Enabling the future together





Fiscal year ending March 31st 2023



Nippon Gases (hereinafter also referred to as, "Nippon Gases Europe", "NGE") part of Nippon Sanso Holdings Corporation (NSHD) is the brand name under which Nippon Gases Euro-Holding S.L.U. with Spanish tax ID B88128368 (also referred as "NGEH") and its subsidiaries operate in Europe.

Reporting Period.

This non-financial report includes information of Nippon Gases for the period April 1st, 2022 to March 31st, 2023. Within the report is also referred to as "FYE2023" (Fiscal Year Ending) and "2023".

Scope of the Report. The Sustainability Report is part of the consolidated Directors Report of Nippon Gases Euro-Holding S.L.U. This report includes information on the sustainability (also referred as non-financial information) activities of NGEH and its subsidiaries.

References and Guidelines.

This report has been prepared in accordance with the content required by prevailing Spanish company law and in conformity with the criteria outlined in the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards): in reference with GRI

standards as well as other criteria described in chapter 5.8 Table of contents required under Spanish Law 11/2018 regarding non financial reporting .

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Disclaimer. This report contains not only past and present facts about Nippon Gases, but also forecasts related to social conditions, business plans, policies and estimates of their outcomes. These forecasts and estimates are assumptions or judgments based on the information available at the time of their writing. As such, actual future social conditions and business activity outcomes may differ from the forecasts and estimates presented in this report.



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I. Enabling the future together

As the European subsidiary of Nippon Sanso Holdings Corporation (NSHD) – a global company with over 100 years' worth of experience – Nippon Gases is responsible for representing the Group's presence and interests in Europe.

Comprised of 5 operational regions across 13 countries, Nippon Gases believes in an innovative, collaborative, and proactive approach to business. Combining not only each region's specialities and leadership, but also each team, and every employees' individual talent and knowledge. We achieve results whilst maintaining the highest standards in safety and sustainability – being recognised by many industrial gases associations. Being able to move forward and improve as a team, implementing our joint approach to business whilst being able to give back to our employees and communities in which we operate, is how we are **enabling the future together.**

Message from the President

One year ago, when I was working on the Sustainability Report's opening letter, I was hoping that the war in Ukraine, which had started a couple of months before, would soon be over. Unfortunately, this was not meant to be; we have recently passed its first year and the end does not seem near.

Rivers of ink have flowed dedicated to the suffering and disasters caused by the war and there is very little we can add here. In this report we concentrate on those internal and external, matters that are relevant for our company (our company meaning, our employees, our assets, our customers, our suppliers, our neighbors, our shareholders..). Without a doubt, the war has been relevant and has had a significant impact on our business last year.

○ Working beyond the present

To name a few: natural gas record prices in Europe (natural gas prices reached 15 times the historical average, later returning to a new market price 2 to 3 times above), electricity record prices in Europe, inflation higher than in the last few decades in Europe, global logistics disruptions, significant product shortages in Europe and globally (as an example, in our business in Europe, the CO₂ supply chain disruption due to the cost driven stop of ammonia production plants), European industry slowing down, a general economic slowdown, economic stagnation...

Despite these challenges, many of them unexpected, we have proven our resilience and adapted our decisions and strategy to continue performing for our stakeholders.

\bigcirc Towards a carbon neutral world

As far as decarbonization is concerned, as a fundamental part of the overall sustainability effort, industrial gases are an essential contributor to the solution.

"Enabling a Carbon neutral world" is the leitmotiv of the recently launched NSHD group and Nippon Gases carbon neutrality strategy. We are working internally, inside our own company and externally with our customers. We, all industrial gases companies, are intensive electricity consumers and we use road transport as one of the major ways to reach our customers. As such, we need to contribute to a decarbonized society also from an internal point of view.

In Nippon Gases, we have increased the usage of renewable electrical energy up to 35% this past year and, including low carbon energy usage, we have reached 76% of the total electricity consumed. We have achieved an emission reduction of 36% from the baseline FYE2019, we sign long term Power Purchase Agreements (PPA) contracts whenever possible and we have started to use photovoltaic (PV) solar panels for self-generation.

In addition this increasing use of greener electricity, we are continuously investing in new technologies and in the modernisation of our facilities to reduce the specific consumption. In the last 10 years, we have reduced the specific electricity consumption by 8%.

We are also working to reduce the transportation greenhouse gases intensity by more than 6% from FYE2022 to FYE2026 and we are striving to reduce water usage and to minimise waste in all our sites. Externally, our customer portfolio includes industries with high CO₂ emissions, as well as others with lower emissions, but with a strong commitment to sustainability. We help them reduce their carbon intensity, providing tailormade solutions, adapted to their specificities. We are working on new CO₂ supply projects of biogenic origin, on a green hydrogen project, as well as on a large scale carbon capture and transportation project. Our products and technologies avoided client emissions of more than 1.4 million tons of CO₂, 1.5 times more than our current emissions of 0.9 million tons of CO₂.

Eduardo Gil Elejoste



○ Empowered by people

Our entire Nippon Gases organisation has been giving its best during the difficult times we have just gone through. I want to thank all our employees for their hard work and to let them know that their effort and dedication has resulted in our company meeting our goals, both financial and non-financial, despite the unforeseen difficulties that we all had to struggle with. We have been able to overcome the challenges of last year, of two years of pandemic and one year of war, working harder on our priorities: people excellence, safety, compliance, sustainability and customer focus.

I want to highlight that, especially under this challenging environment, the whole organisation continues to focus on the positive engagement of all employees. According to their own voice, gathered in the annual employee survey, 88% of employees rated their sustainable engagement with Nippon Gases as high.

Working collaboratively, when we go back to these lines in one year, we expect to have made all these projects a reality, so that we will continue enabling the future together, working beyond the present towards a carbon neutral world, empowered by people.

1.2 Nippon Gases Group

Nippon Gases is the European subsidiary of Nippon Sanso Holdings Corporation (NSHD), a global company with over 100 years of experience and a major presence in Japan, Asia, Australia, the US and Canada. We are the fourth largest industrial gas company in Europe with over 3,000 employees – of which 27.9% are women. Nippon Gases highly experienced team of motivated and engaged employees contribute to the sustainable growth of our customers, suppliers and partners.

Our presence in Europe positions us as a leading company – operating today in 13 European countries (Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Spain, Sweden and UK), serving more than 150,000 customers through a combination of onsite/piping, merchant and packaging lines of business across key industrial zones and having achieved revenues of €1.9 billion during FYE2023.

The main products supplied by Nippon Gases are oxygen, nitrogen, argon, carbon dioxide, hydrogen, helium, carbon monoxide, gas mixtures, electronic gases, specialty gases and the services and technologies associated with the use of these gases and mixtures. As the strategic partner for industrial and medical gases for our customers, we offer our own technological solutions to a wide range of markets such as aerospace, chemicals, electronics, energy, environment, food and beverages, health and homecare, manufacturing, metal production and petrochemicals.

The high quality of our products, services and application technologies forms the foundation of our success in the industries wherein we operate. We emphasise close cooperation with our customers as the key to offering them the products, services and technologies that will help them in being a more sustainable business – all by increasing their productivity and reducing their energy consumption.

Nippon Gases' commitment to our customers, employees and partners – and to the communities in which we operate –

<image>

reflects our dedication to sustainable development. As part of this effort, our procurement and supply chain also adheres to Nippon Gases' Code of Conduct Principles.



1.2.1 Group structure

Even though we operate in 14 countries (13 European countries and with a presence in Singapore through our helium Offshore business), the European group is managed throughout 5 business regions. The group structure of Nippon Gases is clearly outlined below.



) 1.2.2 Management team

The Nippon Gases Management Team consists of Euro-Holding's functional Directors and regional Managing Directors (MDs).





Other brands by region: All regions All regions Deria region Iberia region NIPPON NIPPON GASES Offshore region Offshore region Offshore region Italy Ita

•	Engineering Director Olen		
•	Operations & Distribution Director Madrid		Germany MD Düsseldorf
•	Marketing Director Madrid	>	BNF MD Olen
		$ \longrightarrow $	Iberia MD Madrid
•	Energy & Sustainability Director Madrid	>	Italy MD Milan
•	HSEQ Director Madrid		Northern Europe MD Oslo

→ Internal Audit Director Madrid

1.2.3 Market position

Nippon Gases is the fourth largest industrial gases company in Europe, with an overall market share close to 9%.

Considering only our current operational European countries, our market share is around 12%.

We are recognised as leaders in:

- Safety
- Uninterrupted supply
- Expertise in the industries we serve
- Responsiveness to customer requirements

The company also enjoys a wide portfolio in terms of markets served, with more than 34% of its sales in resilient, non-cyclical markets such as food and beverages, health and homecare, electronics or environment:

Healthcare Chemicals & Petrochemicals • Other Energy Electronics Environmental Remediation 19% 19% 10% 3% 18% 10% 12% 6%



Manufacturing

Metal Production

Food & Beverages

1.3 Vision, philosophy, & guiding principles

Since 1910, Nippon Sanso Holdings Corporation, to which Nippon Gases belongs, has been adapting its operations to the needs of its customers.

Our capacity to respond proactively to the needs of the market and to innovate collaboratively are central values that guide all our operations to make life better through gas technologies - building positive relationships between people and societies, as well as with our planet.



Our philosophy

Proactive. Innovative. Collaborative.

Making life better through gas technology.

The Gas Professionals.

○ Diversity

es can	Diversity and inclusion are essential to
oonsibility of	Inclusion is a line-management accountability.
ponsible for haviour.	Every employee is responsible for being a model for inclusive behaviour.
stop a job if it Ily.	Every employee must stop non-inclusive actions or conduct.
yield results	Efforts in diversity and inclusion will increase engagement and improve business results.
condition	Inclusiveness is a condition of employment.

1.4 Sustainable development

Sustainable development means adopting business strategies and activities that meet the needs of the corporation and its stakeholders today, whilst protecting, sustaining and enhancing the human and natural resources that will be needed in the future. This includes being responsible towards employees, customers, communities, the environment and partners. By adopting socially and environmentally responsible behaviour, businesses can make a significant contribution to boosting employment and wealth creation, fostering social justice and protecting the environment.

1.4.1 Sustainability framework

The Nippon Gases President has ultimate responsibility and authority over our initiatives to work towards the European Union's (EU's) transition to a climate-neutral and green economy, in line with the European Green Deal. Additionally, he leads Nippon Gases' commitments related to the UN Sustainable Development Goals (SDGs), including its human rights and environmental objectives.

The President appoints the Nippon Gases Sustainability Director to execute and handle sustainability programmes. The management of sustainability matters is covered by the Sustainability Committee and the Sustainability Task Force.

The Sustainability Committee (SC), led by the Nippon Gases President, is comprised of 13 top representatives of the functional areas, and meets on a quarterly basis.

The Sustainability Committee is responsible for:

- Coordinating with NSHD's CSO (Chief Sustainability Officer) and Sustainability team when establishing the sustainability strategy and defining ESG goals and targets.
- Monitoring the performance of Nippon Gases' Sustainability Mid-Term Plan.
- Evaluating initiatives related to compliance, safety, quality, supply chain, human rights, the environment, energy, people and community.
- Promoting and coordinating the publication of Nippon Gases' annual Sustainability Report.



Nippon Sanso Holdings Corporation materiality matrix

NSHD's materiality matrix was initially formulated in 2015, being revised and having obtained approval from the NSHD Board of Directors in December 2021.

The respect for Human Rights, Safety and Security, and Corporate Ethics are preconditions for the existence of an Enterprise.

Conservation of water resources (KPI). Coexistence with the local community.	Strengthening communication with stakeholders. Sustainable supply chain. Contribution to regional and industrial development as social infrastructure. Diversity & Inclusion (KPI).	Product and service safety & quality (KPI). Providing products and services that contribute to solving environmental and social issues (KPI). Climate change mitigation and adaptation (KPI). Effectiveuse of resources and prevention of pollution (KPI).
,	Pursuit of customer satisfaction (KPI). Technology and R&D capabilities that support the creation of customers and social value. Promotion of initiatives for digital innovation. Employee and family health.	Strengthening information security measures. Improvement of productivity and promotion of production optimisation (KPI). Development and mainteance of human resources.
Conservation of biodiversity. Protection and effective utilisation of Intellectual Property.	,	Improvement of employee engagement (KPI). Providing comfortable and affluent lifestyles.

MPURIANCE IU UUR BUSINES

O Important issues related to the olobal environment

O Important issues related to social systems

.4.2 Nippon Gases initiatives

During the FYE2023, Nippon Gases has focused on consolidating and following the progress of initiatives committed in our Sustainability Mid-Term Plan FYE2022 - FYE2026, disclosed in last year's Sustainability Report.

Third-party engagement initiatives

Nippon Gases' adherence to external commitments is confirmed and exemplified by engaging third-party agencies relevant to stakeholders to evaluate our sustainable strategy, and provide visibility to our stakeholders.





Ecovadis

In FYE2023 we participated in the Ecovadis survey and received a Gold Medal, recognising Nippon Gases in the top 2% of companies in our sector for our sustainability programme, covering the areas of Environment, Labour and Human Rights, Ethics and Sustainable Procurement.



Responsible Care

Nippon Gases participate in the Responsible Care programme lead by CEFIC, the International Organisation of the National Chemical Associations. Now, under the umbrella of Nippon Gases and the Global Charter signed by our President, we all benefit from coordination and commitment to fulfil the six Responsible Care pillars.

O Important issues related to companies and organisations.



United Nations Global Compact (UNGC)

We have been an active participant of the network since we joined. This fiscal year, we updated our membership status to be registered as an affiliate of Nippon Sanso Holdings.

) 1.4.3 Nippon Sanso Holdings (NSHD) initiatives

As part of the NSHD group, we continue to align with TCFD (Task Force on Climaterelated Financial Disclosures) and have launched various sustainability initiatives included in the Medium-Term Management Plan Sustainability Programs.

Carbon Neutral Program I (CNP I)

NSHD aims for carbon neutrality by technological breakthroughs by FYE2051.

NSHD Group GHG emissions FYE2026: -18% FYE2031: -32%* * Compared to FYE2019

Carbon Neutral Program II (CNP II)

NSHD will reduce our customers' GHG emissions through environmental products offerings and applications.

By FYE2026, NSHD will achieve GHG reduction contribution that exceeds GHG emissions by the Group

Zero Waste Program (ZWP)

3R (Reduce, Reuse, Recycle) approaches of waste treatment are requirements of the times.

Sustainable Water Program (SWP)

We aim for the preservation of water resources by the efficient utilisation of water throughout our business activities.

Safety First Program (SFP)

Aim for World-Class Safety in the industrial gas industry.

Lost Time Injury Rate (LTIR): 1.6 or Iower (FYE2026)

Talent Diversity Program (TDP)

Diversified talents are essential to the sustainable growth of our Group.

Female employee 22% FYE2026, 25% FYE2031; Female Management posts 18% FYE2026, 22% FYE2031

Quality Reliability Program (QRP)

Instill a quality-oriented culture to further reform of employee awareness, and enhance NSHD's quality and reliability by promoting introduction of automation technologies.

Compliance Penetration Program(CPP)

We further promote our compliance activities by instilling awareness and correct understanding of compliance among all employees. **Rate of receiving compliance training 100%**

) 1.4.4 Sustainable Mid-Term Plan

In January 2022, the Nippon Gases Sustainability Committee approved the Sustainability Mid-term Plan FYE2022 – FYE2026. This plan outlines the purpose, governance and the process by which to identify the initiatives, and has been defined in alignment with the NSHD corporate medium-term plan. We are aware of the role we play in society and thus have also incorporated a series of ESG commitments into our Sustainability Mid-term Plan FYE2022 – 2026.

The governance and follow-up of the Mid-term Plan is managed by the Sustainability Committee and its Task Force.



The communication of our Mid-term Plan and its progress is disseminated through our internal channels (website, quarterly magazine, quarterly meetings), via our corporate website and through our Sustainability Report.

Five areas of activities have been defined to coordinate the initiatives identified for the mid-term plan:

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









SDG GOAL	NGE MIDTERM INITIATIVES	TARGET	STATUS APR 2023
	CLIMATE CHANGE/INNOVATION AND TECHNOLOGY		
7 mmmeriele Timerent	Reduction of GHG emissions: Reduction rate of total CO ₂ emission(%) in absolute value (t) from FYE2019	29% reduction FYE2026 35% reduction FYE2031	• On Track 35% vs FYE 2019 Baseline
	Carbon Neutrality: Expand products and services that enable customers to reduce CO ₂ emissions. Increase the rate of CO ₂ reduction contribution to customers	Contribution > Emission	• To Follow Contribution 1.4 Mill TCO ₂ > Emission 0.9 Mill TCO ₂
	Carbon Neutrality: Biomethane production by Anaerobic Digestion of Waste water treatment sludge	Reach 8 unit/yr with average production 500 m³/hr, equivalent 281 GWH per year	On Track Several projects under development
	Carbon Neutrality: Promotion of this Biomethane as source for producing green or low carbon Hydrogen for small/ medium customers	Reach 6 unit/yr with average production 240 m³/hr	On Track Several projects under development
12 ESPIRIEE ARE PROJECTION	Renewal Energy: Continue promotion of renewable energy share	35% renewable energy	• To Follow 35% Renewable Energy during FYE2026
7 strument AM	Productivity projects: promote productivity generating Sustainable Development savings cumulative FYE2022-FYE2026	50,000 Tons CO2eq.	• On Track To meet 50,000 Eq. CO ₂ Tons 70% achieved
	ENVIRONMENTAL		
6 CLEAN NOTED	Water: Continue on reducing water usage intensity (vs sales) in all our operating plants. Reduction rate of water consumption intensity. Base year FYE2020	Reduction 10% in water intensity vs sales.	• On Track Water Intensity Redution > 30%
12 ESPIREE CREATER MERICICIEN	Waste: Reduction rate of waste disposal intensity (vs sales). Base year FYE2020	Reduction 11% in waste intensity vs sales.	• On Track Waste Intensity Redution > 30%
7 STREAM	Logistics: Continue to take advantage of data driven technologies and improve the efficiencies in our logistics by right sizing our tank and cylinder bundle size. Base year FYE2022	Reduction 6% product transportation GHG intensity improvement.	• On Track Transport Intensity Redution vs last year 2%
13 INNE INNE	Environmental Management System ISO 14001: Improve participation of operational sites	>80% operation sites	• To Follow >80% operation sites
	PEOPLE		
	Diversity and Inclusion: Increase of female population and its managerial and specialist participation	Female 30.5%, Managerial 28.5%	• On Track Total Female 27.9%; Famales Manegarial ans Spec 30.4%
8 ECCAT HOEK AND ECONOMIC GROWTH	Employee engagement: Evaluation of employee engagement. Improve Sustainable Engagement Index	≥85%	• On Track Sustainable Engagement rated at 88 in the last survey.
8 ECURIT WHEN AND ECURIONEC GROWTH	Community engagement: Coordinate social and community initiatives in the areas were we have presence. Base Year FYE2022	Increase people participation, funding and # projects. 30% increase	• To Follow >50% people participation in community initiatives
8 ECENT WORK AND ECONOMIC SERVITH	Youth: Commitment of increasing the number of positions for young local diverse talent in the organisation	Increase the # of internships by 3% per annum	On Track 40% increasse from FYE 2021

SDG GOAL	NGE MIDTERM INITIATIVES	
	SAFE OPERATION	
3 DODHAIN ANDRELIENC	Improve our RI rate. (Recordable Injuries per million working hours).	RIR 1.1
3 AND HELLENK	Improve Lost Time Injury rate. (LTI per million working hours).	LTI 0.
3 ACCENTION	Preventable Product Vehicle Accident rate (Pre-PVA per million kilometers driven).	Pre-P
3 AND HELL CINC	Number of Property Damages (PDs)	12/yr
3 doubleath And well-denic	Continue promoting campaigns as result of analysis from Incidents and Assessments	One c
3 methelene	Complete the Process Safety Roadmap	Comp
4 execution	Reinforce the European Safety & Environmental assessment program	12 Eur
13 COME	Bring the training for employees and contractors into a digital platform	Comp FYE20
	ETHICS AND COMPLIANCE	
12 EDAGEE Inclusion ACHIODICEN	Customer: Reinforcement of quality assurance and management systems	Numb econo
12 ESPIGEE AN PRODUCTION	Customer: Satisfaction survey	As nee
16 HAR AUTOR ANITHING METHING	Compliance: Thorough compliance training	100% trainir
16 AND THEME ADDRESS	Standards: Participate in the developing of HSEQ Corporate Standards	Comp
16 MARE AUSTREE MEDITATIONS	Compliance: Sustainable review of all potential integrity cases	100%
	Procurement: Incorporate environmental management and the ESG (Environmental Social and Governance) criteria procedures with all the participants in the value chain. To be included in supplier contracts	Suppl to be i Relati New E Europ
12 ESCINETION AND AND AND AND AND AND AND AND AND AND	Procurement: Improve CSR risk analysis prior to supplier assessments or audits	Imple the pr sourc



12 ESPINATE Incomption Alternation

Procurement: Improve information on reporting on sustainable procurement issues

TARGET	STATUS APR 2023
RIR 1.19	• On Track FYE2023 at 1.09
LTI 0.54	On Track FYE2023 at 0.52
Pre-PVAR 0.20	• On Track FYE2023 at 0.10
12 <i>l</i> yr	• To Follow Property Damages during FYE2023: 9
One campaign per year	Done
Complete by FYE2024	• On Track
12 European assessment per year	• On Track 16
Complete Europe deployment by FYE2024	• To Follow Expected by FYE 2025
Number of Product Complaints with economic impact higher 1 Mi JPY; ≤5/yr	• To Follow One Complaint with economic impact higher 1 Mi JPY during FYE2023
As needed	• To Follow As needed
100% employee receiving Compliance training	• To Follow Successfully completed by 100% of target employees (2,272)
Complete review NGE Standards	• To Follow We are part of NSHD Standards Board
100% review	• To Follow 100% review
Suppliers covering 80% of spend to be included in new SRM - Supply Relationship Management system. New ESG clauses incorporated in European contract templates.	• To Follow New system (CLM) in place in 2 out of 5 regions, to be completed in FY2024
Implement new system (iRisk) as part of the process for all safety critical, single source and sole source suppliers.	• To Follow iRisk module to be implemented in FYE2024 for all safety critical suppliers
Incorporate new supplier Code of Conduct to the documentation and SRM process for targeted (80% spend) supplier.	• To Follow New code of conduct in place and documents sent to key suppliers
Incorporate supplier driven initiatives related to productivity sustainable actions and link them to new SRM system.	• To Follow On target





2. Working beyond the present

By recognising the importance of long term solutions, we are determined to go beyond traditional practices by actively addressing future challenges.

To **work beyond the present**, we proactively use advanced technologies that help us develop sustainable solutions tailored to our customers' changing needs. All of that, can only be achieved by prioritising safety above everything else, ensuring it remains our top priority in all our operations.

Additionally, at Nippon Gases we are committed to promoting a culture of people excellence and integrity by following strong ethical values and a comprehensive Code of Conduct.

Amidst a period of global political and socioeconomic uncertainty, not only has Nippon Gases survived – but thrived. A consequence of this, however, is affecting businesses across the world, and particularly so in our related sectors. We asked some of our Managing Directors – José Revuelta, MD Iberia, Raoul Giudici, MD Italy, and Frank Rutten, MD BNF – about the effects of inflation, current and upcoming trends in the industry, and the economic implications towards a greener future.



JCD Justin Corcho Vice President and Chief Financial Officer Furo

Christoph Laumen

Sigurd Haukeli MD Northern Europe

SH

José Revuelta MD Iberia

Frank Rutten



Inflation and interest rates are at high levels, does it impact our business?

[JR] Both have a meaningful impact on the business. Consolidated Inflation, as we have in IbeBoth have a meaningful impact on the business. Consolidated Inflation, as we have in Iberia, with a subjacent 7% means that it's embedded in the cost stack and that it will not be easily removed. For our customers it's a clear step down in their competitiveness when they export and this is leveraging a lower demand because of higher prices. Furthermore, high interest rates are a bad companion for the economy, they are limiting enterprise financing and new projects. A clear tool from central banks to freeze the economy.

[RG] It does have an impact. As always, they can be either a risk or an opportunity. Inflation puts our cost stack under pressure. But it also offers an opportunity to review our pricing strategy and take productivity actions to enhance further our competitiveness. Same about high interest rate: on one hand, it could hit severely investments and slow down economy; but, on the other hand, it can also be turned into an opportunity for us: many of the applications which we can offer would allow our customers to play with OPEX and CAPEX and help them to be more cost effective. I believe Nippon Gases can count on strong and professional organisation and it's when tough times come that you can really make a difference.



Industrial natural gas demand has dropped by 20% since last summer; did we see a similar trend now?

[JR] The increase in Nippon Gases prices of past months brought a decrease in their products proces or pact months bear that level of cost in their production. They also started to look for alternatives and some of them were successful in that endeavor, in an irrecoverable way. At the same time, a mild winter contributed to consumption decline. current prices, but considering that other alternatives have

[FR] The recent relaxation in the natural gas market did reduce gas prices to between 50 and 60 €/MWh in February 2023, but that is still about three times higher than normal and three times higher than in the US. Again, this puts extra pressure on our economy and companies evaluating to

[RG] We are monitoring natural gas very closely. It's a good KPI which allows to track industrial production trends. Moreover, as we all know, oxycombustion is a great opportunity for Nippon Gases. For the time being, despite a significant drop in natural gas price, we are not yet seeing any sign of recovery. It will probably take some time. But, we also have to be aware that end users have been looking for alternatives and will probably lean towards other solutions, either for partial or full replacement of natural gas use.

Inflation has reached its peak levels in the last 40 years, do you think it will significantly impact our cost structure?

[FR] Belgium, for Nippon Gases representing the major turnover of the BNF region, had an average cost increase between 15-20% compared to 10-12% in the neighbouring countries (Germany/France/Netherlands). This brings the companies in Belgium into a dilemma: only partially increase prices to remain competitive and give in on profitability, or automatic indexation system in Belgium, the gross wages of employees in Belgian companies would increase by 16% in 2022-2023. In neighbouring countries, wages are not expected to increase by more than 10% over that period. This cost impact has put a burden on potential investments and production capacity in Belgium (with chemical production estimated at 65% - last seen in the 80s).

[JR] Without a doubt, we were fortunate enough to be able to pass through part of the cost increase from our different suppliers to the market, including cost of power.

[RG] With such high inflation, we have been suffering cost maintain our cost structure as flexible as possible so that, whenever this inflationary peak will be over, we follow the same way and reduce our costs, so that we can avoid the risk of losing competitiveness.

Impact of global macroeconomics on our business? Do we expect any impact from China's GDP (5%) or the fact that the USA may not enter in recession?

[JR] Whether we like it or not, China is becoming the global engine. Whilst 5% growth compared with former years seems to be low, take a look at Europe! It would appear that the inertia of the economy is coming back and China is largely contributing to it. The USA has been super-performing in the last decade and their independence from global NG and Oil has been basic. North America in good form will continue being an essential sponsor for the EU economy.

[RG] Yes, we do. Europe, and some key geographies where we play in particular, such as Italy, have been exporting more and more to those countries - think about food, beverages, fine chemicals or pharmaceuticals. We have been focusing on those companies, with high export, in recent past to sustain our volumes. With domestic demand not-so brilliant, global trading will keep making the difference in FYE2024 and beyond.

The EU Commission has announced multi-billion euro programs to boost the change to a greener economy, what is your view about this?

[FR] As part of the Nippon Sanso Holdings Group strategy "Carbon neutral is to achieve a zero balance in CO₂ emissions. Achieving this requires transitioning from fossil fuels to renewable energy sources. We help companies globally make this transition a reality." I can only applaud greener economy. As such, we have committed to the production of green hydrogen, solely powered by sun and wind. One of many projects we are working on to pursue a carbon neutral world.

[JR] It has been a bold initiative and a decision made rollout of the plan that were not deeply analysed and the schedule has not been realistic. Today, we are seeing how a substantial part of the super-boosted H₂ multiple projects are on hold, as they were taking into consideration costs that the state of the technology could not afford today. Also, CO₂ sequestration poses uncertainties related to cost and CO₂ destination. Despite all of the above, Nippon Gases has been offering miscellaneous "Green " viable solutions helping our customers to improve their CO₂ footprint.

[RG] This is going to be a long journey and it is still unclear in which way markets will be reshaped by EU multi-billion program. But, whatever direction the markets will take, this is going to be a great opportunity for us: Nippon Gases can count on a variety of applications, products and services, which can play an important role in this market transformation. I believe we are given a unique opportunity

2.1 Business model

Our core competency lies in our ability to provide safe and reliable supplies of industrial and medical gases, and reflects our technological development, production, supply and sales capabilities accumulated over the years since our inception. These capabilities are pivotal in continuing to underpin sustainable growth in the years ahead.

We are proud to be proactive because we care for our employees, our families, and our communities; it is only through honouring that philosophy that we will help society as a whole: "making life better trhough gas technology".

The diagram below sets out the Nippon Gases' business and value creation model, including types of assets used in our supply chain.

	Onsite/At customer/By pipeline	Bulk/Liquid	Package/Cylinders
Type of gases	O_2 , H_2 , N_2 and CO	O2, N2, Ar, CO2, He & H2	All industrial gases Non-cryogenic
End- markets	Chemicals Metal production Energy Glass Petrochemicals Refineries	Manufacturing Metal production Chemicals & petrochemicals Energy Electronics Food & Beverages Healthcare	Manufacturing Metal production Chemicals & petrochemicals Energy Food & Beverages Healthcare Electronics
Volumes	Large (>50 tpd)	Medium (1-50 tpd)	Low(<1tpd)
Delivery distance	Up to 250 kms for pipeline networks Low delivery distance for stand-alone/individual customer supply	Medium, c. 300 km	Low <100 km



) 2.1.1 Products Markets

Industrial gases primarily include atmospheric gases (air gases), produced via air separation, and other gases which are produced or obtained from various industries and technologies. Our integrated business model incorporates various supply modes, including onsite (at customer premises and via pipelines), bulk (liquid deliveries) and packaged gases (via cylinders, cylinder bundles and small liquid containers).



Metals and Chemicals Manufacturing

Developing new ways of improving processes, meeting environmental objectives and reducing production costs. Our range of products, services and equipment are focused on optimising fuel consumption and reducing CO₂, CO or NOx emissions.



Our medical gases and respiratory

therapy services contribute to the health of our society.



Improving the quality of water through our solutions – enabling drinking water, pollution reduction in wastewater, or improving the water quality once it returns to its natural environment.



Hospitality From supplies for dispensing

carbonated beverages to molecular cooking.



Research Activities (University & Lab)

Our pure gases and mixtures are basics for research, testing and analysis.



Welding and Cutting

Collaborating to reduce manufacturing costs, increase productivity and improve quality - maximising economic performance and minimising environmental impact.



From research and development to reaching full production in the pharmaceutical, laboratory and biotechnology sector.



Food and beverages

Food safety and quality are the pillars of solutions capable of keeping food fresh without the need for chemical additives.



Electronics

We supply semiconductor specialty gases used in the manufacturing process of liquid crystal and semiconductors, contributing to the development and dissemination of the high-tech industry.



) 2.1.2 Service supplier

The philosophy that permeates Nippon Gases is to provide solutions that actively contribute to the common objective of making our planet cleaner and more sustainable.

Nippon Gases' sustainable approach helps our customers reduce emissions and waste, reuse materials, and increase energy efficiency and productivity. Our aim is to combine the safe operation of our production plants with the important demand from the industry – securing reliable gas supply to support the economic recovery across all sectors.

The following services are also core activities:

A. Healthcare

At Nippon Gases we believe that the access to a universal and high quality health system is essential in a sustainable society. Nippon Gases Healthcare, our medical division, contributes to the health of the population by producing medical-grade gases and mixtures following European pharmacopeia. Medical oxygen, nitrous oxide (N₂O), breathing mixtures and helium are just a few examples of the most intensively used products in this sector.

Our innovative technologies are developed to complement the aforementioned gas products. With life expectancy increasing, homecare services are essential to guarantee the quality of life for our elderly population.

The first device for inhaled nitric oxide therapies, developed by Noxtec, has made it possible not only to monitor and manage the therapy in constant doses as the patient's respiratory flow changes, but also to improve the safe management of the device through remote control systems and automatic calibration.

