

# Message from the President & CEO



**Challenges to solve  
social issues by  
“materials” and “environment”  
with 100 years of trust and  
technology**

President & CEO  
**Yasushi Aoki**

## Moving to the Next Growth Stage, Based on 100 Years of History in Business

In October 2025, we will celebrate the 100<sup>th</sup> anniversary of our founding, which is a major milestone. Starting from Ogaki Denki Yakin Kogyosho Co., Ltd. (later Nippon Denki Yakin Co., Ltd.) established in 1925, we have supported the development of the Japanese industry by manufacturing the highest quality manganese ferroalloys based on our belief that “good steel comes from good raw materials.” Through these efforts, we have established a solid position as Japan’s top supplier of manganese ferroalloys and cultivated advanced metallurgical technologies, and we have firmly maintained a world-class competitiveness till today.

Since our founding, we have refined our electric furnace operation technology, which is indispensable for the production of ferroalloys that give steel its properties. These technologies are now applied to the production of

functional materials such as ferroboration and metal hydride alloys, as well as the melting and recycling of incineration ash, contributing to the realization of a sustainable society.

We have expanded our business domains to include electronic components and battery materials, in addition to the original business of ferroalloys, and our competitive advantage is based on the trust built as an important part of the supply chain by dealing directly with leading Japanese companies in those fields. In recent years, we have also been working with municipalities, which led to the expansion of our Incineration Ash Recycling business. In our 100-year history, we have overcome many difficulties. Inheriting the efforts and aspirations of our predecessors, we will strive for further growth and technological innovation for the next 100 years.

## Mitigating Risks by Diversified Business Operations Under a Challenging Business Environment

For the fiscal year ended December 31, 2024, ordinary profit doubled from 2.4 billion yen to 4.9 billion yen. However, the underlying ordinary profit excluding inventory impact and one-time factors remained almost at the same level as in the previous fiscal year. The background to this is the stagnation of the global economy and the disruption of supply chains caused by the prolonged conflict in Ukraine and the slowdown of the Chinese economy, which are factors causing global uncertainty. In addition, the depreciation of the yen and soaring prices of commodities caused costs to increase in Japan.

In the Ferroalloys business, a major manganese mine in Australia suspended production and shipment in March 2024 due to a cyclone. The market stabilized after the fall, but the market price of manganese ore temporarily surged. On the other hand, as steel supply and demand eased globally, the market prices of ferroalloys did not rise as much as that of ore, which declined margins.

Even in such a challenging environment, we minimized the impact on business performance by utilizing a pricing formula that keeps the margin between a product price

and a raw material price within a certain range, while also strengthening our cost competitiveness by extending a periodic repair cycle. These efforts were successful in reducing the risk of market fluctuations and keeping the Ferroalloys business profitable.

In the Functional Materials business, although affected by the EV market, signs of recovery are beginning to emerge as users adjust their inventories. Taking advantage of our strength as the “one-of-a-kind domestic products,” we continued negotiations for realizing prices commensurate with added value and strove to increase new customers, which resulted in an increase in profit. The Incineration Ash Recycling business has seen the effect of the price pass-through of the rise in electricity costs to selling prices. In addition to active sales activities targeting municipalities, the market prices of precious metals have remained stable at high levels, contributing to increased earnings.

Thus, the decline in revenue in the Ferroalloys business was offset by other businesses, and the company as a whole was able to maintain the underlying ordinary profit flat and to secure stable earnings.

## Achieving “Our Ideal State in 2030,” by Solving Social Issues and Improving Corporate Value

We set “Our Ideal State in 2030” to become “a company on a constant quest for a better future by supporting people’s lives with ‘materials’ and ‘environment.’” We aim to solve social issues and enhance our corporate value by leveraging and refining the strengths of our five businesses.

For example, one of the strengths of our Ferroalloys business is our ability to provide a stable supply of high-quality manganese ferroalloys, backed by our technological capabilities that enable us to remain highly competitive although the cost of electricity is high in Japan. To achieve further sustainable growth, the Tokushima Plant is in the process of extending the interval for periodic repairs of electric furnaces from 1 year to 1.5 years to improve productivity and cost efficiency. We are also working to optimize inventory management of raw materials to strengthen our financial position. In overseas business, we have invested in Pertama Ferroalloys Sdn. Bhd. in Malaysia, which manufactures green ferroalloys based on hydroelectric power generation, and are working to strengthen competitiveness by building a manufacturing model with low environmental impact to reduce CO<sub>2</sub> emissions and improving productivity.

In the Functional Materials business, we offer unique products in niche areas such as electronic components and battery materials, and supply rare materials that only

our company handles in Japan, including boron oxide, ferroboration, and manganese sulfate. We are also responding to the growing demand for zirconium oxide and boron oxide for use in electronic components, and are expanding into the EV and AI fields. In the Incineration Ash Recycling business, we have realized the perfect recycling of incinerated ash by utilizing one of the largest treatment capacities in Japan at 130,000 tons per year. With the shortage of landfill sites for incineration ash becoming increasingly severe, we have announced plans to increase the number of melting furnaces from the current four to seven (with a total treatment capacity of 220,000 tons per year) by 2030, and we plan to make an investment for the fifth furnace by the end of 2025. In the Aqua Solutions business, we will focus on expanding our business domain as well as responding to the needs of society by utilizing the technology and expertise in the wastewater treatment equipment and the pure water production system that we have cultivated over the years. In the Electric Power business, we have obtained certification for the Feed-in Tariff (FIT) system for renewable energy at the Horomangawa River Hydroelectric Power Plant in Hokkaido to promote a stable supply of green electricity, and we are also contributing to CO<sub>2</sub> reduction at the Koriyama Plant through the use of non-fossil certificates.

