









## **NIPPON SANSO HOLDINGS**



**INTEGRATED REPORT** 2025















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#### **Editorial Policy**

Integrated Report 2025 provides insight into the NSHD Group's growth by explaining how the Group is utilizing strengths cultivated since its founding to steadily implement strategies in the focused fields of the medium-term management plan NS Vision 2026, and by setting out the achievements of these efforts as well as the tasks that remain. At this juncture—115 years after our founding and five years after becoming a holding company—we hope this report conveys a sense of our present and future as we continue growing in line with the plan. In compiling this report, we have endeavored to clearly communicate our sustainable value creation from both financial and non-financial perspectives pursuant to the IFRS Foundation's Integrated Reporting Framework and the Ministry of Economy, Trade and Industry's Guidance for Collaborative Value Creation.

#### Reporting Boundary

#### Reporting organizations:

Nippon Sanso Holdings Corporation and its Group companies

#### Reporting period:

From April 1, 2024, to March 31, 2025 (Certain details on activities after March 2025 included)

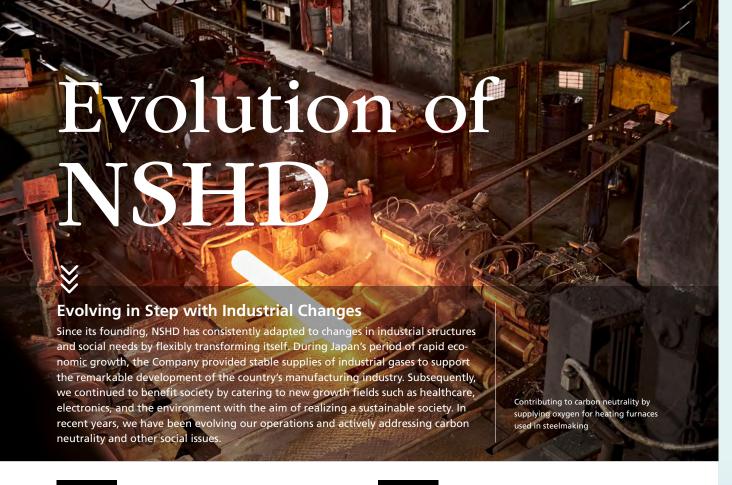
#### **Expression Standard**

- Formal names (e.g., Nippon Sanso Holdings Corporation):
   Used primarily in the formal titles of corporate officers,
   executive officers, and employees
- Truncated formal names (e.g., Nippon Sanso Holdings):
   In principle, used as the basic way of expressing company names
- Acronyms (e.g., NSHD): Used as a simple expression to allow the reader to identify a particular company in the context (e.g., in dialogue)
- Generic expressions (e.g., the Company, the Group):
   Capitalized to describe Nippon Sanso Holdings or the
   Nippon Sanso Holdings Group, and used with lowercase
   (e.g., the company, the group) when describing segment operating companies

#### Cove

The photographs on the cover show Group employees—who, as "The Gas Professionals," support various fields around the world, including steel, automobiles, semiconductors, aquaculture, food, and medicine—as well as some of the fields' end users. The cover expresses how industrial gases, though invisible, are essential to daily life and indispensable in shaping a better future.





#### Example 1

## Reducing CO<sub>2</sub> Emissions from Steelmaking by Improving Combustion Efficiency

The most representative example of the application of industrial gases is the use of oxygen in the steel industry. The manufacture of steel comprises two main processes: ironmaking and steelmaking. In ironmaking, oxygen improves combustion efficiency, while in steelmaking oxygen removes impurities. The oxygen steelmaking process was one reason why steel production increased

dramatically during Japan's period of rapid economic growth in the 1960s. Today, rather than contributing to production volume, this process plays a significant role in reducing fuel consumption and CO<sub>2</sub> emissions by improving combustion efficiency.



Shunan Plant, established in 1964 as an industry pioneer (now Shunan Sanso Co., Ltd.)

#### Example 2

## Making an Early Foray into the Electronics Business

We launched the semiconductor-related gases business in the 1970s. Responding swiftly to the adoption of silicon in Japan's electronics industry, we established a position in the electronics market. Electronic material gases are essential for semiconductor manufacturing processes such as silicon wafer film deposition, etching, and cleaning and are now used in a variety of electronics

fields. NSHD's Total Electronics solutions, which include related equipment and on-site services, have established a favorable reputation.



Total Gas Centers support customers with total solutions

Founding

#### 1910

• Establishment of Nippon Sanso Ltd.

#### 1935

 Completion of first Japanese-built air separation unit

#### 1964

• Establishment of Shunan Plant, Japan's first on-site plant system

#### → 1970s

Development of semiconductor-related gas business

#### 1978

 Commercialized the world's first stainless steel vacuum-insulated bottles

#### 1982

• Establishment of National Oxygen Pte. Ltd. in Singapore

#### 1983

 Acquisition of Matheson Gas Products, Inc. in the United States

#### 1989

 Acquisition of the Thermos business in the United Kingdom, the United States, and Canada

#### **Evolution of NSHD**

## **Expanding Businesses Overseas** Through M&As

NSHD has actively pursued M&As with the aim of strengthening its competitiveness in global markets and expanding its business fields. In particular, through acquisitions in Europe, the United States, and Asia, the Company has built a global network for industrial gases and established a service delivery system tailored to regional needs. In the post-merger integration phase, we emphasize building trust with local management teams and employees and conduct management in a flexible manner that is based on respect for the strengths and culture of each region. This approach enables the creation of synergies and early stabilization of performance, thereby making M&As a driver of growth throughout the entire Group.



Operating company in the United States Matheson Tri-Gas, Inc.



## **Evolving Through the Introduction of a Holding Company Structure**

Our transition to a holding company structure in October 2020 heightened the flexibility and speed of business management. Having a structure based on the four global regions of Japan, the United States, Europe, and Asia and Oceania, and overseeing a diverse range of business fields that includes the consumer brand THERMOS, enables growth strategies and decision-making that leverage regional characteristics. This structure has strengthened the foundation for efforts aimed at sustainable growth and enhancing corporate value in a competitive global environment and helped realize Group management that is more agile and strategic.

#### NSHD head office

#### 1999

Establishment of Matheson Tri-Gas, Inc.

#### 2004

 Merger of Nippon Sanso Ltd. and Taiyo Toyo Sanso Co., Ltd., and establishment of Taiyo Nippon Sanso Corporation

#### 2008

• Establishment of Dalian Changxing Island Taiyo Nippon Sanso Gas Co., Ltd. in China

#### 2014

 Conversion into a consolidated subsidiary of Mitsubishi Chemical Holdings Corporation

#### 2016

 Acquisition of part of industrial gases business and related assets in the United States from French industrial gases supplier Air Liquide S.A.

#### 2018

 Acquisition of part of European industrial gases business of Praxair, Inc., a U.S. industrial gases supplier

#### - 2020

- Introduction of a holding company structure
- Establishment of Think Globally.
   Act Locally.

Utilizing Advantages to Provide Diverse Value Since Our Founding

## Advantages Developed During Our Evolution



1

#### Diverse Human Resources—The Gas Professionals—

Our team, across the four global regions, is highly attuned to customer needs and possesses the application expertise and technological capabilities necessary to address customer challenges.

They are professionals operating worldwide, harnessing their skills under our shared Group Philosophy and Vision to create new business opportunities.

Evolving
Talent Strategies

≫P.46

7

#### **Operational Excellence**

Curbing costs while delivering high-quality products at appropriate prices is crucial in any business. With this in mind, NSHD has established a system for identifying and gathering best practices that particular regions have developed so that the practices can then be shared with other regions around the world. In this way, by pursuing Groupwide Operational Excellence initiatives that encompass technology departments, management departments, and the Thermos business, we aim to maximize our collective organizational knowledge.

Pursuing
Operational
Excellence

≫P.28



#### Think Globally. Act Locally.

Effective post-merger management is crucial for the global growth of the industrial gases business. NSHD has expanded internationally by respecting the initiatives of its operating companies, which maintain strong connections to their local communities.

NSHD plays a central role in the four global regions for industrial gases and the Thermos business, focusing on accelerating decision-making and clearly defining responsibilities for business execution.

Strategy by Segment

≫ P.70

4

#### **Total Electronics and Other Solutions**

In the industrial gases field, product differentiation can be challenging. However, NSHD has created unique value by leveraging the Group's comprehensive capabilities to provide flexible, customized solutions and advanced technological expertise tailored to meet customers' needs.

We will continue to develop competitive solutions and technological innovations, including those of Thermos, by leveraging our strengths in all future business activities.

**Total Electronics** 

> P.26

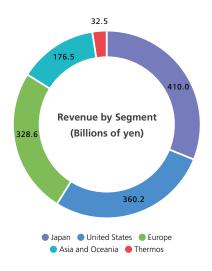
Group R&D

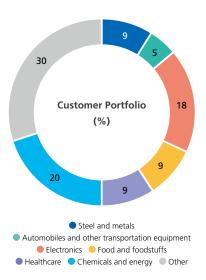
≫ P.52



#### **Our Current Position**

#### **NSHD** by the Numbers (FYE2025)





**Core Operating Profit** 

¥189.1 billion

**Overseas Revenue Ratio** 

**67.2**%

**Industrial Gases Global Market Share Ranking** 

 $\mathbf{4}_{\mathsf{th}}$ 

**Countries and Regions of Operation** 

31

\* This figure reflects the Company's withdrawal from Myanmar and entry into New Zealand in FYE2026.

**Consolidated Number of Employees** 

19,754





#### **Industrial Gases Business**

We manufacture and supply various gases that are essential for a wide range of industries, including the steel, chemicals, automotive, and food industries. We have continued to provide safe, reliable supplies for many years, contributing to improved customer productivity and reduced environmental impact. We are truly a pillar of industrial infrastructure.

We also operate a medical business, which supplies medical institutions with medical gases such as oxygen, nitrogen, and carbon dioxide (dry ice) as well as related medical equipment.



#### **Electronics Business**

We provide high-purity gases used in semiconductor and display manufacturing processes, semiconductor material gases, and precision gas supply systems. The business has earned the trust of numerous customers by leveraging its advanced quality control and technological development capabilities to serve as a partner that supports leading-edge operations in the global electronics industry.



#### **Thermos Business**

We market products under the THERMOS brand, known as the pioneer of vacuum-insulated bottles. The business offers products with advanced heat and cold retention performance for use in a wide range of settings, including homes, outdoor activities, and business environments. Thus, we continue to contribute to the comfortable lifestyles of people around the world.

## Our Philosophy and Vision

**Group Philosophy** 

Proactive. Innovative. Collaborative. Making life better through gas technology.

## The Gas Professionals

**Group Vision** 

We aim to create social value through innovative gas solutions that increase industrial productivity, enhance human well-being and contribute to a more sustainable future.



#### NIPPON SANSO HOLDINGS GROUP

(Japan)
Taiyo Nippon Sanso
Corporation Group

[United States]
Matheson Tri-Gas, Inc. Group

(Europe)
Nippon Gases Euro-Holdings,
S.L.U. Group

(Asia and Oceania)
Asia and Oceania Region
Group Companies

(Thermos)
Thermos K.K. Group



NSHD has built strong relationships of trust with stakeholders by remaining mindful of its role as industrial infrastructure and steadily creating synergies through M&As and other strategic initiatives.

Over the past year, we achieved steady progress in business development and organizational reform.

The entire NSHD Group stands ready for a major stride forward.

Toshihiko Hamada

President CEO

#### **NSHD's Present:**

#### 1. Trump 2.0 in Early Summer 2025

Studying the past is useful when facing a challenging situation.

In early summer 2025, the NSHD Group began the final year of its current medium-term management plan. As a result of the policies of the new U.S. administration, the global economy is in a state of turmoil. From our viewpoint as a company that takes pride in its provision of industrial infrastructure, I must admit that the challenges we face are unprecedented.

A safety net is provided by the Group's production at the point of consumption. In other words, since we manufacture locally and provide products to local customers, the impact of tariffs is limited. That said, no matter which region we operate in, we must adapt to our customers' production plans. Currently, we communicate almost daily with operating companies, making decisions on investments and other management matters as appropriate in light of all available information. If this uncertain situation persists, however, we may no longer be able to confirm clear business plans with our customers.

Although I sometimes remark that dealing with the current conditions is problematic, I actually feel the same as always. In the present situation, a corporate leader should calmly absorb the various information and opinions that emerge in the course of day-to-day management. If my expression or attitude showed anger, no one would speak frankly to me. For this reason, I try to remain unperturbed in all situations.

Additionally, I have spent a lot of time studying the past. The resulting insights are particularly useful right now. I reflect on what I have seen and heard since joining the Company, and I read through old Company records and documents. In most cases, I find something that, when viewed in the context of a particular era's social situation, makes me think, "Ah, I see." These discoveries offer clues on how to overcome difficult situations. At the same time, acquiring this kind of insight into our corporate history is strangely calming.

#### **NSHD's Present:**

#### 2. M&As in Europe and Australia

We are implementing strategic measures to expand high-potential operations in Australia and in the field of plant engineering.

Four years ago, I became president CEO. Since then, we have steadily moved forward one step at a time while studying the past. As part of this process, in FYE2025 NSHD made marked progress in firmly establishing foundations for growth by advancing several acquisition plans and concluding agreements. Nippon Gases Euro-Holding S.L.U. (NGE), which manages European operations acquired from Praxair, Inc., took a further step forward by expanding its business through new M&As. Thus, in terms of establishing foundations, it was an excellent year for the Group.

Specifically, in October 2024 NGE acquired Polaris S.r.l., a plant engineering company based in Italy. The primary aim of this M&A is to enable the global utilization of air separation unit manufacturing technology previously only available in Japan. As well as having an extensive track record of deliveries not only in Europe but also globally, Polaris specializes in technologies for small- and medium sized equipment.

Given the trend toward carbon neutrality, we anticipate higher demand not only for operations that supply large steel mills and petrochemical plants but also for operations that efficiently supply customers who have small- and medium-sized plants. Therefore, we believe that the true value of NGE's acquisition of Polaris will soon become evident.

In December of the same year, NGE also concluded an agreement to acquire Esteve Teijin Healthcare S.L., a home healthcare and respiratory services company headquartered in Spain. The acquisition is currently under review by the Spanish authorities.



Coregas Group

In Australia, we have acquired part of the LPG sales business of Wesfarmers Kleenheat Gas Pty Ltd. We concluded the agreement for this acquisition in May 2024. In December of the same year, we also concluded an agreement to acquire the Coregas Group, which operates industrial gas businesses in Australia and New Zealand.

Personally, I feel that Australia has tremendous potential in the long term. Given its vast land area, abundant mineral resources, and low level of geopolitical risk, the country will surely develop more manufacturing, a sector that has yet to become a major presence in the country's economy. While it remains uncertain which specific manufacturing sectors will experience the most growth, I am confident that we can contribute to this development by providing industrial infrastructure. Last year's early strategic moves were in preparation for such contributions.



#### **NSHD's Present:**

## 3. Final Year of the Current Medium-Term Management Plan Results in the electronics business are encouraging, and we are focusing on Operational Excellence more than ever.

Launched in April 2022, the medium-term management plan NS Vision 2026 ends in March 2026. In the current fiscal year, we will use objective analysis of the measures taken under the plan as the basis for considering the next steps.



Looking back at the five focused fields set out in the current plan, overall we have successfully implemented Sustainability Management through measures such as reducing greenhouse gas emissions by providing environmentally friendly products. On the other hand, we are still at the research stage with respect to

Exploring New Business toward Carbon Neutrality. What kind of carbon-neutral businesses balance social issue resolution with corporate profitability? Including such options as green hydrogen, which area is the most appropriate? Which option will contribute most to society while also benefiting the Company? At present, we are in the process of objectively considering these questions in light of each region's particular characteristics.

Our expansion in the Total Electronics field is progressing well thanks to a combination of the strong reputation that the NSHD Group's technologies have established among customers and the higher demand for semiconductor material gases that is likely to accompany the construction of several leading-edge semiconductor-related factories in Japan.

Looking ahead to the future of the electronics industry, Al is undoubtedly of great importance. Al's reliance on semiconductors with advanced processing capabilities is well known. Additionally, the number of data centers where companies centrally manage their IT infrastructure is on the rise, and demand for the semiconductors used in these centers is also expected to grow. The same is true of the automotive industry. High-performance semiconductors are essential for electric vehicles and plug-in hybrid vehicles.

The NSHD Group's strategy of pursuing Operational Excellence is aimed at globally exchanging information among Group companies on methods for increasing efficiency and improving quality while finding the best approach for each company. This is a strategy that we will continue long term, and much remains to be done. Currently, we are forming a project team that will be tasked with expediting the sharing of best practices within the Group.

Our pursuit of Operational Excellence is complemented by the advancement of DX Initiatives focused on new value creation because their initial goal is to promote the visualization and sharing of information. As I will explain later, among the five focused fields of the current plan, the advancement of DX Initiatives will be a central strategy of the next medium-term management plan.



#### **NSHD's Present:**

#### 4. Organizational Reform for Dramatic Progress

We are strengthening the holding company structure to optimize and increase the efficiency of investments and businesses.

The organizational reform and personnel changes of April 1, 2025, are important aspects of current developments within the NSHD Group. The most significant of these measures is the reorganization of the Group Corporate Planning Office. With the aim of strengthening functions for strategic planning, business management, and promotion of the Group's comprehensive capabilities, the Group Corporate Planning Office's business management and business promotion functions have been separated to establish two new offices.

Of these two new offices, the Group Business Management Office will adopt the standpoint of NSHD and oversee the operations of all four regions and conduct high-quality, efficient monitoring of management. Moreover, the new office will ensure the effectiveness of its monitoring by providing support for new projects. Since its establishment in 2020, NSHD has operated as a "small holding company," respecting the autonomy of operating companies. However, the steady expansion of these companies has made stronger governance necessary in certain areas.

Meanwhile the other new office, the Group Business Promotion Office, will promote global initiatives in areas that straddle operating companies, such as Total Electronics, Global Air Separation Unit Engineering, R&D, and Operational Excellence. For example, as a result of the acquisition of Polaris, which I mentioned earlier, we can now not only manufacture air separation units in Japan but also in Europe. The role of the Group Business Promotion Office is to liaise with the relevant operating companies to accurately evaluate which types of air separation unit can be built in which regions and then facilitate the advancement of projects.

As for personnel changes, we have established the new position of executive vice president with a view to formulating the next

medium-term management plan. At the same time, we have also established the position of chief information officer, who leads the preparation and execution of IT and digital technology strategies for the entire Group. This officer will spearhead initiatives focused on optimizing systems and realizing Al-enabled efficiency improvements throughout the Group. In June 2025, Scott Kallman, chairman and CEO of Matheson Tri-Gas, Inc., in the United States, resigned as a director of NSHD. However, he will continue as chairman and CEO of Matheson. He resigned because he wished to focus on his current duties in the United States, where the economic situation is unpredictable. On the other hand, Naoto Yabe, an executive officer of Mitsubishi Chemical Corporation, has been appointed as a director. As Mr. Yabe has been involved in formulating management strategies for many years, we expect that he will contribute significantly to the preparation of both the new medium-term management plan and our business strategies.

#### **NSHD's Past:**

#### 1. Growth Drivers and the Reason for Successful M&As

The core business that we have focused on since our founding will also shape our future.

The NSHD Group was founded 115 years ago. Making industrial gases our core business is a major reason for our significant accumulated growth. Currently, the NSHD Group plays indispensable roles in a whole range of different industries, including the



At a Thermos product factory

steel, automotive, semiconductor, construction, chemicals, medical, and food industries. In all of the aforementioned fields, our businesses are based on, or related to, industrial gases. Although the Thermos

business is not in the industrial gases field, basically the same technologies are used to manufacture gas tanks and Thermos vacuum-insulated bottles.

The key forms of value provided by our industrial gases business are an ability to reliably manufacture and supply products and an ability to provide comprehensive maintenance with rigorous safety as a major premise. We must ensure uninterrupted supply and avoid giving customers any reason to worry about potential disrruptions. Reliability is especially critical for medical gases. For example, running out of cooling gases in food factories or running out of nitrogen gas that maintains inertness in advanced semiconductor factories would render all items in production unusable. How can we ensure that customers are able to use our products and services with peace of mind? What kind of systems are needed, and where should our production bases be located? Over the past 115 years, we have carefully prepared plans based on these considerations before providing products and services to our customers. This approach has led to the NSHD Group's current position. Given our track record, we have earned the right to refer to ourselves as "industrial infrastructure."

Our M&As also reflect a policy of maintaining industrial gases at the core of our business portfolio. Investors give high marks to NSHD's post-merger integration capabilities, which are seen as a factor contributing to our growth. Simply put, the M&As have been successful because they have maintained our focus on industrial gases.

The foundation of past M&A activities has always been the understanding we have shown toward and the relationships of trust we have built with acquired companies' management teams, who generally have many years of experience in industrial gas-related businesses. Without this approach, we would have struggled to get along not only with the employees of acquired companies but also with the management teams who agreed to the acquisitions. Post-merger integration is an area to which we have devoted a great deal of effort, and we believe this has been a major factor in the successful development of businesses and the achievement of corporate growth.



#### **NSHD's Past:**

#### 2. Changes After Becoming a Holding Company Globally competent personnel have helped us understand the meaning of a holding company.

The NSHD Group's operating companies are engaged in businesses rooted in their respective regions. These companies must therefore recognize and foster the types of personnel that underpin their businesses. Meanwhile, a holding company needs personnel with a deep understanding of all operating companies. In other words, individuals with a global mindset and knowledge are essential.

Five years have passed since NSHD was established. Initially, our Japanese employees, and perhaps some of our non-Japanese employees, did not fully understood what a holding company entailed. Further, the fact that non-Japanese officers joined our domestic corporate organization had a significant impact on officers who had only worked in Japan. However, this change in our organization was actually the fastest way to gain an understanding of what being a holding company means. Approaches that Japanese companies tend to view as common sense are no longer always accepted as such at NSHD.

For example, NSHD CFO Alan David Draper has enormous influence on operating companies. His global mindset, which is rare among Japanese personnel, greatly reduced the distance between our four mainstay regions. I believe this was a major turning point for us.

Currently, the subsidiary that manages the Group's businesses in Southeast Asia and India has also become a holding company, with a Portuguese national serving as its president. In this way, the active promotion of diversity and inclusion and the establishment of a structure that assigns diverse talent to appropriate roles is crucial for the entire NSHD Group. However, there is still room for improvement. I believe we can extend our diversity-driven approach further.

Therefore, when asked about the kind of personnel that the NSHD Group will require in the future, my answer is individuals who have acquired experience in local businesses and who have an ability

to view businesses from a global perspective. With these two attributes as premises, our personnel must also be motivated to assimilate more knowledge about their particular fields of work, such as legal affairs, engineering, and sales.

#### NSHD's Future:

#### 1. The Key to the Next Medium-Term Management Plan Advancing DX will enable the important process of learning from the past.

At this juncture, I cannot yet clearly set forth the core strategies of the next medium-term management plan. However, as I mentioned earlier, DX will be one of our key strategies. While the ultimate goal of DX is the transformation of corporate culture, the first step is to make information visible and shareable. Without fully leveraging digital technologies in the processing and sharing of data, we cannot enhance operational efficiency or accelerate the generation of new ideas.

I try to learn from the past, as I mentioned at the beginning of this message. NSHD's core industrial gases business, which we should always refer back to, has a great deal of data that employees should study. We owe our current technologies, products, and markets to the past. Innovation never arises from absolutely nothing. It is born from the proper use of data that has been accumulated to form an institutional memory. Accordingly, the realization of DX that maximizes digitalization and fully utilizes the resulting data is a mission that we certainly must accomplish.

While DX is now inseparable from Al, I must admit that we have yet to fully utilize Al Companywide. For example, a great deal of scope remains for research on using Al to design air separation units and to enhance their operational efficiency and performance.

However, the NSHD Group is engaged in promising Al-related initiatives. For the past seven to eight years, in Japan we have been providing a system that automatically supplies specialty materials gases.

We envision using AI to advance this system so that it is possible to automatically manage gas inventories and appropriate usage volumes and thereby coordinate efficiently with external manufacturers and suppliers. At the same time, as these processes are recorded as detailed data and made visible, learning from the past and using the acquired insights as a guide for action will become achievable in actual operations. In the future, I believe that we will be able to increase the efficiency with which we improve air separation units and other types of equipment in our lineup.

#### NSHD's Future:

#### 2. Requirements for Ranking Among the Global Majors

We will provide electronics factories worldwide with all of our technologies and expertise.

Aiming to join the ranks of the global majors is a natural enough goal. But what do we need to compete with them? Given the current gap between us and the global majors, building solid cash flows and achieving a higher degree of financial strength are critical. We must identify areas where we can win and use significant amounts of capital to develop our businesses. The keys are where and how to use this capital. If we use it indiscriminately, we will not be able to win against the global majors.

In Japan, Taiyo Nippon Sanso Corporation is a truly strong company in the field of semi-conductor material gases and related construction. Currently, the company uses air separation units and nitrogen gas generators and directly supplies nitrogen to customers' factories in Japan. By enabling the global marketing of Taiyo Nippon Sanso's strengths, the NSHD Group will transform the competitive landscape. In addition to semiconductor



An example of exhaust gas abatement system for semiconductor material gases

material gases and related equipment and construction and the aforementioned automatic supply system, we will provide electronics factories worldwide with all of our expertise in air separation units and nitrogen gas generators.

The first step toward challenging the global majors is to the global rollout of solutions in the electronics field and beyond that combine the value of industrial gases with systems for the facilitation of usage methods. By viewing the world as a whole at certain junctures, we will be able to identify the areas where we excel. Whether these are geographical areas or industrial areas, gaining recognition of our superiority in certain areas is satisfying and may be leveraged to make future business development much easier. As it is well suited to such a strategy, the electronics business in Japan has considerable scope for global expansion.

To achieve this expansion, we must establish robust cash flows, which is why we had to reorganize the Group Corporate Planning Office, as mentioned earlier. Established in April 2025, the Group Business Management Office will further increase the robustness of cash flows through direct engagement with operating companies from the initial project planning stages and through in-depth involvement in subsequent monitoring.

#### NSHD's Future:

## 3. Establishment of Stronger Relationships of Trust The NSHD Group will further entrepel its reputs

The NSHD Group will further entrench its reputation for reliability.

Even if the NSHD Group builds the solid base needed to actively advance businesses globally in the way outlined earlier and as a result gains recognition for excelling in certain areas, this brand reputation would be meaningless if the Group could not ensure reliable supplies or maintain high levels of quality. Our operating companies must sustain their current levels of performance while

continuing efforts to improve even further.

Customers have to be confident that no matter where in the world they place an order the NSHD Group can be relied upon to deliver.

Establishing and maintaining such trust is crucial.

The criteria for evaluating companies are diverse. In the current era, the efforts of companies to address environmental issues also affect stock prices. In recognition of its climate change initiatives, in 2024 NSHD was selected as an "A List" company by the CDP,\* which promotes the



The logo of the CDP's 2024 A List, recognizing companies that score highest for climate change initiatives

disclosure of environmental information. By not only reporting our efforts in our integrated report but also having them properly evaluated by third parties, we assure all stakeholders that we are a company that can continue benefiting society.

Additionally, Group member Thermos K.K. is a high-profile company with a favorable reputation. Companies with such attributes are rare in the industrial gases industry, and having a company like Thermos form part of the Group is a great source of pride.

I believe that if the brand name "Nippon Sanso Holdings" is also able to acquire similar kudos and become a byword for reliability, and if we devote constant efforts to furthering businesses, we will be able to sustainably provide society with better value and move toward the future.

\* A nonprofit organization that operates the independent system for environmental information disclosure. The CDP's system is used by many companies to manage their environmental impact.

September 2025

- Tostita floreda

We remain focused on moving forward, leveraging the strong COI profit and margins we have consistently delivered over the years to fuel sustained growth and long-term success.

#### **Alan David Draper**

Senior Executive Officer
Group Finance and Accounting Office, and CFO



#### Financial Performance FYE 2025

Nippon Sanso Holdings (NSHD) delivered another excellent financial year.

Here are some of the team's key financial achievements compared to the previous year:

- Revenue reached ¥1.308T, an increase of 4.2% or 1.4% excluding currency
- Core Operating Income (COI) increased +13.9% from ¥165.9B to ¥189.1B
- Operating income decreased -3.6% from ¥172.0B to ¥165.9B
- Excluding H<sub>2</sub> Impairment: Operating income increased +11.4% from ¥172.0B to ¥191.7B\*
- Net Income attributable to owners of the parent decreased -6.7% to ¥98.7B
- Excluding H<sub>2</sub> Impairment: Net Income attributable to owners of the parent increased +11.5% to ¥118.1B\*
- Operating Cash flows increased from ¥215.9B to ¥235.1B, an increase of +8.9%
- Adjusted net D/E ratio reduced from 0.74 times to 0.71 times
- Dividend increased for the 10th consecutive year to ¥51 a CAGR over 14%
- ROCE after Tax increased 50bps from 6.7% to 7.2%
- EBITDA margins climbed to 23.3%, up 110bps from prior year
- \* As disclosed in the annual filing and as reported in quarterly and year end reports: impairment recorded in a hydrogen construction project where the end customer filed for bankruptcy protection during the construction period.

This year's performance was a continuation from actions that we began several years ago to improve the quality and quantity of earnings across the NSHD Group. The main drivers of the positive performance are effective price management, dissemination and implementation of best practices, cost reduction management, portfolio optimization, and productivity initiatives. In addition, we

have recently restructured the Corporate Planning Department which now has a department dedicated to the promotion of global initiatives across all operating companies. This focus will enable and provide even more resources to support the operational excellence and productivity initiatives across the group.

Our team continues to exceed many of the financial KPls communicated as important metrics in our MTP. As of March 31, 2025, our team is expected to exceed three goals as compared to the final year of our MTP March 31, 2026 (Revenue, Core operating income, Return on capital employed). The remaining two goals Adjusted DE ratio and EBITDA are also progressing smoothly. NSHD's Adjusted DE ratio is 0.71 times for the year ended March 31, 2025, which is only 1bps away from achieving our target. This is despite the refinancing ¥175B of hybrid debt over the past two years which negatively impacts the DE ratio. In addition, Group EBITDA sits at 23.3%, which is 70bps short of our target.

However, given the two acquisitions that we announced in December 2024 that were not contemplated or envisioned when the MTP was prepared, these acquisitions will be a headwind in this fiscal year's financial metrics. More to come on this topic when I cover the FYE Mar 2026 budget.

Additionally, adjusting FYE 2025 Actuals with the MTP currencies and comparing them to the 2026 MTP targets, would still result in sales favorability of 10.5% and COI favorability of 16.7% versus the final year of the NS Vision 2026. Consequently, our FYE 2025 revenue of ¥1.308 trillion and core operating income of ¥189.1 billion surpasses our MTP March 2026 targets on both a constant currency-adjusted basis and reported basis.

#### FYE 2026 Budget

As we begin FYE 2026, there are more economic and geopolitical challenges than in the past. Our management team has demonstrated its ability to grow and enhance profitability in difficult times.

Due to the strengthening JPY, it is important to review our main financial metrics on both a constant currency and on a reported currency basis. Therefore, on a constant currency basis, we are aiming for revenue growth of 1.6% and a core operating income growth of 4.3% in FYE 2026. We expect the profit growth to be supported by modest price activities, slightly positive to flat volumes, continued portfolio optimization, and a steadfast focus on cost reduction and productivity initiatives. On a reported basis, we expect revenue to be negative -1.4% and COI to be slightly positive at +1.0%. Our currency assumptions for FYE Mar 2026 are USD to ¥141 and EUR to ¥162.

As previously noted, our budget for the year includes two pending acquisitions. We anticipate finalizing the Australian industrial gas acquisition by July 1, 2025, and project the closure of the Spanish home care business acquisition by January 1, 2026. Both transactions, announced in December 2024, remain subject to antitrust and regulatory approvals in their respective regions.

The acquisitions impact our Adjusted DE and ROCE ratios, which are expected to be 0.77 times and 6.9%, respectively, in next year's budget. While this reflects a temporary decline, both transactions are fully debt-financed, meaning we will bear the full financing costs upfront while realizing only partial-year profits. If these acquisitions were excluded, our financial metrics would maintain their positive trajectory. However, I am confident that once they are fully integrated and operating under NSHD for a complete year, they will enhance all key financial indicators, reinforcing our overall growth strategy.

Working capital continues to be a key focus for the company. Integrating working capital as a component of incentive programs across the NSHD Group has proven highly effective, not only in educating teams on its significance but also in motivating them to enhance working capital management and strengthen operating cash flows. This initiative has fostered a better understanding of financial efficiency while driving meaningful improvements across the organization.

#### **Capital Structure**

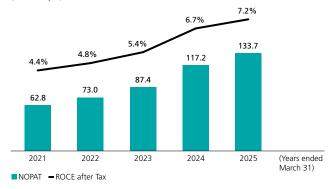
We remain committed to prioritizing the equity spread, the variance between return on capital and cost of capital, across the Group's operations. Our success in this area is reflected in the consistent improvement of our after-tax return on capital employed (ROCE), a key metric that has shown significant growth over the past five years, as illustrated in the attached chart. This progress underscores our ongoing efforts to enhance financial performance and create sustained value.

#### **ROCE after Tax and NOPAT**

ROCE after Tax (Return On Capital Employed after Tax)
NOPAT (Net Operating Profit After Tax)

Capital employed (Interest-bearing debt + Total equity attributable to owners of parent)

(Billions of yen)

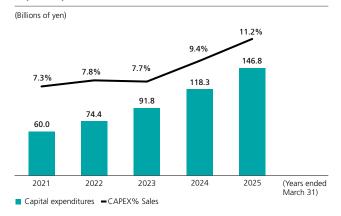


#### **Capital Investment:**

NSHD operates in a capital-intensive industry, requiring investments both to sustain daily operations and to drive growth, strengthening our core business and enhancing corporate value. Over the past five years, we have steadily increased our spending to ensure a robust pipeline of projects that will support our company's expansion over the medium and long term. As illustrated below, our capital spend continues to rise in absolute terms and show an upward trend when

measured as a percentage of sales, which is widely considered a benchmark in the industrial gas market.

#### **Capital Expenditures**



#### **Capital Prioritization:**

Capital projects are prioritized based on economic returns and risk assessment, with higher-yield and lower-risk investments taking precedence. Decisions follow a disciplined review process and are approved by authority levels set by the NSHD Board. Risk considerations have been enhanced, ensuring a balanced approach to value creation and long-term stability. Decentralized approvals enable swift greenlighting of smaller projects that meet local hurdle rates, while larger, higher-risk initiatives undergo a structured hierarchy of review to align with strategic objectives.

Twice a year, the NSHD Global Investment Committee reviews and updates hurdle rates by region to align with prevailing market conditions. The committee also assesses underperforming projects, identifying the root causes behind discrepancies in timing, capital allocation, and returns. Key insights from these evaluations are shared with leadership, helping to refine future decision-making and strengthen risk mitigation strategies.





Last year, we faced an impairment of nearly ¥26 billion due to the bankruptcy of a renewable diesel customer during the construction of our onsite hydrogen plant. This was a tough lesson, and it remains firmly in our minds. In response, we have strengthened our checks and balances, particularly for projects outside our core industrial gas business, to mitigate future risks. While this event was impactful, it does not define our capabilities or outlook. We remain focused on moving forward, leveraging the strong COI profit and margins we have consistently delivered over the years to drive continued success.

#### Dividends:

NSHD is committed to paying regular dividends in a stable and reliable manner. Since 2014, NSHD has increased its dividend annually and expects to maintain this track record. Our target dividend ratio is 20-30% of net income. While debt load (from acquisition related activity) and interest rates are high, we will be at the lower end of the dividend ratio scale. As debt is reduced, we aim to move up the scale.

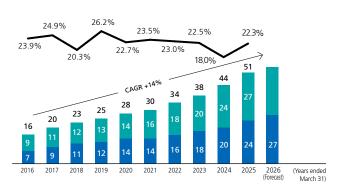
While our target dividend ratio is 20-30%, we recognize the need for flexibility in financial management, including capital investments, acquisitions, and debt reduction. Therefore, there may be temporary periods when the target ratio is not met, but over time, we anticipate the dividend ratio to trend within the targeted range.

#### **Debt Reduction:**

Our debt-to-equity (DE) ratio has long been a key external measure of financial health, and we remain focused on strengthening it to enhance our flexibility in financing and refinancing debt. In addition, we have begun utilizing EBITDA to Net Debt as another critical gauge of financial stability, aiming to further improve these ratios and align our performance with industry peers. As of March 31, 2025, our EBITDA to Net Debt stands at approximately 2.5 times, a notable reduction from over 5.0 just a few years ago, reflecting our continued commitment to disciplined financial management.