Nippon Gases and Noxtec Development have joined forces to develop and strengthen a company dedicated to the design, production and distribution of state-of-the-art medical devices worldwide.

B. Digitalization

As a consequence of the pandemic, our digitalization strategy has significantly accelerated. Digitalization plays a very significant role in sustainable development, as the digital transformation of multiple sectors – especially energy, water and transport, amongst others – are determining factors in the management of climate change.

Our commitment to digitalization and innovation includes products for the remote control and monitoring of processes, and combustion analysis to improve efficiency.

Not only do we develop specific proprietary digital technologies for different markets to help our clients achieve their sustainability goals, but we are also enablers in advancing the electronics industry through a stable supply of high purity nitrogen and specialty electronics materials (EM's) and gases, as well as total solutions, as the EU has launched an initiative to achieve a 20% of world market share manufacturing microchips. Our company is implementing an expansion of production capacity in our electronics gases plant in Oevel, Belgium, to support this objective providing both reliable and high quality electronics gases and chemicals that are so essential for this industry.

We support our customers in this transformation through the installation of special piping for high-purity specifications (essential in the electronics industry), as well as related equipment including exhaust gas abatement systems and cylinder cabinets, among other high-tech elements.

C. Decarbonization and environmental initiatives

Europe has taken leadership in the world effort to reduce the global warming and climate change.

Nippon Gases is fully aligned with this European strategy and is focused on providing different solutions to our customers, to support their own initiatives in reducing their GHG (Greenhouse gases). For years, Nippon Gases' oxy-fuel combustion solutions have helped energy-intensive consumers improve energy efficiency in reducing fossil fuel consumption during their production processes. The use of Hot Oxygen Burner (HOB) technology and ScopeJet® Burners allows the use of fossilfree fuels, therefore having a direct impact on the reduction of CO₂ emissions in the production of aluminium, cement or metals, and many other products.

In other industries, such as glass production, our thermochemical regeneration process provides a creative and environmentally-efficient solution, reducing CO₂ emissions by up to 40% when compared to classic regenerative air furnaces, and 60% in comparison to classic air recovery furnaces.

Nippon Gases has the experience and services needed to control and improve the processes in wastewater treatment. Our Mizu[®] solutions combine the use of pure oxygen with equipment that improves oxygen dissolution.

Regardless of the type of industry, any aerobic biological treatment processes can be improved with the injection of oxygen – from increasing the capacity of wastewater treatment plants, to being able to treat more load (volume and/or chemical oxygen demand), eliminating odors, removing ammonia, and enabling seasonal intensive industries to fulfil environmental requirements.

Water treatment remains a significant application when it comes to sustainability. Our **Mizu**® 0₃ technology guarantees



the quality of drinkable water, replacing chemical-based solutions. This solution eliminates viruses and bacteria, allowing the reuse of treated water and contributing to the circular economy.

Furthermore, the use of CO₂ in this industry provides an efficient, safe and environmental solution, replacing dangerous acids and contributing to the objective of optimising natural resources – at a time when stable and potable water supplies are an increasingly pressing topic.

Capturing emitted CO_2 is key to achieving carbon neutrality, and Nippon Gases is actively engaged in all of these areas. We provide a variety of CO_2 capture solutions to our customers, proposing the most adequate recovery method according to flue gas characteristics and volume.

As part of our circular economy approach, transforming biogenic wastes into biogas via anaerobic digestion (AD) and upgrading it to biomethane has become an increasingly viable initiative to reduce natural gas consumption. Nippon Gases offers various solutions in this market, including a complete solution to liquefy or compress the biomethane and provide a green mobility solution to the vehicles of our customers.

> Oevel, Belgium

Expanding into **Total Electronics** Todd Kuroiwa

Electronics Business Director

As Nippon Gases advances in its goal towards a carbon neutral world, comes increased demand for new business avenues that implement more carbon neutral solutions. One such business avenue has been Electronics. Todd Kuroiwa, Electronics Business **Director**, explains the changing market landscape, how we plan to capitalise on it and what it means for our carbon neutral solutions.

The EU Commission has announced multi-billion euro programmes to boost electronics manufacturing in Europe, do you see a change in the market?

It is the so-called "EU Chip Act", which was announced in February 2022. Following the announcement, we have been increasing the number of new semiconductor fabrication investments by global chip manufacturers, as well as European-based manufacturers, to whom we have an already-established relationship supplying SSG (Semiconductor Specialty Gases). In addition to private sector's investment plan, most EU countries and investment agencies have been trying to get those new investments in their countries with whom we have been closely cooperating.

On the other hand, the "Dot-com bubble" happened at the beginning of the year 2000, which triggered downsizing of the electronics market in the EU. As a result, key materials supply chains - including SSG for the electronics market in EU - have been heavily relying on import from Asian countries and North America.

Now, market is looking for stable supply on key materials, meaning more domestic products are welcomed. We had set the European Electronics Business mid-term business plan in 2019, anticipating the steadily increasing electronics market in the EU. We also set our mission statement as "... to better satisfy customer expectations and closely follow the European Initiative on processors and semiconductor technologies". Thanks to the mid-term business plan, we had already invested in SSG production expansion and the new production plant in Oevel, Belgium, for supporting the increasing market demand towards 2030.

Is there any technological barrier to entering the electronic gases business?

No, I don't think so, because at NSHD group we have been a key player in the global electronics market as an SSG supplier since the 1970's - in close collaboration with key accounts. NSHD has SSG production plants in 6 countries (Japan, US, Korea, China, Malaysia, and Belgium) to supply SSG to the global market. We also have the capabilities to be potent manufacturers of SSG supply systems, purification, abatement, and on-site installation management as total solution providers to the electronics market.

In addition to this, NSHD has electronics R&D centres in Japan and the USA in order to follow future technological demands from the market. I am really confident in our future electronics business in Europe, because 1) the market is continuously growing, 2) we have the capability to follow increasing demand, and 3) we can leverage the NSHD group's extensive knowledge and technology. We are not only an SSG supplier - we are the partner of the electronics market to provide complete solutions.



Who in our clients' organisations needs to be involved in carbon neutral planning?

Semiconductor chips are key devices for all Carbon neutral activities, e.g. to materialise the so-called "Smart City" or "Smart Society" via DX, IoT, and Power management amongst others systems. Therefore, our client needs to be heavily geared towards carbon neutrality; mainly led by our procurement and dedicated sustainability team. I am always thinking as a partner of the electronics market, as through our SSG products we are indirectly contributing carbon neutral solutions.





2.2 Stakeholders' engagement

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

Our relationship with all stakeholders (employees, customers, shareholders, suppliers, communities, industry associations, and government and regulatory bodies) is based on the overarching need to ensure the sustainability of our business in all its different aspects, including the impact of our operations on the community and the environment.

In FYE2023, our internal stakeholder engagement activities focused - amongst other things - on our European employee pulse survey. Dialogue with external stakeholders centred on a number of important key issues, including sustainability across our supply chain, our activities for climate protection and Green Deal activities.



Our Sustainability Committee discusses our strategy with stakeholders who are experts in different fields.



Customers

- At Nippon Gases we approach our customers with innovative thinking and solutions to their most pressing operational challenges. Finding a valuable solution may become a partnership opportunity.
- The key sustainability concerns of our customers vary by business, but typically focus on how our products and technologies can help them improve resources and energy efficiency, and reduce their environmental impact through the reduction of GHG emissions.



Employees

- Nippon Gases is committed to a safe work environment where our employees can grow and thrive.
- We promote communications with our employees for continuous personal development and for sustainability initiatives.
- Nippon Gases promotes benefits that reward performance and provide opportunities for a healthy work-life balance, and engages employees in well-being activities.



Shareholders

- The way to serve our customers with excellence, develop and reward our employees, and support our communities, is to have a profitable company with satisfied shareholders.
- NSHD represents and channels its shareholders' interest. Through guarterly reviews we facilitate a two-way channel to align interests.
- We regularly report to NSHD through quarterly NGEH Board meetings, where a thorough review of the main business areas is undertaken.



Governments, regulators and associations

- All Nippon Gases' activities are ethical, transparent and in compliance with all legal requirements.
- Nippon Gases participates in the preparation and update of regulations through its membership of industry associations, which help to maintain open dialogue with local, regional and national authorities.



Suppliers

- Nippon Gases engages with suppliers proactively in order to promote their environmental and social responsibility as well as the governance bodies to ensure compliance in accordance with corporate ethics.
- Supplier periodic qualification reviews offer an opportunity to evaluate supplier performance as per Nippon Gases standards.



Communities

Nippon Gases is a good neighbour, committed to community engagement initiatives. See chapter 4.5 (Community Commitment).

2.3 Strategy

Industrial gases are, and will continue to be, an essential contributor in Europe's journey towards a more sustainable, carbon neutral society.

The strategy combines a global group, responsible for creating the most suitable solutions and the regional organisations, who are then responsible for implementing them across the world into our customers' processes. This is a key element of the new strategy, but so too are the technologies and innovation partners that will be required to deliver against it. We proactively seek out the best technology partners, whether through collaboration agreements to capitalise on synergies or through mergers and acquisitions, where we believe they bring additional value to our strategy.

So, the strategy is based upon five foundational pillars:

- **Greening Combustion**
- **Hydrogen Solutions**
- CO₂ Capture and utilisation
- **Circular Economy**
- **Digitalization**

Eduardo Gil Eleioste President of Nippon Gases IOMA Annual Meeting - Sintra, Portugal October, 2022 (IOMA) International Oxygen Manufacturers Association

The Nippon Sanso Holdings Group (NSHD) aims to realise a sustainable society and global environment through the industrial gases business. NSHD considers it our inherent mission to maintain our global environment in a sustainable manner for the future. In addition to this, the group will also address various social issues by proposing solution-based strategies through products and services that utilise its technological capabilities.

NSHD has set the main pillars for its development in a midterm management plan, titled 'NS Vision 2026', with the core of the campaign and group slogan being 'Enabling the Future'. The strategy of the mid-term management plan is structured across the group as a whole with five fields of focus, and through select business strategies pertaining to our four regional industrial gas operations (Japan, US, Asia & Oceania, and Europe) and the Thermos business.

(1) Sustainability Management: Focusing on continued reduction of greenhouse gases, reducing emission of waste products, and conserving water resources.

Exploring new businesses towards carbon neutrality, (2) "Providing value through business": Contribution to the reduction of greenhouse gas emissions in client industries, through environmental contribution products and technology enhancement with strategic partners.

Total Electronics: Enhancement of existing businesses (3) supplying the electronics industry (electronic materials gas supply, construction and installation of gas supply equipment and facilities) in response to growing global demand.

Operational Excellence: "Proactive mutual complementation and coordination": Sharing, expanding, and making the best use of individuals.

(5) DX Initiatives: Advancing business models through digital data coordination, analysis, and use": Creating new business value.



Respect for Human Rights, Safety and Security Operation and Corporate Ethics remanding as basic preconditions for the business of NSHD.

Our growth will be balanced between investment projects, applications and technology opportunities, as well as new opportunities to explore that which we have yet to.

Tax strategy

Nippon Gases' approach to tax matters is completely aligned with the group ethics and compliance philosophy. Its guiding principles can be summarised as follows:

- Strict compliance with local applicable laws and regulations.
- Advisors' guidance where complexity or uncertainty exists.
- Business customers and suppliers' alignment to ensure accuracy in transactional taxes.
- Solid cooperation with local tax authorities.

Since the nature of Nippon Gases' business is fundamentally local, we generate our income and pay our taxes in the 13 countries across Europe wherein we operate. In the limited cross-border transactions that we conduct, Nippon Gases' approach is always to comply with OECD transfer pricing guiding principles, such as the Arm's Length principle.

Our tax contribution in each country is substantial and similar in scope, with a total figure in Europe in the range of €260 million, and mainly includes Corporate and Value Added Tax but also other taxes (mainly Energy & Municipal). It is a significant contribution across the continent.

2.4 Corporate governance

Proactive. Innovative. Collaborative. Making life better through gas technology. Nippon Gases' philosophy and mission is simple and clear.

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

A pillar within our core values is sustainability, and our commitment and responsibility to this cause is embodied in the Nippon Gases Code of Conduct. The Nippon Gases Code of Conduct is designed to respond to the expectations of customers and our society at large, and represents the standard of conduct in which all Nippon Gases employees are expected to meet through their business endeavours.

In line with our philosophy, vision and values, we set the necessary guidelines and policies, define goals and targets on material issues as well as the governance structure, the sustainability performance indicators and the management of communication and stakeholder engagement plans ensuring that sustainability issues are integrated into our risk management systems.

We believe that good governance practices help to achieve long-term sustainability goals. Nippon Gases is in fact committed to upholding strong corporate governance principles and practices, which are essential to maintaining the trust of its stakeholders and achieving sustainable business growth.

Nippon Gases aligns sustainability reporting with current and emerging disclosure standards to ensure the group discloses relevant and meaningful data on sustainability performance. This includes compliance with obligations under EU Directive 2014/95/EU on non-financial reporting and its transposition in Spain. The NSHD group voluntarily aligns reporting with the Task Force on Climate-related Financial Disclosures (TCFD) guidance, the Sustainability Accounting Standards Board (SASB), and the Global Reporting Initiative (GRI). This report has been prepared in reference to GRI standards: Core option. Criteria for choosing specific GRI standards are based on compliance with Spanish Law 11/2018 and material issues. In cases where alignment was not possible, other standards aligned to our industry guidance or internal frameworks were used.



2.4.1 Governance structure

The governance structure of Nippon Gases is designed to ensure that the company operates in a transparent, accountable, ethical and responsible manner while delivering value to its shareholders.

Consequently, sustainability initiatives across all operating companies and support functions are coordinated at a group level and implemented autonomously in each region, under the responsibility of the local companies.

The role of providing oversight and direction for sustainability programs at a group level is played by Nippon Gases Euro-Holding's (NGEH) Board of Directors, who are committed to implementing the sustainability guidelines of its parent company and to define the main areas of focus - considered the pillars of our ESG strategy - as well as the policies, control systems and processes necessary to ensure the company vision is embraced by everyone within the organisation. In addition to this, Nippon Gases has established various committees to ensure effective governance, risk management and sustainability implementation - one of them being the Sustainability Committee.



Relationship with parent company

NSHD fully supports and cooperates with Nippon Gases in accordance with its Group Management Regulations. On a day-to-day basis, NGEH functions independently with autonomous management, financial, sales and other corporate responsibilities. Four NSHD executives have been appointed to the Board of Directors of NGEH, thus assuring the sole shareholder's direct supervision of the company's management.

NGEH's Board of Directors grants continuous alignment with its parent company; it reviews the company's plans, budgets, and objectives, and ensures compliance with laws, regulations and internal policies and that both the shareholders and other stakeholders' interests are protected.

Decision-making management

Nippon Gases' business activity requires deep knowledge of the markets in which the company is operating, and is imperative that business judgements, decisionmaking and oversight are based on expert understanding derived from the experience of working closely within the industry.

The Board of Directors, who are responsible for defining the correct level where different types of decisions must be made and delegating appropriately, make sure that the decisions taken are aligned with company goals, that all stakeholders are informed, and that the management team is aligned and accountable for prompt and efficient execution.

This is done through the approval of rules and policies which are designed to guarantee appropriate checks and controls, to ensure that decisions are taken after careful consideration of all relevant aspects and that they are ethical and comply with all rules and laws.

Strategic decisions are reserved for the Board of Directors, who have the authority to resolve transactions above a certain threshold, including those

regarding M&A and investments. The definition of the level of authority to approve decisions within Nippon Gases below the threshold reserved for the Board of Directors, is done through the ATA (Authority to Approve) system. Through the same system, clear powers for making key decisions are conferred upon regional general managers and functional executive teams within Nippon Gases.

To grant a proper evaluation of any decision and assure that the same can bring value to all the stakeholders involved, the ATA system requires the input from different functions, and defines the necessary reporting lines, to allow the Board to monitor the results of business activities and be timely informed of any relevant issue. The objective of the ATA Process is to achieve seamless business operation while ensuring that business decisions of a certain magnitude are appropriately escalated.

2.4.2 Highest governance body

Nippon Gases Euro-Holding Board of Directors

The NGEH Board of Directors, whose members are appointed by the sole shareholder, is responsible for making decisions regarding management policies and key matters related to business execution, which include formulating key management indicators and medium to long-term strategies, as well as supervising the execution of business activities.

The Board has oversight of key aspects of the governance structure in areas including director independence, appropriate board committees, board effectiveness, outreach to the parent company and alignment with parent company goals and long-term strategy, and adherence to a comprehensive sustainability program.

The Board of Directors implements the company policies, in accordance with the principles of the Code of Conduct, with a focus on our commitment to diversity and inclusion, safety, health, the environment, human rights, corporate citizenship, and the prevention of bribery and corruption.

Non-financial issues are a key component of Nippon Gases' values, culture and performance expectations. For this reason, we have established non-financial goals in the areas of safety, compliance, sustainability, human resources, productivity, strategy and integration.

The NGEH Board of Directors' composition is the following:



Yujiro Ichihara



- Manager of Business Planning Division and General Affairs Division, Taiyo Nippon Sanso Corporation
- 2008 Senior Executive Officer and General Manager of General Affairs Division
- Managing Director and General Manager 2010 of General Affairs Division
- Senior Managing Director and General 2012 Manager of Corporate Administration Division
- 2013 Executive Vice President, Director, and General Manager of Corporate Administration Division
- 2014 Executive Vice President and Director, with responsibility for Corporate Administration Division and Corporate Planning & Global Operations Division
- 2014 Representative Director, President CEO
- Current Chairman of the Board of 2021 **Directors, Nippon Sanso Holdings** Corporation



- Eduardo Gil Elejoste
 - 2008 CEO, Praxair España S.I.
 - 2016 CEO, Praxair Portugal S.A. President, Praxair Furoholding S.L.

2006 CEO, Germany and Benelux, Praxair

and Portugal, Argon S.A.

Praxair Euroholding S.L.

Euroholding S.L.

2004 CEO, Germany, Praxair Euroholding S.L.

responsible for Europe, Praxair España S.L.

- Chairman and President, TNSC Euro-2018 holding S.L.U. (now Nippon Gases Euro-Holding S.L.U.)
- 2019 Director TNSC, Chairman and President Nippon Gases Euro-Holding S.L.U.
- Current Director NSHD, Chairman and 2020 President Nippon Gases Euro-Holding S.I. U.



Alan David Draper Member of the Board

- 1993 Certified Public Accountant, Lumsden & McCormick, LLP
- 1996 Internal Auditor, Praxair, Inc.
- 1999 Financial Analyst and Subsidiary Controller, Praxair, Inc.
- 2000 Senior Financial Analyst, Praxair, Inc.
- 2001 Finance Manager, Praxair, Inc.

Praxair, Inc.

2002 North Region Controller, Praxair, Inc. 2004 Director Volume and Revenue Analysis,

2005 Director of Accounting & Operations

Controller, Praxair, Inc.

Vice President Finance & Operations 2014 Excellence, Praxair Surface Technologies, Inc.

2009

Vice President Finance, Praxair 2017 Euroholding S.L.

Technologies, Inc.

Chief Financial Officer, Nippon Gases 2018 Euro-Holding S.L.U.

Finance Director, Praxair Surface

Current Executive Officer & Chief 2020 Financial Officer, NSHD



Todd Kuroiwa

Senior Vice President, Matheson Tri-Gas Inc. Electronics Vice President, Taiyo Nippon Sanso (China) 2017

Director of Technology, Messer Nippon

Sanso GmbH & Co.KG

Electronics Marketing

& Co.KG

- Investment Co., Ltd. for Total Electronics
- 2019 Director Integration, Nippon Gases Euro-Holding S.L.U.
- 2020 Electronic Business Director, Nippon Gases Euro-Holding S.L.U.



Toshihiko Hamada

Member of the Board

- Joined the Nippon Sanso Corporation 1981
- 2002 Executive Vice President responsible for Specialty Gas Technology, Matheson Tri-Gas, Inc.
- 2005 Deputy General Manager of Semiconductor Gas Section of Electronics Division, Taiyo Nippon Sanso Corporation
- 2006 General Manager of Semiconductor Gas Section of Flectronics Division, Taivo Nippon Sanso Corporation
- 2010 Subordinate directly to General Manager of Flectronics Division and General Manager of Business Strategy Promotion section, Taivo Nippon Sanso Corporation
- 2014 Managing Director, Nissan Tanaka Corporation
- 2016 Senior Managing Director, Nissan Tanaka Corporation
- 2017 President and representative, Nissan Tanaka Corporation
- 2020 Director, Executive Vice President of the Taiyo Nippon Sanso Corporation (Aide to the president)
- 2021 Current Representative Director, President CEO, Nippon Sanso Corporation

Certified Accountant, Arthur Andersen

Senior Auditor, Deloitte & Touche BV

Manager Global IFRS and Offering Services, Deloitte SL Madrid Spain

Senior Manager Financial Accounting Valuation and Securitisation group,

Director Internal Audit, South/Central

Industrials Ltda (Praxair, Inc.) Rio de

America and Europe, White Martins Gases

Rotterdam, Netherlands

Rotterdam, Netherlands

Deloitte LLP New York, US

Janeiro, Brazil



Justin Corcho Maters



2014

- 2017 Director Merger, Integration & Divestiture, Praxair Inc. Danbury, US 2018
- Financial Controller, M&A and Special Projects Director, Nippon Gases Euro-Holding S.L.U. Madrid, Spain
- 2020 Current Vice President and Chief Financial Officer, Nippon Gases Euro-Holding S.L.U. Madrid, Spain
- 2023 Interim CEO Nippon Gases Deutschland GmbH



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Tsutomu Moroishi

84	Joined Nippon Sanso Corp. TI	he Thermos
	Company USA	

- General Manager, Corporate 1991 Communications, Taiyo Nippon Sanso Corporation
- 2013 Deputy General Manager, Taiyo Nippon Sanso Corporation
- Corporate Planning & Global Operations, 2014 Taiyo Nippon Sanso Corporation
- Corporate Officer, Executive General 2018 Manager, Global Operations, Taiyo Nippon Sanso Corporation
- Current Senior Executive Officer, Group 2021 Corporate Planning, Nippon Sanso Holdings Corporation



Wim de Raedt

1988	Compensation & Benefits Specialist Belgium, Holland, Germany, Praxair NV
2001	HR Manager Benelux & Germany, Praxair NV
2004	HR Director Germany, Praxair Deutschland Holding GmbH & Co Kg
2005	HR Director Germany & Benelux, Praxair Deutschland Holding GmbH & Co Kg
2008	HR Director Europe, Praxair Euroholding S.L.
2021	HR Director Europe & Member of the Board, Nippon Gases Euro-Holding S.L.



Laura Zanotti

- 1999 Italian Legal Counsel, Rivoira S.p.A.
- 2013 Italian Legal and Compliance Director, from 2014 responsible also for legal and compliance matters for Scandinavia, Praxair Scandinavia
- Italian Legal Compliance and Quality 2017 Director, Rivoira S.p.A.
- 2020 Additional responsibilities as Sustainability Champion for Italy, Nippon Gases Italia S.r.I
- 2022 Legal and Compliance Director, Nippon Gases Euro-Holding S.L.U. Madrid, Spain

2.4.3 Committees

The European Business Team (EBT)

As established by the NGEH Board of Directors, the European Business Team (EBT) meets, under the leadership of the European President, at least four times per year - once after every quarter, and often a fifth time for budgeting purposes and when there is a strategic plan review or for any other important specific purpose.

The EBT (mainly Regional Managing Directors and functional European Directors) reviews safety, legal and compliance matters, sustainability initiatives and SDG status, business results, business forecasts, investment proposals, risks and opportunities, HR matters and other issues requiring attention at any given time.

Compliance Review Board (CRB)

The Compliance Review Board (CRB), under the leadership of the Chief Compliance Officer (CCO), meets every quarter and as required. All managing directors report on their local CRB meetings and the CCO on all other compliance-related issues, including incidents/potential cases, precautions taken and training processes.

The members of the European CRB are the President of Nippon Gases, the Managing Directors of the local businesses, and the European Directors for Finance, HR, Legal and Operations. The CRB identifies and assesses risks unique to Nippon Gases, verifies measures aimed at reducing these risks, and reports on risks that have manifested as issues. The committee also periodically verifies the appropriateness of risk- management systems through risk-reduction activities.

Sustainability Committee

The Sustainability Committee, under the leadership of the European President and managed by the Sustainability Director, is formed by the Nippon Gases representatives of the functional leaders and meets quarterly. The Sustainability Committee is responsible for:

- Reviewing and making recommendations on strategy and commitments regarding Nippon Gases' sustainable development
- Coordinating with the NSHD CSO (Chief Sustainability Officer) when



establishing sustainable strategy, indicators and defining ESG goals and targets.

- Monitoring the performance of Nippon Gases' Sustainability KPIs related to SDGs, as well as compliance, safety, quality, supply chain, human resources, environmental, energy and community initiatives.
- Promoting and coordinating the publication of the annual Nippon Gases Sustainability Report.

Capex Committee

The Capex Committee, formed by the European President, the CFO, the Operations Director, the Electronics Director, the Engineering Director and other European directors as needed, meets monthly to review the approval of investment projects presented by the regional businesses.

Safety and Environmental Committees

The European Safety and Environmental Committees, under the leadership of the HSE Director, meet every quarter. Members of these committees are all Safety and Environmental Heads of the different European regions, and the HSEQ/ Sustainability Director.

The committees are responsible for the development and implementation of the European Safety and Environmental Plans. In addition, incidents are discussed, and corrective measures are agreed and initiated.

) 2.4.4 Governance performance

FYE2023 performance

The European economy has been slowly recovering from the impact of the Covid-19 pandemic, with very negative consequences impacting our business. During 2022, extremely inflated power prices have challenged our business and the company has conscientiously worked with customers and suppliers to manage the situation and reduce the impact to all stakeholders.

Nippon Gases has done a great job undertaking pricing actions, enforcing surcharges, and negotiating solid contracts to affect these headwinds, however, we also noted that our suppliers are experiencing the same conditions and we are undergoing pressure largely on our distribution costs and fixed costs. Our operating cash flow and working capital have improved significantly year-on-year and compared to pre-Covid levels, providing us with strong cash flow generation.

During the last fiscal year, the Ukraine war had a major impact on Europe as natural gasflows from Russia and prices were highly affected, resulting in extreme high energy prices. Such pricing actions pose an adverse effect on the economy and, potentially, on Nippon Gases.



Chivasso, Italv Nippon Gases' cash flow, liquidity, and balance sheet remain strong. We demonstrated excellent working capital during this fiscal year, mainly driven by strong collections and payment terms on our services.

Sustainability underpins our business strategy and is fundamental to our long-term growth. Nippon Gases is committed to minimising its environmental impact and improving its social impact, whilst executing on group strategy, and delivering best practices in both programs and processes.

Besides our company financial performance, in the setting of annual performance-based variable compensation targets and goals, the NGEH Board determined that selected strategic and non-financial factors will be considered critical to measuring our business success.

Based on management assessment of the degree of achievement in each goal, and considering their relative importance to Nippon Gases' long-term success, in April 2023 the NGEH Board determined that Nippon Gases' performance with respect to non-financial goals was favourable and awarded a positive adjustment to the variable compensation award determined by the financial goals.

2.5 Risk management

Nippon Gases' Board of Directors has overall responsibility for ensuring the appropriate risk management framework is adhered to; including the determination of the nature and extent of risk it is willing to take to achieve its strategic objectives. The Board has oversight of the group's operations to ensure that internal controls are in place and operate effectively. Management is responsible for the effective operation of the internal controls and execution of the agreed risk mitigation plans. However, all personnel at Nippon Gases should feel responsible for, and be empowered to take ownership of, risk management within their function and for their level of responsibility.



) 2.5.1 Roles and responsibilities

FYE 2023 performance

Nippon Gases has established a business-focused corporate governance system in which certain key management members are included in the 'Authorisation To Approve' (ATA) process.

Nippon Gases Euro-Holding Board of Directors

The role of the NGEH Board is to represent the shareholder and to promote and protect the interests of the company. The Board is specifically responsible for establishing the delegated limits of authority to the geographical and functional executive teams and attending to matters reserved for board decision-making. These limits are set out in the ATA Process.

The Board has ultimate responsibility for ensuring that:

- (1) The group risk appetite and tolerance is clearly articulated.
- 2 There are appropriate policies in place to manage risk and maintain internal controls, and that this policy allows businesses managers to operate appropriately within those boundaries.
- 3 A regular programme of audits is undertaken to test the adequacy of and compliance with prescribed policies.
- 4 Proper remedial action is undertaken to address areas of weakness. On an annual basis, the NGEH Board of Directors reports the outcome of its risk assessment analysis to the executive board of NSHD.

Delegation of authority

Through the ATA Process, the regional general managers and functional executive teams within Nippon Gases are given the authority to act within their authorised limits. They are responsable for:

- The implementation and coordination of risk management.
- The management of all risk factors within the strategic, operational and financial framework to mitigate and to reduce risks.
- Providing timely and accurate information about the risks that the company faces, as well as steps taken to ensure their effectiveness.
- The coordination of information flow and documentation relating to the risk management.



2.5.2 Internal framework

The group has an approved Risk Management Policy in place. This policy sets the framework for a comprehensive risk management process and methodology, ensuring a robust identification and assessment of the risks facing the group, including emerging risks. Enterprise risks are assessed and plotted on an enterprise risk map (with individual risk maps produced for each region and relevant function). This system ensures that the appropriate business practices are reinforcing internal control by clarifying decision-making authority and business processes, among other issues.

We have also established Compliance and Safety Risk Assessment, and Management Committees, with the aim of reinforcing compliance and ensuring the effectiveness of our internal control system.

In addition to our annual business risk assessment, at Nippon Gases, we have completed a three-point risk analysis which covers:

5

Employees and contractors

Every Nippon Gases staff member is responsible for effective management of risk, including the identification of potential risks. Management is responsible for the development of risk mitigation plans and the implementation of risk reduction strategies. Risk management processes should be integrated with other planning processes and management activities.

Managers are accountable for strategic risk management within areas under their control, including the promotion and training of the risk management process to staff.

It is the responsibility of all Nippon Gases employees and contractors to:

- Report any breaches of policies, laws or regulations to their supervisor.
- Report to their supervisor any perceived risks that may not be covered by existing risk management practices and policies.

Hürth, Germany

- Risks to the quality of our products and services.
- Environmental risks.
- Health and safety risks to our employees and to our processes (this review was conducted within the framework of the Seveso regulation and the national HSE regulations).

Manuals and standards

The Nippon Gases Management System is supported by the information documented in manuals in which we can find the development of activities (procedures) and the documents that report the results encountered (records).

2.5.3 Risk management model

The Nippon Gases risk management model can be summarised as follows:



The Nippon Gases Board of Directors discusses risk and considers the risk environment as part of wider Board discussions, including a review of the assessment of Nippon Gases' performance against its risk appetite, scenarios for assessment of viability and the outputs from the viability modelling. All risks are assessed for likelihood and impact against the group's business plan and strategy.

Goals of the risk assessment are to:

- Align risk appetite/tolerance and strategy.
- Link growth, risk and return.
- Enhance risk response decisions.
- Minimise operational surprises and losses.
- Identify and manage cross-enterprise risks.
- Provide integrated responses to multiple risks.
- Include all possible strategic and operational risks.
- Continue to build risk ownership culture and organisational capabilities around identification and evaluation of risks.
- Establish a regular cadence of risk management activities and updates.

The steps of planning and implementing a response strategy are determined by the individual regional and/ or functional leaders in conjunction with the European management team. The monitoring performance is generally a local/functional responsibility, whereby the key topics are also actively monitored at the European level.

In order to identify risks and assess their likelihood and potential impact, Nippon Gases performs an annual business risk assessment aimed at taking a comprehensive look at the risks faced as a company. These surveys are prepared by the managing directors of the different regions and the functional leaders, and result in a risk map for Nippon Gases, highlighting priority issues. Both strategic and internal operational risks as well as risks in the Nippon Gases value chain are evaluated.

