

NSSMC Announces Mid-Term Management Plan

Forging Manufacturing Capability, Addressing Megatrends, and Creating the Value of Steel

NSSMC has developed its 2020 Mid-Term Management Plan (the “2020 Plan”) consisting of a three year plan for Fiscal Year (“FY”) 2018 through FY2020 and longer-term measures beyond FY2021 to be formulated and set into motion in the three-year term.

NSSMC’s Business Environment

With the world economy expected to remain strong, global steel demand is projected to steadily increase over the long term, led by demand for construction and infrastructure development in emerging countries. In Japan, continued demand for urban infrastructure replacement is expected. Trends such as rapid innovation in IT (in such areas as AI, IoT, and big data), automakers’ growing need for lighter and stronger vehicles, a shift to electric and other new energy vehicles, and the development of self-driving vehicles are anticipated to bring significant change to society and industry. Further, the adoption of the Sustainable Development Goals (SDGs) by the United Nations and entering into force of the Paris Agreement reinforce corporate responsibility to contribute to the achievement of a sustainable society.

Steel possesses significant advantages relative to competing materials not only in terms of cost but also of diverse properties and infinite potential, repeated recyclability into all kinds of applications, and low life-cycle environmental impact. Steel being an indispensable basic material for all industries and infrastructure, the steel industry will continue to play a significant role in the growth of the society over a long term.

Having in mind the megatrends of changes in society and industry and the role of steel, NSSMC intends to work on the following major initiatives over the medium- to long-term:

- Delivering materials and solutions responsive to changes in society and industry
- Strengthening and expanding its global business
- Continuing to strengthen “manufacturing capabilities” of domestic mother mills
- Utilizing advanced IT in steelmaking processes
- Contributing to the achievement of a sustainable society (SDGs)

Through these initiatives, NSSMC will seek to advance towards “the best steel maker with world-leading capabilities” by further improving its capabilities in terms of “technology,” “cost,” and “being global,” and “creating the value of steel”. The major features of the 2020 Plan are described below.

Major Features of the 2020 Mid-Term Management Plan

1. Delivering materials and solutions to address changes in society and industry

Requirements for properties of materials are becoming diverse and advanced: automobiles are becoming lighter and more electrified, and electronic components are required to be even lighter, thinner, shorter, and smaller, as well as more reliable. NSSMC will develop materials that address evolving customer needs and expand its offer of solutions in areas such as application and processing technologies. This will include supporting customers through stable supply of and further enhanced performance of high-grade steel such as high-tensile steel sheet, high-efficiency electrical steel sheet, high-corrosion resistant seamless pipes, stainless steel for high-pressure hydrogen environment, and high-strength rails. NSSMC will thus aim to contribute to customers' value creation and to achieve growth in its own sales.

Moreover, NSSMC will respond to customer needs for multi-materials by organically allying technologies and products of its non-steel material businesses (Chemicals and New Materials) with steel. To advance this initiative, Nippon Steel & Sumikin Chemical Co., Ltd. and Nippon Steel & Sumikin Materials Co., Ltd. will be integrated to strengthen their capabilities in providing comprehensive material solution proposals (the integration is planned for October 2018).

2. Strengthening and expanding global business

Leveraging its product technology capability, cost competitiveness, and global supply network to the maximum extent, NSSMC will expand the supply of steel products in the automotive, energy and resources, and infrastructure sectors in Japan and overseas.

NSSMC will meet increasing overseas demand by the combination of exports of high-grade steel from Japan and supplies from overseas production bases. In order to expand supply of steel products to areas where demand for infrastructure in particular is increasing, and to prepare for rising protectionism and a shift towards self-sufficient markets, NSSMC will expand overseas integrated steel production bases. NSSMC is currently working with ArcelorMittal on joint acquisition of Essar Steel India Limited, an Indian integrated steelmaker.

In implementing these initiatives, NSSMC will continue to undertake alliances with major companies and M&As, with speed and flexibility.

3. Continuing to strengthen “manufacturing capabilities” of domestic mother mills

NSSMC’s domestic mother mills will aim to strengthen their “manufacturing capabilities” and to continue to improve as bases for technology development, cost competitiveness, and productivity. The mother mills will be committed to stable supply of steel products in Japan and overseas and assisting overseas businesses.

(1) Further enhancing facilities and human resources capabilities

NSSMC will further increase capital expenditures by about ¥ 100 billion per year in addition to the capital expenditures in the 2017 Mid-Term Management Plan (“2017 Plan”), which were at a higher level than the previous years, in order to undertake refurbishment of blast furnaces, coke ovens, and other facilities and to introduce advanced equipment, thereby improving stability, productivity, and cost.

