

1. Policy and Business Operations Overview

Birla Carbon (Thailand) Public Company Limited (THE COMPANY) (formerly “Thai Carbon Black Public Co., Ltd.”) was incorporated in 1978 to produce Carbon Black (CB). The commercial operation began with a capacity of 16,000 TPA of CB. With regular expansions and debottlenecking, The company’s current capacity stands at 275,000 TPA which is 17 times of its initial capacity. The company also has the capacity to produce 370 MT / hour of Steam and 49.70 MW / hour of Electricity. The company is listed at Stock Exchange of Thailand since 1990 with market capitalization of Baht 11,775 million as on 31st March 2020.

Factory is located in Angthong province. The company is accredited IATF16946:2016, OHSAS 18001:2007, ISO14001:2015. The company has also been awarded the prestigious TPM Excellence award by JIPM, Japan and Deming prize for total quality management.

Our product under brand of “Birla Carbon” offers wide range of Carbon Black for Rubber and specialty applications.

Almost 25% of the company’s production is exported to more than 10 countries worldwide. The company’s product meets the stringent quality expectations of customers in Japan, Australia, Philippines, Singapore, India, Malaysia, Indonesia, Vietnam, Taiwan etc

The company has been making continuous efforts to improve productivity and quality of its products to cater high-end markets. Being a prominent exporter, a significant contributor to exchequer and a major employer in Angthong Province, the company is contributing to the economy of Thailand.

1.1 Vision, Mission

Vision : To be the most respected, dynamic and sustainable global Carbon Black Business

Mission : To be a premium global conglomerate with a clear focus on each business

1.2 Development and Significant changes in 2019-20

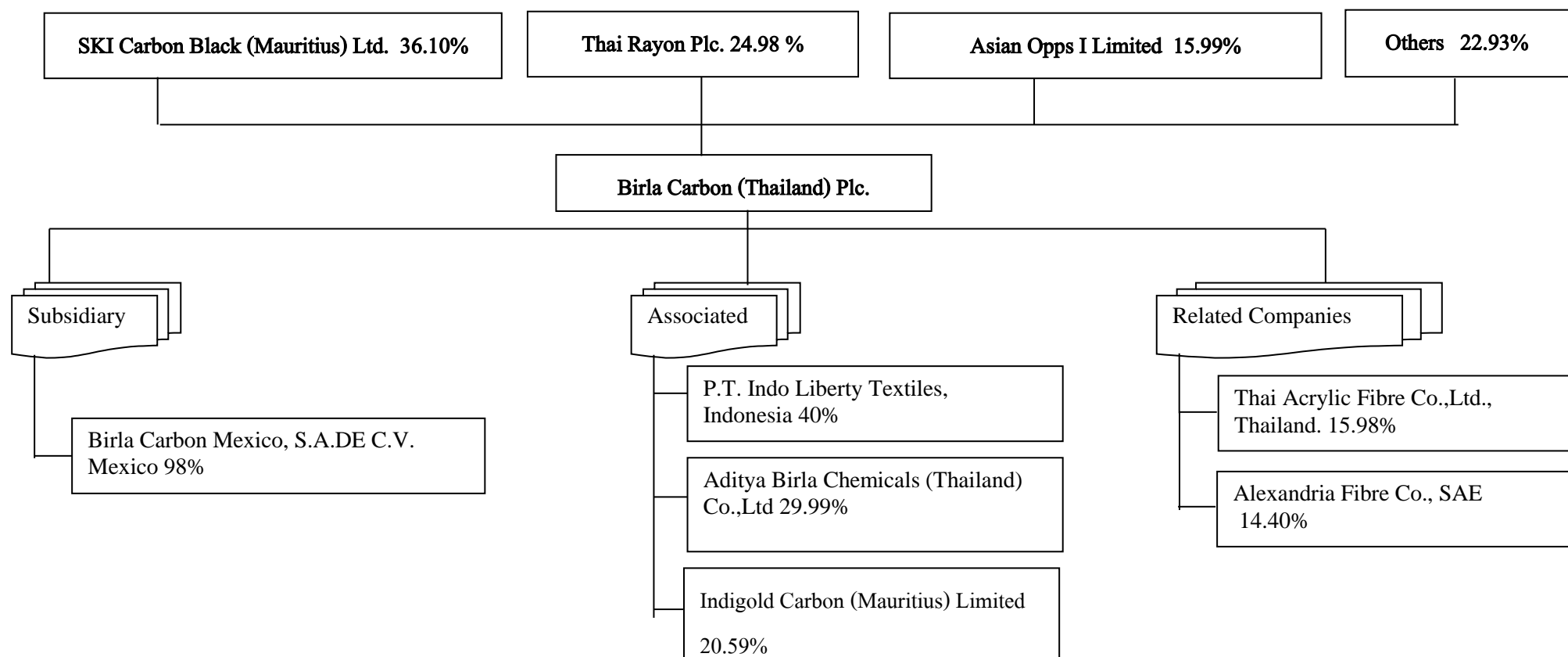
29th May 2019:

The Board of Directors' passed the resolution to recommended to Annual General Meeting of shareholders to pay dividend of Baht 1.10 per share amounting to Baht 330 million.

9th September 2019:

The Company received the Outstanding Establishment Award for Labor Relations and Labor Welfare of the Year 2019 from the Ministry of Labor on September 9, 2019.

1.3 INVESTMENT STRUCTURE OF THAI CARBON BLACK PUBLIC COMPANY LIMITED (as on 31 March 2020)



1.4 SHAREHOLDING STRUCTURE

Company Name	Activity	Paid-up Capital	% Share Holdings	Cost of Investment (MB)	Other Major Shareholders (>10%)
Subsidiary Companies					
Birla Carbon Mexico, S.A.DE C.V. (Registered in Mexico)	Manufacture of carbon black (under liquidation process)	4.5 million Mexican Peso	98.00	12.85	
Associated Companies					
Aditya Birla Chemicals (Thailand) Co., Ltd	Manufacture of Caustic Soda & Epichlorohydrin, chlor-alkali, epoxy resins, phosphates and sulphites	Baht 1,700 Million	29.99	509.82	1.Thai Rayon Pcl (29.98%)
P.T. Indo Liberty Textiles (Registered in Indonesia)	Manufacture of Synthetic Yarn	USD 19.5 Million	40.00	196.95	1.Thai Rayon Plc. (40%) 2.Cheddington Trading Company Inc. (16%)
Indigold carbon (Mauritius) Limited	Manufacture of Carbon Black	USD 10 million	20.59	63.60	1. SKI Investments Pte Ltd – 58.82% 2. Alexandria Carbon Black – 20.59%

2. Nature of Business

Revenue Structure

(Unit : Million Baht)

Product/Service	For the year ended				
	31 March				
	2020	2019	2018	2017	2016
Domestic	5,425	6,181	5,372	3,128	2,941
Export	2,069	2,369	1,952	1,912	1,895
Other income	840	734	473	455	441
Total revenue	8,334	9,284	7,797	5,495	5,277

Company produces carbon black as a main product

2.1 Products Features

Carbon Black

Carbon Black is elemental carbon in the form of extremely fine particles having an amorphous molecular structure. It's derived from the incomplete combustion through controlled process. In the older times, Chinese used Carbon Black produced from resins and vegetable oils in inks and water colors. The Greeks and Romans used Carbon Black to paint the walls of their buildings. Today, Carbon Black's biggest application is as reinforcing filler in rubber products. Manipulation of Carbon Black surface can enhance the physical properties of rubber. Almost all rubber products, especially those that need to have abrasion wear properties, use Carbon Black; hence, they are black in color. It also helps conduct heat away from the tread and belt area of the tire, reducing thermal damage and increasing tire life. Carbon black particles are also employed in some radar absorbent materials and in photocopier and laser printer toner, and other inks and paints. The high tinting strength and stability of carbon black has also provided use in coloring of resins and films. Additionally, carbon black has been used in various applications for electronics. As a good conductor of electricity, carbon black is used as filler mixed in plastics, elastomer, paints, films, adhesives, and paints. Application of carbon black as an antistatic agent has provided uses as an additive for fuel caps and pipes for automobiles.

