



# Integrated Report

# 2025

## Outline and Vision

## Company Philosophy

Leverage the power of people to deliver the earth's resources in more useful forms and contribute to the happiness of humankind

## Company Policy

- 1 Integrate the management strategies of the entire Group to maximize the synergy effects of each Group company.
- 2 Focus on the development and quality improvement of world-class smelting technology, and establish the world-leading platform for management efficiency and competitiveness.
- 3 Promote compliance.
- 4 Secure appropriate profits through fair, transparent and free competition.
- 5 Actively tackle all environmental problems to protect the irreplaceable earth.
- 6 To develop the individuality of employees and fully demonstrate their creativity, pursue a sense of comfort and affluence both physically and mentally, and realize a rewarding workplace.
- 7 Promote wide-ranging exchanges with society and actively disclose fair corporate information.



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## Long-term Vision

**A comprehensive materials company that co-creates a sustainable, recycling-oriented society**



## Tool Map



## Editing policy

This report covers our performance during the target period and our initiatives for the medium-term business plan, and explains our approach to sustainability linking financial and non-financial information. By doing so, we aim to make this report a tool for our shareholders, investors, and all other stakeholders to better understand the Company and deepen dialogue with us.

## Scope of report

PACIFIC METALS CO., LTD. (Domestic Offices)

\*The activities of some affiliate companies are included.

## Reporting period

FY2024 (April 1, 2024 to March 31, 2025)

\*Some activities outside the reporting period included.

## Month of issue

November 2025

## Reference guidelines

"Guidance for Collaborative Value Creation" by Ministry of Economy, Trade and Industry  
 "Environmental Reporting Guidelines (Fiscal Year 2018 Version)" by Ministry of the Environment  
 Global Reporting Initiative (GRI) Standards

## Disclaimer

The contents of this report refer not only to past events, but also cover future plans and forecasts at the time of publication. Please note that actual future activities and results may differ from those described herein.

# Message From the President

**We will utilize our on-site capabilities to realize a business model shift and contribute to society as a comprehensive materials company**

**Kazuo Iwadate**

President and Representative Director



## Objectives of the Medium to Long-term Strategy PAMCOvision 2031

I was appointed President and Representative Director of the Company in June 2025. The Company was founded in 1949 as a producer of pig iron from iron sand. Five years later, we began manufacturing ferronickel, currently our main product, the production of which we have continued for over seventy years. Since joining the Company in 1985, I have been primarily in charge of the Production Division, and have built my career alongside the development of the Company's ferronickel business. However, due to the global upsurge in energy prices and the emergence of cheap nickel pig iron produced by companies with Chinese capital, the profit structure of the ferronickel business has become unsustainable. We regard very seriously the harsh reality of posting losses for three consecutive fiscal years through the fiscal year ended March 31, 2025. In order to review the business model from scratch and proceed to a new stage, we launched the seven year Medium to Long-term Strategy PAMCOvision 2031 (Medium to Long-term Strategy) as of April 2025, and have begun reforms under a new management structure in which the number of Directors has been reduced by three.

Specializing in ferronickel, in what could be described as a "single-legged" business, inevitably means we remain in

an unstable financial situation; therefore, the diversification of our business is the biggest challenge facing the Company. I believe that my greatest mission is to ensure that we steadily achieve the business model shift by promoting business diversification in the four areas outlined in our Medium to Long-term Strategy, and to lay the foundations during these seven years for full-scale growth in the next medium-term business plan.

Specifically, the four areas are as follows: (1) metal smelting from ore, which the Company has developed over the years. In this area, we are considering the matte raw materials business as a short-term initiative, and the polymetallic nodule business as a medium- to long-term business pillar. Furthermore, we will promote: (2) the retail electricity business for high-voltage and extra-high-voltage businesses in the electricity field; (3) the beryllium business in the functional materials field; and (4) the calcium aluminate manufacturing and sales business in the resources recycling field. Details of each business will be provided later, but all of these businesses will utilize our strengths, and are new businesses for which we have sown seeds and been working on over the past few years. Going forward, I believe that we can lead these new businesses to success by

responding flexibly to changes in the environment and demonstrating our ability to further transform.

