



**NIPPON SANSO HOLDINGS**

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

December 19, 2023

The United States with Tokyo, Japan

**The Gas Professionals**

# Important Notice

For the purpose of this notice, “presentation” means this document, any oral presentation, any question and answer session and any written or oral material discussed or distributed by NIPPON SANSO Holdings Corporation (“NSHD”) regarding this presentation. This presentation (including any oral briefing and any question-and-answer in connection with it) is not intended to, and does not constitute, represent or form part of any offer, invitation or solicitation of any offer to purchase, otherwise acquire, subscribe for, exchange, sell or otherwise dispose of, any securities or the solicitation of any vote or approval in any jurisdiction. No shares or other securities are being offered to the public by means of this presentation. This presentation is being given (together with any further information which may be provided to the recipient) on the condition that it is for use by the recipient) on the condition that it is for use be the recipient for information purposes only (and not for the evaluation of any investment, acquisition, disposal or any other transaction). Any failure to comply with these restriction may constitute a violation of applicable securities laws. The companies in which NSHD directly and indirectly owns investments are separate entities. In this presentation, “NSHD” is sometimes used for convenience where references are made to NSHD and its subsidiaries in general. Likewise, the words “the Company”, “we”, “us” and “our” are also used to refer to subsidiaries in general or to those who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies.

## ● Forward-Looking Statements

This presentation and any materials distributed in connection with this presentation may contain forward-looking statements, beliefs or opinions regarding NSHD’s future business, future position and results of operations, including estimates, forecasts, targets and plans for NSHD. Without limitation, forward-looking statements often include words such as “targets”, “plans”, “believes”, “hopes”, “continues”, “expects”, “aims”, “intends”, “ensures”, “will”, “may”, “should”, “would”, “could”, “anticipates”, “estimates”, “projects” or similar expressions or the negative thereof. These forward-looking statements are based on assumptions about many important factors, including the following, which could cause actual results to differ materially from those expressed or implied by the forward-looking statements: the economic circumstances surrounding NSHD’s global business, including general economic conditions here and abroad; competitive pressures and developments; changes to applicable laws and regulations; the success of or failure of product development programs; decisions of regulatory authorities and the timing thereof; fluctuations in interest and currency exchanges rates; claims or concerns regarding the safety or efficacy of marketed products or product candidates; the impact of health crises, like the novel COVID-19 pandemic, on NSHD and its customers and suppliers, including foreign governments in countries in which NSHD operates, or on other facets of its business; the timing and impact of PMI (post-merger integration) efforts with acquired companies; the ability to divest assets that are not core to NSHD’s operations and the timing of any such divestment(s); and other factors identified in NSHD’s most recent annual Consolidated Financial Statements on Japanese Securities relevant acts and exchange commission, available on NSHD’s website. NSHD does not undertake to update any of the forward-looking statements contained in this presentation or any other forward-looking statements it may make, except as required by law or stock exchange rule. Past performance is not an indicator of future results and the results or statements of NSHD in this presentation may not be indicative of, and are not an estimate, forecast, guarantee or projection of NSHD’s future results.

## ● Certain Non-IFRS Financial Measures

This presentation and materials distributed in connection with this presentation include certain financial measures not presented in accordance with International Financial Reporting Standards (“IFRS”), such as Core Operating Income, EPS (Earnings per share), Debt, Net Debt, Adjusted net D/E ratio and Free Cash Flow. NSHD’s management and executive officers evaluates results and makes operating and investment decisions using both IFRS and non-IFRS measures included in this presentation. These non-IFRS measures exclude certain income, cost and cash flow items which are included in, or are calculated differently from, the most closely comparable measures presented in accordance with IFRS. By including these non-IFRS measures, management and executive officers intends to provide investors with additional information to further analyze NSHD’s performance, core results and underlying trends. NSHD’s non-IFRS measures are not prepared in accordance with IFRS and such non-IFRS measures should be considered a supplement to, and not a substitute for, measures prepared in accordance with IFRS. Investors are encouraged to review the reconciliation of non-IFRS financial measures to their most directly comparable IFRS measure, which are on the part of our slide deck.

