

## 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 Plc., (NTS) whose shares were held by Horrungrueng Group and Siam Iron and Steel (2001) Co., Ltd (SISCO) and 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. Subsequently, the company changed its name from Millennium Steel Public Company Limited to Tata Steel (Thailand) Public Company Limited (TSTH).

The Company's major shareholder, Tata Steel Global Holdings Pte. Ltd. ("TSGH"), is a wholly owned subsidiary of Tata Steel Limited ("TSL") and operates its business as an investment company with its corporate office at Singapore. TSL is a registered company incorporated under Indian Laws and is among the top three integrated steel producers in India. TSL (Indian operations) is in the same industry as the Thailand based Company. However, TSL's 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 & development of people; occupational safety, health & environment; and Information technology through its network of manufacturing plants and offices around the world. Along with operations in Singapore & Malaysia, TSL drives the long products strategy in India & SE Asia in an integrated manner.

TSTH operates its business as a holding company with shareholding in its three subsidiaries namely N.T.S., SISCO and SCSC. The three subsidiaries produce Reinforcement bars (Rebars) including ready to use cut & bend products, Wire Rods, Small Sections and Special Bar Quality steel in state of the art facilities and led by an experienced and knowledgeable management team.

The Company's operations are undertaken in a cohesive manner with the Tata Steel (Thailand) Plc as the policy making body and the three subsidiaries responsible for carrying out the operations according to the prescribed policies 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

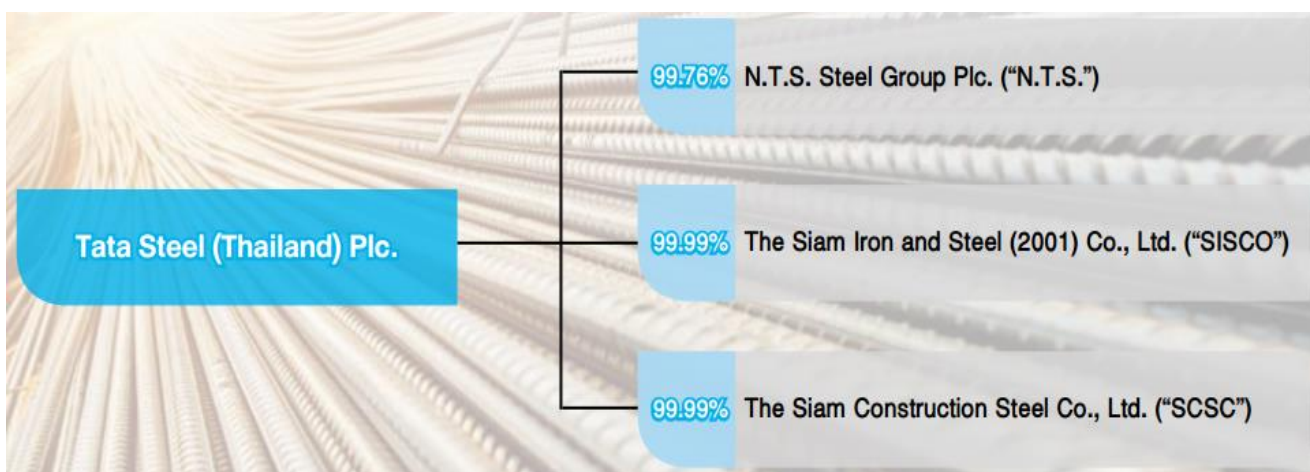
Previous significant profile and developments as follows:

<b>2002</b>	<ul style="list-style-type: none"> <li>The Company was established as a Public Company Limited named “Millennium Steel Public Company Limited” (MS).</li> <li>Acquired the businesses of NTS, SISC and SCSC, last two of which were subsidiaries of Cementhai Holding Company Limited (CHC).</li> <li>Company listed on SET under the sector of “REHABCO” (Rehabilitation Plan).</li> </ul>
<b>2004</b>	<ul style="list-style-type: none"> <li>The SET reclassified the Company securities in the sector of “CONMAT” (Construction and Furnishing Material).</li> </ul>
<b>2005</b>	<ul style="list-style-type: none"> <li>CHC agreed to sell all MS shares pursuant to the Blinding Offer from Tata Steel.</li> </ul>
<b>2006</b>	<ul style="list-style-type: none"> <li>Tata Steel Groups submitted their voluntary tender offer to all Company’s shareholders.</li> <li>The Company’s major shareholders changed from “CHC” to “Tata Steel Group”</li> <li>The Company’s name changed from “Millennium Steel Public Company Limited” to “Tata Steel (Thailand) Public Company Limited”.</li> <li>Trading stock symbol on SET changed from “MS” to “TSTH”.</li> </ul>
<b>2007</b>	<ul style="list-style-type: none"> <li>The Company paid annual dividend for the year 2006 to all preferred and ordinary shareholders at the rate of Baht 0.03 per share (38% of its net profit).</li> </ul>
<b>2008</b>	<ul style="list-style-type: none"> <li>The Company paid annual dividend for the year 2007-2008 to all preferred and ordinary shareholders at the rate of Baht 0.076 per share (20% of its net profit).</li> </ul>
<b>2009</b>	<ul style="list-style-type: none"> <li>The Mini Blast Furnace (MBF) steel production project using iron ore as raw material was completed. This was considered first of its kind project in Southeast Asia.</li> </ul>
<b>2011</b>	<ul style="list-style-type: none"> <li>The SET announced to regroup the Company securities to be under the sector of “STEEL”</li> <li>Mini Blast Furnace mothballed in August 2011 due to cost of imported raw materials.</li> <li>TATA Tiscon Branded rebar launched in August 2011.</li> </ul>
<b>2012</b>	<ul style="list-style-type: none"> <li>The Company entered the Special Bar Quality steel market, only producer of this product in Thailand.</li> <li>The Company launched seismic resistant rebar for earth quake prone areas, first time in Thailand.</li> </ul>
<b>2013</b>	<ul style="list-style-type: none"> <li>The Company was recognized by the SET for CSRI Recognition Award.</li> <li>NTS was awarded Prime Minister’s Industry Award - Safety Management.</li> </ul>
<b>2014</b>	<ul style="list-style-type: none"> <li>The Company was recognized by the SET for Outstanding CSR Award and CSR Recognition award.</li> <li>NTS was awarded Prime Minister’s Industry Award - Quality Management.</li> </ul>
<b>2015</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The Company was among the first 30 companies in Thailand that joined The Children Sustainability Forum to make a commitment in protecting Children Rights.</li> </ul>

	<ul style="list-style-type: none"> <li>SCSC received 'Green Mining Award 2015' from Department of Primary Industries and Mines, Ministry of Industry.</li> </ul>
<b>2016</b>	<ul style="list-style-type: none"> <li>SCSC won the Prime Minister's Industry Awards 2016 - Safety Management.</li> <li>SCSC received Gold award at ICQCC 2016 (International Convention on Quality Control Circle 2016) held in Thailand.</li> <li>SISCO won Corporate Social Responsibility -Department of Industrial Works Award (CSR-DIW).</li> <li>SCSC received Green Star Award 2016 from Industrial Estate Authority of Thailand.</li> </ul>
<b>2017</b>	<ul style="list-style-type: none"> <li>The Company received "Thailand ICT Excellence Award 2017" for "Core Process Improvement Project".</li> <li>The Company received "Thailand Sustainability Investment Award" and "Sustainability Report Award 2017" from SET.</li> <li>NTS received Prime Minister's Industry Award - Safety Management.</li> <li>NTS and SCSC received "National Safety award" from Department of Protection Labour and Welfare, Ministry of Labour.</li> <li>NTS and SISCO received "Carbon Footprint for Organization" from Thailand Greenhouse Gas Management Organization.</li> <li>NTS received "CSR-DPIM" from Department of Primary Industries and Mines, Ministry of Industry.</li> <li>SCSC received "Green Star Award" from IEAT</li> <li>SCSC received "Green Mining Award" from Department of Primary Industries and Mines (DPIM)</li> <li>SCSC received "Corporate Social Responsibility - Department of Industrial Works Award" (CSR-DIW) and SISCO won Corporate Social Responsibility (Continuous level)</li> <li>SCSC received "Kaizen Gold Award".</li> </ul>
<b>2018</b>	<ul style="list-style-type: none"> <li>The Company arranged "Tata Steel Mini Marathon 2018 Run for War Veterans".</li> <li>Tata Business Excellence Model (TBEM) score improved from "Good Performance" in 2016 to "Emerging Industry Leader".</li> <li>The Company received "Thailand Sustainability Investment Award 2018" and "SET Sustainability Award 2018 in Outstanding Category" from SET.</li> <li>NTS received "Corporate Social Responsibility - Department of Industrial Works Award" (CSR-DIW), SCSC and SISCO received "Corporate Social Responsibility - Department of Industrial Works Award" (CSR-DIW) - Continuous level.</li> <li>SCSC and SISCO received "Carbon Footprint for Organization (CFO)" from Thailand Greenhouse Gas Management Organization.</li> <li>NTS and SCSC received "Green Mining Award" from Department of Primary Industries and Mines, Ministry of Industry.</li> <li>SISCO received "3R Waste Management Award" from Department of Industrial Works, Ministry of Industry.</li> <li>NTS received "The Prime Minister's Industry Award 2018 on Quality Management".</li> <li>SISCO and SCSC received Happy Workplace Award 2018 from Thai Health Promotion.</li> </ul>

