



**NIPPON SANZO HOLDINGS**

# **BofA Securities | 2023 Hydrogen Conference Corporate Presentation**

December 19, 2023

The United States with Tokyo, Japan

**The Gas Professionals**

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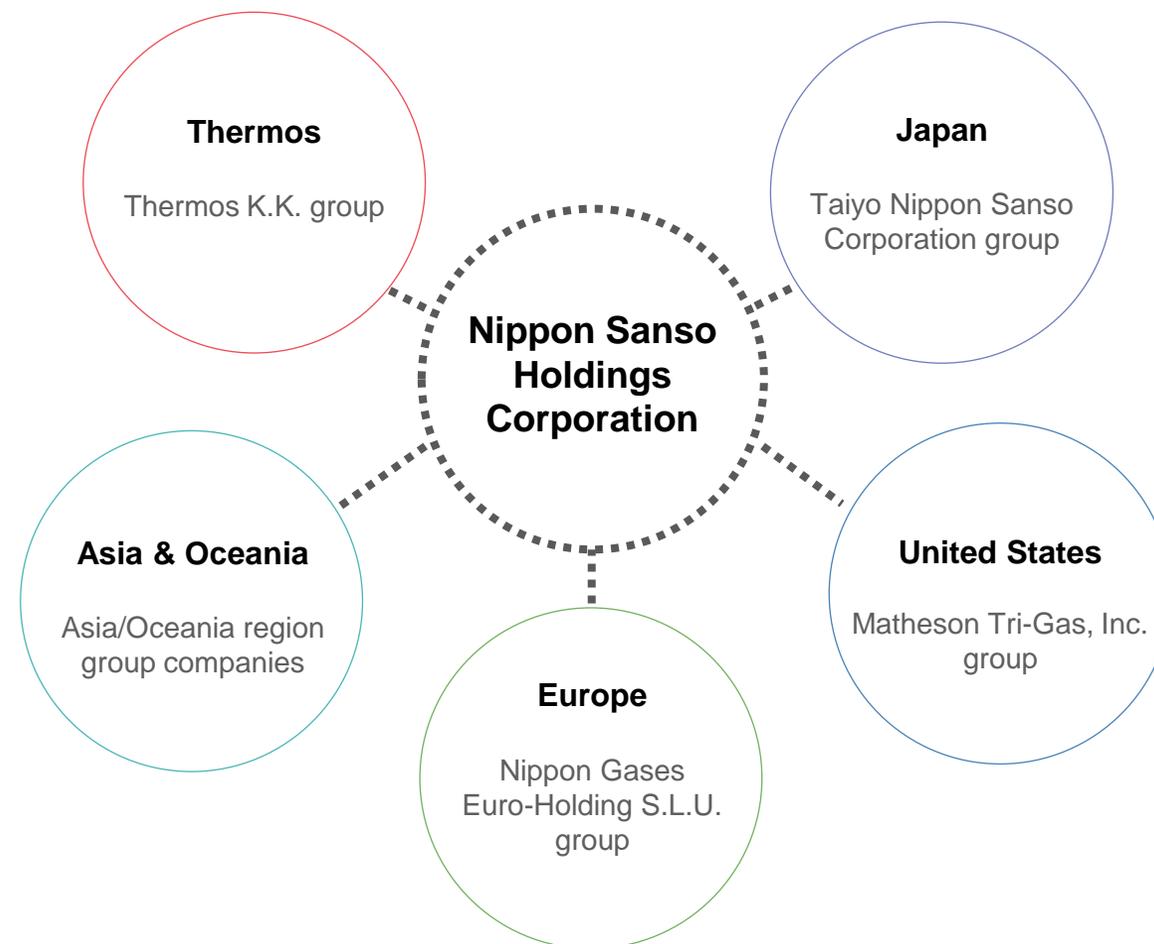
## ● Financial information

NSHD’s financial statements are prepared in accordance with international Financial Reporting Standards (“IFRS”).

# Group Overview

Company name	<b>Nippon Sanso Holdings Corporation (NSHD)</b>
Ticker (Tokyo Stock Exchange)	<b>4091.T</b>
Established	<b>October 30, 1910</b>
Head office	1-3-26 Koyama, Shinagawa-ku Tokyo, Japan
President CEO	<b>Toshihiko Hamada</b>
Employees [As of March 31, 2023]	<b>19,579</b>
Revenue (¥ bn.) [FYE2023]	<b>1,186.6</b>
Operating income (¥ bn.) [FYE2023]	<b>119.5</b>
OI margin [FYE2023]	<b>10.1%</b>
Countries Served	<b>32 Countries and Areas</b>

