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Govt announces Steel Scrap Recycling Policy, aims to reduce imports; scrap centres planned

The scrap policy will ensure processing and recycling of products in an organised, safe and environment-friendly manner, besides evolving a responsive ecosystem and producing high quality ferrous scrap for quality steel production minimising the dependency on imports.

In a bid to ensure quality scrap for the steel industry, the government came out with a Steel Scrap Recycling Policy that aims to reduce imports, conserve resources and save energy. The country's steel scrap imports were valued at Rs 24,500 crore in 2017-18, while the deficit was to the tune of 7 MT. "The policy aims to ... promote circular economy in the steel sector", besides promoting "a formal and scientific collection, dismantling and processing activities for end of life products that are sources of recyclable (ferrous, non- ferrous and other non-metallic) scraps which will lead to resource conservation and energy savings and setting up of an environmentally sound management system for handling ferrous scrap," the Ministry of Steel said in a statement. National Steel Policy 2017 aims to develop a globally competitive steel industry by creating 300 MT per annum steel production capacity by 2030 with a contribution of 35-40 per cent from EAF/IF (Electric Arc Furnace/ Induction Furnace) route.

It said the scrap policy will ensure processing and recycling of products in an organised, safe and environment friendly manner, besides evolving a responsive ecosystem and producing high quality ferrous scrap for quality steel production minimising the dependency on imports. The statement said the policy envisages a framework to facilitate and promote establishment of metal scrapping centres in India, which will ensure scientific processing and recycling of ferrous scrap generated from various sources and a variety of products. Among others, it also aims to decongest the Indian cities from reuse of ferrous scrap, besides creating a mechanism for treating waste streams and residues produced from dismantling and shredding facilities in compliance to Hazardous & Other Wastes (Management & Trans boundary Movement) Rules, 2016 issued by the Ministry of Environment and Forests.

The policy is based on "6Rs principles of Reduce, Reuse, Recycle, Recover, Redesign and Remanufacture through scientific handling, processing and disposal of all types of recyclable scraps including non-ferrous scraps, through authorized centers / facility". The gap between demand and supply of scrap can be reduced in the future and the country may be self-sufficient by 2030, it added. The ministry said its endeavour is to develop a globally competitive steel industry by adopting state-of-the-art environment friendly technologies.

Although scrap is the main raw material for secondary sector, the primary sector also uses scrap in the charge mix of BOF (Basic Oxygen Furnace) to the tune of 15 per cent to improve efficiency, minimise cost of production and other process needs.

There is a worldwide trend to increase steel production using scrap as the main raw material as recycling of scrap helps in conservation of vital natural resources besides other numerous benefits. The use of every tonne of scrap shall save 1.1 tonne of iron ore, 630 kg of coking coal and 55 kg of limestone. There shall be considerable saving in specific energy consumption also, the statement said. It said the availability of scrap is a major issue in India and in 2017 the deficit was to the tune of 7 MT. This was imported at the cost of more than Rs 24,500 crore in 2017-18.The government said the scrapping policy shall ensure that quality scrap is available for the steel industry.

Scrap is an important input for the electric furnaces. If quality scrap is provided as the charge to the electric furnaces, then the furnaces can produce high grade steel. High grade steel scrap shall not have the impurities if processing is done with the scrap processing centres and by shredders etc.

"The current supply of scrap is 25 MT from the domestic unorganised scrap industry and 7 MT from import of scrap. There is potential to harness this 7 MT of scrap that is currently being imported... "To produce 7 MT more of scrap, the country shall require 70 scrap processing centres each with the capacity of 1 lakh tonnes; this is without disturbing the existing dismantling centres. The 70 scrap processing

centres shall require about 300 collections and dismantling centres on the presumption that 4 collecting and dismantling centres cater to scrap processing centre," the statement said.

In case of steel production rising to 250 MT, the requirement of scrap shall rise to 70-80 MT, it noted. "This shall require about 700 scrap processing centres, that is 700 shredders. These shall in turn be fed by 2800-3000 collections and dismantling centres spread all over the country," the statement said. It added operating on the 4+1 hub and spoke model, where 4 collection and dismantling centres are to cater to 1 scrap processing centre, then 400 jobs would be created by one such composite unit.

"And for 70 units producing a total of 7 MT of scrap the potential for employment generation would be of 2800 persons. If the country was to produce 70 MT, as expected as per NSP 2017, the employment generation could be in the range of 3 lakh jobs," the statement said.

www.auto.economictimes.indiatimes.com

Global steel industry passing through difficult phase: Dharmendra Pradhan

The global steel industry is passing through a difficult phase, Union Minister for Petroleum and Natural Gas and Steel, Dharmendra Pradhan

said during his address at the Ministerial Meeting of Global Forum on Steel Excess Capacity (GFSEC). Stressing that steel excess capacity had a devastating effect on the industry globally during the crisis of 2015, the Union Minister said, "After a brief recovery during 2016-18, again, the global steel industry is passing through a difficult phase." He emphasised that it is important to take suitable measures to avoid a repeat of the situation of 2015.

"The members' willingness to share data on capacity and information on various direct and indirect support measures deserves praise. This is a unique first-time effort. Information sharing has enabled in formulating a better response in terms of improvements for the global steel industry," said Pradhan. The Minister said it has also improved our ability to understand the problem of global steel excess capacity. "We should strive to make concerted efforts to ensure that all actions are in line with fair international trade practices," he said.

He added that with rapid economic and infrastructural development in India, the demand for steel has seen a "substantial increase and is expected to increase further in the future as it embarks to become a US $ 5 trillion economy by 2024."

The Minister said India is committed to spending about US $ 1.4 trillion on its infrastructure development in the next five years.

"All this augurs well for the steel demand in the country. We are determined to raise the per capita consumption of steel from its current low of 72 kg per capita to 160 kg per capita by 2030. India's demand for steel shall always be the driver of its capacity expansion," Pradhan said.

"The steel sector in India is deregulated and is driven by market forces. As it is well known, India does not contribute or suffer from excess capacity. We are mindful and conscious of the problems, which originate from excess capacity, and thus respect the principles laid down by this forum," he added.

Stressing that addressing the concerns of the steel sector is a collective responsibility, Pradhan said, "I hope this Forum can address the issues by continuing its work by consensus in the best traditions of the G 20."

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Global steel firm in talks with 3 states for $4 billion unit

A global steelmaker is considering investing $4 billion (Rs 28,000 crore) to set up a plant in India and is in preliminary discussions with the Karnataka, Andhra Pradesh and Gujarat governments for the proposed project. The company plans to set up a 4 million tonne per annum steel plant in the near term and progressively take it up to 12 million tonnes, according to officials. Building a 1 million tonne capacity requires an investment of $1 billion.

The company's India plans are part of its strategy to diversify its steel mills across the world, the officials said, requesting anonymity because

the discussions are in a preliminary stage. Ballari district in Karnataka is the company's preferred location for the plant because the region has abundant deposits of high-grade iron ore, a key steel-making ingredient, and is home to steel, sponge iron and pellet units. The JSW Group has a steel mill of 12 MTPA capacity in the district.

The Karnataka government will do its best to facilitate investments in the steel sector as it would add thousands of jobs, state industries minister Jagadish Shettar told ET. The government will meet investor needs as per the state's industrial policy, he said.

Karnataka has banned the export of iron ore and has been encouraging investments in facilities that use iron ore as the main input. The state government, however, will have to meet the company's needs in terms of land, water and help with iron ore supply.

While the steel giant is said to be keen on its proposed investment, projects of ArcelorMittal, the world's largest producer, and Uttam Galva (Brahmani Steel), have not progressed after land in Ballari district was allotted to them.

The global steelmaker is also evaluating potential areas in Gujarat and Andhra Pradesh. Steelmakers prefer to set up their plants close to sea ports or iron ore mines. Proximity to ports helps in the import of iron ore and export of finished products.

Industry experts peg local demand for iron ore in Ballari region at about 32 MTPA. The Supreme Court capped production at 28 MTPA in 2014, with NMDC accounting for half of the output. Setting up a new steel mill in the region would be possible only if iron ore production can be increased or the raw material is imported.

A lot may also depend on how Karnataka deals with a request of JSW Steel to register its land in Sandur taluk of the district. The government is yet to take a decision on the land sale deed. Chief minister BS Yediyurappa had campaigned against the Sajjan Jindal-controlled steel behemoth during the previous JD(S)-Congress regime.

Source: The Economic Times

Steel ministry wants to put off sale of NMDC's Chhattisgarh steel plant

The Union steel ministry has called for deferring the proposed sale of NMDC's Nagarnar Steel Plant in Chhattisgarh until the plant is commissioned, citing the huge investments involved and sensitivities of the Maoists-affected Bastar district where it is being built. Any move to divest the plant at this juncture would adversely impact the plant's completion, the ministry said in a letter to the Department of Investment and Public Asset Management (Dipam).

The Nagarnar plant was among a number of state-run companies the government had identified for strategic disinvestment. The cash-rich NMDC Ltd, formerly National Mineral Development Corporation, however, is opposed to the idea of a demerger and disinvestment of the plant. So is the Congress government in Chhattisgarh. "Whether it is Nagarnar or (Steel Authority of India's) Bhilai, we are opposed to disinvestment of PSUs," chief minister Bhupesh Baghel told ET. "These were established by the Congress to help in nation building."

NMDC has invested Rs 15,937 crore up to August end in the three million tonnes per annum plant and is expected to spend another Rs 7,203 crore over the next 8-9 months. The plant is expected to be commissioned by June 2020.

With plans to increase its iron ore capacity from current 43 mtpa to 67mtpa by 2025, NMDC believes its cash flow and capex plans for acquiring new mines are linked to Nagarnar plant's future. Its ability to retain mining leases — four of which with combined capacity of 26 mtpa are set to expire in 2020 — and to develop new greenfield mines could be affected with the demerger or disinvestment of Nagarnar plant, NDMC told the steel ministry.

After the 2015 amendment to the Mines and Mineral (Development and Regulation) Act, auction of mines fetches state governments revenue as a percentage of the sale value of the mineral, in addition to royalty and taxes. When reserving or extending a lease to a PSU, states could forgo this additional income. NMDC is locked in a dispute with the BJP government

in Karnataka over an extension of its Donimalai lease. In 2017, however, three of its leases in then BJP-ruled Chhattisgarh were granted 20-year extensions.

Baghel said the previous government's decision to reserve deposits for PSUs and then call in a private MDO (mine developer and operator) as had happened for coal blocks had hurt the state's earnings. He said the state stands to lose Rs 9 lakh crore in revenue in coal over the next 30 years.

"However, we also do not think it is intelligent to burden a PSU (like NMDC) with a heavy premium that makes it impossible for it to operate," Baghel told ET. Some of NMDC's mining leases in the state will expire in March next year.

In 2008, Tata Steel had set out to build a steel plant in the state but failed to win local support for the project that was to come up at about 20 km from Nagarnar. Among the first decisions Baghel took after assuming office in December last year was to return this land to its original owners, mostly tribal farmers.

Also, his government was forced to order a halt to work on a greenfield mine (Deposit 13) being developed in Dantewada in June, following massive local protests.

The deposit is developed being under a 51:49 JV of NMDC and the Chhattisgarh Mineral Development Corporation that has hired Adani Enterprises as mining contractor. The joint venture also holds rights to Deposit 4 linked to the Nagarnar plant.

Source: The Economic Times

India's JSW Steel forecasts stable demand growth

India's steel demand growth will remain stable in the October 2019-March 2020 period at around 5pc, forecasts domestic private-sector producer JSW Steel, amid reviving sales for the construction, solar appliances and pipe sectors. India's steel demand growth has nearly halved during the current 2019-20 fiscal year ending 31 March from 8.8pc in the 2018-19 fiscal year on the back of a deepening economic slowdown that has affected key steel consuming sectors, such as infrastructure development, real estate and automobiles. Steel consumption posted 4.2pc growth to 59.23mn t during April-October.

"We are seeing some green shoots in the market," JSW's joint managing director Seshagiri Rao told analysts, adding that he did not expect demand to be lower than 5pc in the second half of 2019-20. The steel sector has pinned its hopes on a surge in public spending on infrastructure to shore up economic growth and steel sales. But the federal BJP government has not provided much details of its infrastructure spending plans for 2019-20, beyond pledging a $1.5 trillion investment in the sector during its current five-year term that started in May this year. JSW attributed slower government spending as one of the factors for a fall in its domestic sales in the first half of 2019-20.

"We had domestic government orders for which, unfortunately some of these orders were put on hold or adequate funding was not available," said JSW's commercial director Jayant Acharya. He expected funding for these projects to become available in the second half of 2019-20. "Domestic expenditure on the infrastructure side, oil and gas pipelines and water pipelines, we are already seeing some movement happening," he said. JSW has increased steel exports to make up for deficit in domestic sales, with exports accounting for 31pc of total sales volumes in the July-September quarter compared with a typical average of 20-25pc. JSW forecasts exports to revert to the 20-25pc proportion of sales in the second half of 2019-20.

India's hot-rolled coil (HRC) producers pushed millions of tonnes of additional volumes into overseas markets such as Vietnam and the EU, leading to a slide in export prices. The Argus-assessed cfr Vietnam HRC price fell by around 20pc in the four months to 28 October at $412/t, although it has since rebounded to $430/t as of 12 November.

Iron ore concerns

JSW expects disruption to iron ore supplies to be limited after several merchant mining leases in key producing states of Odisha and Karnataka expire in March 2020. These leases currently produce around 60mn-70mn t/yr of iron ore, around a third of India's total output.

The company does not expect supply disruptions in Karnataka, where its flagship 13mn t/yr Vijaynagar steel plant is based. Indian state-controlled iron ore producer NMDC may step up output with the possible return of its Donimalai mine, which had remained shut after a royalty dispute with the state government. A court has ruled in NMDC's favour in the dispute, while Delhi has notified an order to make it compulsory for states to grant extensions in lease periods to state-controlled companies. Supply disruptions are possible in Odisha, India's largest ore producing state, JSW said.

A sharp rise in iron ore prices or an increased reliance on higher priced imports could erode profitability of steel producers further in a slow demand scenario. The expiring leases are expected to be auctioned off, although none of these leases have found a new buyer to date. The new leaseholder may be allowed to operate the mines based on existing approvals on environment and other regulatory requirements for two years, said JSW, citing an "advanced stage" of discussions in the government on such a proposal. Without such a fast-tracking of approval for new leaseholders, there may be "some problems" for iron ore supply.

JSW expects in such a scenario sales of existing iron ore stocks by current leaseholders of such mines, as well as a clearance for state-owned steel producer Sail to sell its iron ore output partially in the open market as possible buffers against a sharp fall in supplies. JSW Steel forecasts producing 2.5mn-3mn t of iron ore from its captive mines in Karnataka in the second half of 2019-20 compared with 2mn t in the first half.

Source: Metal Junction

Need self-sufficiency in high-grade steel; industry must step up: Pradhan

Union Steel Minister Dharmendra Pradhan stressed on the need to make India self-sufficient in high grade steel and sought collective efforts of the industry to make the sector future-ready. Metals, including steel, continue to play a vital role in building India a modern economy, the minister said, adding that there is a strong positive correlation between steel usage and a nation's economic growth. "He has appealed to the delegates to embrace challenge of producing high grade steel for greater self-sufficiency. Steel sector must be future-ready to embrace the change and leverage innovation. Professionals from the metallurgical fraternity will have an important role to play in achieving this quantum leap and creating green pathways to make the Indian steel sector future-ready," a statement quoted Pradhan as saying.

The National Steel Policy 2017 was formulated to create a more self-sufficient and globally competitive steel industry with a crude steel capacity of 300 million tonnes by 2030, he said. The steel sector will have a key role to play in the making of a New India envisioned by Prime Minister Narendra Modi, the minister said.

"The next trajectory of growth, fuelled by government's key focus on building infrastructure for future, creating smart cities, industrial corridors and so forth will further boost steel consumption." Import of high-grade steel was one of the issues the industry faced in 2018-19. High grade and value-added steel are used in power, defence and automobile which is currently imported.

Source: Business Standard

SAIL posts Rs 342-cr Q2 loss as demand contracts, price moderates

The country's largest steel maker SAIL posted a loss of Rs 342.84 crore for the July-September quarter of the current fiscal due to demand contraction and moderation in prices. The steel PSU had posted a standalone profit of Rs 553.69 crore in the second quarter of the previous fiscal. Income during the second quarter declined to Rs 14,286.18 crore, from Rs 16,832.37 crore in the year-ago period, SAIL said in a regulatory filing. Total expenses also fell to Rs 14,809.21 crore during the quarter from Rs 15,950.21 crore in the corresponding quarter of the previous fiscal.

The second quarter result was affected by a lot of factors on both domestic and global fronts, SAIL chairman Anil Kumar Chaudhary said. It is common knowledge that several steel consuming sectors including auto, infrastructure

and manufacturing did not perform well in the said quarter. At the same time, the prices have also faced continuing downward pressure. This has reflected in the results, he said.

"During the period, the company has undertaken several measures for cost reduction across the organisation. The measures include improving operational efficiency through better techno-economic performances, better utilization of raw materials and improving revenue generation through other means," he said. Meanwhile, timely announcement of new corporate tax rates and a slew of measures for increasing infrastructure and allied demand for steel by the government raise hope for the future.