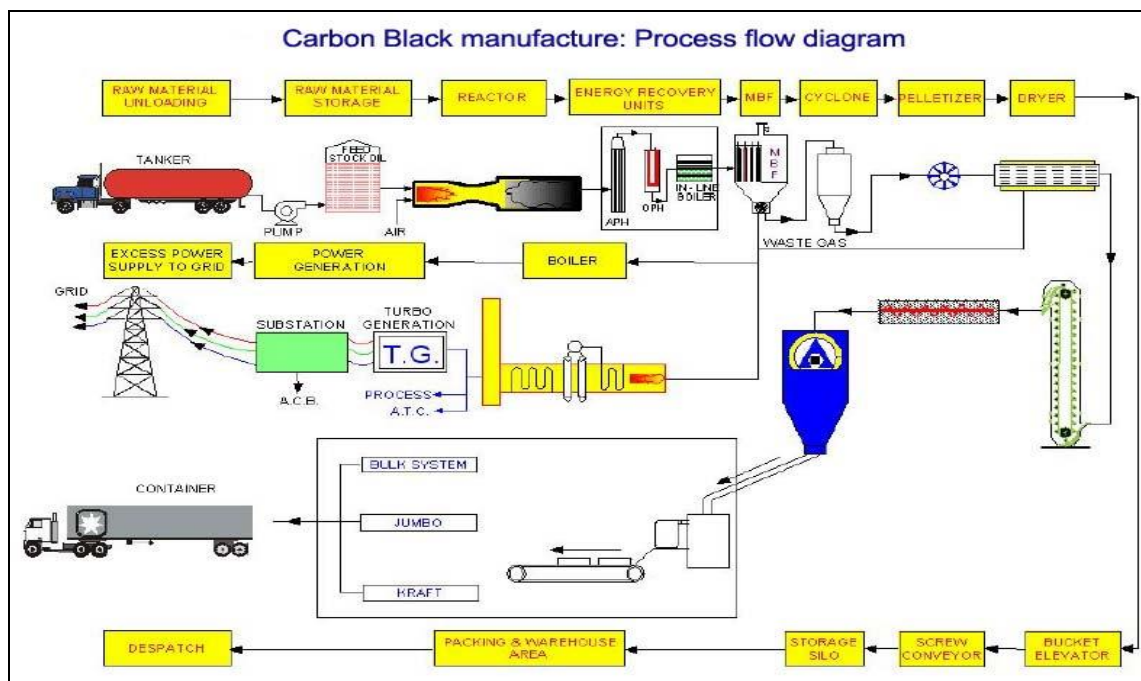
Manufacturing process

Carbon Black is produced by partial combustion of oils and pyrolysis in the reactor. Carbon Black feed stock is suitably blended before charging into the reactors. Predetermined quantities of process air from a process air header system, fuel natural gas and Carbon Black feedstock are introduced into the reactor, which has been brought up to the desired temperature level.

At the initial stage, carbon nuclei or precursors formed from the oil combine to form aggregates. The reaction is stopped at suitable points by direct quenching with water, at predetermined locations with predetermined quantities. The entire operation of flow, including the temperature measurements is controlled by computer-supervised electronic instrumentation.

Effluents from the reactors are essentially carbon-laden flue gases containing some combustibles. These gases are at a temperature between 700oC and 900oC. This heat is first utilized in preheating incoming process air in an air pre-heater and then reused to heat incoming Carbon Black feed stock in an oil pre-heater. This process maximizes heat recovery and process efficiency. The effluents from the reactors pass into an inline boiler and then into a common header called smoke header.

The smoke header leads the carbon-laden flue into the main bag filter. Inlet of the flue is controlled at about 280 degree Centigrade. The main bag filter is a filter house consisting of multi-cylinders, where Carbon Black is filtered. Clean gases containing combustibles pass out of the filter to the Carbon Black pellet dryer. Carbon black is recovered from the bag filters by reverse flow of the flue gases into the cylinders, performed in rotation one at a time. Carbon Black thus released from the bags accumulates in the hopper and is dropped into a pneumatic conveying line through air lock valves. Two pneumatic conveying fans draw carbon black from underneath the hopper.



Loose Carbon Black and the conveying gases are drawn through two micro pulverisers and transferred to the accumulator tank through a conveying cyclone separator. The purpose of this cyclone is to separate Carbon Black from the conveying gas. Loose Carbon Black from the cyclone separator falls into the accumulator tank and the conveying gas is drawn by a return fan and returned to the smoke header at the bag filter inlet.

Carbon Black collected in the accumulator tank is in a fluffy, powdery form, and being difficult to handle as such, has to be pelletized. Pelletization is achieved in a proprietary machine called wet pelletizer where the loose Carbon Black is mixed with a near equal quantity of water and small quantities of pellet binders. An indirectly fired rotary drum dryer is used to dry the wet pellets. Drying is achieved by burning the part of the waste gases from the main bag filter in a specially designed combustor. Water vapors from the dryer are drawn by an exhaust blower and the exhaust or purge gas exits to the atmosphere.

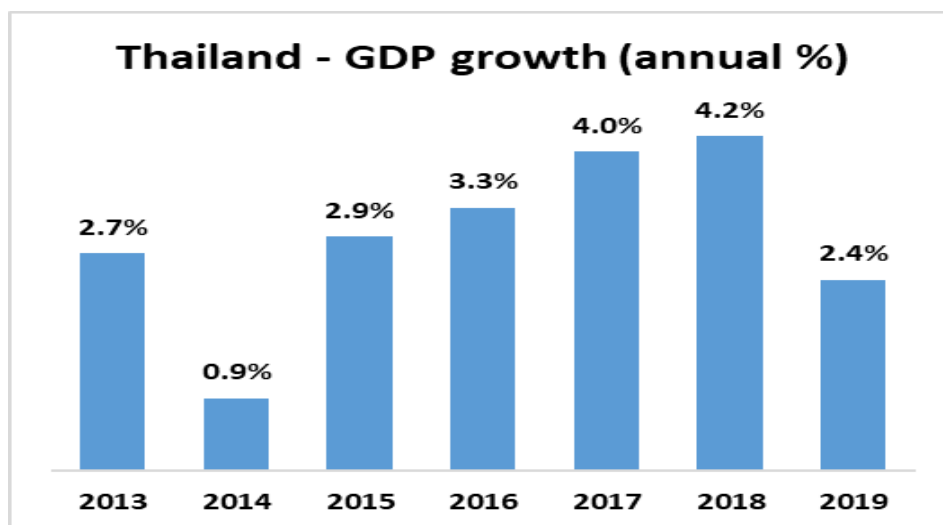
The entire operation is completely automatic, achieved by sophisticated electronic distributed control system of instrumentation. The dried Carbon Black is lifted by a bucket elevator and passed through a scalper screen to separate lumps from the product and a magnetic separator to separate accidental contamination of Carbon Black by magnetic particles before discharging into product storage tanks by product screw conveyors. Lumps separated from the product are returned for reprocessing.