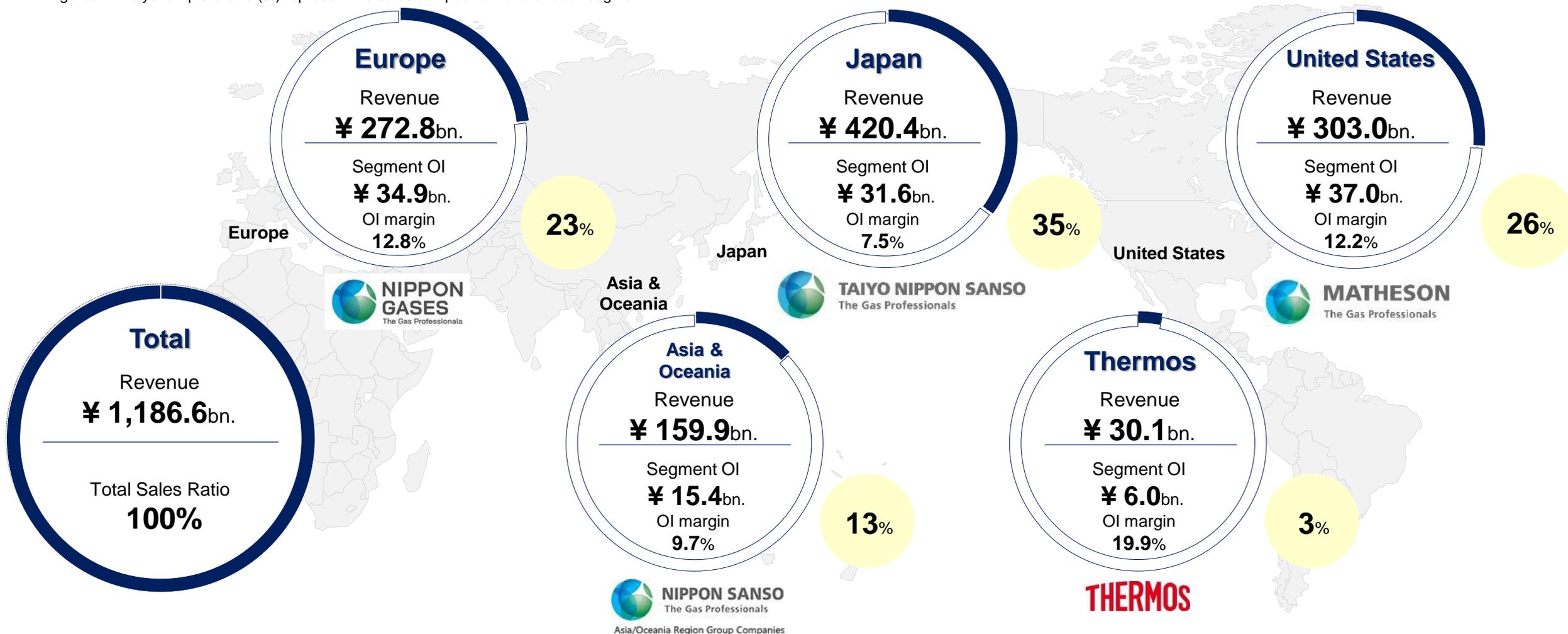
## NSHD's Group operating structure



# Global Operation

\*Figures for each segment are for FYE2023.

\*Figures in the yellow pie charts (%) represent the sales composition ratio of each segment.



# Our key businesses

● : Revenue Composition  
(FYE2023 full-term actual)

## Industrial Gas

79%



### Main Products

- Oxygen
- Nitrogen
- Argon
- Hydrogen, CO and syngas
- Carbon dioxide
- Helium
- Related equipment & construction

## Electronics

18%



### Main Products

- Arsine ( $AsH_3$ )
- Diborane ( $B_2H_6$ )
- Fluoromethane ( $CH_3F$ )
- Hydrogen chloride (HCL)
- Phosphine ( $PH_3$ )
- Silane ( $SiH_4$ )
- Related equipment & construction

## Thermos

3%



### Main Products

- Bottle
- Mug
- Tumbler
- Frying-pan
- Pan
- Dish

# Global HYCO



(Note) Use of different terms in this presentation as below,

- HyCO: the area of H<sub>2</sub>, CO, Syngas plus CO<sub>2</sub>
- HYCO: our own business line

