4	103.7	116.4
As a % of PBT	0.01%	1.65%	4.46%	2.65%	2.19%

Source: Company Annual Reports, SMIFS Research

In FY20 owing to higher commission paid to Dr Sanjiv Goenka remuneration jumped which became normalized in FY21 & FY22.

Independent Director's Compensation

As on FY22, PCBL board constituted of 6 independent directors. Independent directors were paid cumulative ~Rs6.2mn which is 0.12% of PBT as on FY22.

Fig 39: Remuneration of Independent Director

(Rs in mn)

Name	FY22 Compensation (Rs in mn)	As % to PBT (FY22)
Mr. K S B Sanyal	0.82	0.02
Mr. O P Malhotra	0.81	0.02
Mr. Paras Kumar Chowdhary	1.34	0.03
Mr. Pradip Roy	1.35	0.03
Mr. R K Agarwal	0.52	0.01
Mr. T.C Suseel Kumar	0.27	0.01
Mr. K Jairaj	0.02	0.00
Mrs. Kusum Dadoo	0.50	0.01
Mrs. Rusha Mitra	0.55	0.01
Total	6.17	0.12

Source: Company Annual Report FY22, SMIFS Research

Board Composition

Independent directors constitute 60% of the board composition.

The details are given below:

Fig 40: Board Composition

	FY18	FY19	FY20	FY21	FY22
Non-Executive Promoter Directors	2	3	3	3	3
Executive Director, Managing Director	1	1	1	1	1
Non-Executive Independent Directors	6	5	5	4	6

Source: Company Annual Reports, SMIFS Research

Contingent Liabilities

The company's contingent liability as a % of net worth is mere 1%. A major portion of contingent liabilities is safe items which we have taken into consideration in calculating total liability. **There is hardly any contingent liability on the company.**

Fig 41: Contingent Liability

(Rs in mn)

	FY20	FY21	FY22
Income tax & excise duty related	142.9	132.6	323.7
Guarantees or counter guarantees or counter indemnity	129.1	1.8	0.0
Total	272.0	134.4	323.7
As a % of Net Worth	1.6%	0.7%	1.2%

Source: Company Annual Reports, SMIFS Research

Related Party Transaction

As per our analysis of RPT, nothing specific has come to our notice. The sale of power is to its group company CESC Ltd. The increase in others is due to dividend paid on equity shares.

Fig 42: Related Party Transaction

(Rs in mn)

	FY18	FY19	FY20	FY21	FY22
Security deposits (Net)	-	-	-	300	24
Sale of power (Net)	488	890	777	544	794
KMP incl. directors disclosures (remuneration, benefits etc)	119	232	336	275	366
Others	475	579	1,345	986	1,316

Source: Company Annual Reports, SMIFS Research

Key management personnel

Fig 43: Details of promoter and director

Name	Designation	Profile
Dr Sanjiv Goenka	Promoter, Non-Executive & Chairman	Dr Sanjiv Goenka is currently the Honorary Consul of Canada in Kolkata. Dr Sanjiv Goenka was a former President of the Confederation of Indian Industries (CII) as well as the All-India Management Institute (AIMA), and a member of the Prime Minister's Council on Trade & Industry. Dr Sanjiv Goenka believes there is no replacement for the age-old virtues of sheer hard work, clear vision and the courage to bring an entrepreneurial streak into management. For him, there are no secrets to success which do not spring from perseverance, preparation, hard work and learning.
Mr. Shashwat Goenka	Promoter, Non-Executive	Shashwat Goenka, is a graduate from The Wharton School of Business, University of Pennsylvania, and Philadelphia, with a Bachelor of Science in economics, specializing in finance, marketing and management. He is the immediate past President of Indian Chamber of Commerce and current Chairman of CII National Committee on Retail and FICCI Young Leaders Forum. He is also Executive Committee Member – National Executive Council, Federation of Indian Chambers of Commerce & Industry and Director – Retailers Association of India (RAI).
Mrs. Preeti Goenka	Promoter, Non-Executive	Preeti Goenka studied Interior Designing at South Delhi Polytechnic to secure a diploma. Married to Dr Sanjiv Goenka, Preeti Goenka has vast experience in art and supports creative talents in diverse fields. A past President of the Ladies Study Group of Indian Chamber of Commerce, Kolkata, currently she is an Executive Committee Member of the Birla Industrial & Technological Museum, Kolkata.
Mr. Kaushik Roy	Managing Director & CEO	Mr Kaushik Roy has Around 30 years spread over Apollo Tyres, a brief stint with Gujrat Ambuja Cement. He has completed MTech (Mechanical) from IIT Kharagpur, MBA from University of Tokyo and also Alumnus of IMD – Switzerland. He was the Indian Tyre Industry Representative on the Industry Body of International Rubber Study Group, Singapore; and also, the Member of Governing Council, RSDC (Rubber Skill Development Centre), India.
Mr. Kaushik Mukherjee	Company Secretary & Chief Legal Officer	Mr Kaushik Mukherji has completed B.Com (H) from Calcutta University, CA from ICAI and CS from Institute Of Company Secretaries Of India. He started his career with CESC Limited in 1993 and has since been working with the Group
Mr. Raj Kumar Gupta	Chief Financial Officer	Mr Raj Kumar Gupta has completed B.Com (H) from Calcutta University, CWA from ICWAI and CA from ICAI. He started his career with CESC Limited in 1998 and has since been working with the Group. Mr Raj joined PCBL in 2015.
Mr. Vijay Josh	Chief Operations	Mr Vijay Josh has completed BE from Pune University, Diploma in Business Management from Pune University, Masters in Marketing Management from Pune University and PG Diploma from MSBTE - Mumbai. Mr Vijay has worked in Deepak Fertilisers, Bombay Dyeing, Futura Polysters and Century Enka. Mr Vijay Josh has more than 30 years of experience.