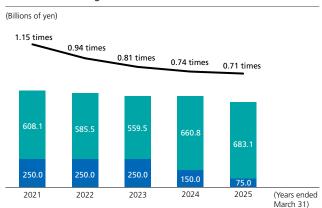
#### **Dividend Trend**

(Yen)



#### ■ Interim dividend ■ Year-end dividend ■ Dividend payout ratio

#### **Net Interest-Bearing Debts**



- \* An indicator of safety (financial soundness) calculated in consideration of this part due to 50% of the amount raised by HBF is permitted as "Equity" by rating agencies.
- Hybrid Finance (HBF) Net debt excluding HBF Adjusted net D/E ratio\*

#### **NS Vision 2026 Medium Term**

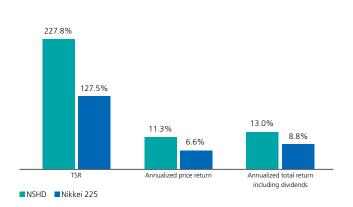
The key focus areas of NS Vision 2026 remain unchanged from the previous year, reinforcing our commitment to Sustainability Management, Exploring New Business Toward Carbon Neutrality, Total Electronics, Operational Excellence, and DX Initiatives. In alignment with our Operational Excellence and DX Initiatives, I am pleased to announce the establishment of a Global CIO position for the NSHD Group, effective Q1 FYE March 2026. The Global CIO's primary responsibility will be to design and implement a comprehensive global IT strategy and roadmap while also defining the organizational structure and governance. This role is expected to bring substantial benefits across the NSHD Group, with further insights to be shared in next year's integrated report.

#### **Closing Remarks**

Over the past year, NSHD Investor Relations (IR) team has conducted more than 500 investor meetings, an approximate 10% increase compared to the previous year. Our commitment remains focused on fostering open and transparent communication with the investment community. We continuously strive to enhance our IR activities, ensuring that investors receive the most relevant and valuable information.

Additionally, NSHD's stock has demonstrated strong performance over the past decade, delivering an accumulated total shareholder return of 227.8%. When broken down, our annualized price return stands at 11.3%, while the annualized total return including dividends is 13.0% per year. In comparison, the Nikkei 225 has achieved an accumulated total shareholder return of 127.5%, with an annualized price return of 6.6% and an annualized total return of 8.8%. Over the past 10 years, we have significantly outperformed the broader local stock market.

TSR 10 Years



# SPECIAL FEATURE

Here, we focus on FYE2025 and FYE2026 milestones— M&As and expansion of the electronics business.

Our Bases

## SPECIAL FEATURE

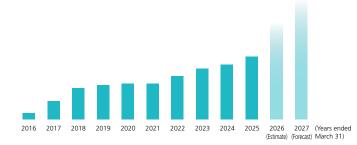
## Advancing Strategic M&A

Under its current medium-term management plan NS Vision 2026, Nippon Sanso Holdings is promoting strategic M&A initiatives aimed at strengthening its global business platform and achieving sustainable growth. We are leveraging M&A with the objective of entering growth markets, expanding our supply structure, and enhancing our presence in specific regions and fields, while also pursuing synergies with existing businesses to broaden the Group's business portfolio. Through these initiatives, we are working to achieve sustainable growth and enhance corporate value.

#### **NSHD's Journey in Australia**

Established a footprint on Australia's east coast through the acquisition of Renegade Gas 2016 Expanded our sales network across Australia by acquiring Supagas Holdings 2018 Both companies merged together to form Supagas Pty Ltd 2024 Strengthened our sales network in northern and western Australia by acquiring Kleenheat's LPG retail business 2025 Acquired the Coregas Group and integrated it with our nationwide sales network in Australia to further enhance competitiveness in the industrial gas business Entered New Zealand, establishing a solid industrial gas business foundation in the Oceania region

#### **Revenue Growth in the Australia Business**





Coregas Group

in the Oceania Region Coregas Group sites (entered in 2025)

Further expansion of industrial gas business in the Australian and New Zealand markets



#### Aiming for Strong Growth in the Oceania Business

Since acquiring Renegade Gas in 2015, NSHD has primarily expanded its business foundation in the Australian market through M&A. However, the companies we have acquired to date had grown from their roots in the LPG business, and we recognized the need to further strengthen the industrial gas business. Against this backdrop, we determined that the Coregas Group—a manufacturer of industrial gases founded in 1974 with an integrated business structure spanning production to supply, as well as strengths in medical gases and specialty gases—was the ideal acquisition target to drive further growth of the Group's Oceania business.



#### **Flexible Supply Structure that Meets Regional Needs**

The acquisition of the Coregas Group will strengthen our manufacturing and supply capabilities for industrial gases in the Oceania region. By integrating the Coregas Group's network with our existing nationwide sales and logistics networks in Australia, we aim to enhance both supply network density and operational efficiency to build a flexible supply structure able to meet the needs of the region. In addition, through coordinated initiatives with NSHD's globally integrated operations, we aim to generate synergies on multiple fronts while sustaining business growth and accelerating the evolution of our earnings base in Oceania.



#### **Enhancing Competitiveness and Establishing a Solid Earnings Base**

Following the acquisition of the Coregas Group, the NSHD Group is keen to make aggressive capital investments in order to accelerate growth in the Oceania region and reinforce production capacity and the business foundation. We are undertaking multiple projects, including the expansion of CO<sub>2</sub> production capacity and the construction of a new air separation unit scheduled for completion this fiscal year. We are also working to increase the efficiency of our bases and delivery networks, aiming to improve cost competitiveness through supply chain optimization, thereby enhancing our regional competitiveness and establishing a stable earnings base.











#### Advancing Strategic M&A: Coregas Group

**Coregas Group** 

Message from the Executive General Manager



**Alan Watkins** Executive General Manager Coregas Pty Ltd

## This is an exciting development for us. Considerable synergies are likely to emerge.

I would like to thank everyone for welcoming Coregas into the Nippon Sanso family.

This is a significant and exciting moment for all of us. We are delighted, on our 50th anniversary, to be joining both Nippon Sanso and Supagas and to be owned again by a major industrial gas company.

Our immediate focus is on becoming independent of our prior owner, primarily in support service areas. We have already commenced on synergy project discussions with Supagas with a strong list of opportunities. I see the future as combining the local strengths of Supagas and Coregas while benefiting from the technological prowess, global breadth, and mindset of Nippon Sanso. This will work to the benefit of our customers. Cybersecurity has been an early and positive area of cooperation with Nippon Sanso.

We look forward to learning more about and contributing to the Nippon Sanso journey.

NSC (Australia)

Message from the Managing Director



**Erol Arican**Managing Director
NSC (Australia) Pty Ltd

## There is great significance in the coming together of two companies from different market segments.

This is a major milestone for Nippon Sanso and a meaningful step forward for Supagas, as Coregas is an established and high-performing gas company with a strong footprint across Australia and New Zealand.

Coregas brings a long-standing presence across industrial, specialty, and medical gases, along with a strong footprint in both Australia and New Zealand. At the same time, Supagas, with its focus on delivering best-in-class service across LPG, industrial, medical, CO<sub>2</sub>, and specialty gases, remains proud of the value, agility, and customer-first mind-set it brings to the market. The two businesses serve different market segments with limited product overlap. This means customers across the Group will benefit from a broader, more competitive offering.

The combination of Coregas and Supagas provides strength in our people, capabilities, product mix, and an expanded footprint supporting the next phase of growth for both companies. These are exciting times for teams at both companies.

**NSHD** 

Message from Senior Executive Officer Tsutomu Moroishi



**Tsutomu Moroishi** Senior Executive Officer, In charge of Strategic Projects

## We fulfill regional needs and accelerate industrial gas growth in Oceania, realizing our decade-long vision.

Supported by abundant resources and steady population growth, the Oceania market is poised for sustained economic expansion. In this region, the NSHD Group has steadily strengthened its presence in the industrial gas sector through M&A. The acquisition of the Coregas Group had been envisioned since our purchase of Renegade Gas, a distributor in Australia, in 2015, realizing a vision nearly a decade in the making. By combining the Coregas Group's strength in industrial gas production and supply with Supagas' nationwide sales and logistics network in Australia, we have built a structure capable of meeting diverse local industry needs. In addition, we will leverage the engineering expertise and gas application know-how accumulated by NSHD through its global operations to unlock further growth potential. With an eye on future demand, including a decarbonized society, we will continue to foster new value through co-creation with local customers and partners, working together to shape the future of industry and society across the Oceania region.













SPECIAL FEATURE

Advancing Strategic M&A

## **Polaris**



**Purpose of Acquisition** 

#### **Enhance global engineering capabilities**

#### A Bold Strategic Shift

The acquisition of Polaris S.r.l. marks a transformative milestone in Nippon Gases Euro-Holding S.L.U. (NGE)'s strategic trajectory. It underscores the company's commitment to innovation, operational excellence, and customercentric growth. Polaris, a recognized leader in engineering solutions for the industrial gases sector, contributes a complementary portfolio and deep technical expertise that aligns seamlessly with NGE's long-term vision.

## **Engineering Excellence and Innovation Acceleration**

This strategic move significantly enhances NGE's engineering capabilities and establishes the foundation for a Centre of Excellence dedicated to the advancement of gas technologies. Polaris' strong R&D culture and innovation network enable accelerated timeto-market, effectively bridging the gap between research and customer needs. Together, the two organizations are well-positioned to deliver high-efficiency, tailored solutions across key sectors including electronics, metallurgy, and energy transition.

#### **Synergies and Integration Highlights**

The integration unlocks multifaceted synergies. Commercially, it enables cross-leveraging of customer bases and the co-development of new offerings. Operationally, improved project execution is anticipated through shared best practices, harmonized workflows, and enhanced competitiveness. Polaris' agility complements NGE's scale, particularly in decarbonization and manufacturing initiatives.

## Joint Initiatives and Strategic Projects

Following the acquisition, several initiatives are already underway, including the alignment of project management methodologies, harmonization of safety protocols, IT integration, rebranding, and the launch of dedicated product lines. High-impact projects include:

- VIGA Project—the new air separation unit in Norway
- Visit to PEC\*—a joint engagement by NGE and Polaris to accelerate cooperation and integration
- VPSA Next Gen
- New exclusive product line for the steel mill and manufacturing industry



- Vent Gas Condensation Unit in Belgium These projects are expected to set new benchmarks in safety, sustainability, and performance.
- \* TNSC's Plant Engineering Center

#### **A Shared Vision for the Future**

The acquisition represents more than a transaction—it is a strategic convergence of values, capabilities, and vision.

Together, NGE and Polaris are shaping the future of industrial gas engineering in Europe.

Polaris

#### Message from the COO



This integration can be viewed as a natural evolution for the company.

Mario Masetto
Chief Operations Officer
Polaris S.r.l.

NSHD offers Polaris streamlined access to international markets for our technologies in gas purification and VOC abatement. In turn, Polaris is well-positioned to support NSHD in the development of small- to medium-sized air separation units, particularly across Europe and the Americas.

Thanks to NSHD's global presence and leadership in gases, technologies, and related services—and Polaris' expertise in delivering smart process solutions with direct access to construction capabilities—our combined team is now more competitive and resilient. Together, we are leveraging the strengths and reputations of both organizations to deliver greater value to our customers.

#### **NSHD**

#### Message from Executive Officer Kimitaka Koga



Kimitaka Koga

Executive Officer, Executive Project Manager of
Global ASU Engineering Enhancing Project,
Group Business Promotion Office

The integration of Polaris into the NSHD Group marks a ground-breaking milestone that complements the Group's engineering capabilities and enables each region to better capture growth opportunities than ever before. We intend to continue seeking out and realizing such opportunities. We are genuinely excited to see what kind of chemical reactions will emerge from the collaboration between Polaris and the Taiyo Nippon Sanso Plant Engineering Center.

## Enhancing the Electronics Business

SPECIAL FEATURE

As part of efforts to further expand the electronics business, the NSHD Group is proactively developing new products that can keep pace with advances in semiconductor production technology. As a solutions provider in semiconductor manufacturing, we are reinforcing R&D from a medium- to long-term perspective to increase our contributions to the industry. To strengthen the electronics business, we are expanding production capacity beyond East Asia to other regions as well, in ways tailored to the specific characteristics of each market.



Objective

Contributing to the reduction of environmental impact in semiconductor manufacturing processes

#### **Reducing GHG Emissions on a Global Scale**

As part of our medium-term management plan, we have set forth key strategies such as "promotion of sustainability management," "exploration of new businesses toward a carbon-neutral society," and "expansion of our electronics business." As part of these initiatives, we joined the Sustainable Semiconductor Technologies and Systems (SSTS) program at Interuniversity Microelectronics Centre (imec), one of the world's leading research institutes based in Belgium, and advance joint development efforts. SSTS aims to help partners throughout the value chain achieve their sustainability goals and reduce the overall environmental impact of the semiconductor industry. Through joint development with imec, we aim to contribute to the global reduction of greenhouse gas (GHG) emissions through our Group's products and technologies.

#### **Synergies Between Japan and Europe**

In the joint research with imec, Taiyo Nippon Sanso, our Japanese business company, will collaborate with Nippon Gases, our European business company. By leveraging both companies' expertise in gas handling and gas chemistry, together with imec's extensive knowledge of semiconductor manufacturing, we will promote the development of technologies that contribute to a sustainable society.

Taiyo Nippon Sanso and Nippon Gases Expertise in gas handling and gas chemistry

Technology development that contributes to a sustainable society imec Extensive knowledge of semiconductor manufacturing

02

## Expansion of Specialty Gas Production Capacity at the Oevel Plant



Expansion of the electronics business, supporting the semiconductor industry in Europe through enhanced supply chain security

#### **Strategic Investment in Sustainability**

Nippon Gases officially launched a new specialty gas production plant at the Oevel Plant in Belgium, "Liquid Fill 2.0," on September 17, 2024. Liquid Fill 2.0 is more than a facility, it's a strategic investment in sustainability, supply chain resilience, and customer-centric innovation. With the production of electronics and specialty gases, this plant strengthens our ability to serve the evolving needs of the electronics industry while supporting our carbon-neutral goals,

which reflects our unwavering dedication to innovation and collaboration. As we continue to grow, we remain focused on what matters most: delivering value to our stakeholders and accelerating a more sustainable future for electronics.





Comment from the Business Director

Katleen Boeckx

Business Director, Electronics
Nippon Gases Belgium NV

Liquid Fill 2.0 is a state-of-the-art trans fill station, purpose built to support the semiconductor industry in Europe. Onshoring is no longer just a plan—it's gaining real momentum. We are ready to meet the growing demand for specialty gases in the electronics industry in Europe. Europe is taking confident steps toward greater self-reliance, supported by a strategic balance of global reach and local supply. We also recognize the importance of continuous improvement in production processes and services, and we are committed to it.

# NSHD VALUE CREATION

This section shows the value NSHD is creating by steadily implementing initiatives in line with the medium-term management plan NS Vision 2026.













The above icons indicate the corresponding key strategy in the medium-term management plan NS Vision 2026.

#### **Value Creation Process**

NSHD offers services to a broad range of customers as a provider of industrial infrastructure.

Resolving various social issues through the provision of these services is the source of our value creation.

#### Social issues

(Key issues identified by the Company)

Mitigating and adapting to climate change

Declining birthrate and aging population

Labor shortages

Improving quality of life

Offering a comfortable and abundant lifestyle

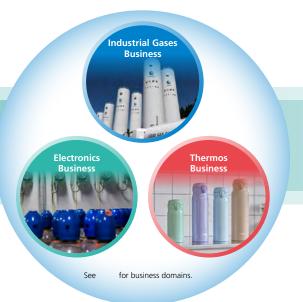
#### Business activities leveraging our unique strengths

The Gas Professionals

Think Globally. Act Locally.

**Operational Excellence** 

**Solution Creation Capabilities** 



#### Sources of Value Creation

Group Philosophy

Proactive. Innovative. Collaborative. Making life better through gas technology.

Sources of Value Creation

- Increasing engagement by sharing and understanding the Group Philosophy and Vision
- Knowledge cultivated over a history of 115 years
- · Commitment to quality and safety

#### NSHD's solutions

#### Domain of Provision

#### **Carbon Neutrality**

#### Solutions

Products, technologies, and services that help customers reduce / mitigate GHG emissions

#### Domain of Provision

#### Electronics

#### Solutions

To meet the diverse and unique needs of our customers, we provide total solutions in the electronics industry, including high-quality materials, bulk gases, equipment, and on-site services.

#### Domain of Provision

#### Resilient markets (healthcare, food and beverages)

#### Solutions

- Gas supply services for home healthcare
- Supply of Water-18O used in positron emission tomography (PET) diagnostics (world's largest supplier)
- Contributing to food waste reduction and food quality preservation through freshness retention technology and modified atmosphere packaging (MAP)
- Improving growth efficiency and assisting with water quality management in the aquaculture field through applications of oxygen dissolution technology

#### **NSHD's Vision**



Realization of the Group Vision

We aim to create social value through innovative gas solutions that increase industrial productivity, enhance human well-being, and contribute to a more sustainable future.

## Progress Under the Medium-Term Management Plan NS Vision 2026

Under the Medium-Term Management Plan NS Vision 2026, which has been underway since FYE2023, NSHD is working to achieve sustainable growth and create social value through five key focused fields.

#### **Five Key Focused Fields**

#### **Sustainability Management**

In the current medium-term management plan (MTP), we established eight non-financial programs and six non-financial key performance indicators (KPIs). In addition, during the fiscal year, we appointed Chief Sustainability Officers (CSOs) in each region, and have been advancing sustainability management through collaboration among operating companies and across the NSHD Group as a whole.

#### Exploring New Business toward Carbon Neutrality

Leveraging NSHD Group technologies, such as those for oxygen combustion and CO<sub>2</sub> capture, purification, and utilization, NSHD is proposing solutions that help reduce GHG emissions for customers in the steel, nonferrous metals, and cement industries.

#### **Total Electronics**

We aim to win new business opportunities by expanding our lineup of products and services, one of our core strengths. At the same time, we are advancing R&D in electronic material gases and related equipment for next-generation semiconductors through close communication with semiconductor manufacturers.

#### **Operational Excellence**

We will further enhance our value propositions by improving value and services in the supply of industrial gases to each customer, and by promoting value creation from the customers' perspective. We are also advancing cost reduction and efficiency initiatives.

#### **DX Initiatives**

We will continue promoting the automation and advanced control of production plants, as well as improve efficiency in tanker truck deliveries through the use of customer inventory data. In addition, we are focusing on internal training to increase data utilization.

#### Progress on Financial KPIs

	FYE2023 (Results)	FYE2024 (Results)	FYE2025 (Results)	FYE2026 (Targets)
Revenue	¥1,186.6 billion	¥1,255.0 billion	¥1,308.0 billion	¥975 billion to ¥1,000 billion
Core operating income	¥123.1 billion	¥165.9 billion	¥189.1 billion	¥125 billion to ¥135 billion
EBITDA margin	19.3%	22.2%	23.3%	≧24%
Adjusted net D/E ratio	0.81 times	0.74 times	0.71 times	≦0.7 times
ROCE after Tax	5.4%	6.7%	7.2%	≧6%

#### Progress on Non-Financial KPIs

			FYE2023 (Results)	FYE2024 (Results)	FYE2025 (Results)	FYE2026 (Targets)
Ε		Reduction rate of GHG emissions	12.3%	15.3%	21.2%	18%
	E	Contribution to GHG emission reduction	7,308 > 5,868 thousand t-CO <sub>2</sub> e	7,454 > 5,667 thousand t-CO <sub>2</sub> e	8,104 > 5,258 thousand t-CO₂e	Lower customer GHG emissions through environmental product offerings and applications > NSHD Group GHG emissions
		Lost time injury rate	1.56	2.09	1.85	≦1.6
S	S	Rate of female employees	19.9%	20.2%	20.8%	≧22%
		Rate of female management posts	14.5%	15.4%	16.7%	≧18%
	G	Rate of receiving compliance training	99.7%	99.4%	100%	100%

#### **Progress on Financial KPIs**

#### Achievements

Even when converted using the currency exchange rates assumed in the MTP, results for FYE2025 exceeded the final fiscal year targets in the MTP for both revenue and core operating income. Both indicators surpassed our full-year forecasts announced at the beginning of the fiscal year, and core operating income grew a solid 13.9% year on year. ROCE after Tax also exceeded the 6% target in FYE2024 well in advance of the FYE2026 target, driven by ongoing improvements in profitability and healthier finances. These positive trends have continued into FYE2025.

#### Issues

The EBITDA margin has improved by 4 percentage points compared to the first fiscal year of the MTP, but is still short of our target by just under 1 percentage point. In FYE2026, the final fiscal year of the MTP, we are working to improve profitability by promoting Operational Excellence, in order to achieve the target EBITDA margin of 24%.

For details, please see the CFO Message section on

#### **Progress on Non-Financial KPIs**

#### Achievements

Non-Financial Programs: Under Carbon Neutral Program I (CNP I), the Company has been making steady progress in reducing its GHG emissions. Furthermore, as a result of promoting the eight



non-financial programs and reflecting requests from stakeholders, NSHD was selected as an A List company, the highest rating, in the 2024 CDP climate change assessment in the environmental field. Our other external non-financial evaluations have also steadily improved, as demonstrated by NSHD's inclusion in the FTSE4Good Index Series, indicating that our initiatives are being recognized.

#### Issues

While all non-financial KPIs are showing improvement, there remain gaps for some indicators compared with the final fiscal year targets. We are accelerating ongoing initiatives to close these gaps and drive further improvements.

For details, please see the Sustainability Management section on



Electronics









Progress Under the Medium-Term Management Plan NS Vision 2026

## Strengthening Comprehensive Capabilities: Realizing Total Electronics



By further strengthening its comprehensive capabilities overseas, the NSHD Group aims to become a global solutions provider, playing a key role in the semiconductor industry.

#### Toshiyuki Aida

Executive Officer, Senior General Manager of Total Electronics Strategy, Group Business Promotion Office

Senior Executive Officer, Executive General Manager of Electronics Unit, Taiyo Nippon Sanso Corporation

The strengths of NSHD's electronics business are comprehensive capabilities that cater to a wide range of customer needs—including gases, equipment, and site services—and the Company's supply footprint in semiconductor production regions.

Total Electronics is an important strategy that utilizes these strengths to support customers with global operations.

We have implemented initiatives to expand the electronics business in line with the medium-term management plan NS Vision 2026, which sets out three priority tasks: bolster the electronics specialty gases business; enhance comprehensive capabilities Groupwide, including equipment, air separation units, and engineering; and promote digital transformation.

The electronics specialty gases business is increasing production capacity in respective regions and expanding its global supply system. In addition, to meet customer demand for high quality and stable supplies, the quality control departments of Group companies are continuing to coordinate their activities. As well as advancing initiatives focused on

quality issues, these companies are horizontally sharing best practices and pursuing standardization.

As part of our efforts to promote digital transformation, we have developed a system for the automation of processes that are heavily dependent on the skills of plant personnel. We are currently preparing for full-scale operation of the system.

Regarding air separation units, we have leveraged our global sales track record and experience in dealing with leading-edge customers to develop new equipment specially designed for semiconductor manufacturing. As for equipment and engineering, we have also established a track record in the area of large-scale semiconductor-related construction projects outside Japan. Specifically, we have consistently received orders for the construction of equipment and system piping from major semiconductor customers in Taiwan.

Going forward, by continuing to further strengthen its comprehensive capabilities overseas, the NSHD Group aims to become a global solutions provider, playing a key role in the semiconductor industry.

#### **Strategies Overview**

#### **Promotion Structure**



#### 01 Strategic customer management

- Focus on strategic customers likely to experience rapid growth
- · Promotion of unified Group strategy

#### 02 Product management

- Enhancement of competitive advantage through more robust quality and cost reduction
- Partnership with raw materials manufacturers

#### 03 Supply chain

Optimization of global product procurement

#### 04 Development plan

- Development of next-generation products (gases and equipment)
- Planning of strategic M&As

#### 05 Operation

- · Capital expenditure that captures market needs
- Strengthening management of productivity, Environment, Health, and Safety (EHS), and other aspects
- · Optimization of gas cylinder logistics

#### Initiatives



#### Enhance the semiconductor specialty gases (SSG) business

- Expand product lineup and production capability
- Improve Group SSG quality and responsiveness



#### Group capability enhancement for equipment, air separation units, and engineering

- Leverage Group capabilities for equipment in the electronics business
- Enhance the possibility to acquire on-site business for semiconductor investment
- Expand opportunities to supply semiconductors and photovoltaic cells in Asia



#### DX introduction

• Enhance productivity and semiconductor quality through DX



Electronics





Progress Under the Medium-Term Management Plan NS Vision 2026 Strengthening Comprehensive Capabilities: Realizing Total Electronics Value Creation Example: Advancing Total Electronics in Taiwan

#### **Overview of the Project**

Nippon Sanso Taiwan, Inc. (NSTW), successfully secured a comprehensive contract for the expansion project of a major semiconductor manufacturer's fab in Taiwan. The order covers equipment such as gas purification systems, cylinder cabinets for SSG, and other equipment as well as construction of gas system piping. The first phase of construction has been completed successfully. As the customer plans further expansion, we are striving to secure contracts for subsequent projects as well.



Equipment factory of TNET

#### **01** Key Points Leading to the Order

In addition to safely handling hazardous gases such as toxic and flammable gases, the gas system in a semiconductor manufacturing fab must also stably supply multiple types of semiconductor manufacturing tools with high-quality gases, with impurities reduced to the absolute minimum, and then completely neutralize them to harmless form and dispose of them safely.



The clean room of TNET's equipment manufacturing plant

Additionally, as schedules are frequently subject to change due to various reasons, this requires flexible responses during construction.

NSTW, which successfully secured the order, has SSG warehouses in Toufen and Tainan and a long track record of supplying SSG to customers in science parks in the northern, central, and southern regions near the warehouses. In addition, Taiyo Nippon Sanso Engineering Taiwan, Inc. (TNET), a subsidiary of Taiyo Nippon Sanso Corporation, owns an equipment manufacturing factory with a clean room in Hsinchu and has a proven track record of providing engineering services across entire customer fabs. By collaborating closely, both companies were able to respond to the requirements of the large-scale project, and earn the customer's trust, leading to securing the order.

#### **02** Benefits of Winning the Order

In the NSHD Group's electronics business, the SSG business constitutes a major revenue segment. This business provides customers with materials necessary for semiconductor manufacturing. Although our products are categorized as consumables, stable supply in terms of both quality and quantity affects customers' product manufacturing. In response to the growing semiconductor

production capacity in Taiwan, NSTW is strengthening its warehouse management capabilities.

Meanwhile, the equipment and facility construction business is related to establishment of and expansion of customers' fabs. Consequently, its business environment differs from that of the SSG business. Although busi-



One of NSTW's warehouses

ness opportunities are limited in some regions, investment in semiconductor fabs in Taiwan is expected to continue. As part of our proven track record, the recently received order promises to attract new projects and is expected to contribute significantly to growth going forward.

#### 03 Points to Strengthen in the Future

Although primarily based in Japan, the equipment and facility construction business has been successfully established in Taiwan. As well as strengthening SSG supply capabilities, we expect that the equipment and facility construction business will contribute to the business growth of NSTW.

Additionally, Taiwan is seeing a gradual trend toward the domestic production of semiconductor-related products, and new investment projects are planned in Southeast Asia, India, and other countries and regions. Based on achievement in Japan and Taiwan, we will develop our capability to provide products and services in other regions with a view to becoming a global solutions provider.

#### Interview with the Person in Charge



**Tad Chuang**Director
Nippon Sanso Taiwan, Inc.

## We are always conscious of meeting customer requirements.

In our activities to win the order for the project, we worked closely with TNET, the equipment and gas system construction company, to consider how best to meet the customer's requirements. We believe our continued success in securing orders for large-scale projects is the result of close collaboration within the NSHD Group while conducting negotiations with customers and vendors. In addition to the traditional key points such as price, delivery time, and specifications, in recent years EHS initiatives have become increasingly important. Without resting on our laurels, we aim to further expand our business by creating a system that can flexibly respond to customer requirements and changes in social conditions.











## Strengthening Comprehensive Capabilities: Pursuing Operational Excellence



Operational Excellence underpins the development of cooperation across the Group, the creation of an ambitious workplace culture, and the establishment of competitive advantages over the medium to long term.

#### Masayoshi Omichi

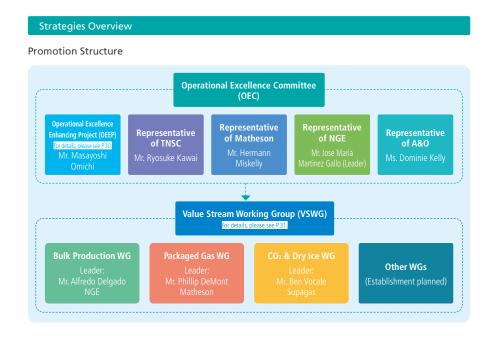
Executive Officer, Executive General Manager of Group Business Promotion Office, and Executive Project Manager of Operational Excellence Enhancing Project (as of August 2025)

With the aim of creating value and strengthening its comprehensive capabilities across the entire Group, the NSHD Group is actively pursuing Operational Excellence as a focused field. Launched in FYE2023, the current medium-term management plan calls for a ¥56.0 billion reduction in costs over four years. Moreover, in 2024, a dedicated project for improving productivity was established in the Corporate Planning Office to build a system for collaboration among Group companies based in Japan, the United States, Europe, and Asia and Oceania. Further, the plan clearly identifies the advancement of digital transformation as a strategy supporting the creation of new value. The rigorous pursuit of Operational Excellence and digital transformation are closely interrelated.

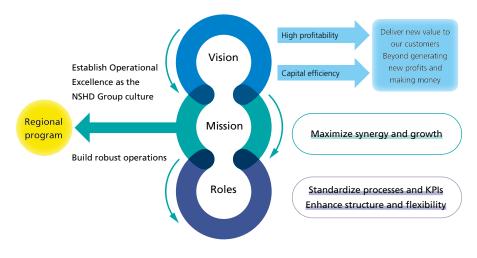
Operational Excellence activities go beyond mere cost reduction. They emphasize multifaceted improvements based on creativity and ingenuity in frontline operations. Activities include improving productivity through investment in digital transformation and new technologies and equipment, transforming work processes and systems, and utilizing data to optimize logistics routes. Additionally, we are encouraging operational sites around the world, including

Thermos, to formulate practical proposals and identify issues based on a customer-driven approach that uses data on customer needs and requests acquired from day-to-day operations as a starting point. We are sharing know-how by introducing outstanding methods developed by bases in particular regions to bases in other regions. To facilitate this process, we are also focusing on creating an environment where employees feel free to suggest ideas, and are working to heighten employee engagement.

Such rigorous pursuit of Operational Excellence strengthens cost structures, fosters an ambitious workplace culture, and develops cooperation across the Group. What is more, our focus on Operational Excellence is embedding the mindset in our corporate culture and establishing a basis for competitive advantages over the medium to long term. Also, with a view to improving productivity through digital transformation, we are expanding our incorporation of AI to take advantage of the technology's rapid evolution. Thus, the pursuit of Operational Excellence has become a core strategy enabling us to sustain both corporate growth and corporate value enhancement.



#### NSHD's Approach to Operational Excellence













Progress Under the Medium-Term Management Plan NS Vision 2026 Strengthening Comprehensive Capabilities: Pursuing Operational Excellence Value Creation Example: Expanding Productivity Improvement Activities Globally

This section focuses on examples of how we are introducing Europe's productivity improvement activities to Asia and Oceania.

**Evolution of Our Productivity Improvement Programs** 

**Nippon Gases Euro-Holding** 

**Asia and Oceania** 

**Supagas** 

**Concerted Groupwide** promotion of productivity improvement

#### **Productivity**

Our European operating companies began productivity improvement activities in the 2000s, when they were under the umbrella of Praxair. At the time, these activities sought to maximize production efficiency by adopting quality management techniques such as Six Sigma, which was being introduced mainly in the manufacturing industry, and lean production methods developed from the Toyota Production System. Subsequently, the companies incorporated their own priorities into improvement methods and management indicators and developed companywide activities that were not limited to production sites. This know-how was assumed by the NSHD Group as part of the post-merger integration process when the European business joined the Group in 2018.

#### **Shiba Productivity**

In 2019, the NSHD Group began to introduce to its operating companies in Asia and Oceania



SP Boot Camp 2024

systematic productivity improvement methods practiced in Europe. Initially launched in three countries—Australia, India, and the Philippines this initiative was named "Shiba Productivity." The initiative is now being introduced across the entire Asia and Oceania region and continues to evolve as we make adjustments to suit the business models and requirements of each operating company.

2025

#### Post-M&A **Embedment Measures**

The Shiba Productivity Program was fully implemented in the Supagas business through systematic training, target setting, and strong executive sponsorship. These essentials will be replicated at recent acquisitions, Kleenheat and Coregas Group. Key personnel from these companies will be included in the productivity management team. Targets will be assigned to each through the budgeting process.

#### Comment from the **Person in Charge**



Productivity Manager Supagas Pty Ltd



Adoption of the Shiba Productivity Program relies on sponsorship from executives and managers at Kleenheat and Coregas Group. All employees receive training on basic productivity concepts and function of the program through LMS. To achieve buy-in from managers, face-to-face sessions with the productivity manager and inclusion in annual productivity workshops is undertaken.









Progress Under the Medium-Term Management Plan NS Vision 2026 Strengthening Comprehensive Capabilities: Pursuing Operational Excellence

## Short Discussion: Further Developing Operational Excellence to Build Sustainable Competitive Advantages

The NSHD Group has established the Operational Excellence Committee, which comprises representatives from each region who are tasked with formulating the overall goals of Groupwide initiatives. The former chairperson, who served until March 2025, and his successor, who took office in April, discuss the progress of activities and expectations for the future.





Miskelly Over the past two years, participating in the Operational Excellence Committee (which is positioned beyond the scope of Matheson Tri-Gas at the global holding company level), has been a valuable learning experience for me.

The committee has undertaken three major initiatives, all of which I feel have been successfully accomplished. First, we clarified the mission and role of the committee. Second, we launched significant activities under the Value Stream Working Groups. \*1 Third, we identified gaps between regions. These activities brought me to the realization that it is important for Matheson, Nippon Gases Euro-Holding, and programs in Japan and Asia and Oceania to learn from each other and grow together.

Martinez Gallo When I joined the committee, the initial face-to-face global meetings of the Operational Excellence Working Groups were held in Germany and Belgium. For me, the meetings were an extremely meaningful experience. Similar meetings were later held in Vietnam, and I believe that such meetings will encourage the Groupwide expansion of projects.

Given its strengths in digital transformation, Nippon Gases Euro-Holding can significantly contribute to the Group's global operations. With extensive experience in cost reduction and process efficiency enhancement, we can improve global productivity by deploying multiple engineers for cross-divisional support at various plants. Additionally, Matheson's The Right Way Program\*<sup>2</sup> and educational curriculum offer valuable learning opportunities. I see great potential for cooperation in these areas.

Miskelly The key is, of course, the working groups. There is no need to start from scratch in your own region with initiatives that have already been successful in other regions. These working groups will be a place to exchange ideas and share projects.

Over the next two years, under your leadership, I believe that we will enter a phase of closing the gaps between regions through actual projects. At the same time, developing infrastructure to accelerate the sharing of best practices will be important. This will not only raise the level of operational excellence in each region but also maximize cost reduction.

Martinez Gallo To begin with, I would like to strengthen our global support system for projects and their execution. I want to establish a common platform that enables all operational excellence-related personnel to access projects so that we can promote communication, collaboration, and standardization. Personnel are the most important element. We will focus on developing human resources so that we can establish an understanding of the basic principles of lean manufacturing\*3 and progress to the stage of introducing Six Sigma\*4 methods.

We are currently in the midst of change. In adapting to this change, let's encourage innovation and advance cross-region collaboration that is based on clear quidelines and communication. The ultimate goal is to establish sustainable competitive advantages by placing operational excellence at the core of the entire Group.

Miskelly You are facing tasks that are more challenging than the activities the committee has advanced to date. I will do my best to support you.

Martinez Gallo ■ Thank you. I'm excited to see the valuable contributions each of us will bring.



- \*1 Please see page 31.
- \*2 Since 2009, Matheson has been implementing this program, which focuses primarily on improving business processes and cost
- \*3 The Massachusetts Institute of Technology of the United States studied Japan's waste-free production methods in the automotive industry and named them "lean manufacturing" methods.
- \*4 This is a set of quality management methods. It is said that enabling employees to experience these business improvement methods can enhance their work awareness.