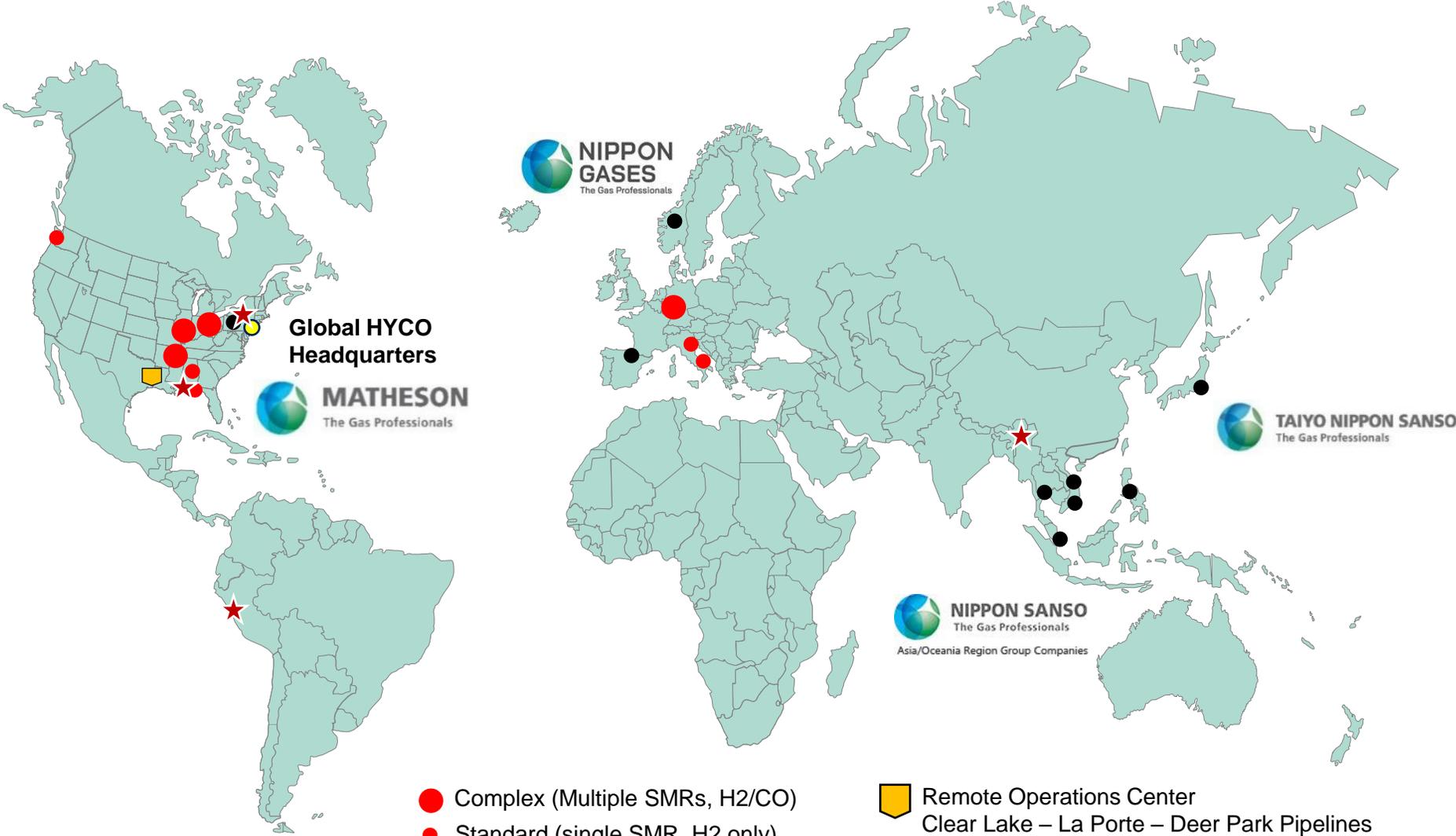
# Global HYCO – Investment / Development Focus

- Plant/supply Integrity Quality and growth at incumbent sites
- Geographic footprint establishment in select countries/regions
  - Selected by presence, compatibility and growth
  - Lead in certain countries with HYCO
    - Utilizing our HYCO expertise base
    - Critical opportunity size
- Focus of development of Integrated solutions/value with customer investment
- Business models for our “Blue” Hydrogen plays customized to case
- Discriminative involvement with “Green” Hydrogen including overall impact of utilized power
- Select technology development

# Global HYCO – Plant Design/ EPC Approach

- Select partnerships
  - Specific to technology/scope but highly selective
  - Specific to geography/case - EPC
- Matheson/NSHD Design Specs. based on Reliability & lifecycle O&M
- Target best-in-class lifecycle operations
  - Fleet reliability > 99.5% on single-plant basis
  - Leading safety performance
  - Performance through Collaboration
    - Field Staff and Experts
    - Remote Operations Center (ROC) & Tools
    - HYCO Process & Project Experts
    - Continuous feedback into plant design, instrumentation & controls

# Global Map of HyCO Plants



- Complex (Multiple SMRs, H2/CO)
- Standard (single SMR, H2 only)
- Minor (<1 mmscfd)
- Remote Operations Center  
Clear Lake – La Porte – Deer Park Pipelines
- ★ Plant/Operation being established

# Global HYCO Operations Record - Reliability

## H<sub>2</sub> Supply Operations Record - Reliability

11 yrs

Production base	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average
Lima-1	99.60%	99.81%	99.93%	99.91%	99.56%	98.05%	99.92%	99.91%	99.87%	98.74%	100.00%	99.57%
Lima-2	98.37%	99.53%	99.98%	99.44%	100.00%	99.80%	100.00%	99.85%	99.99%	100.00%	100.00%	99.72%
Lima-3					99.38%	99.41%	100.00%	99.06%	100.00%	98.96%	99.26%	99.44%
Lemont-1	100.00%	99.95%	99.34%	97.75%	99.89%	99.73%	99.34%	99.97%	99.67%	99.98%	99.56%	99.56%
Lemont-2	98.32%	90.04%	99.13%	99.98%	98.88%	99.26%	99.50%	99.71%	99.85%	99.80%	99.72%	98.56%
McIntosh 2	99.58%	99.62%	100.00%	99.68%	100.00%	99.40%	99.85%	99.97%	98.52%	93.67%	99.87%	99.11%
Saraland	99.82%	99.81%	99.40%	99.71%	97.83%	99.37%	99.98%	97.04%	98.85%	99.91%	99.79%	99.23%
Anacortes	97.38%	99.17%	99.80%	99.91%	99.67%	99.98%	99.72%	99.63%	99.01%	90.18%	99.33%	98.53%
Pensacola							97.42%	99.59%	99.42%	97.86%	99.72%	98.80%
Talara PHP											98.40%	98.40%
Talara NIS										99.04%	99.95%	99.50%
<b>Average</b>	99.01%	98.27%	99.65%	99.48%	99.40%	99.37%	99.53%	99.41%	99.46%	97.81%	99.60%	99.30%