Source: Company Investor Presentation, SMIFS Research

CSR Activities

PCBL has been actively involved in CSR activities for the betterment of the society. The company has spent ~Rs81mn in FY21 and ~Rs87mn in FY22. The spend as % of prescribed limit is above 100% for both FY21 and FY22.

Fig 44: CSR spend

(Rs in mn)

Company	Avg Net Profit (last 3 Yrs)	Prescribed Expenditure	Total Spends	Spend as % of prescribed limit
FY22	4,317	86.3	86.6	100.3
FY21	3,963	79.3	81.2	102.4
FY20	3,386	67.7	118.2	174.6

Source: Company Annual Reports, SMIFS Research

Auditors

PCBL appointed M/s. S R Batliboi & Co. LLP as the statutory auditor. The auditors have given a true and fair view for the results of the financial year 2021-22.

Fig 45: Auditor fee

Auditor Name	Type	Auditor Fees - (Rs mn)	As a % of PBT
M/s. S R Batliboi & Co. LLP	Statutory Auditors	15.8	0.3

Source: Company Annual Reports, SMIFS Research

Key milestones

Fig 46: Key Milestones of PCBL

Year	Major Milestones
1960	Incorporated on March 31 as a Public Limited Company in collaboration with Phillips Petroleum Company, USA
1962	Started production at Durgapur Facility
1974	Durgapur Facility's capacity enhanced to 36,000 MT
1995	Durgapur Facility's capacity enhanced to 78,000 MT
1996	Acquisition of carbon black unit of Gujarat Carbon Limited adding 25,000 MT (total capacity enhanced to 103,000 MT)
1997	Amalgamation with Carbon and Chemicals Limited, Kochi adding 40,000 MT (total capacity enhanced to 143,000 MT) and 2.5 MW CPP
1998	Durgapur Facility's capacity increased to 1,10,000 MT (total capacity enhanced to 1,75,000 MT)
2003	Durgapur Facility's capacity increased to 1,35,000 MT (total capacity enhanced to 2,00,000 MT)
2004	Palej Facility capacity increased to 70,000 MT, Durgapur Facility's capacity increased by 25,000 MTPA
2005	Expansion of 12 MW power plant at Palej, Baroda (total power capacity: 18.5 MW)
2006	Palej Facility is first unit in carbon black industry to win carbon credits.
2009	Commencement of 30 MW power plant at the Durgapur Facility on April 1, 2009 Commencement of 90,000 MT carbon black plant at the Mundra Facility on October 17, 2009 (total capacity 3,60,000 MT).
2009	Commencement of 16 MW co-generation power plant at the Mundra Facility on December 24, 2009 (total capacity 60.5 MW)
2011	Expansion of 10 MW co-generation power plant at Kochi (total power capacity: 70.5 MW) New soft black line of capacity 50,000 MTPA initiated at the Mundra Facility (total capacity: 4,10,000 MT)
2012	Expansion of 8 MW co-generation power plant at the Mundra Facility (total power capacity: 76.5 MW) Capacity addition of 12,000 MT at the Durgapur Facility (total capacity: 4,22,000 MT)
2013	New soft black line of capacity 50,000 MTPA initiated at Kochi (total capacity: 4,72,000 MT)
2018	IATF 16949:2016 awarded to Kochi Facility Commissioned Sushila Goenka R&D Centre at Palej. Capacity increased by 43,000 MTPA across plants by de-bottlenecking
2019	Capacity addition of 56,000 MT at the Mundra Facility
2020	Sushila Goenka innovation centre at Belgium became operational
2021	Capacity addition of 32,000 MT at the Palej Facility Greenfield project initiated in Chennai - 147,000 MT

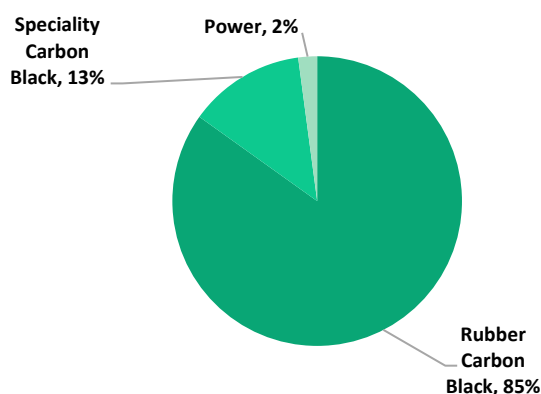
Source: Company Investor Presentation, SMIFS Research

Company Background

What is PCBL all about?

