

◆ NOBIAN  
**SUSTAINABILITY  
REPORT 2025**

**GROW GREENER  
TOGETHER**





Dear Reader,

Welcome to our fifth annual Sustainability Report.

2025 was a year that tested the resilience of the European industry and reaffirmed the strength of our purpose.

Many companies in our sector, including Nobian, faced mounting pressure and had to navigate strong headwinds. Nevertheless, we continued to deliver meaningful progress and strong results on sustainability.

Several milestones stand out, such as achieving an EcoVadis Platinum rating for the fourth consecutive year. This is a fantastic achievement and the result of the hard work of so many of our colleagues and partners. To be consistently placed among the world's top performers underscores our commitment as well as the fact that we keep raising the bar.

We also became Europe's first large-scale (>100 MW) green hydrogen producer certified under ISCC EU for Renewable Fuels of Non-Biological Origin (RFNBO), as you can read on page 23. We developed and patented two new production processes enabling more efficient production of essential ingredients for lithium and salt-based batteries. We will continue to work hard to scale these products, supporting the rapidly growing need for electrification and energy storage solutions. And we launched the first fresh and drinking water usage reduction project under our water management program, marking a key step toward more responsible resource use.

Yet progress rarely comes without challenges. Market and geopolitical volatility, intensifying global uncertainty, and delays in permitting forced us to pause certain projects. This included implementing elements of the tailor-made



agreements with the Dutch government. These were difficult decisions, but necessary to safeguard long term resilience. Yet, we have reached and greatly exceeded our 2025 climate targets, reducing Scope 1 and 2 emissions by 25% compared to 2020.

Our industry is at a pivotal moment. Europe's basic chemicals sector is navigating increasing raw material and energy costs, increased imports and tightening regulations. This poses challenges for investment.

At the same time, sustainability expectations are accelerating, and the global race for green technologies is intensifying. These pressures do not alter our direction. If anything, they reinforce the urgency of innovation and the importance of leadership.

We remain fully committed to contributing to Europe's sustainability and energy transition. This also includes the development of hydrogen storage caverns, which will be critical for a well-functioning hydrogen backbone and to store and balance renewable energy. Sustainability remains the foundation of our vision for green, responsible chemistry and our ambition to be one of Europe's most sustainable chemical companies.

In 2025, we made real progress: reducing our CO<sub>2</sub> footprint, scaling greener solutions and strengthening the technologies that will shape tomorrow's energy and materials systems. None of this would be possible without the dedication of our employees and partners. Thank you for your expertise, your perseverance and your belief in our purpose.

**Michael Koenig**  
CEO

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**What did we achieve in 2025?**

**Milestones & highlights**



**4X**  
PLATINUM

p. 14

We achieved an EcoVadis Platinum rating for the fourth consecutive year

Twente Canal | ©Adobe Stock/TravelTelly



p. 36

We completed a successful water-saving project in Delfzijl, saving 300,000 m<sup>3</sup> drinking water per year



©RTV Oost/Harro Brouwer

p. 31

We patented two innovative and sustainable processes to produce lithium hydroxide monohydrate and NaAlCl<sub>4</sub>, key battery chemicals for lithium and molten-salt batteries

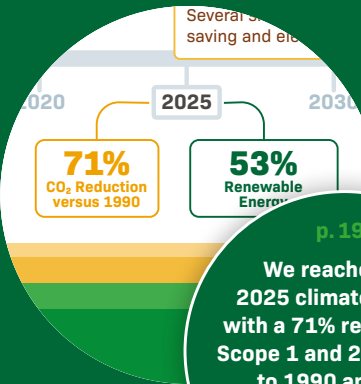
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We further expanded our range of ISCC-certified, low-carbon products and increased the sales of these products to 14% of our total product portfolio



p. 23

We became the first large-scale (>100 MW) European green hydrogen producer to receive the ISCC EU certification for Renewable Fuels of Non-Biological Origin (RFNBO)



p. 19

We reached our 2025 climate targets with a 71% reduction in Scope 1 and 2 compared to 1990 and 50% compared to 2020, and 53% renewable energy

# Introduction

## This is Nobian

At Nobian, we transform salt into essential chemicals that are indispensable in the production of countless everyday products. Through salt extraction and purification, electrochemistry and the development of energy storage capacity, we play a leading role in the energy transition and contribute to a more sustainable and resilient society and living environment.





Because we believe in a future where chemistry is fully green and responsible, we strive to be among Europe's most sustainable chemical companies. Positioned at the very start of the chemical value chain, we are ideally placed to support the transition towards green chemistry and low-carbon products. Our ambition is to 'Grow Greener Together' (see section 2.1).

**Essential elements at the heart of industry, business and society**

Nobian applies its expertise in salt production, electrochemistry and energy storage caverns to deliver indispensable raw materials that form the foundation of a wide range of critical materials and products. Our chemicals are fundamental to the products we use in our daily life and are key components of the energy transition, including solar panels, batteries, insulation materials, LED lights and windmill blades.

Additionally, our chemicals are equally vital in everyday life and help support a resilient society in demanding situations, such as the production of aluminum, steel and ballistic protection materials like body armor and helmets.

We operate within integrated chemical clusters and production sites in Rotterdam, Delfzijl and Hengelo in the Netherlands; Frankfurt, Ibbenbüren and Bitterfeld in Germany; and Mariager in Denmark.

Nobian Frankfurt | © Nobian / Céline Paezowski

Our team of 1,600 employees is dedicated to continuously improving the safety, efficiency and sustainability of our operations.

**The value of salt**

Nobian has over a century of experience in producing salt and essential chemicals.

Salt production, as ordinary as it seems, is fundamental to modern society – and will continue to be indispensable. Our high-purity salt is ideally suited for chemical applications and forms the basis of many everyday products. Salt, an irreplaceable raw material, is essential for developing sustainable technologies and enabling a sustainable future. By extracting salt in the Netherlands and Denmark, we ensure Europe has reliable access to this critical raw material, strengthening resilience, supporting independent value chains and contributing to the economic autonomy for our industry and society.

**Essential chemicals**

The products and chemicals we supply are used across a wide range of applications, from construction and cleaning to pharmaceuticals and water treatment. Our customers depend on us to ensure their operations run reliably.



Nobian, Frankfurt | © Nobian / Celine Paczkowski

Chlorine is a key building block for the chemical and pharmaceutical industries. Nobian produces chlorine, together with caustic soda and hydrogen, through the electrolysis of salt brine. The products produced through this process are crucial for approximately 55% of chemical production in Europe, supporting the manufacture of chemicals, plastics and medicines essential to modern life.

Caustic soda is used in wastewater treatment, detergents and soaps, paper and board production, construction materials and many other applications. In addition, we produce derivatives such as chloromethanes, which

serve as intermediates in the production of pharmaceuticals, agrochemicals, refrigerants, silicone polymers, automotive parts, water treatment and electronics. Hydrogen, previously a by-product, has become increasingly valuable as it is used as a fuel and as a feedstock for circular chemicals, including sustainable aviation fuel.

**Energy**

Our operations are inherently energy-intensive, requiring substantial amounts of steam and electricity. To support this, our salt production sites operate their own energy facilities, including

combined heat and power plants, a biomass boiler and an e-boiler. As a utility provider in several chemical clusters, we supply the steam, electricity and process water we generate to co-located customers.

In addition to our own energy production, we increasingly source steam and electricity from external renewable sources such as waste incineration, wind and solar. We also actively help to stabilize the electricity grid with our E-flex activities.

### Energy storage

As the energy transition progresses, energy storage becomes even more important. When wind and solar generation exceed demand, storing this surplus renewable energy ensures it can be used when production falls short. This enables renewable energy producers to deliver a reliable supply and maintain a stable base load for industrial customers.

We develop salt caverns that are suitable for different types of energy storage such as hydrogen, natural gas, diesel-oil, compressed air and nitrogen. Underground storage in salt caverns is widely regarded as the only proven and available technology for large-scale hydrogen storage.<sup>1</sup> The Dutch government has classified the development of salt caverns for hydrogen storage as being of national importance as salt caverns are essential for a well-functioning hydrogen economy by balancing supply and demand differences, providing security of supply and ensuring a well-functioning hydrogen market and hydrogen backbone.<sup>2,3</sup>

In parallel, we are developing new battery chemical technologies. One of these is designed to produce lithium hydroxide (or carbonate) for use in Li-ion batteries, drawing on our crystallization and electrolysis expertise. Another builds on our salt and chlorine expertise to produce a sodium-based electrolyte (NaAlCl<sub>4</sub>) for molten-salt batteries.

### Sustainability report 2025

In this sustainability report, we outline our environmental, social and governance (ESG) ambitions and provide a detailed update on our progress to date. We share tangible examples of what we have achieved, along with insights into our ongoing activities and future plans. We are proud to present these results.

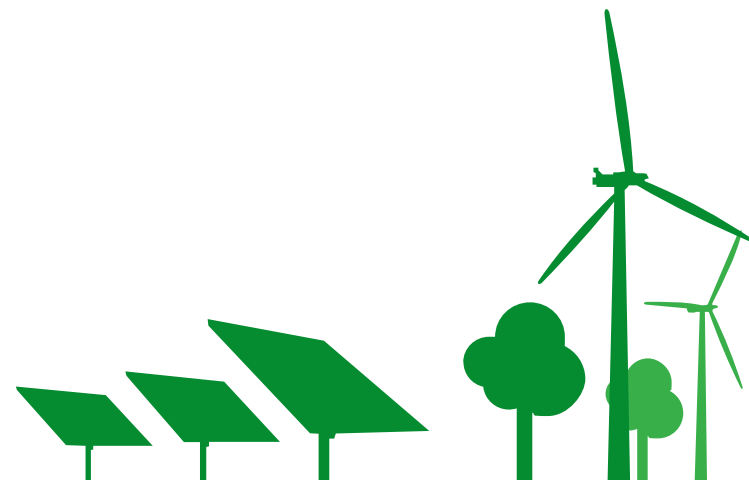
By working closely with our employees, stakeholders and communities, we continue to make meaningful progress on our journey to become one of Europe's leading sustainable companies, while consistently improving our performance.

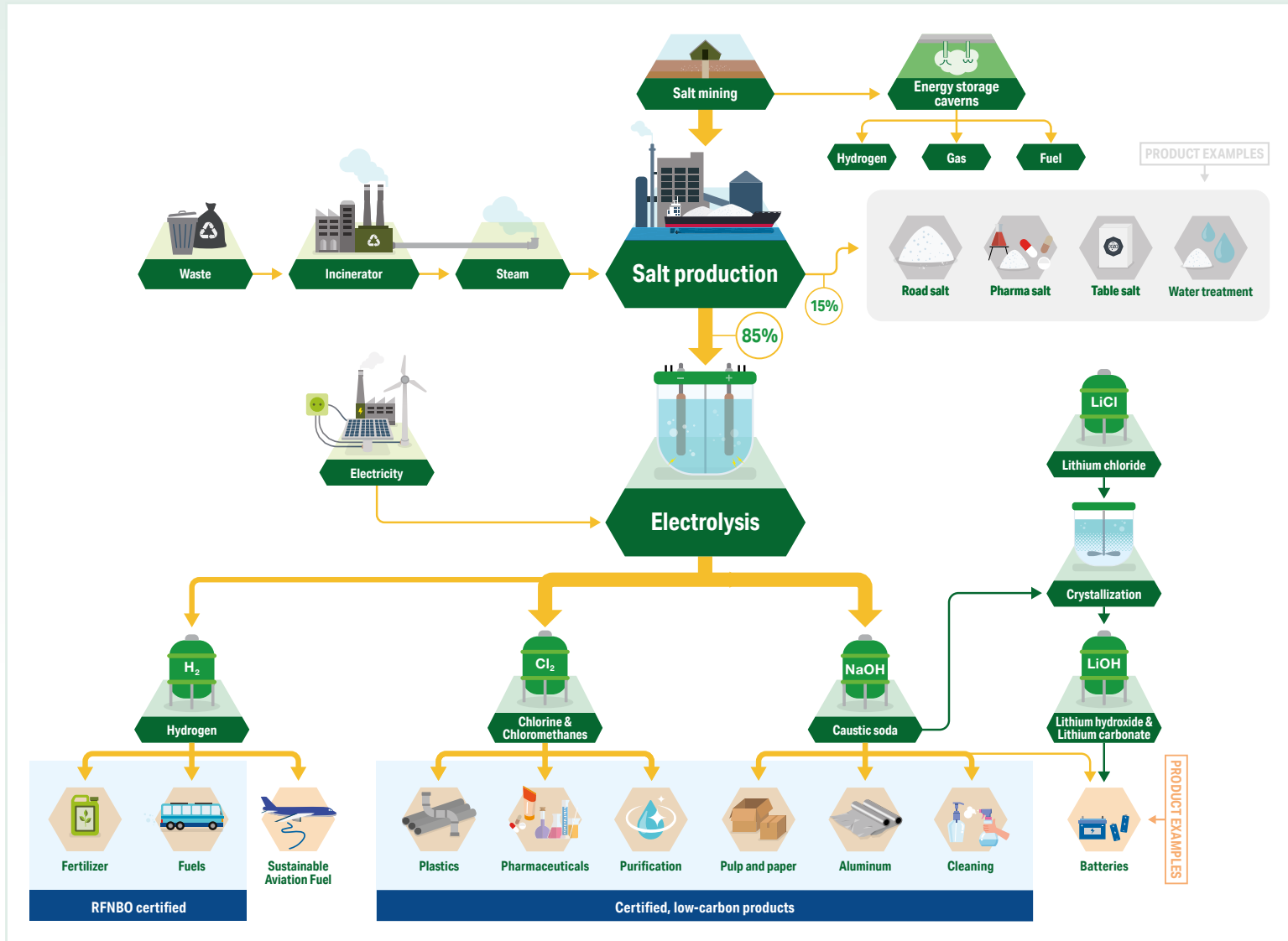
### This is how we Grow Greener Together.

<sup>1</sup> Nationale Agenda Ondergrondse Waterstofopslag; *Hydrogen TCP - Task 42, Underground Hydrogen Storage: Technology Monitor Report 2023*.

<sup>2</sup> Ministry of Climate and Green Growth (NL), *National Agenda for Underground Hydrogen Storage (2025)*.

<sup>3</sup> *Structuurvisie Ondergrond*, Ministerie van Infrastructuur en Waterstaat en Ministerie van Economische Zaken en Klimaat, 2018.





## Nobian's products and value chain

**40%** of all products in the chemical industry are derived from salt.

**85%** of Nobian's salt is used in the chemical industry.

**100%** of the salt used in the chlor-alkali clusters in Delfzijl, Rotterdam and Frankfurt, and a significant share of the salt used in other major chlor-alkali clusters in North-Western Europe, is produced by Nobian.

## **Our approach and progress towards a sustainable future**

To achieve our ambition to Grow Greener Together and become truly sustainable, we measure and assess our performance against a clear, ambitious set of key performance indicators (KPIs) and targets. Each target aligns with one of our three sustainability pillars: Climate, Circular and Care.

**GROW GREENER  
TOGETHER**



## 2.1. Grow Greener Together

Through our Grow Greener Together sustainability program, we aim to be one of Europe’s leading sustainable chemical companies. Our goals surpass the Paris Agreement targets and seek to help our customers reduce their carbon footprints via our low-carbon products, foster growth in innovative and impactful markets and strengthen our relationships with employees and among the communities in which we operate.

Grow Greener Together is founded on three pillars: Climate, Circular and Care.

Each pillar consists of three focus areas with specific, measurable KPIs and targets, detailed in the table on page 13. We have aligned these pillars with the UN Sustainable Development Goals (SDGs) where we believe our impact can be most significant, as outlined in section 2.2.

Our value chain plays an important and material role in Europe’s transition to a sustainable economy. Grow Greener Together is an integral part of this ambition.

Beyond our ESG ambitions, the Grow Greener Together program is designed to create tangible commercial value. It supports revenue growth



through an expanding portfolio of certified, low-carbon products and access to new markets, including the RFNBO (sustainable fuels) value chain. At the same time, it delivers cost efficiencies through more flexible energy use (E-flex) and increased circularity, including reduced freshwater consumption and the recovery of salt from customer residual streams.

We are developing new business opportunities by developing special hydrogen caverns with partners, as part of a renewable energy system in

North-Western Europe. Next to this, we are investing in the development of materials for sustainable battery systems.

Value creation may be further accelerated by EU initiatives to establish “lead markets” and other market-pull mechanisms to boost demand for green and low-carbon products, including through the Critical Chemicals Alliance (CCA).<sup>4</sup> This focus on demand creation can strengthen the business case for our low-carbon products by improving market conditions and unlocking new value pools.

<sup>4</sup> [https://single-market-economy.ec.europa.eu/sectors/chemicals/critical-chemicals-alliance\\_en](https://single-market-economy.ec.europa.eu/sectors/chemicals/critical-chemicals-alliance_en)  
(The Critical Chemicals Alliance - Internal Market, Industry, Entrepreneurship and SMEs)

## Progress towards our targets

Our sustainability strategy is guided by a set of KPIs and targets, detailed in the table on the next page. These undergo an annual review and update process, receiving approval from the Corporate Responsibility Committee. More information on our overall sustainability governance can be found in the Governance appendix.

The next three chapters of this report provide detailed information on our progress in 2025. A chapter is dedicated to each of the three pillars of Climate, Circular and Care, and sections within each of these cover all focus areas. Below is a summary of key achievements, highlights and changes.



In the **Climate pillar**, we have reached and greatly exceeded our 2025 CO<sub>2</sub> emissions reduction and renewable energy targets and are well on track to reach our ambition of net-zero. We are slightly behind our automatic Frequency Restoration Reserve (aFRR) target due to unforeseen process control requirements. However, our overall ambition to reach a 20% capacity target remains intact, and we expect to achieve this in 2027.

More information can be found in Chapter 3.



In the **Circular pillar**, we have introduced a new target for the sales of certified, low-carbon products. This target has been included in our sustainability-linked loan, next to the targets for CO<sub>2</sub> reduction and share of renewable energy in operations. By 2030, we aim to generate 20% of our revenue from low-carbon products across our total product portfolio. In the Water focus area, where last year we introduced a target to reduce our drinking water intake, we are clearly seeing the initial results of our water management program.










Further details can be found in Chapter 4.



In the **Care pillar**, all focus areas have resulted in ongoing programs and activities that are actively pursued across the company. These are now an integral part of our sustainability approach and company values and reflect the essence of this pillar. A new target has been set to strengthen employee well-being, with a focus on mental health.

More information can be found in Chapter 5.