As for the enhancement of human resources, NSSMC will maintain the number of newly-hired employees at the increased level of the 2017 Plan and promote the succession of skills and know-how and employee training, and in parallel, promote labor-saving measures (i.e., use of IT and automation) to address labor shortage expected due to Japan’s declining population.

(2) Establishing an optimal production framework

NSSMC will promote the development of an optimal production framework in order to build a lean manufacturing framework that can address changes in the business environment. In addition to the measures implemented under the 2017 Plan, namely, the consolidation of rolling and surface-treatment facilities and the ceasing of operation of the No. 3 blast furnace of Kimitsu Works, the following measures will be implemented as part of the 2020 Plan:

- 1) Yawata Works’ advanced continuous caster will start operation (in FY2019) and the upstream facilities (the blast furnace and the steelmaking mill in the Kokura Area will cease operation at around the end of FY2020, as scheduled. Kokura’s production of special steel bars and wire rods will be maintained at the current level. (as already announced)

- 2) At Wakayama Works, production will be switched from the No. 5 blast furnace to the new No. 2 blast furnace, which has been on standby, at around the end of FY2018, increasing steel production capacity by 500,000 tons per year. The steelmaking mill of Nippon Steel & Sumikin Shapes Corporation located in Wakayama Works will cease operation at around the end of FY2019, after which steel slabs will be supplied by the Wakayama Works steelmaking mill.

3) The small-diameter seamless pipe & tube mill (former Tokyo Works) in Kimitsu Works will cease operation at around May 2020 and production will be consolidated to the Kainan Area of Wakayama Works.

4. Developing world-leading technologies and utilizing advanced IT (AI, IoT, and big data)

NSSMC will make the best of its R&D operations, which is the largest in scale (with about 800 researchers) and highest level in quality in the global steel industry, and promote technology development, a key driver for innovation. Specifically, NSSMC will work on the development of high-end products (e.g., products that provide lighter weight, higher strength, more corrosion-resistance, and lower electricity loss) by anticipating and addressing evolving customer needs. The company will also promote advances in design and processing technology as well as technology to minimize environmental impact through the use of steel products over their life cycle from manufacturing to use and recycling. NSSMC will thereby continue to demonstrate world-leading capabilities by “creating the value of steel”.

Utilizing IT, which is continuously evolving, is becoming an essential element that determines the competitiveness of a company. Taking advantage of the system solutions business within the Group (NS Solutions Corporation) and utilizing advanced IT (AI, IoT, and big data), NSSMC will aim to achieve safety and competitiveness in manufacturing frontlines, stability in production, improvement in product quality, and sophistication in business operations.

5. Enhancing the operating structure of the NSSMC Group

NSSMC will enhance alliances within the Group to strengthen the Group’s overall capabilities in order to deliver higher value to customers and society through materials and solutions, utilizing the Group’s core competency in steel. At the same time, NSSMC will undertake further reorganization within the Group and advance concentration on core business operations.

(1) Synergies with Nisshin Steel Co., Ltd.

NSSMC and Nisshin Steel Co., Ltd., which became a subsidiary of NSSMC in March 2017, will realize synergies of ¥ 20 billion per year by the end of FY2020. In addition, the companies will further expand alliances in steel sheet, stainless steel, and other products, as well as in iron-making. The refurbishment of the Kure No. 1 blast furnace of Nisshin Steel Co., Ltd. has been deferred from the end of FY2019 to the end of FY2023 by utilizing NSSMC’s technology to extend the life of a blast furnace.

(2) Through alliance of the steel business and integrated chemicals and new materials businesses, the NSSMC Group will strengthen its capability to respond to leading-edge needs in areas including vehicles and batteries, thereby advancing its business strategy.

- (3) The Engineering Business segment will work at strengthening the competitiveness of each of its businesses and enhancing its alliances within the NSSMC Group. In addition, to pursue synergies through collaboration with companies outside the Group, Nippon Steel & Sumikin Engineering Co., Ltd will work on expanding its profitability through a comprehensive collaboration with Toyo Engineering Corporation.
- (4) Further growth in the System Solutions segment and enhancement of the Group's IT infrastructure

NS Solutions Corporation is strengthening its capability to provide solutions to customers in the areas of IoT and AI, through its IoX Solution Business Promotion Department (established in April 2016) and its AI R&D Center (opened in October 2017). Taking advantage of NS Solution Corporation, the NSSMC Group will work on strengthening its IT infrastructure and utilizing advanced IT.

