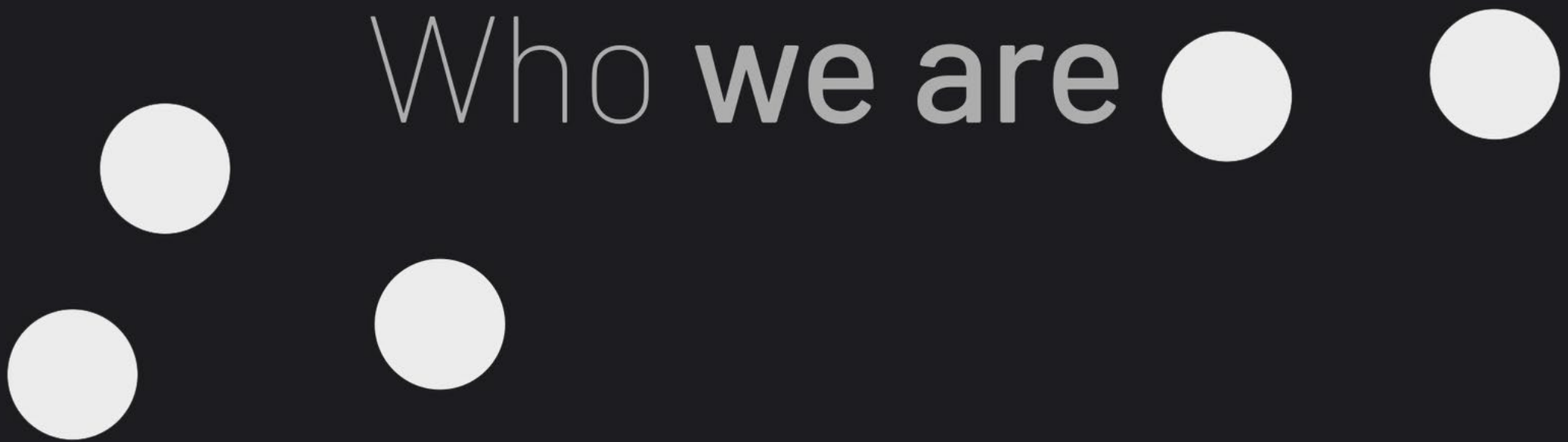


Nippon Gases Europe

Fiscal year ending March 31st 2022

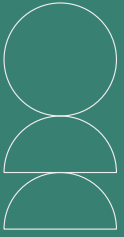


Who **we are**



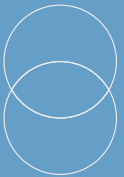
Nippon Gases

Making life better through gas technology.



We are **Proactive**

Being much more than just a gas supplier means putting our customers at the centre of everything we do, **proactively** seeking the best technological offerings.



We are **Innovative**

We believe that an **innovative**, responsible and sustainable business plays an important role in building a healthy, thriving society.



We are **Collaborative**

We are a great company because we have a great team, thanks to a diverse and inclusive organization that enables a **collaborative** spirit with all our stakeholders.



1. About us

- Nippon Gases Group
- Our vision & philosophy
- Our priorities and guiding principles

2. Proactive

- Business model
- Market share and portfolio
- Our trademarks

3. Innovative

- Environmental sustainability
- Engineering
- R&D

4. Collaborative

- Human capital
- Our community activities





NIPPON SANSO HOLDINGS

Nippon Gases is part of Nippon Sanso Holdings Corporation -the parent company to the Taiyo Nippon Sanso industrial gas business in Japan, the US Matheson Tri-Gas Group, the European Nippon Gases, the Asia/Oceania Regional Group and Thermos Business Group. Our group has over 100 years of experience and boasts a major presence in Japan, Southeast Asia, Australia, the United States and Canada and in Europe.

Established
30th Oct **1910**

Head office
In Tokyo **Japan**

With more than
employees **19K**

Operations in
countries **31** | Operating over
Air Separation Units **130**

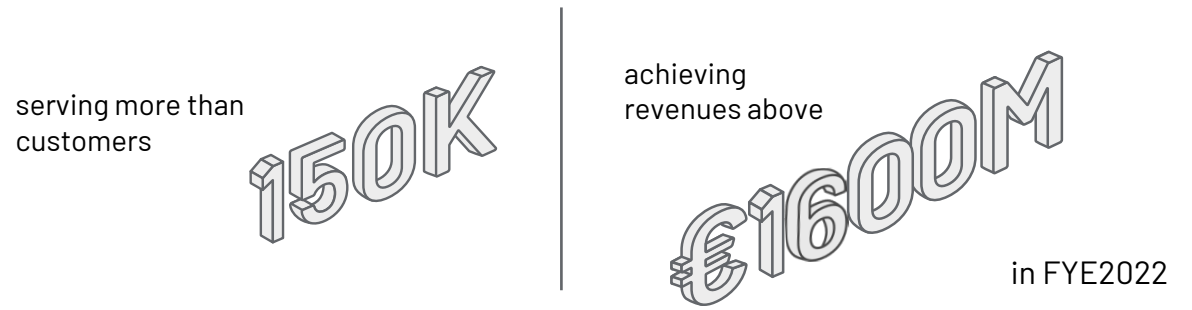


The Gas Professionals

Our presence in Europe positions us as a leading company:



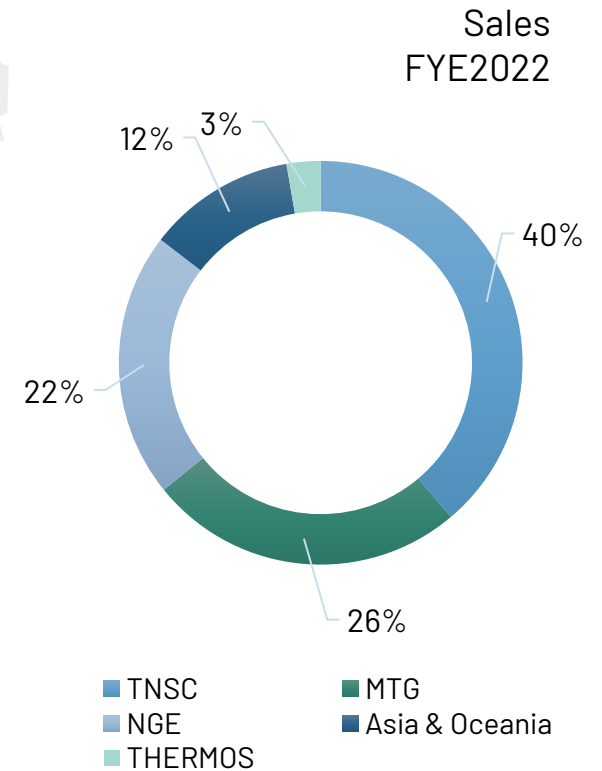
Belgium, Denmark, France, Germany, The Netherlands, Ireland, Italy, Norway, Poland, Portugal, Spain, Sweden and the United Kingdom.