## Key performance indicators and targets

PILLAR	SUBJECT	KPIs and TARGETS	STATUS YEAR END 2025
Climate	 CO <sub>2</sub> reduction	<ul style="list-style-type: none"> <li>◆ Scope 1 and 2 reduction: 25% by 2025, 50% by 2030 and 100% by 2040 compared to 2020 -----</li> <li>◆ Scope 3 reduction: 2% by 2025, 25% by 2030 and 90% by 2050 compared to 2020 -----</li> <li>◆ Carbon neutral in Scope 1 and 2 by 2040 -----</li> </ul>	2025 target reached, 50.2% 2025 target reached, 15.4% On track
	 Renewable Energy	<ul style="list-style-type: none"> <li>◆ 50% share of renewable energy by 2025 -----</li> <li>◆ 66% share of renewable energy by 2030 -----</li> <li>◆ 100% renewable energy by 2040 -----</li> </ul>	2025 target reached, 53.4% On track On track
	 Energy Efficiency and Storage	<ul style="list-style-type: none"> <li>◆ Increase automatic Frequency Restoration Reserve (aFRR) capacity from 10 to 20% by 2027 -----</li> </ul>	Reached 14% in 2025. Some delay due to unforeseen process control requirements
Circular	 Green Products	<ul style="list-style-type: none"> <li>◆ Increase revenue of certified, low-carbon products sales of total products revenue to 20% in 2030 -----</li> <li>◆ Have Environmental Product Declarations (EPD®) available for all low-carbon footprint products -----</li> </ul>	On track, reached 14.2% in 2025 Target reached
	 Water	<ul style="list-style-type: none"> <li>◆ Freshwater consumption reduction: 8% by 2030; 15% by 2035, 35% by 2040 compared to 2020 -----</li> <li>◆ Reduce drinking water intake with 20% by 2035 compared to 2020 and aim to eliminate the use of drinking water for process purposes by 2040 -----</li> </ul>	On track, 9.7% reduction in 2025 On track, 19.6% reduction in 2025
	 Recycling	<ul style="list-style-type: none"> <li>◆ 100 kton salt is reused from salty residual streams by 2027 -----</li> <li>◆ 10 kton CO<sub>2</sub> captured based products in our value chain by 2025 -----</li> <li>◆ Circular methanol available as source for our chloromethane production by 2030 -----</li> </ul>	Delayed to 2029, due to permitting issues Not reached. Awaiting food contact approval. Target reduced to 5 kton in 2027 On track
Care	 Health & Safety	<ul style="list-style-type: none"> <li>◆ Reduce safety incidents year-on-year towards zero people and process incidents -----</li> </ul>	Target not achieved
	 Community	<ul style="list-style-type: none"> <li>◆ Maintain the active local community program at all sites -----</li> <li>◆ Have an active local community program for all new salt mining projects from start of salt production -----</li> </ul>	Ongoing Ongoing
	 People	<ul style="list-style-type: none"> <li>◆ Launch employee engagement survey 2025 and act on outcome -----</li> <li>◆ Continuation of the Nobian Inclusion and Diversity actions for 2025 -----</li> </ul>	Done Done



### Reporting and independent validation

We are transparent in reporting our progress and our approach and our data is verified by an independent, recognized third party. We aim high from the outset by participating in three internationally recognized standards: EcoVadis,<sup>5</sup> the Science Based Targets

Initiative (SBTi)<sup>6</sup> and CDP.<sup>7</sup> SBTi has validated our CO<sub>2</sub> reduction targets and confirmed our net-zero science-based target by 2050.

In CDP, we report our progress on both our climate ambitions and water management in detail. Our sustainability report and ESG data align with the standards of the Sustainability Accounting Standards Board (SASB)<sup>8</sup> and our ESG data and

sustainability report are independently assured by DNV Business Assurance Germany GmbH.<sup>9</sup> In addition, our financing is sustainability-linked, including our targets for CO<sub>2</sub> reduction, increased renewable energy use and growth in low-carbon sales. We are also fully prepared to implement the new EU Corporate Sustainability Reporting Directive (CSRD) which is expected to apply to our company as of the 2027 financial reporting year.

<sup>5</sup> <https://ecovadis.com/>

<sup>6</sup> <https://sciencebasedtargets.org/>

<sup>7</sup> <https://www.cdp.net>

<sup>8</sup> <https://www.sasb.org/>

<sup>9</sup> DNV Business Assurance Germany GmbH

## 2.2. UN Sustainable Development Goals

Guided by our values and plans, Nobian is committed to contributing to the prosperity and well-being of a sustainable society. We therefore support the UN's SDGs. The six on the right are where we believe we can make the biggest impact.

### Progress towards SDGs

As an integral part of our sustainability approach, we report our progress against each of these six SDGs in the relevant sections of this report.

We made significant progress or achieved continued good performance in 2025, as we did in the previous year. This was particularly the case in the areas of *Affordable and clean energy* and *Climate action* (Chapter 3), *Decent work and economic growth* via the expansion of low-carbon products portfolio and employee empowerment (sections 4.1 and 5.3), *Responsible consumption and production*, and *Good health and well-being* via our engagement with communities (section 5.2).

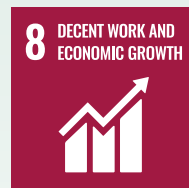
### Six UN SDGs where we can make the biggest impact<sup>10</sup>



*Human health and safety are at the heart of our operations and among our top priorities. We continuously work to reduce pollution from our operations to minimize the impact on our workplace, the environment and our surroundings. We actively engage with communities in close proximity to our production facilities, sharing our knowledge and supporting local initiatives.*



*As a company with high energy demand, we have taken substantial steps to help increase our availability and share of renewable energy. We actively participate in the development of new wind farms to support grid stabilization and lower energy consumption, while our unique processes and expertise enable us to produce green hydrogen and store renewable energy.*



*We firmly believe that business performance and sustainability go hand in hand. To this end, we invest in renewable energy and low-carbon products that deliver sustainable growth and create new and meaningful jobs. We work hard to empower our employees and create a high-performing, diverse and inclusive workplace that reflects our values and the nature of our company.*



*To achieve our sustainability targets, we are embracing innovation and new ways of working. We collaborate with our partners across the value chain to seize these opportunities. To develop and commercialize pioneering solutions, we invest in state-of-the-art technologies focused on renewable energy storage, battery chemicals production, and novel approaches to enhance the sustainability of the cement industry.*



*We actively seek to create circularity within our production processes and throughout our value chain, such as the reuse of salt from residual streams from customers. Furthermore, we strive for greater efficiency by reusing residual and energy streams from our own operations and those of our customers.*



*We recognize that we have a significant role to play in reducing our CO<sub>2</sub> emissions and lead by example in demonstrating our commitment through tangible actions. Our commendable record of reducing emissions began in 1990 and we are well on track to meet our near and long-term targets.*

<sup>10</sup> UN SDGs not part of assurance by DNV.

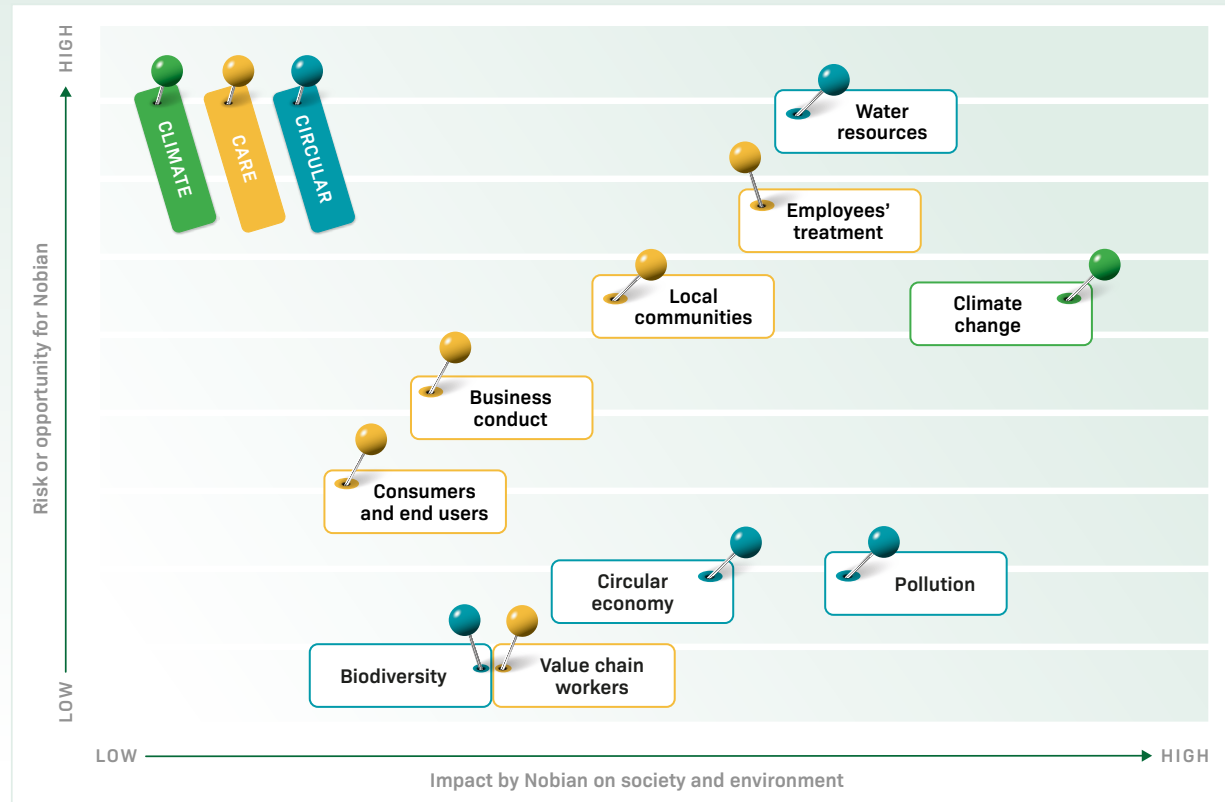
### 2.3. Double materiality assessment

As part of implementing the EU CSRD, we conducted a double materiality assessment<sup>11</sup> to identify the key sustainability topics most material to our strategy, actions and reporting. Completed in early 2024, this helps us understand the materiality of ESG topics from two perspectives: the inside-out impact of our company on society and the environment, and the outside-in risks and opportunities these topics present for our business performance.

The first step was a high-level assessment of impacts, risks and opportunities to identify the ESG topics most relevant to Nobian, based on input from both external and internal stakeholders, including investors, public authorities, non-governmental organizations, suppliers, customers and employees.

The assessment of risks and opportunities forms an integral part of our enterprise risk management (ERM) process, demonstrating how specific ESG topics may affect our company. See appendix 'Impacts, risks and opportunities'.

Seven topics were assessed as material and are addressed in chapters 3, 4 and 5 of this report. Three topics – biodiversity, value chain workers, and consumers and end users – were found not to be directly material to Nobian.



Materiality assessment

#### Biodiversity

Our operations include salt mining, salt production and the production of other essential chemicals. Most of our production sites are situated in industrial areas, away from biodiversity-sensitive regions.

The exception is our Delfzijl site in the Netherlands, situated near the Wadden Sea, a Natura 2000 and UNESCO World Heritage site with a small area sensitive to nitrogen pollution. The impact of nitrogen oxide (NOx) emissions from our Delfzijl

<sup>11</sup> Double materiality assessment not part of assurance by DNV.

site on local biodiversity is negligible. In addition, heat discharge into the Eems, also a Natura 2000 site, remains well within permitted limits and will be further reduced through the implementation of the tailor-made agreement. For our mining operations,

most activities take place underground, resulting in minimal impact on biodiversity. Potential impacts from developing new wells and pipelines are carefully managed in accordance with relevant permits, including preventing disruption to nesting birds.

**Value chain workers**

Our activities focus on producing and supplying base chemicals used at the start of the chemical value chain. Our direct workforce consists solely of our own employees in Western Europe, and we have limited interaction with value chain workers further downstream in the production process. Additionally, stringent labor and safety regulations in Western Europe ensure our employees' rights and welfare are well protected and closely monitored. For these reasons, value chain workers are not considered a material topic for our reporting.

**Consumers and end users**

Our products are primarily used in industrial processes. They serve as raw materials or intermediates in manufacturing goods like PVC, polyurethanes, pulp and paper, as well as other industrial applications. Our production processes and products comply with the most extensive and stringent health, safety and environmental regulations. As our products are not sold to consumers, and only rarely to end users, our impact on consumers and end users is limited.



Nobian, Heiligerlee | @Nobian/Studio Dijkgraaf

# Climate

## Reducing our environmental footprint

We have reached our 2025 targets for our Scope 1 and 2 CO<sub>2</sub> emissions and renewable energy and are on track to become net-zero by 2040. Since 1990, we have reduced our carbon footprint by 71%. Over the same period, we have increased our use of renewable energy to 53%.

## Climate KPIs and targets

### Climate

#### CO<sub>2</sub> reduction

- ◆ Scope 1 and 2 reduction: 25% by 2025, 50% by 2030 and 100% by 2040 compared to 2020
- ◆ Scope 3 reduction: 2% by 2025, 25% by 2030 and 90% by 2050 compared to 2020
- ◆ Carbon neutral in Scope 1 and 2 by 2040

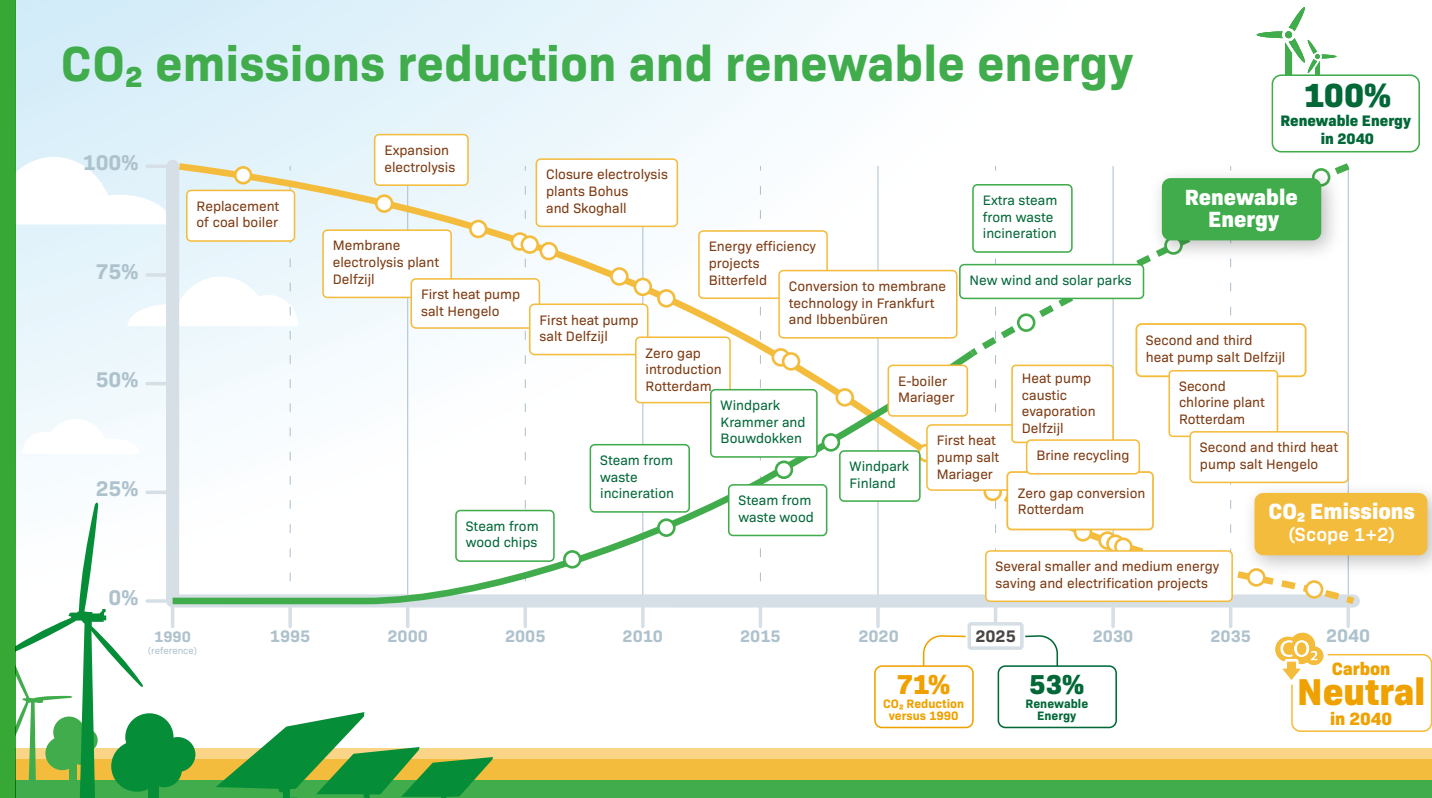
#### Renewable Energy

- ◆ 50% share of renewable energy by 2025
- ◆ 66% share of renewable energy by 2030
- ◆ 100% renewable energy by 2040

#### Energy Efficiency and Storage

- ◆ Increase automatic Frequency Restoration Reserve (aFRR) capacity from 10 to 20% by 2027

## CO<sub>2</sub> emissions reduction and renewable energy



Since the 1990s, Nobian has worked to reduce CO<sub>2</sub> emissions and increase the use of renewable energy sources. The journey continues with robust plans for the future.

### 3.1. Greenhouse gas emissions reduction

Reducing our Scope 1 and 2 emissions is crucial due to the energy-intensive nature of our production processes. We aim to be net-zero in both scopes

by 2040, ahead of the Paris Agreement goals. Our targets have been evaluated by SBTi and comply with the target to limit global warming to 1.5°C.



Nobian, Rotterdam | © Nobian

The infographic on page 19 shows what we have accomplished so far, along with our plans for the future.

**Scope 1 and 2 emissions**

We have reached and even significantly surpassed our 2025 Scope 1 and Scope 2 emission reduction targets with a reduction of

50.2% compared to 2020. This is just over twice our 25% target and we are fully on track to meet our 2030 targets. This overall reduction is a combination of an increased share in the use of renewable energy, CO<sub>2</sub> saving measures and lower production volumes.

Our main source of Scope 1 emissions – the greenhouse gases we generate directly – is the combustion of natural gas to produce steam and electricity in our boilers and combined heat and power plants. Compared to the previous year, in 2025 our Scope 1 emissions decreased by 20%. This significant reduction comes primarily from using more external steam from municipal waste incineration instead of from our own natural gas-powered combined heat and power plant at our production facility in Hengelo. Alongside this, our gas-fueled Delesto-2 powerplant was mothballed and production volumes were lower compared to 2024.

Overall, we used over 67 million m<sup>3</sup> less gas than in 2024.

In 2025, our Scope 2 emissions increased slightly. The main cause of this is a small decrease in our share of renewable energy. For more information, see section 3.2.

**Scope 3 emissions**

To achieve our Scope 3 targets, we focus on actions in the parts of the value chain where we have direct influence. We work with suppliers to increase the use of lower-carbon products and reduce logistics emissions by optimizing full truckload shipments and using alternative fuels such as hydrogen and biodiesel for truck and barge transport. We also reduce fossil fuel use in our operations by electrifying installations, increasing the share of renewable energy and exploring captured CO<sub>2</sub> as a feedstock.

Further Scope 3 reductions depend on external market developments, including the availability of low-carbon feedstocks such as biomethanol and bio-ethylene. Progress requires technological and infrastructure developments across the value chain.