The black is then packed into multi-wall paper bags, polyethylene bags or super-sacks for dispatch to customers. The packing of paper bags/ polyethylene bags are achieved by fluidizing of Carbon Black and super-sacks by gravity fill.

2.2 Market and Competition

Macroeconomic overview:

As per the National Economic and Social Development Council, Thailand (NESDC) the Thailand economy grown at 2.4 percent during year 2019, compared with 4.2 percent for 2018. The drop of 1.8 percent over year 2018 mainly due to negative growth of - 0.2 & -0.7 percent in agriculture & manufacturing sector. There was drop of - 2.6 percent in exports of goods as compared positive growth of 3.3 percent in year 2018. The Headline inflation averaged at 0.7 percent against 1.1 percent in year 2018. On Monetary front current account recorded a surplus of 6.8 percent of GDP mainly due to depressed imports in export led sluggish economy. During the year, Thai Baht has appreciated against USD by 8.6% which was the highest among Asian Currencies. The Thai baht's appreciation has been driven by the Thailand's strong current account surplus and strong foreign investor sentiment with perception of safe-haven currency. However, the baht's strengthening has been a challenge for the local economy, driving exports down and pushing up prices for tourist spending power.



On the expenditure side, Government & Private consumption remained lower at 1.4 percent & 4.5 percent respectively during the year 2019 as compared at 2.6 percent & 4.6 percent during Year 2018. The Fixed capital formation investment grew at 2.2 percent which was lower by 1.6 percent as compared to Year 2018. Thai Economy in the first calendar quarter (January to March) of 2020 contracted by 1.8 percent, compared to a rise of 1.5 percent in the previous quarter. On the production side all sectors during the Jan- March 20 quarter on y/y basis have shown a negative growth ranging from

– 24.1 percent to – 1.4 percent with only exception of trade & real estate sector showing growth of 4.5 percent & 1.6 percent respectively .

The NESDC 's projection on Thai economy have a forecast of contraction in the range of -6% to -5 % during the Year 2020 due to following factors:

- (i) Severe downturn of global economy and merchandised trade that will limit manufacturing & export expansion,
- (ii) Sharp decline in revenues from foreign tourists due to drop of no. of tourist arrivals due to travel restriction & fear of COVID-19 outbreak,
- (iii) Drought condition that may have negative impact on production from agricultural sector,
- (iv) Delay in the budget approval process for FY2020 which tends to lower the contribution from public expenditure and unclear policy framework.

In all, it is expected that export values of goods, private consumption expenditure, and total investment will decline by 8.0 percent, 1.7 percent, and 2.1 percent, respectively. Meanwhile, the headline inflation is expected to be in a range of (-1.5) to (-0.5) percent, and the current account tends to register a surplus of 4.9 percent of GDP.

The projection is based on the expectation that limitations from the delayed budgetary process will end in the first quarter while the COVID-19 outbreak will subside within the second half. The economy will thus recover to a normal trend in the second half of the year. Under such conditions, it is expected that the economic growth would return to its normal pace in the second half of the year 2020, supported by

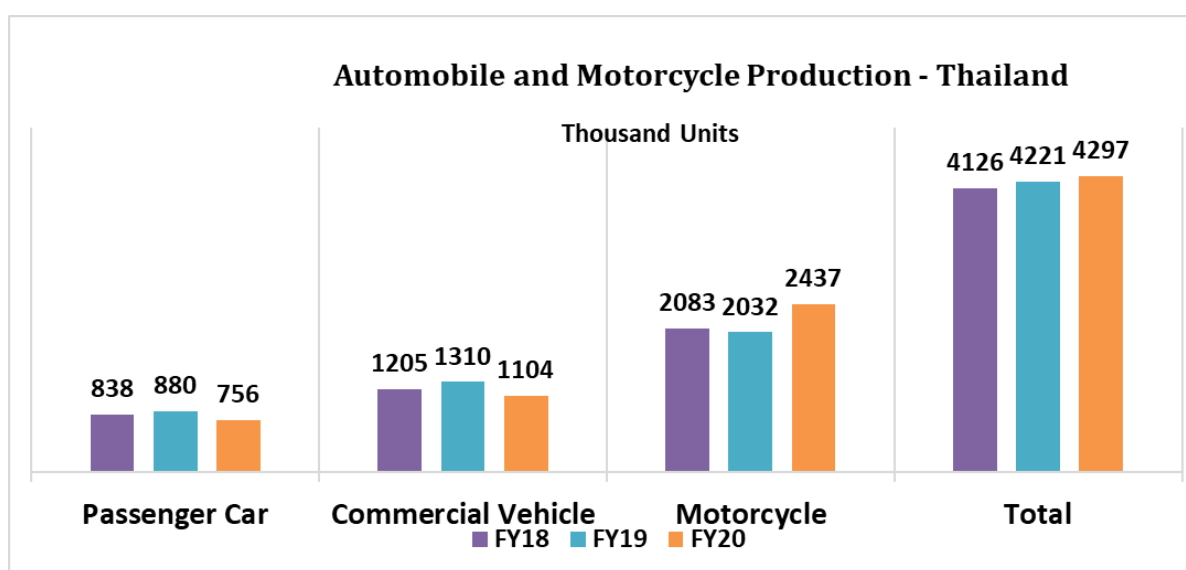
- (i) the recovery in global economy, which, in turn, causes the export and manufacturing sectors to resume their expansions although at a low pace,
- (ii) the satisfactory expansion in domestic demand,
- (iii) supports from government measures.

Thailand - Automotive and Tire Segment

The automotive industry is the largest user of Carbon Black products like in tires, rubber components & many of the profiles/coatings.

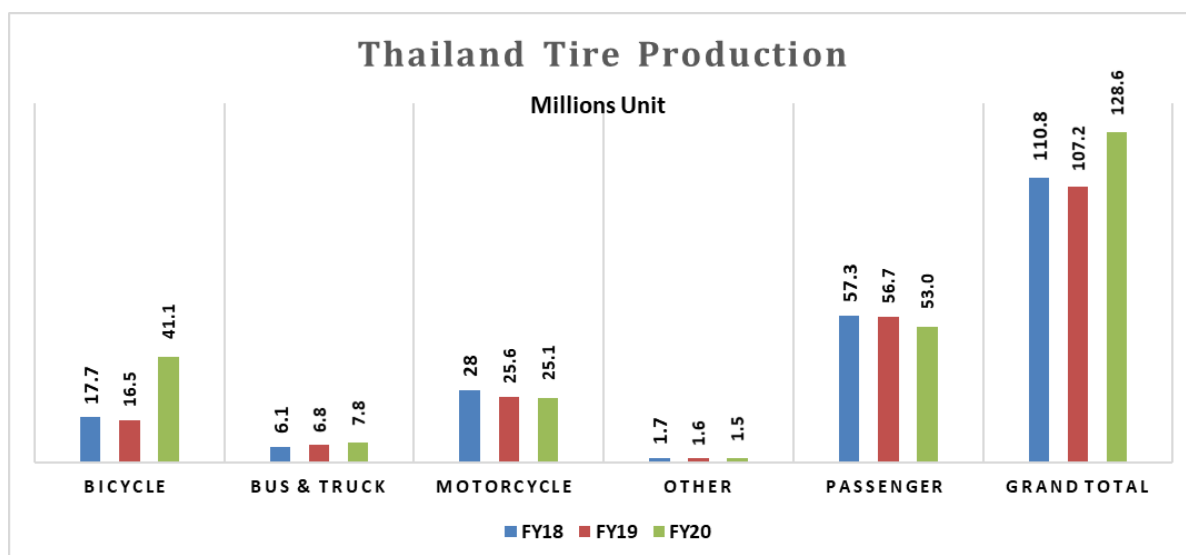
The Carbon Black demand from the automobile industry is generated by OEM demand from vehicle manufacturers and replacement demand from after- sales markets. The sector is highly susceptible to economic growth & consumer spending.