The move for new corporate tax regime is expected to bring in investments in new projects from the freed up cash. The renewed thrust of the Government on investments and infrastructure projects, coupled with industry-friendly measures are likely to help in increasing steel demand in the second half of the Financial Year, signalling that the worst period may be over.

Source: Business Standard

RAIL – SAIL Collaboration: Moving the Nation

When two large organisations collaborate, it makes a far reaching and resounding impact. The case in point is the collaboration between Indian Railways and Steel Authority of India Limited (SAIL) for more than six decades.

While the Railways is the heart of transport infrastructure of our Country, SAIL is the most trusted and longstanding supplier of rails and forged wheels to the Indian Railways.

Both the behemoths have created strong synergy and have all along played vital roles in the development and progress of the country.

SAIL's Bhilai Steel Plant (BSP) produces world class rails that crisscross the country while Durgapur Steel Plant (DSP) is the only forged wheel producer in India for passenger coaches, wagons and locomotives.

To cater to the changing requirements of the Indian Railways, SAIL has continuously developed its products to meet and in some cases even go beyond the exacting standards.

In rails, it has steadily rolled out the required volume, quality and length of rails (which has gradually increased from 13 meter to 260 meter), year after year. In wheels, SAIL has supplied more than 1.8 million numbers of wheels of various dimensions ranging from 720 mm to 1100 mm of diameter to the Indian Railways in last six decades.

The finding of the Research & Development Centre for Iron & Steel (RDCIS), Asia's largest iron and steel related research centre at Ranchi, shows that SAIL-BSP has the capability to produce rails, which can safely support 25 Tonne Axle Load while also allowing passenger trains at 160 kmph.

Currently, SAIL is the only producer of the longest single piece rails measuring 130 meters. The report of Transportation Technology Centre Inc. (TTCI), USA – a world-class transportation research and testing organization and a wholly owned subsidiary Association American Railroads (AAR) shows that wheels produced at SAIL-DSP conforms to international standards and provide for excellent serviceability in train operations.

SAIL is committed to be a partner in the Indian Railways' endeavor to increase average traffic speed economically without any compromise on safety. It is pertinent to mention here that the quality of rails produced by SAIL-BSP is in tandem with the quality of rails used in the European Union.

In fact, The European Union uses the same quality of rails, which is equivalent to UTS-90 rails produced by SAIL, for speed up to 150 km/hr. The wheels produced at SAIL-DSP have exhibited proven performance in diverse terrains and climate of the Country and have been in use for speed up to 160 Km/hr.

SAIL is working on improving further the quality of its rails, which included reducing the hydrogen content in rail steel to less than 1.6 ppm, which is the world benchmark, successfully developing 110 UTS rails, thick web asymmetrical rails, Vanadium rails and Nickel-Copper-Chromium (NCC) rails.

The NCC corrosion resistance rails that SAIL-BSP developed and supplied for coastal areas have

successfully undergone field trials. For wheels, to maintain superior quality, it is produced through state-of-the-art manufacturing process including heat treatment and is passed through rigorous process and quality control measures.

Each wheel is subjected to Ultrasonic Testing and Magnetic Particle Inspection to ensure that it is free from sub-surface flaws. Wheel selected from each batch of heat treatment is subjected to all the destructive tests to ensure the quality.

Recently, SAIL has developed with in-house resources the Linke-Hofmann-Busch (LHB) wheels, the first consignment of which has already been despatched.

Earlier, responding to urgent requirement, SAIL-DSP developed, produced and supplied narrow gauge wheels for Kalka-Shimla narrow gauge route and played a key role to keep this popular route alive.

SAIL has also developed and supplied wheels for Kolkata Metro, which used to be imported earlier. The design of these wheels is different and critical due to its complex web profile.

Source: Steel Insights

Indian Steel-makers' profitability to decline on slowing demand growth: Moody's

Global rating major Moody's has changed the outlook for Asian steel industry to negative from stable on following expectations for deterioration in fundamental business conditions over the next 12 months.

"Rated Asian steel producers' profitability, as measured by EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) per ton, will decline further by around 15 percent in the 12 months to June 2020," Moody's says in a report accessed by Steel Insights. The outlook had been stable since August 2017, when Moody's changed it from negative.

Operating profits had fallen 8 percent for the 12 months to June 2019 because of rising input costs and producers' inability to pass on higher costs to customers.

EBITDA per ton for the 12 months ended June 2019 averaged $142 – 8 percent lower than $154 in 2018 – and Moody's expect EBITDA per ton to decline a further 15 percent to around $120 over the next 12 months. "This level of decline meets our trigger for a negative outlook for the Asian steel industry," Moody's says.

The decline in Asian steel producers' profitability comes after strong improvements in 2017 and 2018. EBITDA per ton rose around 35 percent to $133 in 2017 from $98 in 2016, and then increased a further 16% to a five-year high of $154 in 2018.

However, profitability has since come under pressure because of rising input costs and producers' inability to pass on the higher costs entirely to their customers.

Although weaker profitability drives the negative industry outlook, expected levels of EBITDA per ton until June 2020 will still be $10-15 higher compared with the trough in 2015 and 2016.

As a result, Asian steel producers are better placed to weather weakening profitability this time than in the previous downturn. Also, in the last industry downturn from 2015 to mid-2017, steel producers faced a supply glut amid weak demand whereas this time Asian steel supply and demand will be largely flat over the 12 month outlook period.

Below is some of the key findings of the report.

Rising costs and narrowing product spreads will weigh on profitability

Prices of key steelmaking inputs, iron ore and coking coal, will stay high after rising more than 60 percent and 20 percent respectively in June 2019 from a year earlier. Narrowing product spreads between steel and input prices reflect producers' limited ability to pass on price increases to buyers when end-market demand is soft.

Prices of iron ore and metallurgical coal, which collectively account for around 80 percent of production costs, will stay high.

In addition, given producers' limited ability to pass on price increases to buyers at a time when end-market demand is soft, product spreads between steel and input prices will remain narrow, pressuring steel-makers' profitability.

Backward-integrated producers would be better insulated from rising raw material costs.

Rising iron ore prices amid soft steel demand in China will reduce China Baowu Steel Group Corp Ltd's (A3 stable) EBITDA per ton by 23 percent to around $120 in the 12 months to June 2020. Nevertheless, EBITDA per ton of around $120 will still be 25 percent higher than in the last downturn in 2016. Steady sales will also support Baowu's operating cash flow.

India outlook

Indian steel-makers profitability will decline mainly because of slowing demand growth, in particular from the auto sector. EBITDA per ton of Tata Steel Limited's (Ba2 stable) Indian-operations will likely decrease by a mid-single-digit percentage over the 12 months to June 2020.

But at more than $200 per ton, its profitability will continue to be the highest among rated Asian steel producers.

JSW Steel Ltd's (Ba2 positive) EBITDA per ton will decline by around 13 percent and remain lower than Tata Steel's Indian operations, largely because of elevated raw material price and the company's relatively limited backward integration. Nonetheless, the two Indian steel companies will benefit from rising steel production on the back of continued demand growth.

In India (Baa2 stable), licenses to 59 iron ore mines currently under operation will expire by March 2020. "While our baseline scenario is that most of these licenses will be renewed, if they are not, a resulting shortage in iron ore supply would lead to an increase in prices," Moody's says.

Tata Steel's Indian operations are insulated from such iron ore supply disruptions because of its backward integration into iron ore production.

However, JSW's captive sourcing will account for only 20-25 percent of its iron ore requirements by December 2019 and therefore the company is more exposed to a rise in iron ore price.

India's steel demand growth will remain the strongest in Asia, predicts Moody's.

Demand growth, however, will soften to 5 percent per annum over the next two years, from 7percent in the 12 months to June 2019. Steel demand growth will be supported by India's GDP growth of around 6.2 percent and 6.7 percent in 2019 and 2020 respectively, and government infrastructure spending of $140 billion on railways, roads and metro lines to improve connectivity across the country.

In addition, under the "House for all by 2022" mission the government aims to build 19.5 million houses over the next two years, which will support steel demand. The government's "Har Ghar Jal Mission" (translated as water for every home) by 2024 will also boost demand for steel pipe manufacturers. While auto sales will remain soft through 2019, pre-buying ahead of the country's transition to the equivalent of Euro VI emission norms in April 2020 will somewhat fuel steel demand.

Steel demand will vary across Asia

Despite an uptick in demand from the infrastructure sector, soft demand from the property and manufacturing industries will limit China's (A1 stable) apparent steel demand growth to a low single-digit in the 12 months to June 2020.

"We expect real estate investments in China to stay soft over the next 12 months, as contracted sales volumes will be flat or decline by up to 5 percent in the same period. This view takes in to account the recent tightening of financing conditions, weaker demand in some lower-tier cities and an expectation that the government will continue to tweak regulatory measures to prevent sharp property price increases," Moody's says in the report.

In 2018, the contracted value of Chinese residential real estate sales increased 14.7 percent because of a sharp increase in real estate prices, but total volumes increased by only 2.2 percent.

The same trend was seen in the first half of 2019, as contracted sales increased 8.4 percent but volumes declined 1 percent from a year earlier, indicating weaker construction demand growth from the real estate sector.

Weak Chinese auto sales is expected to dampen demand prospects for steel products, especially auto sheets.

After plummeting 12 percent in the first half of 2019 from a year earlier, auto sales will improve somewhat in the second half, but full year 2019 auto sales will still decline 6.5 percent from 2018.

Faster growth of infrastructure investments will support steel demand in China. We expect the pace of infrastructure investments – which increased 4.1 percent year over year in H1 2019 – to pick up for the rest of the year, underpinned by the central government's spending to spur economic growth.

Since late 2018, the Chinese government has articulated policies supporting faster growth of key infrastructure investments, such as railway and toll-road infrastructure projects. The government also recently allowed local governments to use special purpose bonds as equity capital for infrastructure projects, effectively expanding the available funding sources for infrastructure projects and thus providing a much-needed boost to China's steel sector.

Steel demand in Korea (Aa2 stable) will remain flat with a better performing shipbuilding sector compensating for sluggish demand from the auto and construction industries. Stable construction demand in Japan (A1 stable) will drive the country's flat steel demand. India's (Baa2 stable) steel demand will slow to mid-single digit growth due to weak auto and manufacturing demand.

Limited new capacity additions in the region will curb a sharp decline in steel prices

Steel supply in Asia is likely to be broadly stable, supporting steel prices. Most Asian steel companies have no plans to launch major new capacities in the coming 12-18 months. India will remain the world's second-largest steel producer behind China after having overtaken Japan in 2018.

New capacity additions in India will be limited over the next 12 months but domestic production will increase to meet demand growth.

Consolidation in the Indian steel sector that began in 2018 will continue in 2019, with five stressed steel companies accounting for 20 percent of the country's steel-producing capacity operating under new ownership.

As a result, India's capacity utilization will improve to 85 percent over the next two years from less than 78 percent in the 12 months to June 2019. Slowing but still healthy domestic demand and limited capacity additions will help keep steel prices largely stable over the next 12-18 months.

China will retain its tight capacity controls and environmental protection measures. China's supply-side reform initiated in 2016-17 has materially improved supply and demand dynamics in the country, supporting steel prices at relatively high levels compared with 2015 and 2016.

The government had reduced steel capacity by 150 million tons during 2016-18, ahead of original schedule. The reduced capacity accounted of around 20 percent of total steel capacity of around 1.13 billion tons as of year-end 2015.

At the same time, the government has forced steel mills that used illegal induction furnaces to shut down, removing capacity of around 230 million tons.

Production in Korea and Japan will remain flat, and companies in both countries have no plans for significant capacity additions.

Trade tensions will have a limited impact on sales

The US government's rising protectionism in the form of trade tariffs on steel imports will have a limited direct impact on Asian steel companies because of their modest US sales. However, if trade disputes are prolonged, or if they escalate, the spillover effect through weaker economic growth Asia would be greater on Asian steel producers.

Japan's decision on 2 August to remove Korea from a white-list of countries that receive preferential access to Japanese goods will not have a material effect on steel demand in both countries or Korean steel-makers' operations, even if the situation escalates to a Japanese ban on exports to Korea. While Korean companies import scrap metals and intermediate products such as hot-rolled coil from Japan, they should be able to source the materials from outside Japan with little disruption or cost increases, when necessary.

We do not expect US tariffs to lead to a substantial increase in Asian steel companies' exports to India that would hurt the pricing power of domestic steel-makers. This is because India's import taxes and anti-dumping duties will protect the domestic incumbents.

Imports from countries such as Japan and Korea which have free trade agreements with India will attract nominal taxes, but the imports will still be subject to anti-dumping duties. Moreover, the import-parity-pricing mechanism in India sets a floor for steel prices.

What could change the outlook

Moody's will likely change the outlook back to stable if it expects year-on-year growth in EBITDA per ton of our Asian steel producers to stabilize over the next 12 months.

"We will likely change the outlook back to stable if the decline in EBITDA per ton for our Asian steel producers is arrested, and if we expect the metric to stabilize over the next 12 months," Moody's says.

Since outlooks represent our forward-looking view on business conditions that factor into our ratings, a negative (positive) outlook suggests that negative (positive) rating actions are more likely on average. However, the industry outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of the rating outlooks of issuers in the industry, but rather our assessment of the main direction of business fundamentals within the overall industry.

Source: Steel Insights

Nippon Steel cuts capex spending forecast as US-China trade war hurts demand

Nippon Steel Corp has downsized its planned capex for the period between 2019-2021 to the extent of 10-20 percent following weak steel demand in the backdrop of continued China-US trade war which has impacted profits.

Japan's top steelmaker has reported a 33 percent decline in profit for June quarter and predicted a 56 percent plunge in profit for FY20.

The company sees a gloomy scenario has highlighted in its presentations and interaction with investors.

"While promoting further recovery of manufacturing capability, we intend to make a shift to "profitability oriented production" that put more emphasis on economic rationality in production volume in line with order intake, in accordance with demand slowdown in some of domestic industrial sectors & margin deterioration in exports for spot markets," the company said.

"Margin Shrink brought by high raw material prices and low steel product prices,"

"Iron ore prices remained at high level due to growing pig iron production in China. The impacts from Vale's accident & Rio Tinto's underproduction will be subdued and speculative transactions will recede, but in terms of the current low level of inventory, iron ore prices remain high for now,"

Robust infrastructure investments have boosted demand in long steel products and resulted in the record-high crude steel production. The EAF's production volume has grew as it substitutes the removed illegal induction furnaces production.

Due to the poor scarp supply chain in China, the demand of pig iron for the EAFs has increased and pig iron production also reached the record-high level.

Iron ore inventory remains low. The long products' SD situation stays firm, while flat products market bear a weak tone. The polarization between long & flat prices is anticipated to expand as infrastructure investments gain more momentum.

Strategy to fights slowdown

Build lean & optimal production framework

Promote concentrated investment in competitive production lines and improve their operation rates coupled with productivity improvement through implementation of advanced IT.

Overcome drawbacks

Evaluate each product and area of business to define direction. Plans to be announced one by one as they put into concrete shape.

As the first step, UO pipe mill in Kashima Works will be closed. Its production will be transferred to Kimitsu Works.

Restructure overseas business, close loss making arms

In terms of increasing overseas businesses profit and re-distribution of management resources, thoroughly examine measures, including withdrawal from businesses that cannot move into the black, businesses that have completed their roles, or businesses that are losing synergies. Interaction with investors Katsuhiro Miyamoto, Director and Executive Vice President Takahiko Iwai, Executive Officer, Finance

Q. How you incorporated your assumptions on raw material prices?

A. We have incorporated the assumption that fine iron will remain at the current level of US$100 per ton over the second half of the fiscal year ending March 31, 2020 (FY2019). We also assume that the market price of hard coking coal, while it is currently declining, is likely to be higher in the second half compared to the first half, due to weather factors, etc. and given the past pattern.

Q. Explain how the expected cost increase has been incorporated in your product prices of FY2019 forecasts?

A. With regard to prices for products with long-term contracts, we anticipate that we will be able to reflect the increased cost caused by higher raw material prices in some sectors, with some time lag, and that we will have to negotiate with customers for other sectors.

Ultimately, the increased cost resulting from higher raw material prices will be reflected in sales prices but in the case of our forecasts for FY2019, we are incorporating only the price rises which we believe will be reflected within FY2019 as of this moment. Concerning spot products for distributors, our current assumption is based on the current spot market.

Q. If you attempt to raise sales prices while prices are declining in the international market, more imported steel and more electric furnace steel will flow into the market, which may lead to the risk of a decline in your market share. What do you think about this?

A. Electric furnace steelmakers tend to be engaged in different markets and we do not think we will greatly compete with them. We are resolutely determined to explain to our contracted customers the value we provide, including delivery, quality, solution proposals, and a strong response overseas, and ask them for a fair appraisal.

Q. Raw material market prices are projected to decrease business profit by ¥190 billion, or roughly ¥5,000 per ton, while steel prices and the product mix are set to increase the profit by only ¥35 billion, or roughly ¥1,000 per ton. Is it therefore correct to assume that your margin will deteriorate by ¥4,000 per ton?

A. In FY2019, domestic shipment is expected to decrease because of decline in indirect export demand, which we plan to offset by increasing shipments of spot sales for exports. This is likely to cause deterioration in the product mix. In fact, steel product prices alone, excluding the impact of the product mix, are expected to improve by more than ¥1,000 per ton on a net basis.