Furthermore, our vision is to become "a comprehensive materials company that co-creates a sustainable, recycling-oriented society," and we have formulated a seven-year medium to long-term strategy by working back from our future vision to plan the path we should take. In the long

term, we expect the polymetallic nodule business and the beryllium business to become earnings pillars. However, as both will require a certain amount of time until their commercialization, we aim to achieve operating profit from the fiscal year ending March 31, 2028 by prioritizing the launch and monetization of other new businesses.

## Diversifying business by leveraging our strengths

The following is a detailed explanation of the new businesses in each of the four areas. The Company's strengths are, of course, its technology and expertise in metal smelting, but our ability to operate plants stably and maintain continuous operations is also a point of differentiation, and these advantages are highly valued by our partners in the new businesses.

### Metal smelting: A polymetallic nodule business

The aim of the matte raw materials business is to expand the use of nickel. In our Medium to Long-term Strategy, we have announced that we will reduce the scale of or withdraw from our mainstay ferronickel business for stainless steel raw materials when the timing is appropriate. Nickel for matte raw materials can be produced using the same production lines as used for ferronickel for stainless steel raw materials; the desulfurization process can be omitted; and there are few restrictions on impurities compared to stainless steel raw materials, which allows for cost reductions. In addition, matte raw materials are also used in batteries for electric vehicles, and strong demand is expected in the future as society moves toward carbon neutrality.

### Metal smelting: A polymetallic nodule business

In recent years, concerns have arisen over the depletion of terrestrial resources, and expectations for seabed resources are rising globally. In response to this, the Company has been conducting test smelting of polymetallic nodules (manganese nodules), a seabed resource, since 2022. In the past, seabed resources were thought to be difficult to commercialize due to their lower nickel content compared to terrestrial resources. However, as terrestrial resources have become depleted, their nickel content has fallen to comparable levels. As a result, polymetallic nodules, which contain not only nickel but also copper, cobalt, and manganese, are increasingly regarded as promising raw materials for batteries and other applications. We have the smelting technology to enable the stable extraction of metals from ore, and will basically utilize our current production lines for the smelting of polymetallic nodules. In February 2025, the Company conducted the 14-day continuous smelting of polymetallic nodules using an electric furnace at our plant, marking the world's first successful continuous smelting test of polymetallic nodules on a commercial scale.





Currently, global regulations regarding the extraction of seabed resources are under consideration, and commercial operations are expected to become possible by 2028-2029. We aim for the smelting of 1.3 million tons of polymetallic nodules annually, and have already completed a feasibility study and begun preparations to modify the production line at our Hachinohe Plant with a view to commercialization.

#### Electricity: A retail electricity business for high-voltage and extra-high-voltage businesses

The Company has used a significant amount of electricity in the production of ferronickel. In particular, smelting in electric furnaces consumes a large amount of electricity. As part of our cost-reduction efforts, however, we have optimized power usage by combining self-generated electricity with grid power from Tohoku Electric Power, depending on the time of day. As energy prices continue to surge, reducing electricity costs is an issue for many companies. The Company registered as a retail electricity business operator in March 2024, and by utilizing our expertise as an electricity consumer, we have proposed optimization to high-voltage and extra-high-voltage businesses in the Hachinohe region, entered into electricity sales contracts, and started supplying electricity.

In addition, in collaboration with Aomori Kenmin Energy Co., Ltd., we began utilizing electricity, including the renewable energy value, from wind power plants in the Tsugaru region of Aomori Prefecture as of April 2025. This is a scheme to realize the local production and consumption

of renewable energy in the region. Going forward, we will expand our collaboration with Aomori Kenmin Energy in the sales business, including renewable energy electricity, within Aomori Prefecture, including Hachinohe City.

#### Functional materials: A beryllium business targeting the nuclear fusion power generation and existing beryllium alloy markets

Beryllium is an essential metal that functions as a neutron multiplier in the operation of nuclear fusion power generation, and demand is expected to expand in the future. MiRESSO Co., Ltd. (head office: Misawa City, Aomori Prefecture) is a startup certified by the National Institutes for Quantum Science and Technology. The company has been developing a business for the manufacture and sale of beryllium for nuclear fusion power generation using new low-temperature purification technology that enables more cost-effective manufacturing. The Company concluded a comprehensive business cooperation agreement with MiRESSO in October 2024, and a capital and business alliance agreement in July 2025. We are currently developing a pilot plant for beryllium production within our Hachinohe Plant in preparation for the stable, full-scale mass production of beryllium in the future. Nuclear fusion power generation is expected to be socially implemented from the fiscal year ending March 31, 2036 onward. Going forward, however, we will invest in MiRESSO's business with a plan to start beryllium production in FY2027 and recover our investment by the fiscal year ending March 31, 2036.