This is a bottom-up survey of potential risks, and it specifically addresses a range of human rights risks such as employee safety, welfare and working conditions. Employee safety and welfare are part of our guiding principles and are always considered in Nippon Gases' risk assessment, since substantial management resources are allocated to this area. The results of these surveys are presented to the European Business Team, and potential risks related to fraud and corruption are an explicit focus. Afterwards, at a European level, a summary is made of the key risks, which are subsequently reported to the parent company.

Key controls and mitigations are documented, including appropriate response plans. Where risk treatments require time to implement, short-term mitigations are assessed and the timeline to risk mitigation and consequent risk acceptance discussed and agreed. Every principal risk has clear Management Committee oversight. As part of the risk management framework, potential emerging risks and longer-term threats are considered to identify new trends, competitor actions, regulations, governments' interventions, or business disruptors that could impact the group's business strategy and plans. These emerging risks are monitored within the overall risk framework as 'on watch' until they are re-assessed to be no longer a potential threat to the business or where an assessment of the risk impact over the next two to three years can be made, and appropriate mitigations can be put in place.

) 2.5.4 Risk identification

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Actions taken in FYE2023

- Strong management of fixed cost and procurement (strongly monitor cost increases).
- Timely reaction to developments in supply and distribution chains. -
- Pricing actions to offset the impact of increasing inflation and power prices.
- Continue to manage those matters within our control and monitor the development of those outside of our control.
- Receivable and cash flow management.
- Cyber-security awareness activities.

Strong management of fixed cost and procurement

Strongly monitor areas of cost increases and look for ways to avoid them. Further strengthen the overall procurement function and implement productivity initiatives to bring the cost base down.

Timely reaction to developments in supply and distribution chains

Through having close contact with our suppliers and customers, we were able to react in a timely fashion to any developments in the supply and distribution chains and thereby minimise supply interruptions for our customers.

Pricing actions to offset the impact of increasing inflation and power prices

Increased inflation, including power prices, has an important impact on our cost base. Through contractual pass-through clauses, temporary surcharges and specific price increases, these temporary and long-term additional costs are recovered.

Manage those matters within our control and monitor others

Continue to manage our business while keeping a strong eye on the matters outside of our control. It is difficult to influence (geo)political tensions, but being aware of the tendencies we are able to react to any expected changes in worldwide supply chains and other areas of importance to our business.

Receivable and cash flow management

Monitoring of outstanding receivables and client financial positions together with overall strong cash flow management.

Cyber-security awareness activities

Cyber-security activities were further strengthened with a focus on the creation of awareness and basic abilities that help to better distinguish suspicious cyber-security threats.

2.5.5 Climate risk

Climate risk is an important element that Nippon Gases evaluates as part of its annual risk assessment. As mentioned above, the development and use of lowcarbon technologies and renewables energies are at the core of our long-term strategic evaluation of business risks and opportunities.

At the cornerstone of the global strategy against Climate Change, we will find decarbonization. This path to net zero emissions will impact our clients and we expect that the major changes will occur beyond 2030.

As part of NSHD's support of the Task Force on Climate-related Financial Disclosures (TCFD) requirements, Nippon Gases performed a medium (2030) to long-term (2030-2050) financial information scenario analysis, with the overall outcome shared and evaluated with NSHD management. This assessment was used as an important input factor for setting the European medium-term (2026) non-financial environmental KPI's. The assessment evaluated both the estimated possibility and the estimated magnitude of each topic on a three-point scale, whereby an indication was also given to the overall importance of each topic.

2.6 Ethics & compliance

2.6.1 Internal framework

Our commitment to ethics and compliance is an essential component of our overall ESG strategy, which aims to create long-term value for all stakeholders, including customers, employees, and the wider community.

Nippon Gases has established policies, procedures, and practices that ensure the company operates in an ethical and lawful manner. Each employee, manager and director of Nippon Gases as individuals, as well as the group as a whole, strive to be ethical in all business endeavours, following and applying the Code of Conduct.

Our Code of Conduct outlines the standards of behaviour expected, summarising our core compliance values and principles. The Code of Conduct states our commitments to compliance and includes guidelines for ethical decision-making, conflicts of interest, bribery, corruption, confidentiality and respect for human rights. The Code of Conduct is fundamental in promoting compliance culture towards our business partners and stakeholders too, as evidence of our understanding of what it means to be a good neighbour in the community.



The Code of Conduct, available in different European languages in both print and digital versions, also explains what the reporting channels are for any potential compliance violation.

In fact, to achieve its goals of business integrity, Nippon Gases actively encourages employees to report any suspicions: they can anonymously (at their choice) report violations through several channels, both internal (management, HR or legal department, compliance champions) and external (a dedicated hotline and the e-mail address compliance@nippongases.com).

All reports and related discussions are treated with the utmost confidentiality and with defined completion times. In any case, we make sure that the persons involved do not receive any unfavourable treatment and are protected against retaliation. In this regard, a specific policy related to reporting and investigating possible compliance violations is in place.

Every year, a Code of Conduct recertification process is completed, to ensure the Code of Conduct is known and fully understood by all employees. Nippon Gases' Code of Conduct is supplemented by policies on specific topics, that are part of Nippon Gases' compliance program and on which compulsory trainings are organised, at minimum, every two years.

The mandatory training is focused on the following modules:

- Complying with Competition Law.
- Conflict of interest and antibribery. _
- E-mail management and document management including retention of documents.
- -Data protection
- Human rights

A thorough review of all compliance matters, including the defined compliance metrics, takes place every quarter through the local and European Compliance Review Boards' meetings.

2.6.2 Fair competition, anti-corruption and bribery

Nippon Gases is also committed to ensuring fair competition at all levels of the production and supply chain.

Nippon Gases firmly believes that new business opportunities should be obtained solely on the basis of the products and services offered, in compliance with all antitrust and fair competition laws. To this end, we are committed to safeguarding competition, and avoiding the exchange of confidential corporate information with other market competitors.

To ensure compliance in this area, Nippon Gases has developed a detailed policy and guidelines, conducts regular training, and broadcasts messages to remind employees of the importance of correct competitive behaviour. The guidelines mainly deal with who is allowed to communicate with competitors, on which topics, and how contacts with competitors have to be reported and reviewed.

Furthermore, to avoid any corruption and/or bribery cases, Nippon Gases has clear rules and protocols on making and accepting gifts, entertainment and sponsoring, setting clearly defined values.



2.6.3 Prevention of money laundering

Due to the nature of our business and the relationship with business partners, the risk of money laundering activities is not significant. To maintain sensitivity regarding this matter, the finance department sends out regular alerts.

2.6.4 Respect for human rights

Nippon Gases supports the spirit and meaning of the Universal Declaration of Human Rights, the United Nations Global Compact, and the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work, promoting respect for human rights in the workplace and the creation of adequate working environments.

With regards to this, Nippon Gases has published a Human Rights policy and a statement in accordance with the UK's 2015 Modern Slavery Act. We consider it essential to create and maintain a respectful and fair work environment, and to promote the respect of human rights in our supply chain - through our procurement procedures that require suppliers' qualification processes including specific checks in this regard and, in some cases, the obtainment of an undertaking from the suppliers to abide by Nippon Gases Human

Rights policy or confirmation of a commitment to human rights via their own policies.

Our suppliers must confirm their acceptance of our Code of Conduct and they they report their human rights policies to us. All this data is tracked by an IT system and suppliers are audited periodically.

NGE has tools to both identify and act upon actual and potential human rights risks for workers in its operations. The procedures on its supply chains and the services it uses also allows to reduce the risk of any Human Rights violation.

In January 2022, Nippon Gases was accepted as a participant of the United Nations Global Compact and commits to align operations and strategy with their 10 principles. The commitment

2.6.5 Extraordinary compliance initiatives

During this financial year we have conducted our mandatory bi-annual compliance training on the modules and topics above mentioned - 100% of the target employees population completed these trainings.

We have also organised an extended training on Social Media usage, that has involved more than 2,700 employees.

During FYE2023, the decision has been made to extend the training and recertification of our Code of Conduct to all of our employees. We are extremely proud for having been able to achieve this ambitious goal.

The promotion of our compliance program has also been done through the organisation of numerous training sessions on different topics, both locally and at a European level. An overall number of 93 trainings has been rolled out throughout the year. Additionally, we regularly send compliance messages to our employees, mainly through our company intranet, as a general and precautionary measure to raise awareness.

The output of our compliance program for FYE2023 are as follows:

- Confirmed incidents of ethics/corruption and/or anti-trust issues: 0
- Public legal cases regarding corruption and/or anti-trust matters: 0
- Reports of human rights violations: 0
- Confirmed cases of bullying/harassment: 0
- % of employees who have received training on the code of compliance: 100% of Nippon Gases Europe employees.

to our respect of human rights has been confirmed by the Chairman of the Nippon Gases Board of Directors, who has engaged to meet fundamental responsibilities in four areas: human rights, labour, environment and anticorruption.

This commitment is a clear sign of Nippon Gases' resolution to continue to make human rights principles an integral part of its business strategy, day-to-day operations and organisational culture.

2.7 Customers

2.7.1 Internal framework

Nippon Gases' managerial teams maintain their commitment to the safety, quality and environmental management systems already implemented, defining policies that are communicated to all personnel and ensuring to which they are understood and adhered.

Our main purpose is to provide a stable supply of quality products and services according to the needs of our customers – ensuring the specified quality requirements, optimisation of production costs and meeting agreed upon timelines.

At Nippon Gases, the way we do business is wholly governed by our Quality Principles of Business Conduct, which refer to the following main areas:

- Management focus on customers and stakeholders.
- Excellence of people and operations.
- Continuous improvement.
- Commitment of employees.
- Compliance with standards.
- Communication.

2.7.2 Customer relationships

Our aforementioned management systems (safety, quality and environmental) have established different communication channels in order to get continuous feedback from customers. These channels help to exhibit customers' requirements or complaints, as well as to implement an efficient administrative flow for the correct functioning of the business.

Customer complaints management

At Nippon Gases, we utilise a European information system that allows for the reporting and management of quality problems – from received customer complaints, or detected internal/suppliers' non-conformities of products, services or processes. Any Nippon Gases employee who either receives a comment, complaint or claim from a customer by any means of communication, or who detects an internal or supplier non-conformance, reports and registers it in the European information system as a quality incident. Incidents indicate what occurred, when, where and who the actors were, as well as the identification of the product, site, business area and application. This also includes an initial classification of the problem – communicated in advance to the interested parties of the organisation – for its appropriate management, together with a study as to what could've caused the problem, and actions to solve and avoid repetition.

All the quality incident reports are verified by the quality department for their final approval.

Quality management monitors, periodically, how the incidents were managed, the trend of the different type of the reported problems and complaints, its seriousness and recurrence in order to consider taking additional actions.



Average days of resolution of closed complaints



% Product out of spec/total complaints



% Complaint reports investigated and closed out within 90 days of the incident



	FYE2018	FYE2019	FYE2020	FYE2021	FYE2022	FYE2023
% Product out of spec/total complaints	2.98%	5.45%	5.54%	4.63%	5.53%	3.80%
Average days of resolution of closed complaints	90	62	55	39	30	71
% Complaint reports investigated and closed out within 90 days of the incident	61%	63%	60%	81%	90%	73%



WORKING BEYOND THE PRESEN

2.8 Supply chain

At Nippon Gases, we view our supplier base as an extension of our business. We are committed to working with suppliers who share our adherence to operating responsibly. Responsible procurement is a key aspect of our business values and it is how we ensure the reliability and longevity of our ability to operate.

Our supplier base provides us with distinct catalogues of equipment and services that enable Nippon Gases' efficient and effective production and distribution of products. Our extensive and interconnected supply chain is critical to the success of our business and includes manufacturing companies, carriers, distributors, and service providers.

2.8.1 Supply chain procedures

The most substantial positive impact on the environment comes when suppliers work on extending their commitment to responsible business practices, by integrating fair working conditions and sustainable practices throughout the supply chain; promoting increased corporate social responsibility.

Our evaluation of new vendors is attained by market reference checks and in some cases, reinforced by these methods:

- (1) Historical: Former suppliers with quality historical rate.
- 2 **References:** From other NSHD areas.
- **3** Audit: Direct inspection.
- 4 Samples/proof of concept/pilot: Directly tested by the impacted businesses.

Historically, there have been very few re-evaluations due to the extremely small number of critical non-conformities we have experienced.

Nippon Gases, has a system through which they receive feedback by means of customer satisfaction surveys, respective to each operational country. These surveys are managed by each of the countries' quality and customer service departments respectively, using questionnaires to better target groups of customers depending on the information needs regarding customer perception and market trends.

All our products are labelled according to EU 1272/2008 Classifications, Labelling and Packaging, which brought the Globally Harmonized System (GHS) into force in Europe. Safety Data Sheets are provided for all our products.

As a result of our risk assessment, sales to a customer or sales of a product for a specific application may be approved or denied accordingly.

Supply chain management

Sustainable supply chain management means engaging with suppliers proactively to promote increased Corporate Social Responsibility (CSR) and clean technologies; we are committed to operating responsibly in line with our values. Considerable progress has been made in integrating our key productivity initiatives – linked to sustainable development projects – incorporated into our plants, our business, and our systems. In turn, this will continue to increase our capability to execute and manage our supply chain operation more effectively, and expand its impact.

Supplier non-conformity management process

A non-conformance report implies that a product or service did not meet one or more requirements from Nippon Gases. These requirements can be defined by our customers, a regulatory body, or as part of our internal procedures – in every case, Nippon Gases employees report and ensure any non-conformities are registered within the European incidents database. This system captures what is happening when products and services are received at one of our sites, or at a customer location.

As we continue to improve the use of our new incident reporting tool, we have made a step change in our internal processes to include new incidents in addition to product or service specific defects, such as administrative and supply chain-related issues, enabling our team to improve other areas of the business to better manage our end-to-end process.

As part of the incident management system, nonconformities related to supplier problems are co-managed by the procurement departments to improve the behavior and control of the products and services received from them. Supplier non-conformities are also classified into three distinct categories:

1 Internal: If they occur "inside the fence" before the product leaves the factory or as the product/service is received.

- (2) External: Which means they were detected at the customer's site.
- 3 Safety-related non-conformities: Which are separated and closely followed.

Nippon Gases has, in each country, a system through which we receive feedback by means of customer satisfaction surveys. These surveys are managed by dedicated teams in the quality and marketing departments specific to each country, using questionnaires for a target group of customers depending on the information needs regarding customer perception and market trends.

The results of the surveys are internally evaluated and communicated to the interested departments in charge of the necessary actions, to correct or improve relevant products and services, according to customer perception.

Product safety

The safety of customers when using our products is paramount to the way we conduct business, and the Nippon Gases HSE manual includes a chapter that sets out all necessary requirements regarding product safety, covering the following areas:

- New product risk assessments.
- Product design safety management.
- Product hazard communications.

All our products are labelled according to EU 1272/2008 Classifications, Labelling and Packaging, which brought the Globally Harmonised System (GHS) into force in Europe. Safety Data Sheets are also provided for all our products.

As a result of our risk assessment, sales to a customer or sale of a product for a specific application may be approved or denied accordingly.

) 2.8.2 Responsible supply chain

We set ambitious standards for how we operate, and we expect our supplier partners to do the same. We choose to work with suppliers who provide a safe workplace and comply with all local regulations, who share our commitment to responsible use and the protection of the natural environment through conservation and sustainable practices, who protect and advance human rights, and who collaborate with us to achieve continued mutual remarkable results. The framework for supply chain activities is defined in the Nippon Gases procurement policy.

Across Europe, we utilise common selection criteria that's related to supplier requirements, as well as our commitment to environmental stewardship. This commitment not only improves our own environmental impact, but our vision as a whole also encourages us to focus on our key stakeholders – those who strive to shape an environment where we both encourage and support long-term responsible solutions in the market, by incorporating additional benefits to our business partnerships, as shown below:

- Innovation in the supply chain.
- More sustainable products.
- Reduced risk of legal non-compliance.
- Attracting more environmentally-aware customers.
- Improved productivity and efficiency.
- Inclusion of ESG (Environmental, Social and Governance) criteria in procurement procedures.

) 2.8.3 Supply chain innovation

Nippon Gases continues to provide economical and innovative solutions in four key areas – waste, water, energy, and fuel reduction – simultaneously promoting the development and use of low-carbon technologies as much as possible.

We are constantly striving to improve our processes; reducing our plants' energy costs (KWh) whilst working with partners who help us decrease our air separation plant costs by investing in designing highly efficient components and equipment, such as compressors, turbines, and intercoolers (these are just a few examples).

Furthermore, we are looking at distribution software suppliers with the capacity to assist in the reduction of fuel consumption, by reducing our tonne/km cost on an ongoing basis through the utilisation of state-of-the-art demand forecasting and routing algorithms.

Selecting energy providers to find the best balance in renewable energy sourcing, helps us to comply with the 'European Green Deal 2030' and 'complete carbon neutrality by 2050' commitments.

We perform supplier audits to review their performance as we continue to expand key suppliers' scope. Nippon Gases is implementing a new supplier portal to better understand the status of key initiatives, helping us to gain deeper insights as to where each initiative stands, and opening effective lines of communication with the people responsible for executing these initiatives in a bidirectional, effectual way. This improves our performance in all key supply chain functional areas, including those related to ESG (Environmental, Social and Governance). These recurrent assessments confirm the corrections of the non-conformities, thus improving overall supplier performance.



Lillo, Belgium





3. Towards a carbon neutral world

As the need to combat climate change intensifies, urgent actions are required to mitigate its negative effects on people and our environment.

The industrial gases industry plays an essential role in the journey **towards a carbon neutral world**, and as a key player within the industry, at Nippon Gases we place this goal at the top of our priorities. Nippon Gases believes in adopting an innovative, responsible and sustainable business acumen which stays true to our commitment to customers, suppliers, employees, and the communities in which we operate.

Through ensuring our own accountability in sustainable practices, and utilising our extensive knowledge alongside advancements in digitalization, we aim to continue doing our part towards a sustainable society and carbon neutral world.

The launch of 'Carbon neutral world', Nippon Sanso Holdings Group's first global initiative, saw Nippon Gases shift towards more carbon neutral solutions and industries; but this wasn't the only evolution within the business. Joaquín González-Blas Sánchez, Director Energy & Sustainability, José Ramón Calvo, Marketing Director Europe, José Luis Chesa, Director External Communications Europe, and Cesar Callejo, CIO, discuss breaching the industry with carbon neutrality, and utilising digital transformation to disrupt the status quo.



César Callejo Chief Information Officer



JGB

José Ramón Calvo Marketing Director Europe

José Luis Chesa Director External Communications Europe

> **Joaquín González-Blas Sánchez** Director Energy & Sustainability



How are our clients involved in the carbon neutral path?

[JGB] Sustainability is now widely known as the next major challenge since the abrupt change to digital, which disrupted usual business proceedings across the globe. For the environment and society, that's a very good thing. But it means that organisations must be ready for the change.

Top management not only sets targets, provides resources, and designs incentives for employees to promote sustainability initiatives, but also strongly influences organisational culture and company-wide decision-making processes through their commitment and leadership.

Today, most companies aim to decarbonize by 2050; it is a long journey, and we are taking our first steps. Companies are allowed to adopt independent reporting methodologies; therefore, sharing best practices with our clients during this learning phase will aid the process.



How many different approaches are there to carbon neutrality?

[JRC] In the industrial gases market, carbon neutrality can be achieved in a number of ways. One approach is the use of renewable energy sources to power industrial gas production processes. By replacing fossil fuels with renewable sources like solar or wind energy, carbon emissions associated with energy consumption can be significantly reduced or eliminated.

Utilising carbon capture and storage technologies is another strategy. In order to avoid their discharge into the environment, carbon dioxide emissions from industrial gas production plants are captured and stored underground.

Furthermore, the market for industrial gases can assist minimise or even completely eliminate greenhouse gas emissions through the use of low-carbon technologies and procedures like electrolysis or hydrogen fuel cells. These technologies make it possible to produce gases without using fossil fuels, which helps to offset carbon emissions.

What is the role of communications in transmitting the significance of carbon neutrality?

[JLC] Communications plays a crucial role in transmitting the significance of carbon neutrality for a sustainable business such as ours. It serves as a means to engage and inform both internal and external stakeholders; including customers, investors, regulatory bodies, the general public and our own employees.

Nippon Gases is the European forefront of Nippon Sanso Holdings Group's (NSHD) Carbon neutral world project - the group's first global initiative - and one of the primary roles of external communications is to raise awareness and educate stakeholders about the importance of carbon neutrality. Through press releases, public events, social media, and the Carbon neutral world website, we effectively communicate our commitment to reducing carbon emissions, and the positive impact it has for our clients and the environment.

Communications is pivotal in portraying a united global image for the entire NSHD Group, with Nippon Gases External Communications team having orchestrated the

What is the role of IT in digital transformation?

[CC] Although this is tied to the digital maturity of the company, generally speaking, Information Technology still plays a leading role in most of organisations.

Technology evolution and the rapid pace of change requires a continuous identification and review of existing and emerging technologies, where Information Technology departments are, in general, more

On the other hand, the more an organisation has matured in the digital arena, the more the business plays a lead role in it. Looking at Nippon Gases, I've seen a big change in the past years, where nowadays most of the units and functions are focused and considering new technologies as an enabler to optimise and improve business performance. This demonstrates the increased maturity of the company and the recognition of digital technologies as a key element in the overall business strategy.

[JGB] IT solutions come in handy across all aspects of the business, with digital transformation increasing process efficiency – with one example being sustainability reporting. Currently, sustainability reporting has no set format, it is based on standards, but new EU regulations will define the content and format more precisely in the future. These rules are always evolving and leaves some portions unknown. As soon as the legal framework is defined, we will launch the automation and centralise the collection and tracking of data across our organisation. IT solutions ensure data quality and validate data through consistency checks that broadly involve disclosure of a company's environmental, social, and governance (ESG) goals and communicating the company's progress and efforts to reach those goals. Alongside ESG initiatives, sustainability reporting includes financial elements in which IT intervention proves invaluable.



initiative's image and external strategy. By coordinating and implementing a global effort across all the Group's companies (including MATHESON, Taiyo Nippon Sanso Corporation and Nippon Sanso Southeast Asia & Oceania) communications proved - and still proves - to be a central tool in building rapport and credibility.

Furthermore, through sharing carbon reduction strategies, progress, and achievements, Nippon Gases demonstrates transparency and authenticity. By providing evidence of our carbon neutrality efforts, we can gain the trust of customers and investors who seek to align themselves with environmentally responsible organisations, and by providing clear and compelling messaging, we can highlight how carbon neutrality aligns with their values and demonstrates our commitment to combating climate change.

How do you measure the success of a digital transformation project?

[CC] Considering the wide range of technologies introduced in the company, there's no unique metric that allows you to specifically measure success.

Some technologies are easier to measure, such as the implementation of a new network technology or the introduction of a new collaborative platform, where you see a quick and direct impact - bandwidth increase and performance in the case of network, or increase in the usage of the application and mitigation of business disruption - as we saw during the pandemic in the case of Microsoft Teams.

When it comes to Business Applications, success criteria can become more complex, as depending on the technology introduced, criteria can be quantitative, qualitative or a mix of both.

Examples of quantitative success criteria of recent technologies would be the new technology on truck routing optimisation, where the key performance indicator (KPI) is defined as a specific percentage of distribution cost, or a technology in the procurement area, where the indicator is based on a specific percentage of reduction in spend.

If we move to other technologies, especially those focused on people (e.g. a new Intranet), where the main goal is to increase collaboration, employee engagement, etc. the success criteria is defined as a combination of quantitative (normally usage) and qualitative, based on feedback from the organisation.

It seems that a lot of carbon neutrality targets are still far down the road (2030, 2050, etc.). Why is this such a relevant subject now?

[JRC] Future carbon neutrality goals will be important because of the pressing need to combat climate change and its negative effects. Although the goals may seem far off, they provide a crucial roadmap and timetable for governments and organisations as they move towards a sustainable and low-carbon economy.

Since greenhouse gas emissions, particularly carbon dioxide emissions, are the main cause of climate change, there is currently a lot of attention being paid to carbon neutrality. It is essential to keep global warming far below 2 degrees Celsius, as outlined in the Paris Agreement, in order to lessen these effects.

[JLC] Carbon neutrality targets provide a clear and measurable goal that captures public attention and helps raise awareness about the pressing need to address

How does an organisation establish GHG emission reduction targets?

[JGB] Organisations usually adopt a systematic approach when setting goals for reducing greenhouse gas (GHG) emissions. To measure and comprehend their current emissions rate and impact, they first carry out a GHG inventory. This inventory includes Scope 1 emissions (direct emissions), Scope 2 emissions (indirect emissions from purchased electricity), and occasionally Scope 3 emissions (indirect emissions from the value chain).

Then they set reduction targets in line with their sustainability goals. These objectives could be absolute (achieving a particular emissions reduction) or intensity-based (emissions reduction per unit of output), or they may be deadlinedriven; such as setting a goal to reduce spending by a certain percentage by a certain year.

Emissions are regularly monitored, reported, and verified to help track goals and pinpoint areas for improvement. Organisations may modify their aims when conditions change to reflect shifting priorities, technology improvements, and stakeholder expectations.

climate change. By setting ambitious targets, governments and organisations can engage citizens, businesses, and communities in undertaking sustainable practices, encouraging behavioural changes and mobilising collective

Effective communication is essential not only for sustaining collaboration in achieving these targets but stakeholders. This, in turn, enables us to advocate for more robust climate action, promote increased collaboration with other industries, and accelerate the global adoption of sustainable practices. By effectively communicating our efforts and progress, we can establish our leadership position, build credibility, and inspire others to join the cause of combating climate change.

3.1 Climate change

Nippon Gases overtly aware that global warming and climate change are some of the greater challenges of our society. We aligned with the targets of the Paris Agreement and, as a European-based branch, the Green Deal (with the fit for 55 targets and regulations integrated in our operations).

Our interactions with the Earth's climate are focused on:

- Reducing the direct and indirect Greenhouse Gas (GHG) emissions of the products and services we supply.
- Contributing to avoid the GHG emissions of our clients through our proprietary technology and products.

) 3.1.1 Greenhouse Gas emissions

For years, we have been implementing initiatives focused on the three main areas that impact our GHG emissions: energy consumption at our production plants, emissions from our transportation fleet, and GHG emissions related to the utilisation of our products.

We are following the Scope 1 and Scope 2 categories, and Scope 3 according to the GHG Protocol Corporate Value Chain Accounting and Reporting Standard for the calculation and reporting of emissions.

Scope 1 relates to the direct emissions generated by the facilities and equipment, mostly by burning fuels such as natural gas, and diesel for our transportation.

Scope 2 emissions are the indirect emissions that occur as a result of the consumption of third-party energy, such as electric energy and steam.

Scope 3 encompasses all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

During FYE2023, scope 2 increased due to emission factors from the suppliers, as the high price of natural gas has increased the utilisation of coal for power generation. In addition, some regions reduced the redemption of GOs as the cost was 30 times higher than the previous year. Indirect emissions from electricity consumption are calculated 'marketbased', meaning that the specific emission factor of each power supplier and GO redemption are considered. As a consequence, if a supplier does not provide its emissions factor, the country residual mix is used as default.

Nippon Gases accounts for 100% of GHG emissions over which it has financial control. It does not account for GHG emissions from operations in which it owns equity but does not have financial control over. This criteria is applied throughout the NSHD organisation as a whole, from the baseline year to current data.



Scope 3 Calculations	FYE2022	Thousand tonnes CO2e
Category 1	Purchased goods and services	187.516
Category 2	Capital goods	86.991
Category 3	Fuel and energy related	45.895
Category 4	Upstream transportation	NA
Category 5	Waste generated in operations	0.066
Category 6	Business travel	NA
Category 7	Employee commuting	NA
Category 8	Upstream leased assets	NA
Category 9	Downstream transportation and distribution	57.095
Category 10	Processing of sold products	NA
Category 11	Use of sold products	888.291
Category 12	End-of-life treatment of sold products	NA
Category 13	Downstream leased assets	53.032
Category 14	Franchises	NA
Category 15	Investments	NA
Total		1,318.89

Nippon Gases Europe Emissions $CO_2e\%$ vs FYE2023 (SCOPE 1 + 2)



 Nippon Gases Europe Emissions CO₂e ---- Target FYE2026 tonnes (scope 1+2)

CO ₂ e emissions in thousand tonnes								
	FYE2022	FYE2023						
Scope 1	63.80	67.46	84.60	63.47				
Scope 2	1,360.38	1,037.68	810.17	854.14				
Europe Emissions CO2e tonnes (Scope 1+2)	1,424.18	1,105.13	894.77	917.61				
Scope 3	NA	1,474.96	1,505.06	1,318.89				

Natural gas-burning emissions

The main contributor for direct emissions in our facilities are the emissions resulting from burning natural gas in our HYCO and ASU facilities as a heat source. Energy saving initiatives have led to a reduction of emissions in the recent years, and we expect that in a few years the availability of biomethane will lead to a substantial reduction of these emissions.

Emissions related to electrical consumption

Electrical systems is the most effective sector on the path to decarbonization, securing Power Procurement agreements from renewable generators and the redemption of Guarantees of Origin are the best way to reduce emissions. Additionally, during this fiscal year we started multiple self-generation projects; all of them implementing mounted rooftop photovoltaic solar panels that further aid in reducing emissions.

Emissions related to transport

Transport trucks and ships are mostly equipped with engines burning fossil fuels. The increasing production of synthetic carbon-free fuels and biofuel will lead the utilisation of blends with less specific emissions. In the long term, hydrogen and electrification will also play a significant role in decarbonization.

ight) 3.1.2 Carbon neutrality

Helping customers to reduce GHG emissions through our solutions and technology is central to our overall strategy in achieving carbon neutrality. Nippon Gases' commitment to the reduction of GHG emissions does not stop at the gate of our plants – the goal is to achieve, and exceed, customer avoided emissions when compared with the company emissions according to Scopes 1 and 2.

Following NSHD guidance, the avoided emissions calculation is limited to steel manufacturing, welding, and new refrigerants. The reason to exclude other applications is the large range of the specific savings from one customer to another.

Tonnes CO2e:



Greening combustion processes

Beyond reasonable doubt, the single largest share of CO₂ emissions is related to the combustion of fossil fuels. Our technology provides our customers with a more efficient solution, reducing fossil fuel consumption and enabling the use of alternative, fossil-free fuels. Each customer is unique and we provide solutions that start with a simulation process and end with a tailor-made solution that combines specially designed burners, gas control skids and the tracking of main parameters that enable customised reports according to customer requirements.

Digitalisation

Using either the MiruGas® or SansoScan® platforms contributes to the optimisation of combustion processes. In this way, carbon emissions are reduced, helping our customers to meet their environmental requirements whilst keeping their production costs competitive.

Hydrogen in combustion

Through the development of specially designed burners that can be mixed with fossil fuels, we can drastically reduce CO₂ emissions. In the case of green hydrogen, our burners provide a flexible alternative that guarantees optimum combustion conditions according to the available renewable power fluctuations.

Circular economy: Transforming wastes in valuable products

Through our highly specialised wastewater treatment team, we contribute to the reduction of CO_2 emissions by replacing mineral acid with CO_2 recovered from waste streams.

Highly efficient oxygen dissolving technology reduces electrical energy when compared with traditional oxygenation methods, like aerators, in biological water treatment plants. Furthermore, this technology provides more flexibility and efficiency, allowing seasonal peaks of highly contaminated water.

Thanks to our solutions, millions of cubic metres of wastewater have been treated and either released to water sources or recycled, always fulfilling environmental standards.

In light of this, the valorisation process continues: sludge from wastewater treatment plants, organic waste from the food industry, and waste landfills through an AD process transform the waste in biogas that, after an upgrading process, produces both biomethane and 'BioCO2'. Biomethane can replace fossil fuels in mobility applications either as BioLNG or BioCNG, can be injected into the grid, or used as a source of green/low-carbon hydrogen using an onsite generator.

Our specialised teams provide the most suitable technology to upgrade biogas and propose to our customers the best valorisation solution for biomethane products.

The utilisation of waste streams from fertilisers and hydrogen plants to produce CO₂ is also a clear example of the circular economy. Through a cryogenic process, the CO₂ is captured and purified to be used in multiple applications. At Dormagen, the CO₂ waste stream from a fertiliser plant is chemically converted to CO and delivered to an adjacent chemical complex to manufacture new products.