# MATHESON

The Gas Professionals



# Global HYCO Operations Record - Safety

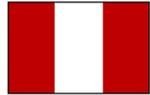
## H<sub>2</sub> Supply Operations Record - Recordable Injuries

Production base	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Lima-1	0	0	0	0	0	0	0	0	0	0	0
Lima-2	0	0	0	0	0	0	0	0	0	0	0
Lima-3				0	0	0	0	0	0	0	0
Lemont-1	0	0	0	0	0	0	0	0	0	0	0
Lemont-2	0	1	0	0	0	0	0	0	0	0	0
McIntosh	0	0	0	0	0	0	0	0	0	0	0
Mobile-Saraland	0	0	0	0	0	0	0	0	0	0	0
Anacortes	1	0	0	0	0	0	0	0	0	0	0
Pensacola								0	0	0	0
Talara	in Peru									0	0

*Performance with current key staff, management, processes*

***No recordables for 8 years – unparalleled across hydrogen-syngas-hydrocarbons operations***

# New Projects in Execution & Commercialization

Location	Country	Key Features & Progress
Numaligarh, Assam	India 	One of the largest, multi-feed SMR-based Hydrogen plants. Well into EPC. Larsen & Toubro is overall EPC partner. Reformer license from Topsoe. Contract executed <b>late Q4 FYE2023</b> .
Saraland, Alabama	USA 	Hydrogen plant integrated on feedstock-fuel with Renewable Diesel plant. Well into EPC. Reformer of TK Uhde design. Contracts execution <b>Q2 FYE2022</b> .
Talara, Peru	Peru 	Largest multi-feed Hydrogen Plant/Supply Scheme in South America established by Petroperu. Commissioning and early Operations by Matheson HYCO in progress.
St. Marys, PA	USA 	Mini Hydrogen plant to supply our local pipeline network and merchant business. Early Operations successfully commenced. Linde Engineering plant.

# Summary

## Establishment

- NSHD's HYCO have established very safe, high reliability HYCO across corporation
- Plant Standards established for different types of technology enable robust plant designs for the future

## Growth

- NSHD HYCO's efforts and collaboration have led to significant projects, execution of key long-term contracts and significant footprint growth

## Future

- **Business Objectives include:**
  - Continue business/footprint establishment in growth geographies
  - Establish positions involving step-out carbon-mitigated solutions in specific segments in Americas/EU/Japan
  - Strategic alliances for select production and applications technologies, selected per economic robustness

# The Gas Professionals

# Q&A Session

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Head,  
Global HYCO,  
Matheson-Tri Gas, Inc.

**Raghu Menon**



General Manager,  
Investor relations,  
Group Finance & Accounting Office

**Keita Kajiyama**

# Appendix

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Corporate Information

(As of March 31, 2023)

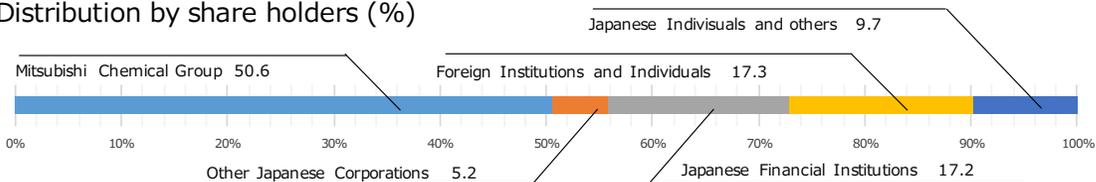
Company Name	Nippon Sanso Holdings Corporation
Founded	October 30, 1910
Headquarters	1-3-26 Koyama Shinagawa-ku, Tokyo 142-0062, Japan
TEL	81-3-5788-8500
	Representative Director, President CEO
Representative	Toshihiko Hamada
Common stock	37.3 billion yen

Stock information

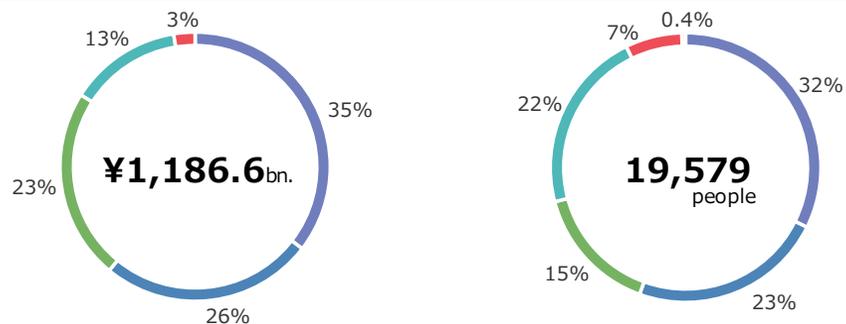
(As of March 31, 2023)

Number of shares	433,092,837
Number of shareholders	14,743
Listed stock exchanges	Tokyo Stock Exchange Prime Market
Ticker	4091.T

Distribution by share holders (%)



Revenue / Employee personnel by Segment (As of March 31, 2023)



■ Japan ■ US ■ Europe ■ Asia & Oceania ■ Thermos ■ Corporate

Corporate Philosophy

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.