Furthermore, alloying beryllium with copper increases strength while maintaining the high electrical conductivity of copper. As a result, demand is expected to grow for electronic appliances, including those for electric vehicles, and we will therefore also focus on the sale of beryllium alloys.

#### Resources recycling: A calcium aluminate manufacturing and sales business

Calcium aluminate is produced from raw materials recycled from catalysts used in petroleum refining. In recent years, against the backdrop of the transition to a low-carbon society, the shift from blast furnaces to electric arc furnaces is progressing, leading to an expansion in demand for calcium aluminate, which is necessary for removing impurities from electric arc furnace steel. We have launched a full-scale calcium aluminate manufacturing and sales business in order to add value to recycled raw materials by leveraging the technologies we have cultivated to date. In association with this, we will collaborate with AMITA HOLDINGS CO., LTD., with which we have a long-standing capital and business alliance, to collect calcium aluminate raw materials and expand our sales destinations, including electric arc furnace steel producers.

## Leverage the power of people, provide the resources needed by the times, and contribute to society

As I explained above, in order to achieve an early return to profitability during the business model shift and rebuild the nickel business, we plan to allocate approximately 42.0 billion yen in operating cash flow over the seven-year period of the Medium to Long-term Strategy, with approximately 23.0 billion yen for growth investments and approximately 19.0 billion yen for shareholder returns. The breakdown of growth investments is estimated to be approximately 16.0 billion yen for the renewal of aging infrastructure, including the cost of modifying polymetallic nodules, and investment in new business foundations, and approximately 7.0 billion yen for investment in the beryllium business, etc. Meanwhile, in order to optimize the balance between growth investments and shareholder returns, we aim for a dividend on equity (DOE) of 4% and stable dividends that are not affected by fluctuations in annual profits. Through these efforts, we aim to achieve a PBR of 1 or more at an early stage.

Furthermore, in order to contribute to the creation of a sustainable society, we recognize that important sustainability issues include climate change countermeasures aimed at achieving carbon neutrality, enhancing investment in human capital with an emphasis on diversity, co-existence with local communities and society, and promoting constructive dialogue with stakeholders. At the same time, the business model shift remains the Company's highest priority, and we will focus on issues with greater priority in light of our new business portfolio.

Until now, I have been working on production reforms and efficiency improvements at manufacturing sites, but going forward, I recognize that my role as the Company's top executive is to optimize the company as a whole. To achieve this, it is important that the management team does not advance unilaterally; above all, we must place the utmost importance on "on-site capabilities." Over the past few years, production volumes at our manufacturing sites have been deliberately reduced. Although our production lines are capable of producing approximately 32,000 tons of nickel, the current production volume is still only about one tenth of that amount. I am more aware than anyone that those working at manufacturing sites, who

witness these conditions firsthand, have felt considerable anxiety and endured extremely difficult times. When I was approached about assuming the position of president, I felt that I had no choice but to accept the position as someone who knows the operations firsthand. With the future direction outlined in the Medium to Long-term Strategy and the commencement of trial operations for new businesses, I believe that employees are finally starting to see a glimmer of hope. In order to further demonstrate our on-site capabilities in the future, it is essential that all executives and employees are aligned in the same direction, and I believe that communication with employees is necessary to achieve this. Therefore, since being appointed president, I continue to visit the Hachinohe site as often as possible. Furthermore, to enable our current employees to maximize their capabilities, I am also considering organizational restructuring, including greater utilization of younger employees.