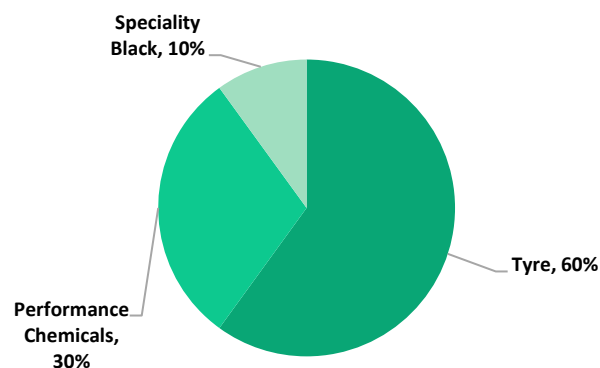
- PCBL was incorporated in 1960 wherein the company commenced production of carbon black, using the oil furnace technology. Presently the company has four manufacturing facilities strategically located in proximity to domestic tyre manufacturers, raw material suppliers and ports.
- The company has carbon black manufacturing capacity of 6.03 lakh TPA and is the seventh largest in the globe and India's largest manufacturer by capacity. The company also has manufacturing capacity of 72,000 TPA for speciality grade carbon black.
- PCBL uses tail gas or off-gas, which is obtained as by product from the carbon black facility to generate 91MW power, which it consumes it in house for its own consumption and remaining surplus is sold in the market.
- PCBL has more than 75 grades of carbon black including 40+ grade in speciality segment from its own R&D investments. These grades of carbon black are used in multiple products essential for everyday life such as tyres, plastics, paints, pipes, films, fibre and ink.

Fig 47: Revenue Breakup



Source: Company, SMIFS Research

Fig 48: End user industries mix



Source: Industry, SMIFS Research

- PCBL has global presence with footprints in more than 40 countries. The exports are largely to multiple geographies including South America, North America, Europe, Middle East, Africa and Asia.
- PCBL has long-standing relationship with majority of tyre manufacturers, which ensures repeat business for PCBL. Roughly, 65-70% is revenue from top 10 customers. **The key clients are MRF, Bridgestone, JK Tyres, CEAT, Apollo Tyres, Continental and Sumitomo rubber industries etc.**

Fig 49: Key Clientele



Source: Company Investor Presentation, SMIFS Research

Varied product basket of carbon black would lead to stronger visibility in end user market

- The company manufactures varied grades of carbon black to cater to diverse requirements of leading tyre manufacturers. The company is also working on new grades to meet the customer requirements. The company enjoys logistical advantage with access to port in the proximity with the manufacturing facilities.
- The company's 60-65% volume is consumed by tyre manufacturers and ~30% by performance chemicals companies like hoses, latex, surgical gloves, footwear etc & remaining 10% is speciality black. Hence, tyre growth, which is larger pie of the share, is critical to carbon black growth.

Fig 50: Business description

	Rubber Carbon Black	Speciality Carbon Black
Sales Volume (FY22)	456484	35000
Utilization (%)	98%	49%
Application	Tyres & other rubber goods like hoses, latex, pipes etc	Plastics, inks & coatings, Printing inks, food applications etc
Key Brands	Orient black	Bleumina & Nutone
Exports	Over 25% is exported	Over 70% is exported
EBITDA margins	12-15%	25-30%
Volume contribution (FY22)	93%	7%
Value addition	High volume, Low value	Low volume, High value

