

PART 1 NATURE OF BUSINESS**1. Policy and Business Overview****Business Description of the Company**

Tata Steel (Thailand) Public Company Limited (TSTH) was formerly known as Millennium Steel Public Company Limited. Millennium Steel Public Company Limited was established by merging the businesses of N.T.S. Steel Group Public Company Limited, (N.T.S.) whose shares were held by Horrungrueng Group and The Siam Iron and Steel (2001) Co., Ltd. (SISCO) and The Siam Construction Steel Co., Ltd. (SCSC), whose shares were held by Siam Cement Holding Limited. In 2006, Tata Steel Limited (TSL), through its wholly owned subsidiary Tata Steel Global Holdings Pte. Ltd. ("TSGH"), acquired the majority stake in Millennium Steel Public Company Limited. The Company changed its name from Millennium Steel Public Company Limited to Tata Steel (Thailand) Public Company Limited.

The Company's major shareholder, Tata Steel Global Holdings Pte. Ltd. ("TSGH"), is a wholly owned subsidiary of Tata Steel Limited ("TSL") and which operates its business as an investment company with its head office at Singapore. TSL is a registered company incorporated under Indian Laws and is among top three integrated steel producers in India. Though TSL (Indian operations) is in the same industry as the Thailand based Company, its product range is much more diversified and the company caters to a wider group of customers. TSL extends support to TSTH in the business operations by providing assistance in technology knowhow, treasury & finance, training of people, safety, information technology and International sales through its network of offices around the world. Along with operations in Singapore, TSL drives the long products strategy in India & South East Asia in an integrated manner.

TSTH operates its business as a holding company with shareholding in its three subsidiaries namely NTS, SISCO and SCSC. The three subsidiaries produce Reinforcing bars (Rebars), Wire Rods, Small Section and Special Bar Quality Steel led by an experienced and knowledgeable management team.

The company's operations are undertaken as a group with the Company as the top policy maker and the three subsidiaries responsible for carrying out the operations according to the prescribed policy with regard to marketing & sales, production, raw material sourcing, finance, human resources management and other aspects of the business.

1.1 VISION**VISION**

TATA Steel (Thailand) shall delight the Customers through innovative best in class products & services in Construction steels and thus create value for its shareholders. We will realize our vision by fostering a culture of trust & continuous improvement while keeping employees happy and adhering to highest standards of business conduct.

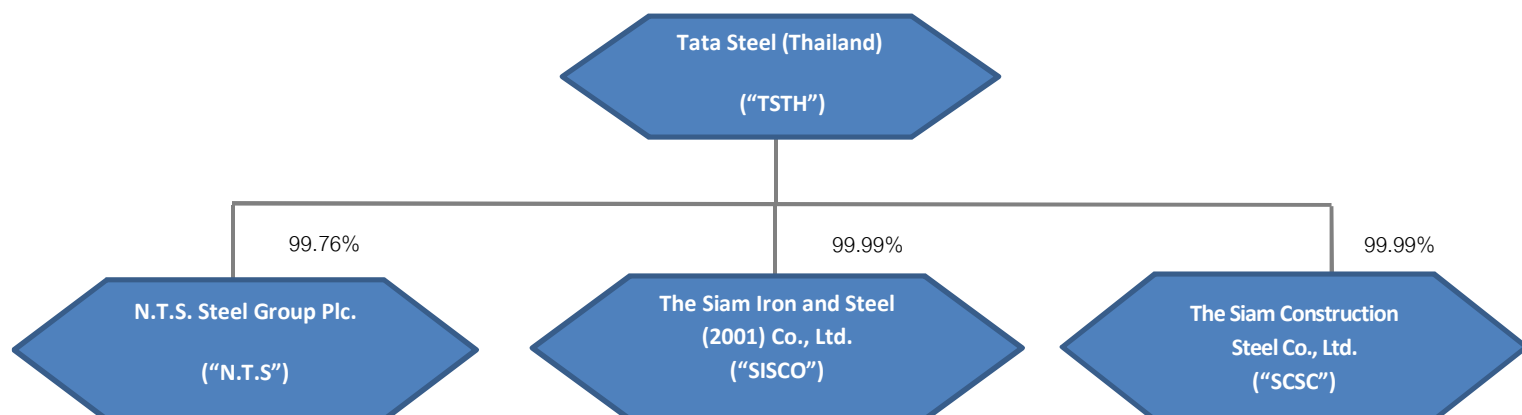
1.2 Significant Developments

Previous significant profile and developments as follows:

2002	- The Company established as a Public Company Limited named “Millennium Steel Public Company Limited” (MS). - Successfully merged the Company business among N.T.S., SISC and SCSC, last two of which were subsidiaries of Cementhai Holding Company Limited (CHC). - The Stock Exchange of Thailand (SET) approved the Company securities as listing securities and started trading under the sector of “REHABCO” (Rehabilitation Plan).
2004	The SET authorized the Company securities to resume trading at the sector of “CONMAT” (Construction and Furnishing Material).
2005	CHC agreed to sell all MS shares pursuant to the Blinding Offer of Tata Steel.
2006	- Tata Steel Groups submitted their voluntary tender offer to all Company’s shareholders. - The Company major shareholders changed from “CHC” to “Tata Steel Group” - The Company name changed from “Millennium Steel Public Company Limited” to “Tata Steel (Thailand) Public Company Limited”. - The SET announced the change in stock symbol trading from “MS” to “TSTH”.
2007	The Company paid the annual dividend payment for the year 2006 to all preferred shareholders and ordinary shareholders at the rate of Baht 0.03 per share (38% of its net profit).
2008	The Company paid the annual dividend payment for the year 2007-2008 to all preferred shareholders and ordinary shareholders at the rate of Baht 0.076 per share (20% of its net profit).
2009	The Mini Blast Furnace (MBF) which is steel production project using iron ore as raw material completed. This was considered first of its kind project in Southeast Asia.
2011	- The SET announced to regroup the Company securities to be under the sector of “STEEL” - Mini Blast Furnace mothballed in August 2011 due to cost of imported raw materials. - TATA Tiscon Branded rebar launched in August 2011.
2012	- The Company entered the Special Bar Quality steel market, only producer of this product in Thailand. - The Company launched seismic resistant rebar for earth quake prone areas, first time in Thailand.
2013	- The Company was recognized by the SET for CSRI Recognition Award. - NTS was awarded Prime Minister’s Industry Award - Safety Management.
2014	- The Company was recognized by the SET for Outstanding CSR Award and CSR Recognition award. - NTS was awarded Prime Minister’s Industry Award - Quality Management.
2015	- The Company listed on Thailand Sustainability Investment 2015 for its outstanding performances in Environment, Social and Governance aspects with potential of giving long-term profit to the investors by the SET. - The Company was 1 of the first 30 companies in Thailand that joined The Children Sustainability Forum to