## ● Financial information

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

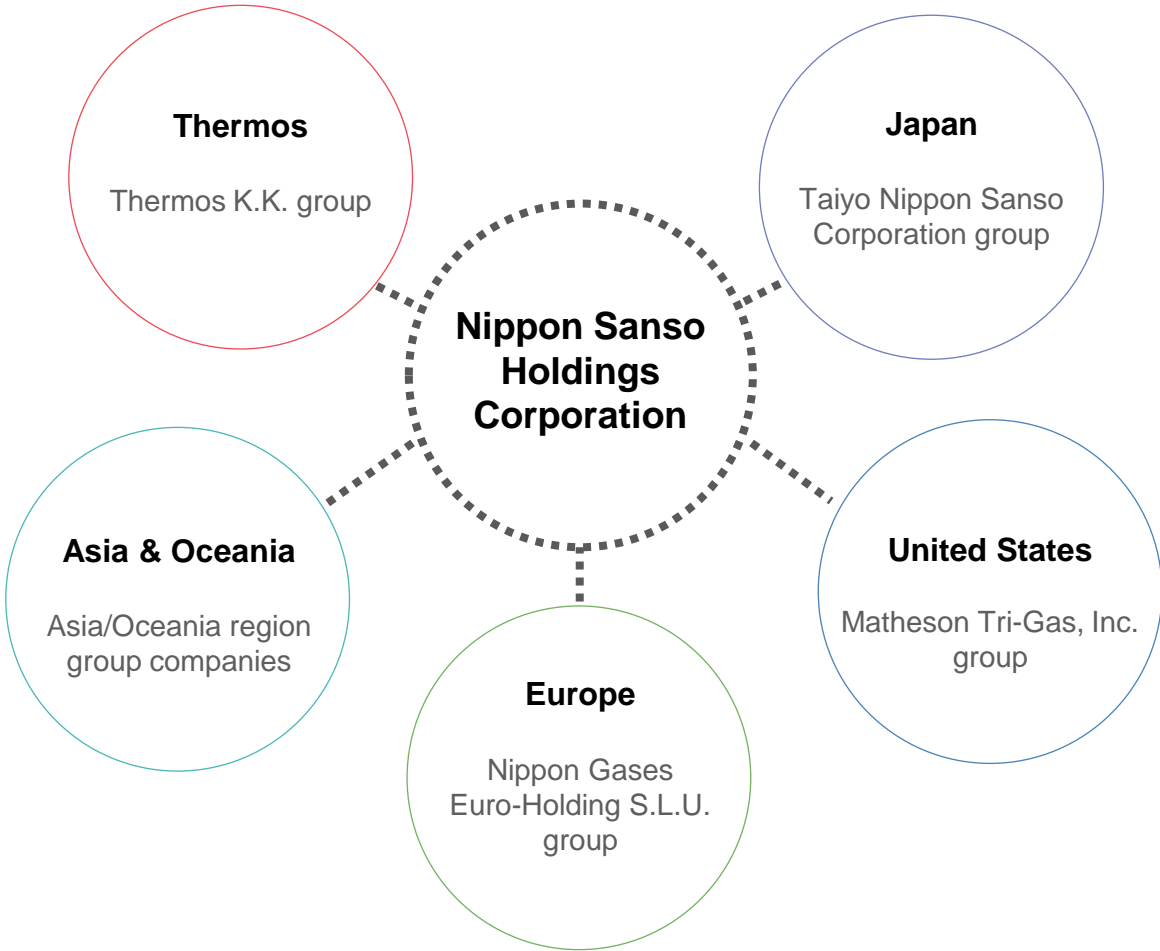


**NIPPON SANSO HOLDINGS**

# Group Overview

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

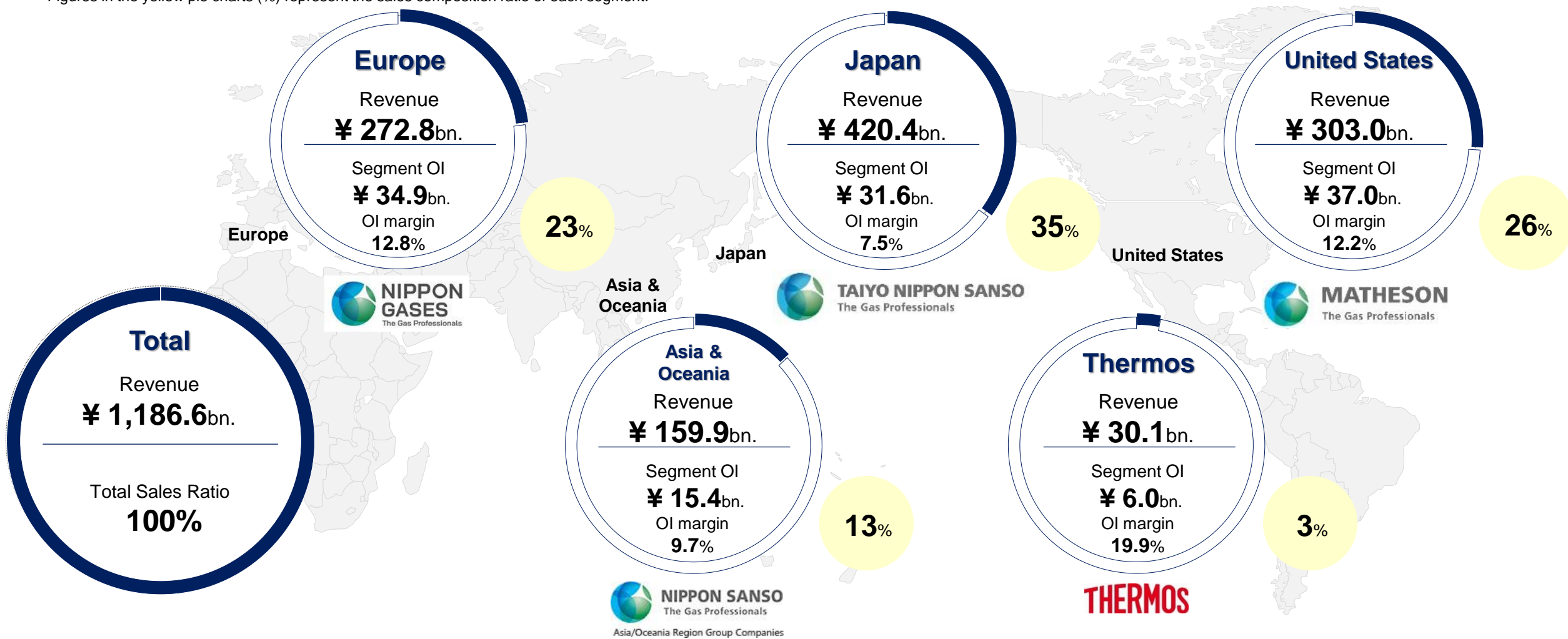
## NSHD's Group operating structure





# 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 ( $\text{AsH}_3$ )
- Diborane ( $\text{B}_2\text{H}_6$ )
- Fluoromethane ( $\text{CH}_3\text{F}$ )
- Hydrogen chloride ( $\text{HCL}$ )
- Phosphine ( $\text{PH}_3$ )
- Silane ( $\text{SiH}_4$ )
- 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