Source: Company, SMIFS Research

- Rubber carbon black is broadly classified into two categories i.e hard black (tread black) and soft black (carcass black). Hard black is generally used in applications demanding high abrasion resistance i.e, which come in contact with the road and are subject to higher friction while soft black is used for applications demanding high modulus i.e for the sidewall of tyres. PCBL manufactures different grades of both hard and soft black.
- PCBL offers its rubber grades carbon black under the brand name '**Orient Black**', which are manufactured in furnace process. Orient Black is a prominent class of carbon black grade that is used in rubber compounds as reinforcing fillers in order to provide the rubber compound the final solution in tailoring specific rubber compound requirements. The enhancement in rubber properties is a function of the major physiochemical properties of carbon black, size, structure, applications, aggregate distribution and surface characteristics. Orient Black is the major volume contributor in the business and constituting almost 93% to the total sales volume. PCBL has a comprehensive portfolio spanning across multiple grades of rubber black, alongside customised high-performance products to cater to next generation business needs.
- The company markets its specialty blacks under the brand name '**Royale Black**'. Carbon black is also used in food contact applications food trays and cutleries. To use carbon black in various food contact plastics, the specific grade of carbon black has to comply with stringent norms of USFDA certification and this is where PCBL has made a foray.
- The broader brand umbrella Royale Black comprises two primary sub-brands, Bleumina and NuTone. Bleumina, a series of medium and high-coloured specialty chemical, is used in car interiors to improve the aesthetic appeal and durability of the products and used in electronic and home appliances. NuTone is a new range in specialty chemical available in a powder form. It is used for printing ink applications such as offset ink, liquid ink, and inkjet, owing to its colour strength and gloss. NuTone series is also used in coatings, fertilizer, adhesives, and sealants due to its low viscosity, good stability and dispersion These products are regularly sold to key customers in France, Russia, China and other countries.
- The company is consistently moving up the value chain to emerge among the few global companies with an elaborate specialty carbon black portfolio, which is used in fibres, pressure pipes, wire and cables, food contact plastics, engineering plastics, inks, paints and coatings, fertilisers and adhesives & sealants.

Valuation and Recommendations

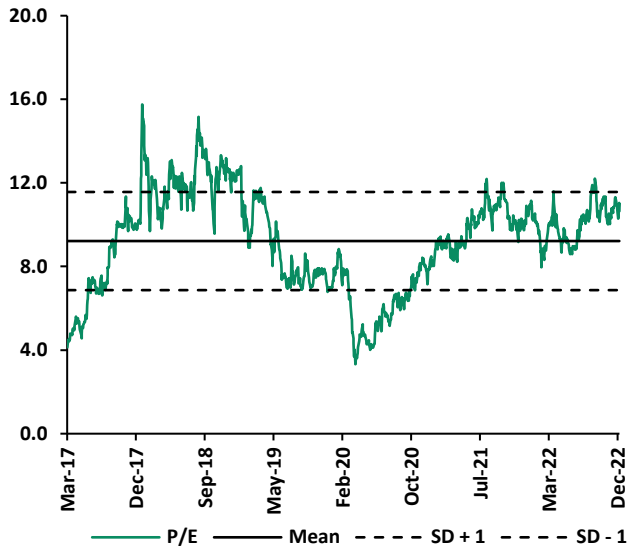
Currently, the stock is trading at inexpensive valuation on FY25E P/E of ~9.3x.

We value the stock on forward P/E multiple of 12.5x owing to increasing share of speciality business, robust volume growth & rising exports share and, thereby, arrive at target price of Rs 183 per share which offers upside of 35% from current valuations.

Therefore, we assign **BUY** rating on the stock.

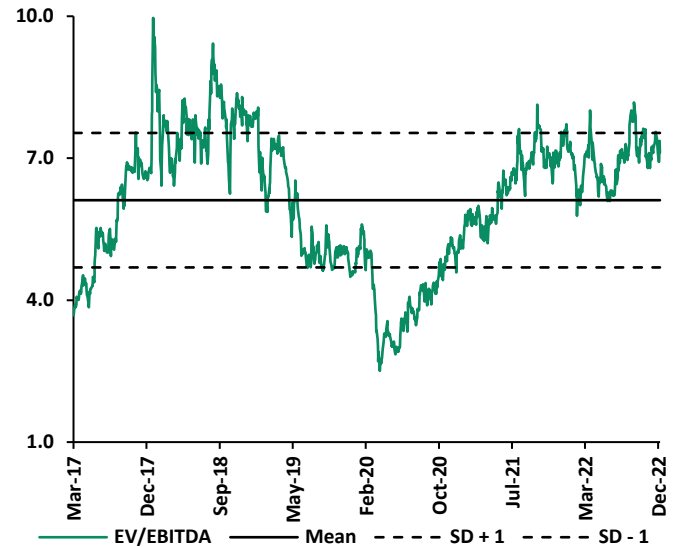
Risk to our call is unforeseen impact on the demand and sharp decline in spread.