As per the data Published by Office of Industrial Economics Thailand; Thai Automobile & Motorcycle production grew by 1.8% in FY20 vs. FY19. Motorcycle production grew by 20% YoY but offset by drop in production of Passenger Car by 14.1% & Commercial Vehicle by 15.7%.



Source: Office of Industrial Economics, Thailand

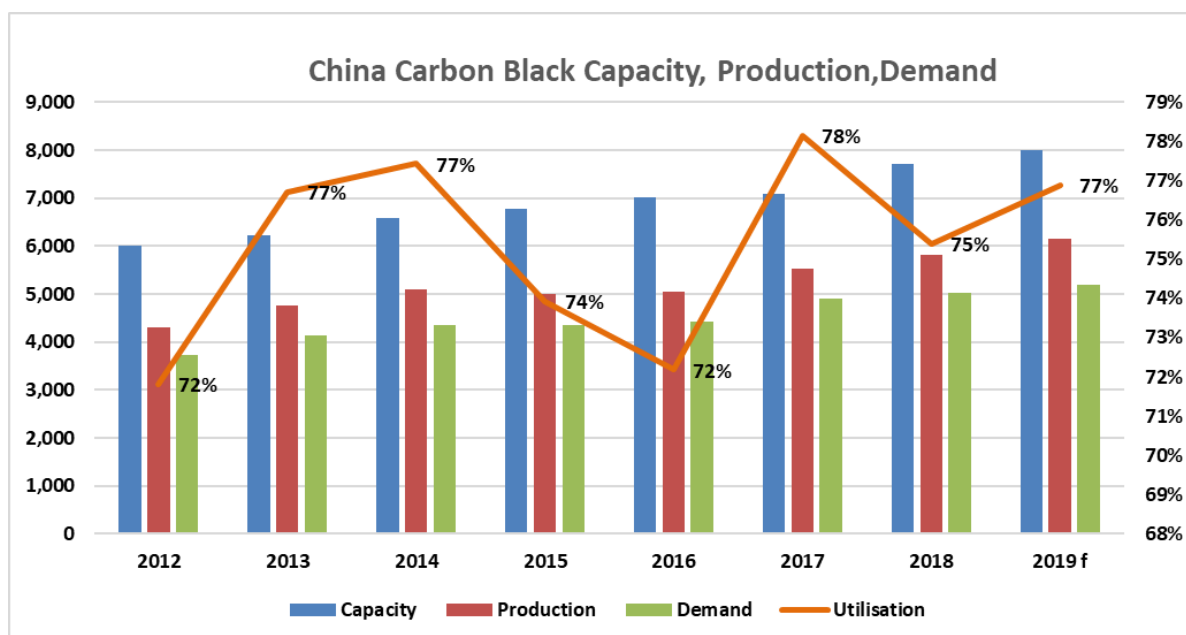
As per the Office of Industrial Economics, Thailand; overall Tire production increased by 20% in FY20 vs. FY19. Bicycle tire production increased by 149%, Bus Truck Tire increased by 15% offset by decrease by 2% in Motor Cycle Tire, 7% in Passenger Car Tire & 3% in other in FY20 vs FY19.



Source: Office of Industrial Economics, Thailand

China

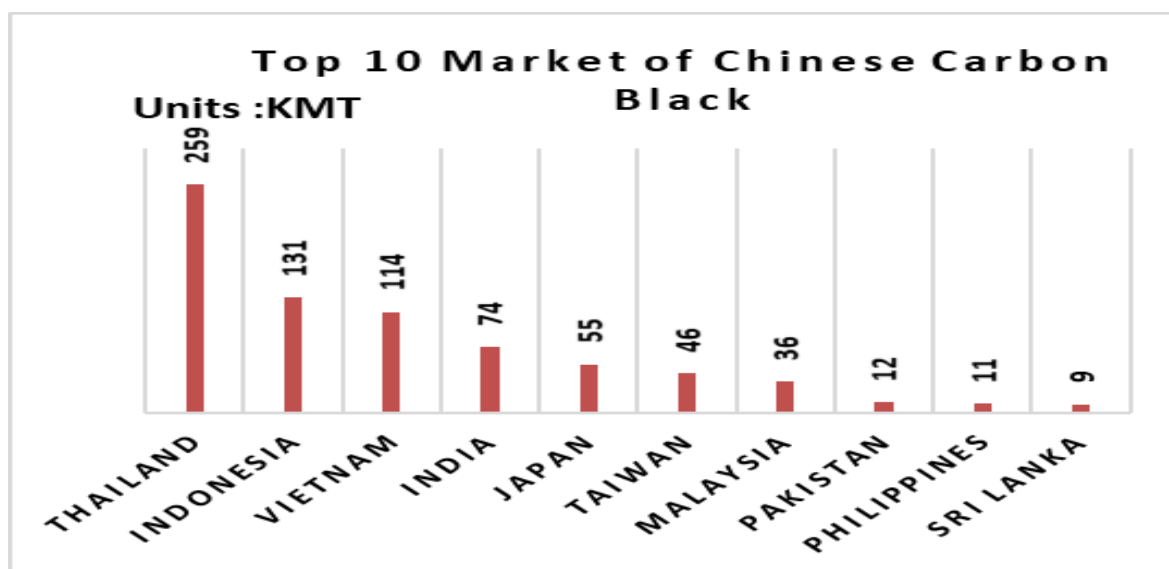
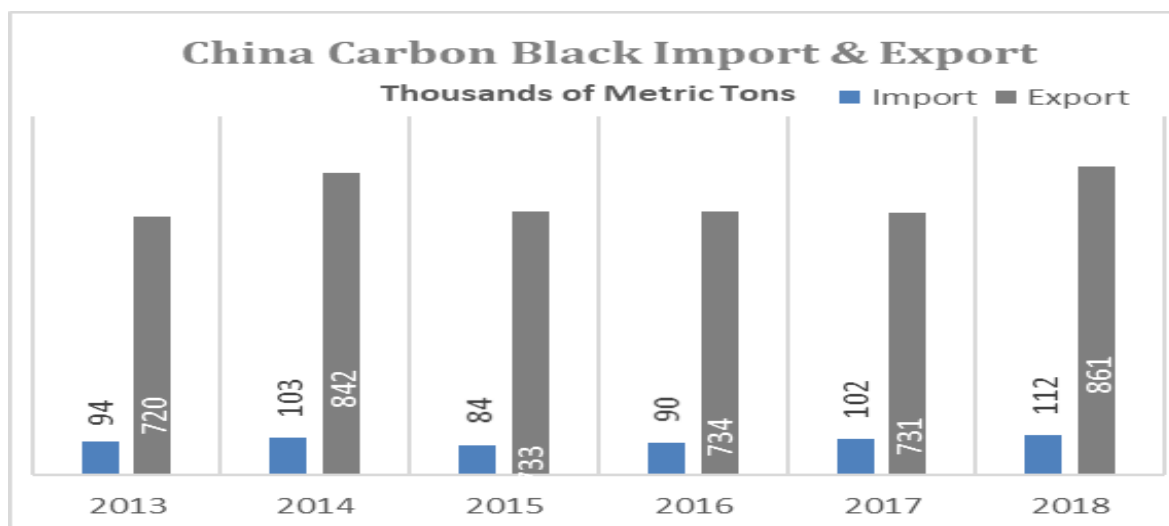
According to Notch CQBN Report- Jan 20, Chinese Carbon Black provisional figures of production in 2019 is expected to contract to 5.7 million tons, a decrease of -1.2% over 2018. Chinese Carbon Black domestic demand in 2019 is expected to remain same as 2018.