Progress Under the Medium-Term Management Plan NS Vision 2026 Strengthening Comprehensive Capabilities: Pursuing Operational Excellence Value Creation Example: Utilizing Value Stream Working Groups

#### **Value Stream Working Groups**

Value stream working groups are mainly tasked with spreading each region's best practices, in particular value-adding operational processes (value streams), throughout the NSHD Group. These activities have enabled the establishment of a system for cooperation among working group members and developed into practical initiatives that heighten the productivity and efficiency of the entire Group.

Value Stream Working Groups

Bulk Production

Focus areas

Focus areas

Packaged gas filling and distributio

**Packaged Gas** 

CO<sub>2</sub> & Dry Ice

Focus areas

dry ice, and logistics

#### **Activities of Value Stream Working Groups**

#### **Bulk Production**



Agustín Baneras Gómez Tejedor Senior Manager, Cost Reduction & Efficiency Europe

Our Group is composed of all the regions where NSHD has a presence: Japan, the United States, Europe, and Asia and Oceania. We have held periodical meetings where we shared projects carried out in each region with the aim of replicating them in other regions. Last May, all the representatives of this group met in Vietnam, where the team from Nippon Sanso Vietnam warmly welcomed us. The representatives of Nippon Gases Euro-Holding (NGE) audited the process of four air separation plants, and we found several possibilities to improve argon recovery while reducing energy consumption.

We will continue to foster these relationships between the Group's regions as they enable us to share knowledge, drive innovation, and achieve greater efficiency across our operations. This collaborative approach not only enhances our technical capabilities but also reinforces our commitment to sustainability and operational excellence.



Nippon Sanso Vietnam's plant

#### **Packaged Gas**



Phillip DeMont
Vice President, Operations South Zone
Matheson

The Packaged Gas Working Group completed its first year with a periodical meeting in March 2025. Throughout the year, there was effective sharing of information and operational efficiency projects across the four regions. We have reviewed best practices during the year with a focus on automation in operations, production efficiency, and distribution efficiency.

The Specialty Gas Analysis Automation project at the MATHESON plant aimed to improve laboratory efficiency by replacing manual processes with automation. A new Orthodyne system was installed, automating analytical testing such as calibrations, sample purging, and Certificates of Analysis. This system enabled comprehensive analysis with a single cylinder hookup and allowed direct analysis from cylinder filling manifolds. Moving forward into FY2026, the Packaged Gas Working Group's focus is on identifying and sharing best practices (with an emphasis on automation) and high impact projects that will drive Operational Excellence while improving safety and our operating income performance.

#### CO<sub>2</sub> & Dry Ice



direction going forward.

**Ben Vocale** SUPAGAS Project Engineer

Since May 2024, the CO<sub>2</sub> and Dry Ice Working Group has been meeting online periodically to collaborate across regions. Although we operate under different conditions, such as varying source gases, purification technologies, regulations, and business strategies, we are united by a common goal: to deliver safe, reliable, and specification-compliant products to our customers. Each region brings its own strengths. Japan has shared advanced automation in storage and warehousing. The United States is leading in dry ice production automation, improving both safety and cost. Europe has introduced AI and machine learning to optimise distribution logistics. Here in the Asia and Oceania region, we are benefiting greatly from replicating these proven solutions, contributing to faster implementation and growth. The group's first in-person workshop will take place at the Matheson plant, where cutting-edge dry ice automation is in

operation. This workshop will shape our working group's strategic











### Progress Under the Medium-Term Management Plan NS Vision 2026

## Continuous Growth: Advancing Sustainability Management



Focusing on the business opportunities presented by sustainability, we will expand businesses that address environmental and social issues.

#### Takeshi Miki

Senior Executive Officer, Group Sustainability Management Office, and Chief Sustainability Officer (CSO)

Begun in April 2022, our current medium-term management plan NS Vision 2026 identifies Sustainability Management as a focused field. This reflects our fundamental belief that, with factors related to the environment, society, and governance becoming an essential requirement for corporate management, we must enhance both our economic value and our social and environmental value.

In addition to our recent efforts to establish policy frameworks and strengthen governance, NS Vision 2026 has established eight non-financial programs and set associated targets, and we are appropriately disclosing our progress in relation to the targets. As a result, external evaluations of our sustainability have steadily improved. Notably, we achieved the highest A rating in the CDP 2024 climate change assessment.

In each region, we have appointed chief sustainability officers, who participate in the formulation and execution of Group strategies while overseeing autonomous non-financial management in each business region. In FYE2025, activities to launch initiatives included introducing internal carbon pricing Groupwide, promoting biodiversity measures

through the adoption of the recommendations of the Taskforce on Nature-related Financial Disclosures, establishing a human rights due diligence system, and managing suppliers in line with the Responsible Business Alliance Code of Conduct.

In relation to sustainability, we will focus not only on risk management but also on business opportunities. Specifically, in addition to environmentally friendly products, we will strengthen efforts focused on resilient markets, such as the supply of gases for aguaculture and food preservation, medical gases and equipment, cold chains, and healthcare based on the "18O" positron emission tomography diagnostic drug raw material. We will also expand businesses that address environmental and social issues, including the proposal of lifestyles that are kind to people and the environment through the Thermos Group.

With pride in our reputation as "The Gas Professionals," we aim to grow sustainably and heighten corporate value by providing innovative gas solutions that help us work with stakeholders to enhance human well-being and contribute to a more sustainable future.



Group **Business Activities** 12 Policies Philosophy Materiality Medium-Term Management Plan (>) Please see here. NS Vision 2026 **Group Vision** 

Non-Financial KPIs of NS Vision 2026

**Environment** 

Reduction rate of GHG emissions (Base year: FYE2019)

≥18% (FYE2026) ≥32% (FYE2031)

GHG reduced emissions through environmental product offer

Lower customer GHG emissions through environmental product offerings and applications > NSHD group GHG emissions (FYE2026)

**Safety Management** 

Lost time injury rate

 $\leq 1.6$  (FYE2026)

Compliance

Rate of receiving compliance training

100% (FYE2026)

**Human Resources** 

Rate of female employees

**≥22%** (FYE2026)

≥25% (FYE2031)

Rate of female management posts

≥18% (FYF2026)

≥22% (FYE2031)











Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: Advancing Sustainability Management

## **Progress of Eight Non-Financial Programs**

#### Reduce GHG Emissions of the NSHD Group **Carbon Neutral Program I**



#### GHG emission reduction target (Base year: FYE2019)

• FYE2026: 18% reduction

• FYE2031: 32% reduction

#### **GHG Emission Reduction Targets**

GHG emissions (Thousands of tonnes CO2e)



\* Base year FYE2019: The actual results for FYE2019 plus GHG emissions from the U.S. HyCO business, the European business, U.S. transport, Asia and Oceania transport, U.S. subsidiaries (Continental Carbonic Products, Inc. (CCPI) + three business sites, and Wester International Gas & Cylinders, Inc.), a Japanese subsidiary (Nippon Ekitan Corporation), and eight Nitrogen Generator Units (NGUs) in Asia and Oceania, and subtracted GHG emissions from Japanese subsidiaries (Sakai Gas Center, Inc. and Taiyo Nippon Sanso Energy

FYE2023: Added GHG emissions from U.S. subsidiaries (CCPI + three business sites, Western) and eight NGUs in Asia & Oceania, and subtracted GHG emissions from Japanese subsidiaries (Sakai Gas Center, Inc. and Taiyo Nippon Sanso Energy Corporation). FYE2024: Added GHG emissions from three CCPI business sites and eight NGUs in Asia and Oceania

As part of its efforts to achieve carbon neutrality by 2050, the NSHD Group is promoting Carbon Neutral Program I (CNP I), which targets an 18% reduction in GHG emissions by FYE2026 and a 32% reduction by FYE2031, compared to FYE2019 levels.

In FYE2025, NSHD implemented a range of measures, focusing on initiatives such as increasing the purchase of green power certificates and introducing carbon-free electric power as part of a broader effort to decarbonize its electricity sources. As a result, the Company has realized a 21.3% reduction in GHG emissions as of FYE2025, making steady progress toward achieving its FYE2026 target.

Building on these achievements, the NSHD Group will continue working toward carbon neutrality by steadily reducing GHG emissions through the adoption of renewable energy and the purchase of green power certificates.

#### Lower GHG Emissions of Customers Through Environmentally Friendly Product Offerings Carbon Neutral Program II

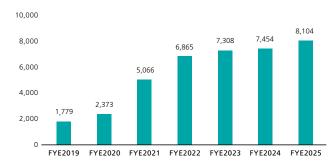


GHG emission reduction contribution

• FYE2026: Lower customer GHG emissions through environmental product offerings and applications > NSHD group GHG emissions

## Reduction in GHG Emissions Through Environmental Product Offerings

GHG emission reduction contribution (Thousands of tonnes CO2e)



In addition to reducing its own GHG emissions, the NSHD Group is advancing Carbon Neutral Program II (CNP II) with the aim of supporting customers in reducing their GHG emissions. CNP II defines the Group's targets as contributing to customer GHG emission reductions through its products, services, and technologies. As a target for FYE2026, NSHD aims to achieve a greater amount of GHG reductions through its environmentally beneficial products and services than the Group's total GHG emissions. In FYE2025, the Company's contribution was equivalent to a reduction of 8,104 thousand t-CO<sub>2</sub>e, exceeding its own emissions of 5,264 thousand t-CO<sub>2</sub>e.

In FYE2025, the NSHD Group added biogenic CO<sub>2</sub>—which curtails increases in atmospheric CO<sub>2</sub>—to the product lineup as a new environmentally friendly product.

Through the expansion of such environmentally friendly products, we will contribute to GHG emission reductions across a wide range of industries.

#### Example of Environmental Product Offerings and Applications

Products and services	Overview		
Combustion-type exhaust gas abate- ment system	This system detoxifies global warming gases emitted from semi- conductor manufacturing and other equipment.		
SF <sub>6</sub> recovery and purification service	This service recovers and destroys sulfur hexafluoride (SF <sub>6</sub> ) used in applications such as insulating gas for high voltages.		
New refrigerants	We promote sales of new replacement refrigerants with low global warming potential.		
MG Shield®	MG Shield®, which has a low global warming coefficient, is used to replace SF <sub>8</sub> as a cover gas for molten magnesium alloy.		
SCOPE-JET®	Oxygen-enriched combustion in electric arc furnaces can reduce electric power usage compared to stand-alone electric operation.		
PSA for laser processing	Compared with general pressure-swing adsorption (PSA) equipment on the market, this unit can manufacture nitrogen gas using far less electricity.		
Thermos products	Switching from an ordinary pot to a Shuttle Chef® for cooking can reduce fuel and electricity consumption and so forth.		
Hydrogen stations	The Company's hydrogen stations fill fuel cell vehicles, helping to reduce CO <sub>2</sub> emissions.		
Industrial gases	Overview		
Oxygen-enriched combustion in blast furnaces	Providing a reliable supply of oxygen to blast furnaces helps to reduce CO <sub>2</sub> emissions.		
Oxygen-enriched combustion in electric arc furnaces	Oxygen-enriched combustion in electric arc furnaces can reduce electric power usage compared to stand-alone electric operation.		
Argon (Ar) welding	Compared to CO <sub>2</sub> welding, Ar welding can shorten welding time and reduce CO <sub>2</sub> emissions.		
Biogenic CO <sub>2</sub>	Producing and selling biogenic CO <sub>2</sub> helps curb the increase of atmospheric CO <sub>2</sub> emissions.		

For more on the eight non-financial programs, please refer to here. Eight Non-Financial Programs: 

Please see here.









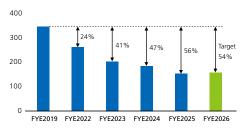


#### Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: Advancing Sustainability Management

#### **Progress of Eight Non-Financial Programs**

#### Reduce Waste Zero Waste Program

Amount of Landfill Disposal (Taiyo Nippon Sanso) tonnes



The NSHD Group is promoting the Zero Waste Program (ZWP) as a key initiative toward the realization of a circular economy. ZWP is a program designed to reduce waste and enhance resource circulation through appropriate waste management and rigorous implementation of the 3Rs (reduce, reuse, and recycle). In Japan, the Company is undertaking Halve Amount of Landfill Disposal (HALD) initiatives with the goal of halving industrial landfill waste by FYE2026. As of FYE2025, NSHD had reduced landfill disposal volume to 56% of the FYE2019 baseline, demonstrating steady progress toward its target.

Note: NSHD joined the Japan Partnership for Circular Economy (J4CE) in August 2025.

#### **Effectively Use Water Resources Sustainable Water Program**

The NSHD Group positions water resource conservation as a materiality (priority issue) and is working to preserve water resources in its corporate activities through more efficient usage.

Each region sets its own targets for reducing water intensity and other metrics, and has achieved results exceeding their targets. As a result of these measures,

NSHD Group has reduced its overall water intake for three consecutive years. The Company will continue striving to effectively utilize water resources.

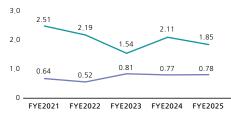
For more on the water stress level survey results, please refer to here

Water Stress Level Survey Results: (2) Please see here.

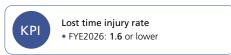
#### A Security and Safety Culture Safety First Program

#### Lost Time Injury Rate\*

\* The frequency rate expresses the frequency of accidents resulting in lost workdays in a fiscal year, calculated as the number of injuries / fatalities due to occupational accidents per million work hours



- Taiyo Nippon Sanso Group Nippon Sanso Holdings Group Reporting boundary: Consolidated subsidiaries with production divisions in Japan and overseas
- \* To improve the accuracy of data aggregation, values presented in previous fiscal years have been retroactively amended



Guided by the belief that safety forms the foundation of its corporate existence, NSHD is implementing the Safety First Program (SFP). SFP is a program that prioritizes safety and security in all business activities and aims to prevent occupational accidents through the cultivation of a safetyoriented culture and better security capabilities through smart security (DX, AI, and IoT). The Company has set a goal of keeping the lost time injury rate at or below 1.6 by FYE2026, and is working to further strengthen safety capabilities through the launch of Hazard Simulation Training II, a new risk sensitivity program. In FYE2025, the lost time injury rate declined to 1.82 from the previous fiscal year, continuing a medium- to long-term downward trend. NSHD will continue strengthening preventive measures based on root cause analysis and training employees to heighten their risk sensitivity, with the goal of achieving zero workplace accidents across the Group.

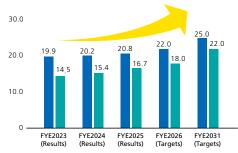
#### Initiatives Aimed at Improving Quality and Reliability Quality Reliability Program

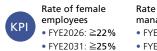
NSHD has been advancing the Quality Reliability Program (QRP) to reinforce a corporate mindset focused on quality and to improve the quality and reliability of the Group's products.

To instill a culture that prioritizes quality, NSHD conducts training on quality ethics and compliance, while also promoting the adoption of automation technologies and implementing quality audit programs to enhance reliability. In FYE2025, the NSHD Group conducted quality compliance training with an updated curriculum. In the area of electronic material gases manufactured and sold globally, the Quality Committee (SSG-QC), covering the sites of production companies, implemented initiatives focused on enhancing customer satisfaction.

#### Diversification of Human Resources and Enhancement of Engagement Talent Diversity Program

Rate of Female Employees, Rate of Female Management Posts Rate of female employees Rate of female management posts





Rate of female management posts • FYE2026: ≥18%

• FYE2031: **≥22%** 

To drive sustainable growth and innovation, NSHD is advancing the Talent Diversity Program (TDP), which aims to secure and develop diverse human resources. TDP is a program designed to reinforce our global competitiveness and transform our corporate culture by promoting diversity and inclusion.

The NSHD Group is proactively creating a supportive work environment and providing career development opportunities, with the goal of achieving a 22% rate of female employees and an 18% rate of female management posts by FYE2026. As of FYE2025, the rate of female employees stood at 20.8% and the ratio of female management posts at 16.7%, indicating steady progress toward these targets.

For more on our initiatives to improve diversity, please refer to here.

Diversity Action Plan: ( ) Please see here.

#### Permeation and Thorough Implementation of Compliance Compliance Penetration Program —

NSHD is promoting the Compliance Penetration Program (CPP) as a foundation for upholding corporate ethics and supporting sustainable growth. CPP is a program focused on fostering awareness and embedding a culture of compliance through training and awareness initiatives for all employees.

The NSHD Group has set a goal of achieving 100% participation every year in compliance training by FYE2026 and reached this target as of FYE2025. Going forward, NSHD will continue to enhance compliance management

by strengthening collaboration with regions and operating companies, and by updating training content in line with the latest social trends and regulations.



Rate of receiving compliance training • FYE2026: 100%

March fiscal year-ends	2023	2024	2025
Training rate	99.7%	99.4%	100%















1-4 Addressing resilient markets

Lifestyle

**Progress Under** the Medium-Term Management Plan NS Vision 2026

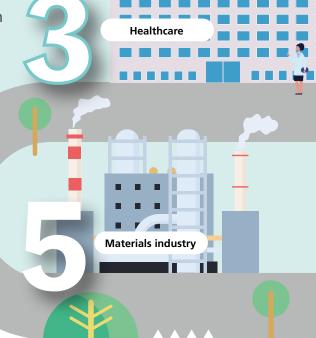
Continuous Growth:

Advancing Sustainability Management

Special Feature:

## **Contributing to Sustainability Through Businesses**

Many of the products and services offered by NSHD are not readily visible, yet they contribute significantly to the advancement of sustainability. Here, we present examples of our contributions to preservation of the global environment in everyday life, as well as to highly resilient markets, such as food and healthcare.















Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: Advancing Sustainability Management Special Feature: Contributing to Sustainability Through Businesses

# **Addressing Resilient Markets**

We contribute to the Sustainable Development Goals (SDGs) by expanding our product offerings for resilient markets, such as food and healthcare, that are essential products for daily living and sustaining life.



# Keeping delicious food delicious longer Reducing food waste with the power of gas

#### **Oxidation Prevention**

By controlling the composition of gases inside the packaging, we prevent discoloration and degradation while preserving the original flavor, nutrients, and aroma.

# Freezing and Processing

Rapid freezing enables long-term preservation without compromising the flavor of products, contributing to the reduction of food loss. This is also used for shaping and cutting products, such as cakes, which are difficult to process at room temperature.



# Healthcare



# **Ouality of Life**

A society where both healthy people and patients can live their own lives

# **Diagnostics**

Water-18O is used as a precursor for PET diagnostic agents for the detection of cancer and Alzheimer's disease.



# Treatment (from hospital care to at-home healthcare)

We provide hospitals with life-supporting products, such as ventilators and medical gases, centered on oxygen, while in the at-home healthcare field, we offer a wide range of products and services to meet diverse needs, including equipment used for home oxygen therapy and the treatment of sleep apnea syndrome.



# **Aquaculture**



# We promote sustainable aquaculture by protecting the bounty of the sea.

# Oxygen Supply for Aquaculture

Aquaculture is seen as one solution to securing resources for fisheries. Oxygen supply improves stocking density and growth rate, enhancing productivity. The NSHD Group provides equipment for efficiently supplying dissolved oxygen in water and oxygen gas.







# Lifestyle



# We propose lifestyle solutions that are comfortable for people and kind to the environment.

# Thermos Initiatives:

# Stainless Steel Bottles

The reuse of stainless steel bottles helps reduce the use of disposable containers, thereby reducing CO<sub>2</sub> emissions and the use of resources and energy, contributing to the realization of a sustainable society while lightening the burden on the global environment.



#### Cookware

Shuttle Chef® is an energy-saving cooking pot that uses residual heat to cook food after being placed in a vacuum-insulated container straight from the stove. It reduces the need for gas or electricity, helping to save on utility costs and cut CO2 emissions, making it an eco-friendly appliance for the kitchen.

# Activities to Collect Stainless Steel Bottles and **Support for Nature Preservation**

As part of our environmental efforts, we are working to reduce the use of disposable containers at events and other occasions. We also collect used stainless steel bottles and contribute to the conservation of birds of prey and coral reefs through proceeds from stainless steel bottle sales.













Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: Advancing Sustainability Management Special Feature: Contributing to Sustainability Through Businesses

**Supporting Core Industries to Realize a Sustainable Society Pioneering a Sustainable Future Through Advanced Technologies** 



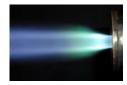
# **Materials industry**



Through gas technologies, we help core industries that underpin society become carbon neutral.

# Oxygen Combustion Technology

Our oxygen combustion technology, which offers greater combustion efficiency than air, helps reduce fuel consumption during the production of steel, aluminum, glass, and other materials.



Oxygen burner lance, SCOPE-JET®, for steel manufacturing

# **Cover Gases for Molten Magnesium Alloy**

Since magnesium alloys are highly susceptible to oxidation, molten magnesium alloys must be protected by forming a barrier layer of fluorides, sulfides, or other compounds to prevent contact with the air. Traditionally, SF<sub>6</sub> gas, which has a global warming potential of more than 20,000 times that of CO<sub>2</sub>, was used in this process. We commercialized MG Shield®, a synthetic gas that can be used in magnesium manufacturing processes and has a global warming potential nearly equal to that of CO<sub>2</sub>, thereby contributing to the reduction of GHG emissions.



**Next-generation industries /** cutting-edge research (space and aerospace)



We are unleashing the potential of gas to support the development of next-generation industries.

# **Cell Freezing Technology**

Our cryopreservation technology contributes to advances in cell therapy and drug discovery. We achieve high-quality cell preservation by storing cells in stable cryogenic conditions using liquid nitrogen and precisely controlling freezing temperatures suited to each cell type.



Fully automated cell cryopreservation system Cryo Library® ADVANCE

# **Compound Semiconductor Manufacturing Equipment** (MOCVD)

The widespread adoption of LEDs, a type of compound semiconductor device, has reduced power consumption for lighting, while advances in power devices have improved power control and conversion efficiency, contributing to reductions in global GHG emissions. Our MOCVD systems support the manufacturing of these compound semiconductors, which are also used in microLEDs for AR/VR glasses, Face ID systems for facial recognition, high-efficiency power modules for EVs, and LiDAR systems for autonomous driving, making them essential materials that enrich our lives.

# **Cryogenic Technology**

Our technologies are being applied to create ultra-low temperature environments, close to -270°C, that are essential for advanced technologies such as superconductivity and quantum computing.

# **Space Simulation Chambers**

In recent years, space development and utilization have advanced rapidly, with growing efforts to harness space resources for a sustainable future. To enable testing of satellites and other equipment on Earth, we provide space chambers that reproduce the extreme conditions of outer space, such as the cold, darkness, and ultra-high vacuum.



Outer space simulation chamber (C) Japan Aerospace Exploration Agency (JAXA) Unauthorized reproduction prohibited

















Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: Advancing Sustainability Management Special Feature: Contributing to Sustainability Through Businesses: **Exploring New Business toward Carbon Neutrality** 



Our mission is to support the realization of carbon neutrality by 2050 as an industrial gas supplier.

José Ramón Calvo Carbon Neutral Executive Team Head Marketing Director Europe, Nippon Gases Euro-Holding S.L.U

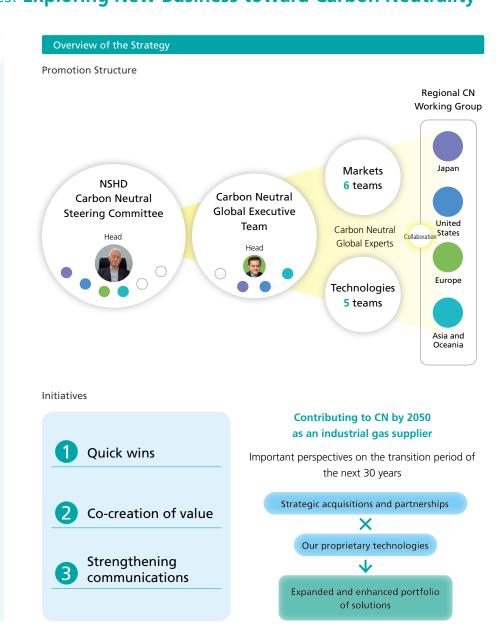
To achieve carbon neutrality (CN) by 2050, NSHD is Exploring New Business toward Carbon Neutrality, one of the key strategies of its medium-term management plan, NS Vision 2026. At the core of this strategy is the integration of CN and sustainability into every aspect of our activities, as well as a focus on qualitative transformation of the value chain.

We categorize our CN initiatives into three areas: (1) quick wins, (2) co-creation of value, and (3) strengthening communications. (1) Quick wins refers to obtaining economically viable CN-related projects to accumulate experience and technical know-how. (2) Co-creation of value involves combining our technologies and expertise with those of partner companies with highly advanced technologies to achieve more efficient reductions in environmental impact. (3) Strengthening communications is aimed at expanding our contribution by raising global awareness of Group technologies and expertise, and how they can help resolve challenges in the transition to a carbon neutral society.

We have established the Carbon Neutral Steering Committee, led by President CEO Hamada,

to swiftly decide targets and identify technologies essential for realizing CN. The committee includes an executive team comprised of representatives from the four global regions, who report regularly on CN activities in their respective region. In addition, a special team called Carbon Neutral Global Experts has been formed, comprising 11 teams across two groups defined as "markets" and "technologies," which are responsible for sharing Group knowledge and technologies with our operating companies around the world and supporting proposal activities.

Our mission is to support the realization of CN by 2050 as an industrial gas supplier. To that end, we are currently focused on four technological domains: combustion, hydrogen production, CO2 capture, and oxygen production. In each of these domains, we pursue both effective environmental impact reduction and economic feasibility as a business.













Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: Advancing Sustainability Management Special Feature: Contributing to Sustainability Through Businesses: **Exploring New Business toward Carbon Neutrality** 

# Examples of Value Creation: Fully Leveraging Core Technologies and Expertise to Achieve Carbon Neutrality



**Ouick** wins

# **Building a Track Record in CN Projects**

# [Combustion] Oxygen combustion proposal for an aluminum manufacturer

For an aluminum manufacturing customer in the Netherlands, Nippon Gases Euro-Holding (NGE), our operating company in Europe, proposed replacing air burners with oxygen burners in the preheating process of a melting furnace (commenced operations in 2023) and in a holding furnace (construction scheduled for completion in the fourth quarter of FYE2025). The objectives of both proposals were to reduce burner fuel usage, lower dross\* emissions, and cut electricity consumption. With these oxygen combustion solutions, we helped the customer reduce CO2 emissions by improving energy efficiency, thereby making CO<sub>2</sub> capture more cost effective while lowering overall operating costs.

\* A mixture of impurities and oxides that arise during metal refining and manufacturing. Specifically in aluminum manufacturing, this refers to the oxides and slag that form on the surface of molten aluminum. Dross contamination causes a decline in quality and generates additional costs and environmental burdens for processing.



NGE has had some guick wins in the combustion field in several regions.



# Co-creation of value

While Continuing to Develop Our Own Technologies, We Are Building Collaborative **Relationships with Partners That Possess Advanced Technical Capabilities.** 

# [CO<sub>2</sub> Capture] Development of CO<sub>2</sub> storage and shipment tanks for CCS

CCS stands for carbon capture and storage, a technology that captures CO<sub>2</sub> from the atmosphere or emissions from factories and power plants, and stores it deep underground. Taiyo Nippon Sanso, our operating company in Japan, leverages its expertise in industrial gas storage tanks to develop CO<sub>2</sub> storage and shipment tanks for CCS applications. By collaborating with companies and governments aiming to reduce atmospheric CO<sub>2</sub> emissions through CCS, we are advancing the realization of CN solutions. This shipment tank facility adopts a proven vacuum-insulated double-shell design and incorporates a safety system that prevents solidification into dry ice.



CO<sub>2</sub> shipping tank equipment for CCS (image)



# Strengthening communications

# **Increasing Communications with All Stakeholders**

# Enhancing the content of our carbon neutrality website

Since 2024, NSHD has been adding content to its carbon neutrality website, "We enable a carbon neutral world," launched in fall 2022, with content focused on two themes: "Making it realistic" (enhancing authenticity) and "Humanise the project" (highlighting usercentered efforts). We also stream videos via LinkedIn and Facebook. These videos showcase success stories in carbon neutrality through narratives that focus on the people involved in the projects.

Carbon neutrality website: "We enable a carbon neutral world" https://www.carbonneutralworld.com/



Sharing people-focused videos on social media platforms











# Special Feature: Contributing to Sustainability Through Businesses: Why Customers Support (Lifestyle)

The NSHD Group's operating companies provide value that contributes to a sustainable society through products derived and developed from industrial gas technologies. Here, we present these initiatives together with positive feedback from our customers.

# (1) Shuttle Chef®

Setting: Households Sustainability contribution: Reduced energy consumption

# **Thermos Representative**



Yosuke Tateno Marketing Department Product Strategy Division Thermos K.K.

The Thermos vacuuminsulated cooking pot. known as the Shuttle Chef, is one of our long-selling products, first launched in 1989. This innovative product

enables heat-retention cooking, whereby a cooking pot that has been briefly heated is placed inside an insulated container to finish

cooking using residual heat. As a cooking appliance that utilizes vacuum-insulation technology, it has been loved by customers for many years. Because it requires no flame, gas, or electricity during heatretention cooking, it helps reduce CO<sub>2</sub> emissions and is environmentally friendly. For example, dishes like curry or stew can be cooked with only one-third of the stovetop time compared to conventional pots.

Thermos is working to reduce greenhouse gas emissions by promoting the use of Shuttle Chef products, which significantly shorten cooking time through heat-retention cooking.



Ms. Ayu Jinja

Ms. Ayu Jinja is a cook and social media influencer. She is a mother of five children, living with her family in Nagano Prefecture. Every day, she shares recipes for simple dishes, boxed lunches, and sweets made with commonly available ingredients.

Discovering the Shuttle Chef has truly changed my life. After a short heating period, the rest is just heat-retention cooking, which saves on gas and electricity costs—something that is both eco- and budget-friendly. It allows for worry-free cooking without having to watch the heat or worry about burning your food, and the results are as rich and flavorful as if it had been simmered for hours.

Because it requires no attention while cooking, it gives me more time for my family or myself, making it the perfect item for a sustainable lifestyle.

# (2) Collection of Stainless Steel Bottles

Setting: Shopping centers and outlet malls Sustainability contribution: Circular economy

#### **Thermos Representative**



Shunsuke Yoshiyuki President's Office Corporate Planning Thermos K.K.

Since May 2023, we have been collecting used vacuum-insulated bottles at directly operated Thermos Styling Stores, and as of June 2025, this initiative has been expanded to 21 locations across Japan. In FYE2025, we



also conducted limited-time collection drives at sports event venues of our partner teams and at elementary schools in Tokyo's Shinjuku and Toshima wards. The total volume collected is equivalent to approximately 7,100 units

of the 0.5-liter JNL series of portable mugs, or about 1,500 kilograms in weight. Collected products are sorted and crushed by recycling companies, then reused as raw materials for new products.

We see it as our mission to manage the entire process from collection to recycling of used products, and will continue to strengthen efforts to promote both resource circulation and environmental responsibility.

# **Directly Operated Store Manager**



Mr. Naoto Kubo Thermos Styling Store, Futako-Tamagawa Rise

Since the launch of our vacuum-insulated bottle collection initiative, we have received approximately 500 bottle dropoffs at our store as of the end of May 2025. We have increased awareness of the program through in-store posters and customer service interactions, and it is gaining momentum in the community.

Customers have praised the service, saying it is convenient

for disposing of items they didn't know how to properly discard, and that being able to drop off similar products made by other companies is a great initiative. We will continue to promote this service to a wider audience, aiming to further enhance customer satisfaction and corporate value.













# Special Feature: Contributing to Sustainability Through Businesses: Why Customers Support (Healthcare)

# (3) Cryogenic Storage Containers

TNSC Representative



Yoshihiro Suguri Bio Medical Division. Medical Unit Taiyo Nippon Sanso Corporation

Since 2003, Taiyo Nippon Sanso has contributed to the advancement of genomic research and medicine by providing liquid nitrogen cryogenic storage systems, including 58 DR-1000AT cryogenic storage containers. 11 control panels. 1 CE unit, and a complete LN<sub>2</sub> supply line, to BioBank Japan at the Institute of Medical Science, University of Tokyo.



BioBank Japan (BBJ) was established in 2003 at the Institute of Medical Science, University of Tokyo, as part of a worldfirst national project aimed at realizing personalized medicine based on individual genetic information. With the cooperation of patients from partner medical institutions across Japan, BBJ has collected and preserved serum samples from approximately 200,000 people, DNA samples from 270,000 people, and their corresponding clinical data.

Liquid nitrogen cryogenic storage systems are used to preserve the serum samples. These systems were unaffected by the 2011 Great East Japan Earthquake, enabling the continued preservation of the quality of all samples. As a result, some samples have remained viable for research for more than 20 years. As of August 2025, BBJ provides samples from patients with 51 major diseases, including lifestyle-related illnesses, to research projects that meet stringent review criteria. These samples are linked to clinical data about diseases, making them an invaluable resource for genomic research targeting the Japanese population. In recent years, BBJ has strengthened its foundation as a disease biobank by collecting additional

clinical data from willing participants, and advancing genomic and omics analyses to meet researchers' needs and strengthen its data platform. Numerous significant research findings have been generated using BBJ's samples and data, many of which have been published in leading international scientific journals such as *Nature*. Through such outstanding research outcomes, BBJ contributes to the advancement of genomic research and medicine not only in Japan but worldwide.



Photo courtesy of the Institute of Medical Science, University of Tokyo Unauthorized reproduction prohibited

# (4) Water-18O



Hinako Tani SI Division. Innovation Unit Taiyo Nippon Sanso Corporation

Taiyo Nippon Sanso is the world's largest manufacturer of oxygen isotopes, supplying Water-18O, used as a precursor in PET diagnostic reagents (18F compounds), to around 50 countries. By ensuring a stable supply of



Water-18O, we support PET diagnostics, which are expected to serve not only in cancer detection but also in emerging diagnostic methods for Alzheimer's disease and cardiovascular conditions, contributing to people's healthier lives.





Mr. Jun Toyohara Team Leader, Team for Neuroimaging Research, Tokyo Metropolitan Institute of Gerontology

His career includes research positions at Nihon Midi-Physics Co., Ltd., National Institute of Radiological Sciences, Chiba University's Center for Forensic Mental Health. Doctor of Pharmacy (Kyoto University)

PET scans are widely used around the world for diagnosing and researching illnesses, such as cancer and Alzheimer's disease, due to its limited side effects from contrast agents and lower radiation exposure compared to other radioactive isotope-based imaging methods. At our facility, PET scans are also used for research purposes, including identifying the causes of dementia and tracking long-term treatment efficacy. In particular, PET scans using 18F are safe, offer highresolution imaging, and place minimal burden on patients, making them an excellent tool for early cancer detection and highly valuable in terms of improving quality of life. Water-<sup>18</sup>O is the most important precursor in the production of <sup>18</sup>F-PET diagnostic reagents. In the late 20th century, as PET

scanning became more widespread, the former Nippon Sanso, predecessor of Taiyo Nippon Sanso, became the first company to achieve commercial production of over 100 kilograms of Water-<sup>18</sup>O per year, meeting growing demand around the world. Thanks to its consistent quality, Taiyo Nippon Sanso's Water-<sup>18</sup>O has become the global standard at PET facilities. In recent years, the use of PET scans has widened to new areas, such as myocardial blood flow measurement for ischemic cardiac disease and in the development of simplified drug synthesis, which should further increase demand for Water-18O. We look forward to Taiyo Nippon Sanso's continued contribution to PET diagnostics and medical and pharmaceutical research worldwide through the stable supply of high-quality Water-18O.









# TCFD Reporting

In November 2019, NSHD endorsed the Task Force on Climate-related Financial Disclosures (TCFD)\* and has since been working to enhance its climate-related information disclosures. NSHD will continue to augment these disclosures based on the TCFD recommendations, and work to enhance corporate value across the Group through both internal improvement activities and engagement with stakeholders.

\* The TCFD announced its final recommendations report in June 2017, which recommends that all companies and other organizations disclose information about governance, strategy, risk management, and metrics and targets regarding climate change-related risks and opportunities.

# Strategy

We recognize negative impacts with significant financial implications as risks and positive impacts as opportunities. We have identified climate-related opportunities and risks, taking into account time frames for the short term (through 2025), medium term (2025–2030), and long term (2030–2050), under both the transition scenario (below 2°C scenario) and physical climate scenario (4°C scenario). These opportunities and risks were then evaluated in the gas business by region using a matrix based on the likelihood and magnitude of potential impact.

We have summarized the Group's opportunities and risks, analyzed their potential impacts across procurement, operations, and products/services, and present our integrated findings and responses below.