Compared to the previous year, our overall Scope 3 emissions decreased by 11.0% (126 kton CO<sub>2</sub>-eq). This reduction was visible across almost all categories and was mainly driven by lower production and sales volumes and with that also less transport. In addition, we also had reduced investments in capital goods.

Compared to our baseline for 2020, Scope 3 emissions have been reduced by 15.4%.

## Case study

### Laying the groundwork for underground hydrogen storage

Europe's growing share of renewable energy makes large scale, flexible energy storage essential. Underground storage of green hydrogen in salt caverns is critical to balancing the energy system, allowing surplus renewable electricity to be stored and used when supply is constrained. A recent study showed that a sustainable energy system, including hydrogen storage, can be competitive with other regions (see case study on page 32). Salt caverns are the most effective and the only proven solution for large-scale hydrogen storage, forming a cornerstone of a reliable hydrogen economy in the Netherlands, supporting security of supply and future infrastructure. Achieving the national policy objective of 13 hydrogen storage caverns by 2040<sup>12</sup> will require timely policy decisions, strong government support, targeted financial and non-financial instruments and close collaboration across the hydrogen value chain.

Together with EnergyStock, a Gasunie subsidiary, we are advancing the HyStock hydrogen storage project in Zuidwending, the Netherlands. Since the summer of 2025, the project has secured permits for two exploratory drillings and one deep drilling, marking a major step toward future hydrogen storage. With these permits in place, HyStock has entered a critical development phase, investigating the composition and quality of deep subsurface salt layers to determine how potential future salt caverns could be designed for safe and reliable energy storage. Subject to the completion of remaining permits, the project may progress to cavern construction in the coming years. Underground storage of hydrogen will strengthen grid stability, enable a flexible hydrogen supply and significantly enhance the long term resilience of the Dutch hydrogen market.

*Preparatory civil works for the planned exploratory drillings for the HyStock project.*



© Nobian

<sup>12</sup> Nationale Agenda Ondergrondse Waterstofopslag. Het belang van waterstofopslag voor het energiesysteem. Ministerie van Klimaat en Groene Groei, juli 2025, <https://open.overheid.nl/documenten/0406245c-b452-45e4-85a8-c3ed96db85a7/file>

Case study

**Saving energy with zero-gap technology in Rotterdam**

Upgrading Rotterdam’s chlor-alkali production facilities offers a major opportunity to improve energy efficiency and reduce pressure on the regional electricity grid. By replacing older forced circulation (FC) electrolyzers with state-of-the-art zero-gap technology, we lower energy use and free up capacity in the 150 kV network, supporting the development of other CO<sub>2</sub> neutral initiatives in the region.

The zero-gap implementation project achieves this through modernization of 24 electrolyzers and several connected infrastructure upgrades. These include a new catholyte system for caustic, along with modifications to the purge brine, feed brine, quench and HCl systems. Together, these steps create a more reliable, efficient and future proof production process.

A key milestone was reached in August 2025 with the installation of the catholyte blowdown tank, the first major equipment component. This forms part of the preparation for a multi-year project under the tailor-made agreement with the Dutch government (currently paused).

*Installing the catholyte blowdown tank in Rotterdam.*



Case study

**Europe’s first ISCC EU green hydrogen certification**

The transition to a low-carbon economy requires reliable, verifiable alternatives to fossil fuels. Across Europe, industry and mobility sectors face rising pressure to reduce emissions and meet stricter EU standards. Scalable, high-quality certification of green hydrogen is essential to ensure new fuels genuinely support decarbonization.

Nobian operates the first large-scale green hydrogen plant in Europe to receive ISCC EU certification for Renewable Fuels of Non-Biological Origin (RFNBO). At our Rotterdam chlor-alkali site, we have the capacity to produce 14,000 tons of green<sup>13</sup> hydrogen each year using renewable electricity in an established electrolysis process. This certification confirms full compliance with EU greenhouse gas and renewable energy requirements, giving customers a truly low-carbon<sup>14</sup> hydrogen alternative.

The certification helps downstream users, such as fuel suppliers and industrial hydrogen consumers, advance toward the EU’s 2030 decarbonization goals. It also builds trust in the emerging green hydrogen market through transparent, audited documentation. By securing RFNBO certification for our green hydrogen, Nobian strengthens a reliable RFNBO supply chain and supports Europe’s shift to climate neutral industry and mobility.

*Receipt of Europe’s first ISCC EU certification for large-scale RFNBO-certified hydrogen production by Toine van de Lindeloof, Site Director Rotterdam (right) and Julien Courtois, Senior Product & Business Development Manager Hydrogen at Nobian.*

<sup>13</sup> Green hydrogen refers here to RFNBO as defined in (EU) 2023/1184.

<sup>14</sup> [https://eur-lex.europa.eu/eli/reg\\_del/2023/1185/oj/eng](https://eur-lex.europa.eu/eli/reg_del/2023/1185/oj/eng)



Nobian, Rotterdam | © Nobian

### 3.2. Renewable energy

We use our own combined heat and power plants to produce steam and electricity, but we also procure a significant share of our energy from third parties. We increasingly source this from renewable sources. We purchase steam from waste incinerators and biomass plants and have concluded several Power Purchase Agreements (PPAs) to procure wind and solar electricity.

In 2025, we reached a renewable energy share of 53.4% surpassing our target of 50%. This percentage is slightly lower than last year, as the exceptional results in 2024 were largely driven by regulatory changes in Germany, which led to significantly higher renewable energy contributions than originally anticipated.

In 2025, the share of renewable electricity from biomass decreased from 42% to 15% compared to the previous year, reflecting a significant shift in Nobian's energy mix. More than 55% of the company's sourced renewable energy now comes from sources such as wind and solar.



Despite ongoing challenges in the chemical industry, Nobian continues to prioritize responsible and efficient sourcing of renewable energy. We focus on procuring energy primarily within the countries in which we operate and further strengthen our

sustainability strategy by linking PPAs directly to the production of certified green products. This approach ensures both operational resilience and alignment with Nobian's long-term environmental commitments.



*Hoisting the crystallizer into the steel structure at our Mariager site.*

## Case study

### **Advancing energy-efficient salt production with MVR technology in Denmark**

Production of high-purity salt requires the evaporation of significant amounts of water, a process that has traditionally relied on fossil fueled steam. This makes it highly energy-intensive and a significant source of CO<sub>2</sub> emissions. An alternative, more energy-efficient technology is mechanical vapour recompression (MVR), a proven technology at two of our production sites (Delfzijl and Hengelo).

MVR can be compared to a large industrial heat pump. Instead of using steam, it runs on renewable electricity and compresses and recycles process steam, significantly reducing energy consumption and related emissions.

We recently expanded the capacity at our site in Mariager, Denmark, with an MVR installation. In 2024 and 2025, this expansion was fully executed and included the construction of a new MVR building as well as the installation of the main evaporator, large compressor, heat exchangers, centrifuge, utility systems and pumps to enable fully electrified operations. The project includes the expansion and upgrades of transportation belts, storage in silos and systems for loading ships. The installation has been fully operational since January 2026 and is ready for sustainable salt production using renewable energy.

### 3.3. Energy efficiency

We strive for maximum energy efficiency at each of our production sites. Our processes are energy intensive, so we continuously look for opportunities to optimize our energy use. Nobian has an ambitious and standardized energy efficiency program with clear governance in place. Our portfolio of energy-saving projects is monitored at our headquarters, discussed on a regular basis with all sites and reported to Nobian's Technology and Sustainability Leadership Team.

In 2025, a new Nobian Production System training was provided at our Rotterdam site to improve process efficiency management, including energy efficiency. A heat exchanger for demineralized water heating was replaced by a steam jet heater, leading to reduced energy consumption. In addition, we introduced a new type of electrode in our chlor-alkali electrolyzers, further improving efficiency.

#### E-flex

E-flex aims to increase the flexibility of our electrolysis plants, strengthening our role in stabilizing the electricity grid. This enables our plants to deliver the maximum value by ramping down during periods of power shortage. The ESG target is to increase automatic reserve



power (aFRR) from 10% to 20% by 2027. Changes in power consumption need to take place within five minutes. To enable higher levels of flexibility, we continuously improve the automation of our plants.

In 2024, our capacity increased to 11%. In 2025, this increased further to 14%. To achieve this, the chlorine plant in Delfzijl was connected to the transmission system operator for the Dutch high-voltage grid. Capacity increases in Frankfurt and Rotterdam have been delayed due to unforeseen technical challenges but are expected to be completed in 2026.

In addition to its application in our electrolysis plants, E-flex technology will be implemented in both our existing and new salt plants that use heat pump technology (MVR). The first application is on the existing heat pump in Delfzijl; the connection was completed in December 2025 and has been operational since Q1 2026. This installation will serve as a model for the other large-scale heat pumps.

In addition, the E-boiler in Mariager is mainly used to consume power when there is a high availability of renewable electricity. This E-boiler approach is integrated into a local energy flexibility and optimization project with surrounding companies.

# Circular

## Circular economy and green products

A key part of our approach is to minimize the environmental impact of our products wherever possible. Through targeted projects, we are also working to lower our freshwater use and drinking water intake, and to expand salt recycling. This helps to reduce our impact on natural resources and make our operations increasingly circular.



## Circular KPIs and targets

### Circular

#### Green Products

- ◆ Increase revenue of certified, low-carbon products sales of total products revenue to 20% in 2030
- ◆ Have Environmental Product Declarations (EPD®) available for all low-carbon footprint products

#### Water

- ◆ Freshwater consumption reduction: 8% by 2030; 15% by 2035, 35% by 2040 compared to 2020
- ◆ Reduce drinking water intake with 20% by 2035 compared to 2020 and aim to eliminate the use of drinking water for process purposes by 2040

#### Recycling

- ◆ 100 kton salt is reused from salty residual streams by 2027
- ◆ 10 kton CO<sub>2</sub> captured based products in our value chain by 2025
- ◆ Circular methanol available as source for our chloromethane production by 2030

The production of salt, chlorine, caustic soda and hydrogen is energy intensive by nature. Through our Grow Greener Together program, we are significantly reducing the carbon footprint of our customers. Many of our plants are based in clusters with our customers, enabling us to recycle residual streams and heat and enhance circular processes.

### 4.1. Low-carbon products

At Nobian, we are committed to leading the way in sustainable chemical manufacturing by developing and expanding our portfolio of low-carbon products. These help our customers reduce the carbon footprints of their own products and their Scope 3 emissions. Each of our low-carbon products is produced using 100% renewable electricity. The environmental footprint is substantiated by independently verified Life Cycle Assessments (LCA) and Environmental Product Declarations (EPD®).<sup>15</sup>

Nobian was one of the first chlor-alkali players to certify its caustic soda and chlorine production according to the ISCC PLUS<sup>16</sup> scheme. As we

expanded our certified, low-carbon product portfolio with caustic soda microprills, sodium hypochlorite and all chloromethane products, we also expanded our geographic reach for low-carbon products. The value of low-carbon solutions is increasingly recognized in the market, resulting in ever-growing demand.

Building on this achievement, Nobian is taking the lead in the RFNBO market and became the largest producer of green hydrogen in Europe<sup>17</sup> in 2025 after successfully certifying its Rotterdam plant under the ISCC EU Voluntary Scheme. Significant volumes of RFNBO are necessary in Europe to meet the ambitions of decarbonization targets set by the European Commission for the transport sector as well as the industry. Efforts to increase Nobian's RFNBO supply in Europe continue with our Frankfurt plant expected to be certified by Q2 2026. Registration of our other chlor-alkali plants for RFNBO production is planned for the coming years. With the third revision of the Renewable Energy Directive (RED III), green hydrogen has been defined as part of RFNBO.<sup>18</sup> RFNBOs include green hydrogen, e-fuels (e.g. e-methanol, e-methane), or green ammonia produced using renewable electricity. They must adhere to strict regulated guidelines for production and electricity sourcing.

<sup>15</sup> The EPDs can be downloaded via the international EPD system <https://environdec.com>

<sup>16</sup> [www.iscc-system.org/certificates/valid-certificates/](https://www.iscc-system.org/certificates/valid-certificates/)

<sup>17</sup> Based on data provided by Argus: <https://www.argusmedia.com/en>

<sup>18</sup> [https://setis.ec.europa.eu/renewable-fuels-non-biological-origin-european-union\\_en](https://setis.ec.europa.eu/renewable-fuels-non-biological-origin-european-union_en)

Nobian is now the largest registered green hydrogen producer able to issue Dutch Hydrogen Guarantees of Origins.<sup>19</sup> Following the introduction of the official Dutch Hydrogen Guarantee of Origin issuing body, VertiCer, Nobian transitioned to this system in 2025.

**Battery chemicals**

With the EU expected to significantly reduce the production of fossil fuel cars, battery production for electrical vehicles in Europe continues to be a potential growth market. The use of stationary batteries for home use and larger systems providing short-term stability in the energy system is also expected to increase. At the same time there is a growing strategic drive in Europe to depend less on (critical) raw material supply, as exemplified by the European Critical Raw Material Act. Nobian expects to play an important role in the battery value chain. Building on our capabilities and market potential we will expand our battery chemicals activities, focusing on developing new products and processes directed towards the battery value chain, see case study on page 31.

Building on our extensive electrolysis and crystallization knowledge, we have developed a new refining process for production of lithium hydroxide, the active compound used in batteries sought by many car manufacturers in Europe. A patent has been filed, and the process has been validated



with a large global engineering company and equipment supplier active in lithium. In implementing our process, we have built and continue to seek collaborations with partners that extract lithium chloride, for example from underground aquifers in Europe as well as in the US and South America. Our technology can also be used in battery recycling, and first discussions to connect to that value

chain have also started. Hence, this technology offers an opportunity for Europe to become more strategically independent regarding lithium sourcing and refining.

Simultaneously, we are leveraging our sodium chloride chemistry know-how to conduct ongoing research into alternative technologies to lithium,

<sup>19</sup> [www.verticer.eu/en/guarantees-of-origin/](http://www.verticer.eu/en/guarantees-of-origin/)

such as so-called ‘sodium-based batteries’. This is an exciting time as we are collaborating with startups and others active in this space.

Our key focus is a new production process for the electrolyte  $\text{NaAlCl}_4$  (used in molten-salt batteries), for which we have filed a patent application. A subsidy project for scaling this process to a pilot research reactor was granted and design and building have begun, with the aim of having this operational by mid-2026. We have connected with several interested players in the Netherlands and Europe who are actively developing sodium-based batteries using this compound. This would provide an opportunity to develop batteries ‘sourced in Europe and made in Europe’. In alignment with our plans to develop sodium-based battery materials and apply batteries on our sites, we have joined a Dutch consortium that had the 22 million Euro “SLD Batt” proposal approved, which is a significant subsidy as part of the 800 million Euro Dutch Growth Fund program (Groeifonds) on Circular Batteries.

**Value chain**

Nobian also supports the development of new value chains that drive sustainability and reduce the global carbon footprint. Examples include applying our low-carbon caustic soda to battery chemicals production and supporting the development of geopolymer-based products in the cement industry.



Case study

**Expanding into new battery chemicals business**

Energy storage in electric vehicles (EVs) and stationary batteries is becoming increasingly important. It helps reduce the use of fossil fuels, relieves grid congestion, and stores solar and wind energy for homes and industry. Europe is pushing for greater independence in battery-production chemicals, driven by the European Critical Raw Material Act and the designation of Strategic Projects. We are actively contributing to this ambition by developing a dedicated battery chemicals business.

In recent years, we have developed an efficient low-carbon crystallization technology that converts lithium chloride (LiCl) into lithium hydroxide monohydrate (LHM) or lithium carbonate, both key materials for EV batteries. This process uses Nobian's existing chlor-alkali infrastructure and produces very little waste compared to conventional processes used currently. Initial pilot experiments at lithium-engineering firm Veolia confirmed both the effectiveness of our process and its potential to scale



*Professor Guido Mul from the University of Twente (right) and Coert van Lare (Director Innovation Program Renewable and Circular) from Nobian at an experimental setup at the innovation center in Enschede, the Netherlands.*

to commercial levels. We are now in the process of building our own pilot plant to accelerate the scale-up. Parallel to this, we are partnering with major European projects focused on extracting lithium chloride from the ground or recovering it from recycled batteries, strengthening a more independent European lithium value chain. We are also engaging with potential investors to secure funding for the next steps.

Our second battery chemicals activity focuses on further developing an efficient, patented process to produce the sodium-based electrolyte  $\text{NaAlCl}_4$  for molten-salt batteries. This new process requires only one production step, compared to the cumbersome two-step process used today. We have secured funding, including support from the Dutch Growth Fund, and are now preparing to build a pilot reactor to scale up this technology. We are also partnering with

several companies in the Netherlands and across Europe that are developing batteries based on this electrolyte.

With our own salt mining in the Netherlands and in-house chlorine production, we aim to contribute to a fully European value chain, from raw materials to production. In addition, we are exploring further funding opportunities through discussions with potential investors.

Case study

**Engaging with policymakers, Nobian helps shape a competitive, circular industrial future**



*Former Minister for Climate and Green Growth Sophie Hermans received the studies on behalf of the commissioning parties, National Programme for the Decarbonization of Industry (Nationaal Programma Verduurzaming Industrie, NPVI) and Royal Association of the Dutch Chemical Industry (Vereniging van de Nederlandse Chemische Industrie, VNCI).*

*From left to right: Erwin Douma (Roland Berger), Marco Waas (Nobian), Koen Becking (VEMW), Sophie Hermans (Former Minister for Climate and Green Growth), Nienke Homan (VNCI) and Bram Albers (Roland Berger).*

The transition to a fully renewable energy system brings both opportunities and challenges for energy intensive industries. As the Netherlands moves toward climate neutral production, important questions arise about long term competitiveness, energy-system costs and the conditions required to keep essential industrial value chains strong. Recent studies, coordinated by TNO, HCSS and Roland Berger, show that when the full

energy system is considered, from generation and storage to transport and production, future costs for sectors such as chlor-alkali and sustainable aviation fuel are comparable between the Netherlands and Saudi Arabia.

These insights highlight that Dutch industry can remain competitive within a circular, renewable based economy, reinforcing the strategic importance of maintaining

domestic production capacity for essential materials. The chlor-alkali value chain is crucial for Nobian, as it underpins many of our production processes and contributes significantly to our role in the industrial landscape.

Building on these findings, we engaged with policymakers – including the Dutch Prime Minister, the Minister of Economic Affairs and

the Minister of Climate and Green Growth – to discuss investment conditions, regulatory stability and infrastructure needed for a competitive, climate neutral industry. Through our position in industrial clusters and our commitment to renewable powered production, we help shape a resilient and future proof industrial landscape for the Netherlands.

## 4.2. Water

We have company-wide targets in place to reduce our freshwater consumption and drinking water intake, along with concrete plans to achieve this. Our overall freshwater consumption remained similar to the previous year but is down 9.7% compared to 2020. Our drinking water intake in 2025 is 19.6% lower compared to 2020, mainly due to lower demand at our chemical park in Delfzijl. We have also completed the implementation of our first water management project in Delfzijl, which is expected to further reduce drinking water consumption in 2026 (see case study on page 36).