Nippon Gases, the European company of **Nippon Sanso Holdings**

Global footprint

Operations in 31 countries



Mid-term plan

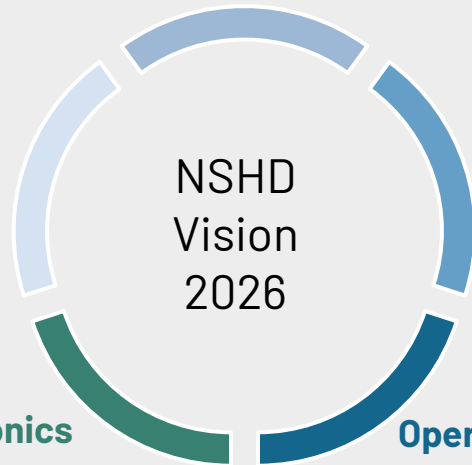
Enabling the future

Sustainability Management

Taking care about the environment, respecting human rights, complying with rules and ensuring safety and quality in all our processes

DX initiatives

Digital initiatives keep adding value and our IT teams are working horizontally to support every business process



Total Electronics

The NSHD group has a long history in the semiconductor materials and gas business. Now there is a growing potential for this business in Europe.

Operational Excellence

promoting the standardisation and optimisation of operations across all the companies in the group by sharing best practices

Exploring

new businesses towards Carbon Neutrality

Working with a global perspective to achieve a more sustainable future.

The medium-term plan is the strategy to be carried out by the group from now until the end of FYE2026.



How is Nippon Gases Europe working towards these goals?

Growth

- Carbon neutrality at our customers
- Large investment projects
- Applications technologies
- Focus on resilient markets
- M&A opportunities

Optimising base business

- Applications technologies
- Operational excellence
- Evaluate market mix
- Geographical footprint



Meet **The Gas Professionals** now in Europe



Over **3,000** employees



12 CO₂ Plants



Over **150,000** customers



Over **600** trucks



14 Pipelines



Over **2.8 M** cylinders



5 Specialty Gases Laboratories



40 PAG Plants



30 Air Separation Units



11 Dry Ice Plants



6 Hydrogen Plants



7 Operative Terminals



44 On-Site



3 CO₂ Ships



Our presence in Europe

The Gas Professionals

Click each region to see a detailed map

Offshore

UK (Aberdeen)

Singapore



BNF

Belgium

Netherlands

France



Iberia

Spain

Portugal



Northern Europe

Norway

Sweden

Denmark

UK

Ireland



Germany

Germany

Poland



Italy



We are The Gas Professionals

Our Vision

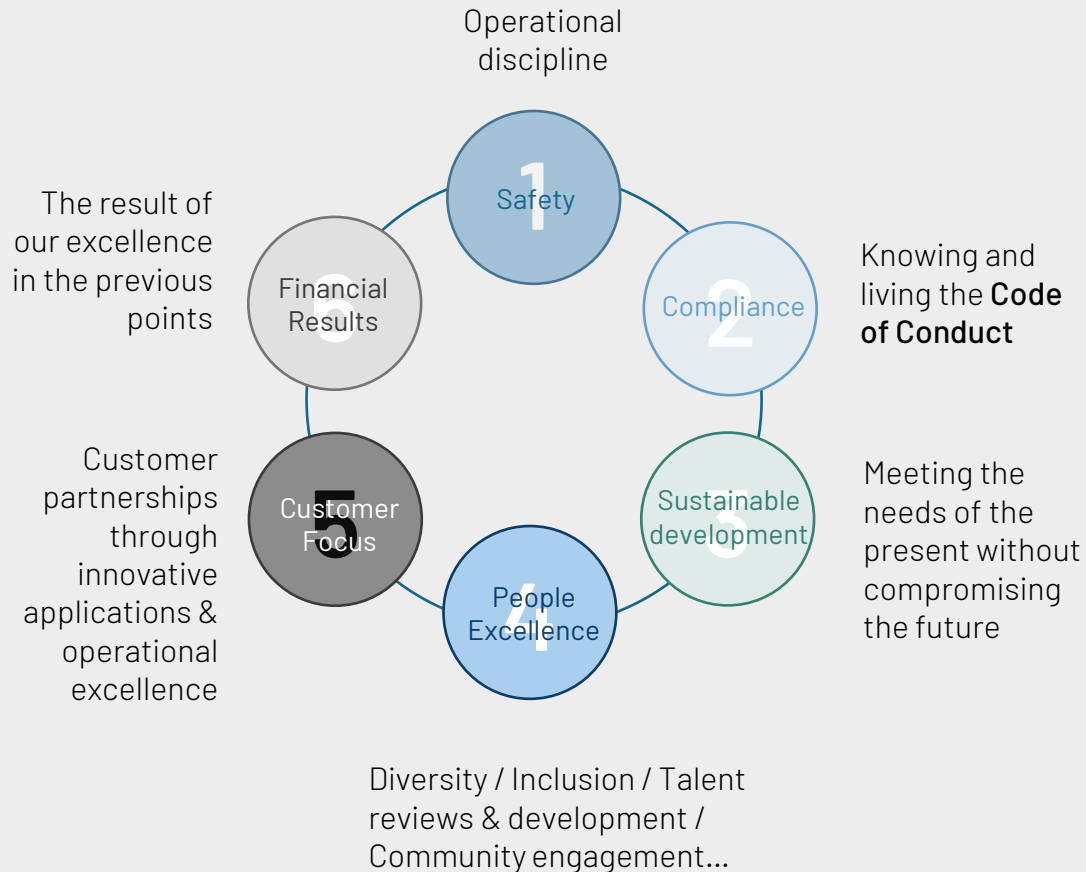
We aim to create social value through innovative gas solutions that increase industrial productivity, enhance human well-being and contribute to a more sustainable future.