As I mentioned at the outset, the Company has specialized in the ferronickel business for many years. However, in response to the changing times, we have evolved from producing pig iron from iron sand at the time of our founding to manufacturing ferroalloys such as ferronickel and manganese, while also processing by-products such as slag into insulation materials, abrasives, fine aggregate for concrete, and other products that we provide to society. Our Company Philosophy is to "Leverage the power of people to deliver the earth's resources in more useful forms and contribute to the happiness of humankind." The underlying spirit of this philosophy will not change even with our business model shift. We will continue to evolve as "a comprehensive materials company that co-creates a sustainable, recycling-oriented society" and work to enhance our corporate value. I hope that all our stakeholders will continue to have high expectations for the Company in the future and maintain their support.



Communicating with employees  
In-person patrol

# Business Growth at PACIFIC METALS and the History of Our Environmental Activities

| 1970-   | 1980-  | 1990-  | 2000-   | 2010-  | 2020-   |
|---|--|--|---|--|---|
| <p><b>1970</b></p> <ul style="list-style-type: none"> <li>The Company absorbed Pacific Nickel Co., Ltd. through merger and changed its name to PACIFIC METALS CO., LTD. and established a foundation as the top manufacturer of ferronickel.</li> </ul>  <p>40,000 KVA closed nickel furnace (Hachinohe 45.9)</p> <ul style="list-style-type: none"> <li>Opened Philippines Office.</li> </ul>   | <p><b>1980</b></p> <ul style="list-style-type: none"> <li>Acquired industrial waste disposal business permit.</li> </ul> <p><b>1983</b></p> <ul style="list-style-type: none"> <li>Separated and transferred Iwase Plant to Pacific Rundum Co., Ltd., along with its abrasives business operation.</li> </ul>  <p>No.2 Mannesmann curved continuous casting machine (Hachinohe 56.10)</p> <p><b>1984</b></p> <ul style="list-style-type: none"> <li>Separated and transferred Naoetsu, Toyama and Narashino Plants to Pacific Special Alloy Castings Co., Ltd., Pacific Steel Mfg. Co., Ltd. and Pacific Machinery &amp; Engineering Co., Ltd., respectively, along with its casting, forging and machinery business operations.</li> </ul> | <p><b>1995</b></p> <ul style="list-style-type: none"> <li>Installed a 60,000 kVA electric furnace. Three electric furnaces system established at Hachinohe Works.</li> </ul> <p><b>1996</b></p> <ul style="list-style-type: none"> <li>Completion of Kawaragi Wharf No.2 at Hachinohe Harbor (public).</li> </ul> <p><b>1997</b></p> <ul style="list-style-type: none"> <li>Completed installation of raw material transport conveyor line (Kawaragi).</li> </ul>  | <p><b>2000</b></p> <ul style="list-style-type: none"> <li>Registered as environmental measurement certification business.</li> </ul> <p><b>2003</b></p> <ul style="list-style-type: none"> <li>Construction completed "Incinerated ash and scallop shell recycling facility" for recycling business.</li> </ul> <p><b>2005</b></p> <ul style="list-style-type: none"> <li>Achieved 1 million tons of ferronickel production.</li> </ul> <p><b>2006</b></p> <ul style="list-style-type: none"> <li>Completed a recycling facility for molten fly ash for recycling business.</li> </ul> <p><b>2007</b></p> <ul style="list-style-type: none"> <li>Installed a small-scale wastewater treatment device as part of the drainage port.</li> <li>Installed drainage monitors (compliance with agreement).</li> </ul> <p><b>2008</b></p> <ul style="list-style-type: none"> <li>Opened Jakarta Office.</li> </ul>  <p><b>2009</b></p> <ul style="list-style-type: none"> <li>Acquired ISO 14001:2004.</li> </ul> | <p><b>2010</b></p> <ul style="list-style-type: none"> <li>Installed a dust monitor in the ore yard.</li> <li>Launched webpage for waste disposal status.</li> </ul> <p><b>2011</b></p> <ul style="list-style-type: none"> <li>Installed monitoring cameras for drainage and chimneys (drainage and dust control).</li> </ul> <p><b>2012</b></p> <ul style="list-style-type: none"> <li>Acquired OHSAS 18001:2007.