Q. Price of hot rolled coils (HRC) has been around the level of $500 per ton in East Asia. Are you expecting this price level to continue in the second half?

A. Given the rise in raw material prices, the HRC market may slightly rise in the future but we are factoring in the assumption that the current level will continue in the overseas steel market for FY2019.

Q. How have cost increase in alloys, commodities and transportation increases been incorporated in your forecasts on this occasion?

A. Costs for commodities and other items, excluding raw material prices, have increased by about ¥5,000 per ton in the past two years. We have strived to reflect this in sales prices in the past two years, but

have not fully done so.

Moreover, the cost of freight and other items is also increasing. We are asking our customers with contracted business to understand our value proposition and allow us to reflect cost increases in commodities, transportation, freight, and other factors. However, we have not fully incorporated the potential cost increase that we think is necessary to be reflected in our forecasts for FY2019.

Q. The level of steel shipments was at a low level in the first quarter. Is there any delay into the second quarter?

A. Mainly due to the weather, shipments of about 280,000 tons have been delayed into the second quarter.

Q. Explain the trend in sales prices by sectors, spanning the first quarter and the second quarter to the second half.

A. Sales prices for domestic long-term contracted products rose from the first half of FY2018 to the second half and are projected to rise from the first quarter of FY2019 to the second quarter. Sales prices for exports were at a high level in the first half of FY2018 and remained firm in the second half of FY2018 but plummeted at the end of FY2018. They then declined again in the first quarter of FY2019 and are expected to decline more in the second quarter. Toward the second half of FY2019, we intend to continue raising sales prices for domestic contracted products. As for exports, the overseas spot markets are expected to be soft, mainly for flat steel products, and we have incorporated flattish markets. At the same time, we are assuming a significant deterioration in the margin stemming from an increase in raw material prices.

Q. Why are you expecting a business profit decline of ¥8 billion from group companies in steelmaking in your forecast for FY2019 vs. FY2018? Your interest in the iron ore mine must be contributing to profit.

A. Our interest in the iron ore mine is contributing to an increase in profit, and so are Sanyo Special Steel Co., Ltd. And Ovako AB, which became our subsidiaries. Despite their positive impact, we forecast a profit decline of ¥8 billion from overall group companies due to a significant profit decline in the stainless steel business and at Nippon Steel Nisshin, mainly owing to a decrease in volume. Moreover, domestic Rerollers are being affected by the changing business environment. The amount of decline in profit is not that significant for each company but significant in aggregate. Domestic demand for stainless steel is expected to decline for kitchen, and gas and oil equipment, due to a decline in housing starts, and for semiconductor-related industrial machinery. The supply-demand balance for exports of stainless products is projected to weaken because of continued excess capacity and excess supply, and the worsening trade protectionism. While the margin is not deteriorating much, the impact of production cuts will be significant.

Q. Steelworks in Japan have posted significant impairment losses in the past. Given your forecast of a ¥65 billion ordinary loss (non-consolidated), is there a risk of generating impairment losses?

A. Because operating profit (non-consolidated) excluding inventory evaluation loss has been in the red for three consecutive years since fiscal 2017, there is a possibility that some segments may indicate warning signs of impairment losses but we intend to make an assessment with due consideration to future profit assumptions.

Source: Steel Insights

Steel biggies see retail beacon in gloomy market

Pounded by an unprecedented slump in automobile sales and gloomy economic scenario, major steel players have renewed focus on steel retailing. Tata Steel, the market leader in the automotive segment, boasting of 46% share, unveiled in August its offline retail store 'steeljunction' in a new avatar. The integrated steel player aims to set new paradigms in steel

retailing by tapping effectively into the B2C (business to customer) platform. The outlet offers a one-stop shop for customers on a steel products buying spree.

According to TV Narendran, Tata Steel's global Managing Director & Chief Executive Officer, "The store will showcase steel products catering to four consumer segments – home décor & gifting, home building, home making and tools & implements. Located in a premium Kolkata area, this 6,000-sq. ft. store promises to offer a unique steel shopping experience, better quality products, greater money value to customers through a comprehensive product range, services and in-store facilities". Tata Steel has sharpened its focus on strengthening customer relationships, expanding distribution networks and building brands that focus on value-added segments like home décor and gifting, home building, home making and tools and implements. The retail outlet 'steeljunction' features Tata Steel's premium branded products such as Tata Tiscon, Tata Pravesh, Tata Wiron, Tata Colour, Tata Agrico and Durashine. Apart from showcasing its own branded products, Tata Steel has also collaborated with its vendor partners to feature their premium branded products in the home-making space at this store.

"Steeljunction is integral to our strategic focus on the retail segment. It is aimed at providing a differentiated steel purchase experience to discerning customers. Steel is the most sustainable metal with diverse applications. This initiative will give a fillip to consumption of steel as products will be made available from more accessible locations," Narendran adds.

Today, Tata Steel boasts of a large retail business, leveraging an extensive network of over 200 distributors and more than 12,000 dealers. The company believes this segment is insulated from the cyclical vagaries of the steel business and promises strong cash flows. If pioneering steel-making in India was a path-breaking step by Tata Steel then de-commoditising steel is a quantum leap. Tata Steel has been a pioneer in introducing brands like Tata Steelium – the world's first branded cold rolled steel, Tata Shaktee, Tata Tiscon, and many others years ago. The June quarter was tough for Tata Steel as sales in the automobile segment dipped 11.47% year-on- year. The automotive sector is one of the key components driving Tata Steel's sales. Tata steel is one of the key suppliers of high-tensile and auto galvanized products. Also, the steel company is the largest supplier of skin panels.

However, Tata Steel beat the auto sector blues by registering higher sales growth in other segments such as branded products and retail, industrial products and projects and downstream. Firm sales growth in these alternative segments helped Tata Steel to achieve 16% overall spike in sales to 3.66 million tonnes (MnT), outpacing the industry average of 7%. And, to insulate itself from the vacillating fortunes of the steel business, the company is now putting more emphasis on its steel retailing plans. Peeyush Gupta, Vice-President, Steel (Marketing & Sales), at Tata Steel, says, "The core purpose of Steeljunction has remained the same since 2005. It is to provide a touch-and-feel experience to its consumers, including consultation on the right choice of product for their home building and home-making needs. With Tata Steel's foray into the digital space via www.aashiyana.tatasteel.com, Steeljunction offers the physical store support in deliveries and order management.

While the Steeljunction store will promote the look-and-feel of products, customers can easily book these online through the company's e-selling platform Aashiyana that clocked a business of over INR 100 crore within one year of its launch. Aashiyana is the online retail platform of Tata Steel that empowers home builders with relevant information, inspirational ideas and reliable contacts at their fingertips. Back in 2005, Steeljunction started off as India's first organised steel retail store. The outlet offers an array of steel products, both useful and aesthetically pleasing. Over the years, the company-owned and –operated store has been clocking about INR 40-crore turnover each year besides providing a unique steel shopping experience.

Essar Steel

Another key domestic producer, Essar Steel, has been running the country's largest retail chain for steel, Essar Hypermart. With a network of over 350 outlets across India, Indonesia and West Asia, the steel maker has ensured last-mile

connectivity. The stores are inter-connected by an IT network and backed by effective logistics and supply chain. Essar Hypermart offers a range of flat steel products for a variety of applications – hot rolled, cold rolled, galvanized, galvanized corrugated sheets, heavy plates, colour-coated sheets, and TMT bars. It offers customized services to original equipment manufacturers (OEMs) and retailers, along with meeting the requirements of small and medium enterprises (SMEs). "We have been the pioneers in steel retailing in the country. The retail outlet chain, Essar Hypermart, accounts for 20-25% of our overall sales. The products are serviced primarily from the service centres. As of now, we have 20 such outlets across the country," say an Essar Steel source. Essar Steel has placed high stakes on steel retailing. The company believes this is a segment immune to market volatility and ensures a steady revenue stream.

JSW Steel

JSW Steel, too, has a leading presence in branded steel retailing. Launched in 2007, JSW Shoppe is a unique network of stores that are operated on the franchise model by the company's channel partners. Such outlets directly meet the needs of individual customers as well as SMEs across the country. Around half of JSW Shopee stores serve the semi-urban and rural markets.

JSW Steel's rural focus is substantiated by firm projections. Finished steel consumption in rural areas is expected to touch 14 kg by 2020, up from 9.74 kg in 2016, as per a report by India Brand Equity Foundation (IBEF). Government-sponsored schemes like Pradhan Mantri Awas Yojana (PMAY) and Pradhan Mantri Grameen Sadak Yojana (PMGSY) are fueling demand in the rural markets.

Enthused by the robust response, JSW Steel plans to add 200 more stores to its network. Beyond the country's shores, the steel manufacture plans to open JSW Shoppes in the SAARC region, beginning with Sri Lanka and Nepal. The company believes the outlets are a unique initiative to take branded steel products to customers beyond the cities. By walking into a JSW Shoppe, buyers can directly purchase products, get a hang of their applications and avail related services like financing.

Most of the JSW Shoppe outlets are also equipped with their own processing facilities, offering value addition on products. The stores market three branded steel offerings from JSW Steel – Vishwas, NeoSteel and Colouron and sell a panoply of products – cold rolled (CR) products, colour coated products, galvanized steel, Galvalume (a coating consisting of zinc, aluminium and silicon used to protect a metal, primarily steel from oxidation), TMT bars, wire rods and special alloy steel.

Source: Steel 360

RHI Magnesita eyes growth prospects in India

Softening steel prices and sluggish sentiments prevail in the European and US markets – dampening spirits of investors sniffing growth opportunities. The emerging markets of South Asia and the MENA region are beckoning industry bigwigs. RHI Magnesita (RHIM) is no exception. The global supplier of high-grade refractory products, systems and solutions, which are indispensable for industrial high-temperature processes exceeding 1,2000C in a wide range of industries, is eyeing growth prospects in India.

The reasons are not far to seek: unprecedented growth in infrastructure and construction, the government's Make-in-India campaign and the unbounded potential for expansion of capacity and consumption make India the one-stop destination of global investors.

RHIM at a Glance

RHI Magnesita serves industries as diverse as steel, cement, non-ferrous metals and glass. With a turnover of Euro 3.1 billion, 35 production sites and 14,000 employees, the refractory behemoth serves more than 10,000 customers globally. Its shares have a premium listing on the London Stock Exchange and are a constituent of the FTSE 250 index.

Refractory products are used in all the world's high-temperature industrial processes. Without them, steel, cement, lime, non-ferrous metals, glass, energy, environment and chemical industries wouldn't exist. Refractories defy the most hostile conditions to stay strong and

stable at temperature of 1,2000C and much higher. Refractories are used to contain materials safely while they are burned, melted, blasted, fired, fused, and shaped as well as to protect equipment such as furnaces and kilns against thermal, mechanical and chemical stress. A refractory manufacturer's job is to provide answers to these extreme challenges. RHI Magnesita produces over 120,000 products ranging from bricks and lining mixes to flow control products such as slide gates, nozzles and plugs. Their service lives range from a few cycles within a day to as long as 10 years. The base materials the company uses are magnesite and dolomite – materials which require skillful handling: the melting point of fused magnesia is above 2,800°C.

Growing Footprint in India

RHI Magnesita has been operating in India through its three subsidiaries – the BSE/NSE-listed Orient Refractories Ltd, RHI Clasil Pvt Ltd and RHI India Pvt Ltd. Together, they provide refractory products and refractory management services to many large and mini steel plants in India. The company is in the process of integrating its Indian subsidiaries to form one listed entity in India, which would emerge as the largest single refractory solutions platform in India offering the industry's most comprehensive product portfolio. The merger scheme is currently under NCLT hearings and is expected to be completed before the end of the calendar year.

Moreover, as part of its 2022 strategy, the company is looking at inorganic growth in the Indian market with above-average level of investments. The refractory services provider has recently made a small acquisition of a metallurgical equipment manufacturing company in Mumbai. Further, it has inked an asset purchase agreement to acquire a plant and certain other assets of another Indian refractory maker in Cuttack, Odisha. RHI Magnesita India MD and CEO, Parmod Sagar, was in Kolkata recently and in conversation with Steel 360 dwelt at length on the company's technological offerings, its business developments in India and the challenges it is likely to confront.

Rapid Strides Towards Growth

"RHI Magnesita plans to strengthen its footprint in India at a time when steel capacity enhancement and unprecedented rise in steel consumption have turned India into the rising star of the global steel industry. We have already acquired two companies in the country. One is a small Mumbai-based metals company that manufactures slide gate-handling mechanisms. So, there is a refractory and there is another machine that operates that refractory. This company is currently a 100% subsidiary of Oriental Refractories Ltd," Sagar informed. "This year," he continued, "we have also concluded an asset purchase agreement with Manishri Refractories & Ceramics Pvt Ltd. This plant is in Cuttack. As part of the agreement we have acquired the land, building and equipment of the said company. As it is an asset deal, we haven't acquired the company's business. And we are planning to put up a magnesia carbon production facility at the plant. It will be the company's first such production facility in India." Dwelling on the refractory market in India and RHIM's valued customers, Sagar said: "Almost all the integrated steel manufacturers are our customers like the JSPL Group and the Tata Group. Earlier, Bhushan Steel was a valued customer until it was acquired by the Tata Group."

Market Leader in Technology

Responding to a query as to how competitive the Indian market is for RHIM, Prasad commented: "There are two distinct segments in the market. First is the high-end product segment that calls for the utilisation of high-end technology. We don't have many competitors in this segment and we are the market leader in technology. However, in the commodities segment the competition is stiff. There are Chinese traders and a lot many small players competing for space. However, we are hopeful that the merger of our Indian subsidiaries would definitely be a big boost to our business. We will have a bigger product portfolio, be in a position to offer full line solutions to our customers and manage resources far more efficiently." Speaking about RHIM's focus on the South East Asian markets, Sagar observed: "We have a strong presence in the emerging South East Asian markets and

would like to consolidate our position further. Many RHIM products from India are expected to other parts of the region." Commenting on the company's thrust on technology, Sagar said: "We have a state-of-the-art manufacturing facility in Vishakhapatnam and a state-of-the-art R&D centre is coming up in Bhiwandi, an industrial township. RHIM has two global R&D centres in Loeben, Austria, and Contagem, Brazail. The third is coming up in Bhiwandi. It will take about one-and-a-half years to be fully functional. The technology centre will streamline our R&D operations in India." Highlighting the company's mining operations that are spread across the globe, Sagar Said: "There are not much refractory raw material reserves in India. There are some bauxite reserves and small reserves of magnesia which are basically low-grade, unsuitable for RHIM's high-end products."

"India and China are our two major markets due mainly to their strong steel fundamentals. Prices are softening in the US and Europe and end-demand remains weak. However, our look-east policy has not been adopted to offset that loss. We are looking at cementing our position in the growth hubs of the global steel industry. We know which are the global growth hubs of the steel industry and are focusing on those regions. In China, for example, the revival of the dolomite plant in Dalian will contribute in a big way to boosting our sales volumes," he said.

Dwelling on the technological services the company provides to steel makers, Sagar said: "We have expertise in flow control technology. Most big steel plants in India and across the globe have adopted our slide gate mechanism to regulate flow control. We also offer state-of-the-art services in tundish metallurgy. RHI Magnesita already has a strong presence in the long steel segment and we are strengthening our presence in the flat segment. We are evenly spread in the alloy, construction and stainless steel markets." "As global refractory leaders," continued Sagar, "We are in a position to drive positive change in our industry and the industries that rely on us. We offer a complete product and services portfolio for all steel industry processes, ranging from reduction up to reheating furnaces, through steel making and ingot casting. A global sales and service network ensures the best and most reliable service in the industry. From basic and non-basic bricks and mixes, slide gate plates, isostatic products and prefab components to special machinery, mechanisms and repair systems, our products and customized services are delivered to customers worldwide."

RHI Magnesita's main client base is the global steel industry. Sagar said: "Around 85% of our customers are from the steel industry. The rest are from non-ferrous industries like cement, chemicals and glass. Now, we all know the importance of recycling in the steel industry and its impact on sustainability. As a leading global supplier of refractory materials we understand the importance of recycling and reusing materials. As an eco-friendly manufacturer, we focus on increasing the share of secondary raw materials in manufacturing."

Expressing optimism about RHIM's growth prospects in India Sagar averred: "Initially, we are looking at growth of around 6% CAGR if steel fundamentals remain strong. With the government's focus on increasing per capita consumption of steel in the country, we are hopeful of growing at a rate of around 7% per annum."

Source: Steel 360

Aichi to invest in Vardhman Group for auto grade steel

Aichi Steel Corp of Japan an affiliate of Japan's Toyota Motor Corporation has decided to buy approximately 11.4 percent stake in Vardhman Special Steels and provide technical assistance aiming to establish a world class special steel company in India.

The company will be capable of supplying steel for critical and special applications for today and tomorrows automotive industry. Aichi Steel will be posting three personnel in India while additional critical support from the headquarters will be provided constantly.

"In addition to investing approximately 11 percent of issued shares after capital increase, we agreed to provide technical assistance to Vardhman. The demand for special steel in India is expected to expand further due to the growth of the automobile industry. Based on this

capital investment and technical support, the foundation of the special steel business will be strengthened by improving global quality and cost competitiveness," Aichi said in a release.