Our Philosophy

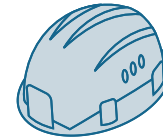
Proactive. Innovative. Collaborative.
Making life better through gas technology.



Our priorities



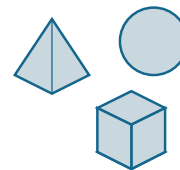
Our guiding principles



All accidents can be prevented.
 Safety is the responsibility of line management.
 Every employee is responsible for her/his own safety.
 Every employee must stop a job if it cannot be done safely.
 Efforts in safety yield results in safety.
 Safety is a condition of employment.



All compliance breaches can be prevented.
 Compliance is the responsibility of line management.
 Every employee is responsible for her/his own ethical behavior.
 Every employee must stop a job if it cannot be done ethically.
 Efforts in compliance yield results in compliance.
 Ethical behavior is a condition of employment.



Diversity & Inclusion are essential to our work and workplace.
 Inclusion is a line-management accountability.
 You are responsible for being a model for inclusive behavior.
 Every employee must stop non-inclusive actions or conduct.
 Efforts in diversity & inclusion will increase engagement and improve business results.
 Inclusiveness is a condition of your employment.



Safety, our highest priority

Safety is constantly improving in our company due to hard work in the search for risk factors and behaviors, and the observance of our safety principles by all our employees.



During the Annual General Meeting of the European Industrial Gases Association (EIGA) in 2022, Nippon Gases received **four top awards for its outstanding safety and environmental performance during 2021.**

Operational Discipline is the base of our Safety Performance

Operational Discipline: Every employee doing every activity, every day, every time in the correct way (according to the established procedures).

In all our activities, our goal is to achieve zero accidents and zero injuries

Our commitment to safety is integral, so we apply this premise in all our products - development, design and distribution - as well as in human behaviors and in environmental control.





Ethics & compliance

Nippon Gases is committed to highest ethical standards, integrity and social responsibility, and to acting in accordance with all laws, regulations and external and internal policies - **this is the basis of our compliance culture.**



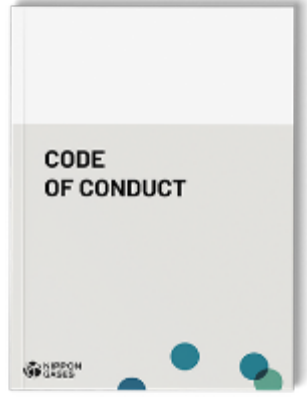
Nippon Gases' Compliance Programme is framed by the Code of Conduct. This code summarises our core compliance values and principles.

Nippon Gases' Compliance Programme and the Code of Conduct is supplemented by policies on specific conducts. Supporting **fair competition** is a major focus of Nippon Gases' compliance actions.

We protect ourselves to protect our customers.

When it comes to **Cyber-security**, we follow a holistic approach to keep the Company safe. Starting with a strong Security Governance framework including standards, policies and procedures, complemented with a set of new security technologies to better protect our systems.

Download here our Code of Conduct



Sustainability commitment

Our strategy and objectives

The Sustainability Mid-term Plan FYE 2022 – FYE 2026 describes the purpose, the governance and the process to identify the initiatives. It has been defined in alignment with NSHD and incorporates a series of ESG commitments.

The United Nations Sustainable Development Goals (SDGs) are the blueprint to achieve a better and more sustainable future for all.



Climate Change / Innovation and Technology Carbon neutrality Energy renewable sourcing		People Human capital. Employee engagement Diversity and Inclusion Stakeholders and communities	
Environmental Environmental management Productivity program Use of resources- water Waste management		Ethics and Compliance Governance bodies Human rights ESG risk management Sustainability reporting certification Product Carbon Footprint certification Procurement. Supplier ESG engagement	
Safe Operation Health and Safety Customers and product safety			

Sustainability commitment

Our commitment: reducing emissions and advocating for sustainable solutions.

Helping Clients to reduce their emissions (tons TC02)	1,5 Million	Renewable electricity sources reached	34%
Water consumption intensity reduced	-20%	Yearly GHG emission reduction	-19%



Our adherence to external commitments



Nippon Gases was awarded the EcoVadis Gold Medal for its performance in Corporate Social Responsibility.