New refrigerants

Refrigerant gases continues to be a shifting landscape as environmental compliance evolves, and Nippon Gases has introduced a range of new products and initiatives in this area, including:

- The introduction of new low-GWP (Global Warming Potential) refrigerants reduced the environmental impact of greenhouse-effect gases.
- Contribution from alternative refrigerants for lowtemperature application, such as R448A, R449A and R452A, which are substitutes for high-GWP gases such as R404A and R507.

Onsite Plants

Onsite customer units permit the reduction of the product transportation, and consequently, the emissions from trucks.

As an intensive energy user at our production plants, efficiency has a direct impact on GHG emissions. Our efforts are based on productivity programmes that contribute to reducing waste, improving plant performance, optimising energy consumption and minimising product losses during the different production steps and unscheduled plant shutdowns. We have a robust programme promoting productivity initiatives that is part of our business plan and has a set quarterly review and follow-up procedure.

As previously described, product transportation is a big contributor to GHG emissions. To mitigate this, we have put in place specific programmes that help to optimise transportation by adapting our transport to customer patterns and avoiding unnecessary km driven; reducing fuel consumption per unit of delivered product.

To reduce the consumption of fossil fuels, we are replacing diesel vehicles for natural gas-fueled alternatives on a caseby-case basis. These alternative fuel sources mainly consist of biomethane, derived from the upgrading of biogas produced through the anaerobic digestion (AD) of biogenic wastes.



3.2 Environment management

For us, a harmonious relationship between people, society and the planet best describes our working culture – it's how we strive to work today, and every day.

Internal framework

In its European Health, Safety and Environmental Standards Library, Nippon Gases devotes a full section to its policies in this vital area, including: environmental management responsibilities, the environmental management system, environmental key performance indicators (KPIs), as well as taking on board emerging regulations and basic training for our employees. This is the foundational framework for Nippon Gases' environmental activities.

All our environmental and energy-conscious efforts increase eco-efficiency - preventing pollution and reducing waste are a basic requirement for every job and workplace.

All our environmental and energy-conscious efforts aim to increase eco-efficiency, which entails the basic requirement for every job and workplace to prevent pollution and reduce waste.

To achieve this, the Environmental Guiding Principles of Nippon Gases demand that management on every level leads Nippon Gases along an ethical pathway that increasingly benefits society, the economy and the environment, whilst adhering to the following principles:

- To lead our companies in an ethical way that increasingly benefits society, the economy, and the environment.
- To design and develop products that can be manufactured, transported, used, and disposed of or recycled safely.
- To work with customers, haulers, suppliers, distributors and contractors to foster the safe and secure use, transport and disposal of chemicals, and to provide hazard and risk information that can be accessed and applied in their operations and products.
- To design and operate our facilities in a safe, reliable and environmentally sound manner.
- To promote pollution prevention, minimisation of waste, and conservation of energy and other critical resources at every stage of our products the lifecycle of our products.

A world of risks and opportunities

At Nippon Gases, we drive actions that reduce the impact on the global environment and prevent pollution, while compliying with local regulations. Due to the nature of our

production, we actively monitor and minimise any and all environmental risks. Additionally, all legal requirements and internal standards to mitigate environmental risks are followed.

Our main opportunities are in the reduction of energy consumption, water and waste, as well as improvements in transport optimisation, where Nippon Gases also participates in and sponsors many initiatives promoting low-carbon activity.

Environmental Management System (EMS)

Nippon Gases has established an Environmental Management System (EMS) to continually improve its environmental performance and to meet regulatory requirements whilst minimising its environmental impact.

This comprises:

- Nippon Gases' Environmental Policy.
- European Health, Safety, and Environment (HSE) management system, applicable to all operations and aligned with ISO 14001.
- Implementation of ISO 14001 in the main operational locations - current 74% implementation.
- Employee training based on job functions.
- Risk assessment processes for both processes and products.
- Fulfilment of regulatory requirements.
- _ HSE assessments conducted by our HSE assessment team.
- Environmental performance review on a national and European level.
- Internal reporting and review on a monthly basis.
- External reporting on environmental performance through our Sustainability Report.



Environmental compliance

In every region there is a Health, Safety, and Environment (HSE) organisation in which a dedicated environmental expert deals with all specific environmental issues. In addition to this, our country environmental leaders, the European HSE and our Sustainability Director meet once per quarter at the European Environmental leaders meeting, facilitating further development of Nippon Gases' Environmental Management System (EMS) to be coordinated at the highest level.

Environmental compliance is monitored on a country level, with the local HSE organisation performing HSE assessments that review compliance with permits. (In chapter 4.4 the HSE assessment program is described).

Nippon Gases' employees are actively involved in the different working groups and councils at the European Industrial

	FYE2019	FYE2020	FYE2021	FYE2022	
HSE assessments	13	15	9	14	

What is Nippon Gases' environmental impact?

There are several areas in which the company's current activities could impact the environment.

The process of air separation and of filling cylinders are both environmentally friendly processes; the main raw material is ambient air, and Scope 1 emissions are minor. Waste generation is also minimal and the water within the ASU is only used for cooling purposes, with no external contaminants introduced into the water stream, and mainly recirculated in a semi-closed loop operation.

The main emissions of note are related to the use of electrical energy in our plants and fuel for the distribution of our products with trucks (for energy analysis see Energy management, chapter 3.3).

The focus of Nippon Gases is to continue improving its existing facilities, with new installations always engineered with the best available technique (BAT) to minimise emissions.

Biodiversity

Most of our production sites are located in industrial areas, so the impact of our activity on the biodiversity is not significant.

The major projects under development are related to CO2 recovery from biogenic origins, which will allow for the replacement of volumes from fossil fuel origins.

For all major capital projects, we evaluate their environmental impact to preserve the ecological health of the place or region.

Next year, we will develop a strategy to understand the impact of our activity on biodiversity and the path to reduce it if there is any significant impact.

Gases Association (EIGA), which oversees the maintenance and adherence of environmental regulations. In the countries where a national gas association exists, Nippon Gases is also actively involved. In FYE2023, no significant fines or nonmonetary sanctions for non-compliance with environmental laws and/or regulations were received.

Environmental assessments are performed on facilities which might have a major impact on the environment, checking the compliance of the assessed facilities according to internal standards and regulatory requirements. No serious breaches were detected. Sites such as small warehouses or logistics centres are not included in the environmental assessments program. In addition to these European assessments, the local HSE organisations perform additional environmental audits, on top of the regular audits from the external ISO 14001 certification body.

3.3 Energy management

Our efforts to contribute to the prevention of global warming are through the optimisation of energy and water consumption at our production facilities, the reduction in transport of our products, and by selecting energy providers that promote renewable energy sources and, therefore, set us on the path to a carbon neutral industry.

At Nippon Gases, energy is one key resource in the manufacture of our products and hence, is also at the centre of our initiatives to optimise its utilisation as we bid to combat climate change by helping to mitigate global warming.

In this section we will describe the main processes through which we manufacture our products, how they are delivered to the end customer, and our various initiatives to optimise energy management in these activities:

- Energy consumption overview.
- Air separation process to produce the air gases.
- HyCO units. Production of H₂(hydrogen) and CO (carbon monoxide).
- CO₂ liquefaction and purification process.
- CO₂ shipping. A unique Nippon Gases transportation mode.
- Productivity through cost reduction projects. Describing how Nippon Gases maintains its facilities at their optimum operation mode.
- Liquid products transport optimisation. Transport is the second-largest source of GHG emissions.
- Energy Management strategy.

Energy consumption overview

For the production of Nippon Gases' core products, the air gases (oxygen, nitrogen and argon) as they are known, the production of hydrogen and CO (carbon monoxide) and the liquefaction and purification of CO₂, the main resource is electricity.

CO₂ emissions attributable to the use of electricity used for this purpose account for 89% of total Nippon Gases CO₂ emissions.

Total electric energy consumed by Nippon Gases in all Europe entities in FYE 2022: 2,594 GWh.

Energy		Electr	ic GWh	Energy Thermal Energy Terajoules*							
	FYE2019	FYE2020	FYE2021	FYE2022	FYE2023		FYE2019	FYE2020	FYE2021	FYE2022	FYE2023
Europe	2,795	2,679	2,531	2,792	2,594	Europe	1,174	1,211	1,030	1,349	945

(*) Thermal energy: Natural Gas + Steam

Air separation process

Air separation units (ASUs) produce oxygen, nitrogen and argon by separating atmospheric air into its constituent gases.

Air is first compressed, and then cooled almost to the point where the gas liquefies, after which it is ready for the distillation column. Here it is separated into its major components using a thermal distillation process which obtains the basic components: nitrogen, oxygen and argon.



The products of the ASU are mostly in their gaseous phase. These products could be compressed and distributed by a pipeline system to our network of customers, which provides the lowest energy supply mode. 72% of our ASU molecules are supplied by pipeline to our end customers, therefore avoiding the additional processes of liquefaction and transport.

Alternatively, these gas products can be liquefied by means of a liquefier system, with a pure nitrogen primary circuit that transfers the required cold to the air gases, which are then stored at cryogenic temperatures in their liquid state.

These cryogenic liquid products are transported by our insulated trailers to our end customers. This secondary process has the additional energy usage of fuels used in the transportation.

One alternative to optimise the supply to our end customers is investing in a dedicated onsite unit which would match the capacity and quality required by the customer's process. Most of these units run unmanned, remotely controlled by a Remote Operation Centre (ROC). In this case, the energy otherwise devoted to transport is saved.

For smaller applications or when the quality of the product requires a very unique specification, the product can be delivered to the customer in cylinders containing compressed gas.

All of the above processes are subject to optimisation and, therefore, we are taking steps to reduce the energy consumed at our production facilities, by continuously analysing the efficiency of the processes and promoting energy-saving measures, and striving to increase the efficiency of product transport.

Efficiency MWh/Eq O2 Tonne vs FYE2019

ASU efficiency	FYE2019	FYE2020	FYE2021	FYE2022	FYE2023
MWh/ Ton 02eqv ASU vs FYE2019	100%	104.2%	103.1%	100.8%	100.7%

HyCO units: Production of H₂ (hydrogen) and CO (carbon monoxide).

There are several technologies to produce hydrogen, and the current market demand is to focus on those with a lower carbon footprint impact.

The most prevalent process still today is via the SMR (steam methane reformer), which produces H₂ and CO. The main raw material is natural gas, and electricity and water are at a much smaller scale. Natural gas, composed mainly of methane (CH₄), together with steam reacts inside a furnace with catalyst-filled tubes. A synthesis gas (syngas) composed mainly of hydrogen and carbon monoxide is produced. A secondary reaction step produces the syngas, composed mainly of hydrogen and carbon dioxide.

Hydrogen production through electrolysis is based on the dissociation of water molecules (H₂O) using electricity, to extract hydrogen and oxygen molecules. When the electricity used for the electrolysis is from a renewable origin, the H₂ produced is considered carbon-free.

Another mode of H₂ production is by purifying a by-product from other

industries, such as chlorine production. In this case, the energy resources are minor and so too is its carbon footprint.

In all the above modes, the hydrogen is purified and pressurised in gaseous form and delivered to end customers mostly transported via tube trailers.

CO₂ liquefaction and purification process

The atmospheric gases - oxygen, nitrogen and argon - are present in the air we breathe. The source is unlimited and is available wherever we need to capture and use it. In comparison, the sources of the 'process gases' such as carbon dioxide (CO₂) are limited to the location and availability of the sources.

The main source for the CO₂ that we process and sell is a by-product of another industry. In Europe, the largest source is agricultural fertiliser production (ammonia producers), followed by bioethanol production and the SMR process.

CO₂ plants take a raw gas stream from the source plant, which is then compressed, purified and liquefied before it can be delivered to our

In FYE 2023, the consumption of energy per produced unit by our air separation facilities improved versus last year, although the operation at partial load does not improve efficiency.

customers. As a practical consequence, the required CO₂ purification and liquefaction facilities are located close to the raw gas source and the distribution network plays an important role in delivering to customers.

In FYE2023, the consumption of energy per produced unit by our CO₂ facilities improved slightly versus the previous year. This excess of consumption was due to the shortage of CO₂ raw gas supply at the sources due to the natural gas high price, running in less efficient mode.

The actual molecules of CO₂ that are marketed do not constitute any additional 'carbon footprint value' and, in our report, are considered in the Scope 3 boundary. Under the terms of the European Union Emissions Trading Scheme (EU ETS), carbon dioxide is always counted as part of the emissions from the source plant - for example, the fertilisers production plants.



CO₂ shipping

As the CO₂ source plants are remote in relation to some markets, it is necessary to transport relatively large quantities of liquid CO₂ to those markets to balance production capacity with market demand.

Nippon Gases owns and operates a fleet of three CO₂ tanker ships. Each ship can deliver a cargo of between 1,200 and 1,800 tonnes of liquid CO₂ per trip. This unique mode of distribution ensures a more reliable supply of CO₂ to our customers.

km driven in Europe for all products	FYE2019	FYE2020	FYE2021	FYE2022	FYE2023
Europe	95.4	94.9	86.6	89.7	84.7
% Bulk km	57%	59%	60%	62%	63%
% Pag Km	27%	26%	27%	27%	27%
% HomeCare km	17%	15%	12%	11%	10%
Km/Ton Liq vs FYE2019	100.0%	102.4%	101.0%	99.7%	104.3%
Km/Ton Liq vs FYE2019 Excl CO2	100.0%	103.1%	100.7%	97.8%	97.0%
Km/Cyl vs FYE2019	100.0%	100.3%	103.0%	98.9%	95.7%

• CO₂ liquefaction plants

CO₂ terminals

— Routes



Transport of liquid products optimisation

When it comes to the transport of air gases molecules produced at our main air separation facilities, 62% is distributed by pipeline, while the remaining 28% is distributed in liquid mode to end customers.

The transport of these liquid products, plus the additional liquid CO_2 , is performed daily by trucks which drive circa 54 million km/year.

These deliveries are performed based on customer orders, and also by utilising forecasts of customer requirements based on telemetry installed at customer tanks. A proper analysis of customer consumption forecasts provides a dual optimisation opportunity, to both maximise the delivered volumes and minimise the mileage.

The average milage per ton of bulk product supplied has decreased for second year, without Liquid CO₂.

The ratio milage for bulk transportation was impacted by the CO₂ crisis. The curtailment of ammonia plants due to the peak natural gas prices has limited the sources for CO₂. As a result it was needed to deliver the CO₂ form longer distances to the Clients.



Productivity: Cost reduction projects

Nippon Gases is further focusing its Cost Reduction Programme to reduce the consumption of natural resources, such as fuels, water and energy, in particular at air separation facilities, by replacing ASU components with new high-efficiency upgrades and optimising end-to-end facility process control to better reflect market demands.

We have established a Cost-Reduction Group as a sub-section of our productivity programme across the European business. The Cost-Reduction Group promotes optimisation in bulk production by identifying processes subject to improvement, defining the solution, and facilitating the execution of projects which result in a more efficient use of our natural resources

In FYE2023 we developed 136 cost reduction projects with a CAPEX close to €3 million that accounted a reduction of 17,800 tonnes of CO2eq. We also have focused on our packaged business by working in areas such as:

- Improving our processes by automation where machines, equipment and people have strong interaction such as product sorting inspection and picking together with its plant movement. New layouts already designed.
- Moving from push to pull system via better plant scheduling solutions.
- Optimisation of our distribution process by better inventory management.
Energy management strategy

Energy management is performed at a country level, due to specific national regulations and existing market environments, with the aim of adapting energy supply contracts to our customers' consumption profiles, while optimising the efficiency of our manufacturing processes.

Energy providers allow the option to purchase a Guarantee of Origin (GO) certificate, allowing our facilities to manufacture gases by using certified renewable energy. Nippon Gases has started a strategy to increase its usage of renewable energy through these GO certificates as well as dedicated contracts for renewable energy, also knowns as PPA's (Power Purchase Agreements), allowing the end-user (customer) to benefit from a 'green' origin product. The total electrical energy consumed by ASUs in FYE2023 - 2,594 GWh - is the result of the energy supplier mix portfolio, with an improved renewable energy share due to the acquisition of G0 certificates. The current ratio of renewable energy is:

35% renewable energy which improved from 34% last year.

The intensity of greenhouse gas emissions from electricity generation in Europe was 442.66 gr/European Attribute Mix (EAM) 2021: Association of Issuing Bodies, while the average emission of Nippon Gases was 325 gr/kWh. The GHG intensity of Nippon Gases electricity consumption is 27% below the European benchmark.

ISO 50001 certification recognises the utilisation of an energy management system at a site. Today 25 sites hold the certification, basically located in Germany, Norway, Sweden and Spain. The strategy is to increase this number, although is some countries there are specific requirements (external energy audits) that may delay the process.

3.4 Water management

In the production of industrial gases water is a pivotal resource, required for functions such as cooling equipment (such as gas compressors), amongst other tasks. Replenishing the water for this purpose constitutes the bulk of our water consumption. Currently, 100% of Nippon Gases' main consumer sites are covered by water management programs which allows for the tracking and monitoring of water system parameters.

The most intense users of water are the Air Separation Units (ASUs). In these units there are several types of cooling systems, and 78% have semi-open water recirculating systems – which require water withdrawal to replenish losses from evaporation and blowdown to the sewer.

As per Global Reporting Initiative GRI-303 - Water and Effluents				
Water withdrawal	Sum of all water drawn from surface wa course of the reporting period.			
Water Consumption	Sum of all water that has been withdra crops or generated as waste, has evap is polluted to the point of being unusab water, groundwater, seawater, or a thi			
Water Discharge	Sum of effluents, used water, and unus third-party, for which the organisation			





A small percentage of ASUs have a once-through system where the water is pumped into our facility, cools the process, and returns back to the source at higher temperature without consumption and without alteration to the chemistry or pollution of the water. The once-through systems are available when the production facility is located inside a large industrial area that serves the water as a utility, or as in some cases, when the plant is located in areas with very high water availability. In all cases, the "once-through" is always considered to have zero environmental impact due to its zero consumption and pollution.

Due to the strong relationship between water withdrawal, consumption, and discharge, following the GRI 303 recommendation, Nippon Gases is to report on all three topic-specific disclosures.

ater, groundwater, seawater, or a third-party for any use over the

awn and incorporated into **products**, used in the production of orated, transpired, or been consumed by humans or livestock, or ole by other users, and is therefore not released back to **surface ird-party** over the course of the **reporting period**.

sed water released to surface water, groundwater, seawater, or a has no further use, over the course of the reporting period.

Year	FYE2021	FYE2022	FYE2023
Water Withdrawal Mi m3	27.89	27.60	25.14
Water Discharge Mi m3	23.78	23.31	20.88
Water Consumption Mi m	4.10	4.29	4.26

In FYE2023, Nippon Gases' water consumption amounted to 4 million m³ from various sources. 21% came from freshwater sources, such as rivers and lakes, 9% came from ground wells, 25% from municipal supply, and the remaining 45% from third-party supply; mainly industrial recycled water.

Year	FYE2020	FYE2021	FYE2022	FYE2023
Water Consumption	%	%	%	%
ASU	86%	86%	86%	87%
HYCO	2%	1%	2%	1%
CO2	12%	12%	12%	12%

Around 87% of the Nippon Gases water consumption goes to the ASUs, which separate the components of atmospheric air (oxygen, nitrogen, argon).



Year	FYE2020	FYE2021	FYE2022	FYE2023
Total Water Consumption Mi m ³	4.52	4.10	4.29	4.26
Consumption Sources				
City water	24%	25%	26%	25%
Third Party water	40%	39%	45%	45%
Fresh Surface water	29%	28%	21%	21%
Ground water	7%	8%	8%	9%
Consumption Destination				
Cooling tower evaporation	69%	70%	72%	72%
Cooling tower blowdown	31%	30%	28%	28%

Discharges into air and water

Due to the nature of our processes as an industrial gases business, discharges into the air and water are limited. ASUs utilise the water for refrigeration purposes and the circuits are separated from the process. As a consequence, no process pollutants are incorporated into the water circuits, nor in the discharge streams.

Reused water consumption

Most of the water entering the cooling circuit of our production facilities does so through a semi-open circuit, where it is recirculated and cooled to provide refrigeration for the equipment. The circuit comprises approximately 2% of the cooling water flow, while the remaining 98% is recycled within the system. Water consumption solely accounts for the makeup of the cooling system's flow. Of the water consumed, 72% evaporates into the atmosphere, while the remaining 28% is discharged into the sewer. The blowdown of the cooling system is necessary to uphold the desired levels of chemical concentration in accordance with process limits.

The blowdown from these semi-open water circuits (cooling towers) is mostly piped back into a controlled sewer that will, at a later stage, perform treatment to allow the water to be recycled.

Water management within the value chain

As water is a limited environmental resource – critical to the health and sustainability of our planet – and is integral to the operational functionality of Nippon Gases' facilities, we strive to be exceptional stewards.

Nippon Gases optimises water consumption through close monitoring of the cooling water circuit parameters and adjusting water treatment accordingly, in order to minimise the discarding of water to the sewer and thereby optimising water usage. Our main purpose is to minimise the usage of an incredibly valuable resource, such as municipal water, and fresh, surface and ground waters.

The water cycle showcases the ratio of water consumption to the cooling tower vs water blowdown. The higher the concentration of the cycle alludes to more optimal use of the water. Also, the consumption per m³ per MWh consumed indicates the optimisation ratio; the less the better.

The absolute water consumption in FYE2023 has decreased as the load range of the facility was lower than previous year. Although the efficiency ratios (m³/MWh) were higher.

Another area of action is the reuse of water that is not valid for human use. The most common alternative is industrial recycled water, where those contaminant levels render it unsuitable for drinking, but mean it can be used for industrial cooling services.

Water KPI's include the following:

Year	FYE2020	FYE2021	FYE2022	FYE2023
Cycles	3.27	3.33	3.57	3.55
Water m3/ MWh	1.59	1.53	1.47	1.64
# circuits	26	27	29	27

Focus on water stress locations

Nippon Gases has incorporated new, distinct efficiency analysis into its water management processes, specifically of the Very High Stress water locations as defined by the World Resource Institute (WRI) and its Aqueduct Atlas. This allows us to identify those locations as per their water stress parameter, which indicates the ratio of total water withdrawals to available renewable surface and groundwater supplies – where we have placed focus on facilities under Very High Stress water locations.

As a result, total water consumption (the net between net withdrawal and discharge) across all Very High Stress locations has been reduced by 10,000 m³ (-2%).

Very High Stress Locations Consumption Mi m ³ water	FYE2020	FYE2021	FYE2022	FYE2023
Withdrawal	0.85	0.76	0.72	0.78
Discharge	0.44	0.34	0.29	0.36
Cycles	1.96	2.24	2.49	2.19

Water intensity. Consumption vs sales. Base year FYE2020

Following the Mid-term plan, here is the result of the SDG (Sustainable Development Goal) of reducing water intensity:





Very High Stress water locations map

Year	FYE2020	FYE2021	FYE2022	FYE2023
Water Consumption Mi m³	4.52	4.10	4.29	4.26
Water Intensity %	100%	96%	81%	68%



Warrenpoint, Ireland

3.5 Raw material usage

During the past year, most of the raw materials used by Nippon Gases in their nitrogen, oxygen, argon and carbon dioxide production processes were considered renewables; notably air and water.

Nippon Gases divides the waste stream into three partial streams:

- 1 Waste that is generated by our suppliers during the production of our main input materials
- 2 Waste that is generated in the manufacture of our products at our plants

Backaging waste from the delivery of our products to our customers.

The main supplied materials used at our production facilities are electricity, ambient air or process gases like CO₂. The environmental aspect of the use of electrical energy is described in chapter 3.3, and the supply of raw gas CO₂ to our facilities does not generate any additional waste at our suppliers. The waste generated at our plants is mainly non-hazardous, such as metal, plastic, paper, wood and domestic waste.

Last year, there was an increase in the total amount of waste, although due to various oneoff effects. These included, among other things, various reconstruction projects that generated an insignificant amount of construction waste.

Hazardous waste is comprised by some process materials, such as oils and residues from scrubbers in SSG (Semiconductor Specialty Gases) filling plants. A small percentage of the hazardous waste generated by Nippon Gases ends up in landfill (6.2%).

The small decrease in either the total amount of hazardous waste or the amount of hazardous waste in landfill is related to some one-off effects.

Waste	FYE2021	FYE2022	FYE2023
Waste total in tonnes	2,390	3,018	3,109
Waste on landfill in tonnes	99	120	88
% on landfill	4.1%	4.0 %	2.9%

Waste intensity. Waste total vs sales . Base year FYE2020

Following the Mid-term plan, here are our results for the SDG (Sustainable Development Goal) of reducing the waste intensity:

	FYE2020	FYE2021	FYE2022	FYE2023
Waste Total tonnes	2,654	2,390	3,030	3,109
Revenue Mi €	1.4	1.3	1.6	1.9
Waste intensity	100%	96%	97%	85%

Nippon Gases produces very little packaged waste. The main delivery modes of our products are:

A. Delivery by pipeline

B. Delivery as bulk liquid

C. Delivery as packaged gas in cylinders

Both pipeline deliveries and the delivery of liquid products to tanks installed by customers, do not generate any waste.

Nippon Gases uses gas cylinders made from steel or aluminium for the distribution of packaged gases, operating a 'closed-loop' business model for reusable and refillable gas cylinders. Every refillable gas cylinder is designed and intended to contain gas throughout its lifetime, and to be repeatedly refilled.

The refillable gas cylinder is an industrial package that is kept in continued use with an economic lifespan of more than 25 years. Each time cylinders are returned for refilling, there are standard procedures to check if they are suitable for continued use. The cylinder only enters the waste stream if it fails its periodic inspection – with the gas cylinder being fully recyclable at the end of its lifetime.

With this sustainable business model concept, Nippon Gases makes a major contribution to avoiding waste.

3.6 Other Emissions

Ozone-Depleting Substances (ODS) and Global Warming Potential (GWP) compounds

At Nippon Gases we use ODS as refrigerants in our cooling systems. In addition to this, Nippon Gases fills some of these products (purchased from third parties) for later marketing. The emissions of these processes are also closely monitored, and which have decreased in FYE2023 due to change in the production process.

NOx emissions

Natural gas is used mainly as a process gas in HYCO plants and as a means of regeneration energy in our ASUs. The resulting NOx emissions are calculated based on an average EPA emission factor of natural gas.

The decreased emissions during FYE2023 are due to a lower workload on our HyCO facilities. It still totals to a very low amount of emissions.

Noise and light pollution

Nippon Gases assures that its light pollution does not have any material impact on outdoor areas. In terms of noise pollution, our operational permits are based on national and local regulations which covers the impact of our facilities.





great team, and it is due to the unique perspectives and talents of our highly qualified and experience workforce that we have been able to see such success

during the last fiscal year.

At the heart of our business, we strive to foster a culture that grants equal opportunities and creates a collaborative atmosphere – to engage better with our customers, suppliers, employees, shareholders and communities, allowing us to find the best possible way to perform our social corporate responsibility.



with us how the organisation – from

Does the proposed Corporate Sustainability Due Diligence Directive (CSDDD) impact our operations?

[RW] We assume that, on the one hand, whilst other information might be required than the one we currently publish in the Sustainability Report (SR), on the other hand, an even higher standard will be applied to the determination of the figures. Even now, the data we publish in the SR is based, as accurately as possible, on measurements and certificates. However, some figures are also estimated because there are no concrete measured values. One example is the determination of household waste quantities. In many communities, this is done by local municipal waste collection services. In most cases, however, there is no weighing of the waste quantities. The waste collection service only empties a container of y-litre size every x-weeks. Therefore the weight is estimated with the help of some key figures.



Can you summarise our environmental footprint? Excluding GHG emissions, what are the key challenges?

[RW] Due to the business model of manufacturing industrial gases, our environmental footprint is very low compared to other businesses.

Our main feedstock is ambient air, which we separate into its main components in air separation units. After use in our customers' processes, residual components are released back into the environment.

There is no air or soil pollution from this process, and water – as a valuable resource – is used only for cooling purposes in our plants. The vast majority of our air separation units have a closed loop system, where only the evaporation volumes from the cooling towers are replaced. Water is never used as a process medium nor as a solvent.

For our gaseous product delivery, classic gas cylinders are used as packaging. They are constantly refilled and reused in a closed system, de facto for several decades. At the end of their service life, the gas cylinders, which are made of either steel or aluminium, are melted down and returned to the raw materials cycle.

The biggest challenges I see are in the area of plastic waste.

Dry ice slices used to cool food and ensure the integrity of the cool chain are often wrapped in protective plastic film for food safety reasons. This is where most of our plastic waste is generated. It is often not possible to avoid the packaging as such, but to improve the situation we are currently working on developing more environmentally friendly alternatives, e.g. packaging made from renewable raw materials or at least the use of recycled plastic.

What do diversity and inclusiveness in the workplace mean?

[WdR] In general, diversity and inclusivity in the workplace refer to facilitating an environment that values and embraces individuals' differences – race, gender, age, ethnicity, sexual orientation, and disabilities, among other attributes. It entails fostering a culture where every individual feels equally respected, heard, and empowered to contribute their unique perspectives and talents. For Nippon Gases, diversity and inclusivity are fundamental to grant equal opportunities and create a collaborative atmosphere that values the strengths and contributions of all its employees.

Work life balance, expectations of the new generation

[WdR] They are changing, clearly. The new upcoming generation of employees gives much more importance to the work life balance – already during hiring interviews they clearly state what their expectations are. It is a candidate hiring market for the moment, and it is not expected to change in the coming years. Remote working, top IT tools, good healthcare benefits, and extended vacation periods are high on their agenda. These initiatives work in companies like ours, that have a solid trust environment. From the other side, we also need to mention that the new generation is strongly result-oriented and will work to complete any assigned task in the foreseen deadlines.

How do we infuse company values into our people practice?

[WdR] Implementing company values in our people practices has to come from the top. Continuous drive to make these values visible will bring results and is apparent even before hiring. In our job searches, recruitment materials are focused on the company values, so that the candidates can easily familiarise with them. During employment, communication plays a key role in this process, where we focus on including a link to our values having in all our communication efforts.

[LZ] Leaders play a fundamental role in infusing company values into our people practice. It is with their actions that they demonstrate every day their dedication towards compliance and ethics. In our Group, training also plays an important role and is considered fundamental to ensure that the company values are clearly understood and embraced. Our compliance programme includes mandatory training with regards to Nippon Gases' Code of Conduct, that is organised every year and involves 100% of our employees – as well as biannual training on Fair Competition, Conflict of Interest and Antibribery, Email and Document Management, Data Protection, and Respect for Human Rights.

How do you see the future in operations other than safety, which is the number one priority?

[JMMG] In Operations, our main focus is surrounding a four-pillar strategy. The first step is People, always. The on-going development plan for upskilling our team with machine learning decision models will guarantee success in the other three pillars: Technology, Processes, and Data. Fostering automation by the robotisation and implementation of automated guided vehicles is the Technological goal. When it comes to Processes, the project revolves around deploying best-in-class solutions that enable ASUs' plant and equipment modelling. Last but not least, we have Data. Its usage and application in big data analytics, data mining, or machine learning solutions are invaluable to core Operations processes.

What impact could robotics have in sustainability?

[JMMG] There are two main areas where we are focusing our efforts in developing our people to further obtain knowledge and disseminate it throughout the organisation: robotics and data science. Many companies have been trying to figure out how to utilise robots to improve their processes, increasing efficiency, helping combat climate change and to make manufacturing more sustainable. A clear example to date are our dry ice plants through the automisation of dry ice slicing and stacking, and containers cleaning. We expect future developments in areas such as package plants sorting/picking and automated guided vehicle implementation in our dry ice and package plants to move dry ice containers and cylinder pallets. All these implementations will enhance our operations to be safer, gain ergonomics for the operators and reduce carbon footprint by reducing energy consumption.

Do you think data science will have a significant impact?

[JMMG] We are convinced the future of sustainability relies on creating practical, data-driven initiatives that focus specifically on data gathering, management, searching for correlations and, from there, creating algorithms to describe business models for all business units in operations. If we are able to lead those initiatives, we will be better positioned to increase our efficiency and have a better chance of meeting environmental, social and corporate governance (ESG) targets and the increasing regulatory requirements as we move forward. Clear examples of this are the models already built to manage the energy efficiency of our air separation units - the core of our business. Currently working in CO₂ planning optimisation, Bulk & PAG supply chain and PAG production scheduling decision models, all of these will lead to effective energy and fuel optimisation within our operations.