	<ul style="list-style-type: none"> <li>• NTS and SCSC received “National Occupational Safety and Health Award (National Level)” from Department of Labour Protection and Welfare, Ministry of Labour.</li> </ul>
<b>2019</b>	<ul style="list-style-type: none"> <li>• Certification for Private sector’s collective action Coalition Against Corruption (CAC) renewed for TSTH.</li> <li>• TSTH received Thailand Sustainability Investment Award (THSI) for 2018 - 2019 from SET.</li> <li>• TSTH received Sustainability Disclosure Award for the year 2019 from Thai Listed Companies Association, The Securities and Exchange Commission and Thaipat Institute.</li> <li>• NTS received Corporate Social Responsibility – Department of Primary Industries and Mines (CSR-DPIM Continuous) Award for 2 consecutive years and SISCO received for the first year in the category of Metallurgy plant from Department of Primary Industries and Mines, Ministry of Industry.</li> <li>• SISCO, SCSC and NTS received Corporate Social Responsibility – Department of Industrial Works (CSR-DIW Continuous) Award 2019 from Department of Industrial works, Ministry of Industry.</li> <li>• SISCO received the Thailand Labour Management Excellence Award 2019 for the role model of Occupational Health and Environment Management from the Department of Labor Protection and Welfare, Ministry of Labor.</li> <li>• SISCO received the certificates of Carbon Footprint for Organization for the year 2017, 2018 and 2019 respectively, from Thailand Greenhouse Gas Management Organization (Public Organization).</li> <li>• TSTH received the Certificate of Global Warming Reduction Party as a company that has cooperated with the Royal Forest Department, Greenhouse Gas Management Organization and Ban Hin Dat Forest Community Committee</li> <li>• NTS and SCSC received the Green Mining Award for the second consecutive year in 2019 from Department of Primary Industries and Mines, Ministry of Industry.</li> </ul>

### 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 decisions to manufacture a particular product is based on the market needs and to serve customer specific requirements if any.

Subsidiary	Paid up Capital (Million Baht) As at March 31, 2020	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. ("SISC")	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	Audited		Audited		Audited	
	Year 2019 - 2020		Year 2018 - 2019		Year 2017 - 2018	
	Million Baht	%	Million Baht	%	Million Baht	%
<b>Domestic Market</b>						
Rebars	11,864	58.9	12,064	54.3	12,174	54.7
Wire Rods	5,605	27.8	6,801	30.6	6,977	31.4
Small Sections	601	3.0	827	3.7	1,094	4.9
Others	52	0.3	61	0.3	52	0.2
<b>Total Revenues from Domestic Sales</b>	<b>18,122</b>	<b>90.0</b>	<b>19,753</b>	<b>88.9</b>	<b>20,297</b>	<b>91.2</b>
<b>Exports</b>						
Rebars	1,608	8.0	2,200	9.9	1,729	7.8
Wire Rods	395	2.0	269	1.2	220	1.0
<b>Total Revenues from Exports</b>	<b>2,003</b>	<b>10.0</b>	<b>2,469</b>	<b>11.1</b>	<b>1,949</b>	<b>8.8</b>
<b>Total Revenues</b>	<b>20,125</b>	<b>100.0</b>	<b>22,222</b>	<b>100.0</b>	<b>22,246</b>	<b>100.0</b>

### 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. diameters 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, concrete road, bridges, stadiums, dams, houses and buildings, etc.

In addition, the Company markets special quality Rebar under trademark 'TATA TISCON S' where 'S' indicates super ductile. These Rebars have special characteristic to withstand the earthquake shock for a longer period of time compared to standard Rebars. These products are available in size range of 10-40 mm diameter and grade SD 40 and SD 50.

The Thai-Chinese high speed train project in Thailand proposes to use GB rebar, GB being a Chinese standard that control some properties like carbon equivalent, fatigue test, etc. The Company has developed this rebar product that conforms to the rebar standard for the Thai-Chinese high speed train project. Consequently, it can reduce the import of steel product, reduce construction cost and shorten the construction lead time.

The Company is developing next generation of high strength Rebars equivalent to SD 60.

## 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 Welding Electrode Quality:** These comply with SWRY11 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 producing 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. 349-2561. These wire rods serve as raw material for manufacturing pre-stressed concrete wire, strand wire, compression spring, binding spring, torsion spring, tire cord, bead wire and sling, etc.

## 3. Small Section Structural Steel

This product range consists of angle and channel steel complying to SM400-570 and SS400-540 grade and is manufactured in accordance with Thai Industrial Standard (TIS) No. 1227-2558 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 400-540 quality class and 19-47 mm diameter is manufactured in accordance with JIS G3101 (1995) grade for general use and with S10C-S50C grade in 19-40 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. This results in avoiding generation of waste at the site and the customers do not need space along with skilled manpower to produce the required shapes and sizes at site. Cut and Bend Rebars are produced using automatic machinery at the plant and transported just in time to the construction site. As construction practices mature, space and availability of skilled workforce becomes a constraint, proportion of using Cut and Bend Rebars increases.

The Company also manufactures ready to use Stirrups that are marketed under trademark 'Tiscon Superlink' and ready to use Dowel under trademark 'Tata Tiscon'. Tiscon Superlink is used during construction of beam and column while dowel equivalent to ASTM A615 grade 60 finds application in road construction and concrete yard.

The Company is developing next generation of ready to use product, Footing for usage during construction of both shallow foundations and deep foundations.