Main Core business

Industrial Gas business



Electronics business



Thermos business



FYE2024 Financial Forecast (IFRS)

Revenue	¥1,230.0 bn.	Net income attributable to owners of the parent	¥97.0 bn.
Operating income	¥163.0 bn.	EPS	¥224.09

## Overview

Plan Name	NS Vision 2026
Slogan	Enabling the Future
Period	4 years from April 2022 to March 2026
Released date	May 11, 2022

## Financial target

(Final fiscal year in the plan: FYE2026)

Revenue	¥975.0-1000.0 bn.
Core Operating Income	¥125.0-135.0 bn.
EBITDA margin	Group: ≥24 % Japan, the U.S., EU, A&O, Thermos: ≥17-33%
Adjusted net D/E ratio	≤0.7 times
ROCE after Tax	≥6 %

(Note) Forex rate (Assumption) : USD ¥115 EUR ¥125

## Non-Financial target

### <Environment>

Reduction rate of GHG emissions	FYE2026:	18 %
(Base year: FYE2019)	FYE2031:	32 %

GHG reduced emissions through environmental product offer  
 FYE2026: Lower GHG emissions through environmental product offerings and applications  
 > NSHD Group GHG emission

### <Safety Management>

Lost Time Injury Rate	FYE2026:	≤1.6
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### <Compliance>

Rate of receiving compliance training	FYE2026:	100 %
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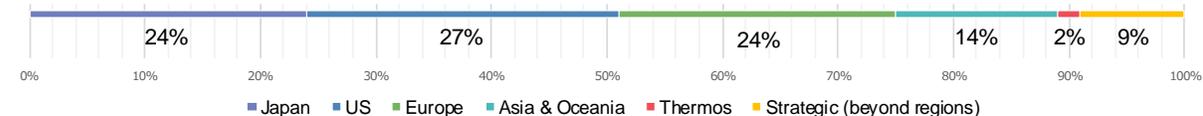
### <HR>

Rate of female employees	FYE2026:	≥22 %
	FYE2031:	25 %
Rate of female management posts	FYE2026:	≥18 %
	FYE2031:	22 %

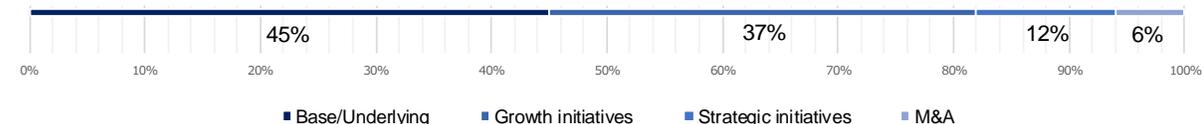
## Capital allocation

Cash-in	(the total for 4 years)
[Operating Cash flow]	¥730.0 bn.
Cash-out	¥433.0 bn.
[Investment as a whole]	

