

Value Creation Process and Nippon Steel's Strengths

BUSINESS MODEL

INPUTS

Manufactured capital

Global steel production capacity **90 mn tons/year**
Tangible fixed assets (book value) **¥2.8 tn/year**

Natural capital

Iron ore **57.77 mn tons/year**
(FY2019 imports)
Coking coal **26.24 mn tons/year**
(FY2019 imports)
Industrial water (Makeup water) **700 mn m³**
(FY2019 makeup volume)

Intellectual capital

R&D staff (non-consol.) **800**
R&D expenses **¥77.6 bn**
Patents (non-consol.) **Japan 15,000**
Overseas 21,000

Human capital

Number of employees (consol.) **106,599**
Number of employees (non-consol.) **27,096**

Financial capital

Equity attributable to owners of the parent **¥2.6 tn**
Interest-bearing debt **¥2.5 tn**
D/E ratio **0.74**

Social and relationship capital

- Coexistence with communities
- Relationship of trust and cooperation with customers

BUSINESS ACTIVITIES

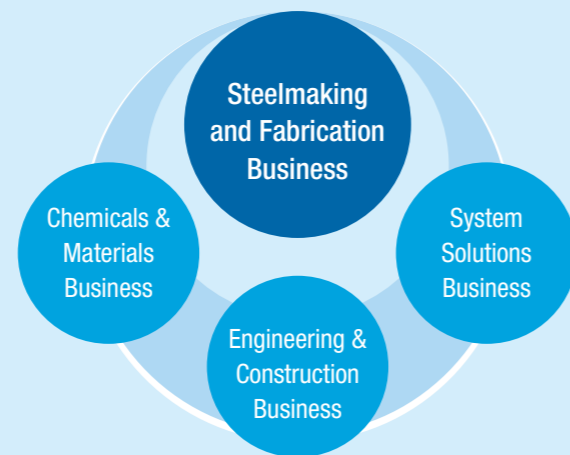
Domestic mother mills as sources of technological strength

- Operational and facility technologies long accumulated based on the model of large blast furnaces and seaside integrated steel mills
- High-grade steel product technologies in response to customers' sophisticated needs

Global production framework

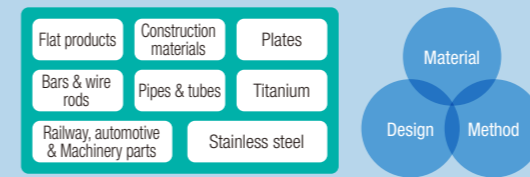
- Leveraging the strength developed in mother mills in Japan, the global production framework supports Japanese customers' overseas expansion and respond to overseas growing demand

Synergies between the steelmaking and three other segments



OUTPUTS

Diverse steel products for and solution proposals for various applications



Vehicles Ships Energy Electric appliances Containers
Industrial machinery Civil engineering Construction

eco PRODUCTS What we produce is "eco-friendly"

Products using by-products

Steel slag products, coal chemical products

Non-steel business products and services

Environment and energy; urban infrastructure, steelmaking plant, chemicals, functional materials, composite materials; IT consulting; DX promotion; IT outsourcing; modernization

eco SOLUTION Sharing our "eco-solutions"

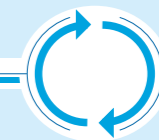
Minimal emissions

Curbing of CO₂ emissions; 99% recycling of by-products; air, water, soil contamination risk management

OUTCOMES

Contribution to SDGs in society

- Jobs for employees (incl. subcontractors) and growth in community
- Safe, reliable living (steel for key auto parts, railway, bridges, buildings, etc.)
- Energy preservation, climate action, recycle-oriented society
- Disaster prevention and reduction, National Resilience
- Infrastructure to build in emerging countries and to rebuild in developed countries
- Products and technological solutions in growth areas
- Education for employees and communities

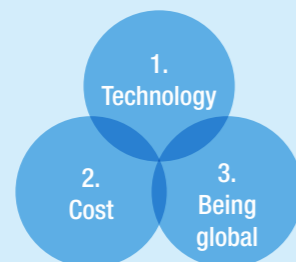


Economic value creation

- Enhancement of sustainable corporate value and return of profit
- Securing of sustainable profit
 - Return of profit
 - Investment for further growth
 - Corporate value enhancement

Nippon Steel's Strengths

Toward becoming the world-leading steelmaker with comprehensive strengths



① Technology

Products and solutions that contribute to customers' value creation

- A global steelmaker's top-level R&D resources
- Practical use of advanced technologies by R&D Centers and Steelworks R&D divisions
- Joint development based on long-term relationships of trust with customers
- A wide variety of products
- Stable mass production technology of high-grade steel
- Synergy with non-steel business segments

② Cost

Cost competitiveness, enabled by our process technology and operational

- The world's top-class energy efficiency
- The Top Runner method with multiple steelworks
- Large blast furnace operational technologies

③ Being global

Global expansion in response to Japanese customers' overseas expansion and local demand

- Global production framework
- Alliances with the world's major steelmakers
- A presence in growing Asia
- High domestic shares; No.3 in the world in production volume