	make a commitment in protecting Children Rights. SCSC received 'Green Mining Award 2015' from Department of Primary Industries and Mines (DPIM).
2016	- The Company received "Thailand ICT Excellence Award 2017" for "Core Process Improvement Project". - SCSC won the Prime Minister's Industry Awards 2016 - Safety Management. - SCSC represented at ICQCC 2016 (International Convention on Quality Control Circle 2016) held in Thailand. The team received Gold Award. - SISCO won Corporate Social Responsibility -Department of Industrial Works Award (CSR-DIW). - SCSC received Green Star Award 2016.
2017	- The Company arranged the event "Tata Steel Mini Marathon 2018 Run for War Veterans" for the first time to strengthen corporate brand. - The Company received "Thailand Sustainability Investment Award" and "Sustainability Report Award 2017" from SET. - NTS has been awarded with Prime Minister's Industry Award - Safety Management. - NTS and SCSC received "National Safety award" from the Ministry of Labour. - NTS and SISCO received "Carbon Footprint for Organization" from Thailand Greenhouse Gas Management Organization. - NTS received "CSR DPIM" from Department of Primary Industries and Mines - SCSC received 'Green Star Award' from IEAT - SCSC received "Green Mining Award" from Department of Primary Industries and Mines (DPIM) - SCSC received "Corporate Social Responsibility - Department of Industrial Works Award" (CSR-DIW) and SISCO won Corporate Social Responsibility (Continuous level) - SCSC received "Kaizen Gold Award".

1.3 Shareholding Structure



Policy on division of operation between companies within the group

The Company has a policy to allocate production at each of its subsidiaries with an objective to maximize the profitability of the Company as a whole. The product mix is derived based on the technical and production capability of each plant and specific decision to roll a particular product in based on the market needs and customer requirements.

Subsidiary	Paid up Capital (Million Baht) As at March 31, 2018	Business Type	Product
N.T.S. Steel Group Plc. ("NTS")	4,627.96	Manufacture steel	Rebars and Wire Rods
The Siam Iron and Steel (2001) Co., Ltd. ("SISCO")	120.00	Manufacture steel	Wire Rods and Small Sections
The Siam Construction Steel Co., Ltd. ("SCSC")	1,750.00	Manufacture steel	Rebars

2. Nature of Business Performance

Structure of Revenues

The Group's operations involve the single business segment of the manufacture and sales of long steel products. The proportions of the Company's revenues from the sales by product lines, as produced by subsidiaries, are as follows:

Line of Products	Year 2017 – 2018			Year 2016 – 2017			Year 2015 - 2016		
	Thousand Ton	Million Baht	%	Thousand Ton	Million Baht	%	Thousand Ton	Million Baht	%
Domestic Market									
Rebars	682	12,174	54.7	844	12,929	65.6	751	10,545	63.0
Wire Rods	360	6,977	31.4	256	4,263	21.6	195	3,115	18.6
Small Sections	59	1,094	4.9	69	1,106	5.6	77	1,295	7.8
Others	3	52	0.2	8	95	0.5	5	53	0.3
Total Revenues from Domestic Sales	1,104	20,297	91.2	1,177	18,393	93.3	1,028	15,008	89.7
Exports Market									
Rebars	101	1,729	7.8	84	1,295	6.6	116	1,705	10.2
Wire Rods	12	220	1.0	1	13	0.1	1	20	0.1
Total Revenues from Exports	113	1,949	8.8	85	1,308	6.7	1,725	1,725	10.3
Total Revenues	1,217	22,246	100.0	1,262	19,701	100.0	16,733	16,733	100.0

2.1 Nature of Products

1. Reinforcing Bars (Rebars)

- 1.1 Round Bar in the size range of 6-25 mm. diameters is manufactured in accordance with Thai Industrial Standard (TIS) No. 20-2559, grade SR24.
- 1.2 Deformed Bar in the size range of 10-40 mm. diameter is manufactured in accordance with Thai Industrial Standard (TIS) No. 24-2559, grades SD40 and SD50.

These Rebars are marketed under 'TATA TISCON' trademark. Major usage is in the construction sector in concrete reinforcement such as beams, columns, road surface, bridges, stadiums, dams, houses and buildings, etc.

In addition, the Company markets special quality Rebar under trademark 'TATA TISCON S'. These Rebars has special characteristic to withstand the earthquake shock for a longer period of time compared to standard Rebars. Here S indicates super ductile. These products are available in size range of 10-40 mm diameter and grade SD 40.

The Company is developing next generation of Rebars equivalent to SD 60 grade and Tata Tiscon S in SD 50 grade.