## Composition ratio by Business



## Composition ratio by Initiative

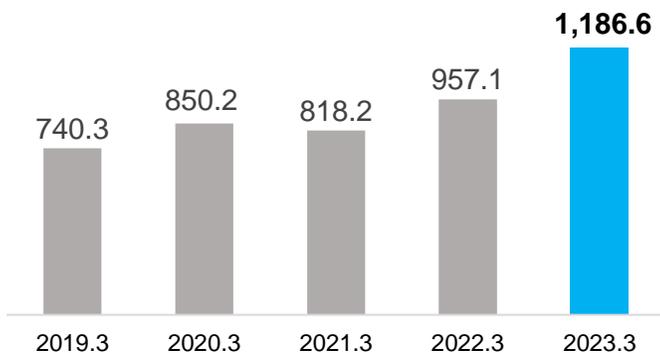


## Focused fields

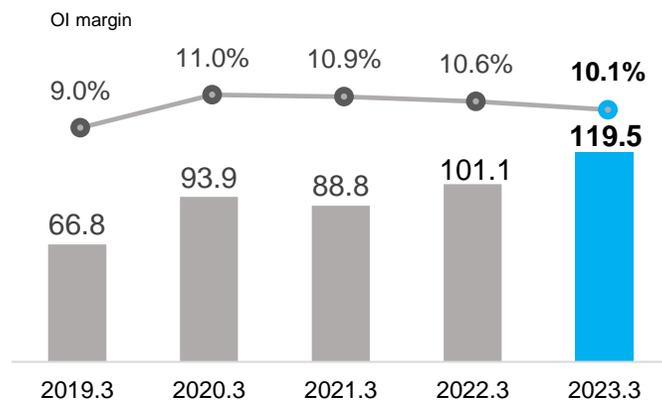


# Business performance over the past five years

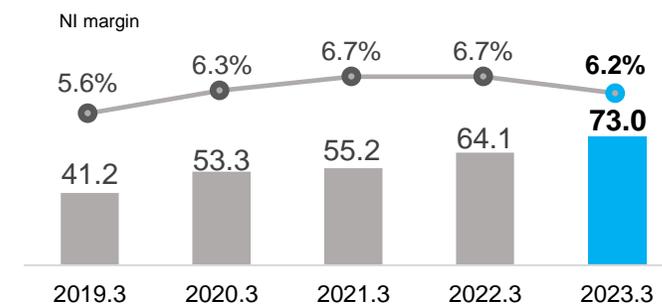
Revenue (¥ bn.)



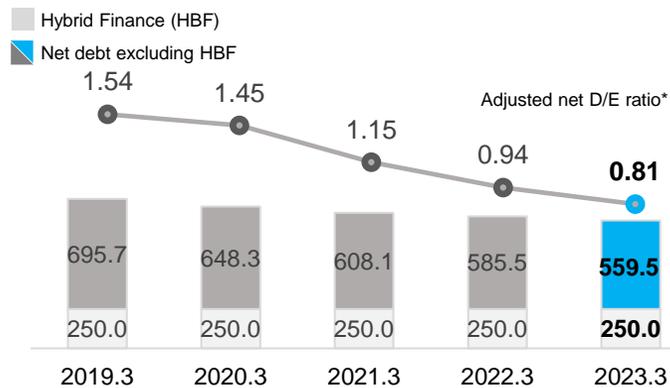
Operating income (IFRS) (¥ bn.)



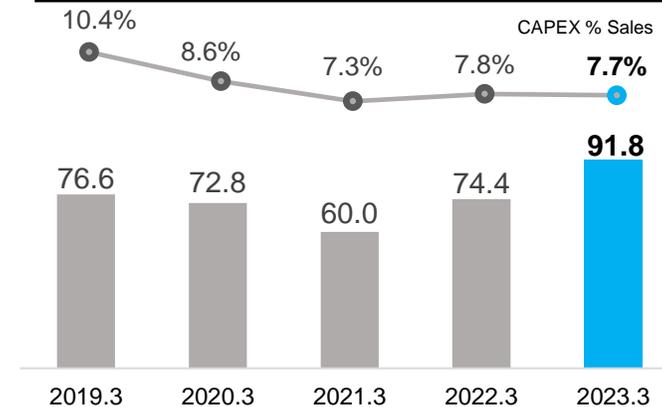
Profit attributable to owners of the parent (¥ bn.)



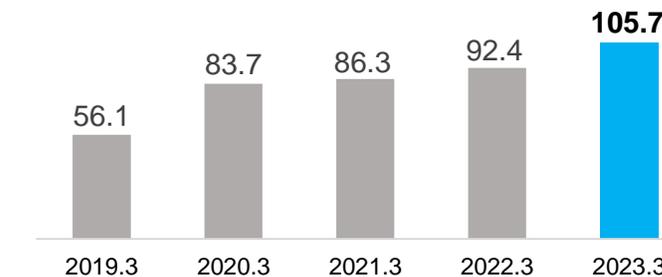
Net interest-bearing debts (¥ bn.)



Capital expenditures (¥ bn.)



Depreciation and amortization (¥ bn.)



\*Adjusted Net D/E Ratio: 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.

\*It's recorded on a construction basis until FYE2019 and on a cash basis from FYE2020 onwards.

# Glossary: EBITDA margin / ROCE after Tax

## EBITDA

*(Earnings Before Interest Taxes Depreciation and Amortization)*

Indicator that shows profitability based on Cash Flow, excluding the impact of M&A and CAPEX.

This indicator should not be considered in isolation from performance indicators such as operating income and net income, which are indicators based on IFRS, and should not be viewed as substitutes for these indicators. This indicator should be given due consideration when comparing them with similarly named financial indicators presented by other companies.

## ROCE after Tax

*(Return On Capital Employed after Tax)*

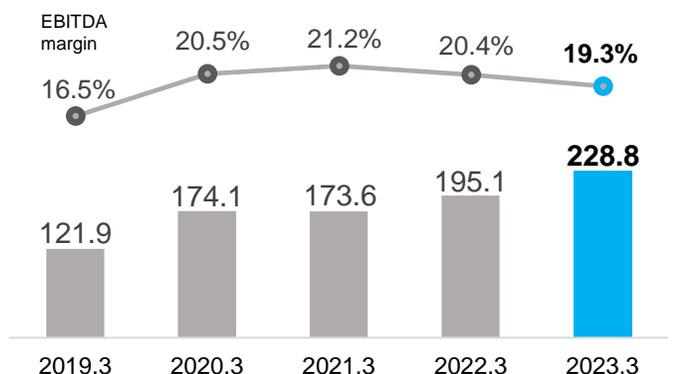
$$= \frac{\text{NOPAT (Net Operating Profit After Tax)}}{(\text{Interest-bearing debt} + \text{Total equity attributable to owners of parent})^*}$$

\* The average of the amounts at the end of the comparative fiscal years of the previous and current fiscal years is used.