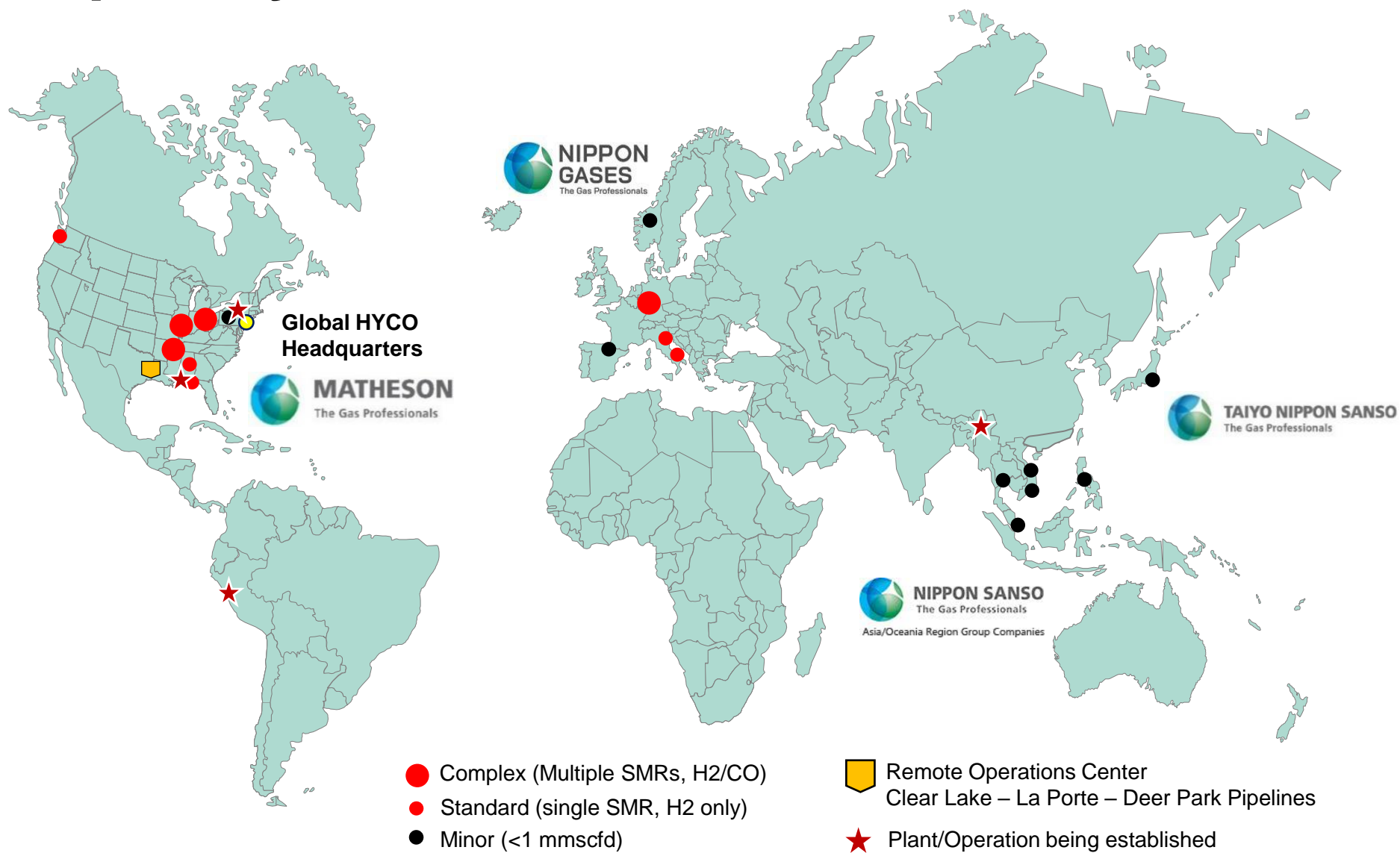


# Global HYCO – Plant Design/ EPC Approach

- 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



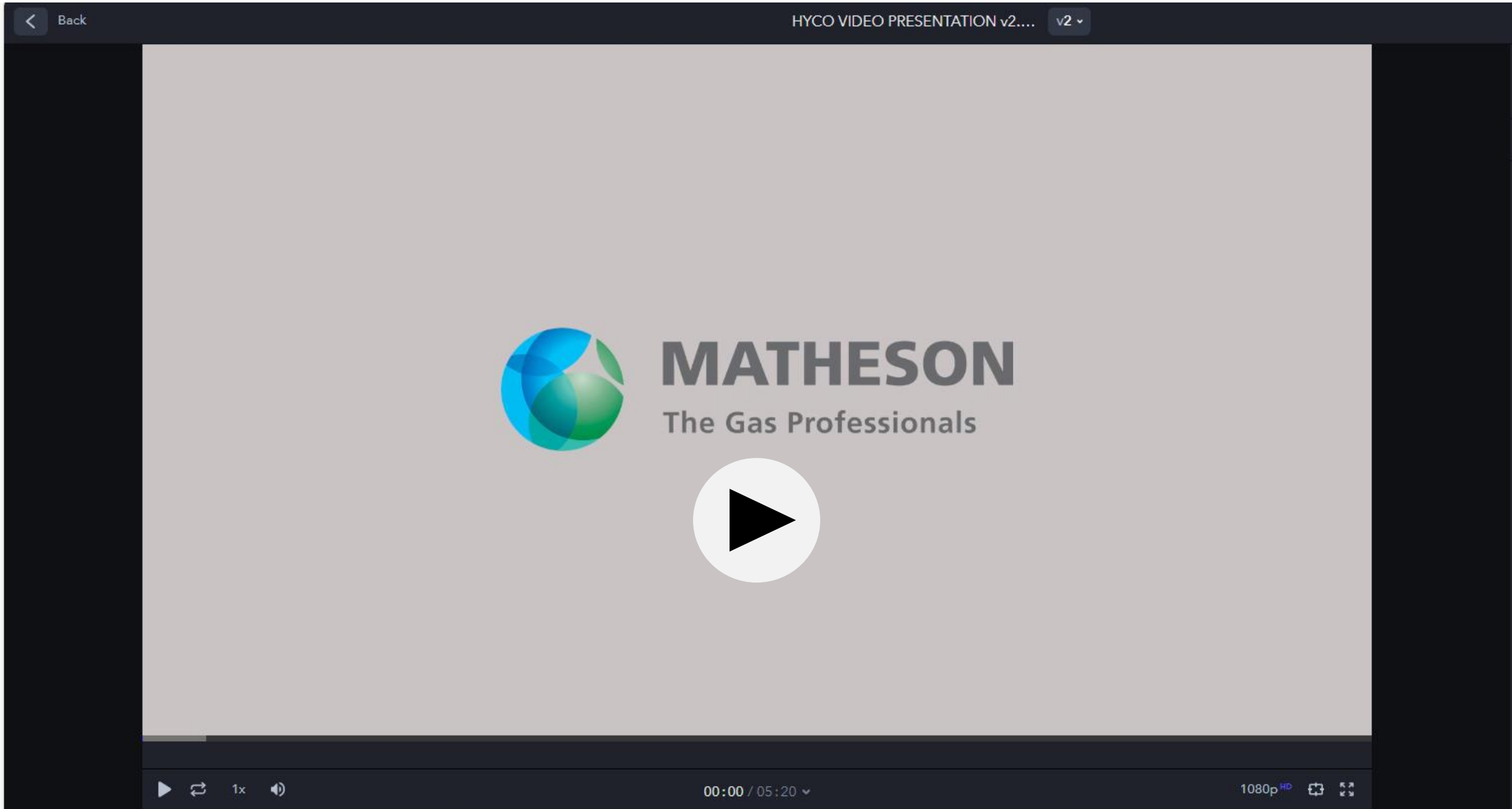
# Global HYCO Operations Record - Reliability

## 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%
Average	99.01%	98.27%	99.65%	99.48%	99.40%	99.37%	99.53%	99.41%	99.46%	97.81%	99.60%	99.30%





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



# 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

---



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

**Raghu Menon**



General Manager,  
Investor relations,  
Group Finance & Accounting Office

**Keita Kajiyama**



# Appendix

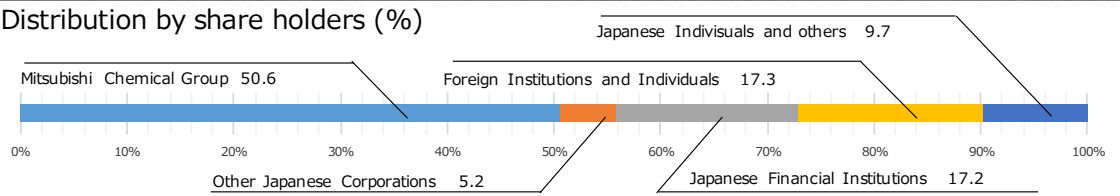
---

Corporate Information (As of March 31, 2023)

