

JX Nippon Mining & Metals Group

Long-Term Vision 2040

~ Aiming to foster the development of society's innovation
with advanced materials ~

July 27, 2019



JX Nippon Mining & Metals Corporation

1. Background – Changes in social trends –

- ✓ Social trends surrounding our business changing radically
- ✓ Strong commitment to international development goals including SDGs

Notable characteristics of social trends

- ① Depletion of resources due to middle-income class expansion
 - Limited resources are subject to competition for acquisition
- ② Shrinking domestic market / Sustainable growth becomes a big challenge
 - The environmental issues becoming critical for sustainable growth also in emerging countries
- ③ Expanding the demand for advanced materials
 - Digital data has been widely used in various industries such as healthcare, energy, IT and mobility, in which advanced materials are indispensable

Correspondence to SDGs

SDGs : The Sustainable Development Goals adopted by United Nations Member States in September 2015

Our business strongly contributes to four goals below



7. Affordable and clean energy
9. Industry, Innovation, and Infrastructure
11. Sustainable cities and communities
12. Responsible consumption and production

2. Future prospect based on social trends

- ✓ Changes in social trends create not only risks but also great business opportunities in up, middle and down streams.

Upstream
(Resources
development)

- High profitability due to tight demand
- Wide fluctuations in metal prices
- Decrease in high quality ore, tighter environmental regulations etc.
→ Increasing the risk of resources development

Midstream
(Smelting & Refining,
Recycling)

- Stable revenue structure of contract smelting
- More opportunities for recycling business in emerging countries
- Shortage of resources and intense competition with Asian companies

Downstream
(Functional Materials,
Thin Film Materials,
etc.)

- Global niche top position in new market through technological differentiation
- Appearance of alternative materials, prolonged lead time of product development, etc. → The risk of market loss

3. Basic policy – Long-Term Vision –

- ✓ Moving from a process industry-type to a technology-based firm
- ✓ Designing to continue generating high profits as well as contributing to the realization of sustainable society

- Positioning our individual businesses as a “focus business” or a “base business”
- Positioning minor metals essential to advanced materials as central domains

Base business

Aim :

- To maintain HR and technology of the company

Method :

- Carrying out structural reforms
 - Improving efficiency
 - Timely review of the asset portfolio

Business field :

- Mining
- Smelting & Refining
- Part of recycling

Organizational
base

Focus business

Aim :

- To greatly expand the scale of profits

Method :

- Through technological differentiation
- Constantly aligns products / technological lineups with high-mix low volume production

Business field :

- Advanced materials
- Technology-based recycling business


Core of growth
strategy

Copper
•
Minor
metal

4. Measures for creating new business

✓Establishing a structure to constantly create new technology-based business to significantly expand the scale of Focus business.

① Making active use of external resources

- Utilization of external resources
 - Building co-creative R&D
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- Shorten R&D period
 - Higher success rate of commercialization

Examples :

- ①Joint research with universities and research institutes
- ②Utilization of open innovation and corporate venture capital
- ③Business alliance with other companies, M & A, etc.

② Building an organizational structure and promoting human resources development for technology-based management

- Working on the establishment of a "flexible organizational structure"
→allowing prompt decision-making and active use of professionals, etc.
- Securing human resources who could create new value

Examples :

- ①Significant increase in technical personnel
- ②Changing corporate culture
- ③Radical reforms of career paths

<Reference> Business structure image aimed at Long-Term Vision