### Management Standard System

All the three subsidiaries of Tata Steel (Thailand) namely, The Siam Iron & Steel Company Limited (SISCO), The Siam Construction Steel Company Limited (SCSC) and N.T.S. Steel Group Public Company Limited (NTS) have adopted international standards and received certificate of Quality Management System ISO 9001:2015 and also received certificate of General requirements for the competence of testing and calibration laboratories ISO/IEC 17025:2005.

In addition, the Company realizes the importance of the environment control. All the three subsidiaries of Tata Steel (Thailand) have received ISO 14001:2015 certificate for the environmental control and also The Siam Iron and Steel (2001) Co., Ltd. received certificate of 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. All the three subsidiaries of Tata Steel (Thailand) have received certificate of International standard of Occupational Health and Safety Management Systems TIS 18001-2554 and ISO 45001: 2018 / BS OHSAS 18001:2007.

Tata Steel (Thailand) Marketing & Sales and Procurement divisions are also ISO 9001: 2015 certified for Quality Management System.

### Investment Promotion License-Based Privilege

The Company can enjoy certain privileges from the BOI and its subsidiaries as of March 31, 2020 as follows:

	Production Volume (tons per annum)	Privileges Received
NTS MBF	500,000	<ul style="list-style-type: none"> <li>Tax exemption for 8 years for the net profit from the first income (November 2009 – November 2017)</li> <li>Net loss incurred between 1<sup>st</sup> – 8<sup>th</sup> year can be realized against taxable profits during the next 5 years.</li> </ul>

\*Mini Blast Furnace Project



## 2.2 Industry Situation

### Domestic Market

#### 1. Reinforcing Bars

The Company distributes this product through dealers in Bangkok and 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 including business partnership program with retail dealers based on the reach and potential in the area to increase retail base and market share in retail market.

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. In addition, the Company regularly organizes various types of marketing activities for major dealers and modern trade i.e. Global House, Thai Watsadu, Mega Home, Home Pro and Do Home.

#### 2. Wire Rod

The Company directly sells to the manufacturer of wires and also selectively distributes via traders. The Company has created a sound platform for continuously improving the product and service offerings to the customers through creation of customer service teams. The team comprise of representatives from production, marketing & sales, technology group and production planning department.

The Company has focused on making customized products as per customer requirements and end applications. The Company regularly supply wire rods for Tire Cord and wire ropes that are high end applications.

#### 3. Small Sections

The Company distributes this product via dealers in Bangkok and in selected regions. Moreover, the marketing & sales team regularly visits end customers such as tower fabricators and EGAT (Electricity Authority of Thailand) 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 bright bar.

#### 5. Cut and Bend

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

The Company has organized a separate project management team to coordinate with project owners about production plan and delivery to match with each project site's requirements. Moreover, company has initiated "CAB web ordering" and "Bar-Cut-List service" to help customers to improve their planning process and reduce work load.

All products are promoted through social media, radio, print media, billboard in Bangkok and provinces. The Company arranges marketing activities in various forms to create a relationship with its customers and distributors.

### Export Market

The Company regularly exports Rebars and Wire Rods to countries such as Laos, Cambodia, Myanmar, Malaysia, Philippine and Indonesia including new market such as Bangladesh. In addition, the Company exports Rebars to India which is supported by the dealer network of Tata Steel India. Total exports during the year were around 10 percent of the total sales.

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

### Distribution Proportion

Distribution Channel	Fiscal Year (%)				
	2019-2020	2018-2019	2017-2018	2016-2017	2015-2016
Direct Sales	43	45	46	39	34
Regional Agent	22	21	18	18	18
Agent in Bangkok Metropolitan Region	35	34	36	43	48
Domestic Total	100	100	100	100	100

### Business Environment

According to the Iron and Steel Institute of Thailand, the country's demand for steel in 2019 was 18.47 million tonnes, declined by 4.5% from the previous year. Import volume was 12.22 million tonnes, at 66% of the demand for steel in Thailand, rose by 1.4% year-on-year.

Demand for long product in Thailand was 6.97 million tonnes, decreased by 7.3 percent year-on-year. Import volume was 2.9 million tonnes, 41% of the demand for long product in Thailand, went down by 2.1% year-on-year.

Table showing production/import/export/usage of steel in Thailand

Year	Production Quantity (Million Tons)	Growth (%)	Import (Million Tons)	Growth (%)	Export (Million Tons)	Growth (%)	Usage Requirement (Million Tons)	Growth (%)	Import (% of Usage Requirement)
2019	7.63	-15.5	12.22	1.4	1.38	-21.1	18.47	-4.5	66.2
2018	9.03	3.1	12.05	6.54	1.75	12.9	19.33	1.3	62.4
2017	9.32	-2.4	11.33	-10.2	1.55	20	19.10	-8.5	59.3
2016	9.54	46.8	12.61	10.3	1.29	8.1	20.86	24.6	60.5
2015	6.50	-3.7	11.44	-3.94	1.20	-11.4	16.74	-3.2	68.3
2014	6.75	-5.2	11.90	-2.9	1.35	-3.1	17.35	-3.7	68.8
2013	7.12	1.4	12.25	8.5	1.40	0.3	17.97	6.3	68.2
2012	7.02	1.2	11.29	23.6	1.40	9.7	16.91	14.3	66.8