2. Wire Rod

Major types of products in this category are:

- 2.1 **Low Carbon Wire Rod:** These are produced in the size range 5.5-17 mm diameter, conforming to SWRM 6-22 grade and in accordance with Thai Industrial Standards (TIS) No. 348-2540. Major applications of wires made from Low Carbon wire rods include binding wire, nail, wire mesh, galvanized wire, barbed wire, numeral wire and chain, etc.
- 2.2 **Carbon Wire Rod for Cold Heading Quality:** These conform to SWRCH 6A-22A grade and are produced in the size range of 5.5-17 mm. in diameter. The wire rods are manufactured in accordance with Thai Industrial Standards (TIS) No. 2243-2548 and end application of wires includes nut, bolt and screw, etc.
- 2.3 **Wire Rod for Electrode Quality:** These comply with SWR Y11 grade, are produced in size range of 5.5-17 mm. diameter and in accordance with Thai Industrial Standards (TIS) No. 2244-2548. Wires from these wire rods are used for making stick welding electrodes.
- 2.4 **High Carbon Wire Rod:** These are produced in the size range of 5.5-17 mm diameter, conforming to SWRH 27-82 grade and manufactured in accordance with Thai Industrial Standards (TIS) No. 349-2548. These wire rods serve as raw material for making prestressed concrete wire, strand wire, compression spring, binding spring, torsion spring and sling, etc.

3. Small Section Structural Steel

This product range consists of angle and channel steel complying to SM400-540 and SS400-540 grade and is manufactured in accordance with Thai Industrial Standard (TIS) No. 1227-2539 under trademark 'BorKorSor'. Small section finds extensive usage in general engineering, signboards, support for roofs, transmission line towers etc.

4. Carbon Steel Round Bar

Carbon steel round bar with SS 330400-540 Quality Class and 619-740 mm. diameter is manufactured in accordance with JIS G3101 (1995) grade for general use and with S10C-S50C grade in 619-740 mm. diameter is manufactured in accordance with JIS G4051 (1979) grade for application in automobile and general engineering sector.

5. Cut and Bend

These consist of ready to use Rebars at the construction site. Conventional Rebars are produced in straight length or in coil form and then cut to required shape and size at the site. This results in generation of waste at the site and needs space along with skilled manpower to produce. Cut and Bend Rebars are made on state of the art machinery at the steel plant and transported just in time at the construction site. As construction practices mature, space and availability of skilled workforce becomes a constraint, proportion of Cut and Bend Rebars increases.

The Company also manufactures finished Stirrups that are marketed under trademark 'Tiscon Superlink' and finished dowel under trademark 'Tata Tiscon'. Tiscon Superlink is used during construction of beam and pole while dowel finds application in road construction and reinforcing rocks.

Management Standard System

All the three subsidiaries of Tata Steel (Thailand) namely, SISCO, SCSC and N.T.S. have adopted international standards in Quality Management System and are certified to TIS/ISO 9001:2015. In addition, the Company realizes the importance of the environment control and therefore SCSC, N.T.S. and SISCO are certified to TIS/ISO 14001:2015 (International standard for the environmental control). N.T.S. and SCSC are certified to ISO/IEC 17025:2005 (General requirements for the competence of testing and calibration laboratories). SISCO and N.T.S. are certified to "Carbon Footprint for Organization (CFO)" from Thailand Greenhouse Gas Management Organization (TGO).

The Company accords highest priority to safety and well-being of workmen at the workplace. Accordingly SISCO, SCSC and N.T.S. are certified to TIS 18001-2554 and BS OHSAS 18001:2007 (International standard of Occupational Health and Safety Management Systems).

TSTH Marketing & Sales and Procurement divisions are certified to ISO 9001: 2015 and ISO 9001:2008 respectively.

Investment Promotion License-Based Privilege

The Company can enjoy certain privileges from the BOI and its subsidiaries as of March 31, 2018 as follows:

	Production Quantity (tons per year)	Privileges Received
NTS Phase II	500,000	▪ Tax exemption for 8 years for the net profit from the first income (April 2006 – April 2014) ▪ Net loss incurred between 1st – 8th year can be realized against taxable profits during the next 5 years.
MBF*	500,000	▪ Tax exemption for 8 years for the net profit from the first income (November 2009 – November 2017) ▪ Net loss incurred between 1st – 8th year can be realized against taxable profits during the next 5 years.
SISCO Phase I	372,000	▪ Import duties exemption for machinery. ▪ Tax exemption for 3 years for the net profit from the first income does not exceed 70 percent of the value of the investment (December 2015 – November 2018) ▪ Net loss incurred between 1st – 8th year can be realized against taxable profits during the next 5 years.

*Mini Blast Furnace Project

2.2 Industry Situation

Domestic Market

1. Reinforcing Bars

The Company distributes this product through dealers in Bangkok and provinces in every region of the country. It also directly sells to selected construction companies and project owners. The trademark used is TATA TISCON which is widely recognized and accepted in Thailand and neighboring countries. The Company continuously evaluates the need to increase dealers in provinces based on the reach and potential in the area. It regularly organizes various types of marketing activities for major dealers and modern trade i.e. Global House, Thai Watsadu and Mega Home

In addition, the Company has a Market Development team for new products such as Seismic Rebar, SD50 High Strength Rebar, Cut and Bend, Stirrup and Dowel. This team regularly meets designers, project owners, government agencies, construction work supervisors, construction contractors and dealers to explain the techno-commercial aspects of the new products.

2. Wire Rod

The Company directly sells to the manufacturer of wires and selectively distributes via trader in few cases. The Company has created sound platform for continuously improving the product and service offerings to the Customers through creation of customer service teams. The team comprises of representatives from production, marketing and sales, quality assurance & new product development and production planning department.

The company has focused on making customized products as per customer processing and end applications. The Company has started supplies of Tire Cord which is a high end application.

3. Small Sections

The Company distributes this product via dealers in Bangkok and provinces in every region. The Company has added new dealers in the provinces. Moreover, the Company regularly visits end customers such as tower fabricators and the electric power generation and transmission companies to understand the demand trend and changes expected in product and service offerings in the future.

