STEEL
# Table of Contents

- Executive Summary........................................3
- Advantage India...........................................4
- Market Overview .........................................6
- Recent Trends and Strategies .......................16
- Growth Drivers.............................................20
- Opportunities.............................................26
- Key Industry Organisations..........................29
- Useful Information.........................................31
EXECUTIVE SUMMARY

- Total crude steel production in India increased at a CAGR of 6.40% during FY08-19P, with country’s output reaching 106.40 million tonnes per annum (MTPA) in FY19P.

- Between April 2020 and September 2020, India’s cumulative production of crude steel was 52.37 MT and finished steel was 47 MT. In October 2020, India produced 9.06 MT of crude steel.

- India surpassed Japan to become the world’s second largest steel producer in 2019, with crude steel production of 111.2 million tonnes.

- Moreover, capacity has increased to 142.24 million tonnes (MT) in FY19, and the figure is anticipated to rise to 300 MT steel by 2030-31.

- Government is working on various fronts to make steel sector globally efficient and competitive.

- National Mineral Development Corporation is expected to invest US$ 1 billion on infrastructure in next three years to boost iron production and increase the iron ore production 75 MTPA until 2021 indicating new opportunities in the sector.

- ~84 lakh MT steel has already been consumed and nearly 158 lakh metric tonne (MT) steel is likely to be consumed in construction of all the houses sanctioned under Pradhan Mantri Awas Yojana (Urban).

- Investment from domestic players in expanding and upgrading manufacturing facilities is expected to reduce reliance on import. In addition, the entry of international players would provide benefits in terms of capital resources, technical know how and more competitive industry dynamics.

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Note: MTPA - Million Tonnes Per Annum, MT- million tonnes
Source: World Steel Association, Ministry of Steel
Increased steel demand from sectors including infrastructure, oil and gas, and automotive will drive the growth of the industry.

India’s finished steel consumption is anticipated to increase to 230 MT by 2030-31^ from 90.68 MT in 2017-18.

India consumed 35.86 MT of steel between April 2020 and September 2020.

To achieve steel capacity build-up of 300 MTPA by 2030, India would need to invest US$ 156.08 billion by 2030-31.

The industry is witnessing consolidation of players, which has led to investment by entities from other sectors. The ongoing consolidation also presents an opportunity to global players to enter the Indian market.

As of 2019, India is the world’s second largest producer of crude steel (up from eighth spot in 2003) with 111.2 MT.

Easy availability of low-cost manpower and presence of abundant iron ore reserves make India competitive in the global set up.

India is home to fifth highest reserves of iron ore in the world.#

National Steel Policy (NSP) 2017 was implemented to encourage the industry to reach global benchmarks.

Government introduced Steel Scrap Recycling Policy to reduce import.

Export duty of 30% has been levied on iron ore* (lumps and fines) to ensure supply to domestic steel industry.

The Government of India raised import duty on most steel items twice, each time by 2.5%, and imposed measures including anti-dumping and safeguard duties on iron and steel items.

Notes: MT - Million Tonnes, FDI - Foreign Direct Investment, ^National Steel Policy 2017, #USGS Mineral Commodity Summaries 2020, *except low grade (below 58%), MT- million tonnes
Source: Metallurgical and Materials Engineering Division Board
MARKET OVERVIEW
EVOLUTION OF THE INDIAN STEEL SECTOR

- Production of steel started in India (TISCO was setup in 1907)
- IISC was set up in 1918 to compete with TISCO
- Hindustan Steel Ltd and Bokaro Steel Ltd were setup in 1954 and 1964, respectively
- In the early 1990s, the public sector dominated steel production
- Private players were in downstream production mainly producing finished steel using crude steel products
- Foreign players began entering the Indian steel market
- No license requirement for capacity creation
- Imposition of export duty on iron ore, to focus more on catering growing domestic demand
- Decontrol of domestic steel prices
- Launch of Scheme for promotion of Research and Development in Iron and Steel sector

**Notes:** (1) TISCO - Tata Iron and Steel Company; IISC - Indian Iron and Steel Company; SAIL - Steel Authority of India Ltd; MT - million tonnes