## Competitive scenario

### Domestic Market

Competitors of the Company can be classified into four categories as 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 remove the impurities up to almost 100 percent, resulting in consistent quality products. Rebars made through EAF route are marked accordingly to educate the consumer.
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 in the absence of secondary refining. The product quality and consistency is not as good as that produced from EAF route of steel making as there may be some impurities in the product. This billet is used to produce products such as Rebar and Sections. Rebars made through IF route are marked accordingly to educate the consumer.
3. Re-rollers using domestic and imported billet. These producers do not have or run steel making operations. Finished products from these manufacturers include Rebar, Wire Rod, Sections and Special products.
4. Importers of finished products such as Rebar, Wire Rod, Sections and Special products as an user as well as a 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 2019 at 7.0 million tonnes, the remaining capacity is considered sufficient to accommodate future demand and there should not be any need to import.

In 2019, Thai economy had signs of slowdown, 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 special grades to supply in the market, and also from the increase of materials available from the new manufacturers through low cost Induction Furnace route continually.

Global economic slowdown has affected the steel producers in each country who tried to use competitive pricing strategy to attract customers in export market. Import of wire rods from Vietnam and Malaysia have gone up on account of new capacities that got added in these countries in last 1-2 years. Wire rods from Vietnam and Malaysia with import prices is cheaper than local products, resulted in the users tending to import more. At the same time, Chinese domestic prices remained strong, resulting in lower exports from China. The Company continues to closely monitor the imports of Wire Rod into Thailand.

The market share in the past 5 years is below:

Year	FY16	FY17	FY18	FY19	FY20
Total Mkt Share	19%	18%	19%	18%	21%

### Customer Satisfaction

The Company has determined to conduct the customer satisfaction survey once in two years for every customer group. The survey covers 6 areas; product quality, product availability, sales team, transportation, finance and marketing activity. Based on third-party assessment, the latest survey which was conducted in the year 2017-2018 has shown the customer satisfaction score improved from the previous year at 81 to 84 points where product quality got the highest satisfaction score when compared to competitors.

### Export Market

The Company has focused on exports to countries like Laos, Cambodia, Myanmar, and Indonesia in the ASEAN region, and has found new markets to distribute products such as Malaysia and Bangladesh. Major competition in Lao and Cambodia is from Vietnam steel manufacturers and China is the 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 regularly exports Rebars to India.

### Trend of Industry in 2020

International Monetary Fund (IMF) forecasts global economy to get impacted with severe economic damage from the COVID-19 pandemic that could be even worse than the 2009 economic crisis. World economic growth is projected at -3.0%, declined from previous year (2.9%) resulting from lockdown measures at each country to contain the rapidly spreading virus. Meanwhile, China's economy is expected to revive but slowly down to 1.2%, decreased from last year (6.1%), from the COVID-19 outbreak. However, China expects that its economy will swiftly return to its potential growth rate and there will be significant improvement in the coming quarters. To recover economy rapidly, China's government accelerates to invest in infrastructure by resuming construction activities. In addition, Chinese government has issued a special bond of around RMB 1.3 trillion to inject into infrastructure projects in March'20.

According to forecasts of the Bank of Thailand (BOT) the Thai economy is expected to grow in the range of -5.3%, from 2.4% in the previous year. The majority of negative factors are the COVID-19 pandemic impacts to extreme contraction of tourism revenue, decreasing of export due to trade partner economic slowdown, domestic spending decrease from avoiding travelling and spending in community. Besides, drought, delay in government budget disbursement and political uncertainty will affect negatively to Thai economy in this year. However, government is expected to take necessary measure to recover the expansion of tourism sector in the second half of the year, help producers through exports measure to return to expansion and accelerates investment in government infrastructure projects both in special economic zone development and transportation. Moreover, government will issue relief measures from impact of the COVID-19 outbreak to stimulate economy and consumption in the country.

World Steel Association estimates world steel demand will increase by 1.7% from previous year as expected demand tends to grow from every region around the world despite an uncertain global economic environment, driven by developing and emerging economies.

China's demand for steel growth is expected to decrease to 1.0% from sluggish economy. The tightening of trade relations between China and USA may lead to steel demand slowdown. In Thailand, Iron and Steel Institute of Thailand expects the steel demand in the country to increase by 0.7% to 18.6-19 million tons in 2020. The main factors are construction sector expansion, investment in government infrastructure projects, especially transportation. However, the domestic steel industry remains very competitive in the market from induction furnaces and import from overseas; especially Vietnam and Malaysia.

### 2.3 Procurement

Procurement Division of Tata Steel (Thailand) regularly communicates policies related to Ethics, Corporate Governance and Safety Standards to all concerned in the supply chain and to relevant business partners. The Procurement Division works toward long term sustainability and aims to expand its supply chain network continuously.