4. Special Bar Quality

The Company directly distributes to the manufacturers of vehicle components and manufacturers of bright bar.

5. Cut and Bend

The Company sells this value added product via the dealers in Bangkok and provinces in every region and also directly sells to the construction companies and project owners.

The Company organized a separate project management team to coordinate with project owners about production plan and transportation to match with each project site's requirements.

All products are promoted through social media, radio, print media and public vehicles in Bangkok and provinces. The company arranges marketing activities in various forms to create a relationship with it's customers and distributors.

Export Market

The Company regularly exports Rebars and Wire Rods to countries in the Asean region such as Laos, Cambodia, Myanmar, Singapore, Indonesia and Philippines. In addition, the Company exports Rebar under TATA TISCON Trademark to India which is supported by dealer network of Tata Steel India. Total exports during the year were approximately 9 percent of the total sales.

During the year, the Company has been granted manufacturing license in accordance with international standard, including ACRS (Australia / New Zealand), BIS (India) and SIRIM (Malaysia) to expand export base.

Distribution Proportion

Distribution Channel	Financial Year (%)				
	2017-2018*	2016-2017*	2015-2016*	2014-2015*	2012-2013*
Direct Sales	48	39	34	32	37
Regional Agent	17	18	18	18	16
Agent in Bangkok Metropolitan Region	35	43	48	50	47
Total	100	100	100	100	100

Remark: * Adjusting according to reorganization

Business Environment

In 2017, global demand for iron and steel was at 1,622 million tonnes, increased by 7% from the previous year in the backdrop of the improving world economy especially US, Europe and Japan. China's demand for steel was 766 million tonnes, increased by 12.4% year-on-year due to the expansion in the industry and infrastructure.

In the past year, China has implemented a policy of reducing excess capacity in the steel industry and steel products especially, the Induction Furnace (IF) plants. This has resulted in Chinese steelmakers selling machinery or moving production base to other countries including Thailand.

According to the Iron and Steel Institute of Thailand, the country's demand for steel was 16.5 million tonnes, lower by 14.2% from the previous year. Import volume was 11.3 million tonnes, at 68.5% of the demand for steel in Thailand, decreased by 10.2% year-on-year..

Demand for long product in Thailand was 5.6 million tonnes, decreased by 25.7 percent year-on-year. Import volume was 2.6 million tonnes, 46.4% of the demand for long product in Thailand, decreased by 16.3% year-on-year. The year witnessed significant slowdown in public investments reflected by delayed auctions and the private investments in the construction sector have also remained low.

Table for Thailand Usage Requirement of Finished Products

Year	Production Quantity (Million Tons)	Growth (%)	Import (Million Tons)	Growth (%)	Export (Million Tons)	Growth (%)	Usage Requirement (Million Tons)	Growth (%)	Import (% of Usage Requirement)
2017	6.77	-15	11.33	-10	1.55	20	16.54	14	68
2016	7.96	22	12.61	10	1.29	8	19.28	15	65
2015	6.50	-4	11.44	-4	1.20	-11	16.74	-4	68
2014	6.80	-4	11.90	-3	1.35	-4	17.35	-3	69
2013	7.12	1	12.25	9	1.40	0	17.97	6	68
2012	7.02	1	11.29	25	1.40	4	16.91	15	67

Source : Iron and Steel Institute of Thailand

Competition Situation**Domestic Market**

Competitors of the company can be classified into four as per details below:

1. The manufacturer with Electric Arc Furnace (EAF) using domestic and imported scrap as raw material. They manufacture semi-finished product called billet to produce finished steel products such as Rebar, Wire Rod, Structural steel and Special steel. This method can limit the stigma of almost 100 percent, resulting in quality products throughout the line.
2. The manufacturers with Induction Furnace (IF) using domestic scrap as raw material for the production of semi-finished products called billet. This method requires high quality scrap steel and strict production control from the separation process of scrap to refining. This may result in poor product quality throughout the line as there may be some contaminants in the product. This billet is used to produce ready-made products such as Rebar and Sections.
3. Non-electric arc furnace manufacturers (Non-EAF) using domestic and imported billet. It is used to produce finished products such as Rebar, Wire Rod, Sections and Special products.
4. Importers of semi-finished products such as billet, and finished products such as Wire Rod, Sections and Special products as an user as well as the distributor.

Considering the current capacity of domestic Rebar, Wire Rod and Section, totaling over 15 million tons, compared to the domestic demand for long product in 2017 at 5.6 million tonnes, the remaining capacity is sufficient to accommodate future demand and there should not be any need to import.

In 2017, the steel industry experienced high competition from existing domestic producers who have invested in the machinery and engaged external experts to improve their production capability to produce high quality grades and also from the increase of materials available from the new manufacturers through Induction Furnace route.

With the policy of reducing production capacity and increasing in domestic demand, export of steel products from China has decreased during the last year. However, Thailand's import of wire rod products from Vietnam recorded increase. The Company continues to closely monitor the imports of Wire Rod into Thailand.

Export Market

The Company has focused on exports to the countries in the ASEAN region such as Lao, Cambodia, Myanmar, Vietnam and Indonesia. . Major competition in Lao and Cambodia is from Vietnam steel manufacturers. China is dominant player in Myanmar. However, 'Made in Thailand' and 'Tata Tiscon' enjoys good reputation in the neighboring countries and are recognized for their superior quality. Accordingly, the Company has been working to strengthen the network in these countries. The Company also exports Rebar to India.

Trend of Industry in 2018

The World Bank forecasts world economic growth at 3.1%, increased from previous year (3%) due to the growth of the US, Europe and Japan, and the developing countries like India, Russia, Brazil and the Middle East. China's economy has slowed down to 6.4%, decreased from last year (6.8%) due to economic restructuring and actions to bring stability in the financial system.