- Mysore Iron and Steel Company was set up in 1923
- According to the new Industrial Policy Statement (1948), new ventures were only undertaken by the central Government
- SAIL was created in 1973 as a holding company to oversee most of India’s iron and steel production
- In 1989, SAIL acquired Vivesvata Iron and Steel Ltd
- In 1993, the Government set plans in motion to partially privatise SAIL
- In 2019, India ranked as the second largest crude steel producer in the world
- From April 2020 to September 2020, India’s cumulative production of crude steel was 52.37 MT and finished steel was 47 MT.
STRUCTURE OF THE STEEL SECTOR

**Form**
- Liquid steel
- Crude steel
- Finished steel
  - Ingots
  - Flat
  - Semis
  - Non-flat

**Composition**
- Alloy
  - Stainless
  - Silicon electrical
  - High speed
- Non-alloy steel
  - Low carbon steel
  - Medium carbon steel
  - High carbon steel

**End use**
- Structural steel
- Construction steel
- Rail steel

*Source: Report on Indian steel industry by Competition Commission of India*
India’s steel production capacity has expanded rapidly over the past few years, growing at a CAGR of 5.26% from 122 MT in FY16 to 142 MT in FY19.

The National Steel Policy 2017 has envisaged achieving up to 300 MT of production capacity by 2030-31.

BF-BOF route is expected to contribute 65% of the capacity, while the remaining 35% is expected to come from EAF & IF routes.

Expansion of production capacity to 300 MT will translate into additional investment of Rs. 10 lakh crore (US$ 156.08 billion) by 2030-31.

Note: P - Projection, ^CAGR is up to FY19, BF-BOF - Blast Furnace-Blast Oxygen Furnace, EAF - Electric Arc Furnace, IF - Induction Furnace, MT- million tonnes
Source: Joint Plant Committee, Ministry of Steel
STEEL PRODUCTION IN INDIA HAS BEEN GROWING AT A FAST PACE

- The steel sector contributes over 2% to India’s GDP. Also, it employs 500,000 people directly and 2.50 million indirectly.
- From April 2020 to September 2020, India's cumulative production of crude steel was 52.37 MT and finished steel was 47 MT.
- In FY20, crude steel production and finished steel production in stood at 108.50 MT and 101.03 MT, respectively.
- Steel manufacturing output of India is expected to increase to 128.6 MT by 2021, accelerating the country’s share of global steel production from 5.9% in 2018 to 7.7% by 2021.

Notes: FY - Indian Financial Year (April - March), MT - Million Tonnes, CAGR - Compound Annual Growth Rate; P - Provisional, *- till June 2020
Source: Joint Plant Committee, News Articles, Ministry of Steel, World Steel Association
DEMAND HAS OUTPACED SUPPLY OVER THE LAST FIVE YEARS

- India’s finished steel consumption grew at a CAGR of 5.2% during FY16-FY20 to reach 100 MT.
- It is expected that consumption per capita would increase, supported by rapid growth in the industrial sector and rising infra expenditure projects in railways, roads and highways, etc.
- India’s per capita consumption of steel grew at a CAGR of 4.12% from almost 64 kgs in FY16 to nearly 74 kgs in FY19. The National Steel Policy aims to increase per capita steel consumption to 160 kgs by 2030-31.
- The government has a fixed objective of increasing rural consumption of steel from the current 19.6 kg/per capita to 38 kg/per capita by 2030-31.

Note: MT - Million Tonnes, #CAGR is up to FY19, **As per the World Steel Association, kg - kilograms, P - Provisional, * - Till June 2020

Source: JPC India Steel, Ministry of Steel, World Steel Association
In FY20, India exported 8.24 MT of finished steel
Export and import of finished steel stood at 7.10 MT and 2.35 MT, respectively, between April 2020 and October 2020.