Fig 51: 1-year forward P/E



Source: AceEquity, SMIFS Research

Fig 52: 1-year forward EV/EBITDA



Source: AceEquity, SMIFS Research

Quarterly financials, operating metrics and key performance indicators

Fig 53: Quarterly Financials

Y/E March (Rs mn)	Q3FY21	Q4FY21	Q1FY22	Q2FY22	Q3FY22	Q4FY22	Q1FY23	Q2FY23
Net Sales	7,694	8,667	10,039	10,676	11,561	12,188	14,091	16,279
Raw Materials	4,291	5,127	6,719	7,173	8,403	9,042	10,257	12,587
Employee Costs	343	347	361	412	398	418	472	488
Other Expenditure	1,178	1,333	1,323	1,220	1,080	1,385	1,408	1,318
EBITDA	1,883	1,860	1,636	1,870	1,680	1,343	1,955	1,886
Depreciation	278	280	292	304	308	305	375	327
Interest	80	81	76	77	69	69	89	110
Other Income	24	112	38	37	90	121	117	38
PBT	1,549	1,612	1,306	1,527	1,392	1,091	1,608	1,487
Tax	294	334	261	306	277	208	346	322
Tax rate (%)	19	21	20	20	20	19	21	22
Reported PAT	1,256	1,278	1,045	1,221	1,115	883	1,263	1,165
Minority Interest	-1	-1	-1	-1	-1	-1	-1	1
Consolidated PAT	1,254	1,277	1,044	1,220	1,114	882	1,262	1,164
YoY Growth (%)								
Revenue	0.1	23.8	179.2	60.8	50.3	40.6	40.4	52.5
EBITDA	56.7	87.5	325.2	77.6	-10.7	-27.8	19.5	0.8
PAT	79.0	75.5	4092.4	110.5	-11.2	-31.0	20.9	-4.6
QoQ Growth (%)								
Revenue	15.9	12.7	15.8	6.4	8.3	5.4	15.6	15.5
EBITDA	78.8	-1.2	-12.1	14.3	-10.1	-20.0	45.5	-3.5
Adj. PAT	116.4	1.8	-18.3	16.9	-8.7	-20.9	43.1	-7.8
Margin (%)								
Gross	44.2	40.8	33.1	32.8	27.3	25.8	27.2	22.7
EBITDA	24.5	21.5	16.3	17.5	14.5	11.0	13.9	11.6
Adj PAT	16.3	14.7	10.4	11.4	9.6	7.2	9.0	7.1
Employee cost as % of sales	4.5	4.0	3.6	3.9	3.4	3.4	3.3	3.0
Other expenses as % of sales	15.3	15.4	13.2	11.4	9.3	11.4	10.0	8.1
Operational Metrics								
CB volumes (in tonnes)	114525	113022	109424	115717	116594	112452	109377	113859
CB Realization per kg	65	75	90	90	97	106	126	140
CB Gross spread Per kg	28	30	29	28	25	26	32	29
Blended EBITDA spread per kg	16	16	15	16	14	12	18	17

Source: Company, SMIFS Research

Key Performance Indicators

Operational Metrics	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Effective CB capacity (in MT)	444427	467469	467469	467469	645000	645000	645000
Normal Grade CB volumes (In MT)	410788	408061	384785	456484	451500	516000	580500
YoY Change (%)	2.2	-0.7	-5.7	18.6	-1.1	14.3	12.5
Speciality Grade CB volumes (In MT)	19501	19378	23967	35000	41400	50400	61600
YoY Change (%)	19	-1	24	46	18	22	22
Blended Gross spread per kg	29	25	26	27	29	30	31

Source: Company, SMIFS Research Estimates

Fig 54: Industry Comparison

Company Name	Net Sales			EBITDA			PAT			EBITDA Margin %			PAT Margin %		
	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E
PCBL	44,464	61,329	65,969	6530	6982	8269	4260	4306	5019	14.7	11.4	12.5	9.6	6.9	7.6
NOCIL Ltd.	15,713	17,099	17,764	2,862	3,085	3,340	1,761	1,921	2,104	18.2	18.0	18.8	11.2	11.2	11.8
Oriental Carbon & Chemicals	4,437	5,345	5,891	870	1172	1335	462	791	921	19.6	21.9	22.7	10.4	14.8	15.6
Navin Fluorine International Ltd.	14,534	19,713	28,053	3,548	5,224	8,219	2631	3654	5,873	24.4	26.5	29.3	18.1	18.5	20.9
Aarti Industries	54,751	66,079	87,635	11,097	10,606	15,833	6,418	5,382	8,939	20.3	16.1	18.1	11.7	8.1	10.2
Fine Organic Industries Ltd.	18,600	28,800	29,200	3,500	6,600	6,200	2500	4,900	4,700	18.8	22.9	21.2	13.4	17.0	16.1
Deepak Nitrite Ltd.	68,022	77,205	88,786	15,948	14,292	18,656	10,666	9,623	12,834	23.4	18.5	21.0	15.7	12.5	14.5

Source: Bloomberg, SMIFS Research

Company Name	CAGR FY22-24E			ROE (%)			Dividend Yield			P/E			EV/EBITDA		
	Revenue	EBITDA	PAT	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E
PCBL	21.8	12.5	9.0	18.7	15.8	16.9	4.4	4.0	4.4	9.7	12.1	10.2	6.5	8.3	6.7
NOCIL Ltd.	6.3	8.0	9.3	12.9	12.7	12.8	1.3	1.6	1.7	22.5	19.9	18.2	13.8	12.0	10.7
Oriental Carbon & Chemicals	15.2	23.9	41.1	7.6	12.4	13.2	1.3	1.8	1.9	23.0	10.6	8.9	0.4	0.0	1.0
Navin Fluorine International Ltd.	38.9	52.2	49.4	15.2	17.5	22.7	0.3	0.2	0.4	83.2	63.4	41.5	62.6	46.8	30.6
Aarti Industries	26.5	19.4	18.0	13.7	10.3	14.8	0.2	0.3	0.3	39.7	45.5	27.4	29.3	25.1	17.1
Fine Organic Industries Ltd.	25.3	33.1	37.1	29.5	43.6	31.8	0.1	0.8	0.7	75.8	38.5	40.7	54.1	28.4	29.6
Deepak Nitrite Ltd.	14.2	8.2	9.7	32	22.4	23	0.3	0.2	0.3	28.0	31.0	23.2	18.1	21.2	14.4