A key element of our plans to reduce freshwater consumption and drinking water intake is circular water use. This means that process water from our production plants is reused by other companies in the chemical parks or reused in our own mining operations. In Delfzijl especially, we have a clear surplus of process water from our production activities that could be reused to reduce drinking water intake. Several projects are already in place to deliver incremental but significant savings in the coming years. In addition, the implementation of the tailor-made agreements will create further and larger opportunities.



## 4.3. Recycling

To create a circular value chain, we aim to recycle salty residual streams originating from our products. To this end, we have developed a process route for a concentrated salty residual stream from a customer in Delfzijl, the Netherlands, which is an integral part of the tailor-made agreement with the Dutch government.

The recovered salt needs to be brought to a quality level suitable for use in our chlorine electrolysis process, thereby making part of the production process circular. In addition, this will reduce emissions of substances of very high concern present in

the customer's residual stream, while the treated recycled stream feeding into our plant reduces overall energy and freshwater consumption. Overall, this provides particularly attractive environmental benefits. The project is in the permitting phase and is expected to be realized in 2029. This represents a delay from the original timeline of 2027 due to the permitting process.

Additionally, efforts are being made to recycle certain battery chemicals, with a specific focus on lithium, using our newly developed technology. For more information, see section 4.1.

### 4.4. Pollution

Pollution comprises emissions to air, water and soil. Our reported emissions are based on the threshold values defined in the European Pollutant Release and Transfer Register.

For emissions to water, we report copper, nickel, chloride and total organic carbon. Of these, only nickel is classified as a substance of very high concern. Our target is to revise older environmental permits, re-evaluate our emissions and, where possible, minimize them. In this way, we ensure compliance with the latest legislation, such as the Water Framework Directive. In 2025, we submitted the first application for revision of a water permit.

For emissions to air, only NOx exceeds the reporting threshold. No separate targets have been set for NOx, as these emissions primarily result from combustion and will decrease in line with our targets to reduce Scope 1 emissions from fossil fuel use. We collect and consolidate data quarterly, in line with all local permitting regulations. The data can be found in the ESG Factsheet on page 59.

At Nobian, we have a pollution reduction policy to protect the environment and public health by controlling, preventing and minimizing the

environmental impact of our activities and products. The policy aims to minimize operational emissions of pollutants to air and water, prevent emissions of pollutants to soil and groundwater, prevent pollution incidents and emergencies, and control and limit impacts on people and the environment. We also aim to substitute and minimize the use of substances of concern and to phase out substances of very high concern where safer alternatives are available.

### 4.5. Product stewardship

We recognize our responsibility to build a greener, more sustainable society, one that extends beyond manufacturing environmentally friendly products. Our commitment aligns with the objectives of the European Green Deal<sup>20</sup> and the EU Chemical Strategy for Sustainability.<sup>21</sup> We apply product stewardship principles at both company and site level, ensuring that product safety and sustainability are considered throughout the entire value chain. This approach



<sup>20</sup> [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en)

<sup>21</sup> [https://ec.europa.eu/environment/strategy/chemicals-strategy\\_en](https://ec.europa.eu/environment/strategy/chemicals-strategy_en)

not only supports regulatory compliance but also helps develop more sustainable solutions for our customers and society.

### Risk assessment for safe use

We manage around 1,600 chemical products at our production sites, including raw materials. Of these, 22 are sold in various grades and used worldwide.

Eighteen of our products are classified as hazardous substances under REACH<sup>22</sup> due to their adverse effects on health and the environment, in accordance with the EU Classification, Labeling and Packaging (CLP) Regulation.<sup>23</sup> The other four are classified as non-hazardous. All classified products have undergone a thorough hazard, exposure and risk assessment under EU REACH and, where applicable, the EU Biocidal Products Regulation (BPR).<sup>24</sup>

These assessments evaluate potential exposure to workers, consumers and the environment. Required safety measures are communicated to customers through safety data sheets (SDS) and

packaging labels, in line with legal obligations. We also provide customer brochures that outline technical properties, safe-handling guidance, and relevant compliance information and associated certificates.

All products are managed carefully to ensure safe use at our sites and by our customers, in compliance with regional, national and international regulations, as well as industry associations' safety recommendations. This includes everything from safe transport to controlled waste disposal and recycling.

Our comprehensive integrated management system is certified under ISO 9001, 14001 and 45001. It is designed to protect the environment and safeguard the health and safety of employees, contractors and local communities from potential impacts of chemicals, emissions and other hazards associated with chemical production and logistics. We also endorse the European Chemical Industry Council (Cefic) Responsible Care<sup>®</sup> program.<sup>25</sup>



### Supply chain safety

Before supplying a new industrial customer, we conduct a first-delivery check to ensure that products can be received and refilled safely. We also provide safety training for customer personnel.

We continuously monitor and investigate incidents at our sites, report our findings to industry associations and enhance safety along the supply chain in line with Cefic's SQAS program.<sup>26</sup> To ensure rapid and professional incident management and clean-up along the supply chain, we maintain a global emergency response system. This system offers 24/7 safety advice and product information by telephone or email, and, when needed, on-site assistance with personnel and equipment in accordance with Cefic's Intervention in Chemical Transport Emergencies program.<sup>27</sup>

In 2025, one incident occurred during the distribution of our products.<sup>28</sup>

Looking ahead, we remain committed to advancing sustainability, safety and compliance across all aspects of our operations and supply chain.

<sup>22</sup> <https://www.echa.europa.eu/web/guest/regulations/reach/understanding-reach>

<sup>23</sup> <https://echa.europa.eu/regulations/clp/understanding-clp>

<sup>24</sup> Regulation (EC) No 528/2012 concerning the placing on the market and use of biocidal products (BPR). For more information: <https://echa.europa.eu/regulations/biocidal-products-regulation/understanding-bpr>

<sup>25</sup> <https://cefic.org/responsible-care>

<sup>26</sup> <https://www.sqas.org>

<sup>27</sup> <https://www.ice-chem.org>

<sup>28</sup> Not part of assurance by DNV.



*Brine preheating installation at the salt plant using process water.*

## Case study

### **Supplying high-quality industrial water to reduce drinking water use**

We are proactively reducing our use of drinking water, driven not only by Dutch guidelines, but also by our own commitment to responsible and circular water use. Growing freshwater scarcity makes it more important than ever to replace drinking water in industrial processes such as cooling and steam generation with high-quality alternatives. At Chemie Park Delfzijl, where many companies still rely on drinking water for essential operations, we actively support the transition to reliable, high-quality industrial water solutions that safeguard both product performance and operational continuity.

By providing this highly purified industrial water stream, Nobian enables companies at Chemie Park Delfzijl to reduce their dependence on drinking water and adopt more circular water-use practices.

We provide a highly purified industrial water stream from our vacuum salt production process, with very low conductivity and minimal mineral content, ideal for sensitive industrial applications. Together with Teijin Aramid, we have developed a closed-loop system that replaces significant volumes of drinking water. Eventually, this will reduce drinking water consumption by approximately 300,000m<sup>3</sup> per year.

We have several projects with partners in the pipeline to explore the use of industrial water, create circular regional water chains, reduce unnecessary discharge, and deliver substantial long-term drinking water savings.

# Care

## Care for people and communities

With 'care' as one of our core values, we are committed to providing a safe and healthy workplace where everyone returns home safely every day. We also strive for active and meaningful engagement with our employees and the communities in which we operate. We encourage open dialogue, share knowledge, and support local initiatives that strengthen our connection with the people around us.

### Care KPIs and targets



## Care


Health & Safety

- ◆ Reduce safety incidents year-on-year towards zero people and process incidents


Community

- ◆ Maintain the active local community program at all sites
- ◆ Have an active local community program for all new salt mining projects from start of salt production


People

- ◆ Launch employee engagement survey 2025 and act on outcome
- ◆ Continuation of the Nobian Inclusion and Diversity actions for 2025

### 5.1. Health and safety

At Nobian, we want to ensure that everyone returns home safely every day. We continuously strive to deliver the highest standards of health and safety, working towards zero injuries, zero waste and zero harm for the benefit of our employees, contractors, customers, neighbors and the environment.

We believe that sustainable safety performance lies in embedding health and safety in our culture at every level, supported by robust processes. These are regularly reviewed and strengthened to ensure they remain effective. Equipping our employees and contractors with the knowledge, skills and tools they need is essential to ensure consistent application across all our sites, together with our Life-Saving Rules which help prevent serious injuries and fatalities.

#### People safety

In 2025, we continued to prioritize safety across all operations, working every day to provide a safe and healthy workplace for our employees and contractors. While these efforts have strengthened safety practices across our sites, this is not yet reflected in our reportable injury performance. A higher number of reportable injuries at our brinefield and mining locations,



## Life-Saving Rules



**Golden Principle:**  
Stop work if conditions or behaviors are unsafe

 <p>Work with a valid work permit when required</p>	 <p>Check equipment is isolated before work begins</p>
 <p>Use fall protection when working at height</p>	 <p>Obtain authorization before disabling safety equipment</p>
 <p>Obtain a permit for entry into a confined space</p>	 <p>Wear a seatbelt in motor vehicles when provided</p>
 <p>Make sure moving machinery is guarded</p>	 <p>Do not use alcohol or drugs at work</p>

driven by increased activity levels, impacted our overall results. In response, a dedicated program has been developed to reinforce safety practices during these activities.

Overall, these results reinforce the importance of strengthening our safety culture, enhancing leadership engagement and improving hazard awareness across the organization.

Leadership is essential for managing risk and reinforcing safe behaviors across the organization. In 2025, we developed and rolled out a Nobian-specific Safety Leadership workshop to support leaders in this responsibility. The workshop equips them with practical tools and clearly defined safety behaviors to manage critical risks, encourage open dialogue and consistently reinforce safe actions in daily operations.

Through interactive exercises and personal reflection, leaders strengthen their visible presence in the field, actively engage with teams and contribute to a learning environment where safety is a shared responsibility. The program introduces nine clear safety behaviors that anchor leadership ownership of safety in everyday decision-making.

A key development in 2025 was the introduction of the Risk of the Month initiative. This program raises awareness of health and safety risks by focusing on one specific risk each month that is relevant to our operations. Risks are selected based on trends and common direct causes identified through incident and near-miss reporting, ensuring attention is directed to areas with the greatest potential to prevent harm.



Nobian, Delfzijl | © Nobian/Romy Benjamins

Employees are encouraged to identify hazards, near misses and at-risk behaviors related to the monthly risk and to engage in meaningful dialogue.

Safety Step Up plans implemented centrally and across our locations were translated into concrete actions. These included increased management presence in the field through leadership visits,

improved safety visualization and more frequent safety rounds conducted together with site management. At Nobian, we encourage every colleague and contractor to report hazards and near misses, as these leading indicators help us proactively create safer workplaces by taking action to prevent injuries. This reporting also increases overall safety awareness and strengthens our safety culture.



Nobian, Rotterdam | @Nobian

Our Behavior-Based Safety (BBS) program is implemented at all Nobian production sites, and we actively encourage all personnel to participate in safety conversations that drive behavioral change. Improvement proposals and employee or contractor feedback are incorporated into the program and used to continually improve site safety.

Learning from incidents, near misses and hazards remains a cornerstone of our safety approach. We consistently analyze trends from reported cases to identify patterns and take preventive actions. Through our monthly incident learning call with managers, operational experts and safety specialists across all departments and sites, we ensure that lessons learned are shared widely and that corrective measures are effectively implemented. By closing the loop on incident prevention, we work towards continuous safety improvement and a stronger safety culture.

Our health and safety performance is monitored through KPIs and third-party verification of compliance with relevant safety standards. Total incident rate (TIR) and lost time injury rate (LTIR) for employees, temporary workers and contractors are the main KPIs for people safety. The combined data for these three groups can be found in the ESG Factsheet on page 62.

### Safety Day

Our annual Safety Day, a company-wide tradition, remains a key event in strengthening safety awareness and engagement. It is also an opportunity to celebrate our achievements and reaffirm our promise to do whatever it takes to ensure everyone gets home safely, every day. In 2025, the theme “Sharing is Caring” emphasized the importance of learning from each other, exchanging experiences, openly discussing risks and caring for one another’s well-being. This theme reflects our commitment to living up to our promise.

Our sites and offices organized interactive and engaging programs designed to involve everyone working for and with us. Highlights included an “escape room”-style safety exercise, which challenged participants to solve safety-related scenarios under time pressure, and practical demonstrations on secondary exposure risk when removing personal protective equipment. We continued popular traditions such as the annual Safety Day Award and the company-wide Safety Day quiz, which encourage participation and knowledge sharing. Our Leadership Team actively participated at every site.

### Worker health

We are committed to safeguarding the health and well-being of everyone working at our sites. That’s why we have implemented site-specific health management systems to proactively identify, assess and reduce



Nobian, Delfzijl | ©Nobian/Ronny Benjaminis

occupational health risks. These risks vary by activity and are typically categorized as physical, chemical, biological, ergonomic or organizational.

Each of our production sites undergoes a Nobian Health Risk Assessment that meets local regulatory standards. Based on the outcome, we develop improvement plans to address any health concerns and enhance risk-exposure control measures, following the hierarchy of controls. This may involve phasing out or substituting hazardous substances, implementing technology to control worker exposure, integrating risk assessments into long-term health studies, or implementing (personal) protective equipment and evaluating alternative materials or processes.

To ensure effectiveness we conduct industrial hygiene monitoring programs, with qualified professionals and third-party experts overseeing sampling and testing strategies.

Beyond workplace safety, we also prioritize our employees' personal health and well-being. We encourage each site to promote health and wellness activities, such as initiatives that highlight the benefits of exercise or raise awareness of unhealthy lifestyle choices.

All employees have access to on-site medical services and we have procedures in place for medical emergencies, laid out in our Emergency Response Policy.

### Contractor safety

At Nobian, safety is a shared responsibility. We recognize that our contractors play a crucial role in maintaining a safe working environment and their insights are invaluable in strengthening our safety culture.

We work with contractors who uphold the same safety standards and values outlined in our Business Partner Code of Conduct and Life-Saving Rules. In the Netherlands, we assess contractor safety performance during the tendering process through ISNworld, ensuring clear expectations from the start.

At the end of 2025, we conducted a safety culture survey among contractors working at our sites in the Netherlands and Denmark. This was the second time the survey had been carried out and the scope was expanded to include contractors in Denmark, both at operational and managerial level. This provides us with a more comprehensive view of perceived safety performance and engagement. Overall, the results indicate a positive development compared to the previous survey in 2023. Feedback from the survey is used to identify improvement opportunities and further strengthen contractor safety and collaboration.



**Process safety**

Process safety is essential in protecting people, the environment and our business. We use a risk-based Process Safety Management (PSM) framework based on industry’s practices, such as CCPS (Center for Chemical Process Safety) and international standards. This PSM framework is fully integrated into our HSE system to prevent process safety events that could cause injury, environmental harm, asset damage or community disruption.

Contributing to the PSM framework are the ‘Process Safety Fundamentals’. This initiative serves as the cornerstone of our process safety culture, ensuring that everyone understands and applies a set of basic principles (dos and don’ts). By focusing on these fundamentals and reinforcing good practices, we strengthen our ability to prevent process safety events.

Empowering our people is key to driving and delivering process safety excellence. Through continuous learning, training and knowledge sharing, we equip our teams with the expertise needed to proactively identify and mitigate risks. Additionally, we are strengthening our focus on leading process safety indicators, ensuring that we move beyond reactive measures toward a more predictive and preventive safety culture.

**Safety management systems and corporate HSE&S audits**

In 2025, we strengthened our HSE governance by completing the rollout of revised Nobian HSE&S procedures. These updated standards cover the full scope of Health, Safety, Environment, Security and Process Safety, providing a consistent framework across all sites and departments.

To support effective implementation, we introduced a self-assessment tool that enables sites and departments to identify gaps in relation to these updated procedures. This tool helps prioritize actions, improve compliance and foster a culture of continuous improvement.

Environmental and occupational health and safety management systems are implemented locally at site level. All Nobian production sites maintain HSE management systems that are certified in accordance with ISO 14001 and ISO 45001, reinforcing our commitment to protecting employees, contractors and the communities around us.

To maintain and enhance safety performance, we conduct internal HSE audits, including process safety reviews, on a structured three-year cycle across all production sites. These audits, carried out in line with our Nobian HSE&S procedures, are designed to drive continuous improvement and ensure internal compliance. We actively track progress as we implement the findings.

## 5.2. Engaging with our communities

Strong, trusted relationships with our neighboring communities are essential to how we operate. Our approach begins with clear, timely and transparent communication. Through regular updates, guided visits to our sites and clear explanations of our activities, we aim to build understanding and foster dialogue. We also involve community members in our HSE practices, particularly around emergency preparedness and awareness. Beyond communication, we actively participate in local life through a range of local activities and local sponsorships.

### Salt mining

Our salt mining activities in the Netherlands and Denmark take place outside our production site boundaries, making close cooperation with surrounding communities especially important. Communities around our existing and planned salt mining and energy storage locations increasingly expect clarity, transparency and early involvement in developments that may affect their living environment. As activities such as evaluation drillings, permitting processes and preparations for potential future underground hydrogen storage expand, residents seek clear information on safety, planning and environmental impacts. Meeting these expectations is essential for maintaining trust and ensuring responsible project development.



*Information session on regional salt mining and energy storage developments, organized together with the Ministry of Climate and Green Growth, TNO and the State Supervision of Mines. These sessions support transparent dialogue by providing local communities with clear information on planning, safety and environmental impacts of current and future projects.*

We therefore maintain continuous dialogue with provincial governments, municipalities, residents and local interest groups to encourage open discussion and ensure that our activities are well understood. To support this, we have set up a continuous and structured engagement process for all our existing and planned salt mining locations. Based on direct, personal contact, we proactively inform and involve local communities through meetings, weekly walk in sessions, site visits to construction sites and one-on-one kitchen table conversations, supported

by regular updates via local media and an easy-to-use mobile app. These interactions also shape the participatory processes we use when designing and developing new salt mining projects, ensuring that residents remain informed throughout ongoing and upcoming developments.

In addition, Nobian participates in public information sessions and topic specific workshops together with the Ministry of Climate and Green Growth, TNO and the State Supervision of Mines.



Walk-in information meeting in Haaksbergen, featuring information panels used to inform visitors about the project.

These events provide clear explanations of mining plans, environmental assessments and potential local impacts such as subsidence, microseismic activity or temporary construction inconveniences.

Through this open and consistent engagement approach, Nobian strengthens two-way communication and supports informed dialogue, helping ensure that regional energy storage and salt mining developments progress with local communities at the center. We continuously improve the sustainability and transparency of our mining operations by incorporating new

insights and discussing them with stakeholders. Throughout the lifecycle of our wells and caverns, we apply a comprehensive planning and monitoring program, including continuous measurement of cavern development and potential effects such as microseismic activity and subsidence. Findings are routinely shared with municipalities, regional authorities and supervisory bodies through established steering groups and regular updates.

In addition, the independent Omgevingsfonds Haaksbergen has now been formally established. This fund, administered by an independent

foundation, will invest part of the revenues from the new Haaksbergen salt extraction site in local projects that directly benefit the surrounding community.