Source: Report from Notch Consulting Group

China's industry operated at 72% of capacity in 2019 against 75% in 2018. World excluding China industry's utilization rate averaged 81% in 2019 drop of 3% compared to 2018. This decline is attributable to capacity expansion activity in 2019 – the industry added a total of 703 KT of new capacity during the year and lower demand.

Further, Chinese producers are facing higher cost pressure due to continued unfavorable price gap between coal tar & petroleum-based feed stocks albeit at increasing range. The volume growth is further limited due to sluggish exports of local rubber-based products & carbon black due to global sentiments in view of COVID-19 origination.

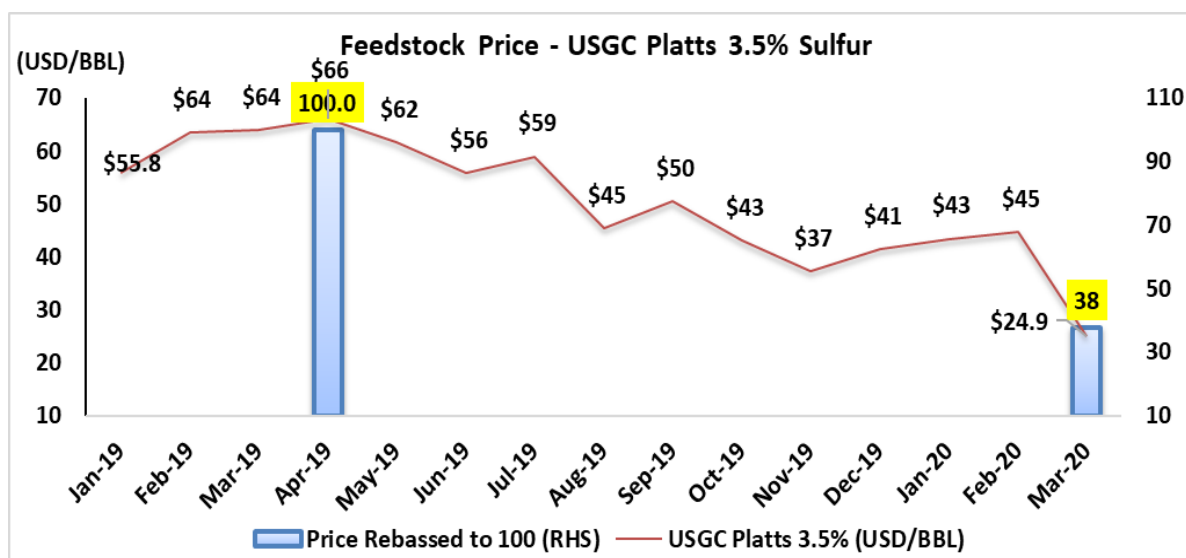


In 2019, the Chinese Carbon Black export was 828 KT. The major destinations of Chinese Carbon Black were nearby Asian countries like Thailand, Indonesia, India, Vietnam, Japan, Taiwan, Malaysia, Philippines etc.

During current year volatility continued due to US China Trade war, contraction in economy of trading countries and emergence of COVID -19 which geographic spread resulted in severe disruptions of economic activity. Your Company sold 226 KT of Carbon Black in FY20, an increase of 4% over preceding year. The increase in sales volume came from growth in both domestic & export segments due

to US China trade war & complete shutdown of China's supply chain system on account of Covid-19 during Apr- March 20 quarter.

Feedstock prices during current year was mostly on downward spiral reaching at a record low in March 20. Feedstock prices of USGC Platts 3.5 % sulfur (HSFO) continued downward fall from \$66/Bbl in Apr'2019 to a historical low at \$25/Bbl in Mar'20. If the HSFO prices were to rebased to a 100 with April 20 as the reference point, by March 2020 these prices had depreciated 0.38x



Chinese coal tar prices were also on downward trend throughout the year Thus Chinese coal tar prices dropped by 30% over the current year.

Due to continued decreased availability of high-quality feedstock from the US Gulf coast and increased demand, heavier slurries were traded at premiums ranging from \$25-50 per ton. Your Company put every effort to neutralize the downside effects of such premiums through price recovery from customers by pass through efforts & initiatives. Prudent purchases of FS in the year resulted in cost savings whilst managing volatility risk.

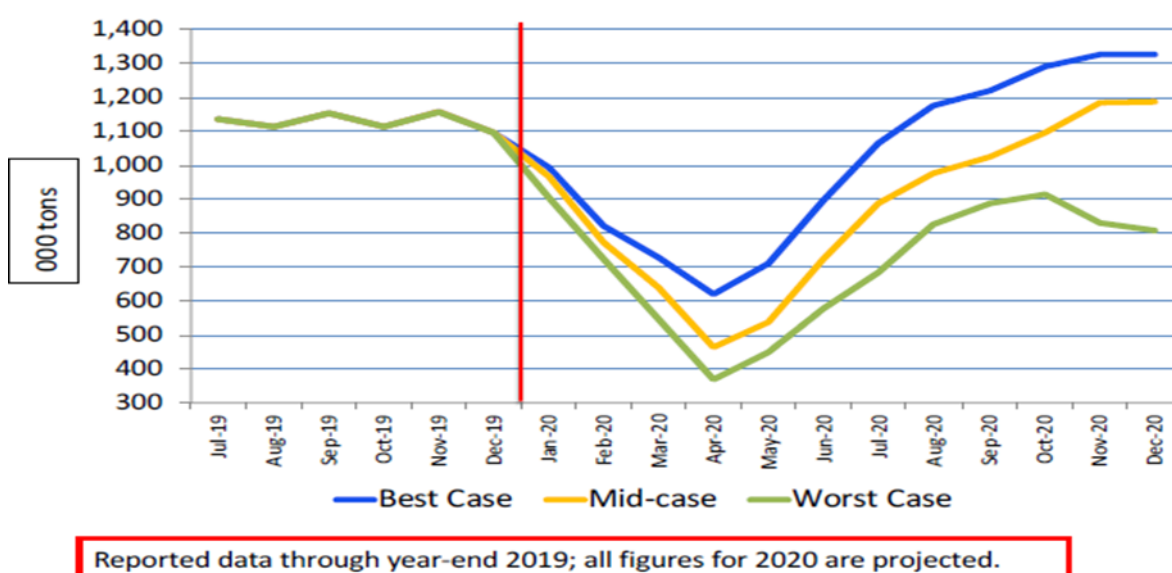
There was complete focus on other Cost items. Your Company positioned itself with value pricing in the market well supported through core competence of excellent quality, on time delivery & customer service programs.