Source: Bloomberg, SMIFS Research

Financial Statements

Income Statement					
YE March (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenues	26,595	44,464	61,329	65,969	71,019
Raw Materials	16,089	31,338	46,903	48,967	51,160
% of sales	60	70	76	74	72
Personnel	1,324	1,589	1,911	2,081	2,246
% of sales	5	4	3	3	3
Other Expenses	4,002	5,008	5,533	6,651	8,605
% of sales	15	11	9	10	12
EBITDA	5,180	6,530	6,982	8,269	9,009
Other Income	180	286	275	300	325
Depreciation & Amortization	1,101	1,209	1,665	1,800	1,852
EBIT	4,259	5,607	5,592	6,769	7,482
Finance cost	339	291	440	465	495
Core PBT	3,740	5,030	4,876	6,004	6,662
PBT	3,920	5,316	5,152	6,304	6,987
Tax-Total	781	1,052	895	1,288	1,460
<i>Tax Rate (%) - Total</i>	<i>20</i>	<i>20</i>	<i>17</i>	<i>20</i>	<i>21</i>
Reported PAT	3,140	4,263	4,257	5,016	5,527
Minority Interest	4	3	3	3	4
Adjusted PAT	3,144	4,267	4,260	5,019	5,531

Source: Company, SMIFS Research Estimates

Key Ratios					
YE March	FY21	FY22	FY23E	FY24E	FY25E
Growth Ratio (%)					
Revenue	-18.0	67.2	37.9	7.6	7.7
EBITDA	11.6	26.0	6.9	18.4	8.9
Adjusted PAT	9.0	35.7	-0.1	17.8	10.2
Margin Ratios (%)					
Gross Profit	39.5	29.5	23.5	25.8	28.0
EBITDA	19.5	14.7	11.4	12.5	12.7
EBIT	16.0	12.6	9.1	10.3	10.5
Core PBT	14.1	11.3	8.0	9.1	9.4
Adjusted PAT	11.8	9.6	6.9	7.6	7.8
Return Ratios (%)					
ROE	17.2	18.7	15.6	16.8	16.9
ROCE	13.2	14.5	12.3	13.1	13.6
Turnover Ratios (days)					
Gross block turnover ratio	1.2	1.7	1.8	1.8	1.8
Adj CFO / Adj PAT (%)	111.7	61.3	111.8	111.0	108.9
Inventory	101	70	55	55	55
Debtors	97	91	85	85	85
Creditors	134	106	85	85	85
Cash conversion cycle	64	55	55	55	55
Solvency Ratio (x)					
Debt-equity	0.4	0.3	0.4	0.3	0.3
Net debt/equity	0.2	0.0	0.2	0.1	0.0
Gross debt/EBITDA	1.5	1.3	1.7	1.3	1.2
Current Ratio	2.0	2.3	2.0	2.1	2.2
Interest coverage ratio	13	19	13	15	15
Dividend					
Adj DPS	3.2	5.0	5.5	6.0	6.5
Dividend Yield (%)	4.7	4.4	4.0	4.4	4.8
Dividend Payout (%)	38.5	44.3	48.8	45.2	44.4
Per share Ratios (Rs)					
Basic EPS (reported)	9.1	11.8	11.3	13.3	14.6
Adj EPS	8.3	11.3	11.3	13.3	14.6
CEPS	11.2	14.5	15.7	18.1	19.6
BV	51.5	69.5	75.4	82.7	90.8
Valuation (x)*					
Adj P/E	7.4	9.7	12.1	10.2	9.3
P/BV	1.2	1.6	1.8	1.6	1.5
EV/EBITDA	5.1	6.5	8.3	6.7	5.8
EV/Sales	0.9	0.9	0.8	0.8	0.7
Adj Mcap / Core PBT	5.5	7.2	10.0	7.9	6.7
Adj Mcap / Adj OCF	5.9	13.9	10.2	8.5	7.5