The Company sources raw materials and other products both from domestic market and through import by emphasizing on Value in Use (VIU). The proportion of domestic and import supply was approximately 74% and 26% for 2019-2020. The 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 job creation and driving the economic growth in the country.

In 2019-2020, many infrastructure projects have been released by the government. New products are being developed, such as non-thermal deformed bars in the process of production (Non TMT), deformed bars in accordance with China's high-speed rail standards (GB Grade Rebar) and wire rods in accordance with customer demand. Procurement Division supports higher demand of respective grade of these products. Procurement Division also emphasizes on digital procurement of products and services, to minimize the impact on environment.

#### **Metallic Sourcing**

The company continues to work on developing alternate low cost steel scrap, expanding the scrap purchasing yards, especially southern part of Thailand can be potential region to boost up scrap volume. The yard expansion is expected to increase domestic volume and replace imported scrap thereby saving on foreign exchange outflow as well as optimize the cost.

Occasionally, the company purchases semi-finished products (billet) from open market provided the source is reliable and it helps in optimization of cost. During 2019, substantial volumes of Iranian billets were imported into Thailand at a price lower than from other sources. Despite it created a competitive disadvantage, the Company maintained its policy of not trading with a source under international trade sanctions. New billet sources from Malaysia and Vietnam are developed. The shorter distance from within SEA region gives a competitive cost advantage to the Company.

#### **Raw Materials sourcing**

Raw Materials team handles the procurement of graphite electrode, ferro alloys, refractory and other additives used in the electric arc furnace. Due to dynamic market situation, collaboration within the procurement teams among SEA as well as Tata Steel China Desk happens regularly to remain updated on the markets and take advantage therefrom. Although there have been improvements in the prices of graphite electrode, ferro alloys, additives etc, the unprecedented situation in China and consequent impact on global trade & logistics China have been have effected the raw material supply adversely during the last quarter of the financial year 2019-20. However, the Company's continuous strategy of sourcing directly from the manufacturers and expand the vendor base by seek new vendors have helped the Company to mitigate the impact to a large extent.

#### **Risk Factors**

##### **Metallic and Raw Material Price Fluctuations**

Scrap is a commodity and there is high demand of domestic scrap from new induction furnaces in the country. A surge in demand without increase in supplies may adversely impact the price. Fluctuation of steel scrap and iron ore prices in international market may also change the price quickly. This has a significant impact on the overall cost of the Company.

##### **Sole Source Manufacturer/ Supplier / Single country risk**

Procurement has reduced the 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.

Procurement Division collaborated with end user and vendor developing to use domestic additive thereby replaced imported material from China. The success of local vendor development helps in reduction of inventory as well as in transportation cost. The Company continues to seek suppliers from different countries to minimize the single country risk.

### 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 issues.

### 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
<b>Total capacity</b>	<b>800,000</b>	<b>400,000</b>	<b>500,000</b>	<b>1,700,000</b>

*With the total finished goods production of 1.21 Million Tons, the capacity utilization for the financial year ending in March 31, 2020 stood at 71%.*

## 3. Risks Factors

Steel is considered to be a cyclical business. Certain other external factors like sensitivity to economic cycles, long lead time for project execution, domestic and international competition also adds to the volatility. The aforementioned uncertainties warrant robust process and framework to minimize the threats and capture opportunities to create sustainable value for the organization. TSTH has implemented an Enterprise Risk Management (ERM) process to provide a holistic view of aggregated risk exposures as well as to facilitate more informed decision-making. In its journey towards risk intelligence, a robust governance structure has been developed across the organisation. The Board of Directors has appointed an Audit Committee comprising of Independent Directors to supervise and review the Risk Management systems. The Audit Committee reviews the Enterprise Risk Management of the Company in its quarterly meetings. The committee takes note of corporate risks relating to operations, climate change risk, reputational risk, product stewardship as covered in the risk register, the risk mitigation plans and also provides recommendations for further improvement in the risk management process. At the Senior Management level, an Executive Committee has been constituted to drive the ERM process at Company level.

The Company follows a robust five step Enterprise Risk Management ('ERM') process to address the risks associated with its business. The ERM process framework has evolved and is aligned with Tata Steel (TSL) Group which is based on international standards with inputs drawn from the best practices of leading companies across industries.

The Company confronts several risks in areas of commercial, operations, safety, human resources 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 plans with process owners – "Bottom up risks". Also, the Senior Management deploys the top of mind of concerns to respective units to know the management's focus which is called "Top down risks". Both types of the risk are identified and classified into A, B & C category based on likelihood of its occurrence and its impact to business.

The Risk Register is regularly reviewed by senior executives of various functional units in order to avoid any undue deviations or adverse events by designing and implementing suitable mitigation plans proactively. Regular and extensive reviews at business units lead to robust implementation of mitigation plans which ultimately create value for the business. The movement of risk is understood through the Enterprise Risk Heat Map.