Finished export destination countries from India Aug-20 vs Aug-19

Finished steel export and import (in million tonnes)

Finished import source countries to India Aug-20 vs Aug-19

Note: FY - Indian Financial Year (April - March), P - Provisional, MT- million tonnes, * From April 2020 to October 20
Source: Joint Plant Committee
### KEY PLAYERS OF THE INDUSTRY

<table>
<thead>
<tr>
<th>Company</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tata Steel Ltd</td>
<td>Finished steel (non-alloy steel)</td>
</tr>
<tr>
<td>SAIL</td>
<td>Finished steel (non-alloy steel)</td>
</tr>
<tr>
<td>JSW Steel Ltd</td>
<td>Hot-rolled coils, strips and sheets</td>
</tr>
<tr>
<td>Jindal Steel and Power Ltd</td>
<td>Iron and steel</td>
</tr>
<tr>
<td>Welspun-Gujarat Stahl Rohren Ltd</td>
<td>Tubes and pipes</td>
</tr>
<tr>
<td>Visa Steel Ltd</td>
<td>Ferro Chrome, coke and special steel</td>
</tr>
<tr>
<td>Essar Steel</td>
<td>Hot Rolled, Cold Rolled, Galvanized, Colour-Coated products, extra wide plates and pipes</td>
</tr>
<tr>
<td>RINL Powergrid TLT Pvt Ltd.</td>
<td>Forged Rounds, Rebars, Rounds, Wire Rod coil, rounds, billets</td>
</tr>
</tbody>
</table>

*Source: TechSci Research*
KEY STEEL PLANTS IN INDIA

- Alloy and special steel plants under SAIL (Bhadrawati and Salem); iron and steel plant at Visvesvaraya
- Steel integrated plants under SAIL (Bhilai, Rourkela, Bokaro, Durgapur and Burnpur)
- Tata Steel’s largest steel plant, based in Jamshedpur
- RINL steel plant in Vishakhapatnam

Source: Company websBPM, TechSci Research
## STEEL SEZs IN INDIA

<table>
<thead>
<tr>
<th>Developer</th>
<th>Location</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tata Steel Special Economic Zone (TSSEZ)</td>
<td>Gopalpur, Odisha</td>
<td>Steel and allied downstream industries</td>
</tr>
</tbody>
</table>

*Source: Formal approvals granted in the Board of Approvals after the SEZ rules coming into force, Special Economic Zones in India website, www.sezindia.nic.in*
RECENT TRENDS AND STRATEGIES
# NOTABLE TRENDS IN THE INDIAN STEEL INDUSTRY

## Growing investment
- Most of the companies in the industry are undertaking modernisation and expansion of plants to be more cost efficient. E.g. SAIL has undertaken modernisation and expansion for its 6 plants.
- Ministry of Steel plans to invest US$ 70 million in the eastern region of the country through accelerated development of the sector.
- The production capacity of SAIL is expected to increase from 13 MTPA to 50 MTPA in 2025 with total investment of US$ 24.88 billion.
- On July 02, 2020, ArcelorMittal Group announced plans to invest Rs. 20,000 crore (US$ 2.84 billion) in Gujarat.
- In June 2020, ArcelorMittal Group announced plans to invest Rs. 2,000 crore (US$ 283.73 million) in Odisha.

## Strategic alliances
- SAIL and Arcelor Mittal are going to form a joint venture (JV) to set up a 1.5 MTPA steel plant.
- In December 2019, Arcelor Mittal completed the acquisition of Essar Steel at Rs. 42,000 crore (US$ 6.01 billion) and formed a JV with Nippon Steel Corporation.
- In March 2020, Arcelor Mittal Nippon Steel India (AM/NS) acquired Bhandar Power plant in Hazira, Gujarat from Edelweiss Asset Reconstruction Company.
- In November 2020, Arcelor Mittal and Nippon Steel announced expansion plan for its steel-making capacity in India.

## Entry of international companies
- Attracted by the growth potential of the Indian steel industry, several global steel players have been planning to enter the market.
- In February 2020, GFG Alliance acquired Adhunik Metaliks and its arm, Zion Steel, for Rs. 425 crore (US$ 60.81 million), marking its entry into the Indian steel market.
- CarVal Investors, the investment arm of US-based agri group, Cargill, has offered around Rs. 2,000 crore (US$ 277.20 million) along with Asset Reconstruction Company (India) Ltd for the purchase of Uttam Value Steels and Uttam Galva Metallics.