Source: Company, SMIFS Research Estimates

Balance Sheet					
YE March (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Source of funds					
Share Capital	345	378	378	378	378
Reserves & Surplus	19,085	25,845	28,071	30,829	33,910
Shareholders' Funds	19,430	26,222	28,449	31,206	34,287
Total Loan Funds	7,690	8,745	11,695	10,907	10,376
Other Liabilities	2,812	2,848	3,982	4,283	4,611
Total Liabilities	29,932	37,815	44,126	46,396	49,274
Application of funds					
Gross Block	21,900	25,574	33,932	37,040	38,650
Net Block	17,424	19,341	25,437	26,150	25,310
Capital WIP	2,668	1,753	1,717	674	521
Investments	1,963	5,880	4,438	4,529	4,569
Other Non-Current Assets	512	1,466	2,019	2,454	2,893
Inventories	4,448	6,039	7,068	7,379	7,709
Sundry Debtors	7,085	11,051	14,282	15,363	16,539
Cash and bank balances	2,644	1,591	818	2,121	4,627
Other current assets	517	727	1,001	1,221	1,452
Total Current Assets	14,694	19,408	23,168	26,083	30,326
Sundry Creditors	5,916	9,111	10,923	11,403	11,914
Other current liabilities	1,412	921	1,730	2,090	2,431
Total Current Liabilities	7,328	10,032	12,652	13,494	14,345
Net Current Assets	7,365	9,376	10,516	12,589	15,981
Total Assets	29,932	37,815	44,126	46,396	49,274

Source: Company, SMIFS Research Estimates

Cash Flow					
YE March (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Operating profit before WC changes	5,134	6,584	6,979	8,266	9,005
Net changes in working capital	-624	-2,644	-882	-942	-1,028
Tax Paid	-660	-1,036	-895	-1,288	-1,460
Cash flow from operating activities	3,850	2,904	5,202	6,036	6,518
Adj. OCF	3,511	2,613	4,761	5,570	6,023
Capital expenditure	-1,141	-3,062	-7,725	-1,471	-858
Adj FCF	2,371	-449	-2,964	4,099	5,164
Cash flow from investing activities	-2,027	-5,407	-6,008	-1,262	-574
Debt	63	770	2,500	-750	-500
Dividend	-1,206	-1,887	-2,076	-2,265	-2,454
Interest and Lease	-652	-617	-440	-465	-495
Cash flow from financing activities	-1,795	2,167	33	-3,470	-3,438
Net change in cash	28	-336	-773	1,303	2,506

Source: Company, SMIFS Research Estimates

Disclaimer

Analyst Certification:

We /I, the above-mentioned Research Analyst(s) of SMIFS Limited (in short “SMIFS / the Company”), authors and the names subscribed to this Research Report, hereby certify that all of the views expressed in this Research Report accurately reflect our views about the subject issuer(s) or securities and distributed as per SEBI (Research Analysts) Regulations 2014. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this Research Report. It is also confirmed that We/I, the above mentioned Research Analyst(s) of this Research Report have not received any compensation from the subject companies mentioned in the Research Report in the preceding twelve months and do not serve as an officer, director or employee of the subject companies mentioned in the Research Report.

Terms & Conditions and Other Disclosures:

SMIFS Limited is engaged in the business of Stock Broking, Depository Services, Portfolio Management and Distribution of Financial Products. SMIFS Limited is registered as Research Analyst Entity with Securities & Exchange Board of India (SEBI) with Registration Number – INH300001474.

SMIFS and our associates might have investment banking and other business relationship with a significant percentage of companies covered by our Research Analysts. SMIFS generally prohibits its analysts, persons reporting to analysts and their relatives from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover.

The information and opinions in this Research Report have been prepared by SMIFS and are subject to change without any notice. The Research Report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of SMIFS Limited. While we would endeavor to update the information herein on a reasonable basis, SMIFS is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent SMIFS from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or policies of SMIFS, in circumstances where SMIFS might be acting in an advisory capacity to this company, or in certain other circumstances.

This Research Report is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This Research Report and information herein is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Securities as defined in clause (h) of section 2 of the Securities Contract Act, 1956, includes Financial Instruments, Currency and Commodity Derivatives. Though disseminated to all the customers simultaneously, not all customers may receive this Research Report at the same time. SMIFS will not treat recipients as customers by virtue of their receiving this Research Report. Nothing in this Research Report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this Research Report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. SMIFS accepts no liabilities whatsoever for any loss or damage of any kind arising

out of the use of this Research Report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice. The information given in this report is as of date of this report and there can be no assurance that future results or events will be consistent with this information. The information provided in this report remains, unless otherwise stated, the copyright of SMIFS. All layout, design, original artwork, concepts and intellectual Properties remains the property and copyright of SMIFS and may not be used in any form or for any purpose whatsoever by any party without the express written permission of the SMIFS.

SMIFS shall not be liable for any delay or any other interruption which may occur in presenting the data due to any reason including network (Internet) reasons or snags in the system, breakdown of the system or any other equipment, server breakdown, maintenance shutdown, breakdown of communication services or inability of SMIFS to present the data. In no event shall SMIFS be liable for any damages, including without limitation direct or indirect, special, incidental, or consequential damages, losses or expenses arising in connection with the data presented by the SMIFS through this report.