Nippon Gases operates in the Responsible Care programme of CEFIC



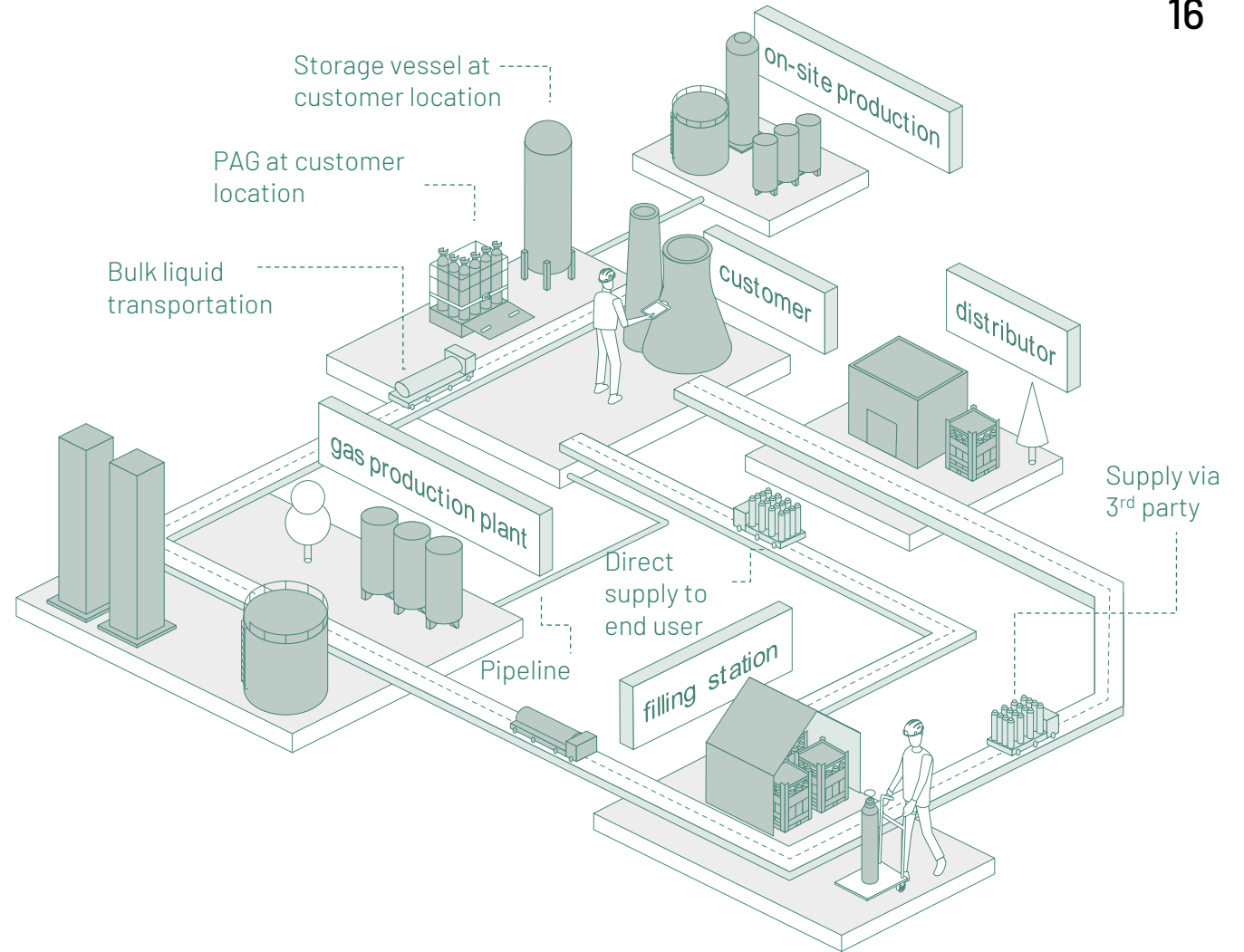
We have signed up to the United Nations Global Compact, thereby fully supporting the Ten Principles of the UN Global Compact.

To read more about our commitment read here our Sustainability Report 2022



Business model

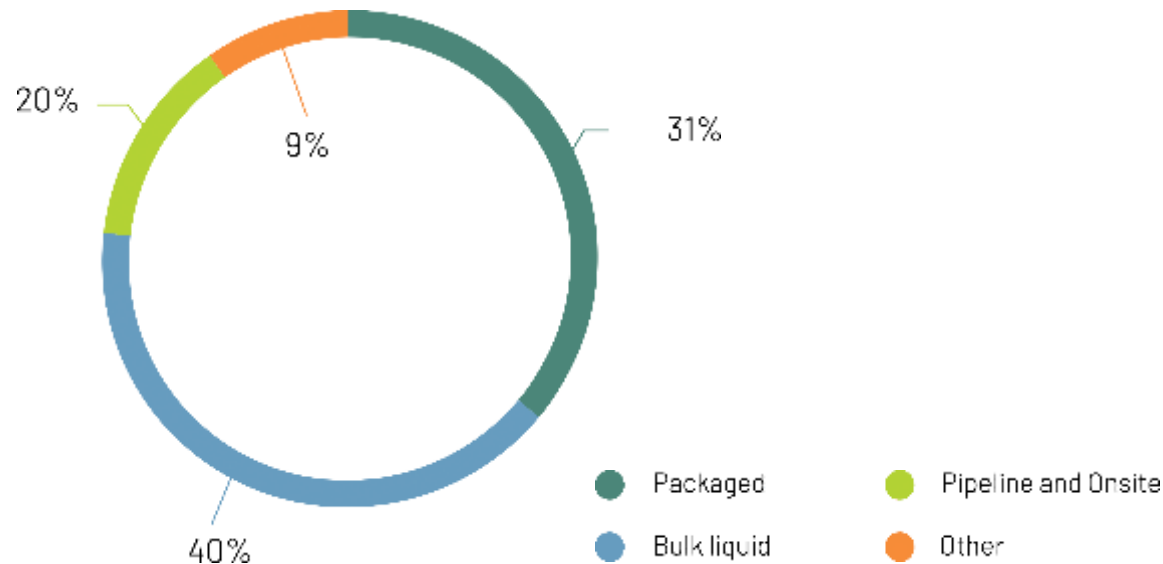
Being much more than just a gas supplier means putting our customers at the centre of everything we do, proactively seeking the best technological offerings that range from the most efficient supply options to tailored customer applications solutions.