*Notes: MTPA - Million Tonnes Per Annum
Source: Ministry of Steel, Ministry of Railways, News Sources*
Increased emphasis on technological innovations

- In the wake of COVID-19 pandemic, Tata Steel has geo-fenced its plant premises to track the movement of employees to track and manage any COVID cases amongst its employees.
- Indian steel companies have now started benchmarking their facilities and processes against global standards to enhance productivity.
- These steps are expected to help Indian companies improve raw material and energy consumption as well as improve compliance with environmental and pollution yardsticks.
- Companies are attempting coal gasification and gas-based direct-reduced iron (DRI) production. Other alternative technologies such as Hismelt, Finex and ITmk3 being adopted to produce hot metal.
- Ministry of Steel has issued necessary direction to the steel companies to frame a strategy for taking up more R&D projects by spending at least one% of their sales turnover to facilitate technological innovations in the steel sector.
- Ministry has established a task force to identify the need for technology development and R&D.
- Ministry has adopted energy efficiency improvement projects for mills operating with obsolete technologies.

*Source: Ministry of Steel*
Companies in the steel industry are investing heavily in expanding their capacity. Major public and private companies, including Tata Steel, SAIL and JSW Steel, are expanding their production capacity.

In September 2020, the state-owned steel major SAIL reported doubling of capacity in 5 of its plants. It had undertaken modernisation and expansion at its steel plants at Bhilai, Bokaro, Rourkela, Durgapur, and Burnpur. Crude steel capacity has increased from 12.8 million tonnes per annum (MTPA) to 21.4 MTPA.

A long-term perspective is to achieve capacity of 300 MTPA by 2030 as per National Steel Policy 2017.

JSW Steel is looking to further enhance the capacity of its Vijayanagar plant from 13 MTPA to 18 MTPA. In April 2019, the company announced plans to expand the plant’s production capacity to 13 MTPA by 2020 with an investment of Rs. 7,500 crore (US$ 1.12 billion).

Tata Steel is expanding the capacity of its Kalinganagar plant from 3 MTPA to 8 MTPA with an estimated investment of Rs. 23,500 crore (US$ 36.46 billion). The expansion is likely to be completed by 2021 or early 2022. It is expected to improve margins and lead to cost effectiveness. The company is planning to increase its overall installed capacity to 30 MTPA by 2025 from the current 18.5 MTPA.

JSW Steel has undertaken capacity expansion at its Dolvi unit in Maharashtra. It is investing around Rs. 15,000 crore (US$ 2.24 billion) to double the capacity of its plant to 10 MT by the end of 2019. The company has set a target of increasing its capacity from the current 18 MTPA to 24 MTPA by March 2020.

The steel sector is going through a phase of consolidation and companies operating in the sector are expected to undertake brownfield investments for expansion.

In March 2019, ArcelorMittal was declared as the winning bidder to acquire Essar Steel for a consideration of Rs. 42,000 crore (US$ 5.82 billion).
GROWTH DRIVERS
STRONG DEMAND AND POLICY SUPPORT DRIVING INVESTMENTS

Growing demand

- Growing demand in the construction industry
- Growing demand in the automotive sector
- Rising demand for consumer durables and capital goods

Policy support

- 100% FDI in the steel sector
- The Government released the National Steel Policy 2017 and laid down a broad strategy for encouraging long term growth for the Indian steel industry by 2030-31.
- Government has also promoted policy which provides a minimum value addition of 15% in notified steel products covered under preferential procurement

Increasing investments

- Rising investment from domestic and foreign players
- Increasing number of MoUs signed to boost investment in steel
- Foreign investment of nearly US$ 40 billion committed in the steel sector

Notes: FDI - Foreign Direct Investment, MOU - Memorandum of Understanding
CAPITAL GOODS, CONSUMER DURABLES AND AUTOMOTIVES FURTHER DRIVING STEEL GROWTH

- During 2018-25F, the appliance and consumer electronics (ACE) sector will expand at a CAGR of 9.91%, contributing to the growth of the steel industry.
- Growth in automobile production is also expected to augment growth in steel production. Automobile production in India stood at 26.35 million units during FY20.
- Gross Value Added (GVA) of the construction industry grew 4.4% * during FY20* and is expected to post strong growth in the current fiscal year, backed by higher expenditure from the Government.
- Since construction industry is a major consumer of steel, expansion across construction industry will translate into growth of steel sector.