According to forecasts of the National Economics and Social Development Board (NESDB), the Thai economy is expected to grow in the range of 3.6-4.6%, up from 3.9% from the previous year. The supporting factors are the world economic growth, increase in exports and in the number of foreign tourists. Public investments in the old projects and new projects, such as the double rail trains, electric train in Bangkok and province, high speed rail, creation and expansion of airports, ports, roads and dams, and the establishment of Eastern Economic Corridor (EEC), accompanied by increased private investment expect to increase income and employment in agriculture, services and industry. There are some concerns that inflation may be higher from increase in oil prices. Protectionist economic policies of the US, trade protection measures in the form of tax and non-tax measures by many countries and a possibility that the prices of agricultural products remain unchanged may also have some impact on the Thai economy.

Iron and Steel Institute estimates world demand for iron at 1.648 million tonnes, increased 1.6% from previous year from global economic recovery.

China's demand for steel is expected at 766 million tonnes, the same as last year. The government has taken measures to strengthen the real estate sector. In addition, the policy to reduce excess capacity in the steel industry such as raw materials and steel products is expected to continue for next few years.

The domestic steel industry is still very competitive from induction furnaces, new investments by Chinese steelmakers and import of steel products from China and Vietnam. Measures to increase import tax of the United States, may cause steel prices to fluctuate and the countries who were exporting to the US may look for an alternate markets may also disturb the demand-supply balance in the Asean region. With the unprecedented increase in the price of raw materials like graphite electrodes and ferro alloys, the cost pressure on steel producers continues.

2.3 Procurement

Over the years, China has become an important supply base for raw materials, spares and consumables to the world. During last year, government of China has taken certain measures to improve environmental performance in the country. This has resulted in partial or complete closure of many manufacturing facilities there thereby impacting supply of certain materials adversely. Availability and hence cost of steel making raw materials like Graphite Electrode, Ferro Alloys, and Refractory has become a challenge. Graphite electrode alone has seen price going up almost eight times in last fifteen months. The company tracks the market situation closely and has been working to develop sources outside of China to reduce the risk. At the same time, Procurement division works closely with Tata Steel China Desk to look for cost effective yet reliable suppliers in China and thereby expand the supplier base.

Procurement Division of Tata Steel (Thailand) works toward long term sustainability and aims to expand its supply chain network continuously. Parallely, the division regularly communicates policies related to Ethics, Corporate Governance and Safety Standards to all concerned in the supply chain and to relevant business partners so that they can develop proper systems in these areas.

The Company sources raw materials and other products both from domestic market and through import by emphasizing on Value In Use (VIU). Proportion of domestic and import supply is approximately 76 percent and 24 percent respectively for 2017-18. Share of domestic buying is higher due to shorter lead time, lower transportation costs, lower currency risk related to fluctuation in currency exchange rate and helps in jobs creation and driving the economic growth in the country.

Senior management of the company engages with the key supplier partners at regular intervals Annual vendor partner meet is organized to share company's plans and get market inputs from the partners.

Structure of Procurement

During the year, there has been a reorganization of the Procurement Division. Production Supply Department has been separated from Maintenance Repairs and Operation Department to improve agility and focus more on strategic sourcing. A new section for material data management has been set to enhance service level to the users and manage material availability at optimum level. Procurement Division of the Company is now organized as per spend in eight major functions, described as under:

1. Metallic Sourcing

Steel scrap is the main raw material for electric arc furnaces. In 2017, competition in the domestic scrap market remained high due to new induction furnace players in country. Occasionally, the company purchased semi-finished products (billet) from open marker as it was a better option commercially. The company continues working on developing alternate low cost steel scrap, as well as expanding the scrap purchasing yards to increase the domestic sourcing to replace imported scrap. The strategy is to maximize domestic scrap as this is the lowest cost option.

2. Maintenance Repairs and Operation (MRO) Goods

This department is predominantly working on sourcing (technical) MRO Goods, including Bearings, Electrical equipment, Hydraulic system, Fuel and Fluid Systems, Water Treatment System, Filter, Belt-Chain and etc. Setting of material data management section to work in close coordination between MRO and Material Supply Department has helped to update material database effectively. This has helped in improving sourcing efficiency for comparable spare parts and consumables. This along with sourcing from low cost countries, reduce transactional load and expanding vendor base remains priority for this department.

3. Raw Materials, Coporate Services and CAPEX

Raw Materials team handles the procurement of ferro alloys, refractory and other additives used in the electric arc furnace. Key strategy is to find the right source of supply with optimum value and price combination suitable for TSTH operations. The

company applies strategic sourcing concept to procure directly from manufacturers in low cost country like India, Bhutan, Malaysia and Pakistan. Chinese Central Government has recently tightened the environment policy thereby affecting the supply from there.

For Capital Expenditure, Procurement, Project managers & teams have developed technical specification review process which has helped to reduce pre-bidding processing time. Projects related to energy saving comply with the sustainability policy of Tata Steel Group.

4. Production Supply

This is linked to the production plan, which needs to be adjusted at times according to market changes. The key production supply material is Graphite Electrode which is very important in the steel making process through Electric Arc Furnace.

China's environmental policy during the past year has resulted in price volatility. There is close collaboration between Tata Steel (Thailand) procurement and Tata Steel Group's in India and Singapore. Procurement uses a combined volume strategy with Tata Steel group to increase bargaining power in both price and other trade terms and also reduces risk by diversifying the source of suppliers.

5. Plant Procurement

Primary function of this team is to source services for the users at the three manufacturing sites. The Company complies with the minimum wage structure as announced by the government from time to time. As services cost is dependent on number of workmen, constant effort is made to improve workmen productivity. As principle employer, the company realizes the importance of the registration and compliance of the legal requirements related to foreign workers. In addition, the Company focuses on the contractor safety processes continuously to ensure zero harm at working sites.

6. Logistic Services

Inbound Logistics and related services are structured to handle import cargoes. Key goal is to manage inbound logistics in such a way that all cargoes reach the end users on time, at optimal cost and in a safe manner.