Impact of Covid-19 on Carbon Black Industry

Shelter-in-place and stay-at-home directives intended to minimize transmission of COVID-19 are causing an unprecedented disruption to the global economy

- The geographic spread of COVID-19 is causing shut-downs at different times by region, with China and parts of Southeast Asia being hit hardest from January to March, Europe being hit hardest from February to April, and North America likely being hit hardest from March to May.
- Nearly all major tire companies have announced temporary plant shutdowns. Startup dates are in question pending the lifting of stay-at-home orders.
- Passenger car tires appear to be the hardest hit sector due to declines in both the OE and replacement segments as consumers are not driving and cutting spending to bare essentials.
- Truck tire replacement demand and retreading activities are benefiting from the essential role the trucking industry serves in the global supply chain – these segments could be relative bright spots in an otherwise dismal short-term outlook for rubber and carbon black.
- MRG markets also are feeling the effect of extremely weak demand for oil and gas equipment due to low energy prices.
- For carbon black, plastics remain a relative bright spot in the market, led by black masterbatch used for agricultural film, trash bags, containers etc.

World – Projected Carbon Black Demand During COVID-19 Crisis



Strategic initiatives:*Operational excellence*

The company has maintained operational excellence in all spheres of manufacturing activities. The Company continued to remain focus on operational safety and implementing global standards of HSE helped to improve the safety culture of the organization. Innovative technical solutions were taken up to increase the oil and air temperatures to improve yield & energy savings. The productivity of our employees, supported by well-established processes and tools, financial support of management and freedom to take decisions, has improved significantly.

Market Structure

Carbon Black is a highly competitive market with over fifty carbon black producers worldwide. There are Global, Regional and local players. Birla Carbon is one of the leading carbon black producers in the world with global footprint and holds a 13% share of global capacity. Birla Carbon Thailand is part of Birla Carbon and one of the core businesses of Aditya Birla Group, an Indian multinational conglomerate. Birla Carbon Thailand is one of the sixteen manufacturing units of Birla Carbon and is one of the largest unit at single location. In line with other Birla Carbon plants worldwide Birla Carbon Thailand competes on value propositions of R&D capabilities, superior & consistent product quality and robust customer engagement.

Carbon black has primarily two applications, rubber and non-rubber (specialty). Rubber grades are used in tire and non tire applications. Non tire applications are further divided into automotive mechanical rubber goods and industrial goods. Non Rubber applications (specialty) are primarily in paints, inks, coatings and plastics segment. The tire application globally holds about 74% of the demand share followed by non tire at 20% and specialty at 7%. The world carbon black demand is forecasted to grow at a CAGR of 2.8% and in Asia at a CAGR of 3.2% during 2017 to 2022.

The Carbon Black Industry continues to witness a huge shift in the demand and supply situation globally; the industry going through a massive change with rubber black capacities contracting. The sustainability of the carbon black plants has become the driving force for the industry with various government agencies aggressively addressing the environmental issues. Birla Carbon has maintained leadership position in this aspect of the business by continuing to reinvest in our existing facilities to ensure compliance to the environmental norms.

Due to concentration of tire manufacturers, Asia region is one of the largest consumer markets of carbon black accounting for 63% of world's consumption with China dominating the market followed by India, Japan, South Korea and Thailand.

The region was largely balanced till 2010 with Chinese consumption very near to domestic production, but thereafter rapid capacity expansion in China, primarily led by low cost availability of coal-tar created a demand supply gap in the region with an oversupply of carbon black in the market leading to low capacity utilizations, severe competition and pressures on margins. The situation aggravated in 2012 with production in other Asian countries shrinking at expense of increase in both production and exports from China; the situation continued. 2016-17 witnessed significant shift in market dynamics. Crashing oil prices and reduced steel output from China gave competitive edge to non coal tar based carbon black manufacturers. In 2017-18 the Chinese Chemical Industry went through a major challenge in terms of sustainable plant operations due to government's stringent 2020 environment policy framework. In line with its vision Birla Carbon Thailand continued its focus on sustainability further strengthening its position in the market.

Affected by the drastic drop in automobile sales in China and anti-dumping duties on Chinese tires in USA, Europe & India the Chinese tire sales suffered leading to reduction of tire production last year with tire plants capacity utilization dropping to as low as 65%. Chinese tire manufacturers who have plants in Thailand ran full capacity to partially fill up the demand. The situation in China benefited tire manufacturers in Thailand and region with increased opportunity of exports to USA and EU. Low tire production impacted Chinese carbon black manufacturers with low domestic demand and swollen carbon black inventories resulting in increased exports at low prices to dilute their inventories.

Thailand Market

Thailand a major automotive production hub in SEA, is also the largest producer of natural rubber in the world and therefore is one of the major tire manufacturing base in the region with presence of all major global tire producers. In the recent past Thailand has been able to attract four major Chinese tire manufacturers investment whose plants are already up and running and scaling up to capacities. The tire segment accounts for about 79% of the Carbon Black demand in Thailand and the balance is consumed by automotive mechanical rubber goods and specialty. Carbon black consumption in Thailand is expected to grow at a CAGR of 5.2% during 2017-2022 with increased tire production primarily driven by new investments in country in both green field and brown field expansions. Besides PCR the

market demand for carbon black is being driven by an increase in TBR output mainly for export shipments to Americas, EU & Middle East.

Thailand has three carbon black producers and Birla Carbon Thailand is the largest among them with about 54% of the total capacity share. The products are well accepted and established in the international markets including the Japanese customers which form a major portion of the South East Asia region. The company exports significant share of production and is able to meet stringent customer quality requirements through robust quality systems.

Key Success Factors

- Robust customer engagement and regular technical collaborations with Key partners.
- Excellent and consistent product quality, approved by all tire manufacturers worldwide enables a strong brand image.
- Low cost of production through efficient utilization of production facility, and continuous improvements in technology and process. Columbian acquisition has proved invaluable for BCT by providing it access to latest technology developments in carbon black process.
- Excellent customer services including Just in Time delivery to customers
- Experienced, Qualified and motivated workforce and management team
- Sound financial position for making required investments in process, technology and environment
- Focus on sustainable development, excellent relations with all stakeholders, high business ethics and good corporate governance
- Major quality accreditations: IATF 16949, ISO 14001, IQRS Level 7, TPM Special award, TPM Consistency award, TPM Excellence award and Deming Prize

Opportunities

- With deriving synergy from technology after acquisition of Columbian, move into high value added products and specialty grades for various tire and non-tire applications.
- Increase share with existing global customers leveraging the global engagements and excellent services
- Become a cost leader in domestic market through technology and process improvements
- Heavy tariffs against imports of Chinese tires into the USA, India and EU may further shift tire production in Thailand Vietnam & Indonesia.