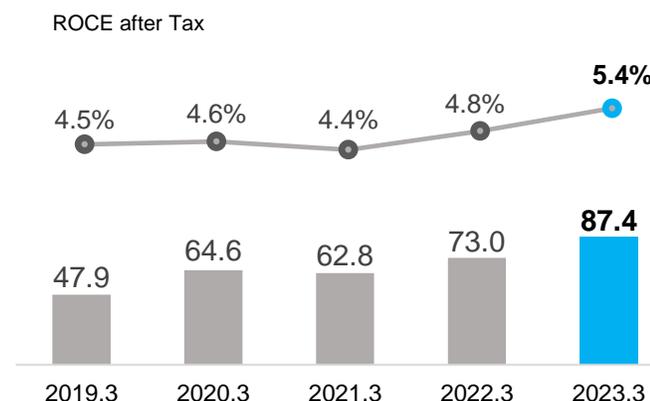
Indicator based on profitability and investment efficiency

This indicator should not be considered in isolation from performance indicators such as operating income and net income, which are indicators based on IFRS, and should not be viewed as substitutes for these indicators. This indicator should be given due consideration when comparing them with similarly named financial indicators presented by other companies.

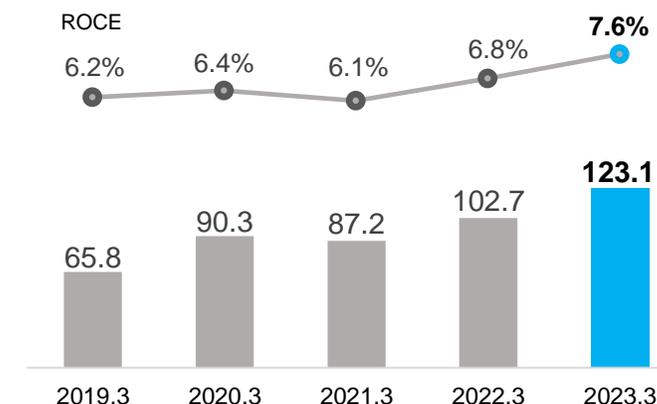
**EBITDA margin and EBITDA** (¥ bn.)



**ROCE after Tax and NOPAT** (¥ bn.)

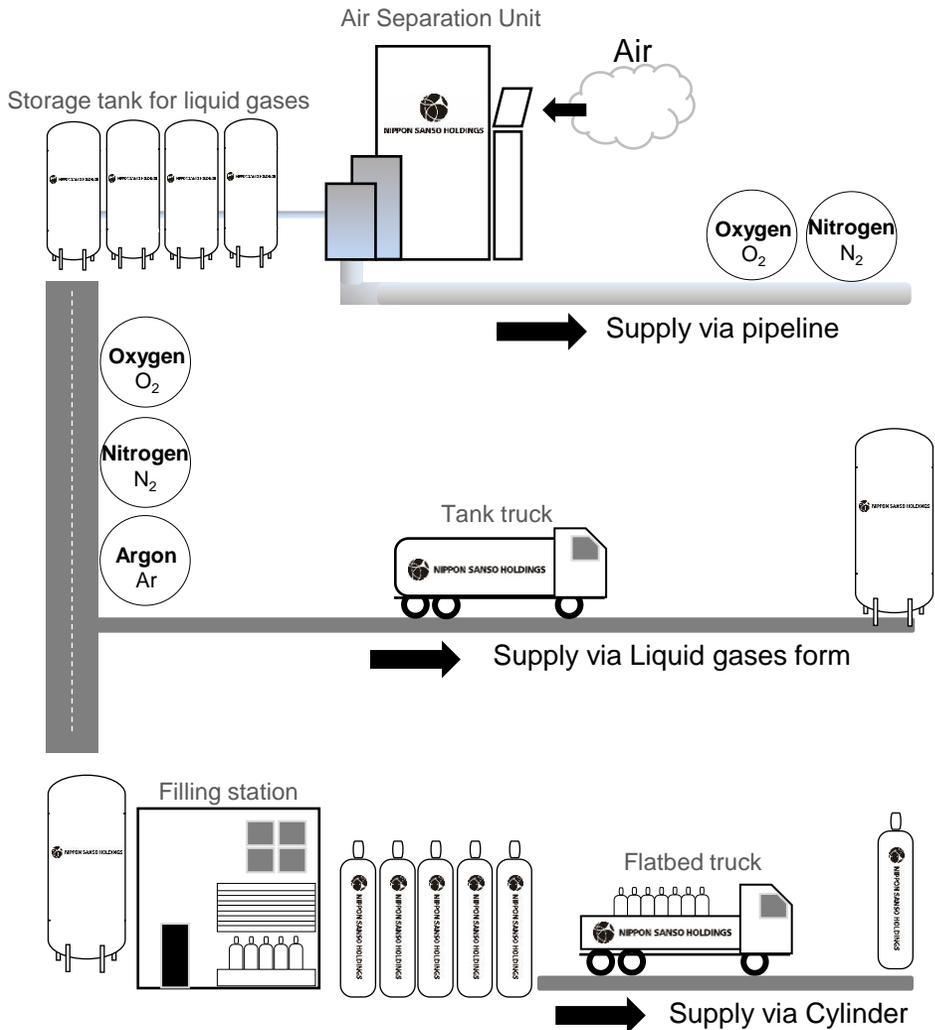


**(Reference) ROCE and Core OI** (¥ bn.)



# Industrial gas supply systems

## Air Separation Gases



## On-site

Major supply destination (Sector)