Since last year, a working group has been set up with representatives from relevant departments to reduce time of vehicle in – vehicle out (VIVO) with the aim to increase the level of satisfaction of customers and transport contractors.

7. Sourcing Support and Reporting

The Company plans to develop an efficient sourcing system to communicate procurement information in a clear and transparent manner to internal and external stakeholders in its journey to become a digital organization. Various options are under study in consultation with the Tata Steel India IT team.

8. Supply Management

This team manages Stores function at the manufacturing sites. Primary responsibilities include on time supply of spares and consumables to the users while ensuring that the inventory is kept at an optimal level. Best practices from Tata Steel India are incorporated in the material management strategy to keep quality of spares and consumables at a healthy level without compromising on the service levels.

Production capacity of Tata Steel (Thailand)

	NTS	SISCO	SCSC	Total
Capacity (tons per annum)				
- Rebars	450,000	-	500,000	950,000
- Wire rods	350,000	300,000	-	650,000
- Small Sections	-	100,000	-	100,000
Total capacity	800,000	400,000	500,000	1,700,000

Source: Tata Steel (Thailand) Plc.

With the total finished goods production of 1,211,500 Tons, the production capacity utilization for the financial year ending in March 31, 2018 stood at 71%

Risk Factors

1. Metallic and Raw Material Price Fluctuations

Last year, there was high demand of domestic scrap from new induction furnaces in the country and fluctuation of steel scrap price & iron ore in international market. This impacted the steel industry significantly. The company expanded to a new area for yard processing to collect more domestic scrap. Alternative low cost metallic trials and commercial sourcing remains a focus area.

2. Sole Source Manufacturer/ Supplier

Procurement has reduced risk from single manufacturer/ supplier through multiple ways. Firstly, working together with end users through Strategic Procurement Optimization Team (SPOT), efforts are made to develop multiple suppliers. Plant is encouraged to take controlled trials so that usability of alternate material or supplier is tested. From monthly follow-up during the year, results shown that the supply dependence on single vendors has declined.

Secondly, in case it is single supplier, effort is made to have long term relationship so that joint development is undertaken to manage the cost effectively. Procurement team regularly reviews the items under single source. Approval is sought from appropriate level in case the sourcing is done on a single supplier basis.

3. Increasing Skilled Labor Cost

Recent announcement of Thai government to prohibit foreign labour to do skilled work resulted in increased labor cost. To reduce the impact, the company work towards combining different types of jobs, improve manpower productivity, shift part of contract jobs to own employees and re-engineer work to avoid certain types of activities.

Environmental Impacts

Tata Steel (Thailand) has set up and communicated clear policies to suppliers and business partners to recognize and comply with environmental laws including the rules and regulations prescribed by the law of the land. Presently, the Company has no legal dispute or lawsuits relating to environment problems.

Work related to project or high value of purchases and sales pending the delivery

- Not Applicable –

3. Risk Factors

The Company follows the Enterprise Risk Management (ERM) process to address the risks associated with its business. The ERM process framework is aligned with Tata Steel (TSL) Group framework and based on international standards such as ISO 31000 and Committee of Sponsoring Organizations of the Treadway Commission (COSO) with inputs drawn from the best practices of leading companies across industries. The Company's ERM has evolved and matured over the years and has been used effectively in identifying and analyzing unforeseen risks that enable management to take decisions. ERM is also an integral part of the Long term planning process to enable organizational sustainability. This has helped to develop a forward looking approach to risk management. The approach enables the Company to counter and mitigate various risks and simultaneously allows it to pursue available opportunities for the long term benefit of the business.

Operating in the steel industry, the Company confronts several risks in areas of commercial, operations, Safety, HR etc. Accordingly, a risk portfolio matrix has been developed consisting of all known business risks, followed up with a detailed analysis of business environment, market condition and risk mitigation plan with process owners. The Company identified risks and categorized them into A, B & C category based on likelihood of its occurrence & its impact to business. Category A risk is being high on risk metric.

The Risk Register is reviewed by TSTH management team on monthly basis, where the risk owners present the status update on mitigation plan and trend of early warning indicators. The movement of risk is understood through the enterprise risk heat map. The same is also reviewed at TSTH Board meeting on quarterly basis.

An assessment of management approach to various types of risks is given below;

1. Market Risk

The GDP growth of the country significantly relies on public investment which has an impact on the steel demand. In 2017, public investment has contracted by 1.2 percentages which has been below the estimated growth and steel consumption also declined. In addition, Imports from China and rising imports from Vietnam moreare also challenges to the domestic steel industry in Thailand. Periodic engagement with the regulators through the Steel Manufacturers' Associations has helped to to reduce the impact of gap in anti-dumping measures taken by the government. In the past year, Company has expanded in the Cut and Bend market and increased its capacity following the sales growth when compared with last year. Besides, focused actions to create Tata Tiscon branding through online social media, dealer partnership program and other marketing activities have helped to build relationship with customers and end users.

The Company also intensified its efforts in export markets to expand its market reach, especially to the Asean countries and India; as additional measure to mitigate the volatility in domestic steel demand. This effort has enabled to increase the customer base which resulted in higher export sale volume as compared to last year and also build Tata Tiscon brand to be popular in the Asean region.

2. Risk of Raw Material Supply

TSTH sources raw materials from domestic market as well as through imports. In recently year, International prices of scrap, billets etc. have been rising continually due to high demand. The demand within China has also increased resulting in lower export of raw materials from China.

Consequently, almost all domestic manufacturers in Thailand have increased their efforts to use more domestic scrap which has resulted in higher competition in domestic raw material market, scrap and billets.

The Company has managed this risk through the strategy to develop key partner vendors in domestic raw material sourcing. TSTH has succeeded in increasing domestic raw material sourcing volumes. The risk of inconsistency in raw material price was reduced by balancing of inventory level.