6. Proactively investing in growth

- (1) Capital expenditures in Japan

NSSMC will implement capital expenditures of around ¥ 1,700 billion over the three-year term, an increase of ¥ 350 billion from the 2017 Plan, in order to (a) enhance facilities through the introduction of advanced equipment and maintenance of the soundness of facilities (e.g., relining of blast furnaces and coke ovens) and (b) capture demand in growth areas by strengthening its production capability.

- (2) Business investments

NSSMC will implement business investment of around ¥ 600 billion over the three-year term. In addition to growth investment in (a) domestic and overseas businesses to be developed on product, customer sector, and region bases and (b) interests in raw materials, NSSMC will be alert for new opportunities through mergers and acquisitions.

- (3) Hiring

In order to enhance its human resources capability, NSSMC plans to hire about 1,100 employees per year, similar to the 2017 Plan level.

In addition, NSSMC will further advance concentration on core business operations on a group-wide basis and proceed with asset compression (targeting approximately ¥ 100 billion within the three-year term), which will fund part of the growth investment above.

	2020 Plan targets	Forecasts for FY2015-2017	2017 Plan targets (FY2015-2017)
Capital expenditures in Japan (consolidated basis)	Approx. ¥1,700bn / 3 years	¥1,260bn / 3 years	Approx. ¥1,350bn / 3 years
Business investment (consolidated basis)	Approx. ¥600bn / 3 years	¥210bn / 3 years	Approx. ¥300bn / 3 years
R&D spending (consolidated basis)	Approx. ¥220bn / 3 years	¥210bn / 3 years	Approx. ¥210bn / 3 years
Number to be newly employed (non-consolidated basis)	Approx. 1,100 employees / year	Approx. 1,300 employees / year	Approx. 1,300 employees / year
Asset compression (consolidated basis)	Approx. ¥100bn / 3 years	Approx. ¥300bn / 3 years	Approx. ¥200bn / 3 years

7. Profit and financial targets and shareholder return

- (1) Under the 2017 Plan, NSSMC has implemented measures to enhance facilities and human resources capabilities as ways to fortify mother mills in Japan and measures to improve cost competitiveness. However, NSSMC experienced a large production decline due to equipment trouble and other reasons. In addition, depressed oil prices caused a decline in demand in the energy sector. As a result, the company does not expect to achieve the target level of 10% in return on sales (ROS) and return on equity (ROE) by the end of the 2017 Plan period.
- (2) Through implementation of the measures outlined above under the 2020 Plan, including global business development, strengthening of “manufacturing capabilities” and enhancement of the Group operating structure, NSSMC aims to advance towards “the best steelmaker with world-leading capabilities.” Through these measures, the company aims at a medium-to-long-term growth in profit and an expansion of cash flow generating ability, with a target ROS of about 10% and ROE of about 10% in FY2020.
- (3) After incorporating facility enhancement investment and growth investment, NSSMC aims to achieve a debt-to-equity ratio of about 0.7 at the end of FY2020, a level similar to that at the end of FY2017.
- (4) With respect to return to shareholders, NSSMC will raise the targeted payout ratio from the current “around 20-30%” on a consolidated basis to “around 30%” (to be applied to FY2018 onwards).

2020 Mid-Term Management Plan Targets

	FY2020 targets	FY2017 forecasts	2017 Plan targets
Return on sales	About 10%	5.3%	10% or more
Return on equity	About 10%	About 6%	10% or more
D/E ratio	About 0.7	About 0.7	About 0.5
Payout ratio	Around 30%	About 30%	Around 20-30%

8. A company with integrity and reliability

(1) Corporate Philosophy

“The NSSMC Group will pursue world-leading technologies and manufacturing capabilities, and contribute to society by providing excellent products and services.”

(2) NSSMC’s priorities in manufacturing are “safety, environment, and disaster prevention,”

“quality,” “production,” and “cost and profit” in this order. NSSMC will continuously work at appropriate risk management and implement preventive measures, based on lessons learned from past events and accidents.

(3) NSSMC will implement and appropriately manage internal control systems and strive to continuously improve them in order to comply with laws and regulations and to ensure credibility of its financial reporting, as well as the validity and efficiency of its operations.

(4) NSSMC will achieve the Workstyle Innovation as endorsed by the Japanese government by standardization of operations and improvement in efficiency of operations as well as further utilization of IT.

(5) NSSMC will promote the establishment of a recycling-oriented society and preservation of the environment through its three Eco’s (Eco Process, Eco Products™, and Eco Solutions) and development of innovative technologies, such as COURSE50.

By implementing these measures, the NSSMC Group will aim to continue to be trusted companies in society.

For more information, please contact:

Public Relations Center, General Administration Division

TEL: +81-3-6867-2135, 2146, 2977, 3419