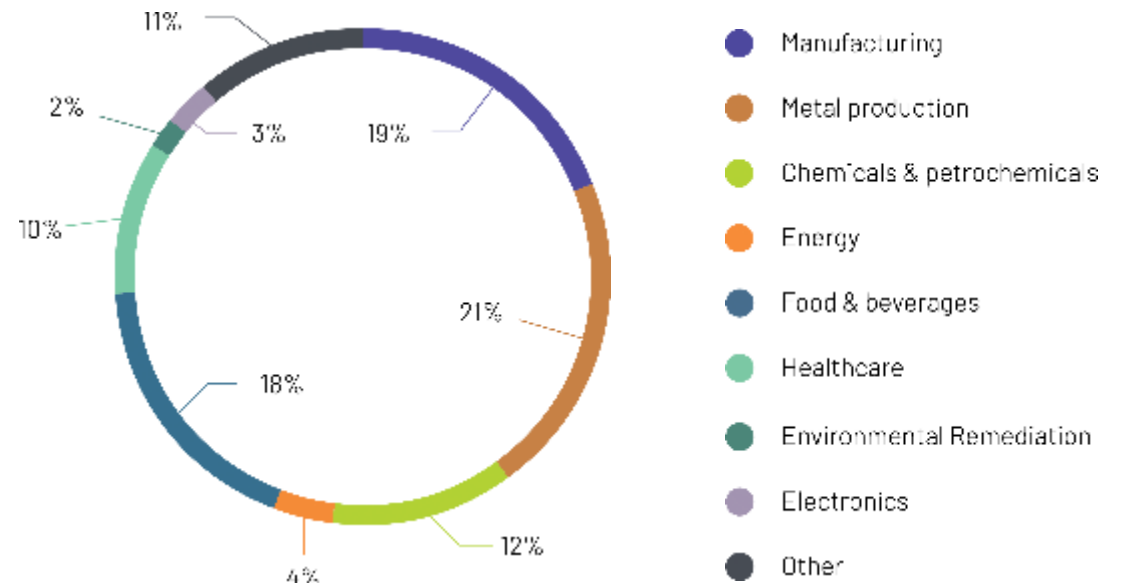
Our market share

Nippon Gases is the fourth-largest industrial gas company in Europe with an overall market share of **9%**. Considering the countries in which we are present, our market share is around **16%**.

Nippon Gases has a very balanced situation with regards to mode of supply:



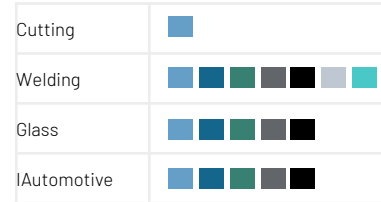
We offer our own technological solutions to a wide range of markets such as:



Market portfolio

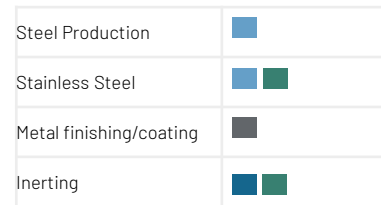
19% Manufacturing

We help reduce manufacturing cost, increase productivity and improve quality, maximizing economic performance and minimizing environmental impact.



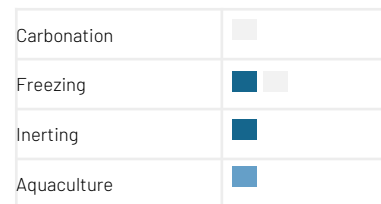
21% Metal production

Our range of products, services and equipment are focused on optimizing fuel consumption and on reducing CO₂, CO and NO_x emissions.



18% Food & Beverages

Quality and food safety are the pillars of solutions capable of keeping food fresh minimizing the need for additives.

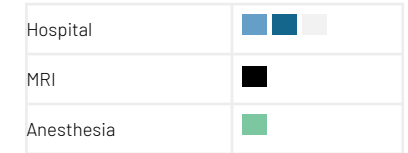


The Gas Professionals

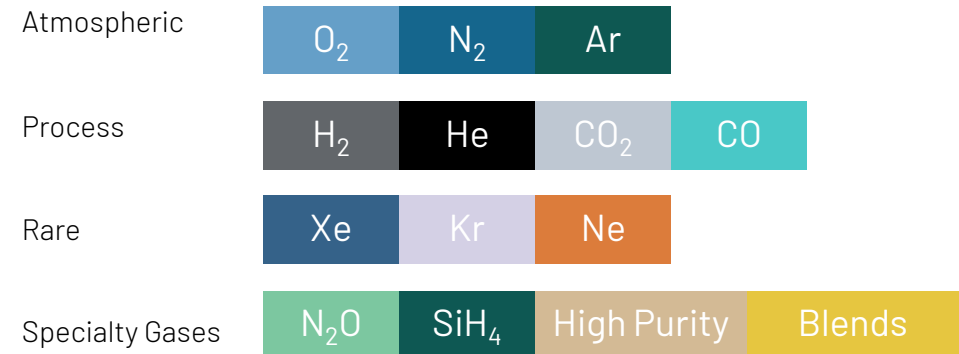
18

10% Healthcare

Our medical gases and respiratory therapy services contribute to the increasing health of our society.



Gases



Market portfolio

12% Chemicals

From research and development to large scale production we offer solutions that contribute to a more sustainable world.

Production	
Coal gasification	
Syngas production	
Process control	
Spec. Gases	

4% Energy

We work to develop new ways of improving processes, meeting environmental objectives and reducing production costs.

Refining	
Natural gas fracking	
Enhanced oil recovery	
Offshore	

3% Electronics

The NSHD group is a leading provider of semiconductor specialty gases and associated equipment and services to the electronics industry.



The Gas Professionals

19

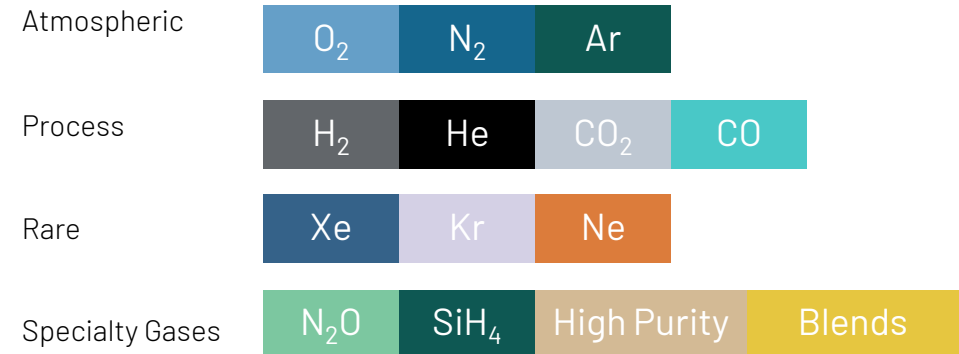
2% Environmental Remediation

We develop solutions to remove pollutants from water in order to restore the environment.

11% Other

We help our customers reduce waste, reuse materials, and increase productivity in many different markets.