We remain fully committed to an open, constructive relationship with the communities around our salt mining and energy storage developments. This will remain a key priority in 2026.



*The technical team from the chlorine plant in Delfzijl that supported the local public swimming pool.*

## Case study

### **Caring for the community by supporting safe and sustainable pool facilities**

Community well-being grows when local facilities remain accessible, safe and sustainable. In Slochteren in the northern Netherlands, the Tobbe outdoor swimming pool faced having to comply with new hygiene regulations as well as remedy out of specification chloroform and bicarbonate levels. Neither of these issues could be solved through routine water replacement, as draining large volumes of water is neither environmentally nor financially viable.

To help, a Nobian technical team supported the pool through an employee engagement initiative. Using a structured root cause problem-solving approach, they explored factors such as water softening and sand filtration and organic materials like leaves, sunscreen or algae. Early findings showed that adjusting the water softening system helps keep bicarbonate levels within specification, while further analysis continues the sand filter's role in chloroform formation.

By sharing expertise and working with local volunteers, the team has helped ensure the Tobbe remains a safe and enjoyable place for residents, showing how community commitment and professional know-how reinforce each other.



### Case study

#### **Strengthening community engagement through the Ibbenbüren Open-Door Day**

Building strong relationships with local communities is essential for maintaining trust and transparency around industrial operations. In Ibbenbüren, the Open-Door Day gave neighbors a clear look at our activities and our role in the circular economy, while also addressing common questions about safety, sustainability and day-to-day operations.

Together with Advancion ANGUS Chemie GmbH, EVERS GmbH & Co. KG, Feralco Deutschland GmbH and REMONDIS Industrie Service GmbH & Co. KG, we highlighted the collaborative nature of the regional chemical cluster. The site welcomed over 300 visitors for guided tours showcasing modern production, efficient resource use and safe, responsible operations.

Events like this foster meaningful conversations, strengthen understanding and demonstrate Nobian's commitment to openness and sustainable practices. The strong turnout reflects the dedication of colleagues who helped create an informative and welcoming experience.



### 5.3. People

#### Our people

In today’s fast-changing world, we recognize that empowered and engaged employees are vital to building a competitive, safe and successful organization.

Our goal is sustainable growth that positively impacts people’s lives through our actions and products. We foster a safe and inclusive workplace by encouraging open dialogue and proactively supporting employee well-being through accessible support services, confidential counseling, open team discussions on engagement and improvement and digital HR systems. This facilitates continuous feedback and transparent communication.

We support and empower our employees and communities by working collaboratively with customers, partners, universities, industry peers and government agencies. These partnerships help drive our growth and enable us to evolve into a safer, more innovative and more sustainable organization.

In 2025, we strengthened our Nobian values, emphasizing ‘care’ and ‘safety’ to support employee well-being and reinforce our commitment to customers, stakeholders and communities.

These core values underpin our performance-driven culture and enable us to achieve our purpose and strategic goals.

#### Health and well-being of our employees

We remain committed to supporting our employees' physical and mental health. Each site is encouraged to implement health and wellness programs, including initiatives that highlight the benefits of regular exercise and raise awareness of the risks associated with unhealthy lifestyle choices. Since 2024, the LifeCheck mobile application has been available at our Netherlands locations, giving all employees convenient access to these initiatives. One of the more recent examples is the 2025 LifeCheck Get Fit-Program, which connects employees with nutritionists to discuss meal plans and training schedules. In Germany and Denmark we provide sponsorship for local gyms, while in other locations employees can receive workout guidance at on-site facilities. In Denmark, as the main sponsor of the Saltcenter, we offer Nobian employees free access to the “Dead Sea” salt baths.

Many of our locations highlight the importance of physical health by organizing annual sporting events, giving employees the opportunity to



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Nobian, Enschede | ©Nobian

engage in physical activities together. In 2025, one of our production sites even introduced vitality bingo and several Strava challenges, where employees competed in hiking, running and biking, raising the bar for wellness initiatives across the organization.

In the Netherlands, we have also collaborated with our health insurance partner to introduce the Lose Weight with Agreements program. This voluntary initiative provides Nobian employees who are overweight with personalized guidance and access to a sports coach for individual

training sessions. Over a period of six months, participants work toward predetermined goals and aim to lower their BMI.

In addition to these sporting activities, we have organized employability workshops for all direct-report managers. Their purpose is to foster a culture that prioritizes preventing absenteeism and ensures that employees' work remains both suitable and sustainable. The workshops equip managers with specialized tools to proactively identify well-being concerns and potential absenteeism, as well as to address different types of absenteeism when

they occur. They also acknowledge that employees may require varying forms of support during periods of illness.

To identify areas for improvement and to better understand how our employees are doing, in 2025 we once again conducted our Employee Engagement Survey, which includes questions on mental well-being, psychological safety and inclusion. Our actions are directly guided by employee feedback, ensuring we focus on the most relevant challenges. Active engagement with employees is essential to strengthening motivation, engagement and overall well-being across our company.

The 2025 Engagement Survey results show improvements in both psychological safety and overall well-being compared to last year, when these topics were first introduced. We have provided training for managers on unconscious bias and privilege and hosted a webinar on psychological safety. These initiatives have contributed to maintaining the high favorable score of 83%.

**Diversity, equity and inclusion**

At Nobian, we place great importance on diversity, equity and inclusion (DE&I). Our continued success depends on our ability to attract, develop and retain top talent and we recognize our responsibility to ensure that every individual feels equally valued.

We view each person as a source of innovation and growth and actively cultivate an inclusive, respectful workplace culture. We are committed to providing all employees with equitable access to resources and opportunities.

Nobian upholds equal employment opportunities and maintains a strict policy against discrimination in the workplace or towards job applicants, customers and business partners. The implementation of our DE&I policy is designed to guarantee equal opportunities for all employees, strengthen diversity at all levels of the organization and create an inclusive environment where every voice is heard. While we have made significant progress, we remain committed to continual improvement and increasing the effectiveness of our efforts.

Enhancing and supporting workforce diversity is an ongoing effort. Gender diversity in senior positions currently stands at 9.1%, while gender diversity overall reached 15.3% in 2025, compared with 14.8% in 2023. The Nobian Leadership Team is composed of three Dutch and four German members.

As an example of our inclusive culture, we have established a talent network for our young professionals, BOOST. In 2025, BOOST continued to expand with new initiatives designed to support both



personal and professional development. The BOOST Board organized workshops, a sports event, networking dinners and a sustainability webinar. With more than 160 members, these initiatives are highly appreciated across the organization.

In addition, our company undertook several DE&I initiatives to foster a more inclusive and equitable workplace. In 2025, we organized a series of DE&I

workshops, including sessions on unconscious bias, psychological safety and privilege-walk exercises. We also established a collaboration with DUniek, a company specializing in supporting neurodivergent individuals and addressing absenteeism. This partnership enables tailor-made occupational health and safety research for employees who may benefit from a more personalized approach.

Case study

**Supporting a strong and sustainable industrial future in the Netherlands**

We are part of a coalition to raise awareness and strengthen the long-term competitiveness of Dutch industry and support the transition to climate-neutral production. This joint effort responds to growing pressure from high energy costs, grid congestion and lengthy permitting processes.

Through initiatives such as the National Industry Alarm, the #DeIndustrieMaaktHetHier (Industry Makes It Here) campaign and a joint bid book from six industrial clusters, the coalition highlights the essential role of industry and the need for a fair European

playing field, faster electrification and hydrogen infrastructure and continued innovation in climate neutral production.

By showcasing our role in salt extraction, essential chemicals and large-scale green hydrogen production, Nobian demonstrates its contribution to the energy transition and Europe's strategic autonomy. Working closely with peers, policymakers and partners, we help build a competitive and sustainable industrial future that remains firmly connected to local communities.



**#DeIndustrieMaaktHetHier!**

*Harry Koolhof (left) and Luppo Bruins Slot, colleagues at Nobian Delfzijl, at NEC Delfzijl, a local football club where they are both active members. With Nobian's contribution to additional solar panels, the remaining energy consumption of the lighting installations has been covered, making it an energy-neutral football club.*





Nobian, Delfzijl | @Nobian / Rommy Benjamins

For more than a decade, we have also offered an Employee Assistance Program (EAP) in Germany. This confidential, employer-sponsored benefit provides employees with complimentary, short-term support for both personal and work-related challenges. Services include counseling, referrals and resources for issues such as stress, mental health concerns, financial or legal matters and substance-related issues. The EAP is designed to enhance employee well-being and productivity while helping minimize absenteeism.

We also continue to integrate DE&I principles into our recruiting and hiring processes through established guidelines and our commitments to

anti-discrimination and anti-harassment. As part of our efforts to create an inclusive workplace, our location in Denmark, Dansk Salt A/S, employs individuals in flex jobs and wage-subsidy schemes, reflecting our dedication to inclusion and diversity.

By offering roles tailored to people with reduced work capacity, special needs and adapted tasks, we support individual development while contributing to our shared social responsibility. These initiatives align with our value of 'care' - taking responsibility for people, our local communities and a sustainable future. We also collaborate with job centers and relevant stakeholders to ensure proper onboarding and continued support.

**Social dialogue and working conditions**

We maintain regular communication between management and employee representatives through monthly meetings focused on economic and social matters. Central and local works councils meet each month in every country and collectively represent 97.1% of our workforce.

Working conditions are negotiated through collective labor agreements, covering 86.1% of employees. These agreements define working hours, social benefits, compensation, policies and mutual responsibilities. Clear communication and well-defined employment conditions contribute to an engaged workforce and strong

employer–employee relationships. In 2025, we negotiated a new collective labor agreement (CLA) with the Dutch Labor Union, which will take effect in 2026. As part of these successful negotiations, several labor agreements supporting employee employability were renewed. One example is the updated company pension scheme, which allows employees in physically demanding roles to opt for early retirement. Another example is the additional vacation hours employees granted annually to employees starting seven years before reaching the state pension age. These additional hours are deposited into an individual 'Sustainable Employability Budget', supporting long-term employee well-being.

To enhance internal communication and foster a feedback-oriented culture, we have introduced a new feature in our employee system, SuccessFactors, which enables employees to request and provide feedback to one another. This allows colleagues, both peers and managers, to exchange constructive feedback in an accessible and transparent way. We are actively promoting this enhancement to encourage broad adoption and engagement across the organization.

To further support open and honest feedback, especially from departing employees, we conduct exit surveys and exit interviews. Employees can

indicate if they prefer to speak with an HR Business Partner from a different location, ensuring that the process remains comfortable, impartial and conducive to meaningful insights.

We promote a culture of digital care by actively involving colleagues in maintaining a safe and supportive digital working environment. Cybersecurity is a shared responsibility across Nobian, strengthened through awareness initiatives such as phishing simulations and cross functional cyber crisis exercises. During Cyber Security Month, employees participated in activities that generated valuable insights and informed targeted training. By embedding digital awareness into daily work, we support secure working conditions and collective resilience.

### Career development and rewards

In 2025, over 99% of employees completed a performance and career development cycle. All employees are required to complete mandatory e-learning training, such as the Code of Conduct and Life-Saving Rules and can also participate in job-related career and skills training to support their ongoing development.

During 2025, we also initiated the development of a new internal training through a pilot for People Manager development. The People Manager

program is designed to support the learning needs of all people managers at Nobian and help them grow into connecting and inspiring leaders. The program places strong emphasis on (mental) well-being, collaboration and ownership. The current pilot phase consists of several e-learning modules covering Nobian's organizational identity, expectations of managers throughout the employee life cycle and relevant legal and regulatory requirements. Additional modules are planned for development in 2026 to broaden the scope and fully embed the program into our manager's onboarding processes.

Besides training and career development, ensuring fair and equitable compensation remains a fundamental priority. Transparency in wages and a strong commitment to closing pay gaps are essential to fostering a responsible and supportive workplace culture. All direct and indirect employees are included in the living wage benchmarking analysis, and as an employer in the chemical industry, we guarantee that salaries in every country where we operate exceed the local minimum wage.

The average unadjusted gender pay gap stands at -0.90%, meaning that, on a global level, women at Nobian earn 0.90% more than men. Additionally, the ratio of the annual total compensation of the highest-paid individual to the median annual

total compensation for all employees is 25.11, underlining our commitment to fair and balanced compensation practices.

**People in our community**

Giving back to our communities is an important aspect of our value ‘care’. This commitment is demonstrated through various employee-led activities, such as organized street clean-up activities and tree-planting efforts within a food forest.

In 2025, we participated in JINC, a Netherlands based non-profit organization promoting equal opportunities in the labor market, through activities supporting young people facing socio economic challenges. These included job application training, short internships and the ‘Boss of Tomorrow’ program.

We also maintain strong partnerships with local high schools and universities, enabling us to engage with students across diverse educational backgrounds. Through our collaborations, we offer internships in multiple departments and organize site visits and excursions throughout the year. In 2025, Nobian hosted site visits for college students specializing in technical engineering, chemical technology, laboratory and process technology and logistics, as well as high school students interested



Nobian Heiksebergen | @Nobian

in chemistry and members of student associations. These visits provided valuable insights into potential career paths and supported students in their professional orientation.

In addition to welcoming students, Nobian actively participates in school-hosted events and business days to further strengthen our connection with future talent.



Nobian, Hengelo | ©Nobian/Studio Dijkgraaf

## 5.4. Sustainable sourcing

We believe that striving for a sustainable future means being a safe and reliable partner for customers, employees, business partners and communities. This means we identify potential sustainability issues from the first stages of supplier selection, eliminating risks and seeking continuous improvement to our sustainability performance measures.

We aim to select suppliers who share and support our standards. All of Nobian's business partners, including suppliers of (raw) materials and services, agreed to the Nobian Business Partner Code of Conduct. We also ask all suppliers to adhere to local and European legislative requirements, including the REACH regulations, through mandatory acknowledgment in all new contracts and in all purchase order terms and conditions. More information on the Code of Business Conduct & Ethics is given in section 5.5.

We actively engage with our business partners to jointly improve our sustainability performance. To this end we have developed a comprehensive supplier sustainability risk assessment by considering the supplier's contribution to our Scope 3 CO<sub>2</sub> emissions, their plans to reduce the carbon footprint of their materials or services in line with Nobian's ambitions

and their EcoVadis score or equivalent scoring from a reputable sustainability rating agency. Through this assessment, we classify our business partners as having a negative, neutral or positive impact on Nobian's sustainability ambitions.

We engage with our suppliers with neutral and negative impact to ensure environmental and social practices are in line with Nobian's ambitions. These suppliers are asked to jointly search for areas for improvement, for example by setting up plans to reduce the carbon footprint of their materials or services in line with Nobian's ambitions, by improving knowledge through training, or by devising plans to improve their sustainability rating. This includes performing on-site audits.

The supplier assessment is evaluated twice a year to track progress and is fully embedded in accordance with our Sustainable Procurement policy. If our suppliers have a negative or neutral score, we actively increase our engagement with them. Suppliers performing strongly on sustainability are more often selected, or chosen for increased orders, while consistently weak performers are more likely to lose their position.

The Scope 3 categories within the remit of our procurement department are: Category 1 purchased goods and services;<sup>29</sup> Category 2 capital goods;



Nobian, Ibbenbüren | @Nobian/Studio Dijkgraaf

Category 3 fuel and energy-related activities; Category 4 upstream transport and distribution; Category 9 downstream transportation and distribution; and Category 13 downstream-leased assets.

In 2025 we assessed our suppliers for raw materials, energy and transport in the above categories, representing 670 kton CO<sub>2</sub>-eq based on 2024 data. This is 88% of the Scope 3 emissions in these categories, representing 54% of our supplier base. Of these, 5% of suppliers were classified as negative and 36% as neutral. We have corrective actions in

place for these and are actively monitoring them. In 2025, 15 of our targeted suppliers went through on-site sustainability audits, where we discussed sustainability topics in-depth.

In October 2025 we had our first internal virtual sustainable procurement event to increase our procurement employees' awareness of sustainability. Finally, all Nobian's procurement employees completed the annual sustainability training in 2025, which forms one of their personal objectives.

<sup>29</sup> Excluding tolling materials.

## Memberships and associations

The best way of becoming a force for good and creating a positive impact through sustainability is by working together. That is why we strongly believe in collaborations and partnerships with other expert institutions and organizations. To this end, Nobian is a member of:



## 5.5. Sustainability memberships and compliance

### Policy engagement and memberships

We actively engage with industry and trade associations to take a constructive and proactive approach to relevant EU initiatives. We bring expertise and solutions on topics such as raw materials strategy, a vision for salt extraction energy, carbon reduction and circular chemistry. This involvement helps further our sustainability objectives and ensures public policy decisions are grounded in sound data and science. Our engagements involve a diverse set of stakeholders focused on chemical-related climate mitigation and adaptation issues, such as product design for energy efficiency, material safety, energy management in business and manufacturing operations and industry collaboration.

### Managing engagement on public affairs

All direct and indirect engagement with policy makers and related organizations follows a formal process managed by our Communication and Public Affairs Team. This covers the scope and business impact of specific policy issues and is integrated into annual business review meetings and our risk management assessment process. This process ensures that our public affairs activities are connected to our business strategy. In line with the Nobian Business Code of Conduct & Ethics and

our company policies, we do not provide financial contributions or endorsements to political parties or politicians.

### Advocacy actions related to sustainability

We seek to engage constructively with governments, regulators and legislators on proposed policies relevant to our business. These can cover a wide range of areas, from tax and employment issues to safety and handling chemicals. We seek to support policies that are sufficient, clear, stable, predictable, comprehensive, economically efficient, well designed and that deliver society's goals at the least cost. We also support policies that align with our position in areas such as our sustainability ambitions.

We have actively engaged with industry and trade associations to take a constructive and proactive approach to relevant EU sustainability and industry initiatives, such as the EU Clean Industrial Deal, critical raw materials and the EU Chemicals Strategy for Sustainability. We not only focus on the risks and challenges for our industry, but also on opportunities via new business models and innovation and actively drive a value chain approach. Through our memberships with several

associations in the EU and the Netherlands, we have also actively engaged with policy makers on creating the right conditions and policy approach for energy storage and green hydrogen.

**Code of Business Conduct & Ethics**

Nobian’s Code of Business Conduct & Ethics requires employees to always act ethically and comply with laws on anti-bribery, anti-corruption, anti-trust/competition, data protection and economic sanctions. The Code applies to all employees, contractors and vendors and, as part of our commitment to a sustainable future, everyone must complete at least one compliance training session on ethical business conduct each year. 95% of all employees completed the 2025 training.

Our compliance program helps our employees and contractors understand and abide by our high standards of ethical business conduct, comply with our legal and regulatory requirements and embody our values. The program consists of training, policies and procedures, external party due diligence and monitoring and investigating and remediating concerns of unethical, illegal or inappropriate conduct. This commitment to compliance and ethics is supported at the highest levels of our business, with the Board of Directors and audit committee receiving regular updates from our General Counsel and Chief Compliance Officer.

In 2025, we had four confirmed compliance cases that were reported via *SpeakUp!*. Each separate case was handled individually and with full confidentiality for the employees involved. Cases are internally classified so trends, if applicable, can be identified in an early stage. Next to this, we had zero confirmed corruption and zero information security incidents with material impact.

