

Through the deployment of our three core businesses, we contribute to the stable supply of goods from basic materials to high-quality products

“Excavating ore, a natural resource, making it into metal materials by smelting and refining, and adding new value to those materials.”
The materials we handle and the value we add vary through the ages, but the essence of this business process remains unchanged over the years.

CASE Putting our strengths into practice
3 **Materials Business**

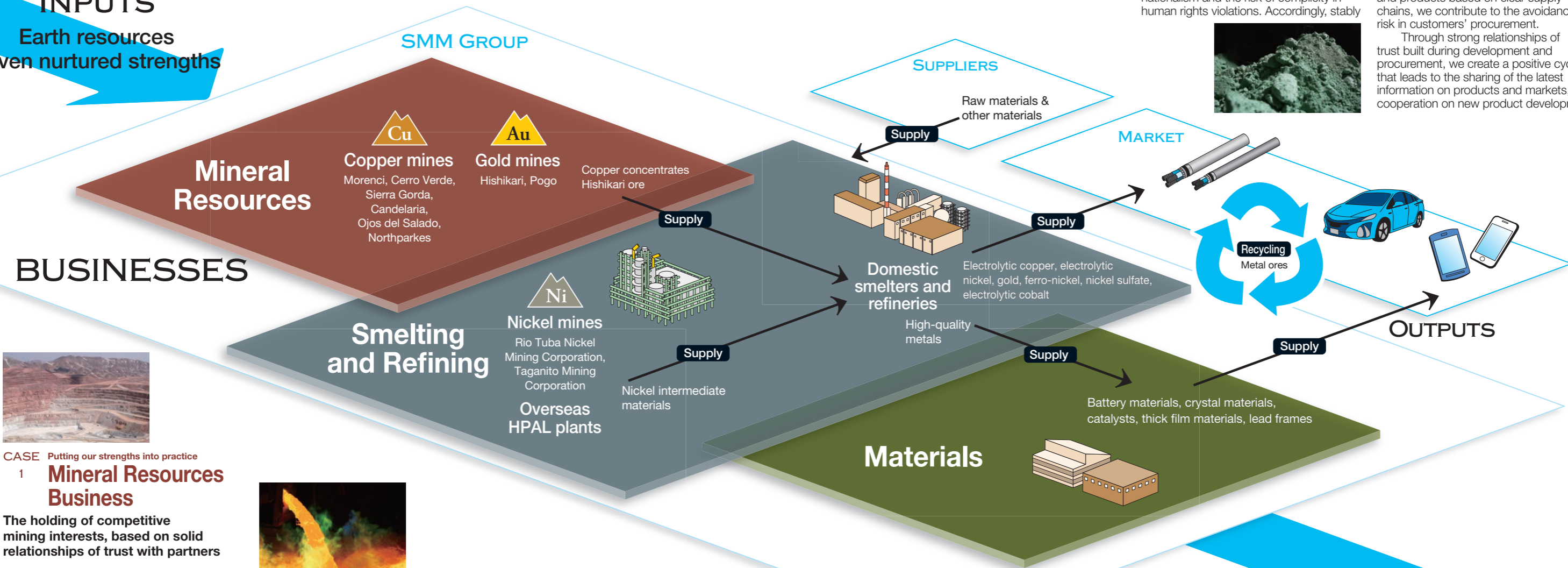
Development and provision of high-quality battery materials through collaboration with customers

In the development of battery materials, we earn the solid trust of customers through close collaboration from the research and development stage through technological support in upstream smelting and refining.
With regard to natural resources, however, concern is growing over issues including the emergence of resource nationalism and the risk of complicity in human rights violations. Accordingly, stably

securing the raw materials for batteries, for which rapid market growth is expected, is becoming a serious issue in procurement.
The SMM Group conducts its business activities in an integrated flow that spans the excavation, smelting and refining, and processing of the nickel and cobalt that are the raw materials. Through the stable supply of conflict-free materials and products based on clear supply chains, we contribute to the avoidance of risk in customers' procurement.
Through strong relationships of trust built during development and procurement, we create a positive cycle that leads to the sharing of the latest information on products and markets, and cooperation on new product development.



INPUTS
Earth resources
Seven nurtured strengths



BUSINESSES



CASE Putting our strengths into practice
1 **Mineral Resources Business**

The holding of competitive mining interests, based on solid relationships of trust with partners

For the SMM Group, the holding of mining interests involves more than making investments. We also contribute to the stable operation and the operational improvement of mines through means including the dispatch of personnel and technical cooperation, drawing on the mining technology we have enhanced and expanded since our development of the Besshi Copper Mine. In doing so, we contribute to strengthened competitiveness and earn the deep trust of our partners.

On the basis of the relationships of trust we have built through such activities, we have gained opportunities to participate in and acquire interests in new, excellent development projects, leading to further growth and enhancement of our corporate value.



CASE Putting our strengths into practice
2 **Smelting & Refining Business**

Utilizing low-grade nickel ore and recovery of rare metals through cost-competitive smelters and refineries and HPAL technology

The SMM Group led the industry globally in successfully commercializing HPAL* technology. Through this, we enable the production of nickel products from low-grade nickel oxide ore, an ore which had been difficult to refine. We have also set our sights on leveraging our HPAL plants and separation and refinement technology for commercial production of scandium, a metal made rare by the difficulty of its refining.

At the same time, with global top-class cost competitiveness in our main smelters and refineries (the Toyo Smelter & Refinery and the Niihama Nickel Refinery), we aim to maximize profit opportunities through stable operation. This high level of technology and high cost competitiveness form the foundation for our stable supply of basic materials.

* HPAL (High Pressure Acid Leach) method: A technology to extract nickel and cobalt from low-grade nickel oxide ores. CBNC was the first in the world to succeed at large-scale commercial production in 2005; Taganito HPAL began operations in 2013 as the second production facility.

Created value
OUTCOMES

Continuous growth through the securing of mineral resources and the stable supply of basic materials and high-functionality materials
Contribution to sustainable society through global environmental preservation, development of products with low environmental impact, and co-existence with local communities