What do you think is the link between compliance and sustainable development?

[LZ] Compliance is essential for businesses to ensure safety, integrity, and ethical behaviour across all levels of an organisation. A culture of compliance not only reduces or eliminates the risk of sanctions and reputational damage, but also promotes virtuous and sustainable business development. Indeed, the promotion of a corporate culture based on the values of honesty, transparency, integrity and fairness helps to consolidate ethical principles, improve relations with customers and investors, and harmonise employee behaviour, making the company more competitive in the market in the long term.

Having a culture of compliance means that every employee understands the rules and embraces their part in ensuring that they are followed. Back to index

4.1 Human capital

"Growing our people to grow our business" is the motto that has motivated the HR department since we became Nippon Gases in 2018. Each year, every initiative we launch is done so with this goal in mind – whether it relates to talent management or to compensation and benefits.

) 4.1.1 Internal framework

Outlined below is the HR strategy for Nippon Gases, where great traction has been gained in supporting the business to be more successful. The main focus of our improvements remained on digitalizing our systems, developing our people in-house, attracting the best talent and improving work-life balance. Parental leaves taken by male employees have increased during FYE2023. Two years ago, the number of male and female leaves was almost the same. During the last year, male parental leaves were 50% higher than female leaves; this aligned with the company gender ratio.



1. Attract and engage the best possible talent

In a year in which several industries have needed to increase their staff, attracting the best talent has continued to be our mission. After having digitalized our processes and building a unique candidate experience, we are now working to make the most out of them. This year, we launched a European taskforce that, under the same umbrella, started working to support hiring managers and candidates throughout the recruitment journey. Especially relevant for this year, we have implemented a new digital onboarding process for new hires. In one single site they will find everything they need for their first days in the company.

2. Retain the workforce

Although we have seen a surge in the voluntary turnover during the last fiscal year, our figures are going back downwards now. Even at the peak of the graph, our turnover figures were at a low rate when compared to the general market. This low turnover is thanks to our high focus on the retention of our employees - shown through several bonus schemes, long-term incentives, and benefits (in the pension and healthcare areas). A yearly review of these plans ensures we stay on track with the market. Hybrid working is also embedded as a benefit in our organisation, with high interest for it from our eligible employees '.

3. Develop and improve leadership and technical skills

The well-established leadership program, Growing Our Leadership (GOL), grew this fiscal year with the path opening for more of our junior employees. We held two sessions with great success; engaging over 40 employees in a learning experience aimed to increase their business knowledge, situational adaptability and drive for results, among other competencies.

We continued training our managers in the GOL II program, a 9 month leadership path that every manager in the organisation will go through. For the first time, we held the international session, a reward and learning experience for a select and international group of employees who have done the complete path. Participants were chosen based on the success of the productivity projects they had been working on during the last year, which were part of their learning experience. As a result of the efforts of all managers going through this learning program, we are expecting more than €1 million in productivity savings for the company.

Our development efforts have strongly increased in the last year and employees are fully aware of it. As a result, in the Employee Engagement survey the satisfaction with the Talent Management category has grown from 60% to 70% in only 2 years.

Needless to say, our safety, compliance and phishing training programs remain as important as ever.

4. Develop a high-performance culture

The PDP process (Personal Development Plan) remains the key contributor for developing our high-performance culture. The combination of individual goals and an individual development plan, managed both by the employee and the manager, creates a win-win situation for both parties.

The PDP is the basis of many other HR programs, like succession planning and talent identification. Both exercises

allow us to identify the employees and managers with highest growth potential in the organisation so we can give them the right tools to speed up their growth.

5. Promote diversity

Increasing diversity, equity, and inclusion is at the core of Nippon Gases' strategy. Hand-in-hand with our professional female network, WING, we reanalysed our gender diversity strategy and are implementing a joint roadmap in three focus areas: building now for the future, development and communication.

The first action has been engaging employees throughout the entire organisation. In a tremendous communication effort, 30 breakfasts were held with the attendance of over 400 employees during the week of celebration of International Women's Day. The very honest and live conversations are helping to develop the new roadmap.

Furthermore, this year we launched a new edition of female sponsoring, in which professional women from different departments and regions are sponsored by European executive team members. The program also includes other networking, visibility and development actions.



6. Promote community engagement

Many NGE volunteers participated again last year in several community engagement initiatives, 81 projects were organised or supported by our employees. The majority of our projects were again in the area of educational support, health and social outreach. Many projects are those that have been supported for several years already, outlining a good relationship with organisers, but also amongst our employees.

7. Direct communication style

Internal communications is increasingly becoming a strategic player for the organisation. All across Europe, internal communication teams are strengthened and growing, supported by the leadership teams that rely on them. We really value effective channels of communication with employees and we are focusing our efforts into this mission. In order to keep improving our communication strategy, the European Internal Communications teams went through three monthly upskilling sessions in different locations of our company. Facilitating teamwork and sharing best practices is an effective way in maintaining that conversation with employees.

8. Work-life balance

Several new initiatives to improve work-life balance were initiated in the different regions. All the initiatives were welcomed by our employees and their families. Hybrid working in all our regions is a well-established tool for our employees to find a good work-life balance.

Parental leaves taken by male employees have increased during FYE2023. Two years ago, the number of male and female leaves was almost the same. During the last year, male parental leaves were 50% higher than female leaves; this aligned with the company gender ratio.

) 4.1.2 Headcount

The diverse and talented group of Nippon Gases employees have sought to achieve the same mission and values for many years. In order to reach these goals, Nippon Gases relies on a diverse group of people from different countries, genders and in different stages of their life and career.

Next to the measurable diversity (as allowed by GDPR), Nippon Gases has proven to be a friendly home for anyone, no matter their background or personal lifestyle. With this philosophy, Nippon Gases also complies – in all regions – with the relevant legislation on the employment of disabled individuals, resulting in more than 61 disabled individuals employed.

Headcount continued to grow, but at a lower pace than last years', amounting to 3,186 individuals. Additional hirings were made in almost all regions due to business growth, adoption of new projects, and the stabilisation for cost and legal obligations in all regions of our European business.

During FYE2023, we saw a strong trend of growth in attracting young people as trainees or interns across all business regions. We firmly believe that by doing this, we are able to attract excellent young talent for the future. During FYE2023, we employed 68 trainees, of whom 6 were hired permanently.



) 4.1.4 Compensation

Nippon Gases' compensation for employees is based on several pillars, starting with a correct base salary. These base salaries are cross-analysed against the standard market salaries based on a well-established, globally-recognised methodology. The comparison is done per country and per job level to ensure the base salaries are competitive from a local point of view. Each year, a revision of the market data is performed to ensure that the salaries of our employees remain in line with the market.

Other factors influencing the base salaries are statutory increases, performance, promotions and experience. Alongside base salaries, we also try to create a healthy mix between fixed and variable compensation. In this way, our employees are rewarded according to both their performance and the company's results. The mix between fixed and variable depends on the impact that the function has on the results. Nippon Gases also offers benefits packages which are locally-orientated, based on several factors, such as social security coverage, collective labour agreements, tenure and level/grade. These are largely focused on pensions (to promote financial welfare for the long-term) and



4.1.3 Employee turnover

Nippon Gases uses a stable methodology to calculate turnover, and provide consistent comparison data year-on-year. This rate is based on all terminations (voluntary, involuntary and retirement) during the 12 previous months, divided by the headcount figure of the last month.

Year-on-year the turnover remained largely below the average in the European Union (EU). Although we did see a peak in turnover in the middle of the FYE2023, as there was also a dip towards the end of the fiscal year. In the coming years, due to the ageing demographic of our workforce (retirement), we foresee future increases in our overall turnover.

medical care plans (to ensure physical and mental health provision). Elements such as gender, part time/full-time status, or age are never considered to determine any benefit eligibility.

Finally, Nippon Gases will always comply with local legal obligations and respect collective bargained agreements.

Striving for gender equality in every single area of the company is a strong commitment that Nippon Gases has made. Under the same employment conditions, we can say that there is no discrimination based on gender existing in NGE. Due to our historical data from hiring records and low turnover, we still have a raw gender pay gap. However, when analysing the data from a more regional point of view, improvements were made in almost all countries. Because we have chosen to proactively tackle this issue, we take every opportunity to reduce this gender pay gap. Working on a master action plan on how to close the gender pay gap in NGE is one of the key goals of the compensation team for FYE2024.

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) 4.1.5 Equality of opportunity

The long history of our company, low turnover and the labour market of the industrial sector, make it difficult fully recognise gender equality. We do not see this as a barrier; rather a motivation to prove we can be a catalyst of change.

Equal opportunities and diversity are part of our Code of Ethics and one of our three main principles together with Safety and Compliance. We work hard in every one of our HR processes to make sure that we are giving the same opportunities to employees no matter their gender, sexual orientation, race, religion or any other non-objective criteria.

With regards to gender, we closely follow up on a representative distribution of promotions, development opportunities, internal visibility and others. In order to counteract the circumstances surrounding our company

from HR we also launch different initiatives, such as a new version of our female sponsoring program to give professional women more visibility and networking opportunities, putting emphasis on attracting female talent for STEM careers by offering professional internship opportunities in the industrial sector, extending the Code of Conduct certification to all employees in the organisation with focus on equality, annual training on Human Rights, and the promotion of the employee networks WING and Equals; addressed to promote gender equality and a safe environment for the LGBTQ+ community. These networks are growing every year in terms of number of participants. Especially in the case of WING, the HR department has given the network broadened responsibilities to move towards a more diverse organisation.

(1) Strengthening the teams

A committed HR department has a direct impact on the employees' engagement. This year we have put the focus in upskilling the HR employees from all the regions, especially in the recruitment area (which is of highest relevance for us). With two intensive workshops dedicated to talent attraction, we are now working towards standardising our processes to increase efficiency whilst reducing time, using our digital tools as a base. Continuous knowledge experience and best practices are shared among the teams, and action plans are identified and executed.

This way of working is extended to other areas of the HR department, in which the standardisation of processes allows us to improve teamwork and build a consistent experience for the employees - no matter where they are located.

(2) Building growth experiences for employees

We invest highly in our employees and they are valuing these efforts in a positive light. In the 2020 Engagement survey, the Talent Management category was rated by employees with a 60% of satisfaction rate. Whereas in the most recent Employee Engagement survey held in December 2022, the satisfaction rate with this category raised to 70%.

This has been possible thanks to the consistency in cultivating learning culture within our organisation.

One of the key pillars involved is the Growing Our Leadership (GOL) learning paths, designed for talent in individual contributor roles and managers.

Isolated actions, however, do not change cultures. The grounds are established through our PDP process; based in supporting their development and to avoid looking solely at past performance. This PDP is interconnected to other HR processes, proving its relevance and utility for employees. It is the pillar to identify the talent who possess biggest growth



4.1.6 Talent

Any company aiming for a world-class HR department needs the right leadership, culture, tools and processes. In the case of Nippon Gases, the strong support we receive from leaders in the organisation permeates the working culture. Over the last years we have been dedicating more efforts in taking our digitalized tools and processes to the next level to improve the employee and candidate experience. We will continue working towards building a better experience for the future, as we continuously revisit our processes in collaboration with our business partners.

The focus this year has been on the people. Only by being close to our employees and providing learning and growth experiences can we be a world-class HR department. This focus has gone in two directions:

potential at a certain moment, allowing us to provide them with the right tools to explore that growth.

As a culture of learning and growth is behind our processes, we identify talent every 2 years. We have come to the conclusion that yearly exercises can only add stress to the organisation and even frustration to participants, as significant growth can only happen on a medium-term basis. We give the right support through visibility, networking and development.

Our learning culture is extended to everyone in the organisation with open NG Talks about technical and leadership topics, the monthly email called Konnichiwa for Leaders with interviews on relevant areas and updates on our safety and financial status, suggested learning paths open to every employee in the organisation and many other actions that, when combined, foster the growth culture that started this section: Growing our people to grow our business.

4.2 Communication

Internal communications

Internal communication is increasingly becoming a strategic player for the organisation. All across Europe internal communication teams are growing, supported by the leadership teams that rely on them.

Upskilling and increased teamwork

We really value keeping alive the conversation with employees and are putting all our efforts into this mission. In order to keep improving, restlessly, our communication strategy, the European Internal Communications teams went through three monthly upskilling sessions in different locations of our company.

During these sessions the team has worked in implementing a common way of working that will allow to increase the

Supporting the business

As a key player for the organisation, we have supported the business in several relevant campaigns and through continuous efforts. The most highlighted ones are those addressed to improve our safety, culture, diversity and cybersecurity culture. We prepare continuous campaigns understanding the real needs and how communication can help in changing behaviors, so among all of us we build the safe, compliant, diverse and technology safe culture we expect.

Employee Engagement Survey

At the end of 2022, 64% of employees completed the Employee Survey we run together with Mitsubishi Chemical Group, our mother company with the support of the external consultant Willis Towers Watson.

Compared to previous Pulse Survey 2021, and to our Employee Engagement Survey 2020, the positive trend is clear: 88% of employees rated the company's Sustainable Engagement favorably, the main indicator about employee satisfaction. We have gone up from the 86% obtained in 2020. This sets us at the same level as the high performing companies, like we have been in the last years.

The best rated category is safety with 93%, the second one Diversity and the third one Sustainable Engagement with 88% of favorable ratings.

In the last years we have done great efforts in the employee development, and this has clearly been perceived by employees. In the 2020 Employee Survey, the category professional development had a 60% favorable rating. In the teamwork and best practices sharing. Having a highly skilled and prepared internal communication team is the best way to keep that conversation with employees.

Renewal of our internal communication channels

During this year we have gone through a renewal of our internal channels. Even if these channels were being effective tools, we are looking always for keeping innovation at the same standards that in the rest of the organisation. Some of these renewed channels are:

- The new intranet has increased with better functionalities aimed to support better employees and have information more accessible.
- Our Konnichiwa for leaders with monthly financial and safety updates of the business, an interview with a relevant leader and suggested trainings has been transformed into a very successful podcast.
- TV screens in production sites are being installed in more regions extending our communications to more sites and taking it to every level.
- Our NG Talks, already consolidated in the company, have an improved preparation and include now suggested prework and postwork. Leaders of the organisation that share their learning in these online sessions go through a public speaking training as a preparation.

2022 survey, the category talent management comparable to professional development is at 69%. In only 2 years the increase has been incredible, as well as the efforts put by all employees to continue growing in the organisation.



External communications

Throughout the last fiscal year, Nippon Gases' External Communications team has continued to enable the company as a digital sustainable business.

A Digital

Focused on optimising and improving users' digital experience, and providing relevant content across a variety of online channels, through the following business actions:

- Increasing collaboration and communication between External Communications teams across all European regions, oriented towards a united digital marketing front to progress forwards together. To help us achieve this goal, new tools and procedures were introduced to standardise work flow; Hootsuite for social media management, Brandwatch for brand monitoring, and Doorway for digital business cards.
- Building and continued maintenance and improvement of the first interactive tools on our websites, such as the digital gas finder. Designed to retain attention and add value to users through an interactive experience that also increases likelihood to convert. Started construction for 3 more regions.
- Improvements in monitoring metrics through a migration to Google Analytics 4.0, allowing for better identification and mitigation of possible issues with UX, web performance, and acquisition/retention of leads.
- Developed a comprehensive strategy that focused on increasing our visibility through the creation of valuable content to build a strong community across our networks. With a third-party tool to help us boost our presence in social media channels, content was shared more effectively, being able to analyse its performance to better understand our audience's preferences. With more than 1,000 posts across 24 accounts, our efforts resulted in an average engagement of 7%; a significant improvement from previous periods.
- Our collaborative approach, based on digitalization, has helped us to create a more cohesive communication strategy, building a stronger brand presence in the European market. To boost this presence, our efforts in organic media (commented above) were also accompanied by paid media campaigns to support our conventional channels. This combined strategy has been supporting the business in reaching our targets and generating more leads in alignment with local market needs.

B Sustainable

Sustainability has become ingrained into our company ethos throughout the last fiscal year, and thus become the cornerstone of our content, messages, and actions. Focusing on 3 parallel lines of work at different scopes – internal, external and global:

- Continued full support to the sustainability committee, with complete collaboration, helps to boost and reinforce internal actions. Furthermore, a new process for the creation and dissemination of the annual Sustainability Report (SR) have been established, in the form of an email marketing beta test (resulting in a 21% year-on-year increase of SR downloads for 2021 and 2022) and new Sustainability Report web page; including a digital, condensed version of the report. Within the dissemination actions, a new full social media coverage focused on the success stories included in the report was carried out.
- In line with our sustainability strategy, and in tandem with our digitalization initiatives, we have been working on the definition of a valued-added service for our customers that will allow them to calculate their carbon footprint, thereby increasing awareness of the critically of climate action.



- The External Communications team led all communication efforts for the global Carbon neutral world project, allowing us to solidify the global brand of the NSHD group, but also overcome new challenges. These challenges span 3 main areas:
- Creation: The development and launching of the Carbon neutral world (CNW) website - an ambitious project that portrays NSHD's joint global front on sustainability. Ensuring that each cooperating company has its brand represented, the CNW website is the bridge between our global sustainable efforts and the consumer. Consisting of professionally-made original content (video and static), an intuitive layout and interactive experience - in English and Japanese - it promotes our carbon neutral solutions and success stories whilst simultaneously adding value to the consumer.
- Awareness: Naturally, with the launch of the new global web, comes the need for brand awareness. Through the joint effort of organic social media/SEO and paid media (Google Ads), the CNW garnered a respectable amount of user impressions; enough to warrant a more targeted approach throughout the second half of the fiscal year. By the end of FYE2023, the website boasted a huge presence mainly across Europe and Asia. The Google Ads SEM campaigns are being continuously monitored and optimised to stay in check with audience habits and behaviours.
- Engagement: In order to keep current users engaged - and to help reel in new potential leads - the content of, not only the CNW, but the project as a whole must be continually adding value to consumers. Therefore, the site takes advantage of an integrated blog (sharing news from all cooperating companies) and sharing interactive success stories as customer testimonials, as well as coordinated content actions across social media, to keep our audience informed and retain attention. Furthermore, a quarterly newsletter is being designed to be sent to our lead list, to aid in finalising conversions and provide extra content as value added via email marketing.

(c)**Business**

Business support is a key function of the department, with our support being counted upon for a variety of business operations:

- Being a business facilitator means supporting the organisation in current markets, but also in defining new lines of business. An example of this is the new strategy for the electronics market, where our activities included, not only the planning of the strategy, but also the elaboration of a complete communications roadmap to facilitate the entry of our brand into this sector.
- To further support our business and our brand, we give support to the creation of the trademarks portfolio: PureSan®, Switch&Work®, WeTrack by Nippon Gases®, MiniCyl[®] and support for UK trademarks registration (outside the EU).
- Media management/New plants: Providing support in the logistics, production of content (including professional photo shooting and timelapse) and social media promotion of the new plants in Malm and Oevel.

- Tradeshows and Events: Present at, participated in or sponsored many events throughout the year, maintaining a high profile within the industry as a proactive member of our community (both businessrelated and societal). These include: gasworld webinars & CO₂ Summit sponsorship, Industria Conectada 4.0, FormNext, Hydrogen Summit by Financial Times, and the KEICHO awards, to name a few.
- Nippon Gases is a main player in the external communications working group of the European Industrial Gas Association (EIGA), hence providing support in communications, branding and events strategy.
- The External Communications team at Nippon Gases Euro-Holding aims to provide support to all 13 subsidiary regional companies, which involves a high amount of logistical and organisational efforts. To optimise this, this fiscal year marked the official launch of the EU Comm Hub. This initiative allows for the External Communications teams of our main business operational regions (BNF, Northern Europe, Italy, Iberia, Germany and Euro-Holding), to meet in-person every quarter - facilitating the complete collaboration in strategy, decision-making, campaigns, and to find solutions to pain points. This is the foundation for a unified European communications team, allowing us to progress as a cohesive unit, together, with our digital communication efforts.
- Brand awareness and media presence is one of our main focuses, with a large part due to collaboration and testimonials with suppliers and partners: SAP, Zycys, Oracle, AT&T, Nova, to projects announcements and relevant articles our press center has over 170 entries.



4.3 Work-life balance

Work-Life balance remains high on the agenda of NGE.

We see supporting a healthy work life balance in our company as win-win situation for the employee and the company:

Employee Better time management Personal growth Better focus Higher engagement Personal health & well-being

Initiatives launched by the regions

In all regions, we encourage our employees to achieve a good balance between work and life.

Our dedication to employee wellbeing is exemplified through various measures. We prioritise health and fitness promotion, offering fitness programmes that include access to gyms, nutritional guidance and physiotherapy services. In addition, we host webinars focused on health, safety and wellness, ensuring our employees have access to valuable resources and knowledge.

To foster a healthy work environment, our offices offer nutritious food options, encouraging employees to make healthy choices.

In addition, in some regions, we go a step further by organising special initiatives, such as School Free Days.

These efforts underline our commitment to work-life balance and support a positive workplace culture while promoting sustainability.



- Better staff retention
- Increased productivity
- Higher employee engagement
- Strong brand reputation & more applicants
- Increased morale
- Reduced absenteeism

4.4 H&S management

In addition to the protection of our environment, the protection of our employees is also of outstanding importance for Nippon Gases.

We comply with all relevant regulations, and strive to maintain and improve our performance year-on-year in the areas of occupational safety, process safety, environmental protection, quality, food safety and medical product safety. We foster the achievement of significant improvements through effective management practices and economically justifiable applications of technology.

Together, we are 'The Gas Professionals' and we all have the same goal – 'Making life better through gas technology'.



The quality of our products and services, the health and safety of our employees and contractors, the protection of the environment, as well as the continual quest to improve our energy-related services always have been – and will remain – our highest priority. This aspiration is an essential part of our culture, and is reflected in our vision, mission, guiding principles and core values.

The Nippon Gases philosophy demonstrates our commitment to being a leader in safety performance in the industrial gases industry.

During our day-to-day business we are always striving for zero accidents and zero injuries for our employees and contractors, maintaining the safe operation of our plants, providing safe products to our customers, and being a good neighbour within our local community.

For this reason, we assign the highest priority to raising awareness and developing a better understanding from within our organisation in the following ways:

- Designing and developing products that can be safely manufactured, transported, used and disposed of or recycled without posing unacceptable risks to people or the environment.
- Maintaining a safety management system to prevent major accidents and mitigate their effects on people and the environment, in
- accordance with the Seveso III Directive on Major Accidents.
- The safe operation of our production facilities.
- A continuous improvement of our safety management and its corresponding reporting, with regard to our goal of the absolute prevention of accidents, injuries,

Employee training based on the

Risk assessment processes for

process safety, worker safety,

product and transportation safety.

personal and environmental damage through our processes, products and services.

- The safe transport of our products to end customers in compliance with all relevant regulations.
- Inclusion of all contractors, including hauliers, in the comprehensive Nippon Gases H&S management culture.

All employees and contractors are therefore committed to work and act safely in a result-oriented manner to comply with our six safety principles. All of our efforts to increase safety for our employees, products, processes and services are a fundamental requirement for every job and every workplace.

The Safety Management System is described in the European HSE Management Manual, a comprehensive set of standards which applies to 100% of our European locations.

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This system integrates internal policies and governmental regulations. In general, our internal policies are stricter than governmental regulations. The main elements of the Health and Safety Management system are:

job functions.

- Nippon Gases Product Safety and Quality Policy.
- Nippon Gases Occupational Safety and Health/Industrial Safety and Disaster Prevention Policy.

HSE standard manual.

- EHS assessments conducted by our national and international EHS assessment team.
- Internal reporting and review on a monthly basis.
 - External reporting on safety performance through our Sustainability Report and report to various stakeholders (EIGA, for example).

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

We employ an extensive range of health and safety measures, starting with our safety principles. Based on these, we regularly conduct safety assessments and structured training whilst simultaneously promoting the importance of safety at every level. For example, every meeting starts with a safety topic, and each year we undertake a Safety Excellence Journey.

It is important to us to systematically record near misses, analyse them and take appropriate remedial action. This allows for preemptive measures to be implemented, eliminating risks before they lead to an accident and employee injury.

To emphasise the significance of this approach, the theme of our 2021 Safety Excellence Journey was 'Safety First: Everyday, Everywhere'. All employees participate in the

Assessments

Number of Health and Safety European Assessments

Number of Health and Safety European Assessments operational sites

Number of Environment European Assessments



Extensive safety training, job safety analysis, risk assessments or Europe-wide minimum requirements for PPE are further measures that we adhere to that help prevent accidents.

Any recorded accident or illness that results in one or more day(s) away from work as a result of a work-related accident or exposure is recorded as Lost Time Injury (LTI). Any workrelated injury which requires a medical treatment is recorded as medical treatment case (MTC). Both are KPIs are found within HSE.

In addition to this, our policy states that all incidents and nearmisses must be reported and investigated. They are reviewed at a European level, on a monthly basis. Safety Excellence Journey, during which events were held at the sites. Each event was led by a member of management and included presentations, videos, and group discussions.

Nippon Gases has taken a series of measures to prevent work-related injuries and fatalities.

A more specific example is the extensive internal HSE regulations, compliance with which is regularly checked via HSE assessments.

If potential for improvement is found, either special measures and safety campaigns are launched, or the internal HSE standards are revised.

In total, the European assessment organisation organisation audited 16 fuctional units over the past year to check compliance with internal standards. The senior management of the respective countries and the European Business Team received the results of these assessments, which did not uncover any significant safety issues.

FYE2020	FYE2021	FYE2022	FYE2023
13	9	14	16
-	9	8	13
4	8	7	11

Serious incidents are discussed monthly at the business review meeting and are also reviewed in detail during a meeting with the European President.

Moreover, Health & Safety and Environmental KPIs and metrics linked to the annual Personnel Development Plan (PDP) and salary reviews are set at all functional levels.

Work injury-related absenteeism is managed by both line management and human resources, reported to senior management on a monthly basis – broken into trends to show areas of opportunity. Every case is investigated in detail according to internal standards.

Number of Recordable Injuries (RIRs)

Recordable injuries	FYE2019	FYE2021	FYE2022	FYE2023
Number of Recordable Injuries	3	8	5	5
Recordable Injuries rate (per mill whs)	1.07	1.43	0.90	1.04

Fleet safety

Although the transportation of our liquid products and the vast majority of the transport of gas cylinders and dry ice throughout Europe is handled by contracted hauliers, fleet safety is an important issue for Nippon Gases. This is shown, on the one hand, by the fact that a separate chapter in the HSE management is dedicated to this topic, but also by special measures that have been implemented.

Furthermore, every High Severity Product Vehicle Accident (HSPVA) is investigated and reviewed by Nippon Gases and the haulier concerned. High Severity classification is given when the vehicle has to be towed away or personnel injury has occurred.

An extensive training program, to which the carriers are contractually obliged, is implemented. All bulk product vehicles are also equipped with a Safety On-Board Computer (OBC). This OBC monitors the driver's behaviour, with results sent directly to the haulier who then evaluates and undertakes any and all appropriate measures. The number of serious traffic accidents involving product transport vehicles has been massively reduced through continuous work in this program.

Number of High Severity Product Vehicle

With regard to accidents, the preventable HSPVA - High Severity Product Vehicle Accidents, has decreased significantly, from 7 to 4.

Number of Contractor-RI

Contractor safety is as important as employee safety for Nippon Gases.

In FYE2023 contractor-RIs, which are mainly related to drivers, increased in comparison with the previous year and is mainly related to slip-trip and fall incidents.

Contractors Recordable injuries

	FYE2021	FYE2022	FYE2023
Number of Recordable injuries	10	12	15
Recordable injury rate (per mill whs)	5.0	5.5	6.4

Several contractor-RIs occurred in the third quarter. To counteract this development, a Contractor Safety Campaign was launched in December.

The campaign consisted of an extraordinary meeting with the aim of increasing hazard recognition amongst our contractors and the refocus of our safety principles "All incidents can be prevented" (1st principle) but most importantly "You are responsible for your own safety" (3rd principle).

In the first step, meetings were held with all drivers/ contractor representatives. During the second step, our management spoke to all drivers and contractors to explain the situation, raise safety awareness and receive feedback from each contractor employee.



4.5 Community commitment

The number of initiatives developed during the last fiscal year reached its historical peak after the reduction suffered during the pandemic. As a consequence, the funds dedicated by the company to such initiatives increased by more than 100% compared to last year (\pounds 293,000).

This fiscal year, a large portion of Nippon Gases employees have participated in the 81 initiatives implemented, across 10 countries, contributing to stronger engagement with our stakeholders. The company remains fully supportive towards community engagement initiatives, as they are one of the best teambuilding activities available. It allows employees to interact, engage, and bond with each other whilst also contributing towards a worthwhile cause. The common thread is that when teams work together to support a good cause and achieve a common goal, they attain a stronger sense of connection with between themselves, their organisation, and their community.

The initiatives are mainly focused on community support, but also environmental protection, education, and health and wellness are increasing their share.



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4.6 Success stories

People

Fostering education and sustainability

Nippon Gases Refrigerants is dedicated to promoting education and sustainability in the refrigeration and air conditioning industry. Their active participation in the Academy Tour 2023, organised by Beijer Ref knowledge and fostering sustainable practices.

Refrigerants emphasised key topics such as the new F-gas Regulations, low-GWP HFO A2L refrigerants, and safety considerations with flammable refrigerants. By engaging industry experts and professionals, the company actively contributes to enhancing understanding and awareness in these crucial areas.

embrace environmentally friendly technologies.



United for refugees support

among its employees to support the aid organisation "Help e.V." which focuses on providing crucial assistance to refugees from Ukraine in Moldova who are in need.

Help e.V. ensures the distribution of vital aid supplies and offers essential medical and psychological care to the refugees through its network of dedicated partners.

Nippon Gases Germany's employees responded generously to the call for donations. In June, the collective efforts resulted in a remarkable contribution of €5,650. Half of this amount was graciously donated by the employees, and Nippon Gases Germany matched their donations, effectively doubling the impact.

The partnership with Help e.V. demonstrates their dedication to providing essential support and compassion to refugees, fostering hope and resilience in challenging times.

Germany (



Healing Harmonies

Nippon Gases Healthcare and OXIMESA have joined forces with the NGO 'Música en Vena' to create "Healing Harmonies", an initiative dedicated to bringing the uplifting power of music to hospitals and community health centers. Over the past few months, a series of 20 concerts have been organised in various hospitals where Nippon Gases supplies medical gases and home respiratory therapies, including units such as oncology, dialysis, ICU, and pulmonology.

confronted with a positive spirit and emotional support. The healing to continuing and expanding these initiatives across the country in the coming years.

Inspiring the next generation of engineers

Nippon Gases UK & Ireland has partnered with Primary Engineer, a notfor-profit educational organisation, to bring engineering and a love of STEM into the classroom with their Vehicle Program.

Primary Engineer's vision is that girls and boys, from a very early age, will aspire to become designers and makers - the engineers of the future. including practical math's and science, creative problem-solving, and

schools and ten Immingham schools. Our engineers have provided hands-on training to teachers so that they can confidently deliver an engineering project in their classrooms.

Our support does not end there; our mentors are on hand to collaborate with the teachers in their classrooms when delivering the engineering curriculum and we have pledged to provide the schools with vehicle kits

Nippon Gases took on March the Month for Prostate Cancer UK

Ten colleagues from across Nippon Gases UK & Ireland boosted their daily step count by taking on Prostate Cancer UK's virtual fundraising challenge March the Month.

Everyone within the team aimed to walk 11,000 steps daily to raise money 11,000 dads, partners, brothers, grandads and mates who die yearly from

Through the kind donations of friends, family and colleagues the team smashed their target of £1,200 raising an incredible £2,665 which was doubled by the company to £5,330, making them the top team fundraisers.

They also walked a combined 3,633,392 steps, equivalent to 1,442.6 miles (2,321.6 km) or from our head office in Immingham to Nezla, Algeria in a straight line. This amazing effort placed them second on the team fitness leader board.