</li> </ul> <p><b>2013</b></p> <ul style="list-style-type: none"> <li>Installed wastewater treatment system (compliance with agreement).</li> </ul>  <p><b>2014</b></p> <ul style="list-style-type: none"> <li>Started operation of Integrated Management System.</li> </ul> <p><b>2015</b></p> <ul style="list-style-type: none"> <li>Established Basic Policy on Corporate Governance.</li> </ul> <p><b>2016</b></p> <ul style="list-style-type: none"> <li>Formulated a new "company philosophy" and "long-term vision."</li> </ul> <p><b>2017</b></p> <ul style="list-style-type: none"> <li>Awarded "Excellent Workplace" from the Aomori Industrial Waste Association.</li> </ul> <p><b>2018</b></p> <ul style="list-style-type: none"> <li>Received the "Mottainai Aomori Award" on the 10th Anniversary of the Mottainai Aomori Prefectural Movement Promotion Council.</li> </ul> | <p><b>2020</b></p> <ul style="list-style-type: none"> <li>Obtained certification of a specially controlled industrial waste disposal operator "Excellence."</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>Transitioned to ISO 45001: 2018.</li> <li>Signed a capital and business alliance agreement with AMITA HOLDINGS CO., LTD. to strengthen and enhance our resource recycling business and environmental recycling business.</li> </ul> <p><b>2022</b></p> <ul style="list-style-type: none"> <li>Transitioned to Prime Market of Tokyo Stock Exchange.</li> </ul> <p><b>2023</b></p> <ul style="list-style-type: none"> <li>Endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).</li> <li>Developed a manufacturing process of raw materials for lithium-ion battery materials, utilizing emulsion flow.</li> <li>Signed a joint research and development agreement with Emulsion Flow Technologies Ltd. to realize rare metal recycling of lithium-ion batteries.</li> <li>Withdraw from recycling business of incinerated ash and scallop shell.</li> </ul> <p><b>2024</b></p> <ul style="list-style-type: none"> <li>Registered as a retail electricity business operator with the METI Agency for Natural Resources and Energy.</li> <li>Signed a comprehensive business cooperation agreement with MiRESSO Co., Ltd.</li> <li>Signed a Memorandum of Understanding with Aomori Kenmin Energy Co., Ltd. regarding the procurement and sale of electricity.</li> </ul> <p><b>2025</b></p> <ul style="list-style-type: none"> <li>Started electricity supply in the retail electricity business.</li> <li>Signed a capital and business alliance agreement with MiRESSO Co., Ltd.</li> </ul> |
| <p><b>1972</b></p> <ul style="list-style-type: none"> <li>Concluded a technological support agreement with Indonesian company PT Aneka Tambang for construction of a ferronickel smelting plant (Antam Plan).</li> </ul> <p><b>1973</b></p> <ul style="list-style-type: none"> <li>Acquired an equity stake in Rio Tuba Nickel Mining Corporation of the Philippines and started to involve development of nickel mines.</li> </ul> <p><b>1975</b></p> <ul style="list-style-type: none"> <li>Telemeter system</li> <li>Installed SOx monitoring equipment (compliance with agreement)</li> </ul> <p><b>1979</b></p> <ul style="list-style-type: none"> <li>Completed construction of Niigata Plant and departments of electromagnetic materials and activated carbon of Shibata Plant moved to Niigata Plant.</li> </ul> <p> <b>Indicates environmental initiatives</b></p> | <p><b>1985</b></p> <ul style="list-style-type: none"> <li>The name Hachinohe Plant was renamed to Hachinohe Works.</li> </ul> <p><b>1988</b></p> <ul style="list-style-type: none"> <li>Developed a nickel mine by taking an equity stake in Taganito Mining Corporation in the Philippines.</li> </ul> <p><b>1998</b></p> <ul style="list-style-type: none"> <li>Acquired ISO9002.</li> </ul> <p><b>1999</b></p> <ul style="list-style-type: none"> <li>Transferred headquarter functions to Hachinohe to become a specialized manufacturer for ferronickel.</li> </ul>   | <p><b>1997</b></p> <ul style="list-style-type: none"> <li>Established Pacific Energy Center Co., Ltd. (power supply from 2000 to 2015)</li> </ul> <p><b>2008</b></p> <ul style="list-style-type: none"> <li>Opened Jakarta Office.</li> </ul>  |   |  |   |