"First of all, we will have Japanese staff stationed in Vardhman from our company to provide strong technical support, and we will consider further strengthening relationships and expanding business while monitoring market trends," it added.

In the future, Aichi and Vardhman will work to realize a timely supply of steel materials to Aichi's forging business bases in the ASEAN region, thereby building an optimal global production system and contributing to customer.

"One of our key objectives of this partnership is to develop special steel grades for automotive companies in India so as to help fill the gap of providing substitution of steel that is currently being imported. We plan to later export this special grade of Steel to South Asia and Europe as well," said Sachit Jain, Vice-chairman and MD Vardhman Special Steels.

The two companies signed an agreement on the deal worth $7 million in a ceremony held recently in Aichi Prefecture, where the Japanese firm is located.

"This partnership will help Aichi Steel strengthen the foundation of its special steel business by improving quality and cost competitiveness on a global basis. Vardhman Special Steels team is a friend who we will be supporting to develop technology based solutions in coming years," added Aichi President Takahiro Fujioka.

This initiative of Vardhman Steel has been executed post deep consultations with the Steel Ministry as part of "Make in India" initiative. Vardhman Special Steels, set up in 1973, focuses on making special and critical steel grades for automotive application.

Customer base spreads from passenger cars, commercial vehicles, and two wheelers to engineering and off highway industry both in India and outside India.

Aichi Steel Corporation is the only material maker of the Toyota Group. Aichi Steel have turnover of $2.4 billion and caters to a wide range of industries centered on the automotive industry. Headquartered in Tokai city, Aichi Prefecture, Japan they came into existence in 1934 and changed name to Aichi Steel Corporation in 1945. They now have steel and forging operations across the globe.

The development comes at a time when Indian auto companies in August delivered a highly subdued volumes performance across segments. While Passenger Vehicles and 2 Wheelers segment recorded higher double-digit volume decline, M&HCVs and LCVs also recorded a sharp decline on YoY and MoM basis.

Tractor segment also continued negative trend due to falling volume in the Northern region in addition to ongoing slowdown in Western and Southern regions. Despite marginal de-stocking, overall inventory level remained higher.

The automobile industry has been facing challenges since past 3 quarters in terms of additional burden of new insurance policy, constraints on loan disbursement from financial institutions and higher axle load norm impacting CV sales.

As most auto makers have decided to cut the inventory gradually in 2QFY20, wholesale dispatches were lower than retail during the month for most companies, which also impacted Y-o-Y and M-o-M performance to some extent. We believe that the industry would see sequential improvement in 2HFY20, though on YoY and basis its performance would remain muted in FY20.

Source: Steel Insights

Pradhan stresses on transformational leap in steel industry

Union Minister of Steel Dharmendra Pradhan stressed on global outreach as a means of sourcing raw materials as well as exploring new overseas markets for Indian steel, while speaking at the Union government's first "Chintan Shivir", organised recently in conjunction with the Joint Plant Committee (JPC) and the Federation of Indian Chambers of Commerce & Industry (Ficci). He emphasized on the need to reduce exports of mineral resources and to focus on value addition. He also spoke about the need for a transformational leap in the Indian steel industry.

Unveiling the new logo of the Ministry of Steel, "Ispat Irada", Pradhan said the country must work with an "Ispat Irada" to increase appropriate usage of steel. He informed that eastern India is the focus of the government. Mission Purvodaya will strive to work on the paradigm of eastern India driving national growth, he said.

It also emerged during the sessions that the state governments and the Government of India (GoI) are working together to avoid any anticipated disruption in iron ore supply due to the expiry of mining licenses in March 2020.

In addition, issues related to logistics are also being resolved through effective co-ordination between the state governments and the GoI.

The Chintan Shivir was a landmark event in the history of the Indian steel industry – not only in terms of participation but also from the perspective of information sharing, said Saraswati Prasad, Special Secretary, Ministry of Steel. The sessions were designed keeping in mind the current and future needs of the steel industry, aligned to the intent of the National Steel Policy, 2017.

The event also provided an opportunity for stakeholders from the steel fraternity to hold discussions on topics of pressing relevance. The stakeholders emphasized on creating an ecosystem for enhancing steel usage in the country, scaling up steel-making capacity in the primary and secondary sectors, developing steel clusters in co-ordination with the state governments and having in place an enabling steel scrap policy.

The industry captains highlighted the key issues that act as deterrents to the growth of the sector. These include the lack of adequate logistics, infrastructure, security of raw material supplies, delays in statutory approvals like environmental, forest and other clearances, availability of water, the fact that there is very little investment in R&D, lack of skill development, high power tariffs, lack of affordable access to finance and taxes in the mining industry.

The discussions brought to the fore knowledge gaps in the usage of steel. Resolving these would help generate demand. Also, taking advantage of the various initiatives of the GoI such as Sagarmala, Bharatmala, Housing for All, etc. will lead to enhanced steel consumption.

It also emerged that the steel industry needs to move on from its basket of generic items to value-added and high-end products.

There was active participation from the audience and many pertinent questions were raised and discussed. According to Prasad, "the Ministry has made a note of all the questions. Some of them were answered. Many of them remained unanswered. Make sure, the Ministry will make use of all these questions in the formulation of its policy.

Source: Steel 360

China Steel optimistic on demand from SE Asia

China Steel Corp recently gave a cautiously optimistic outlook for its business next year, citing growth from infrastructure demand in Southeast Asia and offshore wind farm development in Taiwan.Sluggish market demand and fluctuating raw material prices have plagued the steel industry since the first quarter of this year. The state-run company has witnessed a 42.29 percent annual decline in combined pre-tax net income to NT$13.62 billion (US$447.7 million) in the first nine months of the year, while revenue fell 4.94 percent to NT$281.81 billion. While demand is expected to remain flat this quarter, the industry is showing early signs of recovery, as steelmakers are cutting production and raising prices, CSC executive vice president and spokesman Hwang Chien-chih told a news conference in Taipei. "US steelmakers have taken the lead in propping up steel prices with the Japanese following suit… It has come to a point where we can't afford further declines," Hwang said, adding that European industry peers have also been cutting production. Although a US-China trade spat has cast a pall over the industry, the trend of manufacturers relocating to Southeast Asia and demand for steel for plant construction would benefit the industry, he said. "The Indian market is expected to demand 108.7 million tonnes of steel next year, second only to China … and Vietnam, for once, would become one of the top 10 steel consumers globally, demanding

up to 25.3 million tonnes next year," Hwang said, citing a report published by the World Steel Association. Domestic demand for steel would also increase, as Taiwanese companies are steadily returning home to set up plants, for which CSC expects to ship 200,000 tonnes of steel plates and H-beams, he said. The nation's developing wind energy industry would also help drive up demand for steel until 2025, he added. "According to our estimates, Taiwan's offshore wind farms would need about 1.5 million tonnes of steel plates, of which we can produce about 750,000 tonnes over the next six years," Hwang said. "This equals to 125,000 tonnes per year, or about 15 percent of our overall production [of steel plates]." CSC has invested NT$6.8 billion on a facility to produce underwater infrastructure components through its subsidiary Sing Da Marine Structure Corp, which is to provide Danish wind farm developer Orsted A/S with 56 jacket foundations by 2021. CSC is also co-developing an offshore wind farm off the coast of Changhua County, the Site 29 project, with Copenhagen Infrastructure Partners K/S and Diamond Generating Asia Ltd. The project is expected to be completed and join the power grid by 2024, generating NT$6.34 billion of revenue per year, CSC said.

Source: Metal Junction

Steel minister okays iron ore supply to Andhra for greenfield steel project

Union Minister for Petroleum and Steel Dharmendra Pradhan has assured the Andhra Pradesh government of iron ore linkage for the proposed steel plant in chief minister Y S Jagan Mohan Reddy's home district Kadapa. Pradhan, who met chief minister Reddy at Amaravati a few days back, responded positively to the latter's request. Public sector iron ore miner NMDC would soon sign an MoU with the state government for the iron ore supply, chief minister's office said. During the meeting, Reddy also requested Pradhan to consider setting up of a greenfield refinery at Kakinada through the public sector oil companies, as mentioned in the State Reorganisation Act. He also wanted the Centre share the royalty collected from the oil companies equally with the state, stating that oil and gas exploration activities have been posing various environmental risks besides depleting the fish population in the state. Pradhan said AP was likely to get huge petroleum investments as several big players were looking to invest as much as Rs two trillion in the east coast during the next five years.

Source: Business Standard

Iron ore supply to steel makers to be disrupted after mining leases expire: FIMI

With the mining leases of 329 private mines slated to expire on March 31, apex mineral body FIMI believes that iron ore, a raw material used in steel-making, will be the worst hit from the move. The 329 mines, including 48 operative and 281 non-operative ones, are spread across 10 states, Federation of Indian Mineral Industries (FIMI) said. "Raw material for steel industry, iron ore, would be the worst hit, since out of 329 mines 232 are of iron ore alone - 24 operative and 208 non-operative iron ore mines," FIMI Secretary General R K Sharma said in a statement.

"Things are not that simple as the government might be thinking. It is going to be a panic situation for a lessee if it is not able to retain the mine.....On one side steel industry is looking to produce 300 plus million tonne and here we have a situation where supplies of raw material are bound to get disrupted for a long period," Sharma said adding that the current capacity is of about 100 million tonne. When India is looking to achieve this target, the blues in iron ore mining will be a major roadblock for steel producers, he rued.

The mining leases of 48 operative mines - 24 in Odisha, six each in Jharkhand and Karnataka, five in Gujarat, three in Andhra Pradesh, two in Rajasthan, and one mine each in Himachal Pradesh and Madhya Pradesh - will expire on March 31, 2020. Mining leases of 184 non-operative mines in Goa, 42 in Karnataka, 12 each in Jharkhand and Madhya Pradesh, nine in Maharashtra, seven in Odisha, six each in Andhra Pradesh and Gujarat, two in Rajasthan, one in Himachal Pradesh will also expire. Majority of non-operative iron ore mines are in

Goa which has a blanket ban on mining.

Besides iron ore, the mining leases of 21 mines of manganese, 14 of bauxite, 23 of limestone, four of chromite, two of graphite, one of garnet and 32 of other minerals will expire on March 31. "FIMI does not understand the logic behind such discrimination. For captive mines the expiry is March 31, 2030 and for non-captive mines it is March 31, 2020. Ultimately the raw material is being used to make final products. These bottlenecks are nothing but hindrance in economic growth and need to be removed," Sharma said.

www.auto.economictimes.indiatimes.com

Steel companies may be permitted to divert ore from captive mines to other units

In a big boost to the steel sector, the government plans to allow integrated steel producers to divert a portion of iron ore from their captive mines for use by other joint venture entities. Existing regulations don't allow diversion of minerals from captive blocks for use by any entity other than the one that has been allotted the mine. Only recently, the mines ministry has permitted SAIL to sell a portion of iron ore from their captive mines in the open market to boost its revenue.

As per the new reform initiative proposed for mining, the Centre would permit steel producers to use an identified portion of iron ore from their captive mines allotted prior to the auction regime for use by any other of their entities or joint venture operations.

In case of a JV, the original lessee of the mine (the company that was originally allotted the captive mine) should at least hold 26 per cent equity.

The changes would benefit companies such as SAIL, Tata Steel, Vedanta Ltd and JSW Steel, all of whom have operational captive iron ore mines. Public sector steel major SAIL has over two dozen iron ore mines in Jharkhand, Odisha and Chhattisgarh. Similarly, Tata Steel has also got several mines in all the three mineral rich states. The mining lease of a large number of these is expiring in March.

"This development is positive for the steel industry, but several issues would have to be addressed first for the scheme to become successful. Movement of captive ore may not be easy due to evacuation issues and investment in additional infrastructure would need to be made first," said an expert from the steel ministry's Joint Plant Committee.

The government is looking to introduce the new regime for captive mines based on the recommendations given by a high-level committee headed by the NITI Aayog Vice Chairman and comprising top representation from ministries of finance, mines, coal and environment. The aim is to facilitate downstream plants, encourage value addition in the country and allow for better utilisation of India's natural resources.

Stringent production regulations for captive mines have limited extraction of ore. Companies often produce only that much mineral as is required by their downstream plants because there is no incentive to produce more. Moreover, additional production is also not allowed to be used by the lessee in any other of their downstream operations.

Under the reform initiative, the Centre is already looking to discontinue the practice of offering mining rights (under auction) for mineral resources, including coal, to companies for captive use.

Instead, a new hybrid mining lease agreement would be framed under which companies would be free to use extracted mineral both for captive use of end use plants (power, steel, cement etc.) and commercial sale in the open market.

The government is currently studying the recommendations of the HLC and will soon come up with an action plan, including further amendments to the Mines and Minerals (Development and Regulation) Act. The committee was set up in April on mines, minerals and coal sectors to identify key challenges and negate their impact. It has submitted its report to the Centre.

Source: The Economic Times

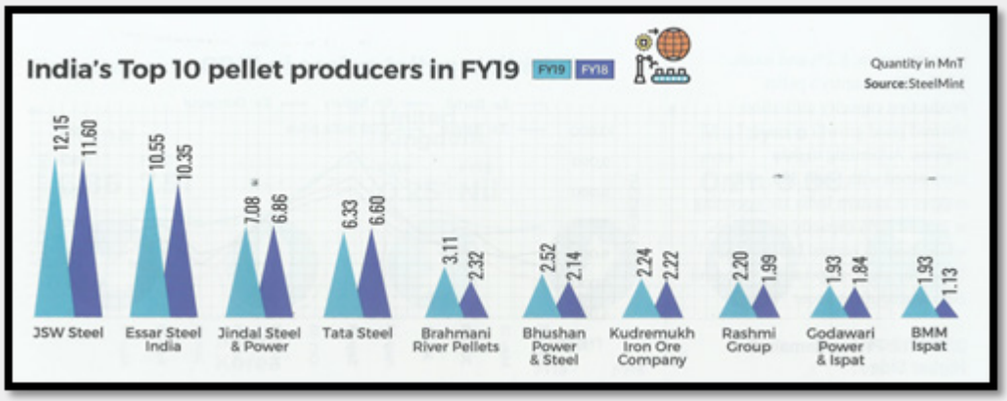
Will Indian Pellets Industry keep up the pace in FY20?

Over the past three years in a row, India's pellet production and exports have grown exponentially by catering to both domestic and global markets.

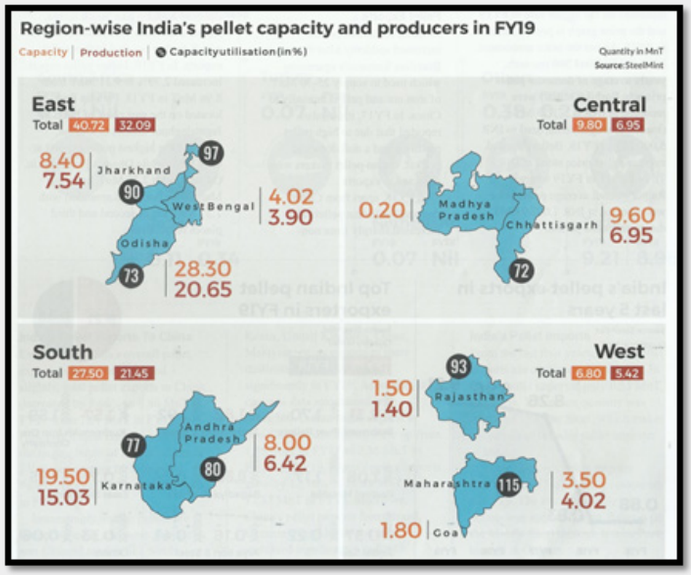
In financial year 2018-19 (FY19), India's pellet production grew by 10.59% to 65.91 million tonnes (MnT) from 59.60 MnT (in FY18). On the other hand, pellet production capacity increased by 4.05% to 84.82 MnT during the same period.

Demand for Indian-origin pellets by Chinese steel makers is one of the main reasons for the growth of the Indian pellets industry. Furthermore, if analysts are to be believed, China' demand for iron ore pellets and high-quality ore is expected to accelerate in 2020 as a result of its government's push to shift dozens of steel mills to coastal regions in its battle to stop smog in industrial cities.

According to industry sources, the Chinese government's emphasis on relocating steel plants to the coast, along with stricter environmental requirements, will lead to a drastic increase in the demand for higher-grade iron ore in the coming years.



Amid stringent environmental policies, domestic pellet production in China is expected to fall and it won't be sufficient to meet the country's demand for this raw material product. Also, the cost of making pellets with imported feeds is going to be very expensive. Hence, the mills will have to rely on foreign pellet producers, say analysts.



London-based senior iron ore analyst at CRU Erik Hedborg expects Chinese pellet demand to grow more than 40% by 2023 to roughly 190 MnT, from 140 MnT in 2018, and this is expected to keep rising, as per international news agency Reuters.

From the past couple of years, India is the top pellet exporter to China with a share of over 34% in the latter's total pellet imports basket and the above numbers indicate a growing demand for the material. It seems like Indian pellet makers have a bright future with increasing demand emanating from China.