				Financial impac		l
	Туре	Factor	Business impact	Short to medium term	Medium to long term	
	Policy regulations	Introduction of carbon pricing	Risks: Decrease in profits due to increased tax burden  Opportunities: Acquire business opportunities by differentiating through  early response		0	
Transition	Technology	Replacement to low-carbon alternative products/Progress in energy saving	Risks: Decrease in sales of existing products due to screening of low-carbon products  Opportunities: Increase profit margin by energy saving  Opportunities: Increase in demand for existing products that contribute to low carbonization  Opportunities: Increase in business opportunities through environmental product offerings and applications that contribute to low carbonization	0	0	
	Markets	Changes in market needs/Changes in customers' business activities	Risks: Decrease in sales due to changes in the manufacturing process of the steel and chemical sectors  Risks: Decrease in sales due to new entrants utilizing by-product 02 gas as demand for water electrolysis process expands  Opportunities: Increase in demand for blue and green H2  Opportunities: Increase in demand for green fuels  Opportunities: Increase in demand for CO2 capture for CCUS		0	
	Reputation	Industry criticism	Risks: Investor valuation decline for GHG-emitting companies  Opportunities: Continue stable funding by demonstrating contribution to  GHG reductions		0	
Physical	Acute	Intensification of disasters/Frequent typhoons/Heavy rain/Droughts	Risks: Plant shutdowns due to disasters caused by abnormal weather Risks: Increase in premiums paid		0	
Ph	Chronic	Sea level rise/Rise in average temperatures	Risks: Narrowing of profit margin due to increase in running costs of air separation units caused by rising temperatures  Opportunities: Increasing demand for medical products to treat diseases		0	

# Response/Actions by NSHD Group Expand low-carbon and carbon-free solutions Increase introduction of renewable energy

- by power purchase agreement and green nower certificates • Promote the introduction of carbon-free (H2,
- NH<sub>3</sub>) combustion technology · Expand the use of oxygen combustion
- Acquire demand for medium-scale CO<sub>2</sub> capture in response to CCUS
- Expansion of H<sub>2</sub> supply business by HyCO husiness
- · Promote the development of environmental product offerings and applications that contribute to low carbonization
- Increase sales of environmental product offerings and applications that contribute to low carbonization

#### Increase efficiency and conserve energy n our own operation

- Promote energy saving by improving productivity through the introduction of DX technology, etc. (Introduction of SAITEKI, optimization of delivery)
- · Replacement of aging air separation units to reduce running costs

#### Address risks in social infrastructure

- Promotion of disaster countermeasures · Provision of medical oxygen, etc.
- Use of insurance
- . Disclosure of quantitative data on GHG reduction contributions through integrated reports, etc.
- Promote disclosure of non-financial

As a result of the evaluation, the following four opportunities and risks were deemed to be "large" or "medium," and we conducted a quantitative calculation of the financial impacts on the Company's business for each of them.

Category	y Risk/Opportunity		Calculation details	Calculation result
Business risk	(·,		Amount of financial impact on the NSHD Group in 2030 due to carbon pricing	¥59.4–92.5 billion
Business risk	(2) Decrease in sales due to changes in the manufacturing process of existing customers in the steel and chemical sectors—Outlook for changes in manufacturing process of the steel sector	Under 2°C	Net sales of oxygen for furnaces of the NSHD Group and its affiliates in 2050	¥30.0 billion (half of the current sales of ¥60.0 billion)
Business risk	(-,		Amount of damage to NSHD Group production sites in the event of a 100-year flood by 2050	¥36.0 billion (¥18.0 billion taking into account disaster insurance policies)
Business opportunity	(4) Expansion of blue/green hydrogen demand	1.5°C	Market scale for blue/green hydrogen in 2030 and 2050	¥13–41 trillion (2030) ¥60–218 trillion (2050)

# **Metrics and Targets**

Internal carbon pricing is one of seven cross-industry metrics. NSHD introduced it from April 2024 to be used as an indicator when making investment decisions. The pricing has been set making reference to the NZE scenario in the IEA's World Energy Outlook 2023.

Metric	Type of internal carbon pricing	Target GHG emissions	Price
Internal carbon price	Shadow price	Scope 1 and Scope 2	85 US\$/t-CO₂e

#### Initiatives Regarding the United Nations Global Compact

NSHD is a signatory to the United Nations Global Compact (UNGC), and has been registered as a participating company since January 2022. For more details on the UNGC, please refer to our corporate website.

Participation in Initiatives: 

Please see here.

For details on our TCFD-based disclosures, including governance, strategy, risk management, and metrics and targets, please refer here. Details of the scenario analysis described above are also available.

TCFD-Based Reporting: (3) Please see here.













# **Biodiversity Measures**

# Response to Biodiversity

In 2021, NSHD established the Nippon Sanso Holdings Group Environmental Policy, which commits to reducing environmental impact through its products, services, and business activities in order to address environmental challenges, such as climate change mitigation and adaptation, efficient resource use and pollution prevention, water resource conservation, and biodiversity protection.

We have positioned the preservation of biodiversity as one of our materiality issues, including participation in the Keidanren Initiative for Biodiversity Conservation in January 2024. The Company has endorsed the message of the Keidanren Declaration for Biodiversity and Guideline, and will continue to promote business activities that help to preserve biodiversity.

In addition, to stem the loss of nature, restore it, and have a beneficial impact on it, we support the pivot to a "nature positive" approach, a target of the Taskforce on Nature-related Financial Disclosures (TNFD)\*1. We joined the TNFD Forum\*2 in August 2024, and registered as a TNFD Adopter\*3, adopting the TNFD Declaration.

Through these initiatives, we aim to contribute to the sustainability and restoration of biodiversity through coral reef conservation activities. Looking ahead, we plan to collate and disclose information on each of the recommended disclosure items in accordance with the TNFD framework, and to promote and actively disclose our initiatives on biodiversity.

- \*1 An international initiative established for companies and organizations, etc., to appropriately evaluate and disclose how they rely on and impact natural capital and biodiversity in their business activities (launched in June 2021).
- \*2 A network that supports the creation of an information disclosure framework by the TNFD, with participation from companies and organizations, etc., that have expertise in diverse fields.
- \*3 Companies and organizations, etc., that have registered on the TNFD website their intention to disclose information based on the TNFD recommendations announced in September 2023. The registered companies and organizations, etc., are required to make disclosures that adopt the TNFD recommendations based on the information of their 2024 or 2025 accounting year.

#### **Background to Our Participation in Coral Reef Conservation**

Our core products, such as oxygen, nitrogen, and argon, are air-derived gases that support our everyday lives and industry. As a company working with these air-derived resources, we value the natural cycle of air, water, and earth that sustains life. In aquaculture, for example, our supply of oxygen gas is used to support the health and growth of fish, contributing to the sustainable use of natural capital while reducing overreliance on natural fish resources.

We view coral conservation, which lies within this extended sustainable cycle, as a vital effort that contributes to creating a more harmonious environment by fostering marine biodiversity.

# Specific Initiatives by NSHD

# Participation in the OIST Coral Project

In July 2024, NSHD joined the OIST Coral Project as a special partner, supporting the mission of Okinawa Institute of Science and Technology Graduate University (OIST) to preserve coral reefs in Okinawa and around the world. Through coral reef monitoring using environmental DNA technology established by OIST and R&D driven by genome analysis technology, we will support coral reef conservation activities in Okinawa and around the world.





OIST Coral Project logo

Thermos original mug for the OIST Coral Project

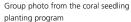
In support of the OIST Coral Project, Thermos is offering

a limited-edition, Okinawa-exclusive mug with an original design. A portion of the proceeds from sales of this product will be donated to the project to support coral reef conservation.

# Joined Team Tyura Sango as a Member Company

In February 2025, Taiyo Nippon Sanso joined Team Tyura Sango, a coral reef conservation initiative in Onna Village, Okinawa. This initiative features an employee participation program that allows staff to experience firsthand the importance of biodiversity and coral conservation through activities such as coral seedling planting, seedling cultivation, and reef monitoring. Through participation in this program, the Company supports the conservation of coral reefs, which are both a vital treasure trove of biodiversity and a valuable tourism resource.







Coral planting



Corals being cultivated











# **Social Contribution**

NSHD promotes a variety of social contribution activities aimed at realizing a better future for people, society, and the planet, including initiatives related to safety and health, environmental conservation, training the next generation, disaster relief, and local communities.



#### Safety and Health

Japan: Thermos donated its frying pans to children's cafeterias in Kanagawa Prefecture.

United States: Matheson raised funds and provided support for breast and ovarian cancer patients.

**Australia:** Supagas participated in the Ronald McDonald House Charities program to support families of children undergoing medical treatment.

#### **Environmental Conservation**

Thailand: Nippon Sanso (Thailand) joined wildfire prevention activities in collaboration with the Northern Industrial District as part of the Sustainable Green Area Development project.

**Global:** Tree-planting activities are carried out in Europe, Asia, and other regions worldwide.

# **Training the Next Generation**

Japan: Taiyo Nippon Sanso held kids' science class lab lessons.

Vietnam: Co-sponsored scholarship programs for junior and senior high school students.

Norway: Participated in the Women in Uniform Read initiative to support children's education in STEM (science, technology, engineering, and mathematics) careers.

# **Disaster Relief**

Japan: Taiyo Nippon Sanso donated relief funds in response to the earthquake in Myanmar, etc.

**Spain:** Nippon Gases Euro-Holding provided donations and assistance to those affected by flooding in Valencia.

#### Local Communities

Japan: Thermos donated large-capacity bottles to skilled workers at the construction site of Alvark Tokyo's new home arena.

United States: Matheson collected preserved foods and daily necessities for donation to support organizations.



Ronald McDonald House Charities program



Activities to prevent forest fires



Taiyo Nippon Sanso's kids' science class lab lessons



Education about STEM careers

Click here for more information about our other social contribution activities.

Sustainability Topics (Society):













# **Valuing People (Human Rights Initiatives)**

Nippon Sanso Holdings supports the spirit and meaning of the Universal Declaration of Human Rights, the International Covenants on Human Rights, the Guiding Principles on Business and Human Rights, and the United Nations Global Compact, and is taking steps to promote them.

# **Policy Formulation**

- We have formulated the Global Policy on Respecting Human Rights, Contributing to Communities, Employment, Labor, and <u>Health</u>. Under the policy, we engage on issues including respect for the dignity and rights of individuals, awareness of human rights and education, privacy protection, prevention of human rights infringement, and human rights due diligence.
- We conduct procurement with an awareness of human rights and occupational safety and health, in accordance with our Procurement Policy and Procurement Guidelines.
- We have stipulated the Occupational Safety and Health / Industrial Safety and Disaster Prevention Policy, and are working to ensure the safety of employees, subcontractors, and external stakeholders based on the principles of "selling gas is selling safety" and "safety comes first "
- Under our Product Safety and Quality Policy, we follow the principles of product stewardship to identify the dangers and hazards posed by our products through risk assessments, and strive to mitigate them.

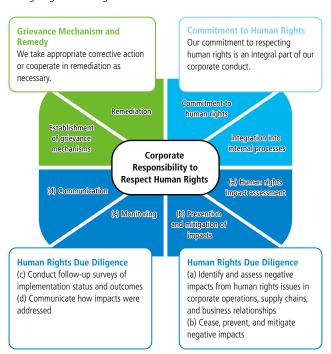
# **Education and Awareness-Raising Regarding Human Rights**

We conduct training on business and human rights as well as training on unconscious bias for the Company's officers.

# **Human Rights Due Diligence Initiatives**

- NSHD has established a human rights due diligence project team.
- The Company launched human rights due diligence efforts to identify major human rights issues associated with its business activities.
- NSHD plans to assess the severity and likelihood of potential human rights issues based on the OECD Due Diligence Guidance and the UN Guiding Principles Reporting Framework.

- We are currently conducting desktop research in collaboration with external experts to identify human rights issues relevant to NSHD's value chain and stakeholders.
- Once key human rights issues are identified, we will prioritize efforts to prevent and mitigate associated risks and implement ongoing monitoring.



# **Initiatives to Share Procurement Guidelines**

- NSHD shares its Procurement Guidelines with suppliers and asks that they duly consider human rights and occupational health and safety.
- Suppliers with a certain level of transaction volume are asked to complete a self-assessment checklist based on the RBA\* Code of Conduct, which NSHD uses to evaluate their compliance with human rights and occupational health and safety standards when selecting business partners.
- To ensure consistent implementation across the Group, NSHD has established standards for purchasing management and is working toward standardized operations.
- \* Responsible Business Alliance: An organization of major companies to improve society, the environment, and ethics in global supply chains

#### **Safety Initiatives**

The NSHD Group aims to improve employees' sensitivity to risk management through hazard simulation training. The training provides proprietary hazard experience equipment specialized for high-pressure gases, and participants learn about recent accidents.

Furthermore, we are working to increase safety awareness among our customers through Minna Gas Shiru ("Gas Knowledge for Everyone"), a package of services for improving safety comprising safety education videos about high-pressure gases, high-pressure gas hazard experience courses, and an online salon where participants can learn about safety.

Minna Gas Shiru (in Japanese only): 

Please see here.



Minna Gas Shiru logo



VR-based experience simulating the tipping over of gas cylinders











# Progress Under the Medium-Term Management Plan NS Vision 2026

# Continuous Growth: **Evolving Talent Strategies**



We are creating a virtuous cycle whereby the results of employee engagement surveys are referred to in implementing each year's new measures, the effects of which are gradually reflected in subsequent engagement survey scores.

Yasukazu Takada Head of HR Division

With a focus on industrial gases, the NSHD Group's businesses engage in production at the point of consumption. Accordingly, in developing its human resources strategies, the Group places emphasis on realizing regional human resources strategies that are closely integrated with the business strategies of each region. While valuing regional autonomy, the Group also gives importance to collaboration with regions that entails the incorporation of Groupwide tasks into regional human resources strategies. Such tasks include developing globally competent personnel who can bridge gaps between regions, promoting diversity, and heightening employee engagement. In FYE2025, the empowerment of women, which is part of our diversity initiatives, made further progress in Europe and also progressed steadily in Japan, which had been lagging behind. As a result of accelerating the strengthening of our organizational and personnel systems and the implementation of specific measures, employee engagement survey scores are trending upward. Over the past three years, we have been gathering engagement data and creating a virtuous cycle whereby survey results are referred to in implementing each year's new measures, the effects of which are gradually reflected in subsequent engagement survey scores. These improvements demonstrate that the Group's human resources

strategies are functioning effectively. To fully realize the potential of personnel—who are the source of sustained business growth—we will continue collaborating with operating companies in the implementation of measures.

On the other hand, we still face challenges such as securing and developing globally competent personnel and sharing best practices and know-how across regions. In particular, collaboration across the entire Group is essential in electronics, carbon neutrality, and other growth fields as well as in IT-enabled productivity improvement measures. As befits its role in the holding company, the HR Division will continue promoting measures aimed at organically linking regional and Group human resources strategies so that the Group's personnel can develop and utilize their talents.

We will continue to take the results of the engagement survey seriously and develop and implement human resources measures that connect employee feedback and management strategies. In this way, we will create an environment where employees can work with pride and a sense of fulfillment as gas industry professionals or as professionals in the Thermos business, realize the Group Philosophy and Vision, and thereby benefit society even further.

# **Strategies Overview**

The NSHD Group's Approach to Human Resources Strategies

# **Realization of the Group Vision** Increase in corporate value

**Business activities** Realize the Medium-Term Management Plan NS Vision 2026

# The Gas Professionals

Basic values of health, integrity, and resourcefulness

Secure diverse human resources

Development of talent through training programs

Increasing employee engagement

• Promote women's active participation

Diversity Action Plan: → Please see here.

• Global talent exchange

- Hierarchical training
- Job-specific training Development of Talent Through Training Programs:

Please see here.

• Periodic survey and improvement cycle

• Promote well-being











Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: Evolving Talent Strategies

# Talent Strategy as Seen in Results of Employee Engagement Survey

# **NSHD Group's Approach to Employee Engagement**

Since FYE2023, as a tool to measure employee engagement, the NSHD Group has conducted employee engagement surveys of all Group employees in order to assess the degree to which employees are empowered to fulfill their potential and how well the Group Philosophy and Vision are understood and embraced.

The survey focuses on cultivating a mindset for working with a sense of purpose within the organization, grounded in an understanding of the Company's philosophy and goals. It assesses, for example, whether employees resonate with the Company's vision and proactively engage in their work with the intention of contributing, and whether they are in a state of physical, mental, and social well-being.

In the FYE2025 survey, overall engagement levels, particularly with relation to diversity, improved across the Group, thanks to action plans to improve engagement implemented by each Group company based on the results of the prior survey. NSHD will continue to listen to employee feedback through these surveys, improve their work environments, and support each employee in realizing their full potential.

#### Summary

Compared with FYE2024, the FYE2025 survey showed improvement in 12 out of the 15 categories shown in the table on the right. Of note, the safety category has maintained the highest score for a third consecutive year, a continued area of strength for the Group. The sustainable engagement category, an area the Group has been focusing on that is defined as having strong motivation to achieve goals and a deep sense of belonging to the organization, also improved by one point from the previous fiscal year.

# Overall Strengths and Areas for Improvement of the NSHD Group Seen from the Results

- · Workplace environment with a high level of support for and sympathy with the desired goals and objectives
- · Commitment to safety and safety culture
- · A climate of high psychological safety

- Support for the corporate philosophy
- · Promotion of diversity
- · Clarification of criteria (goals and objectives) by which employees are evaluated

# Employee Engagement Survey Results\*1

(pt) NSHD Group average

	FYE2023	FYE2024	FYE2025
Sustainable Engagement	78	80	81
Corporate Value, Goals and Objectives	69	76	78
Company Image	66	67	68
Leadership	57	60	62
CSV (Creating Shared Value)	77	78	79
Innovation	57	60	61
Productivity/Speed	69	71	71
Quality	70	74	75
Safety	84	85	85
Immediate Manager	77	77	77
Diversity	71	72	75
Communication	72	72	73
Well-being/Health	78	78	79
Talent Management	62	64	65
Performance Management	61	63	64

<sup>\*1</sup> Percentage of favorable responses (the ratio of people who answered either "agree" or "tend to agree"). Full score is 100 points. Items highlighted in green indicate areas of improvement in the FYE2025 survey.

# **TOPIC 1: Sustainable Engagement**

FYF2023

FYF2024

FYF2025

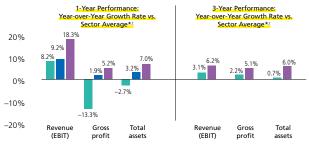
# Signs of steady improvement

Engagement reflects the strength of the relationship between employees and the Company, as an embodiment of their logical, emotional, and behavioral commitment to the Company. Employees with high engagement levels tend to deliver stronger performance than those with lower engagement, but engagement alone is not sufficient to ensure sustainable corporate growth.

The NSHD Group positions sustainable engagement as a key metric, as it reflects factors that influence employee performance and the willingness to go the extra mile to contribute.

Research by Willis Towers Watson, the provider of our employee engagement survey, shows that companies with high levels of sustainable engagement outperform those with low engagement.

NSHD's sustainable engagement score improved by one point from the previous fiscal year to reach 81 points. While we have yet to reach the NSHD Group target of 85 points, we will continue working to further improve this score.



Low engagement High engagement High sustainable engagement

Source: Willis Towers Watson

\*2 Average values of multiple companies belonging to the same industry (i.e., sector). Collected and analyzed by Willis Towers Watson.











# Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: Evolving Talent Strategies Talent Strategy as Seen in Results of Employee Engagement Survey

# Second Engagement Survey Workshop Held

To accelerate improvements in engagement scores, NSHD began hosting workshops in 2024 for engagement survey administrators and managers at each Group company.

The second workshop, held in 2025, featured group discussions and case studies from Group companies with the following objectives: (1) learn how to interpret survey results and identify key issues; (2) experience the process of developing action plans in response to those issues; (3) understand the latest trends in engagement and apply them to action plans; and (4) take effective actions by learning from analysis and case studies across Group companies. By providing opportunities for Group companies to present their actual action plans and their outcomes, the workshop was an opportunity to learn from peers and share insights among participants.





Workshop

# **TOPIC 2: Diversity**

FYE2023 FYE2024 FYE2025

Significant improvement from previous fiscal year

The NSHD Group is committed to promoting diversity by creating workplaces where diverse talent in each region and organization can thrive based on mutual trust and respect.

In the FYE2025 engagement survey, the score for diversity and respect for individuals improved by three points year on year, reaching 75 points. At Taiyo Nippon Sanso in particular, the Diversity & Inclusion Office took the lead in efforts to advance women's participation and step up diversity and inclusion initiatives. Training to raise awareness of unconscious bias, often a barrier to unleashing diverse talent, along with career development assistance measures, yielded tangible results.

# **Examples of Action Plans**

The NSHD Group is undertaking various initiatives to increase the visibility of women in the workplace, promote empowerment, and foster a culture that respects diversity.

- **NSHD:** Messages from all directors were distributed across the Group. Japan: • Implemented a sponsorship program, leadership training for female staff, and unconscious bias training
  - Held town hall meetings between management and employees on D&I topics

#### **United States:**

- Held an event in recognition of International Women's Day, including the first roundtable event with female employees
- Launched Women at Matheson (WAM), a group that supports women's engagement

Europe: • Conducted bias training through WING PROJECTS, a women's support program

> • Hosted an event for the International Day of Women and Girls in Science to reaffirm the NSHD Group's commitment to gender equality

#### **Asia and Oceania:**

Consolidated local company's action plans to promote women's engagement into a unified SEA+I Women's Move Forward Plan

For more information about our D&I initiatives, please see here. 

Please see here.



# Message from the Leader of the Promotion Project Team for Women's Active Engagement

Last year, Taiyo Nippon Sanso issued a formal D&I declaration, which was announced both internally and externally. To promote a deeper understanding of the importance of D&I and specific initiatives, we hosted town hall meetings for employees in various locations and proactively communicated the president's message and activity updates through internal channels. These efforts have led to



**Toshie Furuumi** Executive Officer Taiyo Nippon Sanso Corporation

increased awareness among employees, which I believe contributed to higher engagement scores internally. That said, while awareness is improving, challenges remain in translating that awareness into action and embedding D&I into the organizational culture.

In 2025, we will continue fostering a workplace where D&I is embraced as a personal commitment, and where individuals respect each other's differences and thrive as their authentic selves. Looking ahead, we aim to collaborate with other regions where D&I is further along, and raise our goals to a higher level. I also have high expectations for NSHD's leadership in global D&I initiatives.

Everyone's understanding and support are the driving forces behind advancements in D&I. I sincerely look forward to seeing everyone continue to proactively engage and witnessing their willingness to take on new challenges.









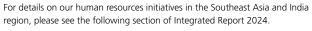


Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: HR Roundtable Discussion

# **Utilizing a Common Platform to Create a Dynamic Human Resources Strategy**

Currently, NSHD is introducing a new human resources platform called "Cornerstone" in the Southeast Asia and India region. Our operations in Europe, which pioneered the introduction of the platform, and our operations in Singapore, which followed suit, are creating synergies between their human resources strategies. Human resources leaders from both regions discuss the real progress they are seeing and future initiatives.





Asia and Oceania, Four Global Regions and Thermos Talent Strategy:

(<del>)</del> Please see here.





#### **About Cornerstone**

Cornerstone Galaxy, the complete Al-powered workforce agility\* platform, meets organizations where they are. With Galaxy, organizations can identify skills gaps and development opportunities, retain and engage top talent, and provide multimodal learning experiences to meet the diverse needs of the modern workforce. Approximately 7,000 organizations and 140 million users in 186 countries use Cornerstone Galaxy to build high-performing, future-ready organizations and people today.

\* Workforce Agility: The ability to respond quickly to change and exploit those changes as opportunities.











Progress Under the Medium-Term Management Plan NS Vision 2026 Continuous Growth: HR Roundtable Discussion

# **Utilizing a Common Platform to Create a Dynamic Human Resources Strategy**

# Introducing Common Human Resources Systems that Transcend Regional Boundaries

Hisae Yamamoto • NGE has introduced Cornerstone in Europe. Following on from this, Cornerstone is also being introduced in the United States. The rollout of the platform is expanding and becoming global. Lieven, could you please begin by explaining the background to and the objectives of the introduction as well as current usage of the platform?

**Lieven Keuppens** • We began implementing Cornerstone in 2018, when our company had just become a member of the NSHD Group. Due to the divestment, legacy systems were rapidly being discontinued. So, we needed to introduce new systems quickly.

In fact, before the divestment we had been seeking a platform that we could manage completely on our own. Cornerstone was exactly what we had been looking for. With this platform, when a specific process is required or we want to add new items, we can handle the task ourselves without relying on external consultants.

The introduction phase was extremely brief. Within about four months, the core items for human resources operations were all in place. In addition to core systems such as learning, skills development, performance management, compensation management, talent management, and succession management, we were able to use a recruitment management system. Thus, we established comprehensive operational capabilities in a really short space of time.

Yamamoto I understand that Nippon Sanso Holdings Singapore Pte. Ltd. (NSHS), where Pauline works, is still in the early stages of the introduction process. What were the appealing aspects of Cornerstone that led you to introduce the platform?

Pauline Loo For quite some time, we had been actively searching

for a robust talent management platform\*¹ that could harness technology to enhance talent development and better align our talent strategy with NSHD's broader business objectives. After evaluating several solutions, we ultimately selected Cornerstone, confident in its ability to support a cohesive rollout of talent acquisition, learning management, performance management, and succession planning across Southeast Asia and India. Operating in a dynamic, multicultural environment, we recognized the critical need to

establish a digital HR ecosystem\* $^2$  tailored to elevate employee engagement. Cornerstone offered the comprehensive framework we had been seeking to bring that vision to life.

Yamamoto As you say, the aim and significance of the platform's introduction becomes clearer when viewed from the perspective of integrating talent strategies with business goals. Pauline, I believe that NGE's introduction process and operational methods gave you some pointers. What aspects of the example set by NGE did you find particularly useful?

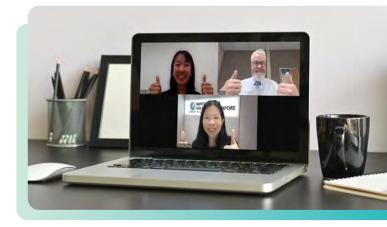
Pauline Gaining a thorough understanding of NGE's implementation process proved to be immensely valuable. By examining both the challenges Lieven encountered and the factors that contributed to the success of the initiative, I recognized the critical importance of prioritizing change management.\*3

We placed strong emphasis on guiding change because transitioning to new workflows, interfaces, and automation can be difficult for employees and often faces resistance. To address this, we actively engaged with our employees—segmenting the rollout into clear phases, defining key milestones, and sharing a roadmap to demonstrate how we planned to move forward.

Without genuine employee engagement, the platform risked falling short of its intended business value and becoming a wasted investment. That is why we deliberately included post-implementation review checkpoints at strategic milestones throughout the launch. This approach resulted in an exceptional employee satisfaction rate of 96%, which was highly encouraging.

To ensure smooth integration across regions with diverse cultures and business environments, it was essential to customize functionalities that catered to local needs. NGE's example provided valuable insight, reinforcing our belief that it is possible to uphold consistent HR policies while respecting regional differences.

- \*1 A system that centrally manages information on employee's skills, experience, evaluations, and career plans and supports the strategic utilization of human resources
- \*2 Human resources infrastructure that connects various human resources functions and data related to such areas as recruitment, human resources development, evaluation, and salaries and that provides support enabling organizations and employees to make decisions and take action in a rapid, timely manner
- \*3 The management of the change process to help employees adapt when organizations implement various types of transformation



# Creating a System that Promotes Global Human Resources Exchanges and Mobilization

Keuppens • We had to complete the introduction process in a short period of time. In comparison, NSHS decided to allow three years for the introduction of the platform. This was the right decision. As Pauline said, in-depth communication with employees to change the mindset of those who are accustomed to existing systems is important, and this takes time. In the future, when we launch another project of this scale, we will most likely ask Pauline about exactly how she managed to successfully implement the project. Providing mutual feedback on each other's experiences is enormously important. Pauline • I heard that after the platform was introduced, Lieven conducted a series of training sessions to strengthen specific areas.

This inspired me to realize that we, too, could create customized educational resources internally—without the need for external

consultants.

Moreover, NGE's initiatives, including a structured leadership development program, a systematic succession planning framework, and a robust mentorship scheme, offered valuable inspiration. Drawing from their example, we developed our own toolkit to support the implementation of a comprehensive succession planning process tailored to our region.

Yamamoto = Various synergies seem likely to continue emerging in the future.













# Utilizing a Common Platform to Create a Dynamic Human Resources Strategy

Keuppens = Yes. We now have a common platform where we can share information about each other's activities and share the materials we have. I would like to discuss whether there are any shareable learning materials.

**Pauline** In the future, we could hold workshops on how to use the platform or hold sessions as the platform is upgraded.

To enhance cross-border collaboration, we leverage our shared focus within human resources operations. If we use the same platform, we can create opportunities for talent exchanges among teams more systematically and share best practices in human resources management, leadership development, and employee engagement.

Also, we can promote talent mobility programs. Cornerstone allows us to collect information about our employees and identify each person's abilities and attributes, making it easier to realize talent exchanges through talent transfer programs, short-term assignments, and leadership-focused job rotations.

# **Keeping Pace with Cornerstone's Evolution**

Yamamoto ■ What organizational changes have occurred since the introduction of Cornerstone?

Keuppens • We are now able to offer employees learning opportunities 24/7. When employees want to grow, they search for opportunities on Cornerstone. Of course, we have been working on skills development for a long time, but the advantage of this latest platform is that it allows for learning that is more effectively tailored to each individual's situation.

Additionally, when there was a major change in a certain region, we were able to quickly determine who should be the new leader of that region. With so many people working in the Group, being able to immediately check the type of person an employee is by accessing the platform is a major advantage. The true value of introducing a new platform becomes clear when major changes occur.

Pauline As Lieven said, I think the main merit of Cornerstone is that it allows us to evaluate employees' experience, abilities, and the

skill sets they have developed both inside and outside the Company. We can also gain an understanding of how employees have performed in their past and current roles. Based on this information, we can make decisions and identify suitable personnel when opportunities arise for global mobility\*4 or assigning special tasks to someone. Without a platform that streamlines this process, we would have to spend a lot of time collecting information and having discussions with managers.

Moreover, the benefits of Cornerstone are not limited to human resources operations. I believe that the platform encourages collaboration between business departments beyond the scope of human resources operations and enhances the pursuit of operational excellence and synergies within the Group.

Yamamoto ■ What kind of capabilities and initiatives do you think will be required to achieve integrated human resources management within regions going forward?

**Keuppens** © Cornerstone is constantly evolving. We must keep pace with Cornerstone and ensure that employees benefit from platform upgrades that the provider rolls out in the future. Our current task is to implement each of the functions offered by Cornerstone and make them available to users as efficiently as possible.

Pauline Navigating resistance to system changes is an ongoing challenge that requires continuous attention. It's essential to ensure that newly onboarded employees and those transitioning from other regions can effectively acclimate to the platform. As such, training programs focused on platform introduction and utilization are vital to drive successful adoption. Data standardization is also a task. Cornerstone already includes AI capabilities. So, in the future we may be able to use AI chatbots\*5 to facilitate the functions of human resources operations. This would allow us to achieve more seamless human resources processes across the entire Group. The possibilities of Cornerstone are endless.

# Developing a Training Platform for The Gas Professionals Yamamoto To continue the pursuit of synergies and innovation

across the entire Group, NSHD will promote further exchanges among operating companies. Do you have any requests about the type of support that would be helpful in this regard?

Pauline I believe that aligning our efforts with the "Proactive. Innovative. Collaborative." Group Philosophy and NSHD's "The Gas Professionals" slogan is essential. An effective way of developing employees into gas professionals is to utilize Cornerstone as an integrated platform and ensure that employees understand the appropriate use of systems and how to collaborate with each other. It is also important to motivate employees to perform at their best in all aspects of their work by making sure they know that their perfor-

mance is fully visible to management. Only then can we make the

NSHD Group truly robust.

Keuppens • What NSHD can do for us is bring together people who are working on similar projects that are tasked with introducing platforms and encourage them to utilize each other's strengths. This does not necessarily mean implementing platforms in a top-down manner. In fact, our current efforts are based on a bottom-up approach. Personal interactions among people like Hisae, Pauline, and myself are building good relationships among companies and creating synergies. I believe we should steadily continue these activities.

Yamamoto To see everyone advancing through a process of trial and error in different introduction phases and in regional contexts is extremely impressive. The common platform provided by Cornerstone has given me a renewed sense of the potential that exists across the entire Group as well as the value of learning and collaboration that transcends regional boundaries. I hope that the points made in today's discussion will be useful for future initiatives and prompt each employee to reflect on their own career and growth.

<sup>\*4</sup> A human resources strategy that involves the transfer and assignment of employees to different countries and regions

<sup>\*5</sup> A service that uses AI to automatically answer questions asked via chat services











# Progress Under the Medium-Term Management Plan NS Vision 2026 Support for Focused Fields: **Realizing Group R&D**



We will further develop and extend existing technologies and create new products and technologies matching customer needs.

Yoshiyuki Hagihara

General Manager, Group Business Promotion Office

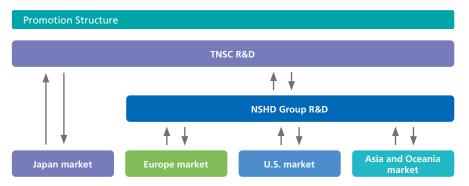
NSHD enhances the efficiency of development projects across the entire Group by sharing and merging technologies and customer solutions fostered in Japan, the United States, Europe, and Asia and Oceania and rolling them out in ways that suit the characteristics of each market. In particular, gas application technologies; gas separation, capture, and purification technology; and air separation-related technology are core technologies common to all regions. With the aim of contributing to carbon neutrality, electronics, and sustainability, we will further develop and extend existing technologies and create new products and technologies that match customer needs.

Carbon neutrality: NSHD is advancing the development of oxygen combustion technology and gas separation and purification technology with a view to realizing a decarbonized society. We are sharing and introducing technologies developed in Japan, such as hydrogen and ammonia combustion technology, CO<sub>2</sub> capture and purification technology, and ammonia cracking and hydrogen purification technology, with other regions.

**Electronics:** In contributing to the advancement of digitalization and the development of the electronics

industry, we are stepping up technological development as well as our activities that are aimed at globally supplying electronic material gases and related equipment. Produced by the technologies of U.S.-based company RASIRC, Inc., BRUTE®-Hydrazine and Peroxidizer are new gas sources that safely supply highly concentrated anhydrous hydrazine gas and hydrogen peroxide gas. In developing atomic layer deposition technologies, which form thin films at the atomic level, use of these gases has proven more effective than using existing nitride materials and oxidation materials.

Sustainability: The establishment of a sustainable food supply chain is a common challenge in every region. Technology platforms that can be shared include aquaculture technology (oxygen dissolution), liquid nitrogen-type food-freezing equipment, and replacement gas packaging technology for extending the shelf life of processed foods. However, effective quantities of data are essential for the development of these technologies. Therefore, through information sharing among regions, we are encouraging technological development and helping to reduce food wastage.



#### **Group R&D Policy**

- We will further develop and expand our core technologies by promoting R&D activities in pursuit of sustainability in our gas business, equipment business, and new businesses.
- Each NSHD Group company will promote R&D activities for resolving issues and creating new solutions.

#### Value Creation Example

# Globally Introducing Core Technologies to Strengthen Competitive Advantages and Contribute to the Electronics Field

NSHD is strengthening solutions proposal capabilities by using its initiatives in Europe, where oxygen combustion technology has been introduced, as an example that other regions can follow. Further, in respective regions we are also verifying and introducing Innova-Jet® Swing, which is a proprietary oscillating combustion technology developed in Japan, as well as carbon-free combustion technology. Through global information sharing and technological collaboration, we aim to expand markets in each region.

In addition, we are helping to increase diborane production capacity globally by introducing high-purity diborane manufacturing technology developed in Japan to Group companies in

South Korea and China. Diborane is an essential material gas in the manufacture of a wide range of semiconductors, including logic, memory, and discrete semiconductors. Demand for this gas is growing as semiconductor manufacturers ramp up their manufacturing capacity. Augmenting our diborane production capacity will help us expand businesses in the electronics field, where further growth is likely.



Matheson Gas Products Korea, Co., Ltd., our diborane manufacturing base in South Korea











# Progress Under the Medium-Term Management Plan NS Vision 2026

# Support for Focused Fields: Realizing Group Engineering



We have launched an engineering advancement project to meet demand for air separation units.