**Our values**

Nobian has four company values: Safety, Excellence, Ownership and Care. These are widely known throughout the business and are actively used in our strategy and day-to-day activities, such as town hall meetings and performance appraisals. They continue to guide our behavior and are a crucial part of our identity and company culture. The values demonstrate what we stand for – as a corporate citizen, a business partner and an employer. They guide our relationships with our partners, suppliers and stakeholders.

**Business partners**

We require our suppliers to adhere to our Business Partner Code of Business Conduct & Ethics. We also require certain third parties, such as customers and suppliers operating in sensitive countries, to undergo a due diligence process where they provide information on their ownership, compliance programs and any past



relevant legal and regulatory issues, including economic sanctions. They are monitored through an online platform and we receive daily updates of any sanctions, regulatory fines or adverse media. Business partners also have access to our ethics reporting hotline, *SpeakUp!*.

**Reporting concerns: *SpeakUp!***

Employees, suppliers, customers and other business partners can report any suspected policy violations, inappropriate behavior and illegal or unethical practices through *SpeakUp!*, our confidential reporting hotline.

*SpeakUp!* is a direct channel that enables people to anonymously highlight their concerns, ensuring issues are heard and addressed in a timely manner.

To ensure everyone is aware of *SpeakUp!*, it is publicized on our intranet, our external website and at every office and manufacturing site, along with contact information. It is also highlighted in our Code of Business Conduct & Ethics and employees are instructed on its use and about the protection they are afforded under our Nonretaliation Policy. Reports to *SpeakUp!* can be made anonymously in English, German, Dutch or Danish.



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# ESG Factsheet

Environment 1	Unit	2020 (baseline)	2022	2023	2024	2025	% change 2025 vs. 2020
<b>Scope 1 greenhouse gas emissions</b>							
Scope 1 emissions	kton CO <sub>2</sub> -eq	713.7	776.1	699.0	600.2	477.4	-33.1%
Scope 1 emissions under regulated emissions trading schemes (ETS)	%	97.9	98.2	98.2	97.9	97.3	-
<b>Scope 2 greenhouse gas emissions</b>							
Scope 2 emissions	kton CO <sub>2</sub> -eq	971.8	575.9	570.8	247.9	362.4	-62.7%
<b>Scope 3 greenhouse gas emissions</b>							
Total Scope 3 emissions <sup>30</sup>	kton CO <sub>2</sub> -eq	1,205	1,265	1,140	1,146	1,020	-15.4%
Category 1: Purchased goods and services	kton CO <sub>2</sub> -eq	402.0	406.7	311.4	354.4	300.8	-25.2%
Category 2: Capital goods	kton CO <sub>2</sub> -eq	9.4	10.6	11.3	11.9	0.9	-90.0%
Category 3: Fuel and energy-related activities	kton CO <sub>2</sub> -eq	330.8	315.7	363.1	267.3	261.4	-21.0%
Category 4: Upstream transport and distribution	kton CO <sub>2</sub> -eq	13.1	12.3	10.5	11.7	10.2	-22.3%
Category 5: Waste generated in operations	kton CO <sub>2</sub> -eq	5.2	4.3	5.8	4.3	4.6	-11.6%
Category 6: Business travel	kton CO <sub>2</sub> -eq	0.3	0.3	0.5	0.5	0.2	-18.5%
Category 7: Employee commuting	kton CO <sub>2</sub> -eq	5.6	5.8	6.2	6.6	3.4	-39.4%
Category 9: Downstream transportation and distribution	kton CO <sub>2</sub> -eq	166.3	137.4	142.3	126.4	109.1	-34.4%
Category 10 and 11: Processing of sold products and use of sold products	kton CO <sub>2</sub> -eq	60.2	110.1	110.4	157.0	143.0	137.4%
Category 12: End-of-life treatment of sold products	kton CO <sub>2</sub> -eq	210.4	260.4	176.7	203.4	184.2	-12.4%
Category 13: Downstream-leased assets	kton CO <sub>2</sub> -eq	1.9	1.0	2.0	2.0	2.0	7.2%
<b>Total greenhouse gas emissions</b>							
Total emissions: Scope 1 and 2	kton CO <sub>2</sub> -eq	1,685	1,352	1,270	848	840	-50.2%
Total emissions: Scope 1, 2 and 3	kton CO <sub>2</sub> -eq	2,891	2,617	2,410	1,994	1,860	-35.7%
Direct biogenic emissions	kton CO <sub>2</sub> -eq	n.a.	n.a.	n.a.	57	50	-
<b>Energy management</b>							
Total energy consumption	GWh	6,239	5,893	5,075	5,504	4,955	-20.6%
Percentage renewable energy	%	28.9	35.7	40.8	57.0	53.4	-
Percentage renewable electricity	%	18.8	37.9	48.4	71.6	65.3	-
Percentage renewable steam	%	37.1	33.9	34.1	44.4	43.9	-
% grid energy	%	30.3	31.9	38.5	38.2	40.8	-
Total self-generated electricity	GWh	978	1,076	962	843	585	-40.1%
Total self-generated steam	GWh	2,592	2,667	2,320	1,998	1,778	-31.4%

<sup>30</sup> Category 8 *Upstream-leased assets*, Category 14 *Franchises*, Category 15 *Investments* are not applicable for Nobian.

Total Scope 3 Upstream greenhouse gas emissions (Category 1-8) 581.5 kton CO<sub>2</sub>-eq.

Total Scope 3 Downstream greenhouse gas emissions (Category 9-15) 438.3 kton CO<sub>2</sub>-eq.

Environment 2	Unit	2020 (baseline)	2022	2023	2024	2025	% change 2025 vs. 2020
<b>Emissions to air</b>							
NOx absolute emissions	ton	563	545	421	347	240	-57.4%
<b>Water management</b>							
Freshwater intake	1,000 m <sup>3</sup>	59,528	54,311	50,909	51,275	47,403	-20.4%
of which drinking water intake	1,000 m <sup>3</sup>	1,661	1,686	1,360	1,605	1,336	-19.6%
Freshwater discharge to freshwater environment or third party	1,000 m <sup>3</sup>	45,814	41,383	40,410	38,880	35,024	-23.6%
Freshwater consumption	1,000 m <sup>3</sup>	13,714	12,928	10,499	12,394	12,379	-9.7%
Freshwater consumption in stressed regions	1,000 m <sup>3</sup>	306	311	318	232	274	-10.6%
<b>Emissions to water</b>							
Chlorides	ton	n.a.	n.a.	n.a.	205,909	204,268	-
Copper	ton	n.a.	n.a.	n.a.	0.127	0.258	-
Nickel	ton	n.a.	n.a.	n.a.	0.209	0.486	-
Total Organic Carbon (TOC)	ton	34.7	32.5	38.3	39.5	32.4	-6.5%
<b>Waste management</b>							
Total waste	ton	11,586	9,206	13,758	10,565	14,063	21.4%
Reusable hazardous waste	ton	4,468	3,471	6,772	4,328	8,212	83.8%
Non-reusable hazardous waste	ton	1,873	1,387	2,143	1,740	1,684	-10.1%
of which disposed to landfill	ton	180.9	155.9	150.8	56.4	29.7	-83.6%
Total hazardous waste	ton	6,341	4,859	8,915	6,068	9,895	56.1%
Reusable non-hazardous waste	ton	3,387	2,108	3,055	3,133	2,979	-12.1%
Non-reusable non-hazardous waste	ton	1,859	2,242	1,788	1,364	1,189	-36.0%
Total non-hazardous waste	ton	5,246	4,350	4,843	4,497	4,168	-20.6%
Percentage reusable hazardous waste	%	70.5	71.4	76.0	71.3	83.0	-
Percentage reusable non-hazardous waste	%	64.6	48.5	63.1	69.7	71.5	-
<b>Sales volume and revenue from certified, low-carbon products</b>							
Total sales volume	kton	8,722	7,535	6,593	7,285	6,474	-25.8%
Percentage revenue from certified, low-carbon products	%	0	0.2	0.7	4.5	14.2	-
<b>Management systems</b>							
Manufacturing sites with ISO 14001/RC-14001 certifications	%	100	100	100	100	100	-

Social	Unit	2020 (Baseline)	2022	2023	2024	2025
<b>Workforce data</b>						
Global headcount Nobian employees	#	n.a.	1,527	1,622	1,660	1,651
Gender diversity in the workforce (M/F)	%	n.a.	86/14	85/15	85/15	85/15
Gender diversity in senior positions (M/F)	%	n.a.	86/14	91/9	93/7	91/9
Employee attrition rate (voluntary and involuntary)	%	n.a.	12.9	7.7	7.5	6.9
<b>People safety</b>						
Total reportable incident rate (TRR) for employees, temporary workers and contractors	per 1,000,000 hours worked	1.09	1.07	2.46	2.81	3.25
Lost time injury rate (LTIR) for employees, temporary workers and contractors	per 1,000,000 hours worked	0.82	0.00	0.74	1.08	0.61
TRR for employees, temporary workers	per 1,000,000 hours worked	0.42	0.95	2.16	2.83	2.73
LTIR for employees, temporary workers	per 1,000,000 hours worked	0.42	0.00	0.43	1.21	0.68
TRR for contractors	per 1,000,000 hours worked	2.29	1.23	2.85	2.79	4.04
LTIR for contractors	per 1,000,000 hours worked	1.53	0.00	1.14	0.93	0.50
Fatalities	per 1,000,000 hours worked	0	0	0	0	0
<b>Process safety</b>						
Process safety incident counts - level 1	#	3	0	2	0	0
Process safety incident counts rate - level 1	per 1,000,000 hours worked	0.82	0.00	0.49	0.00	0.00
Process safety incident counts - level 2	#	3	0	1	2	2
Process safety incident counts rate - level 2	per 1,000,000 hours worked	0.82	0.00	0.25	0.43	0.41
Process safety total incident rate (PSTIR) combined	per 1,000,000 hours worked	1.64	0.00	0.74	0.43	0.41
<b>Management systems</b>						
% of manufacturing sites with ISO 45001 certification	%	100	100	100	100	100

<b>Governance</b>	<b>Unit</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Board</b>					
Directors	#	9	9	9	9
Average director tenure	years	1.0	2.0	3.0	3.6
Independent directors	#	0	1	1	1
Gender diversity (M/F)	%	100/0	89/11	89/11	78/22
<b>Board coverage on ESG issues</b>					
Frequency of board updates on ESG	frequency	Quarterly	Quarterly	Quarterly	Quarterly
Board oversight of climate strategy	Y/N	Y	Y	Y	Y
<b>Leadership Team</b>					
Members	#	6	7	7	7
Gender diversity (M/F)	%	50/50	86/14	86/14	86/14

# Appendices

Basis of reporting

ESRS Index

SASB Index

Breakdown of  
greenhouse gas emissions

Sustainability governance

Impact, risks and  
opportunities

Independent limited  
assurance statement

Glossary

**GROW GREENER  
TOGETHER**



### History

Nobian became a standalone company in July 2021. This is our fifth sustainability report, covering our activities and achievements in 2025.

### Independent assurance

This report and ESG data have been independently assured by DNV Business Assurance Germany GmbH. Details of the assurance can be found on page 78.

### Reporting standards

The report and its content have been prepared in accordance with SASB reporting standards. The index of SASB metrics is provided on page 73. In addition, Nobian is in the process of complying with its sustainability reporting with the EU Corporate Sustainability Reporting Directive (CSRD) by following the relevant European Sustainability Reporting Standards (ESRS). For that purpose, some KPIs were added or adapted in 2024. These KPIs include emissions to air and water, waste and freshwater consumption.

### Scope and data

The scope of our environmental and health and safety data comprises our seven production sites in the Netherlands (Delfzijl, Hengelo and

Rotterdam), Germany (Frankfurt, Ibbenbüren and Bitterfeld) and Denmark (Mariager). Administrative offices were not included as their contribution is negligible. For the remaining social and governance data, the full company is included. Data reported for 2025 is compared to that of 2020 – 2024. The data from 2025 has been included in the assurance process. At each production site, environmental data is reported quarterly, whereas health and safety data are reported monthly. Our data collection method and management system comply with ISO 14001 and ISO 45001.

### Calculation methodology

We followed the guidelines of the SASB standard to report our environmental KPIs as well as the CSRD material metrics, as discussed on the next pages.

### Scope 1 emissions

As indicated in SASB and ESRS, the Greenhouse Gas protocol was used to calculate Scope 1 CO<sub>2</sub> emissions. Our Scope 1 emissions are the combustion of fossil fuels to generate steam and electricity at our energy facilities. The emission factors we used to calculate our CO<sub>2</sub> emissions were based on the Dutch Energy Carrier list,<sup>31</sup> providing emission factors per fuel type.

<sup>31</sup> <https://www.rvo.nl/sites/default/files/2025-02/Nederlandse-energiedragelijst-januari-2025.pdf>

### Scope 2 emissions

Our Scope 2 emissions are derived from purchased steam and electricity. All electricity purchased at Nobian is market-based, indicating that Guarantees of Origins or supplier-specific grid mixes are available for each MWh purchased.

To calculate our CO<sub>2</sub> emissions from electricity, we used supplier-specific emission factors. For steam from combined heat and power (CHP) systems, we have used supplier-specific emission factors. If not available, the EU heat benchmark methodology<sup>32</sup> to calculate the CO<sub>2</sub> emission factor for steam produced in a boiler or CHP system with reference efficiencies for natural gas were used.

The use of steam from municipal waste incineration (MWI) plays an important transitional role in our goal to become net-zero. This is the fastest and most efficient way to reduce overall CO<sub>2</sub> emissions during our transition towards full electrification of our production processes. In a fully circular economy, municipal waste incineration in general will be greatly reduced

and will, ideally, eventually disappear. Until then, steam from MWI is a valuable source of energy that is partly renewable and partly fossil. Overall, it has a lower emissions intensity and avoids emissions by replacing natural-gas-based steam production. For Scope 2 CO<sub>2</sub> emissions from steam from MWI, we apply the widely used LCA methodology, EN 15804+A2, a standard often used for Environmental Product Declaration (EPD®). It follows the polluter pays principle (PPP), meaning CO<sub>2</sub> emissions are carried by waste generator and thus do not need to be included in the carbon footprint of the steam itself. In line with this guidance, Scope 2 MWI steam emissions are not included in the company's Scope 2 emissions.

### Scope 3 emissions

The calculations for our Scope 3 greenhouse gas (GHG) emissions are based on the GHG Protocol, 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard',<sup>33</sup> 'Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain'<sup>34</sup> and in accordance with SBTi. In the GHG protocol standard, Scope 3 emissions are divided into 15 categories. The

description and approach per category can be found on the next pages. We included 50% of emissions from joint ventures, taking an equity share approach.

In cases where secondary emission factors from external sources such as the ecoinvent database, GLEC and IPCC are used, the latest version available on November 1 of the reporting year is being applied.

The methodologies used for Scope 3 calculations are explained per category in the Scope 3 section further in this appendix.

### Energy consumption and renewable energy

Energy consumption was calculated as the total steam and electricity consumption (both internally produced and purchased) and converted to gigawatt hours. The energy from return condensate of steam (hot water) usage is subtracted from the total. A certain percentage of our steam and electricity was procured from renewable sources. The renewable energy content of steam from MWI is calculated based on the

<sup>32</sup> Guidance Document n°3 on the harmonized free allocation methodology for the EU ETS post 2020, section D.

<sup>33</sup> GHG protocol: 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard', 2011 and 'Technical guidance for calculating Scope 3 emissions (version 1.0)', 2013.

<sup>34</sup> WBCSD Chemicals Sector Working Group: 'Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain', 2013.

biogenic share of the waste as set annually by Rijkswaterstaat (53% in 2025). This percentage is, where needed, corrected for the possible additional fossil fuels used in the incineration process and is used for calculating the contribution of renewable steam from MWI into our total renewable energy percentage.

### Emissions to air and water

Our emissions to air and water have been brought in line with the CSRD requirements for Pollution in 2024.

### Water management

An update of the calculation methodology and KPIs for freshwater consumption was made in 2024, based on the definitions in the ESRS standards. Here, freshwater consumption is defined as total freshwater intake minus freshwater discharge to a freshwater environment or third party. The Aqueduct Water Risk Atlas tool from the World Resource Institute has been used to map the use of water in water stressed regions.

### Waste

Waste quantities are tracked at waste processing facilities and the classification of non-reusable and reusable waste is in accordance with the Basel Convention. Total waste is reported, including both process and non-process related waste. Several KPIs on non-hazardous waste are included to provide more insight in the waste quantities.

### Certified, low-carbon products

Nobian includes revenue from products that meet clearly defined certification and carbon performance criteria. To qualify as certified, products must be produced at sites that have obtained and maintained the relevant certifications during the reporting year, demonstrating that production is powered by 100% renewable electricity. These certifications include ISCC PLUS<sup>35</sup> for all chlorine, caustic soda and derivate products and ISCC EU<sup>35</sup> and CMS 70,<sup>36</sup> which are specifically applicable to green hydrogen.

In addition, products categorized as low-carbon<sup>37</sup> have a verified product carbon footprint, expressed in kilograms of CO<sub>2</sub>-eq. per kilogram of product, substantiated through an Environmental Product Declaration (EPD®).<sup>38</sup>

The percentage of sales from certified, low-carbon products is calculated by dividing the revenue from these products by Nobian's total product-related revenue.

### People and process safety

The people safety data and the Process Safety Total Incident Rate (PSTIR) are calculated with the industry standard in Europe (per 1,000,000 hours worked), instead of calculating with the OSHA benchmark of 200,000 hours worked used in SASB.

<sup>35</sup> <https://www.iscc-system.org/>

<sup>36</sup> <https://www.tuvsud.com/en-us/themes/hydrogen/hydrogen-services-that-enable-safety-for-your-ideas/green-hydrogen-certification>

<sup>37</sup> Benchmark: <https://eurochlor.org/app/uploads/2022/02/2022-Euro-Chlor-Eco-profile.pdf>

<sup>38</sup> <https://www.environdec.com/home>

**Description and approach of Scope 3 categories | 1–3**

**Category 1  
Purchased goods and services, including packaging**

<b>Category description</b>	Extraction, production and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in Categories 2–8.
<b>Type and source of data</b>	Procurement data is used for purchased raw materials and packaging, including tolling activities and re-sale. The delivery date is used as a basis of purchased goods volumes.  For third-party services, the hours worked by contractors are used to calculate the corresponding CO <sub>2</sub> -eq emissions from commuting to the factories.
<b>Methodologies, allocation methods and assumptions</b>	<b>Raw materials and packaging</b> Supplier-specific emission factors are used. If these are not available emission factors from relevant datasets from the ecoinvent database (version 3.11) were used. This database is an internationally accepted database for CO <sub>2</sub> -eq emission factors. For a few raw materials, a proxy data set was used if no exact matching dataset was available.  <b>Services</b> The number of days worked by contractors for the reporting year were multiplied with the kilometers travelled per modality and a corresponding CO <sub>2</sub> -eq emission factor from the database ecoinvent (version 3.11). For the travel distance an average of 30 km one-way is assumed.