In India, pellet producers include both large integrated steel manufacturers having captive pelletisation capacities as well as merchant manufacturers. While large pellet makers include the likes of Tata Steel, JSW Steel, Essar Steel and Jindal Steel & Power etc., the merchant category includes Brahmani River Pellets Limited (BRPL), KIOCL, MSPL etc. Let's take a look at how India's pellet:

Pellet Producer's output surged in FY19

Major Indian pellet maker's production increased significantly in FY19 over FY18. Odisha-based BRPL observed an increase in

pellet production by 34.05% y-o-y. The company recorded pellet production of 3.11 MnT in FY19 against 2.32 MnT in FY18.

Naveen Jindal-led Jindal Steel and Power Limited (JSPL) reported pellet production of 7.08 MnT in FY19, up by 3.21% y-o-y.

Pellet production of south-India based miniratna and Central public sector enterprise KIOCL increased by 0.9% from 2.22 MnT in FY18 to 2.24 MnT in FY19.

Central India's major pellet-making company Hira Group's Godawari Power & Ispat Limited recorded a growth of 4.89% in pellet production to 1.93 MnT in FY19 from 1.84 MnT in FY18. India's top five pellet producers, including JSW Steel Ltd, Essar Steel, JSPL, Tata Steel Ltd and BRPL, accounted for 59.50% share in India's total pellet production in FY19.

India's pellet capacity utilisation up

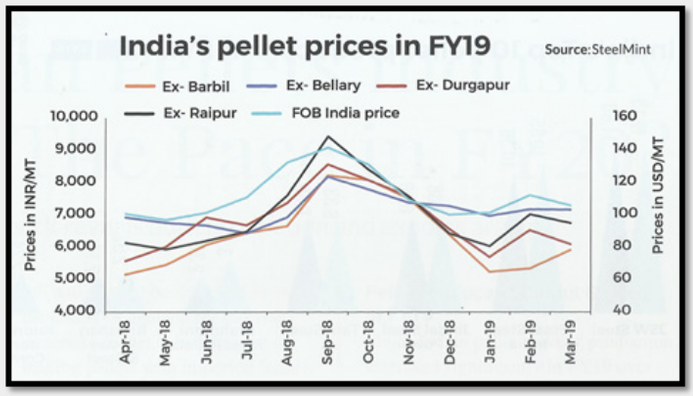
Interestingly, in FY19, India's overall pellet production capacity utilisation increased to 78% against 72% in FY18. India's eastern region pellet makers accounted for nearly 49% share in pellet production in FY19 while the central region accounted for 10.5%, the western region, 8.2% and south, 32.5%. The country's pellet production capacity utilisation showed good growth in most regions. According to data maintained with Steel 360, pellet makers in eastern India are operating at around 79% capacity utilisation while those in central India are at 72%. The west is operating at around 80% and south at about 78%.

Domestic prices remain on higher side

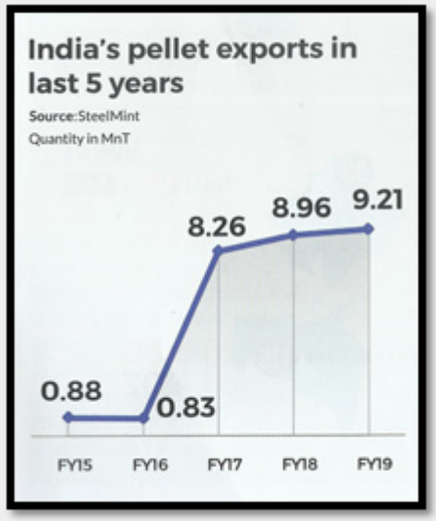
Domestic pellet prices in India remained on the higher side in FY19 and the price graph is pretty similar to FY18. As per the price assessment collected by Steel 360 research, yearly average of domestic pellet prices in Barbil (Odisha) were recorded at INR 6,371.73/MT (loaded to wagon) compared to INR 5,000/MT in FY18. Bellary's annul average pellet price stood at INR 7,134.05/MT in FY19 whereas Raipur's annual average pellet price was reported at INR 7,002.91/MT during the same period.

Pellet exports

Demand for Indian pellets increased suddenly after the halt in Brazilian Samarco's operations which used to supply 25-30 MnT of iron ore and pellets annually to China. In FY17, it was also reported that due to high pellet premium and a dull domestic market, Indian pellet makers were attracted to exports.



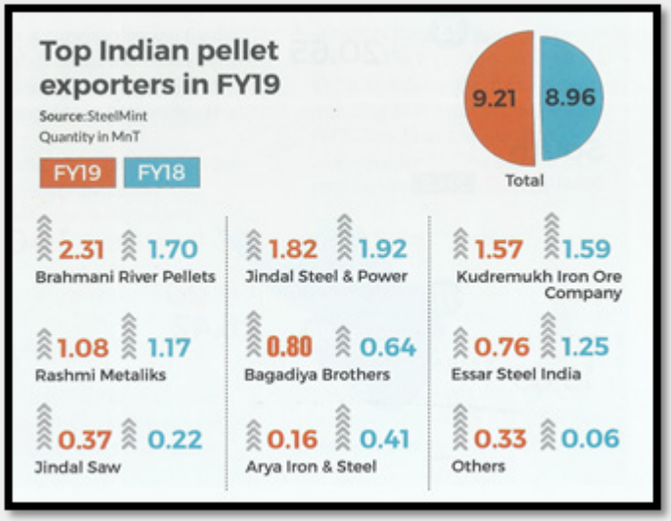
In FY18, apart from China, demand for Indian pellets also increased sharply from non-Chinese markets like South Korea, Japan, and South-East Asian countries which further boosted Indian pellet exports. In FY19, Indian pellet exports increased 2.79% to 9.21 MnT from 8.96 MnT in FY18. Paradip Port, located on the east coast of India in Jagatsinghpur district of Odisha, recorded the highest pellet exports at 4.48 MnT, while Dharma Port (also in Odisha), with 2.26 MnT, and Mangalore Port (in Karnataka) with 1.57 MnT are in second and third places respectively.



India's pellet exports to China

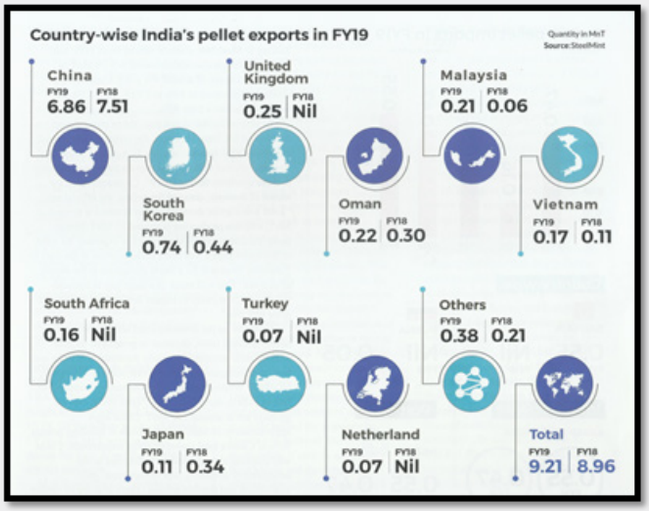
Even though India's overall pellet exports y-o-y have increased slightly, total pellet exports to China decreased by 8.66% to 6.86 MnT in FY19 from 7.51 MnT in FY18. However, China continues to remain the largest buyer of Indian pellets in FY19, accounting for a share of 74.48% in total Indian pellet exports in FY19.

Interestingly, Indian pellets are becoming more and more popular in non-Chinese market like South Korea, United Kingdom, Oman, Malaysia, etc as exports to these destinations have increased significantly in FY19. According to customs data maintained with Steel 360, Indian pellet exports to non-Chinese destination were up from 1.45 MnT in FY18 to 2.36 MnT in FY19. In Fy19, China's pellet imports grew by 12.46% to 19.49 MnT from 17.33 MnT in FY18. Moreover, China's pellet imports from Brazil, Ukraine, Kazakhstan and Iran increased significantly in FY19.



India's pellet imports

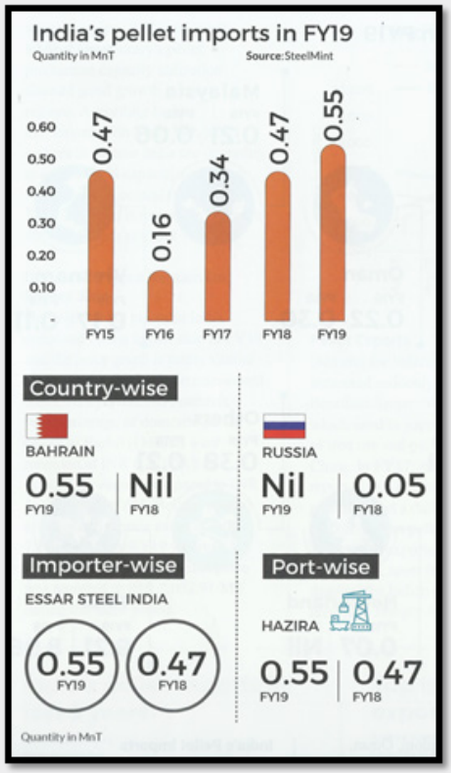
From the last four years, India's pellet imports are continuously growing. In FY19, India imported only 0.55 MnT of pellets. This entire quantity was imported by Essar Steel, which makes the company the sole pellet importer of India.



The company's pellet imports increased by 17.02% y-o-y compared to FY18. The whole quantity of pellets was imported from Bahrain (in the Middle East) through Hazira Port located in Gujarat.

JSPL Aims at 90% capacity utilisation

Talking to Steel 360, a senior official from JSPL said: "JSPL's pellet production increased to 7.10 MnT in FY19, an increase of around 4% y-o-y. capacity utilisation increased to 80% in FY19. For FY20, the target is to achieve over 90%."



The official further stated that "the primary export destination is China. However, the company has started exploring other destinations like Europe and South East Asia and around 10% of total exports have been directed to these countries during FY19". Commenting on the matter of domestic demand for pellets, the official said: "Total non-captive domestic pellet demand is around 15 MnT, whereas production is around 25 MnT. Hence, there is a surplus of 10 MnT which is exported. As most of the major mines will come under auction in the next 6-7 months, there will be a likely disruption in the supply of iron ore. This will result in a huge gap in demand-supply which is likely to trigger demand for pellets and price will rise."

"However, as the domestic steel sector is witnessing severe demand crisis, decrease in prices and overall unfavourable economic scenario currently, it is to be seen how steel companies tackle the raw material cost-push," he added. While discussing the international demand of Indian pellets, the

official said: "Total pellet exports globally are at around 120 MnT. China buys approximately 25 MnT (~20%). India is fulfilling around 30% of China's total seaborne pellet requirement. China will continue to prefer Indian pellets due to the acceptability of quality, less voyage time, spot availability and flexible pricing. There is scope of further volume increase from India to China considering the fact that the Chinese government is continuously focusing on reducing pollution by cutting iron ore fines usage."

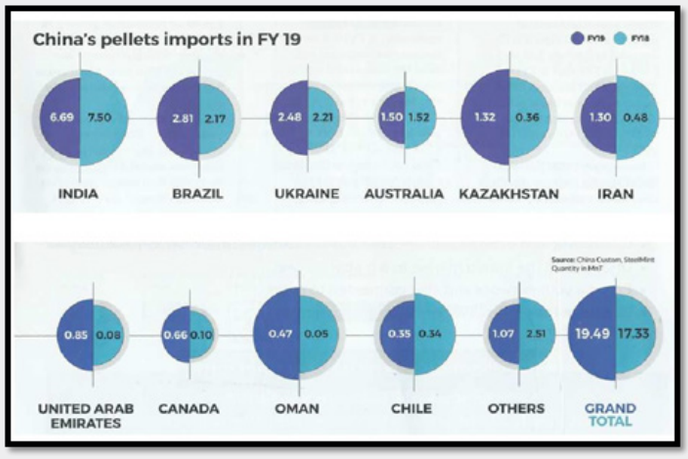
Prices on a roller-caster ride

Both iron ore and pellet prices have been highly volatile during the past couple of years. Primary reasons are as follows:

- Frequent supply disruptions due to the dam disaster at Vale sites.
- Stringent restrictions on iron ore fines usage in China to curb pollution. No definitive policy for the same by the Chinese government; policies keep on changing.
- Significant increase in paper trading for iron ore compared to physical trading. Paper trading is now almost 10 times of physical trading.
- Unstable performance of the Chinese steel sector and the whole economy due to the trade war with the United States.

KIOCL enters high-grade pellets market

KIOCL Ltd produced 2.24 MnT of pellets in FY19 against 2.32 MnT in FY18. Of the pellets produced during FY19, 1.52 MnT were exported during the year, as per the company's official statement.



M V Subba Rao, Chairman and Managing Director of KIOCL, said in a statement that "this is the highest quantity of pellets exported since the closure of the captive mines of KIOCL at Kudremukh in 2006". Income from operations increased to INR 1,887.71 crore during FY19 as against INR 1,637.18 crore in FY18.

As per the statement, this is the highest income from operations since the inception of the company. Profit after tax of KIOCL stood at INR 111.86 crore during the fiscal.

The plant in Mangaluru continued to perform well due to initiatives such as improved production of pellets with internationally acclaimed physical and chemical specifications, 100% utilisation of coastal sea routes for incoming and outgoing movements of cargo, and excellent treasury management and implementation of stringent austerity measures during the year, Rao said. KIOCL has also entered the high-grade new pellets market where premium is high. Operational and maintenance portal and exploration works of different minerals helped the company to improve its turnover and profitability, it said. In addition to the Chinese and the domestic markets, the company entered new international markets such as Japan, South Korea, Vietnam, Malaysia, Chile and the UK.

Will the positivity remain in FY20?

Based on the pellet export numbers reported in the first quarter of FY20, it can be said that India's pellet production and exports are most likely to surpass the numbers of FY19. Pellet exports in the first quarter of FY20 are around 63% higher than in the same period of FY19. During this period, China's imports of Indian-origin pellets increased by 42%. Supporting factors were spot availability, less voyage time and flexible pricing. Also, the Chinese government may undertake environmental measures for reducing pollution that may possibly increase pellet demand. Besides, new markets especially in the MENA region, Japan, Korea, and Europe are being explored. Indian pellet makers have exported a large quantity to Turkey, MENA, South Africa and other countries in Q1 of FY20.

However, currently, the pellet export market is down for India sharply owing to sluggish Chinese demand amid bearish market sentiments. In conclusion, it can be said that the overall performance of the Indian pellets industry in FY19 was robustly supported by good demand in the domestic as well as overseas markets as export prices remained firm.

Source: Steel 360

Met coke demand set to rise on expanding steel capacity

Demand for low ash metallurgical (LAM) coke, an important input material for steel-making, is set to rise as steel mills in India plan to enhance capacity to meet demand in the near to long term, according to industry sources.

The country's overall metallurgical coke production capacity is estimated to be 45-50 million tons (mt) per annum annually. Out of the total production, integrated large steel mills like Steel Authority of India Ltd (SAIL), Tata Steel, Rashtriya Ispat Nigam Ltd (RINL) and JSW Steel have a combined captive capacity of around 35 mt per annum annually, according to industry sources.

Medium mills like Adhunik, Jayaswal Neco, Uttam Galva and secondary steel mills have an estimated capacity of 5-6 mt per annum. The merchant mills make up around 10 mt of LAM coke production in the country, sources said.

However, plant utilisation of merchant producers has declined to 40 percent levels due to imports available at lower cost. There have been unrestricted imports from China at prices well below the cost of production in the originating country.

The increasing price volatility of imported coking coal and poor domestic supply of good quality coking coal has further affected the merchant coke producers.

India imported around 2.01 mt of met coke in 2018-19, up from 1.61 mt in 2010-11.

With expected production of at least 250 million tons of crude steel in India by 2030-31, the metallurgical coke production capacity has to be suitably built up.

Coke rate in blast furnaces is targeted to be reduced to 300-350 Kg/tHM.

At these rates, for a conservative estimate of 250 mt of crude steel demand by 2030-31, around 100 mt of met coke is required for consumption of the steel industry alone. The steel industry alone has to build up another 70-75 mtpa of coke production capacity by 2030-31, industry sources said.

What is met coke?

Coke is made by destructive distillation of a blend of selected bituminous coals (called coking coal or metallurgical coal) in special high temperature ovens in the absence of oxygen until a greater part of the volatile matter is driven off. The resulting product, coke, consists principally of carbon.

Traditionally, chemistry, size and strength (both cold and hot) have been considered the most important properties for use in blast furnaces. The quality of the constituent coals determines the characteristics of the resultant coke. Coke is primarily used to smelt iron ore and other bearing materials in blast furnaces, acting both as a source of heat and as a chemical reducing agent to produce pig iron or hot metal. Coke, iron ore and limestone are fed into blast furnaces, which run continuously.

Hot air blown into the furnace burns the coke, which serves as a source of heat and as an oxygen reducing agent to produce metallic iron. Limestone acts as a flux and also combines with impurities to form slag. Coke also serves as a structural material to support the deep bed of coke/iron oxide/limestone that makes up much of the furnace volume. It is in this last role that its properties are crucial. It is important that it does not degrade (ie, break up into small particles) during its descent through the oxidising hot gases passing through the stock region of the furnace.