Threats

- Partial product substitute may be developed in long term period. Trends in tire labeling may prompt tire companies to switch to costlier, less effective but greener products like silica however no significant impact expected in near future
- Demand contraction due to spread of pandemic impacting global economy

External Factors

- Slowdown in global economies due to trade conflict between USA and China and regional imbalance in demand supply situation in Asia
- Exchange Rate Fluctuation - Thai Baht with USD, and other major currencies
- Volatility in feedstock prices driven by global oil market dynamics
- Calamities in Thailand or any of major markets of Birla Carbon Thailand PCL
- Trade barriers by importing countries to protect domestic industry

Work-in-process

-No-

3. Risk Factors

Risk factors

The company has a systematic method of risk identification, impact assessment, and mitigation. A committee of senior executives supervises risk management. Also the audit committee and Board reviews various risks associated with the business and advises management from time to time about the appropriateness of the company's risk management policies and measures. Company has identified following major risks related to its business:

1. External risks

Business cycles

The business of the company is affected by upturn and downturn in economic conditions. The cycles affect sales volumes, competitive situation, prices of finished goods and raw material, operating costs, and also raw material availability.

Regional demand supply mismatches

Rapid expansion of Chinese capacities in last few years, have created demand supply mismatch in the region leading to fierce competition and driving the prices and margins to remain under pressure.

Company has taken various initiatives to keep ahead in competition and mitigate to a large extent the impact of downturn in business cycles and also regional demand supply mismatches. The initiatives include:

- Maintaining differentiation with competitors through superb quality, and on-time deliveries
- Strengthening customer relationship through an active engagement and personalized solutions through customer centricity approach
- Annual contract negotiations with key customers
- Identifying and developing new markets and customers
- Introduction of new product lines
- Strengthening sales and marketing team for rubber goods and specialty blacks
- Continuous investment in technology and process to improve costs and operating efficiencies
- Offering packaged solutions to customers through combined sales and marketing efforts and high level of synergy with other Birla Carbon units in the regions.

Fluctuations in Raw material prices

Prices of raw material, i.e. Carbon black feedstock oil, have shown high volatility in tandem with crude and fuel oil prices. This creates risks in developing suitable pricing methods, business forecasting, inventory management, and maintaining constant operating margins period to period.

The company is employing suitable pricing models, within the flexibility allowed by market conditions, to hedge against the raw material prices as and when required. Also a very lean manufacturing model protects against risks from changes in inventory valuations. In case of abrupt changes in demand, Company suitably hedges the inventory through commodity hedging instruments.

Raw Material constitute 85% of the total operating cost of the company and as discussed above fluctuates in tandem with crude and fuel prices.

Changes in Government policies

World economic situation has brought high level of uncertainty in Government policies, and timing of policy actions is not always predictable. Government decisions like preferential treatment, anti-dumping duties, tax rates, wage rates, inflation measures, etc. directly impact Company's business. Company proactively engages with the Government to represent the management view points, influence the policies in right direction, and be prepared in advance for policy actions.

High degree of volatility in foreign exchange rates

90% of company's raw material is imported in US\$ & 25% of the companies' sales is export which are all in US\$. Company has also lent \$172.94Mn to ICML on which interest is accrued in US\$.

To some extent company's operations create a natural hedge in short term. Also an appropriate use of available hedging instruments like currency swaps, forward contracts, etc. also protect against impact of currency volatility on profits.

Volatility in interest rates

Company's borrowing arrangements are linked to LIBOR and volatility in interest rates affects interest and financing costs.

Natural Disasters like floods, earthquake, tsunami, hurricane, etc. in any of the operating regions, supplier locations, and markets served, affect company's business. Though company has insurance

programs to cover financial impact of natural disasters, the impact of any large scale natural disaster cannot be totally avoided.

Impact of Covid-19

The COVID-19 pandemic has had far-reaching consequences beyond the spread of the disease itself and efforts to quarantine it. As the SARS-CoV-2 virus has spread around the globe, concerns have shifted from supply-side manufacturing issues to decreased business in the services sector. The pandemic caused the largest global recession in history, with more than a third of the global population at the time being placed on lockdown.

Risk from investment in Associated Company

Company investment in associated companies is THB 770 million which as on 31st March 2020 as per equity method is valued at THB 5,163 million. Your Company has also extended loan to Associated Company ICML which as on 31st march 2020 is THB 5,623 million & interest receivable is THB 2,706 million. Totally Investment, loan and interest receivable constitute 63% of the total asset of the Company. The company is therefore exposed to risks from investing in associated companies. Thus if associate companies performance is impacted due to any reasons it will have impact on the financial position of the Company resulting in erosion of Retained Earnings. So your company pay close attention to the performance of your associates and participates in regular review of business performance through direct/ indirect participation in Board of Directors / Shareholder meeting.

2. Internal risks

High concentration of sales in tire customers

Majority of the Company's sales come from Tire customers, which constitute 70% of the total sales so Company's sales are sensitive to developments in tire, rubber, and automobile markets.

Company has chalked out a focused program to increase the sales to non-tire customers, e.g. rubber goods, inks, coatings. The program includes strengthening sales and marketing team, introducing new product lines, synergies with other Birla Carbon units in the region, etc.

Dependence on Key business partners for port infrastructure, transportation, steam and electricity sales

Company has entered into long term agreements with key business partners to ensure uninterrupted business operations for unloading bulk raw material imports, transportation of oil and carbon black, and sale of steam.

However there are alternatives to mitigate the risk without much impact on company financials.

Equipment failure

Failure of critical production and utility equipment can cause long stoppage of plant. Company has a well experienced plant maintenance team, employs best practices of plant operations and maintenance, has an exhaustive preventive and predictive maintenance system to ensure good health of all its manufacturing equipments, uses standard operating procedures in all areas, and also maintains adequate inventory of critical spares.

Availability of technically trained manpower

As there are very few carbon black manufacturers in Thailand, availability of skilled manpower in carbon black manufacturing process and technology is very limited.

Company has many internal and external training programs for its employees. A development plan is prepared and monitored for every employee. Also there are frequent knowledge sharing and information exchange programs with other Birla carbon units across the world for prompt and effective horizontal deployment of any technology advancement. Time-to-time Company draws on technical resources of other Birla Carbon units and technology centers too.

Risk from storage and handling

Feedstock oil or carbon black, in event of any damage to the container during transportation or storage, could release and pollute a very limited area. To prevent this, the company follows all international standards stipulated for their safe transportation and storage. Though there has never been any accident relating to these products, theoretically the risk exists. Company has appropriate insurance covers to safeguard financial losses from such release.

Environment, health and safety risks

The Company assigns highest priority to health, safety and environment. This is directly looked after by senior management of the Company. In fact the Company is the first Asian Carbon Black manufacturer to receive ISO 14001 certificate for ensuring the highest standards of environment cleanliness.

The production process of Carbon black does not generate any solid wastes. The liquid waste which is process water is fully recycled in the process and no discharge. For this initiative, the Company received River Conservation & Restoration Outstanding Award from Ministry of Industry in 2009. Flue gas samples are collected and tested regularly which are well within the standard limits set by the government. The company also has the cogeneration system of using the waste heat gases in generation of steam and electricity thereby reducing the carbon foot-print.

The company also have plan of further investment in phase manner in equipments to have improved environmental control systems. Also for any of expansion projects, company carries out environment impact assessment (EIA) study from an independent consultant and obtains the necessary approval from Ministry of Industry (MOI).

Besides a very high level of safety consciousness amongst all employees, inculcated through rigorous training and investment in all necessary safety equipment, the company conducts mock drills, emergency plan simulation etc. to ensure high alertness on health and safety aspects. The company has the robust system of 'near-miss' identification and rectification as part of its preventive system to reduce the possibilities of any health or safety incident. The company also has emergency plans in place.

The company is certified for IATF 16949, OHSAS 18001 & ISO 14001 from BV Certification (Thailand) for its quality system as well as Occupational Health, Safety & Environment and ISO/IEC 17025; Lab Accreditation from Thai Industrial Standards Institute and these certifications demonstrates company's commitment to Quality, Safety & Environment.