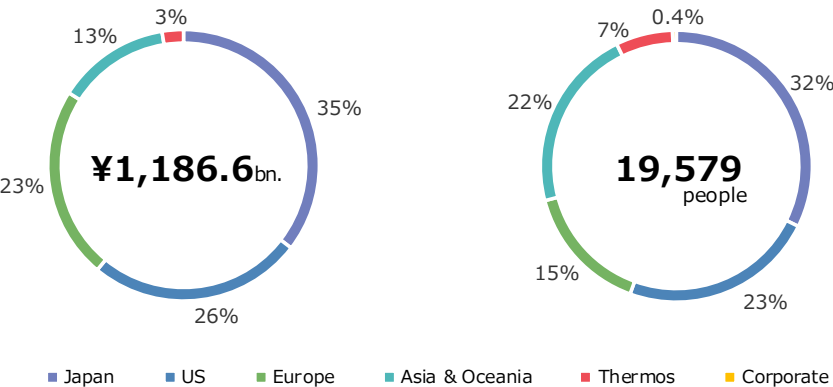
Company Name	Nippon Sanso Holdings Corporation
Founded	October 30, 1910
Headquarters	1-3-26 Koyama Shinagawa-ku, Tokyo 142-0062, Japan
TEL	81-3-5788-8500
	Representative Director, President CEO
Representative	Toshihiko Hamada
Common stock	37.3 billion yen

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



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



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

# Our Medium-term management plan Summary

<https://www.nipponsanso-hd.co.jp/en/ir/management/plan.html>

Published on October 31, 2023

## 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
-----------------------	----------	------

### <Compliance>

Rate of receiving compliance training	FYE2026:	100 %
---------------------------------------	----------	-------