To produce high quality blast furnace coke, high quality coal must be used, high quality coals are those coals which, when coked together, produce the highest stability and CSR (coke strength after reactivity) to support the blast furnace burden and allow maximum production. Low ash metallurgical (LAM) coke is required for metallurgical and chemical industries and is used as the primary fuel where high temperature and uniform heating

is required. The industrial consumers of LAMC include integrated steel plants, industries/ foundries producing ferro alloys, pig iron, engineering goods, chemicals, soda ash and zinc etc.

Quality

Coke quality has always been a subject of prime importance for a stable, efficient and consistent blast furnace operation. The all-coke operation at huge furnaces operating at higher top pressure (>2kg/cm2) has put stringent requirement on the quality of coke. Apart from having low ash content and good room temperature strength indices like M10 and M40, coke should exhibit superior high temperature properties like CSR and CRI (coke reactivity index).

Production of high CSR coke needs high quality coking coals which are not available in India. Due to inferior coking properties, Indian coking coal solely cannot be used to produce coke as required by blast furnaces and it is well understood that we have no alternate but to depend on heavy imports. Imports of coal are associated with several risks such as volatile price trends, in consistent supply, natural calamities, change in quality due to geological reason etc. hence we are always at the mercy of the supplier.

Mitigation of above difficulties needs strong policy initiatives and commitment from all concerned on the following:

- Large-scale beneficiation of indigenous coking coal
- Assessment of maximum achievable improvement in coking property after beneficiation, so as to calculate the exact amount of import substitution in coke making

Estimated low ash metallurgical coke production in India (in million tons)

Producers	Total Capacity
CAPTIVE PRODUCER (LARGE MILLS)	
SAIL	40
Tata Steel	
RINL	
JSW Steel	
CAPTIVE PRODUCER (MEDIUM MILLS)	
Adhunik	6
Jayaswal Neco	
Uttam Galva	
MERCHANT PRODUCER	
Gujarat NRE Coke	1.5
Saurashtra Fuel	1.3
Bengal Energy	0.6
Visa Sun Coke	0.4
Others (including plants in Dhanbad, Gujarat, & southern India)	6.2
Total	50

Source: Gujarat NRE, Saurashtra Fuels, traders

- Joint task group needs to be set up with the Ministry of Steel and Coal India Ltd to conduct R&D and training activities on beneficiation and coking technology
- Use of optimisation model to reduce cost and increase import substitution
- Formulation of cost-effective indigenised (higher use of indigenous coking and non-coking coal) blends by pilot and commercial study and research works.

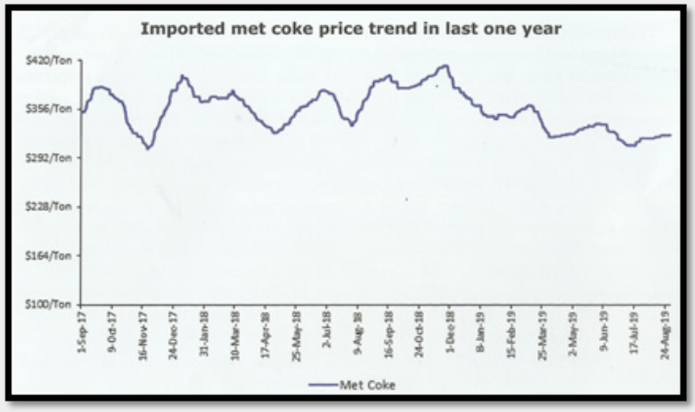
With several years of coke-making experience behind them, some steel mills have coined the idea of introducing straight coal, ie, coal from a single source/mine head into its blend. The basic reasons for such an option are:

- To have cushioning on cost and logistics
- More flexibility in blending
- Obtain accuracy in target blend property
- Tailoring coke quality to different requirements
- Flexibility of supplier base.

Steel production

India produced 106.56 million tons of crude steel in 2018-19, making it the second largest steel producer in the world and has already overtaken Japan to become the second largest steel producer last year.

Only China among the major producing countries has seen a greater output growth of 6.6 percent to reach 923 million tons in 2018.



Japan's steel production has been fairly stagnant for almost a decade and was down

0.3 percent to 104.3 million tons in 2018.

India is on track to produce over 110 million tons of crude steel in 2019-20 if we consider the current growth rate of 3.5 percent year-on-year.

India has a very long way still to run-both in economic and steelmaking terms.

Under India's National Steel Policy, the Indian government has set a target of reaching 300 million tons per annum of crude steel capacity by 2030, driven by per capita steel consumption rising to 158 kg from around 69 kg currently.

New Delhi wants Indian steel to cater to the 'Make in India' program and plans to lift manufacturing's share of GDP to 25 percent by 2022.

Budget, Economic Survey 2019

The government has estimated the country's steel output to hit 128.6 million ton by 2021 and consumption of the same to reach 140 million tons by 2023, on the back of investments in infrastructure, construction and automobile sectors, according to the Economic Survey 2018-19.

Currently, India's per-capita consumption stands at only 69 kg, compared with the global average of 214 kg, it said.

"With huge investments in infrastructure, construction and automobile sector, steel demand and corresponding consumption is growing at an average of 7.4 percent. This will lead steel production to go up to 255 million tons by 2030 and per capita steel consumption to 160 kg," it said.

The Survey said the policy gives broad policy directives to the industry for encouraging long-term growth for Indian steel on both supply and demand fronts. It said the policy envisages focus on domestic production especially of value-added steel in order to meet the growing demand, while adding there is a need for investment in capacity addition and infusion of modern technology for production.

Raw material requirement

It is estimated that 1.4 ton of iron ore, 0.7-0.8 ton of coking coal and around 0.2-0.3 ton of fluxes can be saved from recycling of one ton of steel scrap and thus indirectly will reduce the production which saves around 16-17 percent of energy.

The Survey further said the domestic steel sector faced a number of issues in 2018-19, such as dependence on imported coking coal and import of high-grade steel.

"Some of the key challenges faced by the Indian steel industry are capacity expansion as the demand for steel is bound to rise with economic growth. High grade and value-added steel are used in power, defence and automobile which is currently imported. "Difficulties in acquiring mining lease and high dependency on import of coking coal add to cost of steel production. High logistics costs also act as a major constraint," it said.

The industry's capacity utilisation level is expected to remain at a healthy 82-83 percent between FY2019 and FY2021, supported by a favourable domestic demand and low greenfield capacities coming up in the medium term.

India's metallurgical coal demand

India's met coal demand is estimated to increase to meet the needs of a fast-growing steel sector. Recent consolidation in India's steel sector, and greater international participation, should help ensure the industry is on a surer footing going into its next growth phase.

It is estimated that India's crude steel production will trend towards 128.6 million tons by 2021 from 106.56 million tons from 2018-19 level of production.

Based on the "rule of thumb" for India that 1 million tons of hot metal requires 0.8 million tons of coking coal, it is estimated that coking coal demand will be at 66-70 million tons by 2021. This would mark a 21 percent increase in coking coal demand from 2018-19 levels of around 58 million tons. Monthly coking coal demand is therefore forecast to trend higher towards 5-6 million tons per month at the end of 2020-21.

India to overtake China as largest importer of coking coal

India will overtake China as the largest importer of coking coal by 2025, Fitch Solutions Macro Research said recently.

"We forecast India's coking coal consumption

to grow at an annual average rate of 5.4 percent between 2019 and 2028, driven by an equally robust expansion in steel production in the country," said in a report.

"As a result, we expect India to overtake China as the largest importer of global coking coal by 2025, despite the country only importing half as much as China in 2017," it added.

"The coal reserve of coking coal variety used in steel making is still in scarcity in both quality and quantity. We have no alternative but to import as far as metallurgical coal is concerned. We are importing around 51-52 mt of coking coal and this import will touch around 140 mt or may be slightly more. So, Coal India has decided that we would acquire some coking coal mine abroad and in this context, we have decided that there couldn't be a better place than this region," Coal India chairman Anil Kumar Jha recently said at the Eastern Economic Forum in Russia.

While China will remain dominant in terms of overall market share, India will become increasingly important in terms of seaborne demand, the Fitch report said.

High frequency indicators show that while the largest importer of Australian coking coal, India, saw a 25.8 percent year-on-year increase in coking coal imports from Australia in the second quarter of 2019, China, the second largest importer of Australian coking coal, decreased imports by 8.8 percent year on year in the same period.

"Although taking a longer time than previously expected to play out, due to the ongoing risks to the economy and government efforts to stimulate domestic industries, our view remains that steel production in China will stutter in the medium term with the slowing of the economy and construction sectors, dragging coking coal consumption lower," it added.

One of the key market implications could be the mining majors potentially benefiting from India's growing appetite for metallurgical coal. Since the start of 2017, major Indian steelmakers have been seeking to secure long-term contracts with miners, ensuring reliable supply. This comes at a time when large steelmakers are looking to boost efficiencies and lift capacity utilization rates after acquiring distressed steel assets that were operating well below capacity.

Indian steelmakers typically favor importing high fluidity and high vitrinite type coking coals. Fluidity is measured by the difference between melting and solidifying temperatures of coal. High fluidity gives higher "bendability" of coals and optimizes the coke input into a blast furnace. Vitrinite indicates the heat tolerance of each coal, reflecting better performance in the blast furnace when higher.

With the estimated ramp-up of India's met coal demand by 5-6 million tons per month through 2020-21, implied demand for the preferred likes of Premium Mid-Vol such as BHP-Mitsubishi Alliance's (BMA) Goonyella, Peak Downs North and semi-hard coals like Kestrel, in eastern Australia's Queensland, will grow for the foreseeable future.

Different sources of coal

Besides relying on Australian coals, steelmakers in India were understood to be diversifying their coal blending by opting for other origin coals, including US material. They have also sought cheaper alternatives such as pulverized coal injection (PCI) and semi-soft. This was particularly the case when hard coking coal prices rose to $300 per ton FOB Australia in recent years due to supply constraints in China and Australia. Indian mills are particularly susceptible to price spikes and in certain cases were forced to mothball some blast furnace operations until steel margins improved.

India has also been keen to develop Mozambique coking coal, with both Tata Steel and the state-owned consortium International Coal Ventures Limited (ICVL) investing in the east African country. However, Mozambique supply has not come to fruition as expected, with only Vale's Moatize mine producing sizable volumes of met coal at around 7-8 million tons per year. As a result, it is Australian-based exporters that are best placed to benefit from India's steel capacity expansion.

Structure of Indian steel mills

The Indian steel industry is structured in between three broad categories based on route wise production viz. BF-BOF, EAF and IF. BF-BOF route producers have large integrated steel making facilities which utilize iron ore and coking coal

for production of steel.

The Indian steel industry is also characterized by the presence of a large number of small steel producers who utilize sponge iron, melting scrap and non-coking coal (EAF/IF route) for steelmaking.

However, the Indian steel sector is disadvantaged due to limited availability of essential raw material such as high grade Manganese ore & Chromite, coking coal, steel grade limestone, refractory raw material, Nickel, Ferrous Scrap etc. Due to shortage of domestic coking coal, both in terms of quantity and quality, pig iron producers/ BF operators in India have to significantly depend on import of coking coal.

Domestic availability

India has the fifth largest coal reserves in the world. As on 31st March 2018, India had 319.04 billion metric tons (351.68 billion short tons) of the resource. The known reserves of coal rose 1.23 percent over the previous year, with the discovery of an estimated 3.88 billion metric tons (4.28 billion short tons). The estimated total reserves of lignite coal as on 31st March 2018 was 45.66 billion metric tons (50.33 billion short tons), a decrease of 0.96 percent from the previous year.

Coal deposits are primarily found in eastern and south-central India. Jharkhand, Odisha, Chhattisgarh, West Bengal, Madhya Pradesh, Telangana and Maharashtra accounted for 98.26 percent of the total known coal reserves in India. As on 31st March 2018, Jharkhand and Odisha had the largest coal deposits of 26.06 percent and 24.86 percent respectively.

The energy derived from coal in India is about twice that of the energy derived from oil, whereas worldwide, energy derived from coal is about 30 percent less than energy derived from oil.

India has less proven reserves of coking coal which accounts for just 13 percent (19 billion tons) of the country's total proven coal reserves of 148.8 billion tons (bt). Of the total proven coking coal reserves, only 4.6 billion tons can be considered as prime grade variety. Indian coking coals predominantly fall into the medium category. Since the available coking coal is of inferior grade, it is often blended with imported coal.

If we go back in time, we realise that the country was rather relaxed and liberal in its use of coals in the past. We may recall that in the initial days of coal mining, the best quality thermal coals were available in the Raniganj coalfields and superior grade coking coals in Jharia. Unfortunately, there was indiscriminate use of coals in those days and whatever was mined was used up as fuel.

According to an industry source, "As such, there is a dearth of coking coal in India. And whatever we have are of high ash content. And that ash is also so intimately mixed with the coal matrix that it is difficult to separate it and free the carbon from the coal. So what do we need to do to make it suitable for steel-making or for any other metallurgical purpose?"

The Jharia coalfields have a sequence of 41 coal mines. Some are consistent while others are not. But there were 18 mines that were very consistent, whose seams were numbered from 1 to 18, with the latter being the top-most and the former being the bottom-most. The seams from 9 and above comprised prime coking coal. Coal in the seams from 8 to below are medium coking coals because they do not meet those standards which are required for making coke for use in the blast furnaces. These need to be blended with some prime coking coal for coke-making.

Coking Coals in India are categorized into three types:

- Prime grade: which can form coke for metallurgical purposes without being blended with other coals
- Medium grade: which requires to be blended with prime coking coal for coke-making
- Semi-coking coal: which are weak in coking properties but can be blended in small ratios with prime coking coal for coke-making.

As mentioned, prime coking coals are available in India only in the upper seams of the Jharia coalfields which have been already exploited in the past and the remnants are now available in the surface-constrained areas like surface

fires, rivers, townships, human settlements and road and rail infrastructure.

The medium variety is available in various coalfields in Jharkhand (lower seams of the Jharia coalfield, East Bokaro, West Bokaro, Ramgarh, North Karanpura, South Karanpura); West Bengal (Raniganj coalfield); and Madhya Pradesh (Pench, Kanha and Dohagpur).

The semi variety is available in limited areas of West Bengal (Raniganj coalfield), Jharkhand (Ramgarh coalfield) and Chhattisgarh (Sonhat coalfield).

Though India is fortunate to have the fifth-largest share of coal resources, the quantity of coking coal is limited. Further, since coal seams in India are of "drift origin", where the woody material was transported across longer distances, carrying along with it external impurities, such coals tend to contain high levels of inert material or mineral matter, commonly known as "ash content". These mineral matters are finely disseminated within the coal matrix which makes Indian coals more difficult to wash or beneficiate – for reducing their ash content.

Production by Coal India

An analysis of domestic availability of coking coal will remain incomplete if we do not account for Coal India's production of this scarce commodity.

Coal India Limited (CIL), the largest coal miner in the world, produced 607 mt of raw coal in 2018-19, of which coking coal comprised less than 6 percent, at around 34 mt.

Earlier, CIL suffered a 39 percent decline in its coking coal production to 33.28 mt in 2017-18, compared to 54.65 mt produced a year ago. In absolute terms, coking coal production was down by almost 21 mt during that year.

Consequently, the share of coking coal in CIL's total production kitty was also down at 5.9 percent in 2017-18 from 9.9 percent in 2016-17. CIL's coking coal output in 2017-18 was the lowest in at least 7 years. The dramatic decline was attributed to various factors like depletion of reserves in opencast project, closure of unviable mines and re-gradation of blocks, according to sources.

Bharat Coking Coal Limited (BCCL), a CIL subsidiary which produces the major volume of coking coal in India, also reported a sharp decline in its yearly output for 2017-18 at 23.30 mt from 32.39 mt achieved in the previous year.

In 2018-19, however, coking coal production improved marginally by around 2 mt. With new washeries coming up at BCCL, supply of coking coal is expected to improve in coming years, company sources said.

Going forward, CIL plans to enhance its coking coal production significantly from the current levels.

CIL is eying prospects in Russia, Canada and Africa to augment production.

Sources indicated that looking at mines in Canada is fine but not without its inherent problems. Most often, Canadian mines are located far from the ports which makes the FOB cost for the coal high.

A similarity perhaps can be drawn here with the acquisition of the Benga mine from Rio Tinto by ICVL a few years back.

"The coking coal quality is excellent at Benga. But there are logistic problems which make many analysts feel that this acquisition can become commercially viable sometime in the near future only when prices start moving up," said the source.

Local and global supply

From the domestic standpoint, only 4-5 mtpa of coking coal, produced by CIL subsidiaries BCCL and Central Coalfields (CCL) are supplied to public sector steel players and the remaining is sold to power companies because of washing constraints.

Coal & coke import data from major Indian ports - quantity (in ton)

Coal type	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Total
Coking coal	4,265,052	3,504,592	4,124,996	3,982,563	4,707,291	4,272,882	4,291,647	4,832,729	26,212,109
Met coke	399,603	284,194	417,901	211,077	572,911	330,320	407,232	490,405	2,429,847
Coal type	**Jan 2019**	**Feb 2019**	**Mar 2019**	**Apr 2019**	**May 2019**	**Jun 2019**	**Jul 2019**	**Aug 2019 (Provisional)**	**Jan-Aug 2019 (Provisional)**
Coking coal	3,322,578	4,170,595	3,694,561	4,584,631	4,189,914	4,133,544	4,820,404	4,380,160	25,803,214
Met coke	340,963	325,146	224,102	367,514	244,895	216,871	319,183	223,738	1,616,403

Source: Insights Research

Although BCCL has come up with two new washeries in 2018-19, production from the same

is yet to start to any significant extent.