| 1970-  | 1980-   | 1990-  | 2000-  | 2010-  | 2020-  |
|--|---|--|--|--|--|
| <p><b>Established a foundation as a top ferronickel manufacturer</b></p> <p>In 1949, the Company was founded as Nisso Steel Co., Ltd., and following the establishment of Pacific Nickel Co., Ltd. in 1959, in 1970 the Company absorbed Pacific Nickel and changed its name to PACIFIC METALS CO., LTD. In 1973, we started developing nickel mines. We have established a stable supply of raw materials and a high-quality production system.</p> <p>Pollution countermeasures and regulations have been strengthened due to factors such as the spread of pollution-related diseases, so we have also accelerated the promotion of environmentally friendly business activities, such as concluding pollution prevention agreements.</p> | <p><b>Spun off affiliated companies and formed the Pacific Group</b></p> <p>In 1983, the Company separated and transferred its Iwase Plant to Pacific Rundum Co., Ltd., and in 1984, separated and transferred Naoetsu, Toyama and Narashino Plants to Pacific Special Alloy Castings Co., Ltd., Pacific Steel Mfg. Co., Ltd. and Pacific Machinery &amp; Engineering Co., Ltd., respectively. Consequently, this formed the network of the Pacific Group.</p> <p>At that time, waste disposal in Japan was increasingly becoming an issue garnering attention as waste volume was surging due to growing consumption and expanded production activities. This was when the Company acquired the industrial waste disposal business permit.</p> | <p><b>Established the three electric furnaces system.</b></p> <p><b>Transformed to become a specialized manufacturer of ferronickel.</b></p> <p>With the installment of the third ferronickel smelting electric furnace at Hachinohe Works in 1995, the Company established its three electric furnaces system. Subsequently, in 1999, we transferred headquarters functions to Hachinohe, transforming ourselves to become a specialized manufacturer of ferronickel. In addition, in 1997 we established Pacific Energy Center Co., Ltd. to specialize in the wholesale supply of electric power to electric utility companies by leveraging the technology for the in-house power generation system developed by the Company.</p> | <p><b>Promoting the recycling business to contribute to the creation of a recycling-oriented society</b></p> <p>Having accumulated a track record of accomplishments as a top manufacturer of ferronickel, in 2005 we reached production volume of 1 million tons. Moreover, as waste disposal and recycling measures for the development of a recycling-oriented society escalated in importance, in 2003 we completed construction of a "recycling facility for incinerated ash and scallop shell" and similarly in 2006, completed a "recycling facility for molten fly ash" among other efforts to promote our recycling business.</p> | <p><b>Initiatives for ESG management based on a new company philosophy and vision</b></p> <p>Awareness of ESG has risen worldwide, and we addressed social issues and worked on the development of corporate governance while strengthening our environmentally friendly business activities to realize ESG management.</p> <p>Then in 2016, we formulated a new "company philosophy" and "long-term vision" in order to achieve sustained growth and a sustainable society from a medium- to long-term perspective.</p> | <p><b>Aiming to realize a sustainable society</b></p> <p>Now, when the whole world is working on climate change countermeasures, we are also promoting the use of carbon-free energy and other environmentally friendly manufacturing technologies and methods, as well as expanding sales of eco products.</p> <p>We will continue to contribute to the realization of a sustainable society by responding to all environmental risks and promoting initiatives to achieve carbon neutrality by FY2050.</p> |

As one of the world's top ferronickel manufacturers, Pacific Metals sells ferronickel not only to Japan but the rest of the world as well, and has grown with the nickel business at our core. In recent years, we have also expanded into new business areas, embarking on challenges with the aim of becoming "a comprehensive materials company that co-creates a sustainable, recycling-oriented society."

## Nickel business

Ferronickel is an alloy of iron and nickel, which is the main raw material for stainless steel. Our strengths are in our production capacity made possible with some of the world's largest electric furnaces, our connections with mining companies supporting that production, and our sales network that supports overseas expansion. By combining these strengths, we realized the production and supply of high-quality, stable products that are valued around the world. Pacific Metals is Japan's leading company in terms of ferronickel production volume, and our ferronickel is put to use in lifestyle equipment and helps to enrich people's lives in invisible ways.

### From procurement of ferronickel raw materials to product sales



### All Slag Generated in the Ferronickel Manufacturing Process Is Recycled

Ferronickel slag is a by-product of the ferronickel smelting process. Molten slag is poured into cooling pits, where it is cooled by atmospheric cooling and moderate sprinkling with water, to turn it into a solid, rock-like state. This rock-like slag is crushed and mechanically stabilized before being recycled. This resource is attracting attention as an environmentally friendly recycled material.