3. Risks Associated with Mini Blast Furnance (MBF)

The Company has signed an Asset Purchase Agreement with a prospective buyer on 15th Nov 2017 for the sale of its plant and equipment, tools and spares relating to the MBF complex on "as is, where-is" basis at a consideration of US\$ 15.15 mn. The terms of the agreement requires the buyer to make advance remittances in tranches before dismantling and dispatch of the parts of the complex is allowed. It's a complex dismantling job likely to run for 12-18 months, there is a risk in execution of the agreement and risk of forex exposure leading to loss of value of the assets. From the buyer's point of view, there may also be some regulatory challenges in foreign exchange remittances as advance payments.

4. Safety, Health and Environment Risks

The Company had embarked on Safety Excellence Journey (SEJ) based on guidelines from TSL as well as the Environment Management System (ISO14001) and Occupational Health and Safety Assessment Management System (OHSAS 18001). At TSTH, Safety, Health and Environment (SHE) organization was defined by Apex Safety Council (ASC) with President and CEO as a chairman and Vice Presidents as the members. Some of the key initiatives launched during the year such as Contractor Safety Management (CSM) to take the same safety standards for contract employees as for own and strengthen up road safety. The Company focused on tracking lead indicators such as Lost Time Injury (LTIF), First Aid Case (FAC) and Property Damage. The employees are motivated to report Near misses, Safety Observation and Fatal Risk Control Program (FRCP). This highlights vulnerable areas and thereby helps to increase focus on the same.

The Company focuses on health by providing good working environment and regularly monitors industrial hygiene such as dust, noise, chemical and heat. The Company provides physical health check for employees follows up and supports necessary treatment in case of abnormal result related to work is found. Organizational performance in this area is measured by tracking Health Index.

The Company accords high priority to utilize resources effectively and efficiently with appropriate environmental management regulation to minimize adverse impact to the community. The main raw material used across all three locations is ferrous scrap and is fully recyclable. The Company also emphasizes on Environment by monitoring the CO₂ Emission to measure and control greenhouse gases, follow up the Environment Impact Assessment (EIA) by monitoring gas such as NO_x SO_x CO and dust in all plants by targeting zero complaint and 100% compliance to the regulatory requirements. The Company also effectively utilizes water and applies Zero Discharge principle in water management. For waste management, the Company applies the 3R concept in order to maximize recycle waste by targeting 99% of waste back in process. All plants of Company increase environment standard to Green Industry level 4.

5. Human Resource Risks

The Company may encounter the risk of strategic workforce planning and retaining employees especially with high potential employees and skilled labor in the long run due to its operating in the industrial zone with low unemployment rate in Thailand, business challenges and competition, strict control of alien labor, rising trend of minimum wage as well as head-hunting by other companies offering higher compensation package. Although the attrition rate of the Company has been maintained at a good level; a decline from 8.1% to 5.2% and to 4.5% in FY16, FY17, and FY18 consecutively, the Company has prepared various initiatives to reduce such risks.

The Company engaged an external consultant to study about the strategic workforce planning three majors divisions as a pilot project. There is a bench strength model to create manpower pipeline for engineers. At the same time, various improvements are made to ensure that the attrition rate remains at minimum level. The Company provides career growth opportunities and promotes the internal recruitment program which provides for career opportunity as well as extensive development programs on functional, business acumen, managerial and leadership to improve the competency level of employees. "LOT" (Leaders of Tomorrow) Programme was conducted for the 3rd batch this year to give a fast track career growth opportunity to employees for their development.

In addition, to understand the concerns of employees, the Company availed the services of external HR consultants to do the Employee Engagement Survey. The Company appoints Engagement Champions who are the representatives from various units to discuss and identify the improvement plans. Welfare and benefits are constantly improved to be competitive, based on market survey and benchmark with other leading companies as well as reflects employees' voices and needs. Team building sessions are also constantly held across TSTH locations to foster team working spirit and engagement. Meetings with employees group were arranged to capture employees' opinion and ensure proper communication to avoid risk of employees' dissatisfaction.

6. Financial Risk

Financial risk covers all financial commitments the Company has to the external world. Ensuring that the commitments are honored as per contracts, assumes highest importance within the TSL group. The Company has adhered to all its commitments during the year and will keep a close watch with zero tolerance to noncompliance. The Forex volatility is being addressed through a hedging mechanism in line with a structured hedging strategy, monitored by the Regional Treasury Committee, with a formal reporting mechanism to the Board. Liquidity management is integrated with business planning and cash flow projection. The Company has also appropriate insurance policies to cover assets and business.

7. Risks Associated with Natural Calamity

The Company's inherent risk to natural calamity is relatively moderate due to its operations spread in four different locations. However, the Company is aware of the risk associated with operating in industrial areas and does emergency handling procedures at all its facilities, and structured periodical 'mock drills' are done to ensure effectiveness of such procedures. Disruption to business operation is effectively addressed by flexible supply chain management and switching operation amongst the three production units. Besides, the Company has taken extensive insurance coverage related to natural calamity and all industrial risks.