Notes: F- Forecast, FY - Indian Financial Year (April - March), *Provisional Estimates of National Income, * - As per 2nd advanced estimate
Source: SIAM, PWC, CEAMA
Steel Clusters

- In September 2020, the Ministry of Steel prepared a draft framework policy for development of steel clusters in the country.
- The draft framework policy is aimed at facilitating and establishing greenfield steel clusters, along with development and expansion of the existing steel clusters.

National Steel Policy 2017

- New National Steel Policy was formulated by the Ministry of Steel in 2016 to retain the objectives included in National Steel Policy (NSP) 2005. It aimed at covering broader aspects of steel sector across the country including environment and facilitation of new steel projects, growth of steel demand in India and raw materials.
- Under the policy, the central Government stated that all the Government tenders will give preference to domestically manufactured steel and iron products. Moreover, Indian steel makers importing intermediate products or raw materials can claim benefits of domestic procurement provision by adding minimum of 15% value to the product.
- The National steel policy, 2017 aspired to achieve 300MT of steel making capacity by 2030-31. This would translate into additional investments of Rs. 10 lakh crore (US$ 156.08 billion).
- Further, it aimed to increase per capita steel consumption to 160 kgs by 2030-31.

R&D and innovation

- The scheme for the promotion of R&D in iron and steel sector has been continued under the 14th Finance Commission (FY20). Under the scheme, 26 projects have been approved with financial assistance of Rs. 161 crore (US$ 24.98 million) from the Ministry of Steel.
- Ministry of Steel is setting up industry driven institutional mechanism - Steel Research & Technology Mission of India (SRTMI) - with an initial corpus of US$ 30.89 million. The institute will facilitate joint collaborative research projects in the sector.

Note: MT - Million tonnes
Source: Ministry of Steel
### POLICY SUPPORT AIDING GROWTH IN THE STEEL SECTOR … (2/2)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duty drawback benefits</td>
<td>On October 1, 2020, Directorate General of Foreign Trade (DGFT) announced that steel manufacturers in the country can avail duty drawback benefits on steel supplied through their service centres, distributors, dealers and stock yards.</td>
</tr>
<tr>
<td>Rise in export duty</td>
<td>The Government hiked the export duty on iron ore to 50% ad valorem on all varieties of iron ore (except pellets).</td>
</tr>
</tbody>
</table>
| Reduction in custom duty on plants and equipment | The Government has reduced the basic custom duty on the plants and equipment required for initial set up or expansion of iron ore pellets plants and iron ore beneficiation plants from 7.5/5% to 2.5%.  
- Customs duty on imported flat-rolled stainless-steel products has been increased to 15% from 7.5%.  
- Basic customs duty on steel grade dolomite and steel grade limestone is being reduced from 5% to 2.5%.  
- Basic customs duty is being reduced from 10% to 5% on forged steel rings used in the manufacture of bearings of wind-operated electricity generators. |
| Push due to Make in India initiative | Going forward, the Make in India initiative and policy decisions taken under it are expected to augment the country’s steel production capacity and resolve issues related to the mining industry. |
| FDI | 100% FDI through the automatic route is allowed in the Indian steel sector. |

**Source:** The Economic Times, Ministry of Steel, Business Standard, Make In India
THE SECTOR WITNESSED RISING INVESTMENTS IN THE LAST DECADE