Northern Europe

Northern Europe



The growing impact of Warmste Week

The 'Warmste Week' is a national solidarity action organised by Studio Brussel (radio station) and supported by VRT (TV station) in the Flemish part of Belgium. It started in 2006 and it has grown year after year. In the entire of Flanders people set up small and large-scale actions. The highlight of the action is a 6 day radio show (24/7) the week before

projects selected by the DWW fund.

By organising different actions across different plants of Belgium, an amount of €4,028 was collected. This was raised via actions as: sale of chocolates, hotdogs, pancakes, Christmas cards, but also by organising a spaghetti day and cheese & wine evening. The amount was doubled by Nippon Gases Belgium.

Since 2022 Nippon Gases Belgium has 3 ambassadors that coordinate the different actions: Tracy Sarkodie, Filip Van Baelen and Pina De Beck. They also had the honor to hand over the cheque of €8,056 during the final week of the action.

Preparations for the edition of 2023 have already started. The ambassadors are bursting with ideas to set up actions linked to the new theme 'Be able to



Boosting efficiency

Recognising the decline in machine efficiency over time despite regular maintenance, Nippon Gases Germany took proactive measures to enhance energy performance at their production plants. Significant upgrades operational efficiency.

At the largest production site in Hürth, the outdated electric motor of the liquefaction circuit for gaseous nitrogen and oxygen was replaced with a modern 12 MW drive. This upgrade achieved a remarkable 4% reduction in energy consumption while maintaining the same production output, demonstrating the company's commitment to maximising efficiency throughout the plant's life cycle.

modernisation and optimisation of its cooling water pumps. Through strategic phased replacements during ongoing operations, the energy requirement of the cooling water system was reduced by an impressive 290 kWh per hour, ensuring a reliable supply while minimising energy

Reviving nature

Recognising the detrimental impact of excessive nutrients in rivers, lakes, and eutrophicated reservoirs caused by human activities, Nippon Gases has developed a groundbreaking oxygenation application. This innovative of aquatic ecosystems.

A successful pilot test was conducted in La Isleta port, situated in the Mar Menor, a saltwater lagoon that has suffered severe damage due to promising, demonstrating the effectiveness of supplying pure oxygen in increasing the water's dissolved oxygen (DO) levels by an average of 13%. Notably, this oxygenation process significantly improved water and sediment quality parameters without any adverse effects.

The long-term benefits of this oxygenation technique in eutrophicated environments are remarkable. By promoting sustainability and contributing to the recovery of the aquatic ecosystem, Nippon Gases' oxygenation application plays a vital role in restoring balance to the affected natural habitats.

Through their commitment to environmental stewardship and innovative solutions, Nippon Gases is leading the way in revitalising nature and fostering a more sustainable future for our precious ecosystems.

Portugal reforestation

The reforestation action, initially planned for the 26th of November, was postponed due to the rain forecast to the 28th of January 2023, a cold but sunny day, bringing together more than 65 employees and their families time in Vieira de Leiria with around 1,000 tree species native to the area.

biodiversity of plant and animal local species, and most importantly, helped compensate for several tons of CO₂ emissions.

Nippon Gases recognises that forests play an important role in our efforts to combat climate change. The company is committed to guaranteeing the development of this new forest during the years ahead, and replanting any trees that may have dried up or not evolved adequately.

Earth

EMPOWERED BY PEOPLE

Optimising energy efficiency

Nippon Gases Belgium has successfully transitioned its entire company Belgium. This significant change aligns with the company's commitment to reducing its ecological impact and promoting sustainable practices.

Since June 2022, the installation of loading poles has been underway to enable convenient charging for the electric vehicles, further supporting hybrids, while 34% are fully electric. The number of electric cars within the fleet continues to rise steadily.

Recognising the importance of environmental responsibility, the Belgian government has mandated that that electric vehicles have a more beneficial regulation for taxation as of July 2023 while minimising environmental impact. Nippon Gases Belgium's proactive approach positions the company to comply with this regulation seamlessly.

Inspired by this initiative, both the Netherlands and France have also embarked on their journeys towards sustainable fleets. They have begun the process of transitioning to plug-in hybrids and electric cars, following in the footsteps of Nippon Gases Belgium.

impact on the environment, highlights the successful mind shift towards









Long-term agreement on green CO₂

Nippon Gases Danmark A/S and Bioman ApS have entered into a long-term agreement on bio-based CO₂ from Bioman's new plants in Horsens and Herning. The agreement means that Nippon Gases will recover the green CO₂ produced at Bioman.

Green CO₂ is climate-neutral CO₂ captured from biological material, from Green CO₂ from Bioman is a by-product in the production of biomethane, and Bioman will isolate, purify and liquefy the CO₂ as part of the biogas production.

"Liquid green CO₂ is a unique and climate-friendly product. Through this agreement, users of CO₂ in Denmark can gain access to an environmentally friendly product." says Henrik Bie, General Manager at

"Nippon Gases has a strong commitment to sustainability, and our annual sustainability report includes a target to reduce greenhouse gas emissions by 35% in the period 2019-2029. Therefore, it is important to choose partners and invest in projects that contribute to the reduction of Gases Denmark.

Nippon Gases Denmark is the country's largest supplier of CO₂ for commercial use and has customers in several areas, including



Northern Europe (

Customer

Effective solutions in the Port of Antwerp

Nippon Gases BNF has successfully expanded the water treatment capacity for two customers in the Port of Antwerp by nearly 50% using an innovative hybrid solution. By combining oxygen with the existing aeration

For one customer, the implementation of Mizu Sub technology enabled them to maintain their production levels while ensuring efficient water treatment. The other customer benefited from the use of Mizu ISO waste treatment. Moreover, both customers experienced enhanced

Nippon Gases BNF's hybrid solution demonstrates their commitment to sustainable water management and customer satisfaction. By increasing capacity and optimising treatment processes, they enable businesses to operate efficiently while minimising environmental impact. This successful endeavor highlights the company's expertise in delivering effective solutions for water waste treatment.

Setting a new standard

Nippon Gases Deutschland has become the first European gas company to receive EU medical device certification for medical carbon dioxide. This certification, granted in accordance with the EU Medical Device Regulation (MDR), solidifies Nippon Gases Germany's commitment to excellence in the healthcare sector.

Following a rigorous three-day audit on MDR and ISO 13485 conducted by the esteemed Notified Body TÜV Süd in March 2023, Nippon Gases Germany successfully met the stringent requirements to attain this prestigious certification.

The EU medical device certification reinforces the company dedication to providing reliable and compliant medical carbon dioxide, meeting the evolving needs of the healthcare community.

Nippon Gases leads the change in CO₂ reduction and recycling

As global demand for aluminium increases, the industry faces the challenge of its energy-intensive production and substantial CO₂ and recyclers are actively pursuing sustainable decarbonization

global manufacturer of primary aluminum and aluminium products on its journey to becoming a leading recycler. By introducing oxygen/fuel burner systems as an alternative to air burners, coupled with natural gas, Nippon Gases is driving the transformation towards greener manufacturing

positively impacting the overall carbon footprint. Starting with the for further global implementation, marking a significant milestone in the

A commitment with resilient roots

Through a partnership with Treedom, the world's first platform enabling to plant trees remotely and follow the story of the project they will give life to, Nippon Gases Italia has launched a transformative initiative. The project entails planting 500 trees annually for five years across Cameroon, Tanzania, Ecuador, Guatemala, Madagascar, and Kenya. These trees will social benefits to their caretakers.

in making a positive impact on the environment and local communities, promoting sustainability in profound ways. By planting trees within agroforestry systems, integrated with crops vital to local livelihoods, the

Trees are invaluable allies in combating climate change, producing oxygen, refuge and nourishment for diverse species, promote biodiversity, and combat soil erosion through their roots. By planting the right tree in the right place for the right purpose, Nippon Gases Italia contributes to achieving 10 of the United Nations' 17 Sustainable Development Goals (SDGs) by 2030. This project exemplifies their unwavering commitment to a sustainable and thriving future for all positively impacting the overall carbon footprint. Starting with the conversion of one melting furnace, this collaborative effort paves the way for further global implementation, marking a significant milestone in the pursuit of a sustainable aluminium industry environmental sustainability but also fosters the transition towards a greener and more sustainable agribusiness industry.





Sustainable supermarket refrigeration

Nestled in San Giovanni, Persiceto, MD Discount Store has become the first supermarket in Italy to embrace Honeywell Solstice® L40X (R-455A), revolutionising refrigeration practices. Solstice L40X is projected to save the store approximately €260,000 in lifetime costs and reduce lifetime emissions by 25%* compared to carbon dioxide refrigerants, for that store alone.

Efficiency model, which has been independently validated by Cemafroid.

Selected for its energy efficiency and cost-effectiveness, Solstice L40X is a low global warming potential (GWP), hydrofluoroolefin (HFO)-blend solution designed for commercial refrigeration in small-to-medium sized the European Union Fluorinated Greenhouse Gases Regulation.



Pioneering a sustainable future

Nippon Gases Italia has embarked on an inspiring journey towards a greener future. Partnering with AizoOn and CIRIAF, the company seized a remarkable opportunity, securing funding from the European Union under the National Recovery and Resilience Plan (PNRR). This visionary project falls under Mission 2, "Green Revolution and Ecological Transition", Component 2, "Renewable Energy, Hydrogen, Sustainable Mobility", and Investment 3.5, "Hydrogen Research and Development", promoted by the Ministry of Ecological Transition.

hydrogen, the project, aptly named HEHS (High Efficiency Hydrogen Storage), aims to revolutionise hydrogen storage technology. This innovative solution holds the potential to transform the production, storage, and distribution of hydrogen, unlocking endless possibilities for derivatives and electrofuels. This significant funding, totaling €2,600,000, propels Nippon Gases Italia to the forefront of sustainable innovation, driving a brighter and cleaner future for all.



A sustainable concept for super cooling fresh fish for transport

SuperGreen uses dry ice (CO₂) as a method for cooling fresh fish and other foods under transport. This method of supercooling ensures with dry ice provides a safe and robust cold chain for up to 96 hours.

SalMar, one of the largest fish farming companies in Norway and a long two steps. Step one is onsite dry ice production with manual dosing. Step two will be automatic dosing of dry ice directly into the fish boxes.

SuperGreen is an important sustainability initiative from Nippon Gases that will allow the products of our customers to retain a higher quality and extend the shelf life of the product. The technology can also be used for internal storage, during local distribution and on all road and air transport.



4.7 Awards

EIGA Awards 2022

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

The company was delighted to secure the awards in the following

Company 2022 Award for Category 1 members:

Recognised for our exceptional safety performance, which demonstrates our commitment to employee well-being in all

Working Group Award 2022:

Recognising the outstanding leadership, impact and results of the Ad-Hoc 20.1 Centenary Group, chaired by Jose Luis Chesa, Director of External Communications for Europe, in developing EIGA's centenary

Road Safety Award 2022 (Nippon Gases Belgium)

rate for road vehicles in the cylinder transport category (less than 2 million km per year).

Safety performance recognised by LTI Awards

Nippon Gases is rightly proud of its exceptionally good safety performance, which is evidenced by the number of sites across Europe that have been without Lost Time Incidents (LTI) for so many years.

Overall, Nippon Gases has 12 Nippon Gases locations across Europe that achieved bronze, silver and gold medals, showcasing their accident-free records spanning 5, 10, 15, 25 and even 35 years.

Novara, Italy	- Pamplona, Spain
Anagni, Italy	- Villaverde, Spain
Sant'Ambrogio Valpolicella, Italy	- Rjukan, Norway
Avilés, Spain	- Hounslow, UK
Barcelona, Spain	- Dillingen, Germany
Gijón Enclave, Spain	- Ronfingen Germa



Europe (

Recognition beyond industry

Nippon Gases has been recognised by customers in Europe for its exceptional support and for exceeding expectations through collaborative

Iniciativas Bioenergéticas

The company expressed its gratitude to Nippon Gases for its quick response and availability as a supplier following an unintentional explosion at its Biodiesel Production Facility in La Rioja.

Nippon Gases quickly refilled the liquid nitrogen tank, guaranteeing safety by ensuring the continued inert state of its processes and minimising damage. Iniciativas Bioenergéticas is grateful for the dedication of the workers of the Nippon Gases departments and the drivers who resolved the situation.

Spanish Asociation Against Cancer

Nippon Gases received acknowledgement from the Spanish Asociation Against Cancer for their contribution towards the breast cancer campaign. Their support during the money raise campaign will fund the rehabilitation and physiotherapy of 15 women affected by breast cancer.

Teknic

Nippon Gases Iberia is recognised and appreciated by Teknic for their collaboration in the MiruGas® service for monitoring wastewater treatment plants. The advanced NitroPro® option ensures optimal oxygenation cycles and remote access to process variables, reducing facilities, anticipate deviations, and improve the quality of treated water. Teknic is highly satisfied with the results and looks forward to future collaboration.





Gold Medal for Corporate Social Responsibility, from Ecovadis

Nippon Gases awarded an EcoVadis Gold Medal for its performance in

The gold status reached by Nippon Gases places the company in the top 2% and Labour Rights and Sustainable Procurement.

The recognition of Nippon Gases' performance is the result of the company's commitment to take actions that have a positive impact in areas such as climate change, employee health and safety - Nippon Gases' number 1 priority - inclusion and diversity as well as other aspects such as ethics and

Safety Performance, Recognised by ASSOGASTECNICI

safety results among all the members of the Italian Gas Association,

Furthermore, awards were also granted to two production units.

- 1st prize to our San Salvo facility for achieving 35 consecutive years without accidents
- 5th prize to our Melito facility for achieving 5 consecutive years without

International Safety Award, from the British Safety Council

Nippon Gases UK Ltd, Immingham, and Nippon Gases Offshore, Dyce, have been awarded International Safety Awards by the British Safety Council for their commitment to workplace health and safety in 2022. These awards recognise organisations that prioritise the prevention of workplace injuries, work-related illnesses, and promote well-being and mental health at work.

Nippon Gases UK Limited has also won the Wholesale and Retail Services Sector Award for demonstrating a strong commitment to good health and safety management during 2022.





5. Annex

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5.1 Community initiatives

Country	Organisation & Project Description	Category (Education, Diversity, Community Support (includes Disaster Relief), Health & Wellness, Environment)
Belgium	PDP CUP: A mini football tournament organised in memory of a friend of some staff members, Peter de Smet, who died of cancer, hence PDS cup. A significant part of the proceeds will be passed on to the official Come on Against Cancer campaign.	Health & Wellness
Belgium	HET VRIENDENHUIS: Sponsorship of a BBQ event for a home of disabled children. Employees volunteered to organise the BBQ, help with serving the food, do the dishes, entertain the children.	Community Support
Belgium	NERDLAND FESTIVAL: Nerdland Festival is Belgium's largest outdoor science 3 day-festival that aims to make scientific professions attractive and knowable. Nerdland Festival gives companies the opportunity to showcase their product and processes scientifically educationally. It aims to attract families and to enthusiam mainly young people about science and technology. Companies can sponsor the festival in exchange for a company stand where company/processes/chemical processes can be shown.	Education
Belgium	WARMSTE WEEK: Support of 'Warmste Week', a national event supported by radio and television. Every year they work around a central theme, in 2022 it was poverty. Different actions were organised: Sale of chocolat, hot-dogs, nespresso cups, organising a wine and cheese evening, sale of Christmas cards,	Community Support
Belgium	PROJECT ENSIVAL: Heavy flooding in Wallonia in July 2021 leaving entire villages partially uninhabitable and schools unusable. ENSIVAL is a volunteer project to build a playground/ravot park in a city park next to the current container classes of primary schools set up after the floods.	Community Support
Belgium	TABLET + CHARCHING CABLES: Vzw Spoor 56 is a special youth care organisation. They provide support and guidance to children/youth and their families where there is a troubling parenting situation. Nippon Gases Belgium decided to support this organisation from Community Engagement with 35 tablets and charging cables.	Community Support
Belgium	TRASHPICKING: Local initiatives during lunch breaks in the neighbourhood of the Nippon Gases facilities to help keep the environment cleaner	Environment
Belgium	SPONSORSHIP FOOTBALL ACCOMODATION: Support local football team with the construction of a new facility. The new-built accomodation will not only serve for the football team, but can be made available for other associations (sport, cultural,), for private use or for commercial activities	Community Support
Denmark	Christmas donations: Donations were gathered among employees and distributed to 3 organisations of choice of the employees: Children cancer foundation,Danish Cancer Society (Kræftens Bekæmpelse) and Hospital Clowns	Community Support
Denmark	SDM i Skills is the major annual Danish championship for young people from vocational education and training programmes. DM i Skills gives young people the chance to showcase their talents. It also helps to sharpen their professional skills and show the outside world - including primary school pupils - the diverse and exciting opportunities offered by vocational education and training programmes. The aim is to create awareness about the education and help attract more persons to pursue a carreer in the industry. NGD sponsered this event.	Community Support
Denmark	Nippon Gases employees supports Danish Red Cross work in Ukraine: Employees raise money for the Danish Red Cross operating in Ukraine. For every euro raised, Nippon Gases doubled the amount.	Health & Wellness
Germany	v. Bodelschwinghsche Stiftungen Bethel: Collecting stamps from incoming mail to be sent to Bethel. The Bethel organisation offers handicapped people the work to sort, refurbish, select and sell these stamps.	Community Support
Italy	Mirability: Christmas card contribution for health research on a genetic disease	Education
Italy	Dynamo Camp:Medical devices challenge in order to collect donations through the participation in sports initiatives	Community Support
Italy	Centro Nemo:Gymnasium setup for respiratory rehabilitation of patients with neuromuscular diseases at Niguarda Hospital	Community Support
Italy	Politecnico di Milano: Research group at the University to define the guidelines of the hospital of the fuure in the areas of digital innovation, sustainability, design and risk analysis	Community Support
Netherlands	PUB QUIZ: Online quiz of 1,5 hours over luncht time to support 'Het Vergeten Kind'. This foundation supports children who grow up in very difficult circumstances.	Environment
Norway	Nippon Gases supports Redd Barnas work in Ukraina, Polen & Romania: Employees collected money for Save the Children organisation , operating in Ukraine, Poland and Romania. For every euro raised, Nippon Gases Norway doubled the total amount collected by employees.	Community Support

Country	Organisation & Project Description	Category (Education, Diversity, Community Support (includes Disaster Relief), Health & Wellness, Environment)
Norway	Lørenskog Handball club, girls 2006: Team has big ambitions to be among the best teams in the country. Lot of matches has to be played to reach their goal. For this a lot of financial means are required. Collecting of the budget happens via volunteer days and local sponsor deals.NGD volunteert to be one of the sponsors.	Community Support
Norway	Sunde soccer team, boys 2009: Local football team working only with volunteers. This organisation plays a major role in the integration and unity of people with a minority background in the local community . Sponsoring was provided to buy all kind of equipment so that they could keep on organising their basic activities.	Community Support
Norway	Haukås shool music corps: Support in getting new admin equipment.	Health & Wellness
Norway	Support Ullikisa Football team children : 'Monetary support for a new football goal for the local youth football team .	Community Support
Norway	West coast hockey Academy: WCHA was started exclusively as an additional offer open to all children and young people during a demanding corona period when much of their activities were limited and in periods stopped. This started with a few children once a week and have today 200 participants with 3 events per week. In addition to hundreds of volunteer hours from parent coaches, external coaches have been hired at some of the events.	Education
Norway	*Donate winter clothes from employees to refugees: Refugees need winter clothes - employees deliver warm clothes to the office, and HR delivered them to refugees.*	Community Support
Norway	Malm Idrettslag; Support for the local sports teams 100th anniversary celebration	Community Support
Norway	Sponsoring of the local Theatre in Malm	Community Support
Norway	Propulse NTNU: NG Norway sponsored a group of award winning students from Norways leading STEM university so that they could participate in international competitions. We supported them with our gases up to an agreed value .	Education
Norway	Grorud Sports clubs: The local soccer team which has a strong community engagement and reach outs to minority groups in the area. They organise free football training camps for youth as well as other organised activitites to keep youths off the street.	Community Support
Norway	Yellow reflecting safety jackets were distributed to the local school in the community. This as part of the training they received in school on safety ,	Community Support
Norway	Sotra Sports Club: Contribution to new suits for 32 handball players aged 12	Community Support
Norway	Sørum Sports clubs Athletics group: Monetary sypport to reduce the cost of the training camps	Community Support
Norway	Odd G14 Football 40 boys: Monetary support contributing to a lower participation fee at this years Norwaycup -kids/youths competiton *	Community Support
Norway	Ullkisa Fotrball G16: Monetary support contributed to cover costs for participating in competitions.	Community Support
Norway	Høyenhall BootCamp: Free training offer in Høyenhallparken for children and adults, with goals of inclusion, community, everyday joy and public health.	Community Support
Norway	Christmas party donations to Rjukan community: Christmas party for children open for all people in Rjukan community	Community Support
Norway	"Tinn Leisure club for youths: children's/youth's club in the villages which offers activities other than organised sports etc. The money was spend to buy outdoor furniture"	Community Support
Norway	Rjukan Gymnastics and fitness group: in collaboration with Jazzercise and Moods organised a full-day training activity at Rjukan for everyone - to get everyone interested in training again after the corona.	Community Support
Norway	*Rjukan Golf club: support to the local golf club*	Community Support
Norway	"Rjukan Food festival: support to the food festival *	Community Support
Portugal	Projecto Pro-Natura. ANEFA: Planting 750 new and diverse trees in a degraded area due to forest fires during the last few years	Environment
Portugal	Câmara Municipal Trofa (collection of goods/materials for Ukraine): Delivery of 100 oximeter to Hospitals in Ukraine, in order to use in the war context	Community Support
Portugal	Centro Hospitalar Vila Nova de Gaia / Espinho (CHVNGE): Delivery of 9 stethoscopes to Vila Nova de Gaia Hospital. Purpose of equip the pneumology service of this Hospital.	Community Support

Country	Organization & Project Description	Category (Education, Diversity, Community Support (includes Disaster Relief), Health & Wellness, Environment)
Portugal	Centro Hospitalar e Universitário de Coimbra (CHUC): Delivery of 50 oximeter to a group of clinician in order to use in a humanitary action in São Tomé e Principe	Community Support
Portugal	Hospital Pulido Valente: Weighing scale delivery to Hospital Pulido Valente	Community Support/ Health & Wellness
Portugal	Hospital CUF Almada: Delivery of 10 thermometers to Home Hospitalization Unit of CUF Hospital Almada	Community Support/Health & Wellness
Portugal	Several Hospitals around the country : Delivery of around 500 blankets to use by the Home Hospitalization Units of several Hospitals around the country	Community Support
Spain	Hospital Gregorio Marañon:Delivery of coat pantys for the promotion of the vaccination campaign to the hospital staff.	Community Support/Health & Wellness
Spain	Fundación Aladina: Creating nicer rooms for children with cancer, who have to be at Hospital Niño Jesús during many months	Community Support
Spain	FUNDACIÓN ADECCO: Disability week 2022. Awareness Campaign	Community Support
Spain	Música en Vena: An initiative to bring small orchestras to hospitals to be listened by patients, in order to improve their mood, especially for children suffering from cancer.	Community Support/Health & Wellness
Spain	"Muevete con ALES" (Move with ALES): Collaboration with the ALES association in the "Muevete con ALES" charity race	Community Support/Health & Wellness
Spain	FCHP (Fundación contra la hipertensión pulmonar, Pulmonary Hypertension Foundation in Spanish: Sponsoring of the FCHP XIV Anniversary and of training and awareness sessions for pulmonary hypertension patients and relatives	Community Support
Spain	Firefighters United Solidarity Effort Foundation: Collaboration with Firefighters United Solidarity Effort Foundation	Community Support
Spain	Sponsorship of the 12th "Luchamos por la vida" (Let's fight for life) march.	Community Support/Health & Wellness
Spain	FUNDACIÓN ADECCO: World Down Syndrome Day support	Community Support
Spain	Turkey Embassy in Spain (Madrid): Campaign to help the victims of the earthquake in Turkey with the sending of funds	Community Support
Spain	FUNDACIÓN ADECCO, Plan Familia (Oximesa): We collaborate providing physio therapies, pedagogical and phsicological assitance to seven company children with profund dissabilities	Community Support
Spain	FUNDACIÓN ADECCO, Plan Familia (Nippon Gases Spain): We collaborate providing physio therapies, pedagogical and phsicological assitance to seven company children with profund dissabilities	Community Support
Spain	SEO-Birdlife & Alcorcón Hospital: SEO/BirdLife is the organisation that has been working for the conservation of wild birds and their habitats. The activity is about building bird feeders, made by children and psychiatric patients, to be placed in the surroundings of the hospital	Environment/Comunity Support
Spain	RAI (Royal Academy of Engineering).Project, women and engineering: Development job-seeking skills for five recent female graduates	Diversity
Spain	RAI (Royal Academy of Engineering).Project, women and engineering: Promotion of STEM careers among adolescent girls, with talks given by our engineers in schools	Diversity/Education
Spain	RAI (Royal Academy of Engineering).Project, women and engineering: Promote circular economy among teenagers, being part of the jury that will award the best projects carried out by teenagers in schools in Madrid	Environment/Education
Spain & Portugal	AECC (Spanish Association against Cancer): Creating a health campaign, to promote the awareness, early detection, treatment and palliative care of those which are suffering brest cancer	Community Support
Sweden	Swedish employees received their Christmas and New Year gift of the company and decided to give this financial contribution to the sharity fund of choice	Community Support
Sweden	Swimming club Norrbybadet: Sponsoring of the club	Community Support
Sweden	Spånga fritidsklubb - cricket : Sponsoring of the club	Community Support
Sweden	Hagateatern - Theatre: Sponsoring of the club	Community Support
Sweden	MSK Skinnskatteberg - speedway: Sponsoring of the club	Community Support

Country	Organization & Project Description	Category (Education, Diversity, Community Support (includes Disaster Relief), Health & Wellness, Environment)
Sweden	Köpings golfklubb - golf: Sponsoring of the club	Community Support
Sweden	Buying eastereggs from a school to support the historical school trip	Education
Sweden	During christmas period, funding was collected in the organisation and by voting among the employees a sharity foundations was selected to receive the contributions gathered, For 2022 the Cancerfund Sweden was selected as the winner	Community support
UK	Ukraine Crisis Appeal: Raising funds for the British Red Cross to get critical care to those who need it most both in Ukriane and its bordering countries.Funding was coming from employees making donations	Community Support
UK	Kilt Walk: Employees walked 15 miles along the Scottish countryside to raise funds for local charities. Employees raised funds through sponsorship and the funds were split between the following charities: Clan cancer support, Home start-Aberdeen, Kidney cancer Uk, STV childrens appeal	Community Support
UK	Step Count Challenge : Step Count Challenge - Staff were split into teams of 5, competing against one another to accumulate the most steps over a 8 week period. The winning team chose a charity organisation (North East Sensory Services) to make the donation of the collected funding	Community Support
UK	Beach Clean: Supporting in cleaning the beach to improve health of our marine enviroment	Community Support
UK	Macmillan coffee morning: Staff baked or bought cakes that were sold in pieces to collect money	Community Support
UK	AberNecessities: Local sharity organisation collecting clothes, Offshore employees collected children winter clothes/jackets donated to AberNecessities who distributed them among disadva, Employees donated warm clothing to a campaign - The cosy jacket appeal which was donated to local disadvantaged families	Community Support
UKI	*Three Peaks Walk: Yorkshire 3 Peaks Walking Challenge in aid of Alzheimers Society*	Community Support
UKI	Sponsorship of junior sports teams - cricket, rugby & football: Sponsoring of team clothing for 3 junior sporting teams	Community Support
UKI	Ten Pin Bowling Competition: Highest scoring 10 pin bowler nominated their favourite sharity organisation (Macmillan Cancer Support)to donate the collected money .	Community Support
UKI	*Primary Engineer: The initiative supports the collaboration of primary school,teachers and engineering professionals, in bringing the concept of engineering to young children before entering senior school. For this academic year we will be supporting 20 schools within a 40- mile radius of the Immingham (x10) and Aberdeen (x10) sites, as well as sponsorship of the national award programme*	Education

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5.2 Membership list of associations

We are convinced that our business benefits from the active participation in organisations that represent our industry. During FYE2022 we were active in many associations and organisations, including:

Europa	EIGA: European Industrial Gases Association
Spain & Portugal	FEIOUE: The Spanish Federation of the Chemical Industry AFGIM: Spanish Industrial Gases Association AEGE: Spanish Energy-Intensive Industry Group CEJE: Association of Japanese companies in Spain AmCham Spain: American Chamber of Commerce in Spain GASNAM: Spanish Hydrogen Organisation AEEIIG: Spanish Biogas Association AEC: Spanish Biogas Association for Quality CFAA: Aeronautical Advanced Manufacturing Center AEDTFAA: Business Group for the Development of Advanced Aeronautical Manufacturing Techniques CESOL: Spanish Association of Welding and Joining Technologies BEOUINOR: National Association of the Standardisation of Capital Goods and Industrial Safety APQuimica: Portuguese Home Healthcare Association APQuimica: Portuguese Chemical, Petrochemical and Refining Association IQPA: Cluster of Chemical and Process Industries of Principado de Asturias Club de Calidad: Quality Club INDES: Asociación de Industrias de EL Serrallo (INDES): Industry Association of El Serrallo FEINN: Spanish Federation of Healthcare Technology Companies Shacho Kai: Association of Japanese companies helping to develop their business in Spain BH2C: Basque Hydrogen Corridor Cluster de Energia, Pais Vasco: Energy Cluster Bask country AH2: Spanish Hydrogen Corridor Cluster de Energia, Pais Kasociation </th
italy	FEDERCHIMICA: Italian Association of Chemical Industry AGT: Italian Association of Industrial and Medical Gas Manufacturers UNIONE INDUSTRIALE: Association of Italian Manufacturing and Service Companies IJBG: Italian- Japan Business Group AICEP Italian Process Energy Consumers Association: Association of Industrial Groups characterised by the use of large amounts of electricity in production processes CIB Consorzio Italiano Biogas: voluntary aggregation for companies / organisations / institutions involved in biogas and biomethane from renewable sources CTI Comitato Termotecnico Italiano: a body federated with UNI, aims to carry out normative and unifying activities in the various fields of thermotechnics
Germany	IGV: Industrial Gas Association e.v. VCI: Association of Chemical Industry DVS: German Welding Association VIK: Association of Industrial Energy Consumers HyCologne: Association in Rheinland to promote the use of hydrogen JIHK: The Japanese Chamber of Industry and Commerce in Düsseldorf Wasserstoffenergiecluster Mecklenburg-Vorpommern e.V. : Association in Mecklenburg-Vorpommern to promote the production and use of hydrogen Silicon Saxony: Association of Electronic Manufacturers and Suppliers Saxony DGG: Association of German Glas Producers IHT - Industrieverband Härtetechnik VDZ/ECRA: Association of German Cement Producers
Belgium	Essenscia: Federation of the chemical and life sciences industries Waterstofnet VZW: Hydrogen Association of Belgium FEBELIEC: Federation of Belgian Industrial Energy Consumers BJA: Belgium-Japan Association & Chamber of Commerce VOKA: Flemish Economic Association Flanders Metals Valley: Cooperation of companies, universities and research centers that focusses on complete circular chain (going for climate neutrality & circularity in the metal industry) Bemas (Non-profit organisation in the field of maintenance and asset management)

Netherlands	VFIG: Association of Manufacturers of Industrial Gases of Netherlands DUJAT: Dutch - Japanese Trade Federation Netherlands JCC (Japanese Chamber of Commerce in the Netherlands)
France	AFGC: Association Française de Gaz Comprimes France AFF (Association Françoise du Froid)
ик	BCGA: British Compressed Gases Organization CIA: Chemical Industries Association BSI: British Standards Institution Britsafe: British Safety Council SEDEX: Ethical Trading Organisation AGCC: Aberdeen & Grampian Chamber of Commerce
Denmark	PCG: Association of Compressed Gases Producers
Sweden	SIGA: Swedish Industrial Gas Association SWC: Swedish Welding Commission
Norway	NIGF: Norwegian Industrial Gas Association BN: Biogas Norway