# Kimitaka Koga

Executive Officer, Executive Project Manager of Global ASU Engineering Enhancing Project, Group Business Promotion Office

Until now, operating companies were experiencing a volume of new demand for air separation units that exceeded the supply capacity of Taiyo Nippon Sanso's Plant Engineering Center, which until 2024 was the Group's only air separation unit production base. To support the further development of operating companies, the Group had to optimize air separation unit engineering and manufacturing so that future demand for equipment and facilities could be met. Therefore, we formed the Global ASU Taskforce, which submitted a report outlining organizational structures and short-term and medium- to long-term engineering strategies.

Based on this report, we launched the Global ASU Engineering Enhancing Project in April 2025. Currently, we are focusing on regional engineering support and the advancement of global procurement. We aim to become more involved in operating companies' new air separation unit construction projects than we have been in past global engineering efforts. Further, we will create a comprehensive framework that extends the benefits of global procurement, which are only enjoyed by certain operating companies, to all operating companies.

Nippon Gases Euro-Holding S.L.U. (NGE) has recently launched a new business unit called Onsite Advanced Systems. One of the new business unit's partner companies is Polaris S.r.l., which has become the NSHD Group's second plant supplier with engineering and manufacturing capabilities for air separation units. By collaborating with this partner and others, NGE will continue to grow. Meanwhile, the Global ASU Engineering Enhancing Project will promote mutual cooperation between the Onsite Advanced Systems business unit and the Plant Engineering Center as well as co-creation with operating companies, and focus efforts on enabling operating companies to acquire assets similar to those of the business unit.

Further, the goal is for the Global ASU Engineering Enhancing Project to become a truly global engineering organization that not only handles air separation units but also gas supply systems in general, including HyCO, CO<sub>2</sub>, vacuum-swing and pressure-swing adsorption, and membrane separation. In this way, the project will contribute to the sustained advancement of operating companies.

# Value Creation Example

# A New Business Unit to Support NGE's Growth Through Engineering

In recent years, the engineering department has become more prominent in NGE, and through new investments and acquisitions, its work is becoming increasingly essential. In order to cover all the needs of our company and our customers, and to significantly support business growth in resilient markets, a new business unit called Onsite Advanced Systems was created in 2025. Onsite Advanced Systems is formed of the existing engineering team, located in Belgium, as well as new partners who will work together with us on creating innovative solutions: Polaris, a leading supplier of turnkey systems for air separation units, process gases, and purification units; Hysytech, a company specializing in the engineering, development, and construction of turnkey solutions in biomethane and alternative biofuels; and IET Ecology, a pioneering company specializing in advanced processes and technologies focused on a circular economy.

Partner Companies of the Onsite Advanced Systems Business Unit



Polaris 2



GASES 6



focused on a circular economy

IET Ecology: A pioneering company specializing in advanced processes and technologies

Polaris S.r.l.: A leading supplier of turnkey systems for air separation units, process gases and purification units Hysytech S.r.I.: Specializes in the engineering, development, and construction of turnkey systems and solutions in biomethane and alternative biofuels

The agreement with Hysytech in particular is related to sustainability. This partner specializes in the engineering, development, and construction of turnkey solutions in green chemistry and alternative biofuels such as biomethane, bio-LNG, and bio-hydrogen. Their know-how and expertise in chemical processing, cryogenics, gas recovery, and purification applied to biofuel production and waste-to-energy is a perfect match for our expertise in technologies such as combustion, waste-water treatment, hydrogen, and syngas production.



Olen Office (Belgium)

Onsite Advanced Systems is embedded in our NGE organization, and our new partner, Polaris, is becoming more and more integrated. There is a small tradition in the Olen Office followed by the Engineering team. If the weather is good, the team takes a long walk together during their lunch time. It's a simple but meaningful way to stay connected, and it reflects the collaborative spirit that defines our workspace.

The NSHD Group will continue concentrating its comprehensive capabilities to realize innovation and sustained growth in the industrial gases business.













# Progress Under the Medium-Term Management Plan NS Vision 2026

# Support for Focused Fields: Co-Creation with Partners

Under its Group Philosophy, "Proactive. Innovative. Collaborative. Making life better through gas technology," NSHD endeavors to create new value through co-creation with its partners. In this section, we introduce selected examples of open innovation currently being carried out by Taiyo Nippon Sanso, our operating company in Japan.

# **Open Innovation at Taiyo Nippon Sanso**

Taiyo Nippon Sanso has long sought out global partners with unique technologies. By combining these technologies with its core expertise as The Gas Professionals, it has developed new businesses and generated diverse types of value. To date, open innovation has spanned the four fields of additive manufacturing, electronics, biotechnology, and clean energy.

Among these, attention has recently been drawn to the development of additive manufacturing (AM) technology. While AM literally means additive manufacturing, Taiyo Nippon Sanso is more

specifically interested in metal AM, or manufacturing using metal 3D printers. Applications span a wide range of fields, including automotive, aerospace, and healthcare, and the technology is rapidly gaining adoption globally, especially in Europe and North America, due to its ability to efficiently produce complex shapes.

The company has contributed to ensuring the consistent quality of 3D printed parts through advanced gas control technologies, and is steadily building a track record in open innovation with metal 3D printer manufacturers.

#### Additive Manufacturing

- Metal 3D printers
- Metal powders
- Gas solutions

# Biotechnology

- Biopharmaceuticals
- Functional materials (cultivation/separation/ purification)



# ElectronicsSemiconductorsOrganic EL

- Organic Ei
- Cutting-edge
- materials

  Clean energy



#### nology

- Hydrogen
- Fuel cells
- Batteries



# Example of Value Creation: Expansion and Future Potential of the Metal 3D Printer Business

Aiming for practical application of innovative forming technologies under NEDO's Key and Advanced Technology R&D through Cross Community Collaboration Program

Partners: Yamaha Motor Co., Ltd. and other companies

Traditionally, products with complex shapes have been manufactured by assembling dozens of individual components, but with metal AM technology, a near-final shape can be produced within a single process. It also has the potential to reduce industrial waste, such as scrap material, and help address the shortage of skilled engineers. Although expectations are high from both government and industry in Japan, there are still challenges to overcome regarding fabrication speed, precision, and quality, requiring improvements in these areas.

Beginning in FYE2025, the New Energy and Industrial Technology Development Organization (NEDO) launched the Development and Demonstration of Advanced



Binder Jetting Printer

Metal Additive Manufacturing Systems Technology as part of its Key and Advanced Technology R&D through Cross Community Collaboration Program. Taiyo Nippon Sanso is participating in one of the selected topics, namely the research and development of a metal 3D printer system combining binder additive fabrication and digital process design, together with the lead company Yamaha Motor and other companies, universities, and research institutions, with development to continue through FYE2029.

According to NEDO, the goal is to develop basic technologies for high-speed, high-precision manufacturing using binder jetting (BJT). The technology is expected to contribute to the practical societal application of small-lot, multi-variety production processes, such as aluminum parts for transportation equipment, heat-resistant parts for power generation, and molds.

# Supporting reductions in rocket body and tank manufacturing costs under JAXA's Space Strategy Fund Project Partners: Shimizu Corporation and other companies

Since February 2025, Taiyo Nippon Sanso has been participating as a partner organization in the Space Strategy Fund Project operated by the Japan Aerospace Exploration Agency (JAXA) in the context of developing manufacturing technologies for large liquid propellant tanks for rockets using metal 3D printing. The lead organization commissioned by JAXA is Shimizu Corporation, with Saitama University and Hiroshima University also participating as partner institutions.

With international competition intensifying in the space sector in recent years, there is strong demand for low-cost transport systems. Metal AM technology could help reduce manufacturing costs and shorten production times for rocket bodies, tanks, and engines. Specifically, the project aims to establish large-scale build



Metal AM fabrication process using the WAAM method

processes and improve fabrication quality using Wire-Arc AM (WAAM), a metal AM method that builds up shapes by melting metal wire.

Most metal AM technologies are fundamentally based on the same principles as metal welding. To prevent welding defects, it is essential to constantly apply high-purity argon or proprietary shielding gases to the target object. In this respect, Taiyo Nippon Sanso's strengths as a welding specialist can be fully leveraged to enhance the quality of metal AM.

# NSHD MANAGEMENT FOUNDATION

Governance, risk management, and compliance comprise the foundation essential for our sustainable growth. Here, we explain these critical elements of our operations.

# Messages from Outside Directors

This section comprises messages from outside directors regarding the overall sustainability initiatives of the NSHD Group and the range of programs it is advancing in non-financial areas.



Miri Hara
Outside Director

Effective measures are needed to create an environment in which female employees can grow into officer positions.

In serving as an outside director of NSHD, I am constantly reminded that women's empowerment is a significant issue. Currently, the Group has not established clear systems or career paths for the development of female officers, and the number of female candidates for officer positions remains low.

To create an environment where female employees can grow into officer positions, the Group must expand and enhance systems that enable flexible work styles, implement systematic training, and heighten the visibility of female managers who can serve as role models. I also believe that the Group should consider introducing incentives and allowances.

In addition to measures on the part of the Group, efforts by female employees to form career plans and an awareness of their work are also important. Therefore, I would like to focus on building a network of female employees and female officers that provides opportunities for mutual learning.

I feel strongly that, rather than just setting out ideals and slogans, it is becoming increasingly important to implement effective measures, set specific numerical targets, and manage progress.



**Katsumi Nagasawa**Outside Director

# I believe that regularly discussing non-financial activities is critical.

Executive teams work in environments that oblige them to focus on performance. Based on my experience in corporate management, I feel that in such environments there is a tendency to place less emphasis on non-financial activities such as diversity, sustainability, and compliance. However, in my capacity as an outside director, I would like to stress that, in addition to performance, non-financial activities contribute significantly to the augmentation of corporate value. Reports on non-financial activities are of course submitted to meetings of the Board of Directors. Nonetheless, I feel that there is not enough time for in-depth discussions of such matters.

Given the aforementioned issue, from the viewpoint of an outside director, which is in effect the viewpoint of shareholders and outside stakeholders, I believe that regular discussions on non-financial activities are critical. To hold such discussions, at least once a year the relevant members of the executive team provide the Advisory Committee on Appointments and Remuneration and the Outside Directors Opinion Exchange Meeting with briefings on NSHD's progress in performing the role of a holding company and other important non-financial activities.

Examples of the issues focused on in these discussions include keeping up with the social trend toward empowering women and the need to pursue carbon neutrality by stepping up self-help efforts rather than relying solely on the reduction of emissions coefficients by power utilities. Such briefings and discussions remind the executive team of the importance of respective issues and ensure that corporate activities reflect objective viewpoints from outside the Group. In this way, I hope to encourage the Group to conduct activities that are based on broader perspectives.



Masako Miyatake
Outside Director

# The Three Most Pressing Issues for Outside Directors: Diversity, Compliance, and Innovation

1. Diversity: The advancement of diversity—particularly the increasing proportion of female employees and women in managerial positions—remain a top priority for all directors and executive officers. As of the end of March 2025, women accounted for 20.8% of the Group's total workforce—an increase of 0.6 percentage points year on year. Female managers comprised 16.7% of all managerial positions, up 1.3 percentage points from the previous year.

While these figures indicate steady progress, they still fall short of the targets set by the Act on the Promotion of Women's Active Engagement in Professional Life, which aims for 30% representation in both metrics by FYE2031. In a time of growing labor shortages, the Group's ability to strategically elevate women into leadership roles will be crucial to its long-term competitiveness and sustainability. Leveraging the global NSHD network, we remain committed to pursuing every possible avenue to accelerate progress toward these goals.

- 2. Compliance: Historically, the manufacturing sector has been less compliance-conscious than industries such as finance. However, in recent years, the Group has made substantial efforts to enhance its compliance framework and has begun implementing standardized practices across its global operations. Establishing a culture of rigorous compliance is a time-consuming endeavor that requires a fundamental shift in mindset. Nevertheless, the Board of Directors continues to treat compliance as a top priority. Institutional reforms and mindset changes among those responsible for implementation are progressing steadily.
- **3. Innovation:** Innovation is another critical area of focus for the Board. Strategic discussions are underway on how best to leverage the Group's existing technologies across global markets, as well as how to pursue innovative initiatives that contribute to environmental sustainability. These forward-looking efforts are essential to securing the Group's continued relevance and value in a rapidly evolving business environment.

# Messages from Outside Directors



**Hideo Nakajima**Outside Director

In each region's social and economic environment, companies must adopt a stance of never engaging in any behavior that could be construed as violating laws and regulations.

As an entity that conducts businesses globally, the NSHD Group must rigorously comply with various laws and regulations related to safety and other aspects of the Group's businesses. To this end, the entire organization, not just legal affairs departments, must unite and resolutely advance an array of different compliance-related activities, taking into consideration differences in the laws and regulations of the regions where businesses operate.

Given the costs and reputational risks associated with investigations by relevant authorities and litigation, in each region's social and economic environment companies must adopt a stance of never engaging in any behavior that could be construed as violating laws and regulations. Additionally, when assuming new positions due to personnel changes, officers need to recognize the risks involved in unquestioningly accepting practices as not posing any compliance problems and continuing them simply because they were utilized by the previous incumbent or have been utilized for many years.

To prevail amid competition in the global economy and to establish effective compliance, I believe that avoiding the pitfalls of succession by adopting a proactive approach to work and a problem-solving mindset that does not simply follow precedent is essential.



**Katsuhito Yamaji** Outside Director

Our commitment to the advancement of initiatives based on Groupwide policies has been made clear by incorporating greenhouse gas emissions indicators into officer evaluation criteria and linking them to compensation.

Corporate sustainability is an important issue for our stakeholders. For this reason, NSHD needs to enhance its social value. One area where an industrial gases manufacturer can contribute in this regard is through greenhouse gas reduction measures that benefit the global environment. There are three approaches to reducing greenhouse gas emissions. However, since the Group's mainstay products use the atmosphere as raw material, the primary focus of initiatives should be on the Group's manufacturing and logistics processes and the product usage processes at customer sites. In particular, processes that use hydrogen and other NSHD products promise significant benefits. Meanwhile, promoting reduction of the greenhouse gas emissions of manufacturing and logistics processes as a Groupwide initiative would raise environmental awareness.

In realizing these initiatives, the NSHD Group should set forth Groupwide policies on the global environment while securing the resources and establishing the systems needed to advance initiatives. To ensure steady progress in this respect, our commitment to the advancement of initiatives based on Groupwide policies has been made clear by incorporating greenhouse gas emissions indicators into officer evaluation criteria and linking them to compensation. Viewing the enhancement of social value through a combination of business activities and global environmental measures as the key to sustainable growth, I want to support initiatives by working in partnership with executive divisions.

# Members of the Board of Directors, Audit & Supervisory Board Members, and Executive Officers

A career summary and message from each officer can be viewed here.

Members of the Board of Directors, Audit & Supervisory Board Members, and Executive Officers: 

③ Please see here.

# **Members of the Board of Directors**



















# **Executive Officers**

Tadaharu Watanabe Executive Vice President

Tsutomu Moroishi

Senior Executive Officer

Takeshi Miki

Senior Executive Officer

Alan David Draper
Senior Executive Officer

Yutaka Okuda

Senior Executive Officer

Kazuhiko Nishikawa

Senior Executive Officer

# **Audit & Supervisory Board Members**









**Koichiro Kubo** Executive Officer

Masayoshi Omichi Executive Officer

Teiichiro Sawa Executive Officer **Toshiyuki Aida** Executive Officer

**Kimitaka Koga** Executive Officer

# **Skills Matrix**

The Company believes that members of the Board of Directors shall be composed of diverse individuals with the knowledge and experience required for corporate management in order for the Board of Directors to function more effectively. Accordingly, the fields of particular importance to the Group management are defined as Corporate Management, Financial Affairs & Accounting, Legal Affairs & Risk Management, Sales & Marketing, Development & Technology, and Production & Procurement. The knowledge and experience acquired by all of the officers through their career and in their expert areas comprise the necessary skills for the Group to promote sustainability management. The Company will strive to further enhance the effectiveness of the Board of Directors, assigning personnel with such knowledge and experience in the right places at the right time.

Name	Positions / Career highlights	No. of years in position	Corporate management	Financial affairs & accounting	Legal affairs & risk management	Sales & marketing	Development & technology	Production & procurement	Overseas assignment	Business experi- ence at other companies	Independence
1 Toshihiko Hamada	President CEO	5	•				•		•		
2 Kenji Nagata	Member of the Board Representative Director and President, Taiyo Nippon Sanso Corporation	7	•			•			•		
3 Raoul Giudici	Member of the Board Chairman and President, Nippon Gases Euro-Holding S.L.U.	1	•			•			•	•	
4 Miri Hara	Member of the Board (Outside Director) Representative Certified Public Tax Accountant, Tax Corporation Yokohama Benten Accounting, Inc. Outside Director, SECOM CO., LTD.	4		•						•	•
5 Katsumi Nagasawa	Member of the Board (Outside Director) Former Managing Corporate Executive Officer, Hitachi, Ltd. Outside Director, Sugino Machine Limited	3	•				•	•	•	•	•
6 Masako Miyatake	Member of the Board (Outside Director) Visiting Professor, Keio University Law School Special Counsel, Blakemore & Mitsuki	3			•				•	•	•
7 Hideo Nakajima	Member of the Board (Outside Director) Former Secretary General, Japan Fair Trade Commission Special Advisor, White & Case LLP / White & Case Law Offices	2		•	•				•	•	•
8 Katsuhito Yamaji	Member of the Board (Outside Director) Former Managing Executive Officer and Director, Yamaha Motor Co., Ltd. Outside Director, ENSHU Limited	2	•				•	•	•	•	•
9 Naoto Yabe	Member of the Board Executive Officer, Chief Strategy Officer, Mitsubishi Chemical Corporation Director, Strategy Office, Mitsubishi Chemical Group Corporation	0	•			•	•			•	
1 Satoshi Wataru	Audit & Supervisory Board Member Former Senior Executive Officer of Group Human Resources & Corporate Secretariat Office, Nippon Sanso Holdings Corporation	2	•	•							
2 Kentaro Akashi	Audit & Supervisory Board Member (Outside Auditor) Former Managing Executive Officer, Mizuho Securities Co., Ltd. / Former Chairman of Mizuho Securities Asia Limited, in charge of Global Investment Banking Business	1	•	•					•	•	•
<ol> <li>Satoshi Wataru</li> <li>Kentaro Akashi</li> <li>Kohei Ichiya</li> </ol>	Audit & Supervisory Board Member (Outside Auditor) Former General Manager, Finance Department, Mitsubishi Chemical Holdings Corporate Staff, Inc. (now Mitsubishi Chemical Group Corporation)	1		•					•		
4 Riki Shibata	Audit & Supervisory Board Member (Outside Auditor) Former Managing Executive Officer, Deputy Head of Global Markets Company, Mizuho Financial Group, Inc., and former Managing Executive Officer, Co-Head of Global Markets Division, Mizuho Bank, Ltd.	0	•	•					•	•	•

Note: Details on the definition of table headings

Corporate management: Experience serving as CEO, executive, or executive officer of a listed company or CEO of a local subsidiary of a global company Business experience at other companies: Experience working outside of the NSHD Group's companies or the parent company Group's companies Positions and career highlights are as of July 1, 2025.

# Corporate Governance

Please refer to the following for detailed information about each committee and annual schedules for the Board of Directors, the Audit & Supervisory Board, and the Advisory Committee on Appointments and Remuneration.

# Corporate Governance: (3) Please see here.

# **Basic Approach**

Nippon Sanso Holdings' governance is characterized by rapid decision making and appropriate allocation of management resources. This is achieved by delegating authority to the operating companies in each of the four global regions and the Thermos business, which support an industrial gases business model that produces gases on the site of consumption. As a group that has global business operations, supervision of management decisions and business execution

requires a multifaceted valuation of a wide range of risks based on expert knowledge informed by close contact with the front lines. The Company has adopted the organization of a company with Audit & Supervisory Board, and has a Board of Directors comprising internal directors with a thorough knowledge of the Company's business and independent outside directors who have diverse skills and experience. The Board of Directors discusses management strategy, capital expenditure, M&As, and so forth, makes decisions

on the Company's business execution, and supervises its business execution. Moreover, Audit & Supervisory Board members, who are independent from the management organization, exercise their own authority to audit the process of decision making by directors and the status of management execution.

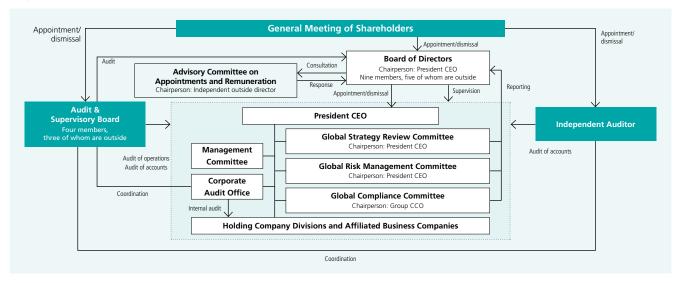
# History of Changes in NSHD's Corporate Governance

Phase	2015–2019: Governance structure transformation	2020–2023: Establishment of a transparent governance framework	From 2024: Ongoing revisions
Measures	Jun. 2015 Appointed two independent outside directors (two of eleven directors)  Oct. 2015 Formulated Principles of Corporate Governance and Disclosure Policy (now IR Policy)	Jun. 2021 Increased independent outside directors to three (three of nine directors; one female outside director)	Jun. 2024 Revised remuneration for directors (added KPIs for non-financial KPI-linked remunerations for direc-
ivieasures	<ul> <li>Jun. 2016 Established Advisory Committee on Appointments and Remuneration Introduced performance-linked remuneration for directors</li> <li>Jun. 2019 Appointed two directors of foreign nationality (heads of U.S. and European businesses)</li> </ul>	Jun. 2022 Increased independent outside directors to five (five of nine directors; two female outside directors) Introduced non-financial KPIs linked to remuner- ation of directors	tors, etc.)

# **Evaluation of the Board of Directors' Effectiveness**

NSHD's Principles of Corporate Governance provides that the Board of Directors will carry out an annual analysis and evaluation of the overall effectiveness of the Board, based on each director's selfevaluation, and will make a summary of the results public in a timely and appropriate manner. The Board consistently carries out these analyses and evaluations and makes continuous efforts to improve its effectiveness. The following is a summary of the results of the analysis and evaluation of the effectiveness of the Board of Directors during FYE2025 (hereinafter, "the term"), and an outline of key initiatives being undertaken in FYE2026.

#### Corporate Governance Structure



#### 1. Evaluation Process

- (1) Evaluated officers: Board Directors (9)
- (2) Evaluation method: Each director was asked to fill out a questionnaire in which evaluation items were listed and submit it to the Secretariat of the Board of Directors after entering their evaluations. The Secretariat compiled and anonymized the evaluations of the directors in a report and distributed the report to all directors. The Board met to discuss the evaluations and decided on matters to be improved during the term.

## **Evaluation Items (Overview):**

- (i) What the Board was or was not able to discuss effectively regarding the following points identified as the challenges of the term based on the results of the Board effectiveness evaluation conducted the previous term (FYE2024).
  - (a) The Company's role as a holding company
  - (b) How the Company can contribute to customers and society through its businesses regarding the realization of carbon neutrality

# Corporate Governance

- (c) Promotion of women's active participation, and advancement of diversity in human resources including exchange of human resources among Group companies
- (d) Verification of progress made thus far on the medium-term management plan in anticipation of the next medium-term management plan
- (ii) Areas where the Board was or was not able to effectively function during the term, regarding its four responsibilities\* laid out in the Principles of Corporate Governance
- (iii) Status of discussions on human capital management
- (iv) What the Board should discuss and monitor on a priority basis in FYE2026
- (v) Activities of the Advisory Committee on Appointments and Remuneration
- (vi) Composition of the Board of Directors
- (vii) Dialogue with shareholders and investors
- (viii) Criteria for the matters to be resolved and reported at the Board of Directors
- (ix) Operation of the Board of Directors, support for outside directors and training for directors
- \* Four responsibilities of the Board: 1) Supervise the overall business and its management, 2) Establish and maintain a system of internal control, 3) Choose, appoint, and dismiss the CEO and other management personnel, evaluate them, and decide their level of remuneration, and 4) Decide business strategy and take on important executive decisions

# **Evaluation Results**

The Board considered that it had fulfilled the roles that were expected of it during the term. For instance, the Board received the following marks and comments from the directors.

- (i) The Company's role as a holding company\*1
- As we enter the fifth year since transitioning to a holding company structure, there was opinion that the time is ripe to examine making a change, from the concept up to now of leaving the business to each individual operating company in the region and keeping the holding company as simple an organization as possible, to one of more involvement by the holding company in operating companies in the regions.
- (ii) How the Company can contribute to customers and society toward the realization of carbon neutrality\*<sup>2</sup>
- The carbon neutrality movement is still in its early stages, and as with any other low maturity market, there is constant exposure to risks inherent in uncertainty, in terms of direction and timing. Thus, a strategy that is well thought out and a

- high degree of flexibility is required. Opinion was offered that since the Company has a good understanding of opportunities and risks, it will be possible to set clear goals for the next medium-term management plan.
- (iii) Promotion of women's active participation, and advancement of diversity in human resources including exchange of human resources among Group companies\*3
- Activities need to be boosted in Japan and the United States, where this issue is slow in being addressed.
- Exchange of human resources among Group companies was not adequately discussed at Board meetings.
- (iv) Verification of progress made thus far on the medium-term management plan in anticipation of the next medium-term management plan
- In the medium-term management plan, it was verified that progress on financial KPIs was outpacing targets, but opinion was expressed that an overall evaluation of progress for the entire plan that included non-financial KPIs did not sufficiently take place.
- \*1 Although the Company's role as a holding company was not discussed as a separate agenda item, the topic was addressed through deliberations and reporting on various matters.
- \*2 As of July 2024, NSHD added contributions to GHG reductions through environmentally friendly product offerings as a part of non-financial KPI-linked remunerations for directors and executive officers.
- \*3 Regarding the promotion of women's active participation, the Advisory

  Committee on Appointments and Remuneration held specific and focused discussions on solutions to the issues that have been impeding progress.

#### **Future Challenges**

The NSHD Group is formulating the next medium-term management plan during FYE2026. Division of roles among the holding company and operating companies, business strategy of the Group for carbon neutrality, electronics, and other matters will be discussed at Board meetings over the course of formulating the next medium-term management plan. In addition, enhancing human capital, such as with the promotion of women's active participation and the advancement of diversity in human resources including the exchange of human resources among Group companies, for which initiatives have been slow, will continue to be discussed at Board meetings.

# Overview of the Board of Directors' Meetings (FYE2025)

Number of meetings held	12 times		
Average number of agenda items	Items for resolution	4.7 items/meeting	
Average number of agenda items	Items for reporting	6.9 items/meeting	
Average meeting duration		3.6 hours/meeting	
Longest meeting duration	5.0 hours/meeting		

# **Relationship with the Parent Company**

NSHD, having Mitsubishi Chemical Group Corporation (MCG) as its parent company, belongs to a corporate group led by MCG (MCG Group). The MCG Group's business is composed of Specialty Materials, MMA & Derivatives, Basic Materials & Polymers, and Industrial Gases. The NSHD Group is positioned as an entity in the industrial gases segment. Being the only one operating an industrial gases business in the MCG Group, the Company Group does not compete with other companies in the MCG Group, and as of this moment does not expect to do so in the future.

NSHD concluded a basic agreement with MCG on May 13, 2014. The basic agreement stipulates that MCG, under its Group Management Regulations, respects our autonomy and is committed to supporting and cooperating with us. Accordingly, we make our own business decisions and do not require MCG's approval for any matters. The basic agreement also includes provisions on maintaining the Company's stock listing.

When there is a conflict of interest between our parent company and our other shareholders, our directors act in a way to avoid harming the interest of the latter. We have five elected independent outside directors, who constitute a majority in the nine-member board, and two elected full-time, independent outside Audit & Supervisory Board members. These independent individuals exercise oversight to ensure that conflicts of interest will not arise between the parent company and other shareholders. Furthermore, we have voluntarily established the Advisory Committee on Appointments and Remuneration that advises the Board of Directors on the nomination of candidates for directors and Audit & Supervisory Board members, as well as the appointment and dismissal of the CEO and other executive officers. The committee is composed of six members the President CEO and five independent outside directors—and is chaired by an independent outside director. This ensures our independence from the parent company on management appointments.

An executive officer of Mitsubishi Chemical Corporation, an MCG wholly owned subsidiary (who is concurrently a business executive of MCG), also serves as a part-time director of NSHD.

# Corporate Governance

#### **Remuneration for Officers**

Non-financial KPI-linked

remunerations

The total amount of remunerations for directors and Audit & Supervisory Board members was approved, respectively, at the General Meeting of Shareholders. The specific amount of remuneration for each director is determined by the President CEO, who is authorized by the Board of Directors, based on a remuneration standard approved by the Board. The amount of remuneration for each Audit & Supervisory Board member is decided through internal discussions among the members of the Audit & Supervisory Board. We have established the Advisory Committee on Appointments and Remuneration, which comprises multiple independent outside directors and the President CEO, and is chaired by an outside director. The committee deliberates the appropriateness of proposed remuneration after being consulted by the Board of Directors and the Audit & Supervisory Board, and then reports its findings to both boards. Directors' remuneration comprises several components: basic monthly remuneration, which is fixed based on rank; performance-linked remunerations, which vary according to company performance; and non-financial KPI-linked remunerations, which are tied to the achievement of certain nonfinancial indicators outlined in the medium-term management plan.

Progress on the lost time injury rate (50.0%)

Achievement of rate of receiving compliance training (25.0%)

Growth rate of GHG reduction contributions from environmentally friendly products (25.0%)

In the latest revisions, to further incentivize achievement of targets in the medium-term management plan, new indicators were introduced for performance-linked remunerations and non-financial KPI-linked remunerations, namely efficiency improvements (consolidated ROCE after Tax) and the growth rate of GHG reduction contributions from environmentally friendly products. To further strengthen collaboration among operating companies, in addition to the basic monthly remunerations, NSHD has added performance-linked remunerations and certain non-financial KPI-linked remunerations to remuneration of directors whose primary duty is serving as officers of operating companies (NSHD subsidiaries). With respect to remuneration levels, NSHD conducts annual comparisons and reviews against peers of similar revenue scale using an external compensation survey database, and makes revisions as necessary based on the results.

Outside directors receive only basic monthly remuneration as fixed compensation from the Company. Likewise, directors whose primary role is as an officer or employee of the parent or a sister company are only paid basic monthly remuneration by the Company. Remuneration for Audit & Supervisory Board members, including outside members, consists solely of fixed compensation.

The following of the non-financial KPIs set in the medium-term management plan are linked to the rank-based standard amounts. Percentages in parentheses indicate the weighting

\* Remuneration for directors whose primary duty is serving as officers of operating companies (NSHD subsidiaries) consists of basic monthly remuneration (74%), performance-linked remunerations (22%), and non-financial KPI-linked remunerations (4%).

Furthermore, their performance-linked remunerations are linked to all indicators and their non-financial KPI-linked remunerations are linked to the growth rate of GHG reduction contributions from environmentally friendly products.

#### **Succession Plan**

Within the NSHD Group's governance structure, we place significant emphasis on preparing the next generation of leaders. The Advisory Committee on Appointments and Remuneration, comprising several independent outside directors and the President CEO, while chaired by an outside director, constantly deliberates on the qualifications required of next-generation leaders, the selection process, training policy, and candidate identification. NSHD is implementing concrete initiatives for the development and evaluation of management candidates, based on the view that next-generation leaders must possess high ethical standards and integrity, extensive experience in the industrial gas business, a global perspective, strong leadership, execution capability, strategic thinking, and communication skills. Given our Group's presence in over 30 countries and regions worldwide, we are committed to developing human resources with deep expertise in our distinctive industrial gases business model, which focuses on production at the site of consumption, comprehensive understanding of the industry structure in each region, and the ability to manage operations with a global perspective.

# **Senior Management Training**

To accelerate global business development, NSHD has established a training system designed to enhance the capabilities of senior management. This system aims to refine the decision-making abilities of our leaders by equipping them with diverse perspectives and knowledge expected at the highest levels of leadership. Below is an overview of the training programs we have implemented over the past three years.

- Aug. 2022 Latest trends in information security and economic security
- Apr. 2023 Prevent corruption globally
- Jan. 2024 Business and human rights
- Aug. 2024 Risk management by teaching officers about recent misconduct cases
- Feb. 2025 Global data governance and points to remember when using generative AI

Eligible participants include directors, Audit & Supervisory Board members, and executive officers of NSHD and Taiyo Nippon Sanso. We will continue to deliver timely training initiatives to improve management.

# Global Risk Management Structure

The NSHD Group is enhancing the effectiveness of its risk management and actively promoting risk reduction activities under a newly established risk management structure.

# **Key Features of Our Risk Management Structure**

A defining feature of the NSHD Group's risk management structure is the integrated operation of the Global Risk Management Committee and the Global Strategy Review Committee.

By discussing risks and opportunities surrounding our businesses from multiple perspectives and sharing risk recognitions and responses to them across business operations, we are advancing Operational Excellence. We also work in close coordination with the Global Compliance Committee and the Global Information Security Council to advance risk management activities Companywide.

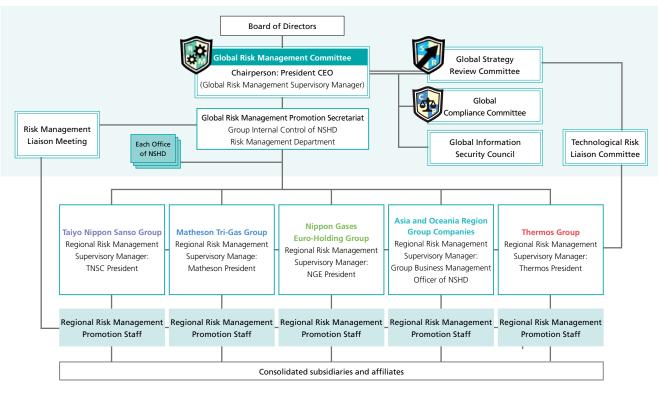
# **Risk Management Process**

We identify and assess changes in both external and internal environments surrounding our businesses as risks and opportunities, and evaluate the risks at each operating company and the holding company, using a common Group framework of risk categories, definitions, and evaluation criteria.

Based on the Groupwide risk assessment results, the Global Risk Management Committee shares risk recognition and risk responses and identifies key risks.

Senior management makes decisions on the prioritization and response policies for risks, and the NSHD Group works collectively to implement measures to reduce key risks.

# Risk Management Structure



Double lines indicate meetings and organizations that lead risk management activities.

Please refer to the following for details on business risks.

Business Risks: Please see here.

# Our Strategic Approach to Risks and Opportunities

The NSHD Group convenes a meeting of the Global Risk Management Committee once a year. In conjunction with the Global Strategy Review Committee, management aims to evaluate the Group's overall business strategy from both risk and opportunity perspectives. Below is an overview of the meeting held on February 20, 2025.

# **Sharing of Risk Recognition and Risk Response**

During the Global Risk Management Committee meeting, each operating company presented its top 10 risks, as well as the specific risks most critical to its business activities. Additionally, each department within NSHD reported on risks that require a coordinated response across the Group. While risk recognitions may vary depending on the business environment, the committee seeks to enhance the Group's overall risk management by gaining a deeper understanding of these differences and the underlying factors, while examining risks from multiple perspectives.

**Key Risk Themes for NSHD** 

# 1. Changes in external and internal environment

Geopolitical risk, supply chains, changes in economic conditions, carbon neutrality

#### 2. Maintain and reinforce core business

Aging of equipment, strengthening coordination in technology development, compliance and prevention of corruption, IT security

# 3. Secure and train human resources who will support the aforementioned endeavors

Shortage of human resources, succession planning, diversity, equity, and inclusion (DEI)





# Progress in Carbon Neutrality and Securing CO<sub>2</sub> Supply Sources

Through CCU\*, the NSHD Group captures and refines CO<sub>2</sub> emitted from various industrial processes without generating additional CO<sub>2</sub>, using it as a valuable resource. As the carbon neutrality movement accelerates, securing CO<sub>2</sub> supply sources for dry ice and liquid carbon dioxide is becoming an emerging challenge.

# Operating Companies in the United States

 We currently have multiple CO<sub>2</sub> sources, and efforts are underway to secure additional ones. The Company is also working to optimize the logistics network from production sites to customers to ensure supply chain reliability.

#### Operating Companies in Europe

 We are strengthening the supply chain by securing a diverse range of CO<sub>2</sub> sources across regions.

# Operating Companies in Japan

 In addition to securing stable CO<sub>2</sub> supply sources, we need to develop alternatives to CO<sub>2</sub> products and gas applications.

# Trump 2.0 and U.S. Policies

In the wake of the reelection of President Trump (Trump 2.0), we held discussions on risks that may affect business operations in each region.