<table>
<thead>
<tr>
<th>Date announced</th>
<th>Acquirer name</th>
<th>Target name</th>
<th>Value of deal (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar-20</td>
<td>Arcelor Mittal Nippon Steel India</td>
<td>Bhandar Power plant</td>
<td>-</td>
</tr>
<tr>
<td>Feb-20</td>
<td>JSW Steel</td>
<td>Bhushan Power and Steel</td>
<td>2,818.72</td>
</tr>
<tr>
<td>Mar-19</td>
<td>Arcelor Mittal</td>
<td>Essar steel</td>
<td>5,821.21</td>
</tr>
<tr>
<td>Sep-18</td>
<td>Tata Steel</td>
<td>Usha Martin Ltd (Specialty Steel Business)</td>
<td>641.41-701.07</td>
</tr>
<tr>
<td>Aug-18</td>
<td>Nippon Steel and Sumitomo Metal Corp</td>
<td>Sanyo Special Steel Co Ltd</td>
<td>-</td>
</tr>
<tr>
<td>Jul-18</td>
<td>Aion Investments-JSW Steel</td>
<td>Monnet Ispat and Energy</td>
<td>428.85</td>
</tr>
<tr>
<td>Jul-18</td>
<td>Liberty House</td>
<td>Adhunik Metals</td>
<td>58.42</td>
</tr>
<tr>
<td>Jun-18</td>
<td>Vedanta Star Ltd</td>
<td>Electrosteel Steels</td>
<td>825.45</td>
</tr>
<tr>
<td>May-18</td>
<td>Tata Steel Ltd</td>
<td>Bhushan Steel</td>
<td>5,461.60</td>
</tr>
<tr>
<td>Dec-17</td>
<td>Tata Steel Ltd</td>
<td>Bhubaneswar Power</td>
<td>39.5</td>
</tr>
<tr>
<td>Jan-17</td>
<td>Tata Steel Ltd</td>
<td>Creative Port Development Pvt Ltd</td>
<td>-</td>
</tr>
<tr>
<td>Aug-16</td>
<td>JSW Steel Ltd</td>
<td>Praxair Oxygen Pvt. Ltd.</td>
<td>36</td>
</tr>
<tr>
<td>Aug-16</td>
<td>Kirloskar Ferrous Industries Ltd</td>
<td>VSL Steels Ltd.</td>
<td>23.68</td>
</tr>
<tr>
<td>Aug-14</td>
<td>JSW Steel Ltd</td>
<td>Welspun Maxsteel Ltd</td>
<td>165.85</td>
</tr>
<tr>
<td>Apr-14</td>
<td>JSW Steel Ltd</td>
<td>Vallabhi Tinplate Pvt Ltd</td>
<td>7.63</td>
</tr>
<tr>
<td>Mar-14</td>
<td>Lalitanjali Group Pvt Ltd</td>
<td>Centom Industries Ltd</td>
<td>-</td>
</tr>
<tr>
<td>Dec-13</td>
<td>Venus Insec Pvt Ltd</td>
<td>Goodluck Steel Tubes Ltd</td>
<td>23.73</td>
</tr>
</tbody>
</table>

Cumulative FDI inflows

<table>
<thead>
<tr>
<th>Period: April 2000 to June 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
</tr>
<tr>
<td>Metallurgical industries</td>
</tr>
</tbody>
</table>

Source: Thomson ONE Banker, Department for Promotion of Industry and Internal Trade (DPIIT). News Articles
### Opportunities (1/2)

<table>
<thead>
<tr>
<th>Automotive</th>
<th>Capital goods</th>
<th>Infrastructure</th>
<th>Airports</th>
</tr>
</thead>
<tbody>
<tr>
<td>The automotive industry is forecast to reach US$ 260-300 billion by 2026.</td>
<td>The capital goods sector accounts for 11% of the total steel consumption and is expected to increase 14-15% by 2025-26. It has the potential to increase in tonnage and market share.</td>
<td>The infrastructure sector accounts for 9% of steel consumption and is expected to increase to 11% by 2025-26.</td>
<td>More and more modern and private airports are expected to be set up.</td>
</tr>
<tr>
<td>The industry accounts for around 10% of the demand for steel in India.</td>
<td>Corporate India’s capex is expected to grow and generate greater demand for steel.</td>
<td>Due to rising investment in infrastructure the demand for steel products would increase in the years ahead.</td>
<td>In FY19, passenger traffic at Indian airports stood at 344.69 million.</td>
</tr>
<tr>
<td>With increasing capacity addition in the automotive industry, demand for steel from the sector is expected to be robust.</td>
<td></td>
<td>70% of the country’s infrastructure, estimated at Rs. 6 lakh crore (US$ 89.50 billion), is yet to come up. Thus, a significant growth potential for steel sector is present.*</td>
<td>The number of operational airports stood at 103 as on 31 March 2019.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For various infrastructure sectors, including real estate and power, Ministry of Finance planning to set up a stress fund.</td>
<td>Development of tier II city airports will sustain consumption growth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Estimated steel consumption in constructing airports is likely to grow more than 20% over the next few years.</td>
</tr>
</tbody>
</table>