5.3 2023 Summary Data

Environment

Greenhouse Gas (GHG) Emissions	Unit	FYE2019	FYE2021	FYE2022	FYE2023
GHG Scope 1	Thousands of tonnes CO2e	65,21	67.46	84.60	63.47
GHG Emissions Scope 2	Thousands of tonnes CO2e	1,360.38	1,037.68	810.17	854.14
GHG Scope 1 percentage vs Scope 1 + Scope 2	%	4%	6%	9%	7%
GHG Scope 2 percentage vs Scope 1+ Scope 2	%	96%	94%	91%	93%
GHG Emissions Scope 1 + Scope 2	Thousands of tonnes CO2e	1,424.18	1,105.13	894.77	917.61
ASU	%	88%	85%	83%	86%
НуСО	%	3%	3%	5%	4%
CO ₂ liquefaction	%	5%	6%	5%	5%
Distribution	%	1%	1%	1%	1%
Filling Stations + F-gas + Others	%	4%	4%	6%	4%
GHG Emissions Scope 1 + Scope 2 vs FYE2019 (a)	%	100%	78%	63%	64%
GHG Emissions Scope 3 -Total	Thousands of tonnes CO2e		1,474.96	1,505.06	1.318.886
Category 1	Miles de toneladas de CO2e			169,18	187.52
Category 2	Thousands of tonnes CO2e		169.18	183.33	86.99
Category 3	Thousands of tonnes CO ₂ e		64.13	69.92	45.89
Category 4	Thousands of tonnes CO ₂ e		53.76	52.52	NA
Category 5	Thousands of tonnes CO2e		NA	NA	0.066
Category 6	Thousands of tonnes CO ₂ e		0.051	0.064	NA
Category 7 - Employee commuting	Thousands of tonnes CO2e		NA	NA	NA
Category 8 Upstream leased assets	Thousands of tonnes CO2e		NA	NA	NA
Category 9 Downstream transportation and distribution	Thousands of tonnes CO2e		NA	NA	57.09
Category 10 Processing of sold products	Thousands of tonnes CO2e		54.94	65.22	NA
Category 11 Use of sold products	Thousands of tonnes CO2e		NA	NA	888.29



Environment

Greenhouse Gas (GHG) Emissions	Unit	FYE2019	FYE2021	FYE2022	FYE2023
Category 12 End-of-life treatment of sold products	Thousands of tonnes CO2e		NA	NA	NA
Category 13 Downstream leased assets	Thousands of tonnes CO2e		42.48	42,31	53.03
Category 14 Franchises	Thousands of tonnes CO2e		NA	NA	NA
Category 15 Investments	Thousands of tonnes CO2e		NA	NA	NA
(a)Calculated using a base of 100 in FYE2019. Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe. 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 when supplied by third parties.					
Scope 3 emissions: Indirect emissions other than Scope 2 emissions.					
GHG emissions in Europe are calculated using emission factors specified recognised international standards as per verified protocol.					
Contributions to Environmental Protection through Products	1				
Greenhouse Gas Emission Reduction Customer Application Contribution	Thousands of tonnes CO2e		314	1,520	1,419
Decarbonization customer initiatives	Number		>60	53	TBD
Greenhouse Gas Emission Reduction refrigerant gases business	Thousands of tonnes CO2e		336.11	344.5	410.8
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.					
Fnernylisage					
Electric power	GWh	2,794.99	2,530.59	2,795.31	2.594.42
Electric power Air Separation Unit	GWh %	2,794.99 92%	2,530.59 92%	2,795.31 92%	2.594.42 92,8%
Electric power Air Separation Unit CO ₂ liquefaction	GWh %	2,794.99 92% 5%	2,530.59 92% 5%	2,795.31 92% 5%	2.594.42 92,8% 4,5%
Electric power Air Separation Unit CO ₂ liquefaction Filling Stations	GWh % %	2,794.99 92% 5% 1.7%	2,530.59 92% 5% 1.7%	2,795.31 92% 5% 1.7%	2.594.42 92,8% 4,5% 1,6%
Electric power Air Separation Unit CO ₂ liquefaction Filling Stations HyCO	6Wh % % %	2,794.99 92% 5% 1.7% 0.4%	2,530.59 92% 5% 1.7% 0.4%	2,795.31 92% 5% 1.7% 0.4%	2.594.42 92,8% 4,5% 1,6% 0,7%
Electric power Air Separation Unit CO2 liquefaction Filling Stations HyCO Others	GWh % % % %	2,794.99 92% 5% 1.7% 0.4% 0.9%	2,530.59 92% 5% 1.7% 0.4% 1.0%	2,795.31 92% 5% 1.7% 0.4% 0.9%	2.594.42 92,8% 4,5% 1,6% 0,7% 0,1%
Electric power Air Separation Unit CO ₂ liquefaction Filling Stations HyCO Others Thermal Energy	6Wh % % % % % 6J	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.0%	2,795.31 92% 5% 1.7% 0.4% 0.9% 1,352.32	2.594.42 92,8% 4,5% 1,6% 0,7% 0,1% 945.47
Electric power Air Separation Unit CO ₂ liquefaction Filling Stations HyCO Others Thermal Energy Air Separation Unit	GWh % % % % GJ	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51 12%	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.0% 1,029.76 12%	2,795.31 92% 5% 1.7% 0.4% 0.9% 1,352.32 9%	2.594.42 92,8% 4,5% 1,6% 0,7% 0,1% 945.47 12%
Electric power Air Separation Unit CO ₂ liquefaction Filling Stations HyCO Others Thermal Energy Air Separation Unit CO ₂ liquefaction	6Wh % % % % GJ	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51 12% 16%	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.0% 1,029.76 12% 18%	2,795.31 92% 5% 1.7% 0.4% 0.9% 1,352.32 9% 12%	2.594.42 92,8% 4,5% 1,6% 0,7% 0,1% 945.47 12% 17%
Electric power Air Separation Unit CO2 liquefaction Filling Stations HyCO Others Thermal Energy Air Separation Unit CO2 liquefaction Renewable energy sourcing	6Wh % % % GJ	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51 12% 16%	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.0% 1.029.76 12% 18% 18%	2,795.31 92% 5% 1.7% 0.4% 0.9% 1.352.32 9% 12% 34%	2.594.42 92,8% 4,5% 1,6% 0,7% 0,1% 945.47 12% 17% 35%
Electric power Electric power Air Separation Unit CO2 liquefaction Filling Stations HyCO Others Thermal Energy Air Separation Unit CO2 liquefaction Renewable energy sourcing Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe Purchased fuels and steam are converted into primary energy amounts (a) Calculated using a base of FYE2019 (b) Gases produced (oxygen, nitrogen, argon) calculated in Tons of equivalent gaseous oxygen	6Wh % % 6J % %	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51 12% 16%	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.0% 1.029.76 12% 18% 19%	2,795.31 92% 5% 1.7% 0.4% 0.9% 1,352.32 9% 12% 34%	2.594.42 92,8% 4,5% 1,6% 0,7% 0,1% 945.47 12% 17% 35%
Electric power Electric power Air Separation Unit C02 liquefaction Filling Stations HyC0 Others Thermal Energy Air Separation Unit C02 liquefaction C02 liquefaction Renewable energy sourcing Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe Purchased fuels and steam are converted into primary energy amounts (a) Calculated using a base of FYE2019 (b) Gases produced (oxygen, nitrogen, argon) calculated in Tons of equivalent gaseous oxygen	6Wh % % 6J %	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51 12% 16%	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.0% 1.029.76 12% 18% 19%	2,795.31 92% 5% 1.7% 0.4% 0.9% 1,352.32 9% 12% 34%	2.594.42 92,8% 4,5% 1,6% 0,7% 0,1% 945.47 12% 17% 35%
Electric power Electric power Air Separation Unit CO2 liquefaction Filling Stations HyCO Others Thermal Energy Air Separation Unit CO2 liquefaction CO2 liquefaction Renewable energy sourcing Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe Purchased fuels and steam are converted into primary energy amounts (a) Calculated using a base of FYE2019 (b) Gases produced (oxygen, nitrogen, argon) calculated in Tons of equivalent gaseous oxygen Environmental Impact NOx emissions	GWh % % % % GJ % GJ % Cons N0x	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51 12% 16%	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.0% 1.029.76 12% 18% 19%	2,795.31 92% 5% 1.7% 0.4% 0.9% 1,352.32 9% 12% 34%	2.594.42 92.8% 4.5% 1.8% 0,7% 0,1% 945.47 12% 17% 35%
Electric power Electric power Air Separation Unit CO2 liquefaction Filling Stations HyCO Others Thermal Energy Air Separation Unit CO2 liquefaction CO2 liquefaction CO2 liquefaction Renewable energy sourcing Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe Purchased fuels and steam are converted into primary energy amounts (a) Calculated using a base of FYE2019 (b) Gases produced (oxygen, nitrogen, argon) calculated in Tons of equivalent gaseous oxygen Environmental Impact NOx emissions SOx emissions	GWh % % % % % % % % % % % % % % % % % % %	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51 12% 16%	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.0% 1.029.76 12% 18% 19% 31	2,795.31 92% 5% 1.7% 0.4% 0.9% 1,352.32 9% 12% 34% 34%	2.594.42 92,8% 4,5% 1,6% 0,7% 0,1% 945.47 12% 17% 35% 35%
Electric power Electric power Air Separation Unit C02 liquefaction Filling Stations HyCO Others Thermal Energy Air Separation Unit C02 liquefaction Air Separation Unit C02 liquefaction Renewable energy sourcing Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe Purchased fuels and steam are converted into primary energy amounts (a) Calculated using a base of FYE2019 (b) Gases produced (oxygen, nitrogen, argon) calculated in Tons of equivalent gaseous oxygen Environmental Impact NOx emissions Particulate emissions	GWh % % % % % % % % % % % % % % % % % % %	2,794.99 92% 5% 1.7% 0.4% 0.9% 1,173.51 12% 16% 35	2,530.59 92% 5% 1.7% 0.4% 1.0% 1.029.76 12% 18% 19% 19%	2,795.31 92% 5% 1.7% 0.4% 0.9% 1.352.32 9% 12% 34% 34%	2.594.42 92,8% 4,5% 0,7% 0,1% 945.47 12% 17% 35% 35%

Environmental Impact				
Releases of substances designated under the Pollutant Release and Transfer Register (PRTR)	Tons	n/a	n/a	n/a
Local and accidental pollution issues	Number	0	0	0
Local and accidental biodiversity issues	Number	0	0	0
Environmental Violations fines	Number	0	0	0
Environmental Violations fines	Euros	0	0	0
Fugitive emissions from cooling systems	Thousands of tonnes CO ₂ e	2.35	2.27	1.96
Emissions from transfilling ODS	Thousands of tonnes CO2e	23.43	31.76	18.18
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe				
Water Usage				
Total Water Withdrawn	Millions of m ³	27.89	27.60	25.14
Total Water Discharge	Millions of m ³	23.78	23.31	20.88
Total Water Consumption	Millions of m ³	4.10	4.29	4.26
ASU water consumption	%	86%	86%	87%
HyCO water consumption	%	1%	2%	1%
CO ₂ water consumption	%	12 %	12%	12%
Surface water e.g. river, lake	Millions of m ³	1.15	0.91	0,91
Ground water e.g. well	Millions of m ³	0.31	0.32	0,37
Brackish water e.g. sea water	Millions of m ³	0	0	0
City water	Millions of m ³	1.04	1.13	1,08
Third party supply water	Millions of m ³	1.60	1.93	1,9
Cooling Tower Water Evaporation	Millions of m ³	2.87	3.09	3.06
Cooling Tower Water Blowdown	Millions of m ³	1.23	1.20	1.20
Total Water Withdrawn in Extreme high stress areas	Millions of m ³	0.76	0.72	0.78
Cooling Tower concentration cycles	Cycles	3.33	3.57	3.55
Water energy intensity	M³/MWh	1.53	1.47	1.64
City water consumption	%	25%	26%	25%
Water consumption intensity (a)	%	96%	81%	68%
Percentage main consumer sites with water management program (b)	%	100%	100%	100%
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.				
(a) Water consumption vs business sales. Base year FYE2020 (b) Water main consumers with water withdraw >30.000 m³/yr				

Environment

Waste	Unit	FYE2019	FYE2021	FYE2022	FYE2023
Waste total	Tons		2,390	3,030	3.109
Waste total on landfill	Tons		99	120	88
Non-Hazardous waste	Tons		1,929	2,434	2,538
Non-Hazardous Waste on landfill	Tons		83	84	53
Percentage Non-hazardous on landfill	%		4.1%	3,4	2,1
Hazardous waste	Tons		461	595.7	571,3
Hazardous Waste on landfill	Tons		16.0	36.6	35,3
Percentage Hazardous on landfill	%		3.4%	6.1%	6.2%
Zero waste program sites	%		100%	100%	100%
Waste intensity (a)	%		96%	98%	85%
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.					
(a) Waste generation vs business sales. Base year FYE2020					
Environmental Accounting					
Investments e.g. efficiency projects with environmental emission reduction	Million Euro		14.5	6.5	2.9
Sustainable savings in cost-reduction projects	Thousands of tonnes CO ₂ e		19.1	10.8	17.8
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.					
Transportation Footprint					
Kilometers travelled by all vehicles delivering gas in liquid or cylinder form or services	Million km	95.4	86.6	89.7	84.7
Kilometers travelled by all vehicles delivering liquid		53.9	52.3	55.7	53.7
CO ₂ emissions generated by road vehicles	Thousands of tonnes CO ₂ e	63.3	55.9	66.1	57.8
Change in distance travelled per ton of liquid industrial gas delivered (oxygen, nitrogen, argon, carbon dioxide) truck delivery. (a)	%		101,0%	99,7%	104,3%
Change in distance travelled per cylinder industrial gas delivered (oxygen, nitrogen, argon, carbon dioxide) truck delivery. (a)	%	100.0%	103.0%	98.9%	95.7%
CO2 shipping					
MGO Maritime Gas oil	Thousand Itr	3,226	3,253	3,674	3.677
CO_2 emissions generated /Ton Liquid CO_2 transported (a)	%	100%	96%	111%	108%
Customer on-site and pipeline					
Estimate of truck transportation kilometers avoided through on-site customer units (in millions of km)	Million km		11.9	15.0	12.3
Estimate of transport CO ₂ emissions avoided by on-site customer	Thousands of tonnes CO2e		11.0	13.7	53.0
Percentage of deliveries of air gases via pipeline	%		72%	72%	67%
(a) Based year FYE2019					
Home-Health Care					
Total number of patients treated by Nippon Gases	Thousands	261	260	267	298
Kilometers driven per patient monitored per year	Km	61	40	36	27
CO ₂ emissions related to transportation (kgCO ₂ /patient/yr)	Kg CO ₂ /patient/y	10.5	6.4	5.7	3.8
Certifications					
Percentage of operational sites certified under ISO 14001 Environmental management system	%		55%	70%	74%
Environmental Liabilities					
Amount of accruals or guarantees made or provided for environmental risks,.	Thousand EUR		0	0	0

Society

Employees	Unit	FYE2019	FYE2021	FYE2022	FYE2023	Employees	Unit	FYE2019	FYE2021	FYE2022	FYE2023
Total employees (Full time + Part time)	Number of individuals	2,696	3,007	3077	3186	HC by part time contracts	Number of individuals	108	123	136	137
Total # of employees & distribution by sex											
Female	%	26.04%	27.70%	27.82%	27.90%	Total # of employees &	%				
Male	%	73.96%	72.30%	72.18%	72.10%	Female	%	71.30%	67.48%	65.44%	63,50%
Total # of employees & distribution by age						Male	%	28.70%	32.52%	34.56%	36,50%
20s and below	%	5.71%	6.65%	7.73%	8,57%	Total # of employees &	%				
30s	%	21.48%	21.72%	22.52%	22,66%	distribution by age	0/	7 70%	1. 00 %	E 1E%	770%
40s	%	31.49%	29.83%	30.13%	28,75%	2Us and below	%	3.70%	4.88%	5.15%	10.05%
SUS and above	/o	41.3Z /o	41.00 %	39.0Z /o	40,02 /o	40s	%	28.70%	30.89%	29.41%	30.66%
Total # of employees by professional category						50s and above	%	50.00%	52.85%	50.74%	64,23%
Director	%	2.89%	2.89%	2.92%	3,08%	Total # of employees by	%				
Manager/specialists	%	41.43%	40.07%	40.79%	46,01%	Director	%	0.00%	0.00%	0.74%	0,73%
Technical- Admin	%	55.68%	57.03%	56.29%	50,91%	Manager/specialists	%	25.93%	29.27%	26 47%	35.04%
HC permanent contracts	Number of individuals	2677	2970	3046	3146	Technical- Admin	%	74.07%	70.73%	72.79%	64,23%
Total # of employees & distribution by sex	%					TOTAL # of terminations					
Female	%	25.92%	27.81%	27.91%	28,07%	Total terminations	Number of	97	205	270	290
Male	%	74.08%	72.19%	72.09%	71,93%	Total terminations by sex	%				
Total # of employees & distribution by age	%					Female	%	31.96%	30.73%	37.78%	34,14%
20s and below	%	5.57%	6.26%	7.52%	8,14%	Male	%	68.04%	69.27%	62.22%	65,86%
						Total # terminations by age	%				
30s	%	21.29%	21.78%	22.59%	22,82%	20s and below	%	13.40%	18.05%	24.07%	20,69%
40s	%	31.57%	30.00%	30.20%	28,89%	30s	%	20.62%	24.88%	28.15%	32,76%
						40s	%	21.65%	20.00%	15.56%	18,62%
5Us and above	%	41.58%	41.95%	39.69%	40,15%	50s and above	%	44.33%	37.07%	32.22%	27,93%
Total # of employees by professional category	%					Total # terminations by professional category	%				
Director	%	2.91%	2.93%	2.92%	3,08%	Director	%	1.00%	0.98%	1.48%	1,72%
Manager/specialists	%	41.58%	40.47%	41.10%	46,50%	Manager/specialists	%	37.00%	27.32%	30.74%	34,83%
	~	FF F10/	50.000	55.0000	50 (10)	Technical- Admin	%	62.00%	71.71%	67.78%	63,45%
Lechnical-Admin	% Number of	10	56.60%	55.98%	50,41%	(voluntary includes employees decision to leave the	Number of individuals	51	116	181	174
HC by temporary contracts	individuals	19	37	31	40	company)					
Total # of employees & distribution by sex	%					Total voluntary leaves by sex	%				
Female	%	42.11%	18.92%	19.35%	15%	Female	%	37.25%	38.79%	41.99%	35,63%
Male	%	57.89%	81.08%	80.65%	85%	Male	%	62.75%	61.21%	58.01%	64,37%
Total # of employees & distribution by age	%					Total # terminations by age	%				
20s and below	%	26.32%	37.84%	29.03%	42,50%	20s and below	%	25.49%	29.31%	32.60%	14,37%
30s	%	47.37%	16.22%	16.13%	10%	30s	%	27.45%	31.90%	36.46%	41,95%
40s	%	21.05%	16.22%	22.58%	17,50%	40s	%	35.29%	23.28%	16.02%	20,11%
50s and above	%	5.26%	29.73%	32.26%	30%	50s and above	%	11.76%	15.52%	14.92%	23.56%
Total # of employees by professional category	%					Total # voluntary leaves by	%				.,
Director	%	0.00%	0.00%	3.23%	2,50%	professional category	0/	0.00%	0.86%	1 10.9/	1 15 %
Manager/specialists	%	21.05%	8.11%	9.68%	7,50%	Mapage-fee	0/	0.00 /o	0,00%	0.0770/	6/ 05%
Technical- Admin	%	78.95%	91.89%	87.10%	90%	rranager/specialists	10	40.14%	24.14%	20./3%	44,20%
						Technical- Admin	%	56.86%	75.00%	70.17%	54,60%

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Employees	Unit	FYE2019	FYE2021	FYE2022	FYE2023
Total # involuntary leaves (involuntary includes employers decision to leave the company)	Number of individuals	17	75	64	93
Total involuntary leaves by sex	%				
Female	%	17.65%	24.00%	29.69%	37,63%
Male	%	82.35%	76.00%	70.31%	62,37%
Total # involuntary leaves by age	%				
20s and below	%	0.00%	4.00%	9.38%	37,63%
30s	%	35.29%	18.67%	15.63%	23,66%
40s	%	17.65%	18.67%	20.31%	20,43%
50s and above Total # involuntary leaves by	%	47.06%	58.67%	54.69%	18,28%
professional category Director	%	0.00%	7.69%	1.56%	3,26%
Manager/specialists	%	52.94%	30.77%	39.06%	19,35%
Technical- Admin	%	47.06%	61.54%	59.38%	77,42%
Total # retirements	Number of	29	14	25	23
Total retirements by sex	%				
Female	%	31.03%	0.00%	28%	8,70%
Male	%	68.97%	100.00%	72%	91,30%
Total # retirements by age	%				
20s and below	%	0.00%	0.00%	0%	0%
30s	%	0.00%	0.00%	0%	0%
40s	%	0.00%	0.00%	0%	0%
50s and above	%	100.00%	100.00%	100%	100%
Total # retirements by professional category	%				
Director	%	3.45%	0.00%	4%	0%
Manager/specialists	%	17.24%	50.00%	24%	26,09%
Technical- Admin	%	79.31%	50.00%	72%	73,91%
New Hires					
Total	Number of individuals		263	347	412
new hires male	%		63.5%	62.82%	66,99%
new hires female	%		36.5%	37.18%	33,01%
Total Number of the new graduates newly hired (Full-time)			4		84
Male			3	26	47
Female			1	17	42
Total Number of the mid- career newly hired (Full-time)			259		323
Male			165	192	229
Female			95	122	94
Internships	Number of individuals		45	64	69
Years of continual employment (Unit: Years) (Full-time)	Year		13.6	12.73	12,43
Male	Year		14.5	13.69	13,32
Female	Year		11.3	10.26	10,12
Average age (Full-time)	Age		46.2	45.54	45,47
Male	Age		47.1	46.50	46,38
Female	Age		43.7	43.06	43,12
Managers	Age		47.9	47.49	49,19

Employees	Unit	FYE2019	FYE2021	FYE2022	FYE2023
Compensation					
Gender pay gap Spain	%		4.8%	2.0%	0,76%
Gender pay gap Oximesa	%		1.9%	3.7%	4,15%
Gender pay gap Rest Nippon Gases	%		13.2%	13.7%	11,12%
Employees with incentive plan	%		85.1%	79.0%	81,80%
Employees under collective agreement	%		93.2%	93.3%	92,94%
% of the total workforce across all locations represented by formal joint management-works councils, health & safety committees or employee representatives			95.7%	95.7%	95,45%
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.					
Career- Performance					
across all locations who received regular performance reviews	%		70.8%	72.8%	74,20%
% of the total workforce across all locations who received regular career development reviews	%		15	72.8%	74,20%
% of employees with an individual variable component as part of their remuneration	%		85.1%	79.0%	81,80%
Average length of service in the Group	Years		13.6	12.73	12,43
Diversity					
Female employees as a % of the total number of employees	%		27.7%	27,8%	27,90%
Female specialist & managers as a % of the total of the specialist & managerial positions		%	27.1%	27.1%	30,43%
Employees with disabilities as a % of total labour force	%		49 (1.6%)	44 (1,4%)	61 39%
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.					
Work-Life Balance					
Parental leave taken					
Male	Number of individuals		65	43	62
Female	Number of individuals		58	36	45
Caregiver leave taken			NA		
Male	Number of individuals		NA	25	31
Female	Number of individuals		NA	17	38
Volunteer leave systems	Number of individuals		NA		
Male	Number of individuals		NA	13	34
Female	Number of individuals		NA	9	32
Male	Days		NA		
Female	Days		NA		
Expenditures on social contribution initiatives (see Contribution to non-profit organisations)	Thousands Euro		148	116	298.419
Employee satisfaction survey in last 3 years	Number		1	1	2
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.					

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Training				
Employees who received training at least once during the year	%	100%	100%	100%
Employees who received safety training	%	100%	100%	100%
Employee training hrs/employee/ yr	Hrs /employee	80	12	13
Safety training hours/employee/ yr	Hrs /employee	12	8	4
Total Training Hours				
Male				30.059
Female % of the employees who received training on environmental issues		67%	73%	11.093
% of the employees who received training to strengthen employees' knowledge and skills specific to their work or their career advancement.		88%	94%	86%
Mandatory Training in PeopleHub				
Technicians & Administration				
Male	Train.hours reg.	4 ,155	8,759	12,543
Female	Train.hours reg.	1,768	2,992	3,846
Specialist				
Male	Train.hours reg.	6,147	8,992	7,998
Female	Train.hours reg.	2,570	3,424	2,623
Manager				
Male	Train.hours reg.	2,413	3,579	2,136
Female	Train.hours reg.	861	746	704
Director				
Male	Train.hours reg.	830	1,064	690
Female	Train.hours reg.	220	157	95
Total				
Male	Train.hours reg.	13,545	22,394	23,366
Female	Train.hours	5,419	7,319	7,268
Soft Skill Training in PeopleHub	reg.			
Technicians & Administration				
Male	Hours Reg.	419	759	1,200
Female	Hours Reg.	216	657	803
Specialist	Hours Reg.			
Male	Hours Reg.	1,680	2,413	3,773
Female	Hours Reg.	1,084	1,846	2,247
Manager	Hours Reg.			
Male	Hours Reg.	949	1,049	1,334
Female	Hours Reg.	550	599	662
Director	Hours Reg.			
Male	Hours Reg.	194	346	386
Female	Hours Reg.	123	156	113
Total	Hours Reg.			
Male	Hours Reg.	3,242	4,566	6,693
Female	Hours Reg.	1,973	3,257	3,825

Occupational Health and Safety					
Occupational accidents resulting in recordable injury		3	8	5	6
Male		3	8	4	6
emale		0	0	1	0
Rate occupational accidents resulting in recordable injury (b)		1.07	1.43	0.90	1.04
ost-time accidents of employees of at least one day (a)	Number	2	4	3	3
Male		2	4	2	3
Rate of occupational accidents resulting in lost		0.71	0.72	0.52	0.52
Male		0.71	0.98	0.48	0.71
Female		0	0	0.64	0
Accident severity rate (c)			22.72	12.06	8.7
Male			31.09	14.91	12.1
Female			0	4.48	0
Absenteeism rate (g)	%	5.32%	3.08%	4.41%	3,79%
Male		5.27%	3.28%	4.23%	3,85%
Female		5.43%	2.55%	4.86%	3,64%
Absenteeism Hours(i)	Hours				
Male					164.175
Female					53.719
Occupational diseases	Number				
Male					0
Female					0
Number of accidents of subcontractors LTI(d)(e)		12	10	9	
Frequency of accidents of subcontractors workers (f)	Number of incidents		6.70	5.50	6.45
High Severity Product vehicles preventable incidents	Number of incidents	7	2	7	4
High Severity Product vehicles preventable incidents rate (h)			0.03	0.08	0.05
Product vehicles preventable incidents rate		0.32	0.08	0.16	0.1
No occupational diseases reported			0	0	0
 (a) Fatal work acidents for (b) Fatal work acidents for (a) Fatal work acidents for NG employees since 2017: none (b) Number of acidents involving lost time of at least one day, per million hours worked by Group employees and temporary workers. (c) Average number of days of lost time per million hours worked. (d) Personnel working under an Nippon Gases contract at a Group site, at a customer site, or as a delivery vehicle driver. (e) Fatal work accidents since 2017: None. (f) Number of accidents involving lost time of at least one day, per million hours worked. (g) Absenteeism rate calculation: # of hours of illness / # of employees * annual working time by employee (h) Product vehicles preventable incidents with an injury or vehicle tow away per million driven km 					

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Assessments	Unit	FYE2019	FYE2021	FYE2022	FY.2023
Number of Health and Safety European Assessments		13	9	14	16
Number of Health and Safety European Assessments operational sites			9	8	13
Number of Environment European Assessments		4	8	7	11
Environmental operational assessment rate	%		89%	88%	92%
% of all operational sites for which an environmental risk assessment has been conducted or IS014.001 implementation			38%	70%	74%
% of all operational sites for which an employee health & safety risk assessment has been conducted			100%	100%	100%
Community					
Community projects . # people participating	Number		400	658	1020
Hours of volunteerism	Hours		NA	NA	NA
Community engagement. # projects	Number		56	79	81
Contribution to non-profit organisations	Thousand Euros		148	141	293
Social Relations					
% of employees covered by Collective Bargain Agreement	%				
Belgium					100%
Germany					100%
Denmark					100%
Italy					100%
Netherlands					0%
Norway					100%
Portugal					100%
Spain					100%
Portugal					0%
Sweden					100%
United Kingdom					0%
Ireland					0%

Governance

Management Configuration	Unit	FYE2019	FYE2021	FYE2022	FYE2023
Directors Male BOD NGEH	Number of individuals		6	8	8
Directors Female BOD NGEH	Number of individuals		1	1	1
Confirmed incidents of ethics/corruption and/or anti-trust matters	Number		0	0	2
Public legal cases regarding corruption and/or anti-trust matters	Number		0	0	0
Human Rights violations complains	Number		0	0	0
Discrimination / Harassment cases reported and confirmed	Number		0	2	0
Security breaches high severity cases	Number		0	0	0
Number of Compliance trainings	Number		105	116	93
% employees received training on ethics (Code of Conduct re-certification process)	%		2,109 (a) (100*%)	2,100 (a) (100*%)	100%
% employees received training on preventing discrimination and human rights violations (part of the Code of conduct re-certification process)	%		2,109 (a) (100%)	2,100 (a) (100*%)	2,831 (100%)
% employees received training to prevent anti-competitive practices	%		2,082 (a) (100%)	2,547(a) (100*%)	2,272(a) (100*%)
% employees received training to information security risk practices	%		2,029 (a) (100*%)	2,514(a) (100*%)	100%
Audits of control procedures (e.g. accounting, purchasing etc.) to prevent corruption and bribery	Number		3	0	5
Audits on anti-competitive practices performed	Number		0	0	0
Audits on information security risk performed	Number		1	1	1
Amount of political donations	Euros		0	0	0
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe. (a) selected employees (b) employees with company computer					
Customers					
Customer Customer complaints with product out of specification % with product out of specification %	%	5.4%	4.6%	5.5%	3.8%
Average days of resolution of closed complains	Days	62	39	30	71
Percentage of complaints reports investigated and closed out within 90 days of the incident	%	63%	81%	90%	73%
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.					
Supply Chain					
Reported non-conformities	Number	61	66	204	399
Reported non-conformities - internal	Number	51	40	62	167
Reported non-conformities - external	Number	10	26	142	232
Reported non-conformities - safety	Number	0	0	0	0
Supply chain suppliers audits	Number		3	13	34
Percentage of targeted suppliers who have signed the supplier code of conduct	%			60	65
Reporting boundary: Nippon Gases and its consolidated subsidiaries in Europe.					
External Commitments					
Audit, specifically related to CSR issues (e.g. Ecovadis)	Number		0	1	0

Back to index

5.4 GHG emission verification statement (SGS)

Ref No 02/958/336129-02

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in the period 01/04/2022 - 31/03/2023 for

NIPPON GASES EURO-HOLDING S.L.U.

CALLE ORENSE 11, 28020 (MADRID)

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

GHG PROTOCOL

For de following activities: Industrial and medical gases.

Technical Director of Sustainability and Climate Change

C/Trespaderne 29, Edificio Barajas I, 2ª Planta, 28042 - Madrid (España)

Approved by



M^a Lourdes Martín Mangas

Date: 5th June 2023

SGS Tecnos S.A.U.

www.sqs.es

VERIFICADO GHG PROTOCOL

Trospademe, 29 Edificio Barajas 1 28042 MADRID Ref No: 02/958/336129-02

Greenhouse Gases Verification Statement

NIPPON GASES EURO-HOLDING S.L.U. provided the GHG assertion based on the requirements of GHG Protocol. The GHG emissions for the Fiscal Year 2023 have been verified by SGS to a limited level of assurance, consistent with the agreed verification scope, objectives and criteria. The emissions are broken down into the following categories:

Scope 1- Direct GHG emissions

Scope 2- Electricity indirect GHG emissions

Scope 3- Other indirect GHG emissions

stated

procedures



equivalent assertion:

- control and notification.

This statement shall be interpreted with the CO2 equivalent assertion "Nippon Gases GHG Inventory Report 2023 rev2b"

as a whole.