#### Tariff Policy

 Tariff policy remains uncertain, raising concerns about its impact on supply chains. We will continue to carefully monitor the situation with a flexible approach.

#### Climate Policy Response

 While the Trump administration is often viewed as unsupportive of measures to combat climate change, the administration emphasizes a balance between economic growth and environmental policy. If opportunities arise in the field of sustainability, investment is still likely to be made.

#### Response to Anti-DEI Trends

 Despite the rise of anti-DEI policies in the United States, we must foster a business environment where capable individuals can thrive regardless of gender, race, age, or cultural background.

\* Carbon Capture and Utilization (CCU): Technologies and methods for capturing and purifying CO2 emitted by various industrial activities and reusing it in other ways.

# **Defensive and Offensive Strategies in the Next Medium-Term Management Plan**

- The Global Risk Management Committee, together with the Global Strategy Review Committee, is a major forum for addressing important matters across the NSHD Group and setting future direction.
- Where there is risk, there is also opportunity. Accurately identifying risks is essential for associating challenges and opportunities to business operations across Group companies.



Toshihiko Hamada, President CEO

# Compliance

The NSHD Group has established a basic compliance policy and continually updates its organizational structures and rules to ensure its effective implementation. The Group Chief Compliance Officer (GCCO) oversees all compliance-related matters, while Regional Chief Compliance Officers (RCCOs) are appointed in each region to coordinate and execute compliance promotion activities on a global scale.

# **GCCO Message**



We will continue to raise awareness among all employees to ensure that compliance becomes embedded in our corporate culture.

#### Kazuhiko Nishikawa

Senior Executive Officer, Taiyo Nippon Sanso Corporation GCCO, with responsibility for Groupwide internal control

# **NSHD Group's Approach to Compliance**

At NSHD, as with safety and quality, we view compliance as the foundation of all business activities, and are working to establish a culture in which compliance violations do not occur, supported by systems that prevent them, and an environment where they are not overlooked.

Our compliance promotion structure comprises a GCCO and RCCOs assigned to Japan, the United States, Europe, East Asia, Taiwan, Southeast Asia and India, Australia, and the Thermos business. We implement a "Global Compliance Program" that applies across the Group while taking into account the characteristics of each region and business domain as we engage in compliance promotion activities. We also conduct training tailored to the compliance risks of each region, aiming for more participatory and employee-centered programs with high practical effectiveness.

# Strengthening Compliance Across the Group and Enhancing the Whistleblowing System

We have clarified our rules for responding to compliance violations and communicated them to all NSHD Group companies. As part of creating an environment where issues are not overlooked, we have established whistleblowing systems in each region to ensure that employees can report actual or potential violations within the Group without fear of retaliation.

We also conduct a "Compliance Survey" every year targeting all employees. While awareness varies by region and company, we analyze the results to identify areas for improvement and raise the overall level of compliance.

# Global Collaboration Through the Global Compliance Committee and Promotion of Fair Business Practices

Each year, the NSHD Group convenes a meeting of the Global Compliance Committee (GCC), bringing together the GCCO and all RCCOs to share progress and challenges in compliance promotion activities in each region. At last year's GCC meeting, an external lecturer gave a presentation on fair business practices. With global business operations spanning the four regions of Japan, the United States, Europe, and Asia and Oceania, we believe that ensuring fair business practices is critically important as we continue to expand business.

To ensure the Group's sustainable growth and improvement in long-term corporate value in an increasingly diverse global society, rigorous compliance and sound risk management are essential. We are committed to further raising employee awareness so that compliance becomes deeply ingrained in our corporate culture.

For more on our compliance promotion structure, please refer to here.

Compliance: 

Please see here.

# Global Compliance Committee

The Global Compliance Committee, chaired by the GCCO and comprising RCCOs from Japan and seven overseas regions, meets once a year to promote an integrated global compliance promotion structure and ensure its effective implementation. The meeting held on October 22, 2024 was the first in-person gathering in five years, during which regional challenges and initiatives were reported. Below is a summary of the meeting.

# **Summary**

RCCOs reported on compliance violations, litigation, and whistleblowing cases. In addition, participants introduced initiatives in their region, such as messaging from senior management, the maintenance of regulation, and compliance education, followed by a lively discussion and exchange of opinions. To deepen understanding of compliance risks, an external lecturer presented on fair business practices.

# Agenda

- 1. Reports on compliance violations, litigation, and whistleblowing cases
- 2. Introduction of compliance promotion activities
- 3. Lecture of fair business practices

# Introduction of Compliance Education in Each Region



**Stephen Stroud** The United States RCCO

Training is conducted online and covers compliance, information security, quality, and safety. Shared computers are provided for on-site employees who do not have personal computers.



**Richard Seneviratne** Australia RCCO

Managers are responsible for explaining assigned training topics to employees. They complete the training in advance, prepare to answer questions, and manage training records.



Clara Teo Southeast Asia and India RCCO

Compliance Week is held in each country, with training delivered both in person and online (via Zoom), using a learning management system. In countries such as Indonesia, Thailand, and Vietnam, materials are translated into local languages as needed.

# **Strengthening the Compliance Structure to Safeguard Corporate Value**

Adherence to compliance is essential to ensuring corporate value and sustained growth into the future. Perceptions of a company influence its share price, and scandals or compliance breaches can trigger sharp declines in share

Toshihiko Hamada, President CEO prices on the market. Group companies should provide ongoing education to employees and executives. We intend to

establish a structure that enables a swift and accurate

response should compliance problems arise.



Group photo of participants

# Information Security

NSHD prioritizes and invests in information security across the entire Group.

# **Revised Information Security Policies**

Keeping up with a constantly changing threat landscape, FYE2025 marked an important milestone for NSHD, publishing our updated information security policy—the commitment of our senior management to information security—and rolling out our updated internal corporate information security policies to all Group companies.

# **Building Organizational Capacity**

Since the establishment of the Global Information Security Council in 2021, the Company has made substantial progress in reinforcing its cybersecurity posture across subsidiaries worldwide. Over the years, several information security subject matter experts have been added to the global team, establishing it as a central hub for knowledge sharing and coordination across all Group companies.

While continuing to strengthen its internal information security capabilities, NSHD is also partnering with leading external providers to enhance team expertise and conduct independent assessments that validate the effectiveness of its security program and defenses.

# **Incident Detection and Response**

Given the scale and complexity of its IT environments, NSHD and its Group companies require continuous monitoring to ensure

timely detection of suspicious or malicious activity. To support this, NSHD has invested in reviewing and optimizing its incident detection and response capabilities. As a result, its IT environments are now monitored 24/7, with significant incidents escalated and consolidated at the corporate level, enabling ongoing improvement of the Group's response capabilities.

# **Operational Technology Security**

NSHD has made operational technology security a strategic priority, recognizing its critical role in operations and safety. With rising threats to industrial control systems, we continue to strengthen our defenses to ensure reliable supply and minimize downtime. NSHD is progressively expanding security monitoring across its facilities and regularly assesses and improves security controls based on risk and impact.

# **Information Security Outlook**

As NSHD continues to expand its Operational Excellence and DX Initiatives, information security will play a key role in ensuring these activities are implemented securely. In light of the evolving geopolitical climate, increasing regulatory demands, and the rise in sophisticated cyber threats worldwide, our security strategy is being continuously adapted to safeguard innovation, resilience, and trust across all regions.

For more details on the structure and specifics of the Global Information Security Council, please visit our website.

Global Information Security Council (GISC): 

Please see here.

Please refer to our cross-Group initiatives here.

# Cross-Group Initiatives: Please see here.

# **Appropriate Taxation**

In all countries and regions where we operate, we comply with laws and regulations to fulfill our tax obligations.

Nippon Sanso Holdings and its subsidiaries act with integrity in every country and region where it has a business presence. Every policy that governs our business activities, including our taxation policy, is aimed at strictly complying with all applicable laws and regulations.

In each country and region where NSHD has a business presence, the NSHD Group is committed to addressing the interests of various stakeholders by ensuring timely filing of tax returns and payment of appropriate tax amounts, as well as by implementing effective tax governance programs that ensure we take a transparent approach to adhering to laws and regulations about tax management.

Through this approach, the NSHD Group is able to pay all relevant taxes in accordance with applicable laws and regulations while maintaining a transparent, constructive, and cooperative relationship with various tax authorities around the world.



# **Dialogues with Stakeholders**

At Nippon Sanso Holdings, we engage in dialogues with shareholders, investors, and other stakeholders in accordance with our IR Policy and Code of Conduct.

# **Basic Approach**

NSHD recognizes the importance of accountability in its corporate activities. We are committed to maintaining transparency and fostering an open attitude toward both internal and external stakeholders at all times. This includes providing timely and appropriate information disclosure. Additionally, NSHD values feedback and constructive criticism regarding its disclosures, ensuring that we communicate sincerely and integrate this feedback into our corporate activities.

#### NSHD's Key Stakeholders



#### **Shareholders and Investors**

In line with our IR Policy, we engage in constructive dialogue with market participants—including shareholders, investors, potential investors, and securities analysts—while adhering to the principles of fair disclosure. Our goal is to achieve sustainable growth and enhance corporate value over the medium to long term. We are committed to strengthening our IR activities by providing fair, timely, and accurate information about our management and business operations. Additionally, we work to enhance corporate value by communicating market participants' feedback and assessments to the Board of Directors and management, ensuring these insights are reflected in our business strategies. In June 2025, the General Meeting of Shareholders was livestreamed over the internet exclusively for shareholders. In addition, the Company uploads to its website videos of portions of the proceedings of the General Meeting of Shareholders.

# Main Activity Results (Last Three Years)

Item	Unit	FYE2023	FYE2024	FYE2025
IR briefings	Times	6	6	6
Total number of discussions with domestic and overseas institutional investors and securities analysts (number of ESG-related discussions)	Events	324 (23)	461 (19)	508 (16)
IR briefings for individual investors (cumulative number of live and on-demand video views)	Times	2 (3,858)	3 (4,402)	3 (4,742)
Number of people attending the General Meeting of Shareholders	People	55	58	56

Please see here.

#### Other Stakeholders

In line with our social responsibility and relationships with stakeholders, the NSHD Code of Conduct includes a dedicated section on "Accountability & Respect for Stakeholders." The President CEO has made significant efforts to instill and reinforce this awareness among Group employees.

NSHD recognizes the importance of addressing various social and environmental issues, including those aligned with the SDGs, which are closely related to our business activities. By identifying and focusing on our materiality, we are committed to taking proactive steps to resolve these issues.

As a result of actively promoting external disclosure of our sustainability approach and initiatives, NSHD has improved its standing in external evaluations.

# Major External Evaluations

	2021	2022	2023	2024	2025	Final evaluation score
FTSE	3.0	3.2	3.5	3.7	3.4	June 2025
MSCI	В	BB	BBB	BBB	_	March 2025
CDP (Climate Change)	A-	В	A-	А	_	February 2025
CDP (Water Security)	В	A-	A-	A-	-	February 2025



# **Intellectual Property**

The NSHD Group is actively engaged in strategically strengthening intellectual property and promoting intellectual property activities that contribute to its management strategy, with the aim of achieving sustainable growth and enhancing corporate value.

# **Intellectual Property Strategy that Supports Corporate Growth**

Technologies and products created through research and development are invaluable management assets for the NSHD Group. To maximize their competitive advantage, we appropriately protect and utilize these technologies and products as intellectual property rights, with the goal of supporting management. The NSHD Group's intellectual property strategy is built on the following three pillars.

# 1. Strengthen competitive advantages

Anticipating future business development and social needs, we collaborate across our business, R&D, and intellectual property divisions to strategically acquire and utilize intellectual property, such as patents, trademarks, and designs.

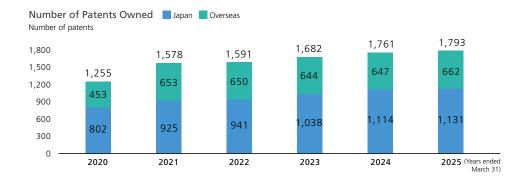
# 2. Secure business freedom and defense against competitors

Based on the amount of investment in development, we set annual filing guidelines to ensure freedom of business through intellectual property and to defend against competitors, thereby supporting stable business development in the market.

#### 3. Strengthen collaboration within the Group

We promote exchange and collaboration on intellectual property among NSHD Group companies, focusing on sharing related information and know-how, and utilizing intellectual property across the Group, with the aim of maximizing Group synergies.

As a result of these initiatives, the number of patents held by the NSHD Group has steadily increased.



# **Taiyo Nippon Sanso Established Intellectual Property Award Program**

In 2024, our Japanese operating company, Taiyo Nippon Sanso, established an internal intellectual property award program to further invigorate intellectual property activities, promote sustainable growth, and enhance employee motivation.

Under this program, awards were bestowed in recognition of three intellectual properties, including one that contributed to securing a high market share through the use of patent rights and others that supported global business expansion through technology transfer to multiple NSHD Group companies.



Award ceremony

This award program aims to instill in each and every employee an awareness of the importance of intellectual property initiatives by visualizing how these initiatives lead to results across the organization. We have had programs that reward inventors, but many employees are involved in responding to a Notice of Reasons for Rejection, commercialization, and marketing process until the invention is registered and used. This award program shines a light on the unseen contributions of employees other than the inventor, praising the result of the results of everyone's efforts to link intellectual property with business.

Through initiatives such as these, we aim not only to foster an environment where the value of intellectual property is shared across Taiyo Nippon Sanso but also throughout the entire NSHD Group, generating new challenges and growth that will contribute to NSHD's sustainable growth.

Number of Patents Held by Region and Segment (FYE2025)



# STRATEGY BY SEGMENT

This section supplements reporting on Companywide achievements and goals by detailing each segment's initiatives and achievements.

# **Business Characteristics of Each Segment**

For more financial information, please refer to our results briefing materials.

Investor Relations: Business:

# **Characteristics of Each Segment (Business Operation Structure of Four Global Regions and Thermos)**

		FYE2025 Results (Billions of yen)	Breakdown of Sales by Industry (FYE2025: Cumulative basis)	Segment Strategy	Business Environment*  * Key considerations as of the start of FYE2026
Japan	Our aim is to maximize value by focusing on measures to optimize profitability, along with an emphasis on "strengthening core business through profitability improvement" and "growth exploration and expansion."	Revenue: 410.0 Segment operating income: 47.0 Segment operating income margin: 11.5%	Steel and metals	Growth Strategy  Expand the scope of the solutions business by integrating gas and technology  Capture demand in the carbon neutrality-related business  Grow businesses in electronics, stable isotopes and biotechnology  Business Changes  Generate high-quality profits through customer-centric value creation  Promote business growth and innovation investment through improvements in working capital and cash flow	Anticipated Opportunities  New equipment and installation projects in electronics business  New demand for electronic material gases for next-generation semiconductors  New demand for gases and equipment that contribute to better productivity and energy savings  Growth in demand for stable isotopes and expansion in new applications and needs in the global market  Concerning Risks  Impact of increased energy and raw material prices on earnings  Supply chain disruptions due to tariffs in various countries  Increase in labor expenses due to labor shortages and labor hour regulations
United States	Matheson will anchor its strategy on competitive advantages related to our vertically integrated product structure and proven success cross-selling these products and services to maximize profits and to create tangible value for our customers.	Revenue: 360.2 Segment operating income: 59.7 Segment operating income margin: 16.6%	Steel and metals	Crowth Strategy     Leverage the advantages of vertical integration expanding sales to existing customers and secure new customers based on our broad range of products and services     Capitalize on product line extensions further exploiting cross-selling successes through solutions related to our welding fuel gases and dry ice capabilities     Create value through product applications providing expertise in optimizing use of our products with application support for metal fabrication, food processing and cold chain operations	Anticipated Opportunities  Increased demand for electronics gases due to the CHIPS and Science Act and growth of AI  Additional on-site and pipeline project development focus on CCUS  Sharp sales improvement in liquid CO₂ and dry ice in markets where we have added new capacity  Concerning Risks  Changing international and political environment impacting economic growth  Competition to recruit technical resources to support product application sales  Impact of ongoing inflation on our core cost drivers and tariffs on imported equipment and materials
Europe	Nippon Gases drives growth through people excellence, safety, sustainability, customer expansion, and strategic investments, supported by collaboration, innovation, and long-term planning.	Revenue: 328.6 Segment operating income: 62.4 Segment operating income margin: 19.0%	Steel and metals	Growth Strategy Top-line growth remains the central focus, pursued through both organic means (new customers, expanded services) and inorganic strategies (acquisitions and joint ventures) to enter new markets and gain capabilities Significant investments to enhance safety, competitiveness, and operational capacity Talent acquisition and organizational restructuring to support growth Investment in cutting-edge R&D, including joining the Sustainable Semiconductor Technologies and Systems (SSTS) research program and opening a new lab at Oevel	Anticipated Opportunities  Expanding in Electronics and Medical; growing on-site business  Leveraging applications to pursue reliable business growth in resilient markets  Actively pursuing acquisitions and partnerships to accelerate growth and gain new capabilities  Concerning Risks  Concerning Risks  Corrections or the global economy; tariff threats and market volatility continue to pose external risks  CO2 shortages and intense helium competition  Geopolitical tensions and subsequent instability

# **Business Characteristics of Each Segment**

Characteristics of Each Segment (Business Operation Structure of Four Global Regions and Thermos)

Asia and Oceania aims to be a major supplier of industrial gases with a diverse lineup of products, while efficiently operating its businesses in compliance with laws and regulations and constantly working to improve productivity.

and Oceania

In the Thermos business, we are a pioneer in vacuum-insulated bottles. We propose ideas for new lifestyles and develop products in tune with the customs and cultures of people living in unique markets in countries around the world.

### FYE2025 Results (Billions of yen)

Revenue:

176.5

Segment operating income:

15.0

Segment operating income margin:

8.5%

### Revenue:

32.5

Segment operating income:

6.2

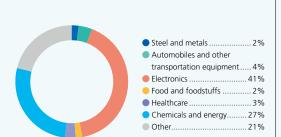
Segment operating income margin:

19.3%



Breakdown of Sales by Region

(FYE2025: Cumulative basis)



## Growth Strategy

Segment Strategy

- Acquire large-scale on-site projects, expand production capacity in air separation units
- Expand new products and sales areas
- Win opportunities in global HyCO business
- Management: New management structure

### **Business Environment\***

\* Key considerations as of the start of FYE2026

### **Anticipated Opportunities**

- Semiconductor market growth across regions and stronger demand for electronic material gases for advanced semiconductors, such as generative Al
- Continued firm demand in Southeast Asia and India
- · Acquisition of new customers in Oceania

### **Concerning Risks**

- Soaring electricity costs in Southeast Asian countries
- Impact from trade friction, changing economic policies in various countries
- Chronic shortage of drivers in the Australian labor market, rising labor costs

### Growth Strategy

- Strengthen new product development, and expand directly operated stores and e-commerce business
- Strengthen interactive communication with Thermos users and organize these users
- Improve THERMOS brand awareness and maximize brand equity

### **Anticipated Opportunities**

- Rise in cost-consciousness in response to price hikes for bottled beverages, driving up demand for stainless steel bottles
- Increase in demand from foreign tourists as more visit Japan
- Heightened environmental awareness among consumers, leading to greater interest in sustainable products
- Reusable bottles becoming the norm amid a growing number of public water refill stations

### **Concerning Risks**

- Weaker consumer sentiment due to inflation outpacing real wage growth
- Earnings volatility caused by yen depreciation or appreciation and instability in raw material prices
- Increase in labor costs at overseas manufacturing plants
- Rising logistics costs and lack of logistics personnel







Japan.

Asia.





# Strategy by Segment: Japan

Market Position and Business Strengths

# Over **40%**

(Market share in Japan)

• Founded in 1910

• Employees: About **6,000** 

• R&D: **5** bases, Plant engineering: **1** base

• Bulk gas production: **34** bases

• Electronic material gases production: **4** bases

• Total Gas Centers: 17 bases

 Supply gas and meet customer needs with extensive sales and operational network and through more than 200 partner companies

### Business Environment (Opportunities and Risks)

### Opportunities:

- New demand for gas and equipment installation driven by domestic production of next-generation semiconductors
- Demand generation through stable pricing and supply enabled by domestic production of rare gases
- Expansion in demand related to carbon neutrality, including CO<sub>2</sub> capture and reuse as part of climate change countermeasures
- ullet Expansion of carbon neutrality-related demand, such as CO<sub>2</sub> capture and reuse as a global warming countermeasure
- Broader adoption of oxygen combustion applications for energy conservation and new materials
- Rising global demand for stable isotopes and expansion of new applications and needs

### Risks:

- Global supply chain instability caused by tariffs and geopolitical risks
- Ongoing inflation from rising energy and raw material prices
- Labor shortages and intense recruitment competition due to shrinking working population
- Increase in labor costs and construction delays due to working hour regulations
- Operational system disruptions caused by cyberattacks

### Key Aspects of Sustainability

### Safety

 Conduct hazard simulation training at the Technical Academy and increase technological and security capabilities through TNSC Technical Seminars while training "The Gas Professionals"

### Environment

- Growth in sales of products that help the environment exceed our own GHG emissions
- →Oxygen combustion burners, hydrogen, ammonia combustion burners, and combustion abatement systems
- →Sales of CO<sub>2</sub>-free gas by using electricity generated from renewable energy sources
- · Reduce our own GHG emissions
- Improve performance of air separation units, procure electricity generated from renewable energy sources
- Promotion of Halve Amount of Landfill Disposal (HALD) initiatives
   Steady progress driven by rigorous waste separation and recycling efforts
- Biodiversity: Promote environmental conservation
- →Participate in Team Tyura Sango, an initiative to protect coral reefs in Okinawa

### Diversity and Inclusion (D&I)

- Promote and embed D&I through grassroots initiatives led by the Diversity & Inclusion
  Office, including dialogues and workshops held nationwide
- Recruit and promote diverse talent through multifaceted approaches to hiring and varied employment contracts (Including increases in the rate of female employees and female management posts)
- Promote health and productivity management and the creation of workplaces that are comfortable for diverse human resources

### **Short-Term Initiatives**

TNSC works tirelessly to improve productivity, increase margins, and advance the development of new products with "Profitability" as its slogan.

- Rigorously implement price management of products corresponding to increases in energy and raw material prices and labor expenses
- Build efficient and highly accurate business operations and productivity improvement frameworks through the use of DX and AI
- Shift management resources to core and growth businesses, and optimize the business portfolio

### **Future Initiatives**

### Sustainability

### Diversity and Inclusion

- Promote awareness of using systems that enable diverse work styles and foster a corporate culture for them
- Strengthen initiatives to develop female leaders, including current and potential management candidates

### Safety

- Enhance VR-based experience content of crisis situations and launch new training programs with the aim of doubling participants in Technical Academy courses by FYE2026
- Utilize AI to prevent workplace accidents, propose accident countermeasures, and promote safe behavior through the application of ergonomics

### Maintain and Improve Profitability

### Optimal Business Portfolio

 $\bullet$  Monitoring of business portfolio based on capital efficiency

### Electronics

- Rebuild the supply chain and engineering framework in response to resurgence of the domestic semiconductor industry
- Develop and expand sales of distinctive products for semiconductor customers by leveraging our strengths
- Secure orders for electronics-related equipment and construction when new semiconductor plants are built or expanded

### R&D

 Drive business growth through innovative, one-of-a-kind technologies and Japan-quality standards to realize a carbon neutral society

- Prioritize investments in enhancing technology development infrastructure and resources for accelerating next-generation semiconductor materials development
- Promote long-term technology development, including participation in Interuniversity Microelectronics Centre (imec)'s Sustainable Semiconductor Technologies and Systems (SSTS) research program focused on reducing environmental impact across the semiconductor industry

### Innovation

 Advance hypothesis verification and market adaptation to create new businesses and establish business models with an eye on future growth

# Position in Final Year of NS Vision 2026



### Strengthen core business: Profitability improvement

Increase competitiveness and expand stable earnings in core business areas



### strategy: Exploration and expansion

Promote
commercialization
through enhanced
profitability and
business expansion
in growth areas, and
by establishing
business models in
exploratory and
development
domains

### Operational Excellence

- Promote advanced control and remote operation of bulk gas production plants through the use of DX and AI
- Improve bulk gas transportation efficiency by leveraging demand forecasting based on historical bulk gas usage data
- Optimize operations through the development of a seamless specialty gas supply chain encompassing production, sales, and logistics
- Enhance operational productivity and reduce costs further through advanced digitalization of product ordering systems

# Segment Top Message: Japan



### **Market Position and Business Strengths**

Taiyo Nippon Sanso has the No. 1 market share in Japan for bulk gases, such as oxygen, nitrogen, and argon, as well as for carbon dioxide. The company also leads the industry in on-site supply to large-scale steel, chemical, and electronics industries and possesses the largest production and supply infrastructure. In the field of specialty materials gases for the electronics industry, Taiyo Nippon Sanso is the only company capable of comprehensively designing and constructing piping and supply equipment, including cylinder cabinets, purification equipment, and abatement devices.

We continue to support the development of a wide range of industries by supplying industrial gases and by advancing various R&D activities based on gas manufacturing, handling, and control technologies.

### Initiatives in the Final Year of the Medium-Term Management Plan

Under the current medium-term management plan, we have focused on further enhancing profitability. As a result, the performance of the business in Japan has steadily improved during the first three fiscal years of the four-year plan. Specifically, the business achieved core operating income and a core operating income margin of ¥31.6 billion and 7.5%, respectively, in the first year, ¥42.9 billion and 10.4% in the second year, and ¥47.0 billion and 11.5% in the third year. In the plan's final fiscal year, we are aiming for further growth as a culmination of the previous three fiscal years. At the same time, we are strengthening our business foundation in preparation for the launch of a new medium-term management plan in April 2026.

Specifically, Taiyo Nippon Sanso will rigorously

implement customer-focused value creation with the aim of establishing enduring earning power in its core business. Also, with our sights set on business growth, we will market several new products. In addition, we will enhance our electronics-related R&D infrastructure while implementing initiatives aimed at advancing diversity and sustainability activities and fostering a more flexible, highly transparent corporate culture.

### **Maintenance and Enhancement of Profitability**

Customer-focused value creation is inseparable from customer management. It involves repeatedly considering whether gases can address customers' actual and potential issues and needs and then proposing solutions. These activities can also be described as "price management." In customers' production activities, industrial gases provide essential efficacy and functionality that improve productivity, quality, and safety. The timely, safer delivery of gases in the amounts required by customers ensures that they recognize the value not only of our products but also of their business relationship with us. By continuously proposing solutions that, along with gases, include gas applications and electronics-related equipment, we will maintain and enhance profitability.

### **Outlook for the Business Environment**

With U.S. tariffs at the forefront, various factors are further heightening uncertainty and unpredictability at present. In the medium to long term, Japan is unlikely to see increases in economic scale or demand volume because domestic industries will be forced to transition to production postures that reflect domestic demand, and because Japanese society is aging rapidly and experiencing

population decline. In this environment, the industrial gases business will sustain growth by expanding in the engineering field, strengthening R&D in the electronics and carbon neutrality fields, and providing new products and solutions. We will achieve these advances by utilizing gas control technologies that leverage the diversity of gas applications and the efficacy and functionality of gases. Moreover, we will roll out the new technologies and products resulting from R&D not only in the domestic market but also in overseas markets.

### Approach to Growth Opportunities

The industrial gases business handles various invisible gases with many different physical properties. We contribute to the production activities of a wide array of industries and customers by providing them with the invisible efficacy and functionality of these gases. The fundamental elements of the business are technologies for the safe, reliable delivery of invisible efficacy and functionality, supply and utilization equipment that maximizes this invisible efficacy and functionality, and expertise in handling invisible gases safely. By evolving, renewing, and further developing handling and control technologies, we will extend the scope of products that lead their particular market niches and that are enabled by our unique technologies. For example, in the electronics field, we will develop and provide packages that include supply equipment and new specialty materials gases. To give another example, we will evolve and adapt conventional combustion technologies so that they can be used as material recovery technologies. Going forward, Taiyo Nippon Sanso will continue to seek further growth by combining gases and technologies to create new products and solutions.

# **Strategy by Segment: United States**

### **Market Position and Business Strengths**

9%

(Market share in the United States)

- Matheson works to grow our share in key markets through vertical integration by establishing infrastructure and capabilities to serve both packaged gas and bulk liquid customers. We enhance our valueadded position through our applications engineering expertise. We also look to supplement this growth with special focus on strategic products such as acetylene, nitrous oxide, and key semiconductor gas mixes all supported by a nationwide network summarized below.
- More than 300 locations and over 4,500 employees in the United States
- Over 100 production facilities including air separation units, on-site generators, liquid carbon dioxide plants, dry ice plants, HyCO installations, nitrous oxide plants, and major industrial, specialty, and electronics cylinder fill plants
- Over **100,000** customer accounts served by over **2,000** delivery vehicles and rail cars

### **Business Environment (Opportunities and Risks)**

### Opportunities:

- Electronics gases demand growth supported by the U.S. CHIPS Act
- Continued growth in the food processing industry and related demand for liquid nitrogen, liquid carbon dioxide, dry ice, and food freezers
- Further development of the metal fabrication market sector related to automation and lasers

### Risks:

- Significant increases in core costs of wages, power, and fuel
- Economic slowdown related to geopolitical developments abroad
- Construction cost inflation in key U.S. growth markets

### **Key Aspects of Sustainability**

### **Environment**

- Continue effort to identify cost-effective renewable energy suppliers for our production operations
- Continued drive to deploy new, more fuel-efficient distribution equipment
- Efforts to participate in commercially viable carbon neutral capital projects

### **Diversity and Inclusion**

- · Emphasis placed on gender recruiting
- Social media communications highlighting our diversity culture
- Mentoring to develop diverse high potential team members

### **Short-Term Initiatives**

- Complete the implementation of cylinder asset tracking system
- Expand sales and engineering capabilities for on-site and pipeline business
- Enhance the metal fabrication and food processing applications groups' capabilities

### **Future Initiatives**

### Sustainability

- Continue investing in power- and fuel-efficient production and distribution equipment aimed at fuel cost savings and related reduction of CO<sub>2</sub> emissions
- Compete for large-scale oxygen plant projects that support direct air capture and clean hydrogen

### Maintain and Improve Profitability

- Enhance inventory management to minimize idle assets, reduce CAPEX, and improve working capital
- Sustain effective cost and price management to offset ongoing inflationary pressures and impact of tariffs
- Further intensify already strong driver recruiting program to reduce expenses related to outside contract drivers

### Operational Excellence

- Comprehensive program to reduce waste at all levels of our operations
- Expand Green Belt coverage to increase number of cost reduction projects
- Expand resources to increase number of cost reduction projects

Position in Final Year of NS Vision 2026



Industry benchmark for Safety, Quality, and Profit Growth



A major supplier to the metal fabrication, cold chain/food processing, and semiconductor market sectors



Sustainability program with a strong emphasis on Safety that delivers profit growth and related shareholder value

# **Segment Top Message: United States**



### **Market Position and Business Strengths**

Matheson's capabilities span the full range of industrial gas products including cylinders, liquids, and on-site plants. Our nation-wide Air Separation Unit fleet for supply of atmospheric gases is the only East to West Coast network across the high growth southern U.S. sunbelt. We are the largest wholesaler of acetylene and a major supplier of nitrous oxide and dry ice. Our offerings include specialty gases and equipment complemented by high-purity electronic gases including gas analysis and research laboratories that support universities. laboratories, and the global semiconductor market sectors. Our vertically integrated product capabilities position us to effectively cross-sell multiple products and allow Customers to fulfill their total gas and equipment requirements with one supplier.

### Initiatives in the Final Year of the Medium-Term Management Plan

The Safety of our Team continues to be the cornerstone of Matheson's sustainability management efforts. This is evidenced by our outstanding distribution fleet Safety record, which is annually recognized by the U.S. Compressed Gases Association. Another key sustainability initiative is to intensify efforts to bring more women into the organization and leverage the advantages of this talent pool not widely recruited into this industry.

In the field of carbon neutrality, we have invested heavily in the re-use of CO<sub>2</sub> to produce dry ice to sell into the food and cold chain industries. We continue to support carbon neutral investments as demonstrated by our major capital project to supply oxygen to the world's largest Direct Air Capture and CO<sub>2</sub> sequestration installation.

The focus fields of Total Electronics will see the completion of facilities to synthesize key semiconductor process gases and further development of gas purification and analytical capabilities.

### **Maintenance and Enhancement of Profitability**

Matheson's drive to maintain and enhance profitability lies with the effective management of pricing and cost. We closely monitor costs which are related to outside factors beyond our control and work with our Customers to offset through adjustments in services, specifications, and pricing adjustments to mutually absorb these cost pressures. To manage our cost stack, we have engaged the entire organization in the effort to identify and address cost reduction opportunities, setting targets for our business units and recognition programs for significant individual contributions. Our process for delivering reductions in our controllable cost stack is called The Right Way program, based on the belief that if we perform our roles in the right way with emphasis on Safety and cost-effectiveness, we position the organization for profitable growth. Both of these efforts are to ensure Matheson and our shareholders are fairly rewarded for the value we provide to our Customers.

### **Outlook for the Business Environment**

The near-term business environment will be soft for new business and existing business expansion due to the uncertainty surrounding the Ukraine/Russian war, tariff negotiations, potential disruptions from the Middle East and from the U.S. midterm elections for the U.S. Congress. The offset to these headwinds will be our strong position in the food processing and healthcare industries, both of which are expected to continue to grow despite unfavorable geopolitical factors. We feel especially good about our food applications offering given our complete line of both cryogens and equipment used for food chilling and freezing. We also have a solid base in a growing hospital industry, with over 40% of our liquid oxygen sales to hospitals. Both are resilient industries that typically maintain if not grow even in economic downturns.

### Approach to Growth Opportunities

Matheson is bolstering our Marketing and Applications Engineering to support our food Customers, as well as metal fabrication, with a re-focus on Sales Force effectiveness to help drive organic and new business growth. We have established geographical strongholds in the steady growth markets of North and Central Texas. Phoenix, AZ, and Southern California. In all cases we seek to provide value to our Customers through superior technical support and service related to our depth of application expertise and well-developed infrastructure with the capacity to ensure timely and reliable supply. An area of particular focus will be our specialty gas business and electronics gases sales to small- and medium-sized electronics Customers, which we view to be an untapped source of growth given our strong brand and history of technical expertise. As always, we are on the lookout for capital projects that support carbon neutral applications and acquisitions that can be integrated into existing businesses or provide a complementary product line extension.

# Strategy by Segment: Europe

### **Market Position and Business Strengths**

9%

### (Market share in Europe)

\* 12% for countries where we have a business presence

Nippon Gases strengthens its European footprint through infrastructure and capabilities that support industrial, medical, and homecare applications. Growth is driven by strategic investments in electronics, green hydrogen, and oxy-combustion technologies, alongside M&A and joint ventures. Sustainability, safety, and diversity are embedded in operations, with strong survey scores and emissions reductions. The segment's performance, risks, and future initiatives—summarised below—reflect its role as a key contributor to NS Vision 2026.