4. Operating Assets

Land, Buildings, and Machines

The details of various locations and land area are as follows:

<u>Location</u>	<u>Land Area (Company only)</u>			<u>Ownership</u>
	<u>Rai</u>	<u>Ngan</u>	<u>Wah</u>	
1. Factory at Angthong	186	1	305.4	Owned by the company
2. Worker Colony at Angthong	3	0	0	Owned by the company
3. Storage tanks at Sriracha	12	0	76	Owned by the company
4. New Colony at Angthong	17	3	87	Owned by the company
Total	218	4	468	
Hence Total will be	219	1	68	

Total Book Value of Land = Baht 138,533,010 Baht

The company does not have any machines and equipment which is having the Book Value of more than 10% of the total assets. All the assets are shown at Net Book Value in the financial statement.

Details of Property, Plant, and Equipment

(Unit : Thousand Baht)

Sr.	Items	The Company	Consolidated
1	Land	138,533	138,533
2	Building, Roads & Lease Rights	775,151	775,151
3	Plant & Machinery	5,168,755	5,168,755
4	Furniture, Office Equipments, Hardware & Software	85,600	85,600
5	Motor Vehicle	14,380	14,380
6	Construction in Progress	-	-
	Total Cost	6,182,419	6,182,419
Less:	Accumulated Depreciation	4,830,974	4,830,974
	Total Net Book Value	1,351,445	1,351,445

Property, Plant and Equipment

Consolidated and separate financial statements

	Land	Buildings and constructions	Machinery and equipment	Furniture, fixtures and office equipment	Vehicles	Assets under construction and installation	Total
	<i>(in thousand Baht)</i>						
Cost							
At 1 April 2018	138,533	759,260	5,020,520	75,898	15,101	63,023	6,072,335
Additions	-	-	20,121	1,447	-	366,208	387,776
Disposal	-	-	(56,928)	(673)	-	-	(57,601)
Transfers	-	-	62,973	-	-	(62,973)	-
As at 31 March 2019 and							
1 April 2019	138,533	759,260	5,046,686	76,672	15,101	366,258	6,402,510
Additions	-	14,519	66,350	5,002	899	-	86,770
Disposal	-	(1,035)	(301,098)	(1,702)	(3,026)	-	(306,861)
Transfers	-	2,407	356,817	5,628	1,406	(366,258)	-
As at 31 March 2020	138,533	775,151	5,168,755	85,600	14,380	-	6,182,419

Consolidated and separate financial statements

	Land	Buildings and constructions	Machinery and equipment	Furniture, fixtures and office equipment	Vehicles	Assets under construction and installation	Total
				<i>(in thousand Baht)</i>			
<i>Depreciation</i>							
At 1 April 2018	-	521,539	4,146,393	73,518	12,077	-	4,753,527
Depreciation charge for the year	-	20,956	186,201	993	1,052	-	209,202
Disposal	-	-	(56,741)	(663)	-	-	(57,404)
As at 31 March 2019 and 1 April 2019	-	542,495	4,275,853	73,848	13,129	-	4,905,325
Depreciation charge for the year	-	26,394	203,033	1,998	987	-	232,412
Disposal	-	(1,035)	(301,098)	(1,701)	(2,929)	-	(306,763)
As at 31 March 2020	-	567,854	4,177,788	74,145	11,187	-	4,830,974
<i>Net book value</i>							
At 31 March 2019	138,533	216,765	770,833	2,824	1,972	366,258	1,497,185
At 31 March 2020							
Owned assets	138,533	201,077	990,967	11,455	3,193	-	1,345,225
Right-of-use assets	-	6,220	-	-	-	-	6,220
	138,533	207,297	990,967	11,455	3,193	-	1,351,445

Investment in associates

	Separate financial statements											
	Ownership						Dividend					
	interest		Paid-up capital		Cost		Impairment		At cost - net		income	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
	(%)		(in thousand Baht)									
Associates												
P.T. Indo Liberty Textiles	40.00	40.00	515,664	515,664	196,948	196,948	-	-	196,948	196,948	2,024	-
Aditya Birla Chemicals (Thailand) Limited	29.99	29.99	1,700,000	1,700,000	509,820	509,820	-	-	509,820	509,820	25,491	25,491
Indigold Carbon (Mauritius) Limited	20.59	20.59	308,870	308,870	63,596	63,596	-	-	63,596	63,596	-	-
Total					770,364	770,364	-	-	770,364	770,364	27,515	25,491

Investment policy

The manufacturing of carbon black is Company's core business and Company always looks for the opportunities to expand and grow and emphasize on future growth of the business. Due to Company's growth policy, the company grew from the initial capacity of 16,000 MT to 275,000 MT/ year by way of 6 expansions and debottlenecking and continuous improvement in the production process.

The decision of Company's investment mainly depends on growth opportunities, return on investment and sustainable growth of Company business and its investment in other companies.

Company's investment is focused on its core business carbon black where the company and Aditya Birla Group have major growth plans for carbon black business and at present company is exploring possibilities for putting up carbon black projects in emerging markets.

The company will continue to explore possibilities to invest and expand in carbon black and other business to maximize return on shareholders' funds.

5. Legal Dispute

-None-

6. General and Other Significant Information

General Information

Company Name : Birla Carbon (Thailand) Public Company Limited
(formerly “Thai Carbon Black Public Company Limited”)

Company Registration No. : 0107537001251

Type of business : Manufacturer of carbon black

Location of Head Office : 888/122, 888/128, Mahatun Plaza Building, 12th Floor, Ploenchit Road, Lumpini, Patumwan, Bangkok 10330
Tel. 0-2253-6745-54
Fax 0-2254-9031, 0-2253-2812
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satyaki.deb@adityabirla.com
orawan.rak@adityabirla.com
Website: <http://www.birlacarbon.com>
<http://www.adityabirla.com>

Location of Factory : 44 Moo 1, Ayuthaya-Angthong Highway, Tumbol Posa,
Amphur Muang, Angthong 14000
Tel. (035) 672-150-4
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Investor Relations

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References

Share Registrar	:	Thailand Securities Depository Co.,Ltd. No.62 Ratchadapisek Road, Klongtoey, Bangkok 10110. Tel : 0-2229-2800 Fax : 0-2359-1259
Trustee	:	- None -
Auditors	:	1. Ms. Orawan Chunhakitpaisan Registered License no. 6105 2. Mr. Vairoj Jindamaneepitak Registered License no. 3565 3. Mr. Waiyawat Kosamarnchaiyakij Registered License no. 6333 4. Ms. Wilai Buranakittisopon Registered License no. 3920 KPMG Phoomchai Audit Ltd. 48 th Floor, Empire Tower 195 South Sathorn Road, Bangkok Tel : 0-2677-2000 Fax : 0-2677-2222
Bankers	:	1. Bangkok Bank Public Co.,Ltd. 2. The Siam Commercial Bank Public Co.,Ltd. 3. Kasikorn Bank Public Co.,Ltd. 4. Citibank N.A. 5. Hongkong & Shanghai Banking Corp.Ltd. 6. Standard Chartered Bank (Thai) Public Co.,Ltd 7. Indian Overseas Bank 8. Krung Thai Bank 9. ANZ Bank (Thai) Public Co.,Ltd 10. Mizuho Bank, Ltd.