4. Operating Assets

4.1 Property, Plant and Equipment Used in Business Activities for the Company and Its Subsidiaries

As of March 31, 2018, property, plant and equipment used in business activities can be summarized as below:

Type of Asset	Proprietary right/ownership	Book Value (Baht million)	Obligation
1. Land	Ownership	798.69	- None -
2. Land improvement, buildings and structures	Ownership	549.47	- None -
3. Machinery and equipment	Ownership	1,860.54	- None -
4. Furniture, Fixtures, equipment and Vehicles	Ownership	60.61	- None -
5. Work in progress	Ownership	22.18	- None -
Total		3,291.49	

Details of operating assets can be categorized by each Company as follows:

Tata Steel (Thailand) Public Company Limited ("TSTH")

Type of Asset	Proprietary right/ownership	Book Value (Baht million)	Obligation
1. Furniture, Fixtures, equipment and Vehicles	Ownership	32.71	- None -
2. Work in progress	Ownership	0.23	- None -
Total		32.94	

N.T.S. Steel Group Public Company Limited ("NTS")

Type of Asset	Proprietary right/ownership	Book Value (Baht million)	Obligation
1. Land	Ownership	714.61	- None -
2. Land improvement, buildings and structures	Ownership	324.54	- None -
3. Machinery and equipment	Ownership	1,510.99	- None -
4. Furniture, Fixtures, equipment and Vehicles	Ownership	12.89	- None -
5. Work in progress	Ownership	6.99	- None -
Total		2,570.02	

The Siam Iron and Steel (2001) Company Limited ("SISCO")

Type of Asset	Proprietary right/ownership	Book Value (Baht million)	Obligation
1. Land	Ownership	84.08	- None -
2. Land improvement, building and structures	Ownership	30.08	- None -
3. Machinery and equipment	Ownership	132.30	- None -
4. Furniture, Fixtures, equipment and Vehicles	Ownership	9.23	- None -
5. Work in progress	Ownership	13.54	- None -
Total		269.23	

The Siam Construction Steel Company Limited ("SCSC")

Type of Asset	Proprietary right/ownership	Book value (Baht million)	Obligation
1. Land	Ownership	0.00	- None -
2. Land improvement, building and structures	Ownership	83.34	- None -
3. Machinery and equipment	Ownership	217.24	- None -
4. Furniture, Fixtures, equipment and Vehicles	Ownership	5.80	- None -
5. Work in progress	Ownership	1.41	- None -
Total		307.79	

5. Legal Dispute

As of March 31, 2018, the Company and its subsidiaries which include NTS, SISCO and SCSC had no legal dispute, neither as plaintiff nor defender, that have not yet been finalized in the following 3 cases:

- 1) No legal dispute or law suits which may have adverse impact to the assets of the Company or its subsidiaries in the amount of exceeding 5% of the shareholders' equity.
- 2) No legal dispute or law suits which may have material effect to the operations of business of the Company or its subsidiaries.
- 3) No legal dispute or law suits arising from the normal operation of the business of the Company and its subsidiaries.

6. General Information

Company's name	: Tata Steel (Thailand) Public Company Limited (Formerly known as : Millennium Steel Public Company Limited or "MS")
Registration No.	: 0107545000136
Business Type	: Manufacturer and distributor of long steel products
Securities Trading Symbol	: TSTH
ISIN Number	: Local TH0692010000 Foreign TH0692010018 NVDR TH0692010R12
Established	: July 12, 2002
Listing Date	: November 29, 2002
Trading Date	: December 18, 2002
Head Office	: 555 Rasa Tower 2, 20 th Floor, Phaholyothin Road, Chatuchak, Bangkok 10900, Thailand
Telephone	: +66 2937 1000
Fax	: +66 2937 1224
Website	: http://www.tatasteelthailand.com
Ordinary Shares	: 8,421,540,848 Baht
Paid Up Capital	: 8,421,540,848 Baht
Par Value	: 1.00 Baht per share
Registrar	: Thailand Securities Depository Company Limited 93 Ratchadaphisek Road, Dindaeng, Bangkok 10400, Thailand Tel : +66 2009 9000 Fax : +66 2009 9991 Email : SETContactCenter@set.or.th http://www.set.or.th/tsd
Auditors	: Ms. Varaporn Vorathitikul (Certified Public Accountant No. 4474) PricewaterhouseCoopers ABAS Ltd. ("PwC") 15th Floor, Bangkok City Tower, 179/74-80 South Sathorn Road, Sathorn Bangkok, 10120, Thailand
Filing a Complaint on Ethics	: Chairman of the Audit Committee Mr. Alan Kam E-mail : alank@libertasth.com

Ethics Counselor : Mr. Siorote Matemanosak
Tel. +66 2937 1000 Ext. 1810 Fax. +66 2937 1224
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Investor Relations : Ms. Arisara Na Ranong
Tel. +66 2937 1000 Ext. 3210 Fax. +66 2937 1224
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Corporate Communications and Activity : Mr. Jitti Suwanvajokkasikij
Tel. +66 2937 1000 Ext. 2420 Fax. +66 2937 1224
Email : jittis@tatasteelthailand.com

Subsidiaries Profile (As of March 31, 2018)
N.T.S. Steel Group Public Company Limited

Registration No.	0107536001273
Business Type	Manufacturer of bars, rebars and wire rods
Established	October 4, 1988
Factory	No. 351, Moo 6, 331 Highway, Hemaraj Chonburi Industrial Estate, Bowin, Sriracha, Chonburi 20230 Tel. +66 3834 5355 Fax. +66 3834 5350
Ordinary Shares	4,627,965,356.40 Baht
Paid Up Capital	4,627,965,356.40 Baht
Par Value	1.20 Baht
Held by TSTH	99.76 %

The Siam Construction Steel Company Limited

Registration No.	0105532094348
Business Type	Manufacturer of rebars
Established	October 4, 1989
Factory	No. 1, I-7 Road, Tambon Map Ta Phut, Ampher Mueang, Rayong 21150 Tel. +66 3868 3968, Fax. +66 3868 3969
Ordinary Shares	1,750,000,000.00 Baht
Paid Up Capital	1,750,000,000.00 Baht
Par Value	100 Baht
Held by TSTH	99.99 %

The Siam Iron and Steel (2001) Company Limited

Registration No.	0105544085276
Business Type	Manufacturer of wire rods and small sections
Established	September 3, 2001
Factory	No. 49 Moo 11, Tambon Bang Khamode, Ampher Ban Mor, Saraburi 18270 Tel. +66 3628 8000 Fax. +66 3628 8002
Ordinary Shares	120,000,000.00 Baht
Paid Up Capital	120,000,000.00 Baht
Par Value	100 Baht
Held by TSTH	99.99 %