Information regarding the Company's key risks and their mitigation strategies are as follows:

#### **Mitigation Strategies**

##### **1. Macroeconomic and steel market risks**

###### **Construction steel demand adversely affected due to delay in execution of Government projects**

The Company has expanded in the Super ductile rebar market, the non TMT rebar market, the GB rebar market, the ready-use product market like dowel, stirrup and Cut & Bend markets. All of these are high value added products and has recorded sales growth when compared with previous year. Company has developed and expanded also in the special wire rods product market with products for tire cord. In addition, Company has increased Rebar sales thru' the Modern trade channel which has been recording continuous growth every year. Besides, focused actions to create Tata Tiscon brand through online social media, dealer partnership program and other marketing activities have helped to build relationship with the customers and end users.

The Company also intensified its efforts in export markets to expand its market reach, especially to the ASEAN countries, India and Bangladesh; as additional measure to mitigate the volatility in domestic steel demand. This effort has enabled to increase the customer base. In last year, domestic wire rod market has been quite volatile. Accordingly, the company has focused to increase export of wire rods and also build Tata Tiscon brand to be popular in the ASEAN region.

##### **2. Risk Raw material supply risks**

###### **High competition in domestic sourcing market from local steel producers**

Thailand data shows increasing imports of semi-finished products from neighboring countries and Middle East as an alternative source of steel production. In this regard, TSTH has developed production process to produce from the alternative source in order to narrow the risk from cost of material. Also, the Company has thoroughly considered risk from source of semi-finished products by avoiding import from any country under any trade sanction.

In terms of domestic raw material sourcing, TSTH has developed a sourcing strategy with key partner vendors for raw material sourcing with reliability and at optimum cost. Inventory management was implemented effectively in syndication between Procurement, Operation and Corporate Strategy.

### 3. Safety, Health and Environment Risks

**Non-compliance/delay in implementation of the provisions of safety, health and environmental laws and regulations, which may lead to stoppage of operations, damage to assets and loss of reputation**

At TSTH, Safety, Health and Environment (SHE) organization is defined by Apex Safety Council (ASC) with President and CEO as the 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 followed for own employees and strengthen Process Safety Management (PSM) and Road Safety. The Company focused on tracking lead indicators such as Lost Time Injury Frequency (LTIF), Medical Treatment Case (MTC), 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.

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

In the area of environment, 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 CO<sub>2</sub> emission to measure and control greenhouse gases, follow up the Environment Impact Assessment (EIA) by monitoring gases such as NO<sub>x</sub>, Sox, 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 have improved their environment standard to Green Industry level 4.

The Board of Directors has appointed the Corporate Social Responsibility and Sustainability Committee with an additional mandate to have an oversight on the performance of occupational safety, health and working environment.

### 4. Human resource Risks

**Risks of manpower management, retaining and building engagement of employees in the organization including the development of human resources to have the potential to be ready for various changes in the future**

Although the attrition rate of the Company has been maintained at a good level, the Company has prepared various initiatives to reduce such risks. The Company has exercised manpower planning with tight control on new recruitment, manpower allocation and management of existing human resources to maximize efficiency. There is a bench strength



model to create manpower pipeline for engineers, sales & marketing, procurement, IT, etc. In terms of employee engagement, there are various channels to listen to employees' voices and opinion to ensure seamless communication to avoid risk of employees' dissatisfaction. Company regularly arranges variety of employees' relations activities. Stay interview with new employees is also initiated as another tool to listen to employees' opinion from different angles. Also, Welfare and benefits are continuously improved to be competitive, based on market survey and benchmarked with other leading companies

The Company provides career growth opportunities and promotes the internal recruitment program which opens for career opportunity as well as extensive development programs on functional, business acumen, managerial and leadership by focusing on sharing knowledge and experience from internal instructors in order to transfer knowledge, expertise to stay within the organization in the long run.

## 5. Financial Risks

### **Contraction in global and domestic liquidity adversely affecting availability and cost of capital**

The company has focused on daily cash and rolling cash forecast in syndication between finance division with marketing & sales division and procurement division to help in maintaining adequate cash flow and keeping the finance cost under control. The fluctuation in foreign exchange rates is being addressed through an appropriate foreign exchange hedging mechanism in line with structured hedging policies, monitored by the regional treasury committee, with a formal reporting mechanism to the Board. The Company has also appropriate insurance policies to cover its assets and business.

## 6. Risks Associated with Natural Calamity

### **Disruption of production and supply due to natural calamity both flood and draught**

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 has emergency handling procedures at all its facilities. 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.

## 7. Emerging risks

### **Trend to use a substitute product or use less rebar in construction technology**

The Company has a focused strategy to increase its downstream portfolio like dowel, stirrup and cut & bend products. The Company also keep promoting the benefit of use of these products to the architects, contractors and other end users.