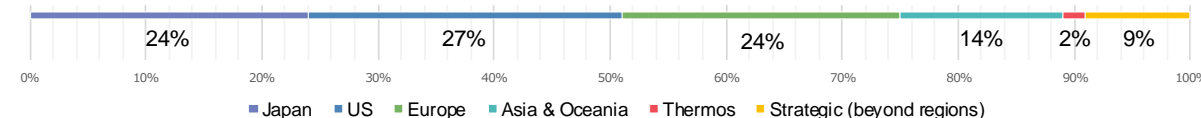
### <HR>

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

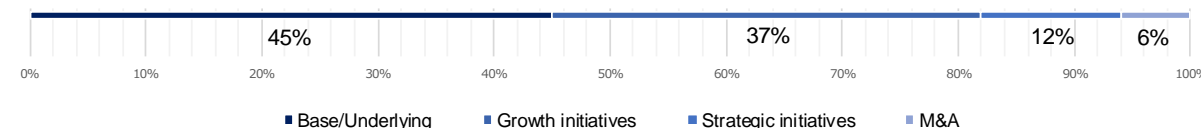
## Capital allocation

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

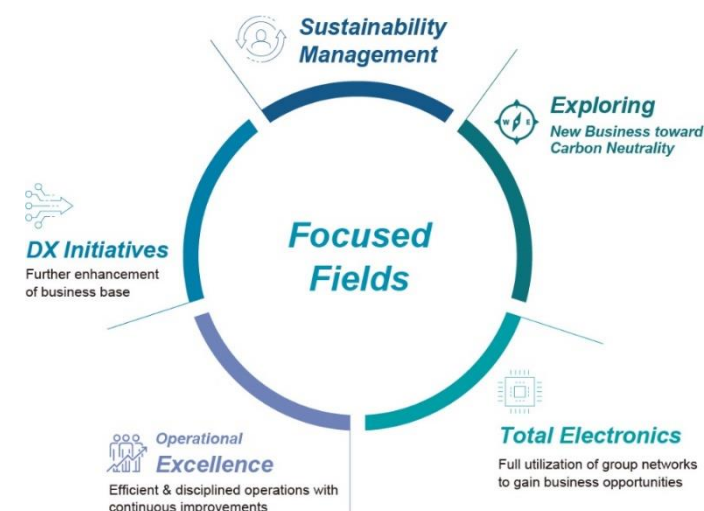
## Composition ratio by Business



## Composition ratio by Initiative

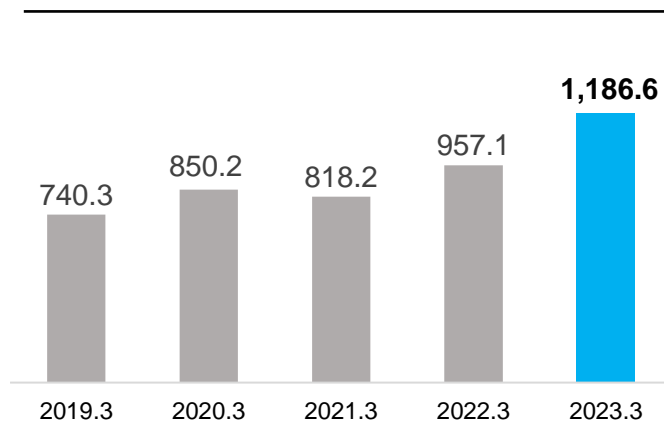


## Focused fields

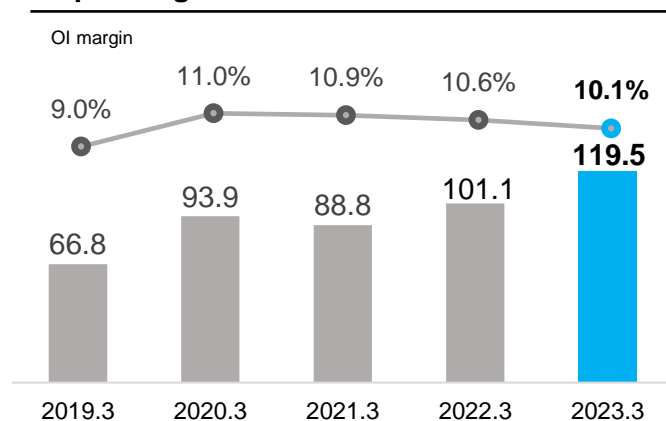


# Business performance over the past five years

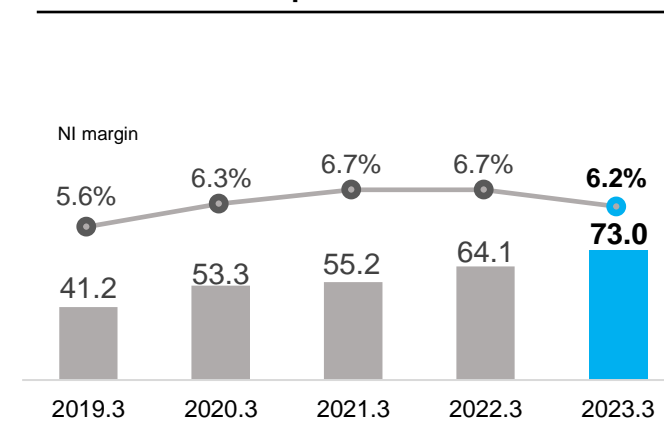
Revenue (¥ bn.)



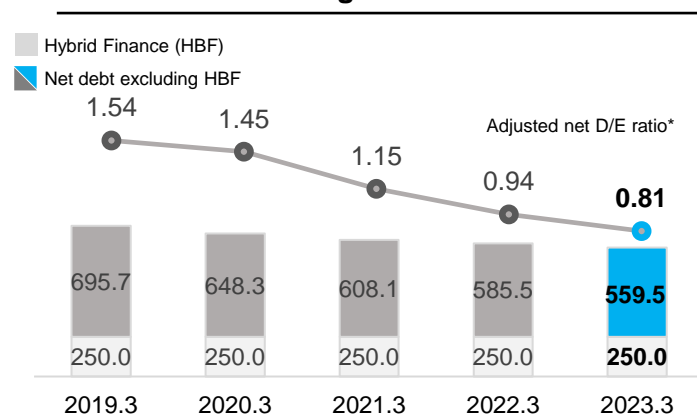
Operating income (IFRS) (¥ bn.)



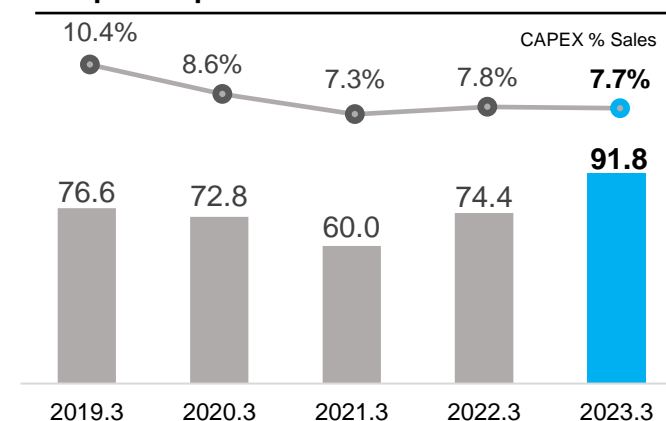
Profit attributable to owners of the parent (¥ bn.)



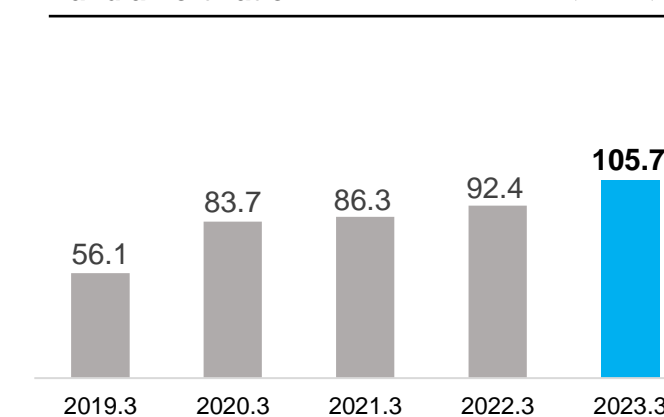
Net interest-bearing debts (¥ bn.)