- Business presence in
   13 European countries
- Network for supplying each region in Europe
- CO<sub>2</sub> carrier (ship for transporting liquefied carbon dioxide): **3** vessels
- Pipelines: **14** lines
- Trucks: More than 1,000
- Number of customers:
   About 150,000 companies,

   390,000 patients
- Operational production facilities:197
- Number of employees:
   Over 3,500

### **Business Environment (Opportunities and Risks)**

### Opportunities:

- Leveraging current expertise to grow medical business across all territories
- Enjoy Europe's investment into semiconductors as an opportunity to import NSHD and TNSC know-how
- Pursue selective acquisitions to boost growth and add capabilities
- Keep adding new customers through applications

### Risks:

- Persistent sluggish economic conditions and increased market volatility due to tariff threats
- CO<sub>2</sub> shortages and intense competitive pressure in the helium market
- Anticipated continuation of challenging market conditions into the new fiscal year
- Geopolitical tensions and subsequent economic effects

### **Key Aspects of Sustainability**

### Safety

- Safety scored 93/100 in the employee survey—highest ever
- More systematic approach with goals cascaded through the organisation to increase awareness and commitment to accelerate execution
- Review of non-financial goals remuneration to ensure alignment across all functions and regional organisations

### Environment

- Continued commitment in GHG emissions reduction (-44% vs baseline)
- Reinforced goals in carbon neutrality by joining the Science Based Targets initiative (SRTi)
- Doubled down on efforts in environmental applications
- Increased focus on quality of life by expanding medical offering

### **Diversity and Inclusion**

- Diversity scored 91/100 in the employee survey—also the highest ever
- Recognition of diversity as a core strength and indicator of organisational health
- Positive survey results reflect ongoing efforts to foster an inclusive workplace
- Diversity and inclusion are implicitly tied to the broader "People Excellence" priority

### **Short-Term Initiatives**

- Rollout of a new organizational structure effective April 1
- Focus on improving collaboration through the "T2C Trust to Collaboration" initiative
- Continued hiring and onboarding to support growth and transformation, including an emphasis on DX
- Reinforcement of pricing and productivity as profitability pillars

### **Future Initiatives**

### Sustainability

- Embedding sustainability into strategic planning and investment decisions
- Enhancing safety culture and performance as a top priority
- Promoting diversity and inclusion as part of long-term organisational excellence
- Continue to promote women sponsorship programs, community engagement programs, and young employee communities
- Continue promoting the development of green fuel, oxy-combustion technologies, and other applications to help decarbonize the industry

### Maintain and Improve Profitability

- Continued emphasis on pricing discipline and productivity improvements
- Increased focus on cash flow generation to fund investments and growth
- Leveraging M&A and joint ventures to access new revenue streams
- Driving top-line growth through customer acquisition and market expansion

Position in Final Year of NS Vision 2026



Strong financial performance in FY2025 with €2.01B in sales and €385M in operating income



Positioned as a key contributor to NSHD's global performance, also in electronics



Preparing for the next strategic cycle with a focus on growth, excellence, and sustainability



Reinforcing core values—People Excellence, Safety, and Collaboration—as foundational to NS Vision 2026's success

# Segment Top Message: Europe



### **Market Position and Business Strengths**

Nippon Gases Europe holds a strong and diversified market position across key European countries, with a broad portfolio spanning industrial, medical, and electronics gases. The company's ability to adapt swiftly to volatile market conditions while maintaining operational excellence sets it apart from other global majors. Nippon Gases' regional integration, customer-centric approach, and agility in highgrowth sectors such as electronics and homecare continue to reinforce its competitive advantage.

### Initiatives in the Final Year of the Medium-Term Management Plan

In the final year of the current medium-term management plan (FYE2026), Nippon Gases Europe is focused on consolidating its growth trajectory while reinforcing its strategic foundations. A key initiative has been the implementation of a new organizational structure, accompanied by a cultural transformation under the "T2C – Trust to Collaboration" initiative. This program aims to foster transparency, communication, and teamwork across all levels of the organization.

Strategically, the company continues to pursue both organic and inorganic growth. It has secured over 400 new bulk accounts, added over 4,500 PAG customers, and expanded its homecare services to support approximately 390,000 patients across Southern Europe. In the electronics segment, sales rose by 3% year-on-year, contributing 17.9% of NSHD's operating income in this area.

On the non-financial front, Nippon Gases reaffirmed its commitment to sustainability by joining the Science Based Targets initiative (SBTi). It also achieved record-high employee survey scores in safety (93/100) and diversity (91/100), reflecting its dedication to people excellence and inclusion. These initiatives align closely with the five focused fields of the medium-term plan, particularly in advancing sustainability, enhancing human capital, and strengthening governance.

### Maintenance and Enhancement of Profitability

Looking ahead to the next medium-term management plan, Nippon Gases Europe recognizes that sustaining and enhancing profitability will require a continued focus on pricing discipline and productivity. These two pillars have long underpinned the company's financial performance and remain central to its strategy. In FYE2026, there is an increased emphasis on cash flow generation, which is essential for reinvestment and long-term growth.

Operational excellence initiatives include nearly €70 million in capital investments aimed at improving safety and competitiveness. The company is also leveraging digital tools and process optimization to drive efficiency across its operations. By aligning profitability goals with sustainability and people development, Nippon Gases is building a resilient business model capable of withstanding external pressures while continuing to deliver value to stakeholders.

### **Outlook for the Business Environment**

The external business environment remains challenging. Economic sluggishness, geopolitical tensions—including the threat of tariff wars—and supply chain disruptions such as CO<sub>2</sub> shortages and helium market volatility continue to pose risks. Despite these headwinds, Nippon Gases Europe remains cautiously optimistic. Its diversified

portfolio and strong regional presence provide a buffer against market fluctuations. Opportunities exist in expanding healthcare and electronics segments, where demand remains robust. However, the company acknowledges that success will depend on its ability to adapt quickly, maintain operational discipline, and foster internal collaboration. The "T2C – Trust to Collaboration" initiative is seen as a strategic response to these challenges, reinforcing the importance of trust, transparency, and communication in navigating uncertainty.

### Approach to Growth Opportunities

Nippon Gases Europe is proactively pursuing growth through a balanced mix of customer acquisition, market expansion, and strategic partnerships. The company views mergers and acquisitions, as well as joint ventures, as key levers for entering new markets and acquiring capabilities it does not yet possess. In parallel, it continues to invest in high-potential segments such as electronics and homecare, where it has already demonstrated strong performance.

Sustainability remains a core focus. By joining the SBTi, the company has committed to measurable carbon neutrality goals. It is also embedding sustainability into its operational and investment decisions, ensuring that future growth aligns with environmental and social responsibility. The expansion of services to nearly 390,000 homecare patients exemplifies its contribution to market resilience and public health.

As it prepares for the next strategic cycle, Nippon Gases is laying the groundwork for longterm success through innovation, collaboration, and a steadfast commitment to its people and the planet.

# Strategy by Segment: Asia and Oceania

### **Market Position and Business Strengths**

# Accelerate the execution of region-specific business strategies through the embedding of the subsegment structure

- Operations in **12**\* countries and regions
- Embed the subsegment structure
   The structure of each subsegment
   accountable for its own performance by
   region and business was officially launched in April 2023.
- Southeast Asia + India Subsegment
- China Industrial Gas Subsegment
- East Asia Electronics Subsegment
- Oceania Industrial Gas Subsegment
- Average annual growth rate of 10% over past 10 years
- Over **4,000** employees in the region
- Operating more than 25 air separation units, as well as carbon dioxide plants, nitrogen plants, and hydrogen plants
- Special gas production bases: **6** facilities
- Special gas supply services:3 sites
- \* This figure reflects the Company's withdrawal from Myanmar and entry into New Zealand in FYE2026.

### **Business Environment (Opportunities and Risks)**

### Opportunities:

- Area-wide recovery in demand in the semiconductor market and new business opportunities for electronic material gases in advanced semiconductors for generative Al
- Continued firm demand in Southeast Asia and India (electronics, infrastructure, and automotive industries, etc.)
- Firm demand in the Australian LPG market over the medium term

### Risks:

- Risks associated with insufficient price management to counter rapidly rising electricity costs in Southeast Asian countries
- Impact on regional economies from U.S.–China trade friction
- Cost increases due to chronic shortage of drivers in the Australian labor market

### **Key Aspects of Sustainability**

### Safety

• Conduct risk simulations, review daily operations from a safety perspective

### **Environment**

- Reduce power consumption through plant efficiency improvements and installation of solar panels
- Propose ways to improve fuel efficiency for customers with electric arc furnaces and glass melting furnaces where GHG emission reduction is a challenge

### **Diversity and Inclusion**

- Host Women Empowerment network meetings
- Hold internal events for International Women's Day
- Foster NSHD Group awareness through the engagement survey report

### Compliance

 Compliance training, internal control training, labor law training, and more

### **Short-Term Initiatives**

### Oceania

- Strengthen competitiveness and establish a stable earnings base by expanding the industrial gas business in the Australian and New Zealand markets
- Enhance market presence by expanding the LPG distribution network in northern and western Australia

### Southeast Asia and India

- Build regional networks and promote collaboration
- Implement price management and deliver added value to customers

 Promote operational efficiency through productivity improvement initiatives and thorough use of DX

### East Asia

- Tap into regional demand for specialty gases and optimize production plants in the electronics business
- Develop capital investment plans that flexibly respond to the production plans of semiconductor customers

### **Future Initiatives**

### Sustainability

### Safety

 Improve safety indicators, including those for occupational accidents, by 10% annually

### Qualit

• Thoroughly manage quality based on Group quality management standards

### Environment

• Utilize oxygen combustion, argon welding, etc.

### **Human Resources**

 Strengthen human resource functions of each company through development of regional networks led by subsegments

### Governance

 Maintain governance through thorough compliance and risk management

### Maintain and Improve Profitability

- Promote thorough cost pass-through measures in response to rising electricity costs
- Concentrate investment in in-house products, such as electronic material gases and growth sectors (collaboration in Japan, enhancing supply capacity, and efficient factory operations)
- Explore new businesses for a carbon neutral society

### Operational Excellence

- Thoroughly control costs, including working capital management (enhance business operations in terms of both price management and cost controls)
- DX strategy (unify IT security levels and promote labor-saving and cost reductions through automation)

Position in Final Year of NS Vision 2026



Become an industrial gases supplier with a diverse product lineup, and become a major player in each country and region



Conduct efficient and disciplined operations through activities to enhance productivity



Strong growth in revenue while improving the operating profit margin



Rebuild our business platform

# Segment Top Message: Asia and Oceania



### **Market Position and Business Strengths**

The Asia and Oceania business, which was launched in earnest in Singapore in 1982, now operates in 12 countries. We have established a high-quality, stable manufacturing and sales network centered on East Asia, a global semiconductor hub. The business is characterized by a high percentage of sales in the electronics field. Further, the industrial gases business in Southeast Asia, which is based on production sites with regional advantages, serves as a solid foundation for our operations in the Asia and Oceania region. In Oceania, we are expanding businesses by leveraging synergies between the LPG and the industrial gases businesses.

### Initiatives in the Final Year of the Medium-Term Management Plan

In 2023, we divided the Asia and Oceania region into four subsegments, each of which is responsible for its own profits and expedites operations based on delegated decision-making authority.

In the electronics field, reflecting our Total Electronics strategy, we are further enhancing the trust earned from our customers in relation to quality and supply chain reliability to capture new business opportunities in the semiconductor market in East Asia and in the growing market of Southeast Asia. As for the industrial gases field, we are facing rising costs for electricity, fuel, steel, and other materials due to geopolitical factors. However, through pricing activities we are passing on some of these costs to sales prices. In Oceania, with the aim of expanding LPG sales channels, in northern and western Australia we acquired part of a LPG business in December 2024. In July 2025, we also acquired industrial gases business in Australia and New Zealand, thereby establishing a structure for strengthening our business foundation through

the realization of synergies with our existing LPG business and other initiatives. In addition, in 2024 we established sustainability officers within each subsegment to transition to a system that advances sustainability initiatives in such areas as safety, the environment, and human resources.

### **Maintenance and Enhancement of Profitability**

Under the subsegment system, we have launched pricing activities project teams to formulate strategies appropriate for each country and improve the effectiveness of our pricing activities. We have extended productivity improvement efforts to include not only manufacturing operations but also sales, management, logistics, and IT operations. At the same time, by regularly sharing the progress of activities within the region, we are further embedding and enhancing these activities. We are also endeavoring to use our resources more efficiently through initiatives such as the digitalization of operations. For example, we are improving delivery efficiency in Vietnam, increasing operational efficiency in the Philippines through system renewal, and reducing the man-hours required for placing and receiving orders in Australia through the introduction of a portal system.

As for new business development in the carbon neutrality field, we are further developing our efforts in the oxygen combustion field in Vietnam and Thailand while consolidating our engineering capabilities to enable the proposal of on-site projects for semiconductor customers in the Total Electronics field.

### **Outlook for the Business Environment**

The escalation of U.S.–China tensions and other geopolitical issues, as well as intense competition driven by the emergence of local suppliers, pose

risks to businesses that provide products and services to the semiconductor industry in China, Taiwan, and South Korea. On the other hand, in fields where demand growth is anticipated, such as the provision of products and services related to generative AI, we will increase specialty gases production capacity in South Korea to ensure that we meet demand. Among the NSHD's four global regions, Asia's industrial gases market has the greatest diversity. Before implementing capital investments to meet new gas demand, however, we will conduct thorough discussions aimed at minimizing risks. Our deliberations on how best to respond to unpredictable matters, such as rapidly changing U.S. tariff policies, will take into consideration the option of temporarily suspending ongoing investment projects.

### **Approach to Growth Opportunities**

We will capture demand for gases by supplying high-quality products to the semiconductor electronic parts and electronics-related equipment industries—where demand is increasing—and by providing global support based on our Total Electronics strategy. In particular, anticipating business opportunities arising from industrial growth in Southeast Asia and India, we have established a task force led by Nippon Sanso Holdings Singapore. We will build a robust supply chain in the region, including not only increased production and supply capacity for specialty gases but also technical support and safety management capabilities.

In the carbon neutrality field, we will build on core technologies in four fields where we enjoy advantages—combustion, hydrogen production, CO<sub>2</sub> capture, and oxygen production—and explore new business opportunities through the participation of representatives from the Asia and Oceania region in the activities of the global working group.

# Strategy by Segment: Thermos

### **Market Position and Business Strengths**

- Nissan Thermo K.K. established in 1980 in Japan
- Approximately 300 employees (Japan only)
- Bases in 17 countries worldwide, including Japan
- Manufacturing plants in Malaysia, the Philippines, and China
- THERMOS brand is available in over 120 countries worldwide
- Customer satisfaction about 96% for our best-selling JNL series of portable vacuum-insulated mugs
- Launch more than
   150 new products every year, with a new product sales ratio of about 25%

### **Business Environment (Opportunities and Risks)**

### Opportunities:

- Increase in savings mentality among consumers due to rising bottled beverage prices (stronger demand for stainless steel bottles)
- Increase in foreign tourist demand due to rise in visitor numbers to Japan
- Growing environmental awareness among consumers (more attention on sustainable products)

### Risks:

- Weaker consumer sentiment due to inflation outpacing real wage growth
- Earnings volatility caused by yen depreciation or appreciation and instability in raw material prices
- Increase in labor costs at overseas production plants
- Rising logistics costs and a shortage of logistics personnel

### Key Aspects of Sustainability

### Safety

- Continuously improve through product safety reviews and new product assessments
- Safety training for all employees

### **Environment**

- By optimizing the production division, reduced waste by 7 tonnes and water usage by 11,004 m³ by December 2024
- Reduction in paper usage through shift to electronic catalogs: Reduction of approximately 0.46 million sheets (converted to A4 sheets)

### **Diversity and Inclusion**

- Educational activities for female managers
- Promote employment of people with disabilities

### Quality

- Hold quality improvement meetings twice a year for major overseas factories
- · Conduct quality audits

### **Short-Term Initiatives**

### Japan

- Introduce dedicated brand areas to main sales outlets nationwide and hold brand promotion events, etc.
- Strengthen lineup of products with growing markets and expand target users for sports bottles
- Increase brand recognition and market share in the kitchenware products market
- Strengthen interactive communication with consumers
- Enter the apparel accessories market with the new sub-brand &ONDO

### South Korea

- Expand consumer touch points and increase brand capabilities by augmenting sales channels
- Launch large-volume tumblers for growth markets and expand sales of frying pans

### Southeast Asia

- Strengthen the e-commerce business, which is growing in the region
- Expand B2B businesses such as corporate gifts

# Future Initiatives

### Sustainability

### Safety

 Safety training for all employees, thorough checks of safety devices, and proper operation of production equipment

### Environment

- Reduce energy consumption, and defective products (waste) through efforts to improve efficiency in plant production
- Collect used stainless steel vacuuminsulated bottles at directly operated stores

### Quality

- Disclose customer opinions received by customer service department
- Continue quality audits

### Diversity

• Employ people with disabilities, promote women into management positions, etc.

### Maintain and Improve Profitability

- Increase new product development and revise pricing
- Expand number of directly operated stores and increase sales through online channels
- Expand kitchenware products and launch products in new categories

### Operational Excellence

- Strengthen activities to improve productivity centered on production plants (reduce raw material procurement costs, review production processes)
- Launched operational efficiency initiatives across all departments in Japan in FYE2025

# Position in Final Year of NS Vision 2026

We aim to achieve sustainable growth and become a valuecreating company trusted by everyone.



Improve customer satisfaction, brand value, and product competitiveness



Deepen and expand core businesses, product lineup, and sales channels



Develop and strengthen human resources

# Segment Top Message: Thermos



### **Market Position and Business Strengths**

Japan saw steady sales of portable mugs, which are the flagship products of the vacuum-insulated bottle market. As for South Korea, a pickup in online sales is contributing to revenues. Further, demand for sustainable products is increasing due to growing environmental awareness. By rolling out products that meet this demand, we are further enhancing our competitive advantage. With this advantage and others providing a foundation, the Thermos business is flexibly adapting to market changes while seeking sustained growth.

### Initiatives in the Final Year of the Medium-Term Management Plan

The Thermos business is advancing many different initiatives with a view to achieving sustainable growth in FYE2026, the final fiscal year of the medium-term management plan. In FYE2025, Thermos conducted promotional activities in various regions to celebrate the 120th anniversary of the THERMOS brand and increased the number of dedicated brand areas. As a result, the domestic business realized year-on-year growth in revenues and profits.

With respect to human resources initiatives, we conducted career development training, including career development for women, and career training for managers, who play a role as supporters. Through the training programs, employees' awareness of medium- to long-term career planning increased, and these initiatives served as an opportunity to encourage behavior aimed at self-growth.

Our environmental initiatives included expansion of a collection service for used vacuum-insulated bottles. In addition to offering the service at

directly managed stores, we have expanded it to include event venues, resulting in an annual collection volume of more than one ton. Further, we are engaged in social contribution activities through product donations to local communities, including donations to children's cafeterias.\*

\* Community-based cafeterias, primarily in Japan, that provide free or low-cost nutritious meals for children and their families

### **Maintenance and Enhancement of Profitability**

Viewing the maintenance and enhancement of profitability as an important management task, we are continuously taking measures focused on cost reduction, the provision of high-value-added products at appropriate prices, and the improvement of operational efficiency through digitalization. At overseas plants, we are revising procurement methods to reduce raw material costs and enhancing manufacturing processes. As part of our pursuit of Operational Excellence, the aforementioned activities are lowering manufacturing costs.

In launching new products, we aim to provide appropriately priced products with quality and value that satisfy customers. Further, we are improving operational efficiency by using digitalization to enhance the accuracy of demand forecasts and to optimize inventory management. Through these measures, we will maintain competitiveness while continuously enhancing profitability.

### **Outlook for the Business Environment**

Going forward, the business environment is expected to be a complex combination of risks and growth opportunities. Risk factors include rising component and material costs and supply chain disruptions stemming from U.S. tariff policies and

conflicts in various regions. On the other hand, greater demand for hydration products is likely due to the extreme heat of recent summers and an increase in visitors to Japan, including visitors to Expo 2025 Osaka, Kansai, Japan. The increasing demand for sustainable products, which is being driven by growing consumer thriftiness, also presents an important growth opportunity for the Thermos business.

### Approach to Growth Opportunities

To take maximum advantage of growth opportunities, the Thermos business is implementing various approaches, such as differentiating products, strengthening marketing strategies, and advancing regional strategies. Specifically, we have launched a new sub-brand, the &ONDO lineup of apparel accessories focused on alleviating stress associated with chilliness felt in daily life.

We aim to go beyond the food and beverages field to make other aspects of daily life more comfortable. Initiatives will include precise targeting through multifaceted marketing that reflects the diversity of consumer needs. For example, we will use social media marketing to target Gen Z consumers, thereby increasing our points of contact with consumers. We will also strengthen interactive communication with consumers by regularly launching limited-edition products through directly managed stores and e-commerce channels, and by issuing email newsletters and LINE app messages.

# DATA SECTION

This section presents trends in both financial and non-financial indicators, along with sustainability data.

For trends in financial and non-financial data, please refer to here.

Chart Generator: 
→ Please see here.

### **Summary of FYE2025 Results**

The business environment for the NSHD Group in FYE2025 made the outlook challenging and unpredictable.

Under these conditions, shipments of products declined slightly for the entire Group, but shipments of our core products, separated gases such as oxygen, nitrogen, and argon, were steady compared to the previous fiscal year. Across the Group, we managed prices by passing higher costs through to selling prices, and carried out productivity improvement programs in each region. However, NSHD recorded an impairment loss due to the cancellation of a hydrogen production facility construction project in the United States.

As a result, in FYE2025, revenue was ¥1,308.0 billion (up 4.2% year on year), core operating income was ¥189.1 billion (up 13.9%), operating income was ¥165.9 billion (down 3.6%), and net income attributable to owners of parent was ¥98.7 billion (down 6.7%).

With respect to the year-on-year impact of foreign currency exchange rates, the yen depreciated on average versus other foreign currencies, weakening by ¥7.26 against the U.S. dollar, to ¥152.57 (up 5.0%), and by ¥5.94 against the euro, to ¥163.66 (up 3.8%), resulting in an impact of approximately ¥35.3 billion on revenue and ¥5.5 billion on core operating income.

### Consolidated Business Performance for FYE2025

	Unit	FYE2024	FYE2025	YoY
Revenue	Billions of yen	1,255.0	1,308.0	+53.0 (+4.2%)
Core operating income*1	Billions of yen	165.9	189.1	+23.1 (+13.9%)
Core operating income margin	%	13.2	14.5	+1.3
EBITDA margin*2	%	22.2	23.3	+1.1
Adjusted net D/E ratio*3	Times	0.74	0.71	-0.03
ROCE after Tax*4	%	6.7	7.2	+0.5

<sup>\*</sup> Please see the following for notes.

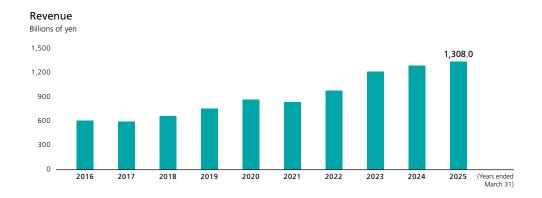
(Forex rate (full-term) / Average Forex rates)

	Unit	FYE2024	FYE2025	YoY
USD	Yen	145.31	152.57	+7.26
EUR	Yen	157.72	163.66	+5.94

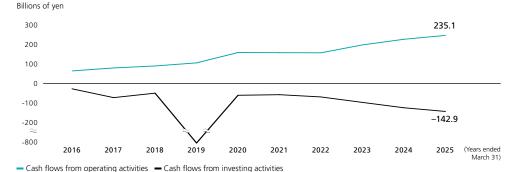
Figures of Revenue and Income (Loss) by Reportable Segment for FYE2025

Reportable segment	Revenue		Segment income*5		YoY factors for increase / decrease		
(Unit: Billions of yen)	FYE2024	FYE2025	FYE2024	FYE2025	TOT Tactors for increase / decrease		
Japan	414.3	410.0	42.9	47.0	Shipments of separated gases and CO <sub>2</sub> declined, and revenue from electronic material gases decreased. However, revenue increased for equipment and construction due to progress on medium- to large-scale projects in both industrial gas and electronics-related fields. Revenue was negatively affected by the joint operation of a subsidiary that supplies gases on-site to a specific customer and the deconsolidation of a subsidiary engaged in the LPG business for residential use. Meanwhile, lower electricity costs and increased revenue from equipment and construction contributed to profit growth.		
United States	347.0	360.2	50.0	59.7	Shipments of separated gases increased slightly. Revenue rose due to price management efforts. Sales were sluggish for equipment and construction, in both industrial gas and electronics-related fields. Price management combined with productivity improvements led to profit growth.		
Europe	302.4	328.6	53.2	62.4	Shipments of separated gases were flat compared with the previous year, while CO <sub>2</sub> was sluggish. Effective price management contributed to revenue growth. In equipment and construction, revenue benefited from firm sales of gas-related equipment and medical equipment. Increased revenue and productivity improvement initiatives led to profit growth.		
Asia and Oceania	160.3	176.5	15.9	15.0	Shipments of separated gases remained brisk. LPG also saw strong sales volumes, resulting in higher revenue. In electronics, both gas and equipment sales increased. However, profit declined due to rising personnel expenses and logistics costs in Australia, lower selling prices in some regions due to helium oversupply, and the recognition of acquisition-related expenses for the Australian business in the fourth quarter.		
Thermos	30.7	32.5	5.5	6.2	Despite the impact of higher manufacturing costs from persistent yen depreciation, efforts to reduce costs led to profit growth.  (Japan) The launch of new products with functional and stylish designs supported strong sales of portable mugs, contributing to revenue growth.  (Overseas) Sales in South Korea remained on par with the previous fiscal year, thereby helping revenue growth.		
Adjustments	0.0	0.0	-1.7	-1.4			
Total	1,255.0	1,308.0	165.9	189.1			

### **Main Financial Indicators (FYE2016 to FYE2025)**



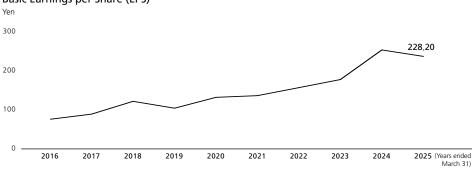








### Basic Earnings per Share (EPS)



- \*1 Core operating income is calculated as operating income excluding certain gains and expenses attributable to non-recurring factors (non-recurring items\*).
- \* Non-recurring items are costs of structural reform (cost for withdrawal or downsizing business operations and special retirement allowances), losses caused by disasters or serious accidents, and other gains and expenses (such as disposal of idling assets).
- \*2 Indicator that shows profitability based on cash flow, excluding the impact of M&A and CAPEX. Calculation formula: Earnings Before Interest Taxes, Depreciation and Amortization (Core operating income + Depreciation and amortization) / Revenue
- \*3 Indicator of financial soundness. Calculation formula: ((Interest-bearing debt Equity-type debt\*1) Cash and cash equivalents) / (Equity attributable to owners of parent + Equity-type debt\*1)
- \*1 Equity-type debt: The amount of debt procured by hybrid finance\*2 that has been recognized as equity credit by rating agencies. In this fund procurement, rating agencies have recognized equity credit for 50% of the procured amount.
- \*2 Hybrid finance: A form of debt financing that has features resembling equity, such as voluntary deferral of interest, extremely long-term redemption periods, and subordination during liquidation or bankruptcy procedures. This kind of financing does not cause stock dilution, and a certain ratio of the funds procured in this way can be recognized as equity credit by rating agencies provided that certain conditions are met.
- \*4 Indicator of capital efficiency. Calculation formula: Core operating income after tax (+ Dividend received) [NOPAT] ((Core operating investment income/loss from Equity in earnings (losses) of affiliated companies included in Core operating income + Dividend received) / (Interest-bearing debt Total equity attributable to owners of parent)\*1 [Capital employed]
- \*1 The average of the amounts at the end of the comparative fiscal years of the previous and current fiscal years is used. Note that return on capital employed (ROCE) had been disclosed and utilized until FYE2022. However, for the purpose of comparability with our peers, ROCE after Tax is disclosed and utilized from FYE2023. Calculation formula: ROCE = Core operating income / (Outstanding interest-bearing debt + Equity attributable to owners of parent\*2)
- \*2 Equity attributable to owners of parent is calculated as Net assets Non-controlling interests.
- \*5 Segment income represents core operating income, which is calculated by excluding from operating income certain gains or losses attributable to non-recurring factors such as losses arising from business withdrawal or downsizing.

Please also see here for an overview of the business in each segment.

Business Segment: 

Please see here.

## Performance by Segment (FYE2023 to FYE2025)

### Revenue



Indicators with 

mark have been assured by KPMG AZSA Sustainability Co., Ltd.



■ Japan ■ United States ■ Europe ■ Asia and Oceania ■ Thermos Reporting boundary: Nippon Sanso Holdings and its main consolidated subsidiaries

### Main Non-Financial Indicators (FYE2023 to FYE2025)

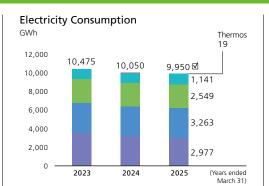
### Environment

### **GHG** Emissions Thousands of tonnes CO2e Thermos 5,868 5,667 V 12 6.000 5,258 5,000 648 797 4.000 3,000 2.087 2.000 1.000 ,712 2023 2024 2025 (Years ended

\* The reporting boundary includes the joint operation JFE Sanso Center Co., Ltd.

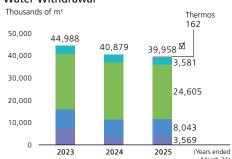
### **Energy Consumption** GWh Thermos 22 15.000 13.945 13.367 13,393 ☑ 1,254 2.912 10.000 6,038 5,000 3.167 2023 2024 2025 (Years ended

\* The reporting boundary includes the joint operation JFE Sanso Center Co., Ltd.



\* The reporting boundary includes the joint operation JFE Sanso Center Co., Ltd.

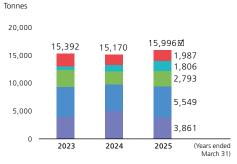
### Water Withdrawal



Reporting boundary: Gas production plants operated by consolidated subsidiaries of Nippon Sanso Holdings in Japan, business locations with facilities specified under the Water Pollution Prevention Act, and main overseas consolidated subsidiaries

### Environment

# Waste Generated (Including Valuable Materials)



- \* Waste generated by the consolidated subsidiaries of Nippon Sanso Holdings in Japan is the volume for which the Company issued a manifest.
- \* Due to restrictions on availability of information, information for the dry ice production and sales base of Matheson Tri-Gas, Inc. (formerly a business site of Continental Carbonic Products, Inc.) is not included among the aggregated total.

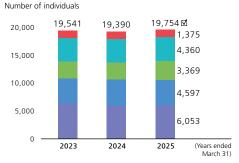
### Society

### Number of Employees by Gender (Consolidated) Number of individuals % 19,754 ☑ 19.541 19,390 40.0 20.000 4.110₫ 15,000 20.8 ☑ 20.0 10,000 ΔĮ 10.0 5.000 15.644☑ (Years ended 2023 2024 2025 March 31)

Male (Left scale) Female (Left scale) Female employees as a percentage of the total number of employees (Right scale) Female managers as a percentage of total managerial positions (Right scale)

\* Due to differences in accounting periods, some of the complied data until FYE2024 included figures as of December of each year, but starting in FYE2025, the actual figures are calculated as of the end of March for all Group companies.

# Number of Employees by Segment (Consolidated)



\* Due to differences in accounting periods, some of the complied data until FYE2024 included figures as of December of each year, but starting in FYE2025, the actual figures are calculated as of the end of March for all Group companies.

### Lost Time Injury Rate\*

\* The frequency rate expresses the frequency of accidents resulting in lost workdays in a fiscal year, calculated as the number of injuries / fatalities due to occupational accidents per million work hours.



■ Taiyo Nippon Sanso Group ■ Nippon Sanso Holdings Group Reporting boundary: Consolidated subsidiaries with production divisions in Japan and overseas

\* To improve the accuracy of data aggregation, values presented in previous fiscal years have been retroactively amended.

GHG emissions: GHG emissions in Japan are calculated using emission factors provided in Japan's Act on Promotion of Global Warming Countermeasures (for electricity, the adjusted emission factors for each electricity provider until FYE2024, and the basic emission factor for each electricity provider from FYE2025; for city gas, chilled water, and hot water, substitute values from FYE2024. Scope 1 GHG emissions overseas are calculated using emission factors set forth in Japan's Act on Promotion of Global Warming Countermeasures. However, from FYE2024, Scope 1 emissions in Europe have been calculated using the DEFRA emission factors of the United Kingdom. Overseas Scope 2 emissions are calculated using country-specific emission factors published by the Electricity in Europe, a separate emission factor for each electricity used, and emissions are calculated making reference to the Guarantee of Origin. Furthermore, emissions from electricity use at Top Thermo Manufacturing (Malaysia) Sdn. Bhd. are calculated using emissions coefficients for each electricity used in the United States, China, Taiwan, and Singapore are calculated using operate and using published origin coefficients for each electricity used.

# **Environment**

GHG emissions quantification is subject to uncertainty when measuring activity data, determining emission factors, and considering scientific uncertainty inherent in the Global Warming Potentials.

	Unit	FYE2023	FYE2024	FYE2025
Greenhouse Gas (GHG) Emissions				
GHG Emissions Scope 1 ₪	Thousands of tonnes CO <sub>2</sub> e	1,103	1,062	1,085
GHG Emissions Scope 2 ₪	Thousands of tonnes CO <sub>2</sub> e	4,765	4,605	4,173
GHG Emissions Scope 3—Total for the Following Categories	Thousands of tonnes CO₂e	3,341	3,499	3,521
Category 1 Purchased goods and services	Thousands of tonnes CO <sub>2</sub> e	911	917	904
Category 2 Capital goods	Thousands of tonnes CO <sub>2</sub> e	67	53	85
Category 3 Fuel- and energy-related activities not included in Scope 1 or Scope 2	Thousands of tonnes CO <sub>2</sub> e	261	236	219
Category 4 Upstream transportation and distribution (Including transportation services whose cost is borne by the Company)	Thousands of tonnes CO <sub>2</sub> e	36	37	38
Category 5 Waste generated in operations	Thousands of tonnes CO₂e	1	1	1
Category 6 Business travel	Thousands of tonnes CO₂e	1	1	1
Category 7 Employee commuting	Thousands of tonnes CO₂e	3	3	3
Category 8 Upstream leased assets	Thousands of tonnes CO₂e	N/A	N/A	N/A
Category 9 Downstream transportation and distribution	Thousands of tonnes CO2e	N/A	N/A	N/A
Category 10 Processing of sold products	Thousands of tonnes CO2e	N/A	N/A	N/A
Category 11 Use of sold products	Thousands of tonnes CO2e	1,382	1,391	1,199
Category 12 End-of-life treatment of sold products	Thousands of tonnes CO2e	N/A	N/A	N/A
Category 13 Downstream leased assets	Thousands of tonnes CO <sub>2</sub> e	N/A	46	46
Category 14 Franchises	Thousands of tonnes CO2e	N/A	N/A	N/A
Category 15 Investments	Thousands of tonnes CO <sub>2</sub> e	679	814	1,026

		Unit	FYE2023	FYE2024	FYE2025
Contributions to Environmental Protect	tion Through Products				
GHG Emission Reduction Contribution	Products and services	Thousands of tonnes CO <sub>2</sub> e	3,556	3,775	3,934
	Industrial gases ₪	Thousands of tonnes CO₂e	3,752	3,679	4,170

For information on the reporting boundary and the method of calculation, please refer to  $\underline{\text{here}}.$ 

Reporting boundary: Scope 1 emissions and Scope 2 emissions represent Nippon Sanso Holdings and its main consolidated subsidiaries. They also include the joint operation of JFE Sanso Center Co., Ltd. For information on Scope 3 emissions aggregation, please refer to here.

Scope 1 emissions: Direct emissions occurring from sources owned or controlled by the company

Scope 2 emissions: Indirect emissions from the use of electricity, steam, and heat

Scope 3 emissions: Indirect emissions other than Scope 2 emissions

Calculation methods: GHG emissions in Japan are calculated using emission factors provided in Japan's Act on Promotion of Global Warming Countermeasures (for electricity, the adjusted emission factors for each electricity provider until FYE2024, and the basic emission factor for each electricity provider from FYE2025, for city gas, chilled water, and hot water, substitute values from FYE2024). Scope 1 GHG emissions overseas are calculated using emission factors set forth in Japan's Act on Promotion of Global Warming Countermeasures. However, from FYE2024, Scope 1 emissions in Europe have been calculated using the DEFRA emission factors of the United Kingdom. Overseas Scope 2 emissions are calculated using the DEFRA emission factors published by the IEA. However, for electricity in Europe, a separate emission factor for each electricity provider is used, and emissions are calculated making reference to the Guarantee of Origin. Furthermore, emissions from electricity use at Top Thermo Manufacturing (Malaysia) Sdn. Bhd. are calculated using emissions coefficients for each electricity provider, while emissions from electricity use in the United States, China, Taiwan, and Singapore are calculated using published grid coefficients for each country.

Please refer to here for calculation method for Scope 3 emissions. From FYE2024, Scope 3 Category 13 has

Please refer to here for calculation method for Scope 3 emissions. From FYE2024, Scope 3 Category 13 has been calculated.

Indicators with  ${\underline{\it M}}$  mark have been assured by KPMG AZSA Sustainability Co., Ltd. for FYE2025.

### **Environment**

	Unit	FYE2023	FYE2024	FYE2025
Energy Usage				
Energy Consumption ₪	GWh	13,945	13,367	13,393
Electric power	GWh	10,475	10,050	9,950
Fuels	GWh	3,269	3,095	3,261
Heat	GWh	201	222	182

Reporting boundary: Nippon Sanso Holdings and its main consolidated subsidiaries. They also include the joint operation of JFE Sanso Center Co., Ltd. The energy of the consumed fuels are calculated based on the gross calorific values specified in Japan's Act on the Rational Use of Energy.