Gases



Nippon Gases' trademarks

Additive Manufacturing
3DPro®

Medical
Plug&Breathe®
NinoXan®
InoxGen®

Chemical
Kemcool®

Metal and Material Processing

SansoJet®
SansoScan®
DiluJet®

Food & Beverage

CryoSan®
SanFresh®
FrutiSan®
SanIce®
SanShield®

Metal Fabrication

Sanarc®
SanCut®
LaserSan®

Water and wastewater treatment, & Aquaculture

WaterSan®
Mizu® Equipment

Other brands
MicroBulk®
EaseBulk®
Plug&Work®

Digital services
MiruGas®
MiruWeld®

Solutions for tomorrow



State-of-the-art oxygen technology that increases plants efficiency and reduce power cost. **CO₂ technology** to allow GHG reduction when recovered CO₂ is used and the reuse of treated water.



Hydrogen for a fossil-free fuel transportation.



Our oxygen burners technology and combustion to reduce fossil fuel consumption, allowing the use of alternative fuels.



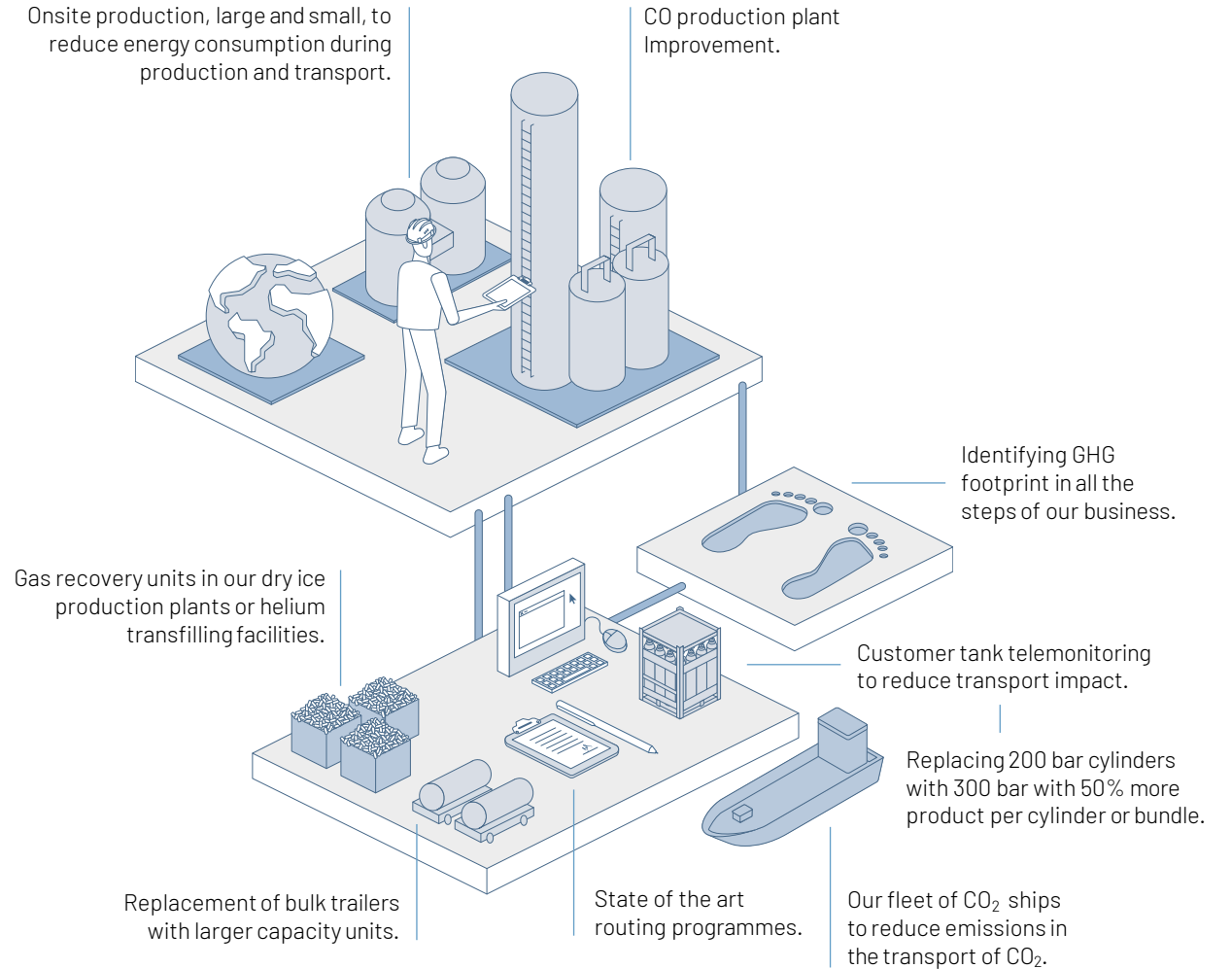
CO₂ based cooling solution for delivery trucks: GHG and acoustic pollution decrease.

We turn ideas into solutions that optimise and improve processes, save valuable resources and protect the environment for the future.