Opinion

Note: This Statement is issued, on behalf of Client, by SGS Tecnos S.A.U. ("SGS") under its General Conditions included in http://www.sgs.com/terms_and_conditions,htm. A full copy of this statement and the supporting GHG Assertion may be consulted at NIPPON GASES EURO-HOLDING S.L.U.. This Statement does not relieve Client from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client.







4.000-	Fiscal Year
t coze	2023
	63,473
3	854,136
	1,318,886
TOTAL	2,236,495

SGS has planned and performed the current work to obtain the information, explanations and evidence considered necessary to provide a limited level of assurance that the CO2 equivalent emissions for the Fiscal Year 2023 are fairly

Our verification of the GHG Assertion of NIPPON GASES EURO-HOLDING S.L.U. includes the evaluation of the GHG information system, its control, and its notification protocol. This verification has included the collection of evidence supporting the reported data, and the verification of the correct application of NIPPON GASES EURO-HOLDING S.L.U.

Based on the process and procedures conducted, SGS concludes that there is no evidence that the presented CO2

- Is not materially correct and is not a fair representation of GHG data and information, and

Has not been prepared in accordance with the requirements of GHG Protocol, in relation to its quantification,

Ref No: 02/958/336129-02 v2



Schedule Accompanying Greenhouse Gas Verification Statement Number

SGS has been contracted by NIPPON GASES EURO-HOLDING S.L.U., for the verification of direct and indirect carbon dioxide (CO2) equivalent emissions as provided by NIPPON GASES EURO-HOLDING S.L.U. in their GHG assertion "Nippon Gases GHG Inventory Report 2023 rev2b", covering the period 01/04/2022 - 31/03/2023 and considering Fiscal Year 2019 (from 01/04/2018 to 31/03/2019) as the base year.

Responsibilities

Energy and sustainability Department of NIPPON GASES EURO-HOLDING S.L.U. is responsible for the organization's GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG emissions information and the reported GHG emissions.

It is SGS' responsibility to express an independent GHG verification opinion on the GHG emissions as provided in their GHG Assertion for the period 01/04/2022 - 31/03/2023,

SGS conducted a third party verification following the requirements of GHG Protocol and ISO 14064-3:2019 of the provided CO2 equivalent assertion "Nippon Gases GHG Inventory Report 2023 rev2b", for the period 01/04/2022 - 31/03/2023

Level of Assurance

The level of assurance agreed for the assignment is a limited level of assurance.



Scope

NIPPON GASES EURO-HOLDING S.L.U. has commissioned an independent verification by SGS of reported CO2 equivalent emissions arising from their activities, to establish conformance with the requirements of GHG Protocol in their facilities located in BELGIUM, DENMARK, FRANCE, GERMANY, IRELAND, ITALY, NORWAY, PORTUGAL, SPAIN, SWEDEN, the NETHERLANDS and UNITED KINGDOM.

The reporting boundaries have been:

- Scope 1: Direct GHG emissions:
 - Emissions from stationary sources: consumption of natural gas.
 - Emissions from mobile sources: Fossil fuel combustion: own vehicles fleet and ships.
 - Fugitive emissions: refrigerants, Dry Ice manufacturing and ODS Gases.
- Scope 2: Electricity indirect GHG emissions:
 - Electrical power..
 - Steam
- Scope 3: Other indirect GHG emissions:
 - Category 1: Purchased goods and services.
 - Category 2: Capital goods.
 - Category 3: Fuel-and-energy-related activities (not included in scope 1 and 2).
 - Category 5: Waste generated in operations. .
 - Category 9: Downstream transportation and distribution.
 - Category 11: Use of sold products.
 - Category 13: Downstream leased assets.

The exclusions have been:

- because it is not required.
- because it is not required.
- Category 1: CO2 refilling extinguishers estimated emissions. -
- Category 4. Upstream transportation and distribution.
- Category 6. Business travel.
- Category 7. Employee commuting.
- Category 8. Upstream leased assets. -
- Category 10. Processing of sold products.
- Category 12. End-of-life treatment of sold products.

This Statement is not valid without the full verification scope, objectives, criteria and conclusion available included in the schedule



- Category 1: Natural Gas in Liquid CO2 Plants, Filling Stations and Specialty gases laboratories

Category 1: Steam in Liquid CO2 Plants, Filling Stations and Specialty gases laboratories

5.5 Glossary

CCU	Carbon Capture and Utilisation
DX	Digital Transformation
ESG	Environmental, Social, and Governance
GEI	Gases de Efecto Invernadero
MAP	Modified Atmosphere Packaging
MCC	Mitsubishi Chemical Corporation
мснс	Mitsubishi Chemical Holdings Corporation. ("Mitsubishi Chemical Group Corporation" a partir de julio 2022).
N2O	Óxido Nitroso
NSHD	Nippon Sanso Holdings Corporation
PDP	Personal Development Plan
РРА	Power Purchase Agreement
EPI	Equipo de Protección Individual
RI - rate	Recordable Injury rate
ODS	Objetivos de Desarrollo Sostenible de las Naciones Unidas
TNSC	Taiyo Nippon Sanso Corporation

Ref No: 02/958/336129-02



The organizational boundaries were established following the **financial** control approach.

This engagement covers verification of emissions and removals of greenhouse gases included within the organization's boundaries and meets the requirements of ISO 14064-3:2019.

- Title and description of activities: Verification of the GHG assertion for NIPPON GASES EURO-HOLDING S.L.U. Fiscal Year 2023.
- Location of the acitivities: Belgium, Denmark, France, Ireland, Germany, Italy, Norway, Portugal, Spain, Sweden, Poland, the Netherlands and United Kingdom plants.
- Activities of the organization: Industrial and medical gases. The main products supplied by Nippon Gases in various physical forms and purities are oxygen, nitrogen, argon, carbon dioxide, hydrogen, helium, carbon monoxide, gas mixtures, electronic gases, specialty gases and the services and technologies associated with the use of these gases and mixtures.
- Types of GHGs included: CO₂, CH₄, N₂O, HFCs, SF₆, NF₃ and PFC.
- The verification period is: 01/04/2022 31/03/2023

Objetives

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the CO2 equivalent emissions are as declared by the organization's CO2 equivalent assertion.
- That the data reported are accurate, complete, consistent, transparent and free of material error or omission.
- Whether the inventory system complies with the criteria and scope established in the GHG Protocol.

Criteria

Criteria against which the verification assessment is undertaken are the requirements of ISO 14064-3:2019.



Materiality

The materiality required of the verification was considered by SGS to be below 10%.

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This Statement is not valid without the full verification scope, objectives, criteria and conclusion available included in the schedule Página 5 de 5

SGS

ANNEX

5.6 About this report

The non-financial statement was prepared pursuant to the requirements of Royal Decree-Law 11/2018, of 28 December, amending the Spanish Commercial Code, the consolidated text of the Spanish Companies Act approved by Royal Legislative Decree 1/2010, of 2 July, and Spanish Audit Law 22/2015, of 20 July, on disclosures of non-financial and diversity information.

It also considered the European Commission guidelines on non-financial reporting (2017/C 215/01) arising from Directive 2014/95/UE.

Preparation also considered the content of the Global Reporting Initiative's Sustainability Reporting Guidelines (selected GRI Standards) and the principles in the Integrated Reporting Framework, published by the International Integrated Reporting Council, IIRC.

The scope of this report includes the information on FY2022 (from April 1st 2021 to March 31st 2022) of Nippon Gases. The following criteria have been applied to the information reported herein:

 The financial information is presented in accordance with the consolidation principles applied in the annual accounts. - Non-financial information relates to operations over which Nippon Gases maintains control (companies consolidated in the Consolidated Financial Statements in accordance with the full integration method).

TThis report details and expands on the nonfinancial statement. Through the non-financial statement, Nippon Gases reports on relevant environmental, social and governance aspects, employee-related and human rights matters for the company in carrying out its business.

During the preparation of this report and its contents selection, the results of the materiality analysis carried out have been considered with the following results:

selection, the results of the materiality analysis carried out have been considered with the following results:

Extremely important aspects	Very important aspects	Important aspects
 Product and service safety & quality Providing products and services that contribute to solving environmental and social issues Climate change mitigation and adaptation Effective use of resources and prevention of pollution Strengthening information security measures Improvement of productivity and promotion of production optimization Development and maintenance human resources Strengthening communication with stakeholders Sustainable supply chain Contribution to regional and industrial development as social infrastructure Diversity & Inclusion 	 Pursuit of customer satisfaction Technology and R&D capabilities that support the creation of customers and social value Promotion of initiatives for digital innovation Employee and family health Conservation of water resources Coexistence with the local community Improvement of employee engagement Providing comfortable and affluent lifestyles 	 Conservation of biodiversity Protection and effective utilization of Intellectual Property

5.7 Legal Entities

Consolidated entities

			lding		
Tradename	Activity	Direct%	Indirect%	Registered office	
Nippon Gases España S.L.U.	Production, marketing and sales of industrial gases	100%	-	Orense 11,28020 Madrid, España	
Nippon Gases Portugal Unipessoal, LDA.	Production, marketing and sales of industrial gases	100%	-	E.N. 13 Km 6,4, 4470-Maia, Portugal	
Oximesa S.L.U.	Production and sale of medical gases and services	100%	-	Orense 11, 28020 Madrid, España	
Nippon Gases Italia S.R.L.	Production, marketing and sales of industrial gases	100%	-	Via Benigno Crespi 19, 20159 Milán, Italia	
Nippon Gases Industrial S.R.L.	Production, marketing and sales of industrial gases	-	100%	Via Benigno Crespi 19, 20159 Milán, Italia	
Nippon Gases Operations S.R.L.	Production, marketing and sales of industrial gases	-	100%	Via Benigno Crespi 19, 20159 Milán, Italia	
Nippon Gases Pharma S.R.L.	Production and sale of medical gases	-	100%	Via Benigno Crespi 19, 20159 Milán, Italia	
Nippon Gases Refrigerants S.R.L.	Marketing and sales of refrigerant gases	-	64%	Via Benigno Crespi 19, 20159 Milán, Italia	
GemGas S.R.L.	Marketing and sales of industrial gases	-	100%	Via Benigno Crespi 19, 20159 Milán, talia	
Nuova Pescarito S.R.L.	Distribution of Industrial gases	-	100%	Via Cavalier Virginio Tedeschi 1 - 10036, Settimo Torinese (TO), Turin, Italy	
Nippon Gases Industrial	Production, marketing and sales of industrial gases	-	60%	Via Benigno Crespi 19, 20159 Milán, Italia	
Domolife S.R.L.	Production and sale of medical gases and services	-	51%	Via Aterno n. 56, Pescara, Italia	
Dryce S.R.L.	Production and distribution of dry ice and CO	-	51%	via Aosta 5, Cernusco sul Naviglio, Italia	
Nippon Gases Pharma S.R.L.	Production and sale of medical gases and services	-	70%	Via Benigno Crespi 19, 20159 Milán, Italia	
Home Medicine	Holding company	-	100%	Salerno, Via San Leonardo 26 CAP 84131, Italia	
Nippon Gases Deutschland Holding GmbH.	Holding company	100%	-	Hans-Böckler Strasse, 1, 40476 Düsseldorf, Alemania	
Nippon Gases Deutschland GmbH.	Production, marketing and sales of industrial gases	-	100%	Hans-Böckler Strasse, 1, 40476 Düsseldorf, Alemania	
Sauerstoff- und Stickstoff- rohrleitungs- gesellschaft mbH (SRG)	auerstoff- und Stickstoff- rohrleitungs- esellschaft mbH (SRG) Distribution of industrial gases		50%	Hans-Böckler Strasse, 1, 40476 Düsseldorf, Alemania	
Nippon Gases SP Z o. o.	Marketing and sales of industrial gases	-	100%	Al Korfantego, 40-004 Katowice, Polonia	
Nippon Gases Belgium, NV.	Production, marketing and sales of industrial gases	100%	-	Lammerdries 29 2250 Olen, Bélgica	
Antwerpse Chemische Bedrijven (LCB), N.V.	Production, marketing and sales of industrial gases	-	100%	Metropoolstraat 16, 2900 Schoten, Bélgica	
Nippon Gases Netherlands, B.V.	Production, marketing and sales of industrial gases	-	100%	Beugsloepweg 3, 3133 KV Vlaardingen, Países Bajos	
Nippon Gases CO2, B.V.	Production, marketing and sales of industrial gases	-	100%	Beugsloepweg 3,3133 KV Vlaardingen, Países Bajos	
Nitraco, N.V.	Distribution of industrial gases	-	50%	Metropoolstraat 17, 2900 Schoten, Bélgica	
Nippon Gases Danmark A/S.	Production, marketing and sales of industrial gases	-	100%	Rode Banke, 120, 7000 Frederica, Dinamarca	
Nippon Gases Norge A/S.	Production, marketing and sales of industrial gases	100%	-	Ringnesveien 50, 0978 Oslo, Noruega	
Nippon Gases Sverige AB.	Production, marketing and sales of industrial gases	-	100%	Volvogatan 14, 731 36 Köping Västmanlands län Suecia	
Nippon Gases Europe Ship AS.	Distribution of industrial gases	-	100%	Fredrik Selmers vei 6, 0663 Oslo, Noruega	
Nippon Gases UK Ltd.	Production, marketing and sales of industrial gases	100%	-	Gresley Way, Immingham Docks, DN40 2NT, United Kingdom	
Nippon Gases Ireland Ltd.	Production, marketing and sales of industrial gases	100%	-	Unit 22, Viscount Avenue, Airway Industrial Estate, Santry, Dublin 17, Irlanda	
Nippon Gases France SAS.	Gases France SAS. Production, marketing and sales of industrial gases		-	Rue de l'industrie 60, Savigny, Francia	
Nippon Gases Offshore Investments Ltd.	Holding company	100%	-	Howe Moss, Avenue, Kirkhill Industrial, Estate, Dyce, Aberdeen	
Nippon Gases Offshore Ltd.	Production, marketing and sales of industrial gases	100%	-	Howe Moss, Avenue, Kirkhill Industrial, Estate, Dyce, Aberdeen	
Nippon Gases Asia Pacific PTE Ltd.	Production, marketing and sales of industrial gases	100%	-	21 Tanjong Kling road, Singapore	
Nippon Gases Finance Ltd. Finance Company		100%	-	Suit 27, 21 Lower Baggot Street, Dublin, D02 X658	

5.8 Table of Contents required under Law 11/2018

General

Sub-	category	Reporting framework	Reference	Comments/ Reason for Omision
Business Model	 Brief description of the group's business model: Business environment Organisation and structure Market presence Objectives and strategies Main factors and trends that affect the company's future evolution 	GRI 2-1 Organisational details GRI 2-2 Entities included in the organisation's sustainability reporting GRI 2-6 Activities, value chain and other business relationships GRI 2-9 Governance structure and composition GRI 2-23 Policy commitments	рр 13-16 144	
Materiality	Materiality Analysis	GRI 3-1 Process to determine material topics GRI 3-2 List of material topics	pp 18	
General	Mention in the report of the national, European or international reporting framework used for the selection of key indicators of non-financial results included in each of the sections. If the company complies with the non-financial reporting law by issuing a separate report, it must be expressly stated that such information is part of the management report		рр 42	
	Description of the policies applied by the group, Results of these policies, including key indicators of relevant non-financial results	GRI 2-23 Policy commitments GRI 2-24 Embedding policy commitments		
Management Approach	Main risks related to these issues and related to the group's activities, including, when relevant and proportionate, its business relationships, products or services that may have negative effects in these areas	GRI 3-3 Management of material topics	pp 50-53	

Enviror	nment
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Sub-	category	Reporting framework	Reference	Comments/ Reason for Omision	
Environmental management	Current and foreseeable effects of the company's activities	GRI 3-3 Management of material topics GRI 201-2 Climate change: financial implications, risks and opportunities GRI 308-1 New suppliers that were screened using environmental criteria GRI 308-2 Negative environmental impacts in the supply chain and actions taken	Pp 72-73		
	Environmental assessment and certification procedures		Pp 126,130		
	Resources dedicated to the prevention of environmental risks		Pp 58-59	The environmental risk assessment has not identified a high probability of occurrence in the locations where we work	
	Implementation of the precautionary principle			The environmental risk assessment has not identified a high probability of	
	Amount of provisions and guarantees for environmental risks		Pp. 126	occurrence in the locations where we work. Consequently, during FYE2023 there have been no provisions or guarantees for environmental risks	

Environment

Ámbito		Marco de informe	Referencia	Comentarios/motivo de omisión
Pollution	Measures to prevent, reduce or repair emissions that seriously affect the environment, including any form air, noise and light pollution	GRI 3-3 Management of material topics GRI 305-6 Emissions of ozone-depleting substances (ODS) GRI 305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	pp.68-71 83, 124	
Circular economy and waste prevention and management	Measures related to prevention, recycling, reuse and other form of waste recovery and disposal	GRI 3-3 Management of material topics GRI 301-2 Recycled input materials used GRI 301-3 Reclaimed products and their packaging materials GRI 306-1 Waste generation and significant waste-related impact GRI 306-2 Management of waste discharge-related impacts GRI 306-3 Waste generated	pp. 83, 124	
	Actions to avoid food waste	GRI 3-3 Management of material topics GRI 306-2 Management of waste discharge-related impacts	N/A	Our processes and locations do not create a material amount of food waste
	Water consumption and water supply in accordance with local constrains	GRI 3-3 Management of material topics GRI 303-3 Water recycled and reused GRI 303-5 Water consumption	Pp 79-81 126	
	Raw materials consumption and measures taken to improve the efficiency of its use	GRI 3-3 Management of material topics GRI 301-1 Material consumption by weight or volume	Pp 83	
Sustainable use of resources	Direct and indirect energy consumption	GRI 302-1 Energy consumption within the organisation GRI 302-2 Energy consumption outside of the organisation GRI 302-3 Energy intensity	рр. 74-78, 124	
	Measures taken to improve energy efficiency	GRI 3-3 Management of material topics GRI 302-4 Reduction of energy consumption	pp. 74-78	
	Use of renewable energy	GRI 302-1 Energy consumption within the organisation	pp. 74-78	
Climate change	Relevant aspects regarding greenhouse gas emissions as a result of the company's activity, including goods and services produced by the company	GRI 305-1 Direct (Scope 1) GHG emissions GRI 305-2 Energy indirect (Scope 2) GHG emissions GRI 305-3 Other indirect (Scope 3) GHG emissions GRI 305-4 GHG emissions intensity	pp. 68-71 123,124	
	Measures taken to adapt to climate change	GRI 3-3 Management of material topics	pp. 53	
	Voluntary reduction targets	GRI 3-3 Management of material topics 305-5 Reduction of GHG emissions	pp. 19,21	
Biodiversity protection	Measures taken to preserve or restore biodiversity	GRI 3-3 Management of material topics GRI 304-3 Habitats protected or restored	pp. 67	
	Impacts caused by activities or operations in protected areas	GRI 3-3 Management of material topics 304-2 Significant impacts of activities, products, and services on biodiversity	pp. 73	

Social and employee related matters

	Sub-category	Reporting framework	Reference	Comments/ Reason for Omision
Employment Tota age Tota emp Nun age Gen Aver Boa Aver Boa	Total number of employees and distribution by country, gender, age and professional category	GRI 2-7 Employees	pp. 127,128	The company reports the total number and distribution of employees by gender, age and professional category; The breakdown of the number of employees by country is not included, to avoid a competitive advantage to our competitors
	Total number and distribution of employment contract modalities	GRI 405-1 Diversity of governance bodies and employees	pp. 127,128	The information provided refers to the number of contracts at the end of the year due to the difficulty of obtaining average annual values. Given the company's low turnover rate, it is considered a good estimate of the average number of contracts for the year ended March 31, 2023
	Annual average of indefinite, temporary and part-time contracts by gender, age and professional category	GRI 2-7 Employees	pp. 127,128	
	Number of dismissals by gender, age and professional category	GRI 401-1 New employee hires and employee turnover	pp. 127,128	
	Gender pay gap	Internal reporting framework: (average women remuneration average men remuneration) / average men remuneration. GRI 405-2 Ratio of basic salary and remuneration of women to men	pp. 128	
	Average remuneration by gender, age and professional category	Internal reporting framework: qualitative description of the average remuneration by gender, age and professional category		The company does not report the average remuneration of employees by gender, age and professional category
	Average remuneration of the Board of Directors by gender by gender.			The Administrator and the members of senior management who may hold positions of administrators or directors in the parent
	Average remuneration of directors by gender	Internal reporting framework: qualitative description of the average remuneration of directors by gender		for this concept

Social and employee related matters

	Sub-category	Reporting framework	Reference	Comments/ Reason for Omision
Implementation of labor Disconnection policies	Internal reporting framework: qualitative description of the implementation of labour disconnection policies		La compañía no dispone de política de desconexión laboral que aplique a todos los países	
Number of employees with disabilities	GRI 405-1 Diversity of governance bodies and employees			
	Organisation of working time	Internal reporting framework: qualitative description of the organisation of working time	Pp 90-96	
Work organisation	Number of absenteeism hours	Internal reporting framework: quantitative description of the number of total hours of absenteeism. GRI 403-2 Types of accidents and frequency rate of accidents, occupational diseases, days lost, absenteeism and number of deaths due to accident at work or occupational disease	Pp 100-102 129	
	Measures to promote work-life balance and co-parenting responsibilities	Internal reporting framework: qualitative description of the measures GRI 401-3 Parental leave	Pp 99	
	Occupational health and safety conditions	GRI 403-1 Occupational health and safety management system	Pp 100-102	
Health and safety	Number of work accidents and Occupational diseases, by gender. Frequency rate and severity rate by gender	GRI 403-9 Work-related injuries GRI 405-2 Ratio of basic salary and remuneration of women to men	Pp 129	No occupational diseases have been recorded during FYE2023
	Social dialogue organisation	GRI 3-3 Management of material topics	Pp 90-96	
	Percentage of employees covered by collective agreements, by country	GRI 2-30 Collective bargaining agreements	Pp 130	
Labor relations	Balance of collective agreements especially in the field of health and safety	GRI 3-3 Management of material topics	Pp 100-102	
	Procedures to inform, consult and joint participation with employees, as well as negotiation procedures	GRI 2-29 Approach to stakeholder engagement	Pp 96-98	
	Training policies implemented	GRI 404-2 Programs for upgrading employee skills and transition assistance programs	Pp 90-95 129	
Iraining	Number of hours of training by professional category	Internal reporting framework	Pp 82-87 129	
Universal accessibility of people with disabilities		GRI 3-3 Management of material topics Internal reporting framework: qualitative description of the universal accessibility of people with disabilities	pp. 90-95	
Equality	Measures taken to promote equal treatment and equal opportunities for women and men	Internal reporting framework: qualitative description of the universal accessibility of people regardless the gender	pp. 94-95	
	Equality plans measures adopted to promote employment, protocols against sexual and gender-based harassment	Internal framework: Qualitative description of measures taken to promote equal treatment and opportunities for women and men. GRI 3-3 Management procedure for material issues GRI 2-23 Values, principles, standards, and norms of behavior	pp. 94-95	
	Integration and universal accessibility for people with disabilities	GRI 3-3 Management procedure for material issues	pp. 90-94	
	Policy against all types of discrimination and, where appropriate, management of diversity	Reporting framework: Qualitative description of the diversity management GRI 3-3 Management of material topics GRI 2-23 Values, principles, standards, and norms of behavior	pp. 90-94	

Corruption and bribery

	Sub-category	Reporting framework	Reference	Comments/ Reason for Omision
Measures taken to prevent corruption and bribery	GRI 2-23 Values, principles, standards, and norms of behavior		pp. 53-55	
Measures to combat money laundering	GRI 2-25 Management procedure to correct failures GRI 2-26 Mechanisms for advice and concerns about ethics		pp. 53-55	
Contributions to non -profit organisations	GRI 201-1 Direct economic value generated and distributed		pp. 131	

Human rights

	Sub-category	Reference	Comments/ Reason for Omision
pplication of due diligence rocedures in the field of human ghts	GRI 2-26 Counselling mechanisms for human rights concerns. GRI 3-3 Management of material topics	pp. 55	In FYE2023, the company has not carried out human rights due diligence procedures
revention of the risks of violation f human rights and, where ppropriate, measures to mitigate, nanage and repair possible abuses ommitted	GRI 3-3 Management procedure for material issues GRI 2-23 Values, principles, standards, and norms of behavior GRI 2-26 Counselling mechanisms for human rights concerns.	pp. 55	
uman rights violations complaints	Internal reporting framework	pp. 55	
romotion and compliance with O's provisions related to freedom f association and collective argaining: the elimination of ork discrimination, forced or ompulsory labor and the effective bolition of child labor	GRI 3-3 Management procedure for material issues GRI 2-23 Values, principles, standards, and norms of behavior GRI 407-1 Suppliers and own operation subject to risk of breaching labor rights GRI 409-1 Suppliers and own operation subject to risk of employment foced labour workers	pp. 58-59	

Society

Sub-category		Reporting framework	Reference	Comments/ Reason for Omision
	Impact of the company's activity on employment and local development	GRI 3-3 Management of material topics I	pp. 103-110-103, 130	
	Impact of the company's activity on local populations and territories	GRI 413-1 Local community involvement operations, impact assessments and development programs	pp. 103-110-103, 130	
Commitment with sustainable development	Company's relations with local communities' agents and dialogue channels	GRI 413-2 Operations with potential or real impact on local community	pp. 103-110-103, 130	
	Partnerships and sponsorship actions	GRI 3-3 Management of material topics GRI 2-28 Membership of associations Marco interno: descripción de las acciones de asociación o patrocinio	Pp 122-123	
Sustainable supply chain	Inclusion of social, gender equality and environmental matters in the company's purchasing policy	GRI 3-3 Management of material topics GRI 2-6 Activities, value chain and other business relationships GRI 2-24 Embedding policy commitments GRI 408-1 Suppliers and operation with GRI 414-1 New suppliers who have passed evaluation and selection filters according to social criteria	Pp 58-59	
	Consideration in the suppliers and subcontractors' relations of their social and environmental responsibility	Internal reporting framework: qualitative description of the management carried out	Pp 58-59	
	Monitoring systems and audits and results	Internal reporting framework: qualitative and quantitative description of monitoring and audit systems, and the results	Pp 58-59	
	Measures to protect consumers' health and safety	GRI 3-3 Management of material topics GRI 416-1 Assessment of health and safety impacts of categories of products or services	Pp 58-59 131	
Consumer relationship management	Complaint systems	GRI 2-16 Critical compliants Survey GRI 2-25 Critical compliants Management	Pp 58-59 131	
	Complaints received and their resolution	Internal framework: Qualitative description of the complaints received and their resolution	Pp 58-59 131	
	Profits obtained by country	Internal reporting framework: quantitative description of the profits obtained before taxes		Information is not provided on the profits obtained before taxes and taxes on profits paid country by
Tax information	Taxes paid on profits	Internal reporting framework: quantitative description of taxes on profits paid		country, since said breakdowns and their historical evolution are considered detrimental to the commercial and competitive position of the company. The profits obtained before taxes and the taxes on profits paid are found in Note X of the Group's FYE2023 Consolidated Annual Accounts
	Public subsidies received	GRI 201-4 Financial assistance received from government		The Group, through its company in Benelux, has received during FYE2023 the amount of 159,000 euros in public subsidies

5.9 Independent Limited Assurance of the Sustainability Report

Independent Limited Assurance Report of the Sustainability Report for the year

NIPPON GASES EURO-HOLDING S.L.U. AND SUBSIDIARIES

ended March 31, 2023



INDEPENDENT LIMITED ASSURANCE REPORT OF THE SUSTAINABILITY REPORT

Translation of a report originally issued in Spanish. In the event of discrepancy, the Spanish-language version prevails

To the Shareholders of NIPPON GASES EURO-HOLDING S.L.U.

Pursuant to article 49 of the Code of Commerce we have performed a verification, with a limited assurance scope, of the accompanying Sustainability Report for the year ended March 31, 2023, of NIPPON GASES EURO-HOLDING S.L.U. and Subsidiaries (hereinafter, the Group), which is part of accompanying Consolidated Directors' Report of the Group.

The content of the Sustainability Report includes additional information to that required by prevailing mercantile regulations in relation to non-financial information that has not been subject to our verification. In this regard, our assignment has been exclusively limited to the verification of the information shown in section 5.8 "Table of contents required under Law 11/2018 " of the accompanying Sustainability Report.

Responsibility of the Board of Directors

The preparation of the Sustainability Report included in the Consolidated Directors' Report and its content is the responsibility of the Board of Directors of of NIPPON GASES EURO-HOLDING S.L.U. The Sustainability Report was prepared in accordance with the content required by current commercial regulation and in reference with the criteria outlined in the Global Reporting Initiative Sustainability Reporting Standards (GRI standards), as well as other criteria described in accordance with that indicated for each subject in section 5.8 "Table of contents required under Law 11/2018 " from the accompanying Sustainability Report.

The Board of Directors are also responsible for the design, implementation and maintenance of such internal control as they determine as necessary to enable the preparation of an NFS that is free from material misstatement, whether due to fraud or error.

They are further responsible for defining, implementing, adapting and maintaining the management systems from which the information necessary for the preparation of the NFS is obtained.

Our independence and quality management

We have complied with the independence and other ethics requirements of the International Code of Ethics for Accounting Professionals (including international standards on independence) issued by the International Standards Board on Ethics for Accounting Professionals (IESBA) which is based on the fundamental principles of integrity, professional objectivity, competence and diligence, confidentiality and professional behaviour.



Our firm applies current international quality standards and maintains, consequently, a quality system that includes policies and procedures related to compliance with ethical requirements, professional standards and legal provisions and applicable regulations.

The engagement team consisted of experts in the review of Non-Financial Information and, specifically, in information about economic, social and environmental performance.

Our responsibility

Our responsibility is to express our conclusions in an independent limited assurance report. Our review has been performed in accordance with the requirements established in the current International Standard on Assurance Engagements 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (ISAE 3000 Revised) issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) and the guidelines for verifying Non-Financial Statement, issued by the Spanish Official Register of Auditors of Accounts (ICJCE).

The procedures carried out in a limited assurance engagement vary in nature and execution timing and are smaller in scope than reasonable assurance engagements, and therefore, the level of assurance provided is likewise lower.

Our work consisted in requesting information from Management and the various Group units participating in the preparation of the 2023 Sustainability Report, reviewing the process for gathering and validating the information included in the NFS, and applying certain analytical procedures and sampling review tests as described below:

- Meetings with Group personnel to know the business model, policies and management approaches applied, the main risks related to these matters and obtain the necessary information for our external review.
- Analysis of the scope, relevance and integrity of the content included in the Sustainability Report for the year 2023 based on the materiality analysis made by the Group and described in section 5.6 "About this report", considering the content required by prevailing mercantile regulations.
- Analysis of the processes for gathering and validating the data included in the 2023 Sustainability Report.
- Review of the information on the risks, policies and management approaches applied in relation to the material aspects included in the 2023 Sustainability Report.
- Check, through tests, based on a selection of a sample, the information related to the content of the 2023 Sustainability Report and its correct compilation from the data provided by the information sources.
- > Obtaining a representation letter from the Board of Directors and Management.



Basis for qualified conclusion

The Sustainability report does not include, as indicated in section 5.8 "Table of contents required under Law 11/2018", information regarding to the number and distribution of employees by country, the average remuneration of directors by gender, the average remuneration of employees disaggregated by gender, age and professional category, nor the tax information regarding to the benefits obtained and taxes on profits paid country by country as required by the Law 11/2018, of 28 December, on the subject of non-financial information and diversity.

Qualified conclusion

Based on the limited assurance procedures conducted and the evidence obtained, except for the impact of the matters described in "Basis for qualified conclusion", no additional matter has come to our attention that would cause us to believe that the Group's Sustainability Report for the year ended March 31, 2023 has not been prepared, in all material respects, in accordance with the contents required by prevailing company law and in reference with the criteria outlined in the *Global Reporting Initiative Sustainability Reporting Standards* (GRI standards), as well as other criteria, described as explained for each subject matter in the section 5.8 "Table of contents required under Law 11/2018" of the Sustainability Report.

Use and distribution

This report has been prepared as required by current commercial regulation in Spain, thus it may not be suitable for any other purpose or jurisdiction.

ERNST & YOUNG, S.L.

Elena Fernández García