#### Strength 1 World-class smelting technology

Our proprietary smelting technology has enabled us to produce high-quality ferronickel that is highly acclaimed around the world. Thanks to our long-standing track record, we also possess technologies and expertise that take environmental impact into consideration.



#### Strength 2 Hachinohe Works achieving highly efficient production

The Company's Hachinohe Works is equipped with three of the world's largest electric furnaces, enabling efficient production. In addition, the Works is located at Hachinohe Harbor, which is a cornerstone of the coastal industrial zone facing the Pacific Ocean, enabling raw materials and products to be transported with less energy and at low cost.



#### Strength 3 Close relationships with mining companies and regional businesses

The Company has been developing resources in collaboration with overseas companies. In addition, in Aomori Prefecture, where our head office is located, we are leveraging our local connections to work with regional businesses on social contributions and business development.



## The Challenges of Business Diversification

We are diversifying our business and restructuring our business portfolio by leveraging the strengths we have cultivated in the nickel business and entering new business areas where we have sown seeds to date.

### Metal smelting

A world-leading polymetallic nodule metal smelting business utilizing underwater sources [P.15](#)

- Considering a polymetallic nodule toll smelting business as a new core business
- Successfully conducted a polymetallic nodule smelting test at commercial-scale facilities

### Electricity

A retail electricity business for high-voltage and extra-high-voltage businesses [P.16](#)

- Collaborating with local power generation businesses to supply high value-added, locally sourced renewable energy

### Functional materials

A beryllium business targeting the nuclear fusion power generation and existing beryllium alloy markets [P.17](#)

- With the commercialization of nuclear fusion power generation as a catalyst, the nuclear fusion market is expected to expand significantly, with the nuclear fusion method that requires beryllium expected to account for half the market
- Supplying beryllium to existing markets and materializing potential demand will grow the existing beryllium market

### Resources recycling

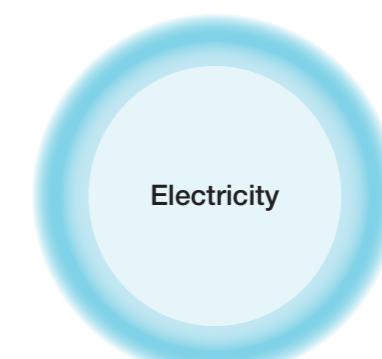
A calcium aluminate manufacturing and sales business through collaboration with Amita Holdings [P.18](#)

- Against the backdrop of a low-carbon society, the shift from blast furnaces to electric arc furnaces is progressing, leading to an expansion in demand for calcium aluminate, which is necessary for removing impurities from electric arc furnace steel