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)

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

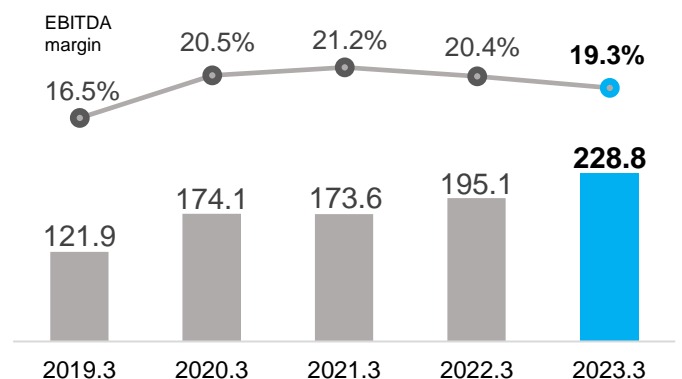
\* The average of the amounts at the end of the comparative fiscal year s of the previous and current fiscal years is used.

**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.

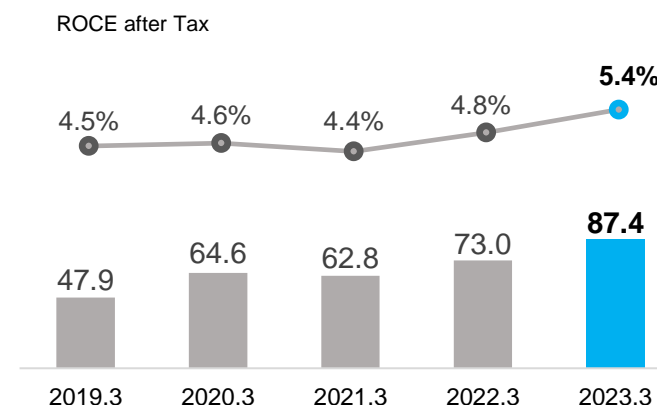
### EBITDA margin and EBITDA

(¥ bn.)



### ROCE after Tax and NOPAT

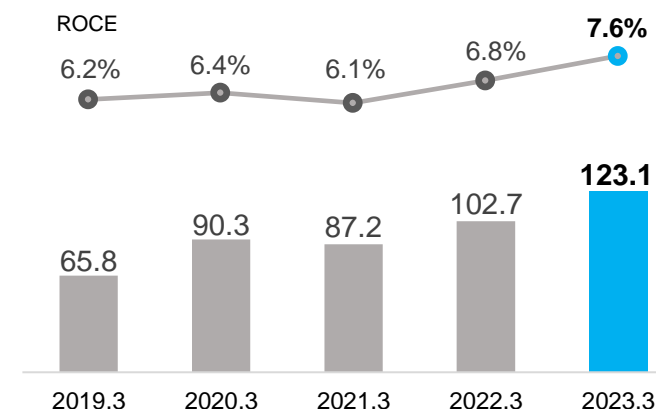
(¥ bn.)



### (Reference)

ROCE and Core OI

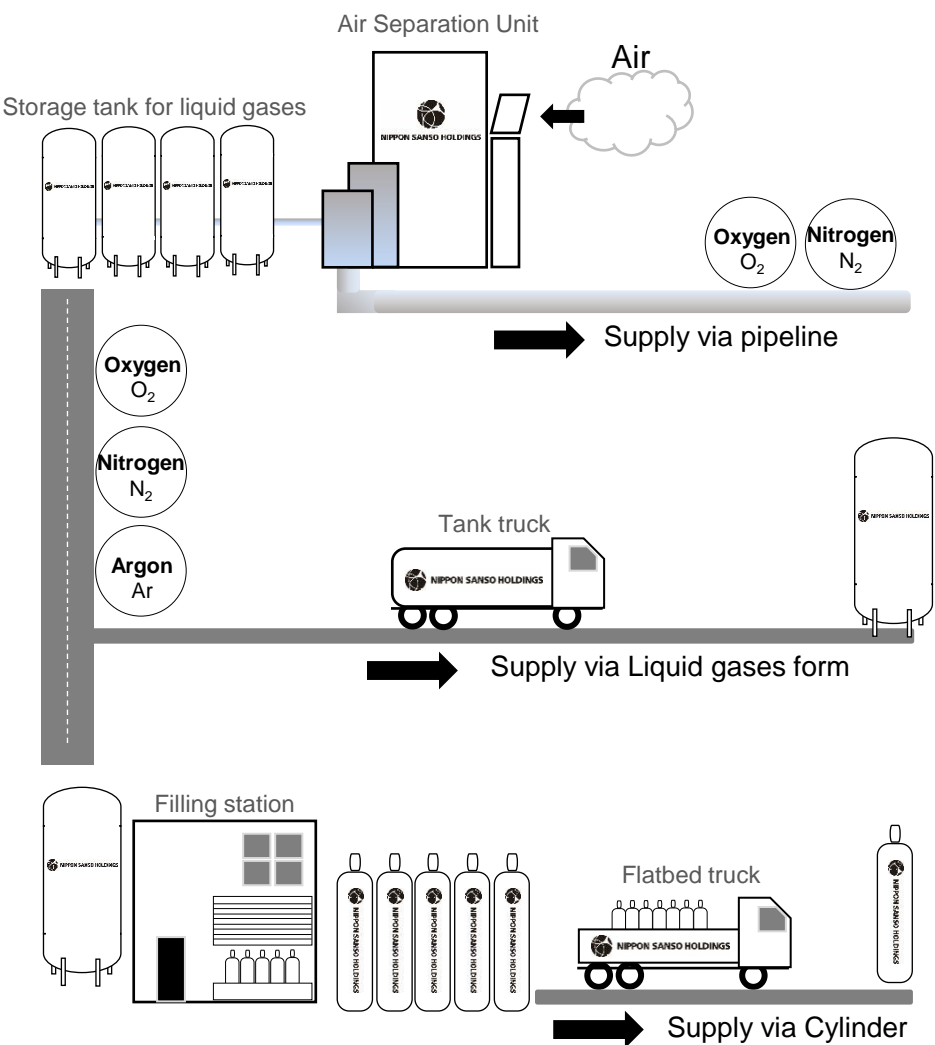
(¥ bn.)