Participants in foreign exchange transactions may incur risks arising from several factors, including the following: (a) Exchange Rates can be volatile and are subject to large fluctuations; (b) the value of currencies may be affected by numerous market factors, including world and notional economic, political and regulatory events, events in Equity & Debt Markets and changes in interest rates; and (c) Currencies may be subject to devaluation or government imposed Exchange Controls which could affect the value of the Currency. Investors in securities such as Currency Derivatives, whose values are affected by the currency of an underlying security, effectively assume currency risk.

Since associates of SMIFS are engaged in various financial service businesses, they might have financial interests or beneficial ownership in various companies including the subject company/companies mentioned in this Research Report.

SMIFS and its Associates, Officers, Directors, Employees, Research Analysts including their relatives worldwide may: (i) from time to time may have long or short positions in, and buy or sell the Securities, mentioned herein or (ii) be engaged in any other transaction involving such Securities and earn brokerage or other compensation of the Subject Company/ companies mentioned herein or act as an Advisor or Lender/Borrower to such Companies or have other potential/material Conflict of Interest with respect to any recommendation and related information and opinions at the time of the publication of the Research Report or at the time of Public Appearance.

SMIFS does not have proprietary trades but may at a future date, opt for the same with prior intimation to Clients/ Investors and extant Authorities where it may have proprietary long/short position in the above Scrip(s) and therefore should be considered as interested.

The views provided herein are general in nature and do not consider Risk Appetite or Investment Objective of any particular Investor; Clients/ Readers/ Subscribers of this Research Report are requested to take independent professional advice before investing, however the same shall have no bearing whatsoever on the specific recommendations made by the analysts, as the recommendations made by the analysts are completely independent views of the Associates of SMIFS even though there might exist an inherent conflict of interest in some of the stocks mentioned in the Research Report.

The information provided herein should not be construed as invitation or solicitation to do business with SMIFS.

SMIFS or its subsidiaries collectively or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the Research Report as of the last day of the month preceding the publication of the Research Report.

SMIFS encourages independence in Research Report preparation and strives to minimize conflict in preparation of Research Report. Accordingly, neither SMIFS and their Associates nor the Research Analysts and their relatives have any material conflict of interest at the time of publication of this Research Report or at the time of the Public Appearance, if any.

SMIFS or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

SMIFS or its associates might have received any compensation from the companies mentioned in the Research Report during the period preceding twelve months from the date of this Research Report for services in respect of managing or co-managing public offerings, corporate finance, investment banking, brokerage services or other advisory service in a merger or specific transaction from the subject company.

SMIFS or its associates might have received any compensation for products or services other than investment banking or brokerage services from the subject companies mentioned in the Research Report in the past twelve months.

SMIFS or its associates or its Research Analysts did not receive any compensation or other benefits whatsoever from the subject companies mentioned in the Research Report or third party in connection with preparation of the Research Report.

Compensation of Research Analysts is not based on any specific Investment Banking or Brokerage Service Transactions.

The Research Analysts might have served as an officer, director or employee of the subject company.

SMIFS and its Associates, Officers, Directors, Employees, Research Analysts including their relatives worldwide may have been engaged in market making activity for the companies mentioned in the Research Report.

SMIFS may have issued other Research Reports that are inconsistent with and reach different conclusion from the information presented in this Research Report.

A graph of daily closing prices of the securities/commodities is also available at www.nseindia.com and/or www.bseindia.com, www.mcxindia.com and/or www.icex.com.

SMIFS submit' s that no material disciplinary action has been taken on the Company by any Regulatory Authority impacting Equity Research Analysis activities in last 3 years.

This Research Report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject SMIFS and affiliates to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction.

Specific Disclosures

1. SMIFS, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
2. SMIFS, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company.
3. SMIFS, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months.
4. SMIFS, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report.
5. Research Analyst has not served as director/officer/employee in the subject company
6. SMIFS has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months.
7. SMIFS has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
8. SMIFS has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months.
9. SMIFS has not received any compensation or other benefits from third party in connection with the research report.
10. SMIFS has not engaged in market making activity for the subject company

Analyst holding in stock: **NO**

Key to SMIFS Investment Rankings

Buy: Return >15%, Accumulate: Return between 5% to 15%, Reduce: Return between -5% to +5%, Sell: Return < -5%

Contact us:

SMIFS Limited. (<https://www.smifs.com/>)

Compliance Officer:

Sudipto Datta,

5F Vaibhav, 4 Lee Road, Kolkata 700020, West Bengal, India.

Contact No.: +91 33 4011 5401 / +91 33 6634 5401

Email Id.: compliance@smifs.com

Mumbai Office:

206/207, Trade Centre, Bandra Kurla Complex (BKC), Bandra East, Mumbai – 400051, India

Contact No.: (D) +91 22 4200 5508, (B) +91 22 4200 5555

Email Id: institutional.equities@smifs.com

Kolkata Office:

Vaibhav, 4 Lee Road, Kolkata 700020, West Bengal, India.

Contact No.: (D) +91 33 6634 5408, (B) +91 33 4011 5400

Email Id: smifs.institutional@smifs.com