**Category 2  
Capital goods**

<b>Category description</b>	Extraction, production and transportation of capital goods purchased or acquired by the reporting company in the reporting year.
<b>Type and source of data</b>	As basis for calculation, the actual tonnages of steel (divided by type of steel alloys), titanium, concrete and fiber reinforced plastics used in the construction of large CAPEX projects are taken. The large projects represent 99% of the CO <sub>2</sub> -eq emissions of all Nobian’s CAPEX investments.
<b>Methodologies, allocation methods and assumptions</b>	CO <sub>2</sub> -eq emissions per kg of material are derived from the ecoinvent database.

**Category 3  
Fuel and energy-related activities  
not included in Scopes 1 or 2**

<b>Category description</b>	Extraction, production and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in Scopes 1 or 2: upstream emissions of purchased fuels, upstream emissions of purchased electricity and steam, transmission and distribution losses, generation of purchased electricity and steam that is sold to end users.
<b>Type and source of data</b>	Primary data on total volumes of fuel and energy sources were used.
<b>Methodologies, allocation methods and assumptions</b>	Emission factors from relevant datasets from the ecoinvent database are used. These datasets represent the average Scope 3 emissions required per country or region (Europe).  For transmission and distribution losses in electricity, country-specific data was used (4.14% for the Netherlands, 5.04% for Germany and 5.66% for Denmark), based on data from the World Bank.

**Description and approach of Scope 3 categories | 4-6**

**Category 4  
Upstream transport and distribution**

<b>Category description</b>	All inbound logistics of raw materials from external suppliers to own operations, both Nobian-arranged transport and supplier-arranged transport.
<b>Type and source of data</b>	Primary data of raw materials purchased by Nobian, including supplier locations and modality are used to calculate the transport distance to the Nobian site. Transport of Nobian products between factories is accounted for in category 9.
<b>Methodologies, allocation methods and assumptions</b>	The transport of raw materials that contributed to 99% of the total volumes purchased of raw materials in category 1 were included in category 4. Emission factors per ton-kilometer were derived from the GLEC framework <sup>39</sup> that provides logistic emissions for the European chemical industry.

**Category 5  
Waste generated in operations**

<b>Category description</b>	Emissions from third-party disposal and treatment of waste generated in the reporting company's owned or controlled operations in the reporting year.
<b>Type and source of data</b>	Primary data on the amount of waste is used. Total waste is reported, which includes production related waste, waste from construction and demolishing as well as maintenance. Waste sent for recycling or for incineration with energy recovery was not included as the GHG protocol uses a cut-off approach where emissions from recycling will be included in the secondary system.
<b>Methodologies, allocation methods and assumptions</b>	Emission factors are derived from the ecoinvent database (version 3.11) per type of waste treatment and multiplied with the waste volume.

**Category 6  
Business travel**

<b>Category description</b>	Transportation of employees for business-related activities in vehicles not owned or operated by Nobian.
<b>Type and source of data</b>	Primary data on total expense claims for flights, public transport and car drives were used. For car drives, the actual total kilometers were available and used.
<b>Methodologies, allocation methods and assumptions</b>	Emission factors for passenger-kilometer (pkm) for flights, train and car transport are derived from the ecoinvent database, that provides well-to-wheel emission factors.

<sup>39</sup> GLEC framework & Cefic: 'Calculating GHG transport and logistics emissions for the European Chemical Industry, Module 5 of the GLEC Framework written in partnership with Cefic', v3.2 edition, revised and updated (October 2025).

**Description and approach of Scope 3 categories | 7-11<sup>40</sup>**

**Category 7  
Employee commuting**

<b>Category description</b>	Transportation of employees between their homes and their worksites in vehicles not owned or operated by Nobian.
<b>Type and source of data</b>	Primary data on home-work distance of Dutch employees was used.
<b>Methodologies, allocation methods and assumptions</b>	Emission factors for passenger-kilometer (pkm) for train and car transport are derived from the ecoinvent database, that provide well-to-wheel emission factors. Mode of transportation was assessed based on travel from home address to working location. The emissions for the Netherlands were extrapolated to Germany and Denmark based on the number of employees.

**Category 9  
Transport downstream**

<b>Category description</b>	All outbound transportation and distribution of products sold between own operations and customers or storage locations.
<b>Type and source of data</b>	Primary data on total kilometers and tonnage were used. For transportation not arranged by Nobian an expert estimation was made.
<b>Methodologies, allocation methods and assumptions</b>	Emission factors per ton-kilometer were derived from the GLEC framework <sup>41</sup> that provides logistic emissions for the European chemical industry or supplier-specific emissions were available. Some emission factors for Nobian-arranged transport were corrected for payload and / or % empty running for transport where accurate data was available.

**Category 10 & 11  
Processing & use of sold products**

<b>Category description</b>	<p><b>Category 10:</b> Emissions generated during processing of intermediate products sold.</p> <p><b>Category 11:</b> Emissions that are directly emitted during the use-phase of goods and services sold.</p>
<b>Type and source of data</b>	For most products, these categories are excluded as Nobian's basic chemicals are used in a wide array of products. As such there is no longer any relation between CO <sub>2</sub> emissions from processing and use of sold products. For a few products that also have greenhouse gas properties, emissions were included. Primary data on sales volumes is used to calculate emissions during the further processing and use of these products.
<b>Methodologies, allocation methods and assumptions</b>	Expert judgment and EU-wide data was used to estimate the emissions. The Global Warming Potentials (GWPs) as provided in the 6th IPCC assessment report were used to calculate the total CO <sub>2</sub> -eq emissions.

<sup>40</sup> Category 8 *Upstream Leased Assets* is not applicable for Nobian.

<sup>41</sup> GLEC framework & Cefic: 'Calculating GHG transport and logistics emissions for the European Chemical Industry, Module 5 of the GLEC Framework written in partnership with Cefic', v3.2 edition, revised and updated (October 2025).

**Description and approach of Scope 3 categories | 12 & 13<sup>42</sup>**

**Category 12  
End-of-life treatment**

<b>Category description</b>	Waste disposal and treatment of products sold at the end of their life.
<b>Type and source of data</b>	Primary data on the total volume of purchased raw materials, tolling materials and packaging was used.
<b>Methodologies, allocation methods and assumptions</b>	Based on the carbon content of the purchased raw materials/packaging, the corresponding CO <sub>2</sub> -eq emissions per input material were calculated. The emissions of the products already reported in categories 10 and 11 were excluded.

**Category 13  
Downstream-leased assets**

<b>Category description</b>	Operation of assets leased by the reporting company, not included in Scopes 1 and 2.
<b>Type and source of data</b>	Primary data for downstream-leased assets for dry and liquid bulk storage was used.
<b>Methodologies, allocation methods and assumptions</b>	For bulk liquid storage, Scope 2 emissions from one vendor were extrapolated to the total tonnage of bulk stored. For dry bulk storage specific fuel use from one vendor was extrapolated to the total tonnage.

<sup>42</sup> Categories 14 *Franchises* and 15 *Investments* are not applicable for Nobian.

NUMBER	SUBJECT	REFERENCE
ESRS E1 <sup>43</sup>	Climate change	Section 3.1, page 19 Case study, page 25 ESG Factsheet, page 60
ESRS E2	Pollution	Section 4.4, page 34 ESG Factsheet, page 61
ESRS E3	Water and marine resources	Section 4.2, page 33 ESG Factsheet, page 61
ESRS E4	Biodiversity and ecosystems	Not material, see section 2.3, page 16
ESRS E5	Resource use and circular economy	Section 4.3, page 33
ESRS S1	Own workforce	Section 5.3, page 47 Section 5.5, page 56 ESG Factsheet, page 62
ESRS S2	Workers in the value chain	Not material, see section 2.3, page 16
ESRS S3	Affected communities	Section 5.2, page 43 Case studies, pages 45 and 46
ESRS S4	Consumers and end users	Not material, see section 2.3, page 16
ESRS G1	Business conduct	Section 5.4, page 54 Section 5.5, page 56

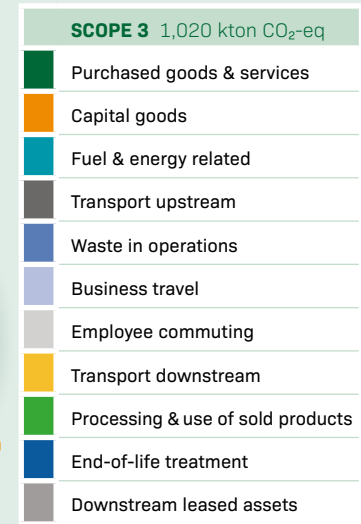
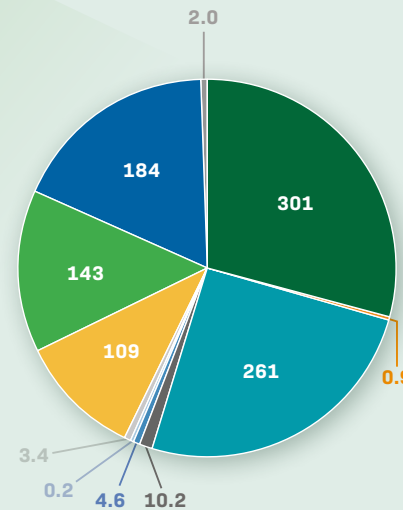
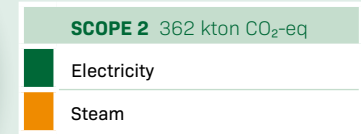
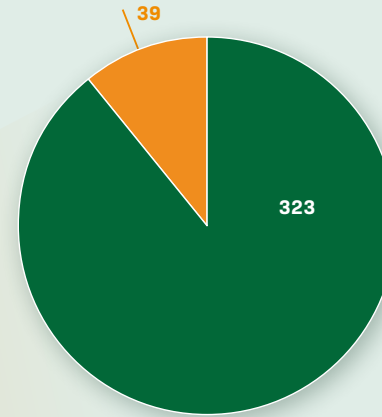
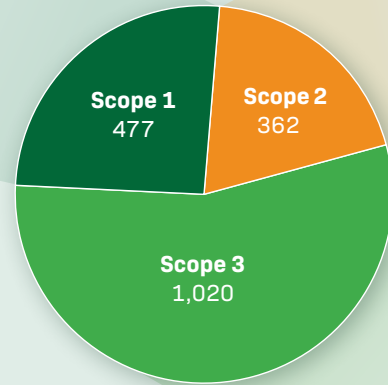
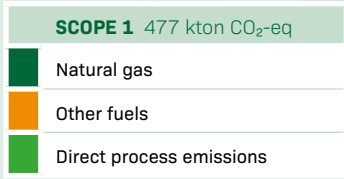
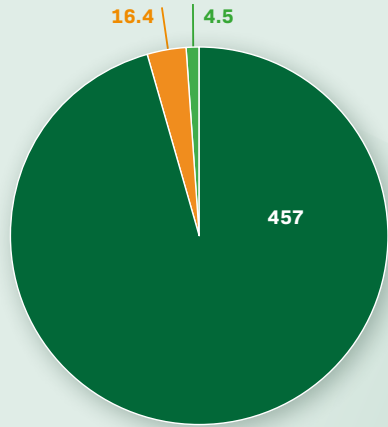
<sup>43</sup> <https://xbrl.efrag.org/e-esrs/esrs-set1-2023.html>

TOPIC	METRIC	CODE	PAGE
Greenhouse gas emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	RT-CH-110a.1	ESG Factsheet, page 60
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	RT-CH-110a.2	Section 3.1, page 19
Air quality	Air emissions of the following pollutants: NOx only. Other air pollutants are below the threshold values of the European Sustainability Reporting Standard (ESRS)	RT-CH-120a.1	Section 4.4, page 34
Energy management	(1) Total energy consumed; (2) Percentage grid electricity; (3) Percentage renewable; (4) Total self-generated energy	RT-CH-130a.1	ESG Factsheet, page 60
Water management	(1) Total water withdrawn; (2) Total water consumed, percentage of each in regions with high or extremely high baseline water stress	RT-CH-140a.1	ESG Factsheet, page 61
	Number of incidents of non-compliance associated with water quality permits, standards and regulations <sup>44</sup>	RT-CH-140a.2	ESG Factsheet, page 62
	Description of water management risks and discussion of strategies and practices to mitigate those risks	RT-CH-140a.3	Section 4.2, page 33
Hazardous waste management	Amount of hazardous waste generated; percentage recycled	RT-CH-150a.1	ESG Factsheet, page 61
Community relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	RT-CH-210a.1	Section 5.2, page 43
Workforce health and safety	(1) Total recordable incident rate (TRIR) and (2) Fatality rate for (a) direct employees and (b) contract employees	RT-CH-320a.1	ESG Factsheet, page 62
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	RT-CH-320a.2	Section 5.1, page 38
Safety and environmental stewardship of chemicals	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	RT-CH-410b.2	Section 4.4, page 34
Genetically modified organisms	Percentage of products by revenue that contain genetically modified organisms (GMOs)	RT-CH-410c.1	Zero
Management of the legal and regulatory environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	RT-CH-530a.1	Section 5.5, page 56
Operational safety, emergency preparedness and response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR) <sup>45</sup>	RT-CH-540a.1	ESG Factsheet, page 62
	Number of transport incidents	RT-CH-540a.2	Section 4.5, page 34

<sup>44</sup> These incidents are included in Process safety numbers.

<sup>45</sup> PSISR is not used by Nobian. We use Process safety incident counts rate – level 1 as KPI for this.

Breakdown of greenhouse gas emissions



Breakdown of greenhouse gas emissions in scopes and categories – 2025

**Sustainability governance**

Our sustainability approach is focused on making sustainability an integral part of our strategic decisions and daily operations. For this reason, the governance structure for sustainability matters is embedded as far as possible in existing processes, controls and procedures and identifies roles and responsibilities.

**Board of Directors & Corporate Responsibility Committee**

The Corporate Responsibility Committee (a Board Committee) has been tasked by the Board of Directors to oversee certain corporate responsibilities relating to Nobian's policies, practices and performance, including the company's environmental, health, safety, sustainability, product quality and social policies and programs, together with other matters that may impact its public reputation.

**Leadership Team**

The Leadership Team, led by the CEO, sets the strategic direction for sustainability issues and monitors progress against the set KPIs, under the initiative and leadership of the Chief Technology and Sustainability Officer.

**Sustainability Core Team**

Central responsibility for the development, implementation, monitoring and reporting of the sustainability program sits

with the cross-functional Sustainability Core Team, led by the Sustainability Manager. The members of the Core Team comprise

all relevant functions. Each member has a Leadership Team sponsor who is responsible for their focus area.

Sustainability theme	Focus area	Sustainability Core Team lead	Leadership Team member
Climate	CO <sub>2</sub> reduction	Technology Manager Energy	Chief Technology and Sustainability Officer
	Renewable energy	Director Energy	Chief Operations Officer
	Energy efficiency and storage	Technology Manager Energy	Chief Technology and Sustainability Officer
Circular	Green products	Sustainability Manager	Chief Operations Officer
	Water	Sustainability Manager	Chief Technology and Sustainability Officer
	Recycling	Director Innovation Program and Technology Manager	Chief Technology and Sustainability Officer
Care	Health and safety	HSE&S Specialist	Executive Vice President Integrated Supply Chain
	Community	Director Communications and Public Affairs	General Counsel
	People	Chief Human Resources Officer	Chief Human Resources Officer
Other	Sustainability reporting and assurance	Sustainability Manager	Chief Technology and Sustainability Officer
	EcoVadis, SBTi, CDP	Sustainability Coordinator	Chief Technology and Sustainability Officer
	Investor relations	Director Treasury and Investor Relations	Chief Financial Officer
	Legislation and compliance	Deputy General Counsel and Chief Compliance Officer	General Counsel
	Sourcing	Procurement Director	Executive Vice President Integrated Supply Chain

**Policies**

Since sustainability is an integral part of our strategic decisions and daily operations, it is embedded in the policies of each relevant function, such as our Procurement Policy, HSE Policy and Cyber Security Policy.

**Reporting**

Our sustainability KPIs and targets are reviewed each year and updated as needed. Progress is reported by team leads in periodical Sustainability Core Team meetings, according to our KPIs. Progress is reported quarterly to the Leadership Team and the Board of Directors' Corporate Responsibility Committee by the Chief Technology and Sustainability Officer.

**This appendix describes the processes through which we identify sustainability-related impacts, risks and opportunities, which is the input for the double materiality assessment. This assessment is aligned with the requirements of the EU CSRD legislation. In 2025, the further development of CSRD reporting was postponed, while we increased the focus on sustainability-related topics within the Enterprise Risk Management (ERM) process. The methodology is in line with the ESRS and the Task Force on Climate-Related Financial Disclosures (TCFD) framework.<sup>46</sup>**

### Impacts

The impact assessment relates to how external and internal stakeholders perceive where Nobian makes the greatest impact (positive or negative) on society and the environment, known as the 'inside-out perspective'. In 2023, we invited representatives from different stakeholder groups – employees, investors, public authorities, suppliers and customers – to complete an impact survey.

In 2025, no follow-up on the stakeholder impact survey was conducted, because of the postponement of the CSRD reporting requirements. The outcomes of the initial stakeholder engagement therefore remain the primary input for the impact perspective.

### Risks and opportunities

The identification of sustainability-related impacts, risks and opportunities is fully integrated in our ERM process. In 2025, additional focus was placed on sustainability-related risks and opportunities within ERM, reflecting their increasing relevance to strategic decision-making.

Nobian conducts a risk and opportunity assessment as part of our ERM process, which is performed annually. We hold ERM sessions with all relevant

functions and departments, and assess and rate strategic, operational, financial, compliance, HSE and reputational risks using a uniform methodology.

During these ERM sessions, we hold in-depth discussions with relevant stakeholders to identify and classify risks and opportunities that could materially affect our business. These include the shift to a lower-carbon economy, extreme weather-related events and volatile water levels.

Each risk and opportunity is assigned a timeline to determine when it might impact the company: short (within two years), medium (two to four years) or long (over four years). The risks are rated according to their potential impact and likelihood within the stated timeframe. Similarly, opportunities are scored according to their anticipated positive impact. The number of top risks and opportunities determine the score, used on the y-axis of the materiality topics matrix. We consolidate the individual rankings of the ERM sessions, resulting in an overall ranking of 1 to 10 based on a combination of likelihood and impact.

<sup>46</sup> <https://www.fsb-tcfid.org/>

### Three significant risks to company performance

The following sustainability risks, identified through the ERM process, remain relevant in 2025 as they could have a significant impact on company performance. Most of the key risks relate to the transition to low-carbon technologies and freshwater shortages.

Selection of identified risks		
Topic	Time span	Initiatives in place
Investment cost to transition to lower carbon emissions technology	Short	Tailor-made agreements with the Dutch government. Innovative business models with equipment suppliers.
Access to affordable renewable energy and power purchase agreements (PPAs) for industry	Short	Consortium with other energy-intensive companies to jointly participate in offshore wind tenders. Bilateral discussions with renewable energy suppliers for PPAs (section 3.2, page 24).
Freshwater shortages	Short	Policy in place to reduce freshwater consumption, address volatile water levels and tackle issues related to water discharge (page 33).