Environmental Impact				
Nitrogen oxide (NOx) emissions	Tonnes	2.6	3.2	1.3
Sulfur oxide (SOx) emissions	Tonnes	1.1	0.7	0.3
Particulate emissions	Tonnes	0.1	0.1	0.1
Volatile organic compound (VOC)* emissions	Tonnes	5	13	10
Releases of substances designated under the Pollutant Release and Transfer Register (PRTR) 🛭	Tonnes	8	13	10

Reporting boundary: Consolidated subsidiaries in Japan, including Taiyo Nippon Sanso

\* The substances covered in the calculation are substances that fall under the PRTR Act and certain substances subject to the PRTR survey of the Japan Chemical Industry Association that are classified as VOCs.

Wa	ter Usage				
Wa	ter Withdrawal ₪	Thousands of m <sup>3</sup>	44,988	40,879	39,958
jo c	Water supply from local government	Thousands of m <sup>3</sup>	18,161	13,434	13,457
sources	Municipal water	Thousands of m <sup>3</sup>	6,332	5,881	5,644
with	Industrial water	Thousands of m <sup>3</sup>	11,829	7,552	7,813
wn c	Groundwater	Thousands of m <sup>3</sup>	2,366	2,377	2,480
Breakdov fresh w	Surface water	Thousands of m <sup>3</sup>	24,440	25,047	24,000
Bre	Other	Thousands of m <sup>3</sup>	21	22	21

Reporting boundary: Gas production plants operated by consolidated subsidiaries of Nippon Sanso Holdings in Japan, business locations with facilities specified under the Water Pollution Prevention Act, and main overseas consolidated subsidiaries

Waste				
Waste generated*¹	Tonnes	15,392*5	15,170*5	15,996*5
Waste disposed of as landfill*2	Tonnes	5,052*5	3,926*5	4,320*5
Hazardous waste generated*³ ₪	Tonnes	2,000*5	1,735*5	1,714*5
Waste recycled*4	Tonnes	7,975*5	9,481*5	9,484*5

Reporting boundary: Nippon Sanso Holdings and its main consolidated subsidiaries

Waste generated by consolidated subsidiaries in Japan is the volume for which the Company issued a manifest.

\*1 Includes valuable materials \*2 Includes residue after intermediate treatment outside the Group company \*3 Includes specially controlled industrial waste \*4 The amount of waste collected is included in the amount of resources recycled. \*5 Due to restrictions on availability of information, information for the dry (ice production and sales base of Matheson Tri-Gas, Inc. (formerly a business site of Continental Carbonic Products, Inc.) is not included among the aggregated total.

Others				
Number of environmental violations	Incidents	0	0	0
Amount of fines paid for environmental violations	Millions of yen	0	0	0

The figures for chemical oxygen demand (COD) emissions, nitrogen emissions in wastewater, and phosphorus emissions have been omitted from disclosure since the amounts of these emissions have been immaterial. The Nippon Sanso Holdings Group uses water primarily for indirect cooling, and its impacts on water quality are therefore not large. Taiyo Nippon Sanso and its Japanese subsidiaries have five business sites that are subject to restrictions on the concentration of COD, nitrogen, and phosphorous emissions in wastewater. The total amounts of COD, nitrogen, and phosphorous emissions for all five sites amount to less than one tonne each.

	Unit	FYE2023	FYE2024	FYE2025
GHG Emissions				
GHG Scope 1 + Scope 2 ₪	Thousands of tonnes CO₂e	5,868	5,667	5,258
Japan	Thousands of tonnes CO₂e	2,054	1,873	1,712
United States	Thousands of tonnes CO₂e	2,251	2,165	2,087
Europe	Thousands of tonnes CO₂e	916	989	797
Asia and Oceania	Thousands of tonnes CO₂e	632	627	648
Thermos	Thousands of tonnes CO₂e	15	12	12
Energy Consumption		·		
Total ₪	GWh	13,945	13,367	13,393
Japan	GWh	3,757	3,389	3,167
United States	GWh	6,106	5,938	6,038
Europe	GWh	2,889	2,830	2,912
Asia and Oceania	GWh	1,167	1,189	1,254
Thermos	GWh	26	22	22
Electricity Consumption				
Total ₪	GWh	10,475	10,050	9,950
Japan	GWh	3,552	3,169	2,977
United States	GWh	3,249	3,242	3,263
Europe	GWh	2,585	2,538	2,549
Asia and Oceania	GWh	1,066	1,082	1,141
Thermos	GWh	23	19	19
Water Withdrawal		,		
Total ₪	Thousands of m <sup>3</sup>	44,988	40,879	39,958
Japan	Thousands of m <sup>3</sup>	7,445	3,377	3,569
United States	Thousands of m <sup>3</sup>	8,464	8,122	8,043
Europe	Thousands of m <sup>3</sup>	25,136	25,690	24,605
Asia and Oceania	Thousands of m <sup>3</sup>	3,744	3,523	3,581
Thermos	Thousands of m <sup>3</sup>	199	168	162
Waste Generated (Including Valuable	e Materials)*1			
Total ₪	Tonnes	15,392*2	15,170*2	15,996
Japan	Tonnes	3,909	4,998	3,861
United States	Tonnes	5,415*2	4,771*2	5,549
Europe	Tonnes	3,068	2,358	2,793
Asia and Oceania	Tonnes	602	1,140	1,806
Thermos	Tonnes	2.398	1,903	1,987

- \*1 Waste generated by the consolidated subsidiaries of Nippon Sanso Holdings in Japan is the volume for which the Company issued a manifest.
- \*2 As with the reporting boundary for "Waste" on the left, Matheson Tri-Gas, Inc.'s dry ice production and sales base (formerly a business site of Continental Carbonic Products, Inc.) is not included among the aggregated total.

# Society

	Unit	FYE2023	FYE2024	FYE2025
Employees and Diversity (Consolidated)*				
Employees	Number of individuals	19,541	19,390	19,754
Japan	Number of individuals	6,391	5,950	6,053
United States	Number of individuals	4,532	4,705	4,597
Europe	Number of individuals	3,013	3,124	3,369
Asia and Oceania	Number of individuals	4,267	4,285	4,360
Thermos	Number of individuals	1,338	1,326	1,375
Employees by gender				
Male ₪	Number of individuals	15,651	15,468	15,644
Female ₪	Number of individuals	3,890	3,922	4,110
Employees by age group (Composition ratio)				
20s and below	%	15.7	15.3	15.1
30s	%	25.0	25.3	26.4
40s	%	27.0	26.2	26.6
50s and above	%	32.4	33.0	32.8
Years of consecutive service			•	
Overall average	Years	11.6	11.2	11.1
Men	Years	11.8	11.1	11.2
Women	Years	11.4	11.3	11.1
Average age	Years	44.1	44.1	44.3
New hires	Number of individuals	3,161	3,020	2,911
Employee turnover rate	%	6.9	4.2	4.2
Female employees as a percentage of the total number of employees	%	19.9	20.2	20.8
Female managers as a percentage of total managerial positions	%	14.5	15.4	16.7

<sup>\*</sup> Due to differences in accounting periods, some of the complied data until FYE2024 included figures as of December of each year, but starting in FYE2025, the actual figures are calculated as of the end of March for all Group companies.

Employees	Number of individuals	88*	91*	112
Employees by gender				
Male	Number of individuals	72	72	87
Female	Number of individuals	16	19	25
Female employees as a percentage of the total number of employees	%	18.2	20.9	22.3
Female managers as a percentage of total managerial positions	%	3.6	3.7	6.3

<sup>\*</sup> Includes employees working concurrently for Taiyo Nippon Sanso Corporation (FYE2023: 47 persons; FYE2024: 41 persons; FYE2025: 49 persons)

	Unit	FYE2023	FYE2024	FYE2025
Employees, Diversity, and Work-Life Balance (Registe	ered Employees	of Taiyo Nippo	n Sanso Corp	oration)
Employees	Number of individuals	2,086	2,110	2,165
Employees by gender				
Male	Number of individuals	1,780	1,794	1,817
Female	Number of individuals	306	316	348
Employees by age group (Composition ratio)				
20s and below	%	20.2	20.1	20.1
30s	%	20.5	21.3	22.1
40s	%	24.2	22.6	20.6
50s and above	%	35.1	35.9	37.2
Years of consecutive service				
Overall average	Years	18.7	18.4	16.7
Men	Years	19.4	19.3	17.8
Women	Years	14.0	13.7	12.9
Average age	Years	42.7	42.7	42.9
New hires	Number of individuals	88	100	113
Employee turnover rate*1	%	3.7	4.5	2.2
Companywide employee training hours*2				
New employee training hours	Hours	27,360	23,680	26,880
Employee training hours	Hours	42,309*5	61,106*5	70,599
Union members	Number of individuals	1,232	1,275	1,302
Union members as a percentage of the total number of employees	%	59.1	60.4	60.1
Layoffs*3	Number of individuals	0	0	0
Female employees as a percentage of total number of employees	%	14.7	15.0	16.1
Female managers as a percentage of total managerial positions	%	1.8	2.4	2.5
Employment ratio of persons with disabilities (as of June 1 of each fiscal year)	%	2.5	2.5	2.5
Number of employees reemployed after retirement	Number of individuals	86	99	87
Employees using childcare leave systems	Number of individuals	39	46	58
Men	Number of individuals	21	28	39
Women	Number of individuals	18	18	19
Employees using nursing care leave or long-term nursing care leave	Number of individuals	0	18	16
Usage rate for annual paid leave*4	%	67.0	70.4	70.3
Employees using volunteer leave system	Number of individuals	0	0	0

<sup>\*1</sup> Employee turnover rate is the number of employees leaving the Company during the fiscal year (including mandatony-age retirees and excluding personnel transferring to other Group companies) divided by the number of employees at the end of the fiscal year \*2 Reporting boundary: Training hours of Taiyo Nippon Sanso Corporation employees and Taiyo Nippon Sanso Group employees who took training held by Taiyo Nippon Sanso Corporation \*3 Employees leaving the Company for reasons attributable to the Company (dismissals) \*4 The number of new days granted in the reporting year is the denominator. The number of days used in the reporting year is the numerator. The denominator does not include the number of days carried over from the previous fiscal year. \*5 To improve the accuracy of data aggregation, values presented in past fiscal years have been retroactively amended.

# Society

	Unit	FYE2023	FYE2024	FYE2025
Others (Consolidated)				
Expenditures on social contribution initiatives	Millions of yen	78.3	103.0	128.6

Occupational Health and Safety					
Lost time injury rate (Number of injuries / fatalities due to occupational accidents per million work hours)					
Nippon Sanso Holdings Group (Including Taiyo Nippon Sanso Group) ø	_	1.54*1	2.11*1	1.85	
Taiyo Nippon Sanso Group ₪	_	0.81	0.77	0.78	
Number of fatalities (Consolidated)	Number of individuals	0	1	0	
Employees	Number of individuals	0	1	0	
Contractors	Number of individuals	0	0	0	
Number of participants in hazard simulation training*2, *3	Number of individuals	978	1,058	712	

Reporting boundary: Main consolidated subsidiaries with production divisions in Japan and overseas

# **Supplementary Notes Regarding the Reporting Boundary**

### Main consolidated subsidiaries

Consolidated subsidiaries in Japan including Taiyo Nippon Sanso Corporation; Matheson Tri-Gas, Inc.; Western International Gas & Cylinders, Inc.; Nippon Gases Euro-Holding S.L.U. and its consolidated subsidiaries (excluding Polaris S.r.l.); Leeden National Oxygen Ltd.; Leeden Gases Sdn. Bhd.; Nippon Sanso Ingasco, Inc.; Nippon Sanso Ingasco Clark, Inc.; Nippon Sanso (Thailand) Co., Ltd.; Ayutthaya Industrial Gases Co., Ltd.; Taiyo Gases Co., Ltd.; Nippon Sanso Vietnam Joint Stock Company; Taiyo Nippon Sanso India Pvt. Ltd.; Shanghai Taiyo Nippon Sanso Gas Co., Ltd.; Dalian Changxing Island Taiyo Nippon Sanso Gas Co., Ltd.; Dalian Taiyo Nippon Sanso Gas Co., Ltd.; Yangzhou Taiyo Nippon Sanso Semiconductor Gases Co., Ltd.; Matheson Gas Products Korea, Co., Ltd.; Nippon Sanso Taiwan, Inc.; Taiyo Nippon Sanso Engineering Taiwan, Inc.; Fu Yang Gas Co., Ltd.; Supagas Pty Ltd; Nippon Sanso Myanmar Co., Ltd.; Top Thermo Manufacturing (Malaysia) Sdn. Bhd.; Vacuumtech Philippines Inc.

<sup>\*1</sup> To improve the accuracy of data aggregation, values presented in past fiscal years have been retroactively amended.

<sup>\*2</sup> Hazard simulation training is experiential training conducted by the Technical Academy of Taiyo Nippon Sanso in accordance with NSHD's Occupational Safety and Health / Industrial Safety and Disaster Prevention Policy. The training is designed to eliminate occupational accidents by raising employees' safety awareness and knowledge, and their sensitivity to hazards. Employees of associates are also included in the scope of data collection.

<sup>\*3</sup> From FYE2024, values presented in past fiscal years have been retroactively amended.

<sup>\*</sup> From FYE2024, data from the joint operations JFE Sanso Center Co., Ltd. and Sakai Gas Center, Inc. are not included.

# Governance

	Unit	FYE2023	FYE2024	FYE2025
Activities of Committees				
Management Configuration	Number of individuals	9	9	9
Internal directors	Number of individuals	4	4	4
Independent outside directors	Number of individuals	5	5	5
Directors serving concurrently as executive officers	Number of individuals	1	1	1
Percentage of directors serving concurrently as executive officers	%	11.1	11.1	11.1
Independent outside directors as a percentage of total Board of Directors' members	%	55.6	55.6	55.6
Female directors as a percentage of total Board of Directors' members	%	22.2	22.2	22.2
Term of appointment	Years	1	1	1
Frequency of Board of Directors' meetings	Times	11	12	12
Attendance at Board of Directors' meetings	%	100.0	100.0	100.0
Attendance of independent outside directors at Board of Directors' meetings	%	100.0	100.0	100.0
Number of directors attending less than 75% of Board of Directors' meetings	Number of individuals	0	0	0
Audit & Supervisory Board members	Number of individuals	4	4	4
Internal Audit & Supervisory Board members	Number of individuals	1	1	1
Independent outside Audit & Supervisory Board members	Number of individuals	2	2	2
Independent outside Audit & Supervisory Board mem- bers as a percentage of total Audit & Supervisory Board members	%	50.0	50.0	50.0
Female Audit & Supervisory Board members as a percentage of total Audit & Supervisory Board members	%	0.0	0.0	0.0
Frequency of Audit & Supervisory Board meetings	Times	14	15	17
Attendance at Audit & Supervisory Board meetings	%	100.0	100.0	100.0
Attendance of independent outside Audit & Supervisory Board members at Audit & Supervisory Board meetings	%	100.0	100.0	100.0
Number of Audit & Supervisory Board members attending less than 75% of Audit & Supervisory Board meetings	Number of individuals	0	0	0
Average age of directors and Audit & Supervisory Board members	Years	66.1	65.2	64.8
Number of executive officers	Number of individuals	7	6	8
Female executive officers as a percentage of total executive officers	%	0.0	0.0	0.0

	Unit	FYE2023	FYE2024	FYE2025
Activities of Committees				
Advisory Committee on Appointments and Remo	uneration			
Members	Number of individuals	6	6	6
Internal directors	Number of individuals	1	1	1
Independent outside directors	Number of individuals	5	5	5
Frequency of meetings	Times	12	9	17
Attendance*1	%	100.0	100.0	99.0
Management Committee				
Members	Number of individuals	12	13	15
Frequency of meetings	Times	12	15	14
Attendance*1	%	100.0	99.5	100.0
Global Investment Committee				
Members* <sup>2</sup>	Number of individuals	15	15	18
Frequency of meetings	Times	2	2	2
Attendance*1	%	93.3	96.5	100.0
Global Strategy Review Committee				
Members	Number of individuals	17	16	18
Frequency of meetings	Times	1	1	1
Attendance	%	100.0	100.0	100.0
Global Risk Management Committee				
Members	Number of individuals	18	18	20
Frequency of meetings	Times	1	1	1
Attendance	%	100.0	94.4	100.0
Global Compliance Committee				
Members* <sup>2</sup>	Number of individuals	8	7	7*3
Frequency of meetings	Times	1	1	1
Attendance	%	100.0	100.0	100.0

<sup>\*1</sup> Average attendance rate \*2 Excluding additional attendees and Secretariat \*3 Including alternate attendees

# Governance

	Unit	FYE2023	FYE2024	FYE2025
Remuneration for Officers				
Remuneration for directors (excluding outside directors)				
Total	Millions of yen	152	147	154
Basic remuneration	Millions of yen	102	91	91
Corporate political contributions	Millions of yen	47	46	53
Non-financial KPI-linked bonuses	Millions of yen	3	9	9
Remuneration for Audit & Supervisory Board members (excluding independent outside members)				
Total	Millions of yen	28	28	30
Basic remuneration	Millions of yen	28	28	30
Remuneration for independent outside directors				
Total	Millions of yen	129	135	145
Basic remuneration	Millions of yen	129	135	145
Remuneration for independent auditors				
Total	Millions of yen	206	233	246
Remuneration for audit services	Millions of yen	205	229	241
Other remuneration for independent auditors	Millions of yen	1	4	5

Others				
Anti-takeover measures	=	Not adopted	Not adopted	Not adopted
Code of ethics	_	Adopted	Adopted	Adopted
Policy on transparency of tax affairs	_	Adopted (Currently disclosed on the Company website)	Adopted (Currently disclosed on the Company website)	Adopted (Currently disclosed on the Company website)
Corporate political contributions	Millions of yen	0.0	0.0	0.0
Violations of rules for the prevention of corruption	Number of violations	0	0	0
Monetary penalties incurred as a result of violations of guidelines for the prevention of corruption	Millions of yen	0	0	0
Rate of receiving compliance training	%	99.7	99.4*	100.0

 $<sup>^{\</sup>star}$  100% completion rate as of the end of June 2024

# Intellectual Property and Research and Development

	Unit	FYE2023	FYE2024	FYE2025
Intellectual Property				
Registered patents				
Total	Patents	1,682	1,761	1,793
Japan	Patents	1,038	1,114	1,131
Overseas	Patents	644	647	662

<sup>\*</sup> Sum of patents at all operating companies, including consolidated subsidiaries

Research and Development				
Research and Development				
Total	Millions of yen	3,515	4,466	4,946
Japan	Millions of yen	3,054	3,895	4,078
United States	Millions of yen	429	529	729
Europe	Millions of yen	_	_	105
Thermos	Millions of yen	31	41	32

# Independent Practitioner's Limited Assurance Report

### **Independent Practitioner's Limited Assurance Report**

To the Representative Director, President CEO of Nippon Sanso Holdings Corporation

We have performed a limited assurance engagement on whether selected environmental and social performance indicators (the "subject matter information" or the "SMI") presented in Nippon Sanso Holdings Corporation's (the "Company") Integrated Report 2025 (English version)(the "Report") as of and for the year ended March 31, 2025 have been prepared in accordance with the criteria (the "Criteria"), which are established by the Company and are explained in the Report. The SMI subject to the assurance engagement is indicated in the Report with the symbol  $\underline{\square}$ .

Based on the procedures performed and evidence obtained, nothing has come to our attention to cause us to believe that the Company's SMI as of and for the year ended March 31, 2025 is not prepared, in all material respects, in accordance with the Criteria.

### **Basis for Conclusion**

We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information, and International Standard on Assurance Engagements (ISAE) 3410, Assurance Engagements on Greenhouse Gas Statements, issued by the International Auditing and Assurance Standards Board (IAASB). Our responsibilities under those standards are further described in the "Our responsibilities" section of our report.

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA).

Our firm applies International Standard on *Quality Management (ISQM) 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements,* issued by the IAASB. This standard requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### Other information

Our conclusion on the SMI does not extend to any other information that accompanies or contains the SMI (hereafter referred to as "other information"). We have read the other information but have not performed any procedures with respect to the other information.

### Responsibilities for the SMI

Management of the Company are responsible for:

- designing, implementing and maintaining internal controls relevant to the preparation of the SMI that is free from material misstatement, whether due to fraud or error;
- selecting or developing suitable criteria for preparing the SMI and appropriately referring to or describing the criteria used: and
- preparing the SMI in accordance with the Criteria.

### Inherent limitations in preparing the SMI

As described the "Sustainability Data Environment section" of the Report, GHG emissions quantification is subject to uncertainty when measuring activity data, determining emission factors, and considering scientific uncertainty inherent in the Global Warming Potentials. Hence, the selection by management of a different but acceptable measurement method, activity data, emission factors, and relevant assumptions or parameters could have resulted in materially different amounts being reported.

### Our responsibilities

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the SMI is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained: and
- reporting our conclusion to the Management of the Company.

Summary of the work we performed as the basis for our conclusion

We exercised professional judgment and maintained professional skepticism throughout the engagement. We designed and performed our procedures to obtain evidence about the SMI that is sufficient and appropriate to provide a basis for our conclusion. Our procedures selected depended on our understanding of the SMI and other engagement circumstances, and our consideration of areas where material misstatements are likely to arise. In carrying out our engagement, the procedures we performed primarily consisted of:

- assessing the suitability of the criteria applied to prepare the SMI;
- conducting interviews with the relevant personnel of the Company to obtain an understanding of the key processes, relevant systems and controls in place over the preparation of the SMI;
- performing analytical procedures including trend analysis;
- identifying and assessing the risks of material misstatements;
- evaluating whether the Company's process for developing estimates as well as its use of data, selection of the methods and assumptions were appropriate;
- performing a site visit at one of the Company's sites which was determined through our risk assessment procedures;
- performing, on a sample basis, recalculation of amounts presented as part of the SMI;
- performing other evidence gathering procedures for selected samples; and
- evaluating whether the SMI was presented in accordance with the Criteria.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

/s/ Junichi Shiraishi Junichi Shiraishi , Engagement Partner KPMG AZSA Sustainability Co., Ltd. Tokyo Office, Japan September 19, 2025

Notes to the Reader of Assurance Report: This is a copy of the Assurance Report and the original copies are kept separately by the Company and KPMG AZSA Sustainability Co., Ltd.

# **Group Information**

# **Awards**

### Japan

### Certified as "Sports Yell Company 2025 (Bronze)" and "Tokyo Sports Promotion Company"

Taiyo Nippon Sanso has been recognized for its active efforts to promote sports activities for employee health. The company has been certified as a "Sports Yell Company" by the Japan Sports Agency for five consecutive years and awarded the "Bronze" designation for companies certified five times or more. In addition, for the first time this year, Taiyo Nippon Sanso has been recognized by the Tokyo metropolitan government as a "Tokyo Sports Promotion Company" for its initiatives to encourage employee sports participation and contribute to society through sports.





### Awarded "Advance" Certification at D&I AWARD 2024

Taiyo Nippon Sanso received the "Advance" certification at D&I AWARD 2024, one of Japan's largest diversity and inclusion awards organized by JobRainbow. This year, 710 companies from across Japan participated, and each company's diversity and inclusion initiatives were evaluated and certified based on their scores. Taiyo Nippon Sanso was recognized for its advanced efforts in D&I, being regarded as a leading role model driving D&I promotion among Japanese companies.



### **United States**

### **CGA Award Achievements**

MATHESON and its group companies received high recognition at the 2024 CGA (Compressed Gas Association) Awards, as outlined below:



• MATHESON and Continental Carbonic Products received the CGA Environmental Excellence Award for their initiative to improve CO<sub>2</sub> gas recovery efficiency in dry ice production through the redesign of vent headers and buffer vessels.

- MATHESON and Western International Gas & Cylinders each received the CGA Safe Facility Performance Award in different categories.
- Western International Gas & Cylinders received the CGA Fleet Safety Excellence Award in two categories.
- An employee of MATHESON was honored with an Outgoing Chair Plaque (Committee Leadership Award) for outstanding leadership of the Medical Gases Committee.

### EcoVadis Platinum Medal

Nippon Gases has received the EcoVadis Platinum Medal for the second consecutive year for its commitment to Corporate Social Responsibility. Ranked in the top 1% globally in Environment, Ethics,



Human and Labour Rights, and Sustainable Procurement, our ongoing efforts toward a sustainable future have been recognized.

### EIGA Awards 2024

At the Annual General Meeting of the European Industrial Gases Association (EIGA), Nippon Gases was honored with multiple awards in recognition of its outstanding safety and environmental performance in 2024.



- Zero Accident Site Award: Nippon Gases was presented with six awards in this category, acknowledging our unwavering commitment to safety and exemplary site management.
- Environmental Award (2nd Place): This award recognizes our exceptional environmental initiatives, including reforestation projects.

### Germany's Medical Team's Commitment and Performance Recognized by Prospitalia

Nippon Gases Germany's medical team was recognized for its proactive and innovative approach, earning a place among the top 3 suppliers in Prospitalia's "Invest" category and receiving the



Silver Award. This customer-centric focus continues to drive strong. long-term partnerships and outstanding results.

### **Asia and Oceania Region Group Companies**

### Thailand: Outstanding Safety and Environmental Achievements of Nippon Sanso (Thailand)

Nippon Sanso (Thailand) has been recognized for its outstanding safety and environmental initiatives at various branches. The TAC factory received the Bronze Award for the Zero Accident in Workplace Campaign for two consecutive years and achieved Green Industry Level 2. The Lamphun factory was recognized for six consecutive years of zero workplace accidents, while the Bangpakong and Rayong factories received Silver and Primary Level Zero Accident Awards, respectively. Additionally, the headquarters was honored as an excellent establishment for occupational safety and health at the provincial level in 2024.

### Vietnam: Awarded Certificate of Merit for Occupational Safety and Health by Dong Nai Province

In April 2025, Nippon Sanso Vietnam received a Certificate of Merit from Dong Nai Province in recognition of its outstanding achievements in occupational safety and health in 2024. This award highlights Nippon Sanso Vietnam's ongoing commitment to strictly adhering to safety standards and continuously fostering a safe and healthy workplace.



### Australia: Supagas Sets New Record with Consecutive "Most Satisfied Customers" Awards

Supagas has been awarded "Most Satisfied Customers" in the national LPG category by Canstar Blue for the fifth consecutive year, continuing its winning streak from last year.



### **Group Information**

# **Corporate Data**

### Company Overview (As of March 31, 2025)

Company name: Nippon Sanso Holdings Corporation

Date founded: October 30, 1910
Paid-in capital: ¥37,344 million

Head office: 1-3-26 Koyama, Shinagawa-ku,

Tokyo 142-0062, Japan

Number of employees: 19,754 Independent public accountants:

Ernst & Young ShinNihon LLC

Stock exchange listing: Tokyo Stock Exchange Prime Market

Transfer agent: Mizuho Trust & Banking Co., Ltd.

2-8-4 Izumi, Suginami-ku, Tokyo

168-8507, Japan

Tel (toll free in Japan): 0120-288-324 Investor Relations, Group Finance and

Accounting Office,

Nippon Sanso Holdings Corporation

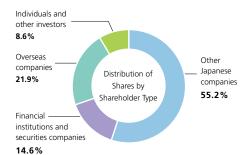
Tel: +81-3-5788-8512

### Share and Shareholder Information (As of March 31, 2025)

### Status of Shares

Number of shares authorized: 1,600,000,000 Number of shares issued: 433,092,837

Number of shareholders: 12,904



### **Major Shareholders**

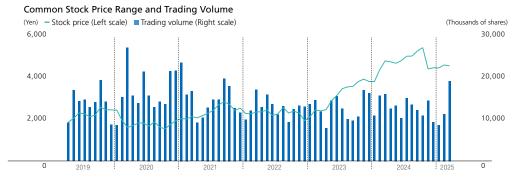
Contact:

(10 Largest Shareholders, Shares Held Rounded Down to the Nearest Thousand)

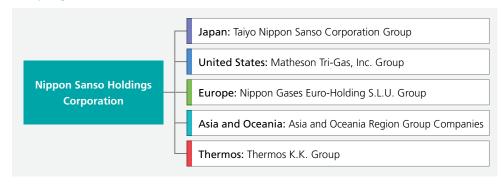
	Thousands of shares owned	Percentage of total (%)
Mitsubishi Chemical Group Corporation	218,996	50.59
The Master Trust Bank of Japan, Ltd. (trust account)	27,672	6.39
Client shareholding association of Taiyo Nippon Sanso Corporation	15,578	3.60
Custody Bank of Japan, Ltd. (trust account)	10,701	2.47
Meiji Yasuda Life Insurance Company	9,006	2.08
JP MORGAN CHASE BANK 385632	8,419	1.94
BNYM AS AGT/CLTS NON TREATY JASDEC	6,210	1.43
JP MORGAN CHASE BANK 385864	5,708	1.32
Mizuho Bank, Ltd.	4,332	1.00
STATE STREET BANK AND TRUST COMPANY 505001	4,087	0.94

<sup>\*</sup> Our company holds 188,000 treasury shares.

The shareholding ratio is calculated based on the total number of issued shares, excluding treasury shares.



### Group Organization (As of March 31, 2025)



### Main Affiliated Companies (As of March 31, 2025)

### Taiyo Nippon Sanso Corporation

1-3-26 Koyama, Shinagawa-ku, Tokyo 142-8558, Japan

Tel: +81-3-5788-8000

### Matheson Tri-Gas, Inc.

909 Lake Carolyn Parkway, Suite 1300, Irving, TX 75039, U.S.A. Tel: +1-972-560-5700

### Nippon Gases Euro-Holding S.L.U.

Calle Orense, 11 9th Floor, Madrid, Spain 28020

Tel: +34-91-453-72-00

### Matheson Gas Products Korea, Co., Ltd.

94, Eumbongmyeon-ro, Eumbong-myeon, Asan-si, Chungcheongnam-do, S. Korea 31443

Tel: +82-41-539-7400

iei: +82-41-539-7400

### Shanghai Taiyo Nippon Sanso Gas Co., Ltd.

No.1959, Zhuanxing Road, Xinzhuang Industry District, Shanghai, P.R. China Tel: +86-21-6442-2966

# Taiyo Nippon Sanso Trading (Shanghai) Co., Ltd.

1601, New Bund International Square, No.90 Qirong Road, Pudong New Area, Shanghai, P.R. China Tel: +86-21-5835-8700

### Nippon Sanso Taiwan, Inc.

5F-1 No.1 Sec.3 Gongdao 5th rd., East Dist., Hsinchu City 30069, Taiwan, R.O.C. (TFC ONE Building) Tel: +886-3-572-6588

### Nippon Sanso Ingasco, Inc.

One Corporate Center 23rd Floor, Dona Julia Vargas Avenue, Corner Meralco Avenue Ortigas Center, Pasig City 1605, Philippines

Tel: +63-2-8626-1504

### Nippon Sanso Vietnam Joint Stock Company

No.33, Road 3A Bien Hoa Industrial Zone II, Bien Hoa City, Dong Nai Province, Vietnam

Tel: +84-251-3836706-09

### Nippon Sanso (Thailand) Co., Ltd.

282 Bangbon 3 Road, Kwaeng Nongkhaem, Khet Nongkhaem, Bangkok 10160, Thailand Tel: +66-2-445-5010

### Nippon Sanso Holdings Singapore Pte. Ltd.

8 Jurong Town Hall Road, #23-03/04, The JTC Summit, Singapore, 609434 Tel: +65-6804-6230

### Leeden National Oxygen Ltd.

1 Shipyard Road, Singapore, 628128 Tel: +65-6266-4868

### Taiyo Nippon Sanso India Pvt. Ltd.

A-201, ICC Trade Towers, Senapati Bapat Road Pune, India 411016 Tel: +91-20-30237000

### Supagas Pty Ltd

5 Benson Road, Ingleburn, NSW 2565, Australia

Tel: +61-2-8788-4444

### Thermos K.K.

21F Mita NN Bldg., 4-1-23 Shiba, Minato-ku, Tokyo 108-8450, Japan Tel: +81-3-5730-0130

# **Editorial Note**

### **Publication Process of This Report**

In publishing Integrated Report 2025, we held multiple planning and editorial meetings to discuss the opinions and requests received from a wide range of stakeholders through interviews and surveys, while engaging in dialogue with shareholders and investors on a daily basis. The Group worked as one under the Production Committee led by CFO Alan David Draper, gathering and collating information on initiatives in each business and region for the entire Group.

### Nippon Sanso Holdings Corporation Integrated Report Production Committee

Head: Alan David Draper

Sub-heads: Takeshi Miki, Yutaka Okuda, Koichiro Kubo,

Masayoshi Omichi, Yasukazu Takada

Arrangers: Hiroaki Hijino, Mamoru Kai, Toru Shiota, Mitsuhiro Toda,

Asami Takai, Shingo Noguchi, Hisae Yamamoto, Toshifumi Abe, Yuji Sakuramoto, Kouji Makino, Ryuichi Ishikawa, Tomoki Nakamura, Yukitoshi Tasaka, Yusuke Tanami, Yoshiyuki Hagihara,

Kayo Ushio, Katsumasa Suzuki, Akiko Kamata,

Hisanori Goto

Secretariat: Keita Kajiyama, Kohei Baba

### Main Discussion Themes

- Consider the direction for Integrated Report 2025
- NSHD Group's M&A strategy
- Key strategies of the medium-term management plan NS Vision 2026 (Total Electronics, Operational Excellence, Sustainability Management, Exploring New Business toward Carbon Neutrality, and DX Initiatives that lead to new value creation)
- NSHD Group's human resources
- Initiatives that support the NSHD Group's key strategies (Realizing Group R&D, Realizing Group Engineering, and Co-Creation with Partners)
- NSHD Group's governance
- The NSHD Group's risk management and compliance

# People Who Helped to Produce This Report (in no particular order)

### Nippon Sanso Holdings Corporation

Tsutomu Moroishi, Kazuhiko Nishikawa, Kimitaka Koga, Teiichiro Sawa, Toshiyuki Aida, Kohei Mochizuki, Hironori Maeda, Junichi Kojima, Hirotsugu Kinoshita, Ryuuichiro Isaki, Shintaro Ito, Saiko Shimada, Miri Hara, Katsumi Nagasawa, Masako Miyatake, Hideo Nakajima, Katsuhito Yamaji, Jan Van den Bulck

### Taiyo Nippon Sanso Corporation

Toshie Furuumi, Hirotaka Mangyo, Manabu Shinriki, Tomohiro Oyama, Ippei Tachibana, Yurika Callicott

Coregas Pty Ltd Alan Watkins NSC (Australia) Pty Ltd Erol Arican

Matheson Tri-Gas, Inc.

Hermann Miskelly, Phillip DeMont, Stephen Stroud

Polaris S.r.l. Mario Masetto Nippon Gases Euro-Holding S.L.U.

Agustín Baneras Gómez Tejedor, Jose Maria Martinez Gallo,

José Ramón Calvo, Lieven Keuppens

Nippon Gases Belgium NV Katleen Boeckx

Nippon Sanso Holdings Singapore Pte. Ltd. Clara Teo, Pauline Loo

Nippon Sanso Taiwan, Inc. Tad Chuang

Supagas Pty Ltd Ben Vocale, Dominie Kelly, Richard Seneviratne

Thermos K.K. Yosuke Tateno, Shunsuke Yoshiyuki

### **Disclosure System**

This report contains important basic information that Nippon Sanso Holdings Corporation particularly wishes to communicate to stakeholders. In the 2025 edition, we have utilized links to our corporate website and guidance to relevant pages in an effort to increase the usability of the report.

### **Editorial Note**

Thank you for reading Integrated Report 2025 through to the end. In preparing this report, we were mindful not only to convey the achievements and progress made under our current medium-term management plan, NS Vision 2026, which is now entering its final year, but also to present our initiatives in a clear and understandable way and show how they connect to the next medium-term management plan currently under consideration. We hope this report conveys our confidence that, despite an increasingly uncertain social landscape and business environment, the Company will continue to enhance its corporate value and achieve sustainable growth into the future.

This year's report again includes interviews and discussions that represent the voices of our approximately 20,000 teammates who work every day to provide solutions to our customers, while also conveying how, with a business model where products are manufactured at the point of consumption, we are building connections and sharing information across regions to generate synergies globally.

We have also added links throughout the report to provide further detail, with the aim of keeping readers engaged and encouraging them to explore the content more in-depth. We hope these efforts help deepen your understanding of the NSHD Group.

We look forward to engaging in ongoing dialogue with readers of this report and welcome your candid feedback, which will help us further improve future editions of the integrated report. We sincerely appreciate your continued support.

In closing, I extend my heartfelt thanks to the many colleagues across the NSHD Group who contributed to the production of this report.

### Keita Kajiyama

General Manager, Investor Relations, Group Finance and Accounting Office,



# **NIPPON SANSO HOLDINGS**

1-3-26 Koyama, Shinagawa-ku,

Tokyo 142-0062, Japan

Tel: +81-3-5788-8512

https://www.nipponsanso-hd.co.jp/en/