## Message from the President & CEO

### Achieving Sustainable Growth by R&D and Synergies Between Businesses

In the 9<sup>th</sup> Medium-Term Business Plan, we plan to allocate 3.2 billion yen to R&D over four years. This amount is 1.5 times larger than that in the 8<sup>th</sup> Medium-Term Business Plan. In order to achieve results with speed, in addition to strengthening our internal structure, we are promoting open innovation through collaboration with universities, research institutes, and venture companies to take on a diverse range of themes.

Our main research areas are “materials” and “carbon neutrality.” In the area of “materials,” recently published results include vanadium dioxide with excellent resistance to temperature changes for use in satellites, electromagnetic wave absorbing materials for the 6G era developed in collaboration with the University of Tokyo, and materials for increasing the hardness of stainless steel. We will continue to develop products that contribute to improving the performance of electronic and battery materials. In the carbon neutrality research

area, we are developing technology to realize the ferroalloy manufacturing process using wood cokes, instead of coal cokes, in order to reduce CO<sub>2</sub> emissions, and we aim to establish a manganese ferroalloy manufacturing process that does not emit CO<sub>2</sub> at all.

In order to apply these research results to existing businesses and new areas, we are taking the following three strategic initiatives. (1) Thoroughly improve productivity and reduce costs, (2) Advertise the added value of unique products and sell them at appropriate prices, and (3) Create new businesses and utilize M&A. With regard to new business creation, we have invested in Galdieria, Co., Ltd., a venture company that possesses algae technology that adsorbs gold, palladium and other precious metals, and will work to build a new business by linking it with our wastewater treatment network.

allows employees to focus on high value-added work. In the Business DX, we will optimize the allocation of management resources by visualizing the entire supply chain to create new businesses.

In addition, we are training employees to have 40 data scientists by 2026 and 80 by 2030, and are steadily

strengthening the foundations for promoting DX. With regard to GX, we have set a target of reducing CO<sub>2</sub> emissions by more than 45% from the level in 2015 by 2030, and are actively promoting energy conservation measures and accelerating research for adopting wood cokes.

### Aiming for ROE of 10% or Higher and Maximizing Corporate Value with Financial and Non-Financial Initiatives

Our financial targets are to achieve ROE of 10%, net sales of 110 billion yen or larger, and ordinary profit of 13 billion yen or larger by 2030. We are making efforts to improve ROE from both the perspectives of revenue growth and capital efficiency improvement. On the earnings side, we will invest a total of 45 to 50 billion yen as growth investment to increase production capacity and accelerate DX and GX. In terms of capital efficiency, we will raise D/E ratio to an appropriate level and increase equity capital efficiency through financial leverage and inventory optimization. To this end, we will increase capital efficiency and improve shareholder value through the enhancement of non-current assets, which are the source of profits, and proactive shareholder returns.

To return profits to investors, we formulated a new shareholder return policy in August 2024. It defines the underlying profit as the dividend standard, with a dividend payout ratio of 40% and a minimum annual dividend per share of 10 yen. This is because we have implemented structural reforms in the Ferroalloys business, which had experienced large profit fluctuations, such as reviewing and renovating production sites and adopting a price formula, and businesses other than Ferroalloys, such as Functional Materials and Incineration Ash Recycling, have steadily grown and improved profit stably, enabling us to provide stable and proactive profit returns.

In order to gain the trust and sympathy of the capital market for our efforts, we will continue to further enhance our investor relations activities and expand opportunities for dialogue not only with institutional investors, but also with individual shareholders through briefings as well as individual investors through events, thereby further deepening our dialogue with our stakeholders.

We have built a relationship of trust with our various stakeholders over the 100 years since our founding, and this is what has made us what we are today. We will continue to make steady progress as a corporate group that can meet your expectations, and we would appreciate your continued understanding and support of Nippon Denko.

### Accelerating Growth Through DX and GX While Having Human Capital as the Core of Growth Driver

Human resources are the most important foundation for promoting our business. As the working population continues to decline, our group is working on human capital management based on the themes: “talent acquisition,” “increasing human added value,” and “strengthening the foundation of human capital management” in order to realize our medium- to long-term business strategy. In addition to hiring human resources who can play an active role inside and outside Japan, we are maximizing the value of existing employees by bringing out their abilities through education and training.

In terms of recruitment, we have adopted a career-track system for a specific area to accommodate diverse work styles. In addition, we are popularizing our recognition and enhancing recruitment capabilities through radio commercials targeting local high school students near our plants, a support system for scholarship refunds, and a referral hiring system.

In human resource development, in addition to supporting skill development through various programs, we prioritize fostering a mindset. As part of this effort, I myself hold group discussions with managers on an ongoing basis to exchange and share beliefs on management mutually. I encourage employees to take

on challenges by quoting my own motto, “The opposite of success is not failure, but doing nothing,” or using profound remarks from the writer Yasushi Inoue, such as “Those who work hard talk about hope, and those who slack off talk about frustration.” We have also positioned the promotion of DE&I as an important theme, and have started training programs for female leaders to promote human capital management toward “Our Ideal State in 2030.”

Meanwhile, we are also promoting DX and GX, the pillars of sustainability management, across the board, and in the DX area, we are developing measures in line with the roadmap in the three areas of “Production DX,” “Operation DX,” and “Business DX.” In the Production DX, as the first step toward the adoption of a smart factory, we have been visualizing production information for the Tokushima Plant’s functional materials and the Koriyama Plant since 2023 to improve production and operational efficiency. In 2025, we plan to install this system in the ferroalloy manufacturing line at the Tokushima Plant and the incineration ash recycling facility at the Kashima Plant to promote labor saving, automation, and improved safety. In the Business DX, we will adopt a new personnel management system and digitalize business processes to create a system that