As already mentioned, 85 percent of the Indian demand is taken care of by imports which have risen to around 48 mt in 2018-19 from around 33 mt five years back(2013).

The globally traded coking coal volume was around 195 mt in 2017 but it is estimated that there will hardly be 1 percent growth in this figure in 2018 because of the overall slow turnaround in the global steel industry.

The largest contributor in this globally traded corpus of coking coal is Australia. The next player is the United States of America.

Most of the countries that produce coking coal use up the material for their own needs.

Only those which produce in excess, like Australia and the US, the latest entrant being Mozambique, export.

As already mentioned, Australia accounts for around 60 percent of the world's exports of coking coal at 183 mt and is expected to retain its share in the same range over the next 5 years.

As per the Resources and Energy Quarterly, December 2017, around 90 percent of Australia's met coal production is exported and in 2016 India imported 43.5 mt from Down Under alone. India is Australia's second-largest consumer of met coal, with 10 percent share after China's whopping 61 percent. China produces 2.38 mt of steel every day.

So just imagine the requirement of coking coal by the dragon country! It, alone, after all accounts for almost 50 percent of the world's steel production!

An industry source indicated that Australia is the most reliable supplier of coking coal for the Indian steel mills because of factors like the continent's proximity to the sub-continent, established business relations and the quality of its coal etc.

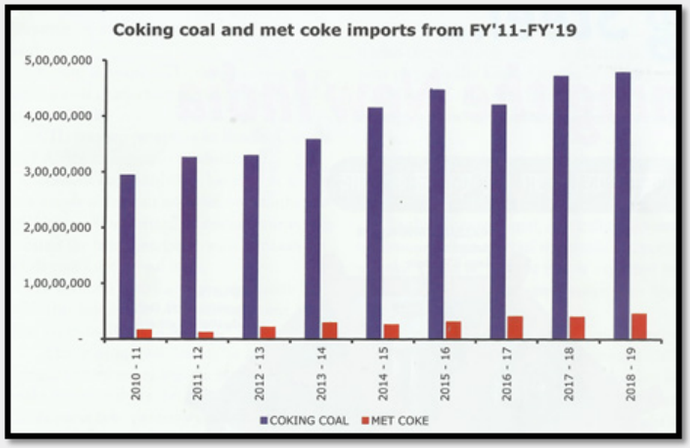
"Mozambique is coming up but there are quality issues that Indian mills will have to work upon," the source said, adding that Indonesian imports will increase a bit, by about a million tons or so by the end of this calendar but not more. Because Indonesian coking coals are softer and not of premium grade, they can be used only 5-10 percent in the blend, making them overall quite unsuitable for Indian use.

Australian Minister's visit

Australia's Minister for Resources and Northern Australia Matthew Canavan has called for increased investments by Indian companies as a means to further cement bilateral relationship.

"Last year, we released an economic strategy document about wide ranging opportunities between India and Australia and I am here principally to help progress that in its next steps," Canavan, who is on a four-day visit to India, told media persons.

He said India is the largest coking coal market for Australia and it will continue to grow. Canavan also said he is looking forward for Indian companies to invest in Australia to secure affordable and long-term supply of coking coal and other minerals to meet their energy demands.



The minister said he recently met Gautam Adani, the Chairman of the Adani Group, and the discussion focused on the developments in Adani's Carmichael coal mining project in Australia.

"All the major legal and procedural hurdles regarding this project have been resolved," he said.

Commenting on whether renewables will replace coal in the global energy basket, the minister said: "It has never happened in the modern times that an economy has relied on one fuel sources for meeting all of the energy needs. There has always been a combination of energy sources to meet the required demand."

Canavan also added that coal sector investments, demand for the fuel and its value

continue to be significantly high, particularly in the Indo-Pacific region.

The minister emphasized that, given India's large domestic production of coal, Australia can only supplement and compliment the country's efforts to meet energy needs and also help in skill and technology transfer to improve productivity and efficiency.

Washing/beneficiation

CIL is currently operating 15 coal washeries with a total capacity of 36.8 million tons per year. Of these, 11 are coking and the rest are non-coking projects with a capacity of 20.58 and 16.22 million tons per year, respectively. The total washed coal production from the existing washeries stood at 12.45 million tons last financial year

Most of these washeries were set up 4 to 5 decades ago. Feed ash is generally in excess of 35 percent. Clean coal ash is at 18-19 percent.

CIL will be setting up 18 new coking coal washeries. Two of these washeries have already been inaugurated in Bharat Coal Coalfields and the rest are going to come up in a phased manner till December 2020. This will add a capacity of around 28.1 million tons for coking coal.

One new coking coal washery with a throughput capacity of 3.5 mtpa is planned to be set up at the Tasra project of SAIL.

Indian coking coal has very poor washability characteristics.

The most economic ash in clean coal is 18-19 percent. New washeries being planned are expected to wash at 18-19 percent ash content.

The total installed capacity of the new and existing coking coal washeries would be about 59.4 mtpa, which at an average yield of about 45-50 percent can provide clean coals to the extent of 27-30 mtpa at 18 percent ash.

Though most of the existing washeries would be replaced with the new ones, there would still remain a gap between the estimated demand of coking coal from indigenous sources and its likely availability. It also needs to be examined whether all the domestic coal with 18-19 percent ash can be blended with imported coal at the steel plants from the point of view of blast furnace productivity and related economics.

Limited availability of domestic coking coal and its spiraling high prices in the international market requires a serious look at the demand management side. Current consumption rate of coke in Indian steel plants vis-à-vis global best practices is very high. The National Steel Policy, 2017 endeavours to bring the coking coal consumption at par with global best practices by resorting to auxiliary fuel injection technologies like PCI/CDI or natural gas/ syngas injection along with PCI/CDI.

At present, because of inadequate washing capacity, most of CIL's coking coal is being supplied to the power sector, and industry circles say this scenario will continue, at a great loss to the integrated steel manufacturers, till the washery construction program of CIL gains momentum.

Government auction

The government recently said it has begun the process of auction of 27 coal mines and allotment of 15 blocks to public sector undertakings. "The Ministry of Coal has started the process of auction of 27 coal mines and allotment of 15 coal mines to central PSU and state PSUs (public sector undertakings)," the coal ministry said in a statement.

According to the objective of auctioning of coal blocks, the government said it is auctioning 21 coal mines for end-use non-regulated sectors and six coking coal mines for end-use iron and steel sector, the ministry said.

In case of allotment of blocks for PSUs, five coal mines are for power sector, nine for sale of coal and one for iron and steel, it said.

"At peak rated capacity (PRC), these 42 coal mines will produce approximately 70 mtpa," it said.

Notice inviting tender and notice inviting application have been published in the newspaper. The electronic bidding will be conducted on Metal Scrap Trading Corporation (MSTC) platform," it said.

Current procurement scenario of Indian mills

India is expected to become the largest coking coal importer through sea route by 2022 as the country pushes for more steel production. The country currently imports about 85 percent of its coking coal demand through imports and, by 2022, the demand of coking coal is projected to grow to 67-70 million ton from about 58 million ton now.

China is the largest importer of Australian coking coal but it is reducing gradually due to various factors. Therefore, India will remain heavily dependent on imported coking coal.

The national steel policy forecasts coking coal demand of 161 mtpa by 2030-31, 31 mtpa of non-coking coal for PCI, 105 mtpa of non-coking coal requirement for DRI route. Thirty five percent of total requirement of 161 mtpa coking coal by 2030-31 is about 56.35 mtpa. This is a challenge to coal and steel producers. India has to heavily depend on imported coking coal for its plan to produce 300 mt of crude steel by 2030-31.

Input price hike hurting steel sector

Credit ratings agency Moody's has revised its outlook for the Indian steel sector to negative, as rising input costs put pressure on the profitability of Asian steel producers.

"We expect steel producers' profitabilit, as measured by EBITDA per ton, will decline by around 15 percent in the 12 months to June 2020," according to the report.

The prices of iron ore and coking coal, two key steelmaking inputs, have surged by more than 60 percent and 20 percent, respectively, in the year to June 2019, and will likely stay high for some time. At the same time, weak demand in end markets was limiting the ability of producers to pass on these price increases to customers, resulting in narrowing product spreads, the note said.

Narrowing product spreads between steel and input prices reflect producers' limited ability to pass on price increases to buyers when end market demand is soft.

"India's steel demand will remain the strongest in Asia but result in slow-to-mind-single digit growth, as weak auto and manufacturing demand offset demand growth in the infrastructure and construction industries," according to Kaustubh Chaubal, vice-president and senior credit officer, Moody's, and co-author of the report.

Indian steelmakers' profitability will decline mainly because of slowing demand growth, in particular from the auto sector, the note said.

Meanwhile, limited new capacity additions across the Asia region will curb a sharp decline in steel prices, with production rising only in India, where demand is still growing, and flat in China, Korea and Japan. Finally, Moody's expects the increase in US tariffs on steel imports will have a limited direct impact on Asian steel companies because of their modest US sales.

Another rating agency, India Ratings and Research (Ind-Ra) has also revised its outlook on the steel sector to 'stable-to-negative' from 'stable' for the remainder of FY20 given sluggish steel demand growth expectations owing to mix of structural and cyclical concerns in end-user sectors, primarily auto and real estate construction.

It has revised downwards its FY20 steel demand growth expectations to around 4 percent from the previous forecast of 7 percent against FY19 level of 8 percent.

Furthermore, raw material availability and price risks may escalate in 4QFY20 if the uncertainty over iron ore mine auctions prolongs.

Ind-Ra expects overall steel sales volumes and margins to weaken further in 2QFY20 after industry witnessed margin correction in 4QFY19 and 1QFY20.

However, the agency expects steel demand to recover in 2HFY20, supported by pickup in government investments, fiscal stimulus measures, improvement in market sentiment and 2HFY19's lower base.

Steel mills buys unlikely to support coking coal prices

Indian buyers are unlikely to provide substantial support to the coking coal spot market later this year, as smaller steel mills scale back production and the main mills remain well supplied by contracts.

China has restricted the import of coal including coking coal throughout the year to support the domestic industry and maintain quality control to

reduce pollution. With the goal of keeping 2019 import volumes at or below 2018 levels despite a year-to-date increase, tighter limits are expected for October-December and quotas issued to Chinese steel mills are already dwindling.

India was expected by some market participants to overtake China in coking coal imports this year. But India imported just 33.27 million tons during January-August period of FY20 compared with 33.95 million tons recorded in the same period FY19.

"Indian demand has to pick up eventually. A lot of projects have been put on hold until after the monsoon, which was really bad this year," a coking coal producer said.

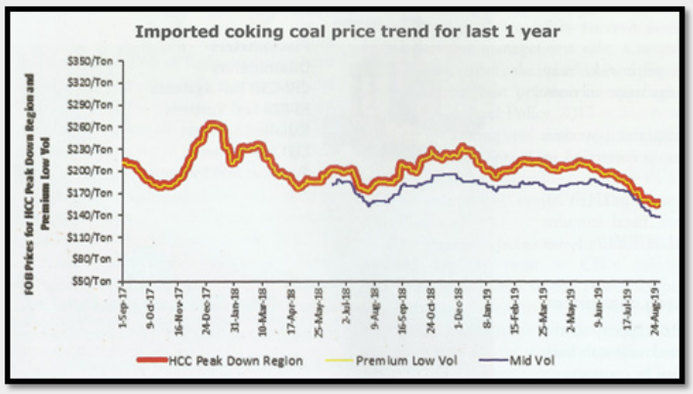
"People in India even wait to buy autos until after the monsoon is finished."

General elections earlier this year delayed any rolling out of major infrastructure, but the current government has yet to implement spending for new projects despite winning a stronger mandate.

A steel producer in India is so overstocked with coking coal contract volumes that it is looking to sell some on the spot market wherever possible, sources said.

"We only expect very isolated spot demand from India. Some of the medium-sized steel mills will prefer to scale back production rather than procure more feedstocks until steel demand picks up," the trader said.

If more Chinese mills back further away from the spot market as the government imposes tighter fourth-quarter import restrictions, spot prices will come under even greater downwards pressure unless coking coal producers also scale back production, the trader said.



Many large-scale Indian mills will keep production rates high and continue to stockpile steel with the expectation that sales will get a seasonal lift later this year and early next year, an Indian steel producer said.

"We like to remain optimistic that steel demand will improve later this year as it usually does. But the steel sector is being impacted by the trade war and it is hard to know how that will play out," said a source.

Most recent enquiries from Indian coking coal buyers have been for semi-hard coking coal or semi-premium Peak Downs North that have recently been offered at significant discounts from premium brands, another Indian trader said.

"The largest Indian steel producers will wait until the end of the year before reassessing steel demand and production rates. But they cannot make up for the absence of Chinese coking coal buyers in the meantime," the trader said.

Coking coal price to remain elevated in 2019

In its latest industry trend analysis, Fitch Solutions sets the coking coal price forecast for 2019 at $195 per ton.

The analysts predict prices will remain elevated, with strong demand from China's steel sector as US-China relations deteriorate and the probability of further economic support from the government to the slowing Chinese economy rises.

On the supply side, Fitch expects production misses from Australia to keep the market tight in the coming quarters as large diversified miners lose their appetite for mining coal.

Although Fitch analysts are more positive on coking coal prices in the coming quarters than they were one year ago, they maintain the view that prices will ease in the long-term as the Chinese steel sector resumes its slowdown and the demand for Australian coking coal softens.

With the re-escalation of the trade war between China and the US the Chinese government will most likely be prone to providing further economic support to domestic industries, especially the infrastructure sector, which would buoy steel production and ultimately coking coal demand, Fitch predicts.

Indicators show that, while the largest importer of Australian coking coal, India, saw a y-o-y decline in coking coal imports from Australia, while China, the second largest importer of Australian coking coal, increased imports y-o-y in the same period.

Long-term outlook

Beyond 2020, Fitch expects Australian coking coal prices to continue on a multi-year downtrend, driven largely by a resumption in the slowdown of the Chinese steel sector and environmental concerns limiting coal imports.

Production outlook

Fitch forecasts that China will maintain its dominance in the producers' market for coking coal, with absolute coking coal production increasing from 536 million tons in 2019 to 551 million tons by 2028, with production in 2028 being triple that of the second-largest producer, Australia (184 mnt).

In 2026, analysts predict that Russia will surpass Indonesia as the third largest coking coal producer in the world, and that over the years, China, Australia and Indonesia will slowly lose the global market share of coking coal production to Russia, India and Mongolia.

Conclusion

Access to competitively priced raw material is vital to building new capacity. There are a number of strategies to ensure access to raw material as well as manage the volatility.

- **Investment in infrastructure to facilitate imports:** Several major steel-producing countries are not backed by sufficient quantities of domestic raw material sources. Japan and South Korea, for example, have been reliant on imports to feed their domestic steel industries. To facilitate large quantities of raw material imports, both countries have invested in large deep water ports to facilitate the movement of large ships to attain cost efficiency.
- **Joint venture with miners:** Steelmakers have also invested in joint ventures with miners by taking a stake in the mining operation and sometimes an offtake agreement. For example, Chinese steelmaker Ansteel increased its stake in Australian iron ore miner Gindalbie Metals to 52 percent in March 2014. SAIL and Tata Steel's S&T Mining had announced that they were looking to invest in coking coal assets.
- **Vertical integration:** Miners have acquired mines or invested in offtake arrangements to secure their raw material supplies. ArcelorMittal, for example, has a significant iron ore portfolio that not only feeds its steel-making business in various parts of the world but also earns revenue on third-party sale.
- **Diversifying sources of raw materials:** China, in particular, has adopted this method to reduce its reliance on traditional suppliers from Australia and Brazil.
- **Development of a derivatives market for steel and raw materials:** This has been used to secure future suppliers and to reduce volatility in prices. The steel sector should get better access to thermal and coking coal mines at competitive cost levels.
- Procurement of imported coking coal is done as per requirements as laid down in policy through long term agreements (LTA) and global tenders. Quantities under LTA are settled annually by Empowered Joint Committee (EJC) comprising representatives of companies. EJC while negotiating quantities and prices with long term suppliers takes the FOB prices settled by Japanese steel mills as per the benchmarked index price. The annual requirement is tied up at the beginning of the year and the same is confirmed and received quarter-wise throughout the year.
- Steel producers' joint negotiation with foreign suppliers. Acquisition of coking coal mines will improve the situation.

According to Jha, with the limited availability of domestic coking coal in terms of the required quality and the high spiraling prices in international markets, it is necessary to look at the demand management side. It is even more important when we look at the current consumption rate of coke in Indian steel plants.

In fact, as per NSP, 2017, the current coke rate is 400-600 kg/thm against the international best practices of 275-230 kg/thm. The NSP, however, has set a target of 300-350 kg/thm by 2030-31.

Moreover, the coking coal available in India has properties that are not suitable for metallurgical purposes. There are a host of other quality parameters which decide how coking coal can be blended to make coke and whether the coke formed from that blend is of the quality that can sustain the intense pressure and hardness of a blast furnace environment.

