# JX Nippon Mining & Metals Group Long-Term Vision 2040

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

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

- 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.



- •High profitability due to tight demand
- $\cdot$ Wide fluctuations in metal prices
- •Decrease in high quality ore, tighter environmental regulations etc.  $\rightarrow$ 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

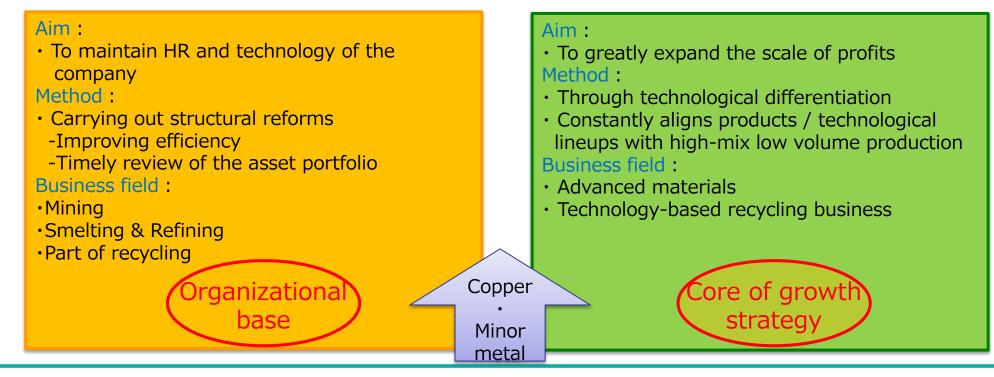
## 3. Basic policy – Long-Term Vision –

 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

Focus business





#### 4. Measures for creating new business

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

Making active use of external resources

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

 Examples:

 Joint research with universities and research institutes
 Utilization of open innovation and corporate venture capital
 Business 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

JX Nippon Mining & Metals

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