*According to Mr. Chaudhary Birender Singh, Minister of Steel

**Source:** Make In India, SIAM, Ministry of Steel, Airport Authority of India

Note: Capex - Capital Expenditure, P - Provisional
OPPORTUNITIES … (2/2)

<table>
<thead>
<tr>
<th>Railways</th>
<th>Oil and gas</th>
<th>Power</th>
<th>Rural India</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ The Dedicated Rail Freight Corridor (DRFC) network expansion would be enhanced in the future.</td>
<td>▪ India’s primary energy consumption of oil and gas is expected to increase to 10 mbpd and 14 bcfd, respectively, by 2040. This would lead to an increase in demand of steel tubes and pipes, providing a lucrative opportunity for the steel industry.</td>
<td>▪ The Government has envisaged capacity addition of 58,384 MW from conventional sources between 2017-22*. Also, the Government is targeting to achieve 175 GW of renewable power generation capacity by 2022. This will lead to enhancement in both transmission and distribution capabilities, thereby raising steel demand from the sector.</td>
<td>▪ Rural India is expected to reach per capita consumption of 12 to 14 kgs of finished steel by 2020. Policies like Pradhan Mantri Awa Yojana and Pradhan Mantri Gram Sadak Yojana are driving growing demand for steel in rural India. In FY19, per capita consumption of steel in rural India was estimated to be between 10 to 15 kgs.</td>
</tr>
<tr>
<td>▪ Gauge conversion, setting up of new lines and electrification would drive demand for steel.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Introduction of high-speed bullet trains and metro trains will increase steel usage.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ As per information in the Union Budget 2019-20, 657 km metro rail network is already operational.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: RE - Revised Estimates, mbpd - million barrels per day, bcfd - billion cubic feet per day, *National Electricity Plan 2018
Source: Make In India, Ministry of Power
KEY INDUSTRY ORGANISATIONS
### KEY INDUSTRY ORGANISATIONS

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>Email</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indian Steel Association</strong></td>
<td>207-208, 2nd Floor, Kailash Building, 26 K. G. Marg, New Delhi - 110 001,</td>
<td>011 - 42668800</td>
<td>011 – 42668805</td>
<td><a href="mailto:info@indsteel.org">info@indsteel.org</a></td>
<td><a href="http://www.indsteel.org">www.indsteel.org</a></td>
</tr>
<tr>
<td><strong>Ministry of Steel</strong></td>
<td>Udyog Bhavan, New Delhi - 110011</td>
<td>91-11-23063236</td>
<td>91-11-23063417</td>
<td><a href="mailto:Sharma.aman@nic.in">Sharma.aman@nic.in</a></td>
<td><a href="http://www.steel.gov.in">www.steel.gov.in</a></td>
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<td><strong>National Mineral Development Corporation</strong></td>
<td>Khanij Bhavan, Masab Tank, Hyderabad - 500028</td>
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<td><a href="http://www.nmdc.co.in">www.nmdc.co.in</a></td>
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<td>L-22/4, DLF Phase-II, Gurgaon, Haryana -122 002</td>
<td>91-124-4375501</td>
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<td><a href="http://www.stainlessindia.org">www.stainlessindia.org</a>/</td>
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USEFUL INFORMATION
GLOSSARY

- CAGR: Compound Annual Growth Rate
- FDI: Foreign Direct Investment
- FY: Indian Financial Year (April to March)
  - So FY10 implies April 2009 to March 2010
- JV: Joint Venture
- MoU: Memorandum of Understanding
- MT: Million Tonnes
- MTPA: Million Tonnes Per Annum
- NPAT: Net Profit After Tax
- SEZ: Special Economic Zone
- TMT: Thermo Mechanically Treated
- US$: US Dollar

Wherever applicable, numbers have been rounded off to the nearest whole number.
## EXCHANGE RATES

### Exchange Rates (Fiscal Year)

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<th>Year</th>
<th>Rs.</th>
<th>Rs. Equivalent of one US$</th>
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### Exchange Rates (Calendar Year)

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*Source: Reserve Bank of India, Average for the year*
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