As for the transition to low-carbon technologies, the main risks to our performance stem from the substantial investments needed to electrify our production processes and secure access to affordable renewable electricity. These topics are part of the tailor-made agreement to accelerate Scope 1 CO<sub>2</sub> emissions reduction, signed by Nobian and the Dutch government on December 19, 2024.

The risks of freshwater shortages include the impact of volatile water levels on transporting raw materials and products, the ability to extract surface or groundwater for our production process and the discharge of cooling water in summer. In 2023, we already developed a sustainable Water Management policy to mitigate these risks, including freshwater consumption reduction targets, also leading to several opportunities.

### Three significant opportunities

The following sustainability opportunities identified through ERM continue to be relevant in 2025 and may lead to substantial business growth and cost savings.

Selection of identified opportunities		
Topic	Time span	Initiatives in place
Accelerate reaching our climate targets supported by tailor-made agreements with the Dutch government	Short	Tailor-made agreements with Dutch government.
Further increasing the flex capacity of our production to help stabilize the electricity grid	Short	The current capacity available for grid stabilization is 25%. Currently working to further increase our automatic Frequency Restoration Reserve (aFRR) capacity (section 3.3, page 26).
Reducing freshwater consumption and increase the reuse of process water (as part of sustainable water management program)	Medium	Several projects in the pipeline to reduce fresh water consumption (page 33).

We have a key opportunity to accelerate our Scope 1 climate targets and become an important contributor to the Dutch government's ambition to accelerate the reduction of CO<sub>2</sub> emissions by 55% by 2030. This also aligns with the EU's Fit for 55 plan. Next to this, we can increase our role in helping to stabilize the Dutch electricity grid, by increasing our E-flex capacity.

Finally, we see several opportunities to significantly reduce our freshwater consumption by moving to heat pump technology (mechanical vapor recompression) from fossil fuel technology. This will significantly reduce our energy and water consumption, returning more process water to our brine fields via return pipelines. All these projects are in our transition plans and require significant investment.

While external CSRD reporting timelines have been adjusted, Nobian continues to strengthen its internal governance and risk management related to sustainability, ensuring readiness for future reporting requirements.



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## Independent Limited Assurance Statement

Nobian Industrial Chemicals B.V. ("Nobian" or "Group" or "Company") commissioned DNV Business Assurance Germany GmbH ("DNV", "we", or "us") to provide a limited level of assurance over the "Selected Information – agreed set of data points (as listed below)" included in Nobian's Sustainability Report 2025 ("Report") for the reporting year ending 31st December 2025.

Our observations and areas for improvement will be raised in a separate report to Company's Management. Selected observations are provided below. These observations do not affect our conclusions set below.

Overall, for the performance data in scope, we have confidence in the processes and systems to ensure the information presented in the Report is accurate. Nobian has demonstrated enhancements in its data collection practices and consolidation approach. Observations by DNV indicate a noticeable improvement in the efficiency of audit trails across all visited sites and key performance indicators. Nobian has expressed and shown a strong commitment to comprehensively document its data collection procedures to further facilitate forthcoming sustainability reporting and audit activities.

### Selected Information

The scope and boundary of our work is restricted to the following areas (collectively the "Selected Information"):

#### 1. Key performance indicators (KPIs)

The performance indicators included within the Report are listed below:

- Scope 1 emissions (kton CO<sub>2</sub>-eq)
- Scope 1 emissions under regulated emissions trading schemes (ETS) (kton CO<sub>2</sub>-eq)
- Scope 2 emissions (kton CO<sub>2</sub>-eq)
- Total Scope 3 emissions (kton CO<sub>2</sub>-eq)
- Category 1: Purchased goods and services (kton CO<sub>2</sub>-eq)
- Category 2: Capital goods (kton CO<sub>2</sub>-eq)
- Category 3: Fuel and energy related activities (kton CO<sub>2</sub>-eq)
- Category 4: Upstream transport and distribution (kton CO<sub>2</sub>-eq)
- Category 5: Waste generated in operations (kton CO<sub>2</sub>-eq)
- Category 6: Business travel (kton CO<sub>2</sub>-eq)
- Category 7: Employee commuting (kton CO<sub>2</sub>-eq)
- Category 8: Downstream transportation and distribution (kton CO<sub>2</sub>-eq)
- Category 10 and 11: Processing of sold products and use of sold products (kton CO<sub>2</sub>-eq)
- Category 12: End-of-life treatment of sold products (kton CO<sub>2</sub>-eq)
- Category 13: Downstream leased assets (kton CO<sub>2</sub>-eq)
- Total emissions: Scope 1 and 2 (kton CO<sub>2</sub>-eq)
- Total emissions: Scope 1, 2 and 3 (kton CO<sub>2</sub>-eq)
- Direct biogenic emissions (kton CO<sub>2</sub>-eq)
- Total energy consumption (GWh)
- Percentage renewable energy (%)
- Percentage renewable electricity (%)
- Percentage renewable steam (%)
- Percentage grid energy (%)
- Total self-generated electricity (GWh)
- Total self-generated steam (GWh)
- NOx absolute emissions (ton)
- Fresh water intake - Of which drinking water intake (1000 m<sup>3</sup>)
- Fresh water consumption (1000 m<sup>3</sup>)
- Fresh water consumption in stressed regions (1000 m<sup>3</sup>)
- Chlorides (ton)
- Copper (ton)
- Nickel (ton)
- Total organic carbon (TOC) (ton)
- Total waste (ton)
- Reusable hazardous waste (ton)
- Non-reusable hazardous waste (ton)
- Non-reusable hazardous waste - Of which disposed to landfill (ton)
- Total hazardous waste (ton)
- Reusable non-hazardous waste (ton)
- Non-reusable non-hazardous waste (ton)
- Total non-hazardous waste (ton)
- Percentage reusable hazardous waste (%)
- Percentage reusable non-hazardous waste (%)
- Total sales volume (kton)
- Manufacturing sites with ISO 14001/RC-14001 certifications (%)
- Percentage revenue from certified, low-carbon products (%)

**Our competence, independence and quality control**

DNV established policies and procedures which are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. Our multi-disciplinary team consisted of professionals with a combination of environmental and sustainability assurance experience.



WHEN TRUST MATTERS

- Global headcount Nobian employees (#)
- Gender diversity in the workforce (M/F) (%)
- Gender diversity in senior positions (M/F) (%)
- Employee turnover rate (voluntary and involuntary) (%)
- Total reportable incident rate (TRR) for employees, temporary workers and contractors (per 1,000,000 hours worked)
- Lost time injury rate (LTR) for employees, temporary workers and contractors (per 1,000,000 hours worked)
- Total reportable incident rate (TRR) for employees, temporary workers (per 1,000,000 hours worked)
- Total reportable incident rate (TRR) for contractors (per 1,000,000 hours worked)
- Lost time injury rate (LTR) for contractors (per 1,000,000 hours worked)
- Fatalities (per 1,000,000 hours worked)
- Process safety incident counts - level 1 (#)
- Process safety incident counts rate - level 1 (per 1,000,000 hours worked)
- Process safety incident counts - level 2 (#)
- Process safety incident counts rate - level 2 (per 1,000,000 hours worked)
- Process Safety Total Incident Rate (PSTR) combined (per 1,000,000 hours worked)
- % of manufacturing sites with ISO 45001 certification (%)
- Directors (#)
- Average director tenure (years)
- Independent directors (#)
- Gender diversity of the board (M/F) (%)
- Frequency of board updates on ESG (frequency)
- Board oversight of climate strategy (Y/N)
- Members of the leadership team (#)
- Gender diversity of the leadership team (M/F) (%)

To assess the listed performance indicators, which includes an assessment of the risk of material misstatement in the Report, we have used Nobian's Basis of Reporting (the "Criteria"), which can be found on pages 65-67 (online version) of the Report.<sup>1</sup>

### 2. SASB Indicators

RT-CH-110a.1, RT-CH-110a.2, RT-CH-120a.1, RT-CH-130a.1, RT-CH-140a.1, RT-CH-140a.2, RT-CH-140a.3, RT-CH-150a.1, RT-CH-210a.1, RT-CH-320a.1, RT-CH-320a.2, RT-CH-410b.2, RT-CH-410c.1, RT-CH-530a.1, RT-CH-540a.1, RT-CH-540a.2

### Our conclusions relating to the Selected Information

#### 1. Key Performance Indicators

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Key Performance Indicators are not fairly stated and have not been prepared in all material respects, in accordance with the Criteria. This conclusion relates only to the Key Performance Indicators and is to be read in the context of this Independent Limited Assurance Statement, in particular the inherent limitations.

#### 2. SASB Indicators

Based on the work undertaken, nothing has come to our attention that causes us to believe that the Selected SASB Indicators are not fairly stated and have not been prepared in all material respects in accordance with the Industry Standard Chemicals Sustainability Accounting Standard 2023 (version 2023-12), issued by the International Sustainability Standards Board (ISSB).

### Limitations

We have not performed any work, and do not express any conclusions, on any other information outside of the Subject Matter that may be published in the Report or on Nobian's website for the current reporting period or for previous periods.

<sup>1</sup> <https://www.nobian.com/sustainability/sustainability-reporting>

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DNV Business Assurance Germany GmbH, Wobbeplatz 21, 45329 Essen, Germany



WHEN TRUST MATTERS

### Standard and level of Assurance

We performed a limited assurance engagement on selected data only, based on the reporting criteria as defined in the Client's Report. To ensure consistency and robustness in our assurance process, our work was conducted in accordance with DNV's assurance methodology, the VeriSustain™ protocol, applying only those sections of the protocol that are relevant to the specific purpose of this engagement.

This methodology is designed to ensure compliance with applicable ethical requirements and requires the planning and performance of the assurance engagement to obtain the intended level of assurance. We planned and performed our procedures to obtain the evidence we considered necessary and appropriate to provide a reasonable basis for our Assurance Opinion.

This assurance statement also explicitly addresses the limitations of the engagement scope. In particular, reporting principles applied by the Client, including materiality determination, are not within the scope of DNV's assurance. This clarification is provided to ensure transparency and clear understanding for the intended users of the assurance statement.

DNV applies its own management standards and compliance policies for quality control, which are based on the principles enclosed within ISO IEC 17025:2019 – Conformity Assessment – General principles and requirements for validation and verification bodies, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than, for a reasonable assurance engagement; and the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. We planned and performed our work to obtain the evidence we considered sufficient to provide a basis for our opinion, so that the risk of this conclusion being in error is reduced but not reduced completely.

**Inherent limitations**

All assurance engagements are subject to inherent limitations as selective testing (sampling) may not detect errors, fraud or other irregularities. Non-financial data may be subject to greater inherent uncertainty than financial data, given the nature and methods used for calculating, estimating and determining such data. The selection of different, but acceptable, measurement techniques may result in different quantifications between different entities.

Our assurance relies on the premise that the data and information provided to us by Nobian have been provided in good faith. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Limited Assurance Statement.

**Responsibilities of the Management of Nobian and DNV**

Nobian has sole responsibility for:

- Preparing and presenting the subject matter in accordance with the Criteria;
- Designing, implementing and maintaining effective internal controls over the information and data, resulting in the preparation of the subject matter that is free from material misstatements;
- Measuring and reporting the subject matter based on their established Criteria; and Contents and statements contained within the Report and the Criteria.

Our responsibility is to plan and perform our work to obtain limited assurance about whether the subject matter has been prepared in accordance with the Criteria and to report to Nobian Group in the form of an Independent Limited Assurance Conclusion, based on the work performed and the evidence obtained. We have not been responsible for the preparation of the Report.

### Basis of our conclusions

#### 1. Key Performance Indicators

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information; our work included, but was not restricted to:

- Conducting interviews with Nobian's management, to obtain an understanding of the key processes, systems and controls in place to generate, aggregate and report the Selected Information;
- Conducting an on-site visit to the headquarter in Amerfoort, and on-site visits to production sites in Delfzijl and Hengelo (Netherlands), and teleconferences with different sites including the headquarter to review processes and systems for preparing site level data consolidated at Group level. We were free to choose the sites on the basis of their material contribution to Nobian's data;
- Performing limited substantive testing on the most significant contributors, to check that their data had been appropriately measured, recorded, collated and reported;
- Reviewing that the evidence, measurements and the content provided to us by Nobian for the Selected Information is prepared in line with the Criteria;
- Assessing the appropriateness of the Criteria for the Selected Information;
- Reading the Report and narrative accompanying the Selected Information within it with regard to the Criteria; and
- Reviewing of supporting evidence for key claims in the Report; our checking process prioritized the most material claims at a group level.

#### 2. SASB Indicators

We are required to plan and perform our work in order to form an opinion over the reporting of selected indicators in accordance with the Industry Standard Chemicals Sustainability Accounting Standard 2023 (version 2023-12), issued by the International Sustainability Standards Board (ISSB).

### For and on behalf of DNV Business Assurance Germany GmbH

**Oliver Bley**, Digitally signed by Oliver Bley, DN: cn=Oliver Bley, o=DNV Business Assurance Germany GmbH, email=oliver.bley@dnv.com, c=DE

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Technical Reviewer

Essen, Germany  
29 April 2025

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Assurance statement number: DNV-2025-ASR-C867475  
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**A**

**Aqueduct Water Risk Atlas** A water risk mapping tool to help companies, investors, governments and other users understand where and how water risks and opportunities are emerging.

**B**

**Basel Convention** The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was created to protect people and the environment from the negative effects of the inappropriate management of hazardous wastes worldwide.

**BBS (Behavior-based safety)** Behavior-based safety (BBS) is a proactive approach to increasing safe behavior in an area. BBS focuses on reducing hazards, risks and incidents by observing the behavior of a person and determining what follows when this behavior occurs.

**Brine** Water saturated with salt.

**C**

**Carbon neutral** Carbon neutrality is reached when the same amount of CO<sub>2</sub> is released into the atmosphere as is removed by various means.

**CDP** CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage its environmental impacts.

**Cefic** European Chemical Industry Council.

**CO<sub>2</sub>** Carbon dioxide.

**CO<sub>2</sub>-eq** Carbon dioxide equivalent is used to compare the emissions from various greenhouse gases on the basis of their global warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

**Corporate Sustainability Reporting Directive (CSRD)** The Corporate Sustainability Reporting Directive (CSRD) requires companies to report on the impact of corporate activities on the environment and society, and requires the audit (assurance) of reported information.

**D**

**DE&I** Diversity, equity and inclusion are three closely linked values held by many organizations that are working to be supportive of different groups of individuals, including people of different races, ethnicities, religions, abilities, genders and sexual orientations.

**DNV** Independent expert in assurance and risk management and one of the world's leading certification bodies.

**E**

**EcoVadis** A globally recognized assessment platform that rates businesses' sustainability based on four key categories: environmental impact, labor and human rights standards, ethics, and procurement practices.

**E-flex** E-flex is the flexible use of electricity based on renewable energy supply and demand, helping to stabilize the grid.

**Enterprise risk management (ERM)** Enterprise risk management is the process of identifying and addressing methodically the potential events that represent risks to the achievement of strategic objectives, or to opportunities to gain competitive advantage.

**Environmental Product Declaration (EPD)** An Environmental Product Declaration transparently reports objective, comparable and third-party verified data about products and services' environmental performances from a life-cycle perspective.

**ESG** Environmental, social and governance: the three core pillars of ESG frameworks, representing the key areas that companies are expected to report on.

**ESRS** European Sustainability Reporting Standards.

**G**

**GLEC** The GLEC Framework is the global method for the calculation and reporting of logistics emissions.

**Green chemistry** Green chemistry is the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances. Green chemistry applies across the life-cycle of a chemical product, including its design, manufacture, use and ultimate disposal.

**Green hydrogen** Green hydrogen is hydrogen produced by the electrolysis of water, using renewable electricity.

**Greenhouse gases (GHG)** Gases, such as carbon dioxide, that trap heat in the atmosphere are called greenhouse gases.

**I**

**IPCC** The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.

**ISCC PLUS** ISCC PLUS certification is a voluntary scheme that is applicable for the bioeconomy and circular economy for food, feed, chemicals, plastics, packaging, textiles and renewable feedstock derived from a process using renewable energy sources.

**L**

**Life-Cycle Assessment (LCA)** A Life-Cycle Assessment calculates the environmental impact of products or services throughout their entire life-cycle.

**Lost time incident rate (LTIR)** is a metric used to record the average number of incidents

leading to an employee being unable to work for a minimum of one day during a set period.

**M**

**Materiality assessment** An ESG materiality assessment is a process through which an organization identifies the ESG issues that are the most relevant and critical – and thus, material – to its operations, its success and its stakeholders.

**N**

**NOx** NOx is shorthand for nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>).

**P**

**Paris Agreement** The Paris Agreement is a legally binding international treaty on climate change. It was adopted in Paris, France, on 12 December 2015.

**Power Purchase Agreement (PPA)** A long-term electricity supply agreement between two or more parties, usually between a power producer and a customer.

**Product stewardship** An approach to managing the environmental impacts of different products and materials and at different stages in their production, use and disposal.

**R**

**REACH** Registration, Evaluation, Authorisation and Restriction of Chemicals. REACH is a European Union regulation and addresses the production and use of chemical substances, and their potential impacts on both human health and the environment.

**Responsible Care** Responsible Care is the chemical industry's ethical commitment to improving safe production, handling and use of chemicals across the supply chains.

**S**

**Science Based Targets initiative (SBTi)** The Science Based Targets initiative (SBTi) is a corporate climate action organization that develops standards, tools and guidance which allow companies to set greenhouse gas emissions reductions targets.

**Scope 1, 2 and 3 emissions**

*Scope 1 emissions* are direct greenhouse (GHG) emissions that occur from e.g. fuel combustion or chemical processes.

*Scope 2 emissions* are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.

*Scope 3 emissions* are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly affects in its value chain.

**Sustainability Accounting Standards Board (SASB)**

SASB Standards help companies disclose relevant sustainability information to their investors.

**T**

**TCFD** Taskforce on Climate-Related Financial Disclosures with the aim to improve and increase reporting of climate-related financial information.

**TRR** Total Reportable Injury Rate, reflecting the number of recordable injuries.

**U**

**UN Sustainable Development Goals** The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

**V**

**Value chain** A value chain refers to the full life-cycle of a product or process, including material sourcing, production, consumption and disposal/recycling processes.

# Colophon

## **Cautionary statement and reference information**

*This report contains forward-looking statements which are subject to risks and uncertainties, and actual results and events may differ considerably from those expressed within them. Many of these risks and uncertainties relate to factors that Nobian is unable to control or estimate precisely, such as future market and economic conditions, the behavior of other market participants, costs of raw materials, changes in law, technological developments and legal judgments and stipulations of regulatory bodies that affect the activities of Nobian. You are cautioned not to place undue reliance on these forward-looking statements. Nobian does not undertake any obligation to update the forward-looking statements contained in this report.*

## **This report is a Nobian publication**

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# **SUSTAINABILITY REPORT 2025**

**GROW GREENER  
TOGETHER**