Steel	Petrochemical	Refinery
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We've established production plants in the vicinity of the customer. A form of direct connection and constant supply of pipes. (Large-scale supply)

## Bulk

Major supply destination (Sector)

Automobile	Shipbuilding	Manufacturing
Construction machinery	Pharmaceutical Medical	Glass/Paper
LCP	Photovoltaics	Food/beverage
		Semiconductor

We've installed a storage tank for liquefied gas in the customer's premises. A form of supply according to the method of use of gas. (Medium-scale supply)

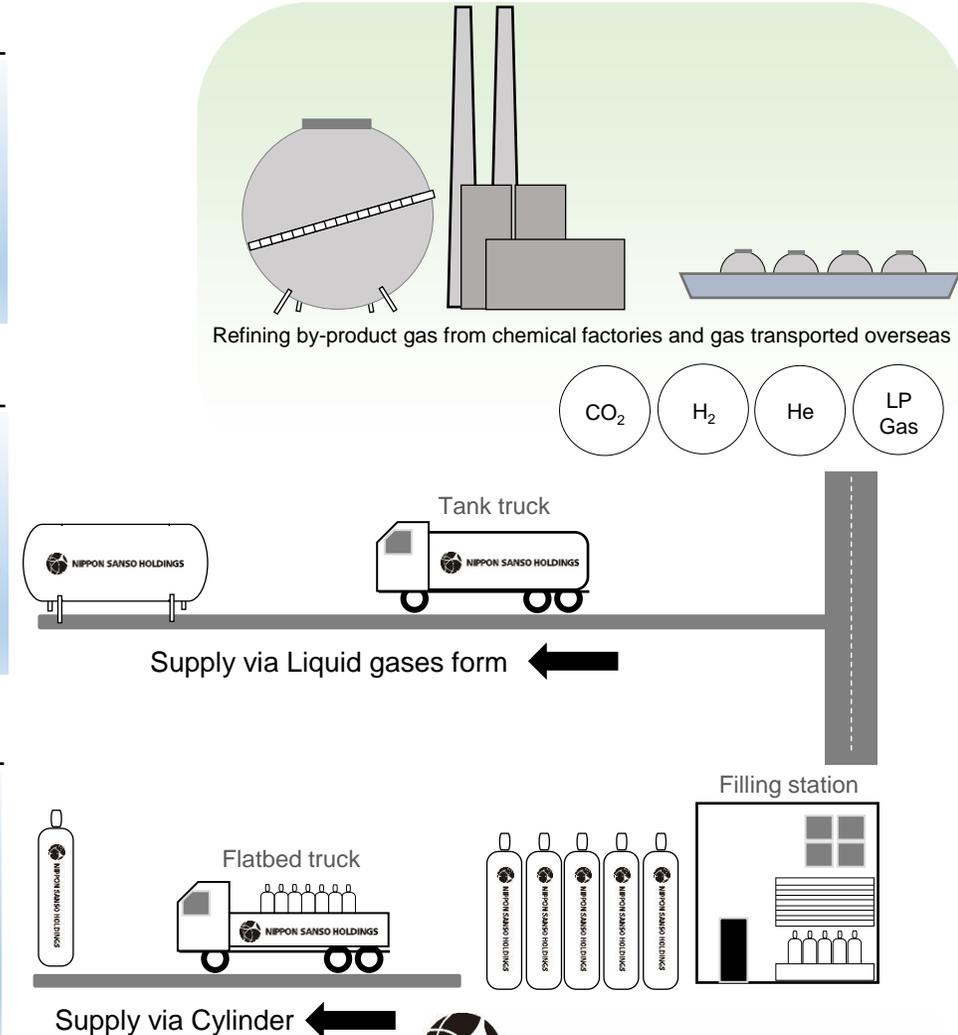
## Packaged

Major supply destination (Sector)

Homecare	Advanced medicine	Sanitation
Engineering development	R&D	Construction/Installation

We deliver filling containers (cylinders) to customers. A form of supply according to the method of use of gas. (Small-scale supply)

## Other Gases



## For further information, please contact:

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### Investor Relations for investors

Investor Relations

Tel: +81 (0)3-5788-8512

E-mail : [Nshd.ir@nipponsanso-hd.co.jp](mailto:Nshd.ir@nipponsanso-hd.co.jp)

### Upcoming IR events

Q3 FYE2024 Earnings Call

February 2, 2024

[www.nipponsanso-hd.co.jp/en/](http://www.nipponsanso-hd.co.jp/en/)

**NIPPON SANSO Holdings Corporation (Ticker:4091.T)**

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**NIPPON SANZO HOLDINGS**

**The Gas Professionals**

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