We are committed to sustainability in all our activities

The Gas Professionals

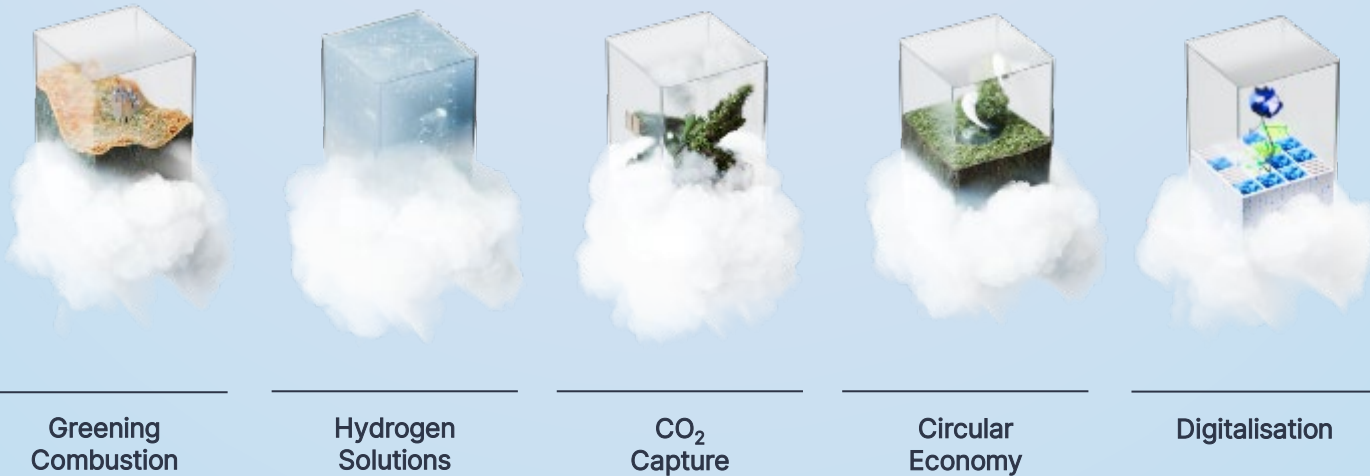


Carbon neutral world

Carbon neutral world is the new initiative of Nippon Sanso Holdings (NSHD), oriented towards helping our customers reduce their carbon footprint.

What are we doing to achieve this change?

As part of our strategy to contribute to this change we are refocusing our gas-based solutions on five key pillars.



Visit carbonneutralworld.com to know more!



We enable
a carbon neutral
world

A NIPPON SANSO HOLDINGS INITIATIVE



NIPPON SANSO HOLDINGS

TAIYO NIPPON SANSO | MATHESON | NIPPON GASES



Our engineering

TNSC plant
engineering center

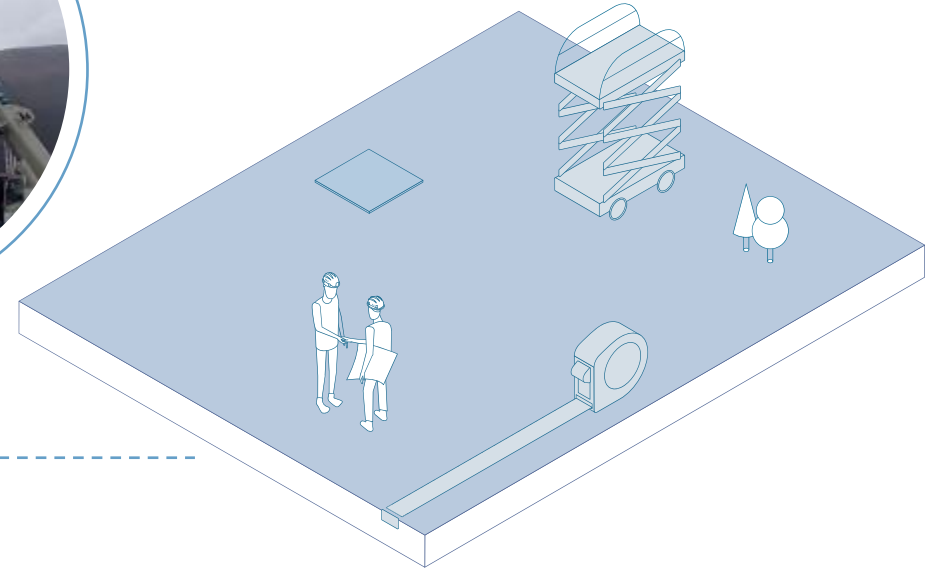
Kawasaki City

Plants built and installed in
Southeast Asia, Middle
East, and North America

850

Design, build, operate
& maintenance
capabilities

Cold box and column
packing design &
fabrication



The Gas Professionals

23

Projects in Europe

Oevel, Belgium



Malm, Norway



We are continuously investing in new technologies
and in the modernisation of our facilities to reduce
specific energy consumption.



Nippon Gases Confidential

Digitalisation and R&D

Digitalisation

Digitalisation and R&D allow us to improve our services and our customer experience as well as to boost the transition to a carbon neutral industry.

Our IT teams are working horizontally to support every business process.



New tools

Zenshin, the Platform for the management of productivity projects.

By promoting the use of Microsoft Power BI Platform through this new tool, we will increase synergies between regions and improve our process to follow the progress of every single stakeholder.

Digitalising our operations.

Enhancing our data analysis capabilities through collaborative data visualisation platforms, where data collected from numerous sources serve as a support for strategic and tactical decisions in operations, such as optimising our routing to minimise km driven.

“A lean & agile mindset facilitates a culture change towards digitalisation”



Digitalisation and R&D

Our R&D

Yamanashi Technology Solution Center

Japan

Research and development of essential technologies:

- Oxygen combustion
- Welding and cutting of metals
- Additive manufacturing
- Heat treatment
- Material technologies



Medical Technical Service Center

Japan

Research and development in the medical field.

Tsukuba Laboratory

Japan

Research and development in the fields of:

- Air separation technologies
- Stable isotope separation technologies
- Cryogenic technologies
- Superconducting technologies
- Ultra-high-sensitivity gas analysis
- Electronics
- MOCVD



MATHESON Advanced Technology Center

USA

Advanced research and development in pure gases, gas handling, micro contamination and purification technologies.

Human capital

Our highly qualified and experienced workforce is the cornerstone of Nippon Gases' success.

Diversity & inclusion

We strive to be a diverse and inclusive organization that attracts talented people from all over the world.



Human Resources Strategy



Female talent

27.1% of our women employees work in specialist and managerial positions.

27.8% of our employees today are women.

35% of employees promoted in FYE2021 were women.

Nippon Gases Confidential



Supporting our stakeholders

We promote initiatives in different areas that shape our internal and customer-oriented activities. These actions are based on the common group vision shared by our employees and encourage joint efforts in sustainability management.

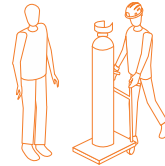


The Earth



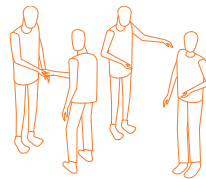
Actions that contribute to the protection of our planet, from low-emission mobility initiatives to circular economy projects.

Customers



We are a strategic partner for our customers. We create tailor-made solutions for each of them.