**NIPPON SAN SO HOLDINGS**

# Industrial gas supply systems

## Air Separation Gases



## On-site

Major supply destination (Sector)

Steel	Petrochemical	Refinery
-------	---------------	----------

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)

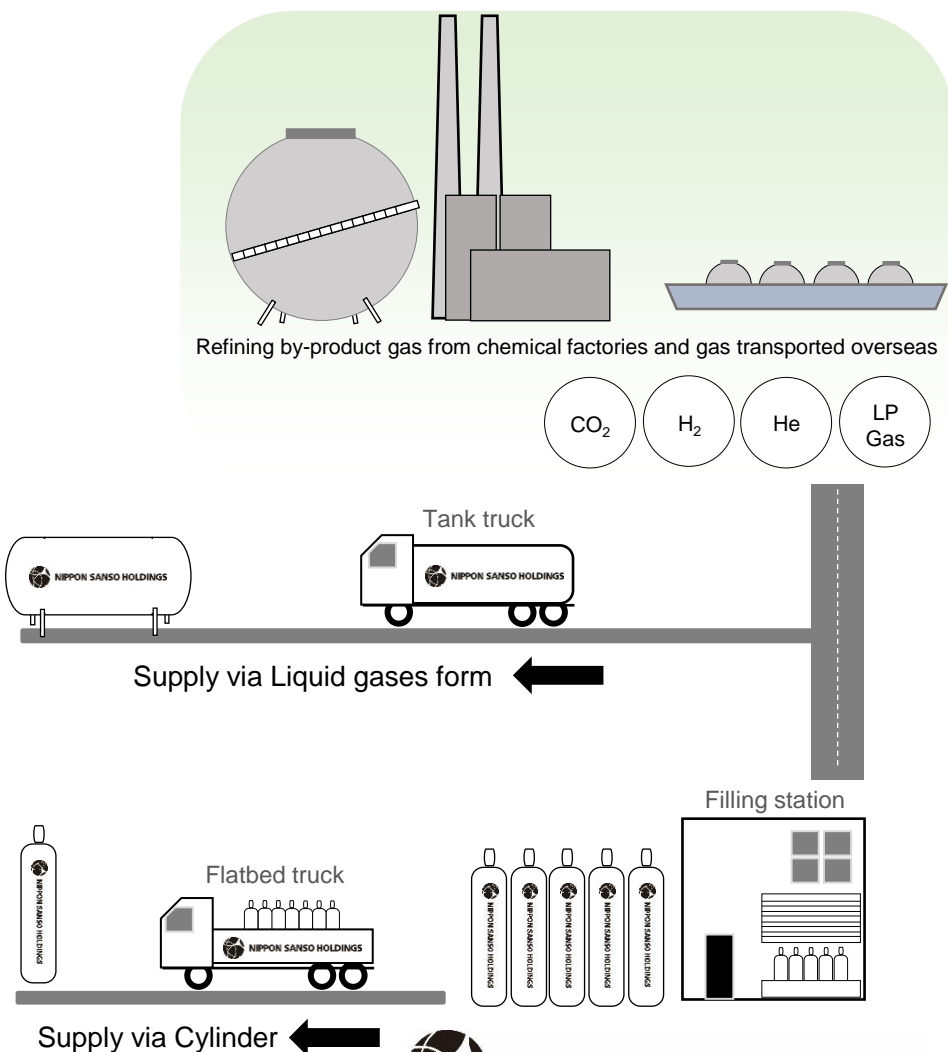
## Packaged

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:

---

### 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)**

Headquarters : 1-3-26 Koyama Shinagawa-ku, Tokyo 142-0062, Japan





**NIPPON SANSO HOLDINGS**

**The Gas Professionals**

© 2023 NIPPON SANSO Holdings Corporation All rights reserved