Coal is a natural resource which cannot be regenerated and particularly coking coal which is scarce. Thus, we may have mammoth plans for generation of steel but we also need to look at whether we should only follow the blast furnace route which essentially needs coke for steel-making. Or do we need to stress more on other methods of making steel that include the induction arc furnace and electric arc furnace routes.

Currently, more than 50 percent of the steel is produced from the BF and BOF route and where the coke rate is high, almost double compared to the best practices worldwide. We have to not only look at the volumes that are required for our mammoth steel production plan but also at the demand side management: how can we reduce the requirement of coking coal so that more volumes of steel can be produced from the same amount of coke?

In spite of all the measures, experts feel the Indian steel industry will have to depend heavily on the internationally traded coking coal, whose import volumes and prices are likely to keep on rising year after year, essentially due to quality degradation and reserves depletion. Moreover, mine owners are milking assets for cash and not reinvesting in assets, which will keep supply tight, going forward, said sources. Therefore, a reduction in coking coal consumption via technology is necessary. There is a need for direct negotiation with miners for arriving at better costs and diversifying of resources. There should also be a mix of long-term and spot buying. Companies should also invest in captive and overseas blocks. As said a source, "From the perspective of buyers, de-risking by looking at a diversified sourcing of coals should be key part of procurement strategies, along with technological innovation to enjoy greater operational flexibility."

Source: Steel Insights

Coal India eyes coking coal mines in Russia

Coal India has started seriously looking at coking coal assets in the eastern region of Russia and has already visited several such mines in the Yakutia region also known as Republic of Sakha.

The deep interest of the state-owned miner has recently culminated in the signing of a memorandum of understanding (MoU) was between Coal India and Far East Investment and Export Agency during the Eastern Economic Forum recently held at Vladivostok in Russia to cooperate in coking coal mining projects implementation in the Russian Far Eastern region.

Before the event, officials of Coal India went to the coal mines of Yakutia region to visit sites of Russian coal companies like Kolmar, Dolguchan and Mechel, Leonid Petukhov, General Director of Far East Investment and Export Agency said during the event attended by Prime Minister Narendra Modi along with industry delegation.

"Coal India has decided to acquire some coking coal mine abroad and in this context, we have decided that there couldn't be a better place than this region. We are very serious about acquiring properties in this place from where coking coal can be taken to India. My team has visited in August to this place, they have scouted certain properties also and we are very much in favour of acquiring either a minority stake or acquiring a mine so that coal produced from this region can be taken to India for our use in steel industry," Jha said while addressing panelist at the India-Russia Business Dialogue at the sidelines of the forum at Vladivostok.

Kolmar LLC, a 8 million-ton coking coal exporting company of Russia having three mining projects

in the Far East, said the company is set to start exporting coking coal to India in the first quarter of 2020.

"Coal India representatives have visited our facilities in South Yakutia. We are hopeful of creating ties with Indian metallurgical industry. We are ready to provide support in developing new deposits and share our expertise in working in tough (sub zero) temperatures," an official of Kolmar said at the session.

"India is keen to bring coking coal from Russia to reduce dependency on Australia and US," the official said. Russian natural resources minister said: "While the far eastern region of Russia has traditional business relations with China, Japan and Korea, in terms of expansion of our cooperation with India, there's work being done to stimulate geological exploration to mineral resources in Russia."

Legislations are also being tweaked to allow single bidder in some case for resources and for exploitation of sub-soil resources usage creating enabling conditions for licensing in the Artic zone of Russia, he said.

Kolmar is now exporting coal in Asian countries like India though the prospects for exporting coking coal is underdeveloped.

"Logistically, it's feasible with supplies possible in 7 days with just 2-3 days in ships," she said.

CIL very serious about coking coal mine buy in far East

"Coal mining history of India dates back to more than 200 years when first mine was started in 1774. After that to take care of the welfare of the workforce, Government of India nationalised coal industry in 1971 and 1973. And Coal India was formed in 1975.

India is the second largest producer of coal with last year's production of 730 million tons and also the second largest consumer of coal with 965 million tons of coal in FY19. So, there is a gap of about 235 mt which we are importing worth over $60 billion.

We are trying to bridge the gap between demand and supply to a minimum possible level by increasing our own production.

As far as non-coking coal is concerned, we have huge resource and we would be meeting the gap between demand and supply in a span of 3-4 years.

In case of India, known resources of petroleum and natural gas is very limited. But coal is here in abundance and the known resources of coal as of day is about 319 billion tons. But unfortunately, the coal reserve of coking coal variety used in steel making is still in scarcity in both quality and quantity.

We have no alternative but to import as far as metallurgical coal is concerned. Government's policy is to take steel- making capacity to 250 mt.

We are presently importing around 51 mt of coking coal and by 2030, this import will touch around 140 mt or maybe slightly more.

So, Coal India has decided to acquire some coking coal mine abroad and in this context, we have decided that there couldn't be a better place than this region.

We are very serious about acquiring properties in this place from where coking coal can be taken to India.

My team has visited in August to this place, they have scouted certain properties also and we are very much in favour of acquiring either a minority stake or acquiring a mine so that coal produced from this region can be taken to India for our use in steel industry.

Funding is not a problem as we have a huge cash reserve. But, as is known, in case of Russia, we have limitations of language and remoteness of this place. Also, weather conditions are not very conducive.

But we are very serious and would see to it that demand supply of coking coal should be met with the help of Fast Eastern region.

Both countries share excellent relations and the friendship between the two countries dates back to a long time. And I am very sure that all necessary help and facility would be extended by the government of Russia to India so that

our venture will fructify and we will see that we should acquire some stakes.

This would only be a small step as by 2030, requirement of coking coal may be more than 150 mt.

We are hopeful that the types of properties that are available in Fast East would be pragmatic as far as acquisition is concerned."

Source: Steel Insight

SIMA MUST TAKE STEPS TO CONTROL SCRAP IMPORTS

Rahul Mittal, Managing Director, Janki Corp Limited, recently took over as the Chairman of the Sponge Iron Manufacturers Association (SIMA), which is the apex body of sponge iron manufacturers in India. As the new SIMA Chairman, Mittal told Steel 360 that the organisation would like to represent the interests of the direct reduced iron (DRI) sector at the upcoming mineral assets auctions, slated for next year in a bid to ensure raw material availability. The major challenges for the DRI segment are availability of suitable raw materials (iron ore and coal/gas) at correct prices. Importantly, Mittal feels, integration and consolidation are key to long-term survival in the sponge iron segment. Furthermore, he said, SIMA will aim to create a self-sufficient steel industry that is technologically advanced, globally competitive and promotes inclusive growth. Excerpts:

Q. What is your outlook on the steel sector, especially the secondary space?

A. Steel is one of the most important products in the modern world and forms the backbone of any industrial economy. The new steel policy aspires to achieve 300 million tonnes (MnT) of steel capacity by the year 2030, which amounts to almost tripling the existing steel capacity of our country. Currently, 30% of the steel production comes from the secondary sector. The government has envisioned a rapid rise in the per capita steel consumption and to achieve such growth in demand for steel the secondary steel sector will have to play a major role. Large integrated steel plants call for a considerable amount of investments and also a long gestation period is involved. Existing primary steel producers will continue to increase capacity through brownfield expansion but it won't be enough to meet the target of 2030. The secondary sector will have a very important role to play in achieving the 300 MnT steel capacity in the country. Coking coal is a major raw material required for production of steel through the blast furnace route. India doesn't have the required quality of coke and the existing factories import their coking coal.

The rationale behind the growth of the sponge iron industry in India is availability of steam coal and iron ore required for the process. It is essential for our country to have a considerable amount of steel production via the secondary route.

Q. What is the total present annual DRI production in India and at what rate is it growing? What is the share of coal – and gas-based DRI? Going forward, how much expansion is likely in both?

A. The total installed DRI capacity in India is 46 MnT per annum, out of which 33.4 MnT is coal-based and 12.6 MnT is from gas-based.

In financial year 2018-19, the utilised capacity was around 75% with coal-based production at 24.94 MnT and 8.06 MnT was the contribution from gas-based. In 2018-19, there was a 15% increase in overall sponge iron production compared to 2017-18. In 2019-20, the first half has been relatively slow so we expect a decline compared to 2018-19. Coal-based sponge iron will continue to see growth but we don't imagine much expansion in gas-based.

Q. What is DRI demand/consumption in India like at present and at what rate is demand growing?

A. The overall steel demand for the first quarter (Q1) has been sluggish due to the general

elections and slowdown in the economy. The markets are expected to recover in the next few months and DRI demand should also improve. Steel demand, scrap imports, coking coal pricing are the major factors affecting DRI demand in the country.

Q. What is the DRI production and consumption growth SIMA is looking at in FY20 and over the next three years? What factors will enable this growth?

A. This year will be an eventful one for India with the government getting a clear mandate and its focus being on infrastructure development. A budget of INR 100 lakh crore is planned for the next five years as the government will try moving towards its target of a USD5-trillion economy. DRI production will continue to grow with new expansions and also increased efficiency. Due to using better quality raw materials like iron ore pellets and high-quality imported coal, the production of existing sponge iron units is improving considerably. DRI production will also increase to feed the growing demand of finished steel in the country.

Q. What are the hurdles, challenges the DRI players are facing, in both gas-based and coal-based, at present?

A. The major challenge being faced by a DRI player in India is the availability of key raw materials, i.e., both iron ore and coal. The availability of iron ore is limited in India and, therefore, the prices are often at unreasonable levels. India, though it has good reserves of coal, the quality is not consistent and the associated infrastructure required for logistics is not adequate. Most of the factories are opting for imported coal because of its consistency in quality and supply. The Government of India should take prudent steps to ensure assured availability of key raw materials required for steel making. The energy requirement of a sponge iron factory is not much and many of them are supported by captive power plants.

Q. Is India the highest DRI producer in the world, or Iran, at present? What legacy factors helped India?

A. India has consistently been the highest DRI producer in the world and is currently also the highest producer. Availability of coal and iron ore and a ready market for finished goods are the major factors helping India drive sponge iron growth. Iran is also a hotspot for DRI production and has many intrinsic advantages like availability of high-quality pellets and cheap gas.

For a few months, India's DRI production was documented wrongly by the World Steel Association (WSA). While recording the DRI production of India, JPC had only considered the merchant sale and not internal consumption of DRI in the industry because of which a lower production was reflected. The same issue was taken up by Deependra Kashiva, Executive Director of SIMA, and is now resolved and India continues to be the largest DRI producer in the world.

Q. Coal-based is polluting so what is the industry thinking about this, especially since environment is such a big issue today?

A. The Indian sponge iron industry has come a long way and it will be unfair to say that coal-based sponge iron making is polluting. With the environment factors in mind, majority of the companies have adopted state-of-the-art pollution control systems in their facilities. Solid waste management has also been a major concern for the sector and players have succeeded in converting their waste to wealth. Fly ash, which is the largest solid waste from sponge iron production, has found use in the cement sector, in brick-making and also in soil enrichment for agriculture. Many sponge iron factories have set up captive power plants to utilise the waste heat from the process. All of these factors do not allow any significant pollution from any of the sponge iron plants and these

measures are substantially contributing to the cost-competitiveness of our industry.

Q. The government has not allocated gas to the sponge iron industry for the last 22 years. There have been no greenfield gas-based units for the last as many years. Is there any update on this aspect?

A. The gas pricing and distribution in India is managed by the Petroleum Planning and Analysis Cell using the administrative price mechanism (APM). Due to shortage of gas, the government has not allocated gas to the sponge iron industry for the last few decades. Therefore, there has been no greenfield expansion in this sector. The existing players had no option but to innovate and have started using energy sources like coke oven gas and Corex gas to replace natural gas.

Q. The steel MSME sector has always had quality issues. So, what strategies are being adopted to resolve this aspect?

A. The market has become highly quality conscious in the last few years and the secondary steel sector has been proactive in producing steel to comply with the BIS stipulations. Many players are setting up ladle refining furnaces to control impurities like Sulphur and phosphorus in steel. With the current steel environment, it is essential to produce high quality steel and all the players are actively working towards it.

Q. A lot of consolidation happened in the steel industry under the National Company Law Tribunal (NCLT). Is there scope for such consolidation in the DRI space?

A. There has been a lot of consolidation in the DRI space for the last few years and it will only increase further. Apart from consolidation, players are opting for forward integration by adding steel-making facilities and backward integration by setting up pellet plants to stay cost relevant in the current steel scenario.

Q. How much investment is required in setting up a DRI-based steel plant? Going forward, what sort of investments are likely to happen in the sponge iron sector for capacity expansion?

A. Investment required in setting up a DRI-based steel plant is highly subjective and controlled by many factors like the capacity envisioned and the end product desired. We don't see many greenfield projects coming up in the DRI sector but certainly a lot of capacity expansion is taking place in the existing facilities. The steel industry is highly competitive. Integration and consolidation are key for long-term survival. We see a lot of investment in setting up DRI-based mini integrated steel plants.

Q. As the new chairman of SIMA, what are the priorities before you, for taking the DRI segment forward?

A. We aim to create a self-sufficient steel industry that is technologically advanced, globally competitive and promotes inclusive growth. The major challenges for the DRI segment are availability of suitable raw materials at correct prices. Key raw materials for DRI are iron ore and coal/gas. Going forward, the Government of India is planning to auction mineral assets. We would like to represent the interests of the DRI sector to ensure raw material availability. Significant investments have already been made by the DRI sector and we need long-term raw material reliability to ensure smooth and sustainable functioning.

Melting scrap is the replacement for sponge iron. Significant volumes of scrap are being imported into India which is a major challenge for the domestic steel industry. We, at SIMA, have to take corrective measures to control the import of scrap into the country.

In the current age, information is power. We want to develop a knowledge sharing platform so that the members can benefit

from each other's experience.

Q. What role has SIMA played so far in furthering the interests of the sponge iron players?

A. SIMA has always had an active role in the growth of the Indian sponge iron Industry. Now, in a multi-dimensional role, it represents the Indian DRI industry and provides a common platform for providing regular interface with the Government of India and many regulatory authorities. The association is a common forum for its members for sharing and exchanging each other's experiences, views and problems. The association concentrates on market development, compilation and dissemination of industrial data and technical and commercial information essential for decision making in the current fast-changing business environment.

The sponge iron Industry is fragmented and has major presence in Odisha, Chhattisgarh and Karnataka. There is a need to have strong state associations to deal with the states-specific issues with the guidance of parent body SIMA.

Source: Steel 360

India to spend $1.4 trn over 5 years on infrastructure development: Pradhan

India will spend about $1.4 trillion on its infrastructure development in the next five years, Union Steel Minister Dharmendra Pradhan said a few days back. Pradhan was speaking at the Global Forum on Excess Capacity (GFEC) Tokyo which was attended by representatives several other countries.

"I wish to emphasize that with rapid economic and infrastructural development in India, the demand of steel has seen substantial increase and is expected to increase further in the future as embarks to become a $5 trillion economy by 2024," he said while addressing the forum. He said that the country is committed to spending about $1.4 trillion on its infrastructure development in the next five years. All this, Pradhan said, augurs well for the steel demand in the country.

India is determined to raise the per capita consumption of steel from its current low of 72 kg per capita to 160 kg per capita by 2030, he informed. Pradhan was on a two-day visit to Japan recently. The minister met senior management of Japanese steel majors JFE Steel Corporation, Nippon Steel and Daido Steel and invited them to invest in the growing Indian steel sector.

Source: Business Standard

Demand for metals used in EV could rise six fold

Demand for metals used in battery electric vehicles could rise six fold if electric cars reach 8% of road traffic by the mid-2020s, delivering huge dividends for producing countries like Democratic Republic of Congo, Moody's said.

The credit ratings agency said a worldwide shift to electric vehicles would likely drive up demand for cobalt, of which DRC is the world's number one producer, as well as lithium, nickel and copper.

However, weak governance in the central African country could dissuade investors and scupper its potential, it added in a research note. Other economies that would reap the benefits of the push toward electric cars include Chile, and the Philippines, followed by Peru, Indonesia and Australia, it said.

The battery boom has the greatest potential to boost Congo's sovereign credit rating because the production value of these metals would be "extremely large" relative to its economy.

By 2030 cobalt production could be equivalent to nearly 16% of DRC's total GDP last year, more than half of its good exports and 133% of its government revenue, and significantly boost its fiscal and current account balances,

Moody's wrote. But "very weak governance, poor infrastructure and persistent pockets of social instability" remain key obstacles to foreign investment, slowing the country's ramp-up of production, they said.

An increased focus on environmental and social issues and the traceability of metals adds another risk for DRC, Moody's added.

But even "very partial" exploitation of DRC's mineral wealth will likely have a credit-positive impact, the analysts said. DRC's economy is already in thrall to volatile battery metal prices. It is expected to grow 4.3% this year versus 5.8% in 2018 due to lower copper and cobalt prices, the International Monetary Fund forecast.

The fall in cobalt prices promoted Glencore to halt output for two years from end-2019 at its Mutanda mine in DRC, the world's biggest cobalt mine.

Among other battery metal producers, Chile will likely see a more moderate impact, with production of battery metals likely accounting for more than 5% of 2018 merchandise exports and total government revenue by 2030, according to Moody's

Peru will likely increase its share of the metals market through new exploration projects, while the Philippines should also see economic gains and increased revenue collection. Canada, China and Russia would be the least impacted by higher demand for battery metals, Moody's analysts said, due to the size and diversification of their economies.

Source: Metal World