People



We strive to make life better for the communities in which we live and work.



Making life better
through gas technology



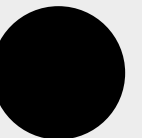
**NIPPON
GASES**
The Gas Professionals

YouTube

LinkedIn

info@nippongases.com






nippongases.com







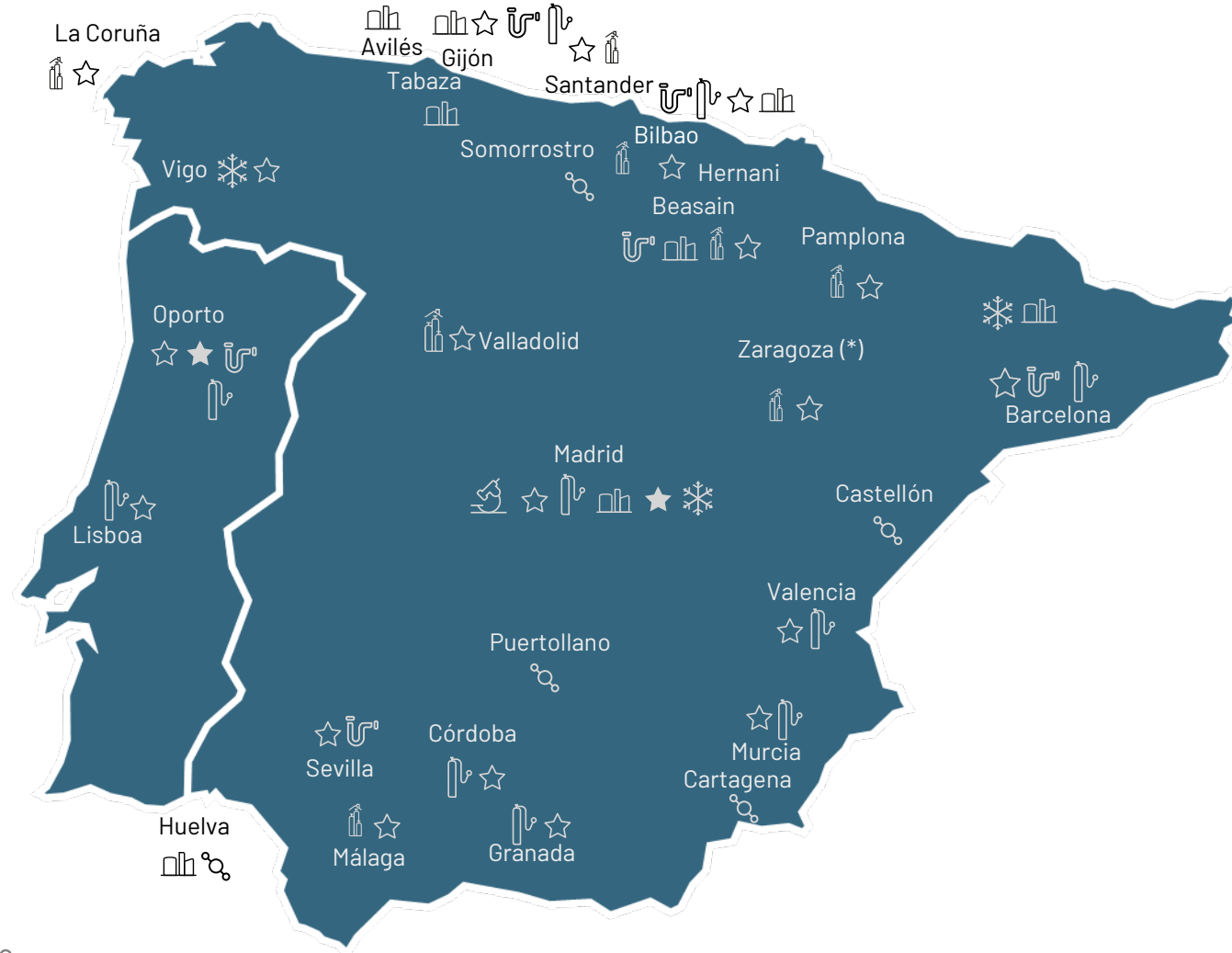
Annex



Nippon Gases in Iberia

-  Pipelines
-  Cylinders Warehouse
-  Filling Stations
-  Specialty Gases Plant
-  Industrial Gases Plant






-  CO₂ plant
-  Main Office
-  Sales Offices
-  Dry Ice Plant
- *Cylinder testing Center








< Back to Nippon Gases Group map



Nippon Gases in BNF

-  CO₂ plants
-  Main Office
-  Sales Offices
-  Terminals
-  Dry Ice Plants












-  Pipelines
-  Cylinders Warehouse
-  Filling Stations
-  Specialty Gases Plant
-  Industrial Gases Plant

- ¹ Olen = Main Office
- ² Oevel = Specialty and Electronic Gases plant
- ³ Lommel = Pipeline & ASU
- ⁴ Schoten = Sales Office & Filling Station
- ⁵ Lillo = Pipeline & ASU
- ⁶ Zwijndrecht (BE) = Pipeline & ASU








Nippon Gases in Italy

-  Pipelines
-  Cylinders Warehouse
-  Filling Stations
-  Specialty Gases Plant
-  Air Separation Unit






-  CO₂ plant
-  HyCO plant
-  Main Office
-  Sales Offices



Nippon Gases in Germany

-  Pipelines
-  Cylinders Warehouse
-  Filling Stations
-  Specialty Gases Plant
-  Industrial Gases Plant









-  CO₂ plant
-  Main Office
-  Sales Offices
-  Terminals
-  Dry Ice Plant



< Back to Nippon Gases Group map

Nippon Gases in Northern Europe

-  CO₂ Terminal
-  Dry Ice Plant
-  Filling Stations
-  Ships
-  Chemical / Cryogenic Tanks
-  Cylinders Warehouse



NGO: Nippon Gases Offshore
 *Operating center in Singapore
 **As of 1 April 2022, Nippon Gases Offshore is integrated into the Northern Europe organisation.



[Back to Nippon Gases Group map](#)



**NIPPON
GASES**

The Gas Professionals