Strength 1  
Strength 2

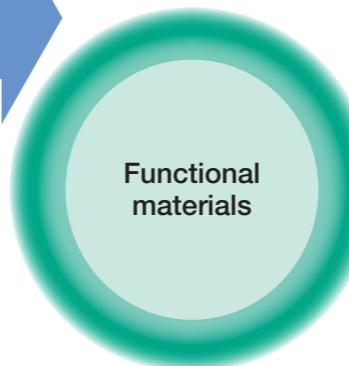


Strength 2  
Strength 3



Demonstrating the strengths of the nickel business

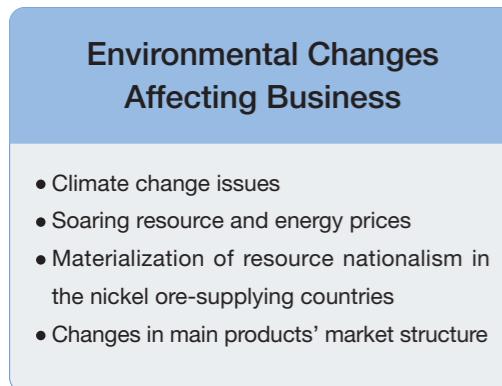
Strength 2  
Strength 3



Strength 1  
Strength 2

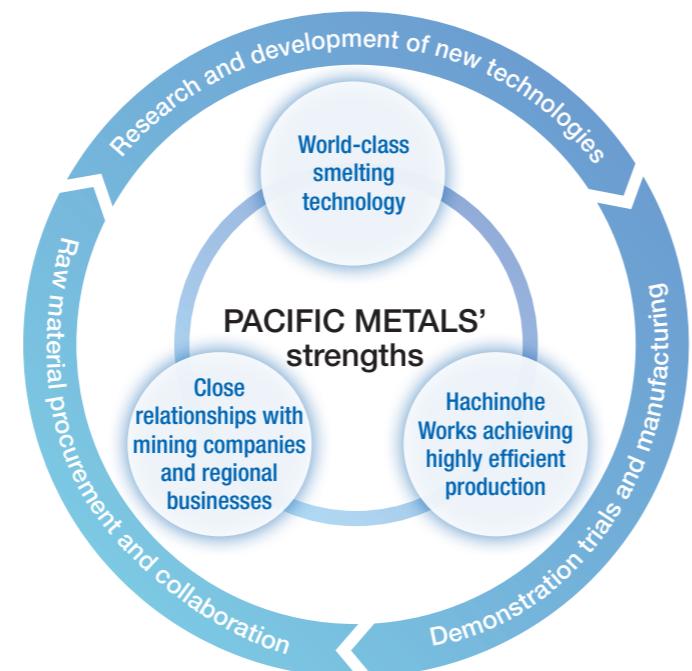


Leverage the power of people to deliver the earth's resources in more useful forms and contribute to the happiness of humankind

**INPUTS****PACIFIC METALS' Main Capitals**

## Results for FY2024

| Financial capital   |                  |
|---|------------------|
| • Net assets  | 67.6 billion yen |
| Manufactured capital  |                  |
| • Smelting equipment (Capacity: 60,000-80,000 kVA)              | Three furnaces   |
| • Capital investment  | 380 million yen  |
| Natural capital   |                  |
| • Long-term nickel ore sales and purchase agreement             | 6 units          |
| • Purchase volume of nickel ore                                 | 320,000 tons     |
| Human capital   |                  |
| • Number of employees (consolidated)                            | 441              |
| Social capital  |                  |
| Customers (delivery destination)                                |                  |
| • Ferronickel sales destination                                 | 7 companies      |
| • Ferronickel slag sales destination                            | 44 companies     |
| Intellectual capital  |                  |
| • R&D investment cost   | 440 million yen  |
| ① Establishment of hydrometallurgical and smelting technologies |                  |
| ② Establishment of LIB recycling technology                     |                  |
| ③ Establishment of smelting technology for polymetallic nodules |                  |
| ④ Restructuring of recycling business                           |                  |

**Creating Value by Identifying Social Issues and Environmental Changes****Business model****Basic sustainability policy****Corporate governance****Materiality****OUTPUTS****Market development****Nickel**

**Ferronickel**  
Supply high-quality stainless steel and alloy steel materials not only to Japan but also to the world  
**Nickel matte raw materials**  
Expand supply from conventional stainless steel raw materials to matte raw materials

**Metal smelting**

**Polymetallic nodules**  
Supply critical metals by utilizing metal smelting technology and existing infrastructure and smelting equipment

**Electricity**

**Retail electricity**  
Supply electricity from locally sourced renewable energy power generation to neighboring regions

**Functional materials**

**Beryllium products**  
Supply the beryllium alloy market and, in the future, the nuclear fusion market

**Resources recycling**

**Calcium aluminate**  
Supply desulfurization agents for steel manufacturing in view of the shift from blast furnaces to electric arc furnaces

**Vision**

A comprehensive materials company that co-creates a sustainable, recycling-oriented society

**OUTCOMES****Values provided to society**

- Efficient use of limited resources
- Creation of a sustainable recycling-oriented society
- Reduction of GHG emissions
- Contribution to the development of regions and resource-rich countries

**Achieving Materiality**

- 1 Smooth shift from ferronickel business to new business
- 2 Securing of stable earnings in the polymetallic nodule business
- 3 Beryllium business and promotion of development of LIB-related business
- 4 Promotion of retail electricity business with focus on local production for local consumption
- 5 Building a frameworks for use of renewable energy
- 6 Expansion of business that support social infrastructure
- 7 Fostering of new corporate culture

Raising corporate value and reinforcing each form of capital