#### 4. Operating Assets

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

As of March 31, 2020, 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	455.45	- None -
3. Machinery and equipment	Ownership	1,550.31	- None -
4. Furniture, Fixtures, equipment and Vehicles	Ownership	62.69	- None -
5. Work in progress	Ownership	24.81	- None -
Total		2,891.95	

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. Building Improvement	Ownership	3.42	- None -
2. Furniture, Fixtures, equipment and Vehicles	Ownership	19.53	- None -
3. Work in progress	Ownership	0.00	- None -
Total		22.95	

##### 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	243.65	- None -
3. Machinery and equipment	Ownership	1,131.77	- None -
4. Furniture, Fixtures, equipment and Vehicles	Ownership	21.26	- None -
5. Work in progress	Ownership	12.66	- None -
Total		2,123.95	

**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	26.95	- None -
3. Machinery and equipment	Ownership	175.39	- None -
4. Furniture, Fixtures, equipment and Vehicles	Ownership	15.98	- None -
5. Work in progress	Ownership	5.99	- None -
Total		308.39	

**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	109.67	- None -
3. Machinery and equipment	Ownership	243.14	- None -
4. Furniture, Fixtures, equipment and Vehicles	Ownership	5.93	- None -
5. Work in progress	Ownership	6.16	- None -
Total		364.90	

## 5. Legal Dispute

As of March 31, 2020, 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

<b>Company's name</b>	: Tata Steel (Thailand) Public Company Limited (Formerly known as Millennium Steel Public Company Limited or "MS")
<b>Registration No.</b>	: 0107545000136
<b>Business Type</b>	: Manufacturer and distributor of long steel products
<b>Securities Trading Symbol</b>	: TSTH
<b>ISIN Number</b>	: Local TH0692010000 Foreign TH0692010018 NVDR TH0692010R12
<b>Established</b>	: July 12, 2002
<b>Listing Date</b>	: November 29, 2002
<b>Trading Date</b>	: December 18, 2002
<b>Head Office</b>	: 555 Rasa Tower 2, 20 <sup>th</sup> Floor, Phaholyothin Road, Chatuchak, Bangkok 10900, Thailand
<b>Telephone</b>	: +66 2937 1000
<b>Fax</b>	: +66 2937 1224
<b>Website</b>	: <a href="https://www.tatasteelthailand.com">https://www.tatasteelthailand.com</a>
<b>Ordinary Shares</b>	: 8,421,540,848 shares
<b>Paid Up Capital</b>	: 8,421,540,848 Baht
<b>Par Value</b>	: 1.00 Baht per share
<b>Registrar</b>	: 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 <a href="https://www.set.or.th/tsd">https://www.set.or.th/tsd</a>
<b>Auditors</b>	: 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
<b>Filing a Complaint on Ethics</b>	: Chairman of the Audit Committee Mr. Alan Kam E-mail : <a href="mailto:alank@libertasth.com">alank@libertasth.com</a>
<b>Ethics Counselor</b>	: Mr. Sirorote Matemasak Tel. +66 2937 1000 Ext. 1810 Fax. +66 2937 1224 E-mail : <a href="mailto:sirorotem@tatasteelthailand.com">sirorotem@tatasteelthailand.com</a>

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**Subsidiaries Profile (As of March 31, 2020)**
**N.T.S. Steel Group Public Company Limited**

Registration No.	0107536001273
Established	October 4, 1988
Business Type	Manufacturer of bars, rebars and wire rods
Steel Capacity (Billet)	550,000 tons/year (EAF on scrap)
Rolling Capacity	800,000 tons/year
Factory	WHA Chonburi Industrial Estate 1, Bowin, No. 351, Moo 6, 331 Highway, Sriracha, Chonburi 20230 Tel. +66 3834 5355 Fax. +66 3834 5350
Ordinary Shares	3,856,637,797 Shares
Paid Up Capital	4,627,965,356.40 Baht
Par Value	1.20 Baht per share
Held by TSTH	99.76 %

**The Siam Construction Steel Company Limited**

Registration No.	0105532094348
Established	October 4, 1989
Business Type	Manufacturer of rebars
Steel Capacity (Billet)	550,000 tons/year (EAF on scrap)
Rolling Capacity	500,000 tons/year
Factory	No. 1, I-7 Road, Map Ta Phut Industrial Estate, Amphur Mueang, Rayong 21150 Tel. +66 3868 3968 Fax. +66 3868 3969
Ordinary Shares	17,500,000 Shares
Paid Up Capital	1,750,000,000.00 Baht
Par Value	100 Baht per share
Held by TSTH	99.99 %

**The Siam Iron and Steel (2001) Company Limited**

Registration No.	0105544085276
Established	September 3, 2001
Business Type	Manufacturer of wire rods and small sections
Steel Capacity (Billet)	300,000 tons/year (EAF on scrap)
Rolling Capacity	400,000 tons/year
Factory	No. 49 Moo 11, Tambon Bang Khamode, Amphur Ban Mor, Saraburi 18270 Tel. +66 3628 8000 Fax. +66 3628 8002
Ordinary Shares	1,200,000 Shares
Paid Up Capital	120,000,000.00 Baht
Par Value	100 Baht per share
Held by TSTH	99.99 %