



Driving innovation –  
essential for the future

Orion S.A. Sustainability Report 2025



# Welcome to the Orion Sustainability Report 2025



Learn more about sustainability at Orion at: [orioncarbons.com/sustainability](http://orioncarbons.com/sustainability)

## INNOVATION AT ORION

Sustainability is embedded in Orion's innovation strategy and vice versa, leveraging external partnering and ensuring strong cross-functional collaboration to drive integrated product and process innovation for future-ready solutions.



Read more on page 9



## CONDUCTIVE ADDITIVES IN HIGH-VOLTAGE WIRES AND CABLES

Orion has a strong and versatile conductive additives product portfolio that will support technologies to modernize global electricity grids and enable a transition to a renewable future.



Read more on page 11



## CLIMATE CHANGE

Orion drives climate action by cutting emissions through circular and renewable solutions, investing in adaptive technologies, and delivering sustainable innovations that create value for customers and society.



Read more on page 20



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## ABOUT THIS REPORT

Our 2025 Sustainability Report outlines our approach to sustainability and our progress to date. We endeavor to be transparent and continue to learn through ongoing monitoring and evaluation of our approach. This report is approved by Orion S.A.'s Board and produced in accordance with the GRI 2021 Standards.

The information in this report concerns and covers all the consolidated Company's business entities from January 1 to December 31, 2025.

### How to use this report

The following symbols indicate that additional information can be found either in this report or on our website.



View more online



View a video



Read more in this report


# We are Orion

Orion S.A. is a global leader in specialty chemicals, producing carbon black, an essential material that makes everyday products stronger, longer-lasting and more efficient, from tires and batteries to coatings and cables.

Carbon black is a finely engineered powder comprised of elemental carbon, manufactured through highly controlled processes, and utilized in various materials to optimize physical, electrical and optical properties. It reinforces performance rubber, and as an additive can enhance conductivity, control static charge, improve viscosity and provide UV protection – making it indispensable across industries. By upcycling industrial by-products and pioneering circular solutions, Orion is redefining carbon black's role in sustainable manufacturing, delivering high-performance materials that support a low-carbon future.

Our lineage stretches back over 160 years to Germany, where we still operate the world's longest-running carbon black facility. Today, over 1,600 Orion employees work to serve customers in over 80 countries around the world.

We have 15<sup>1</sup> plants on five continents and R&D laboratories on three continents. Our innovations have included the first carbon black made from renewable materials and the first circular carbon black.

 [Read more online](#)

 [View video here](#)



~1,600 employees

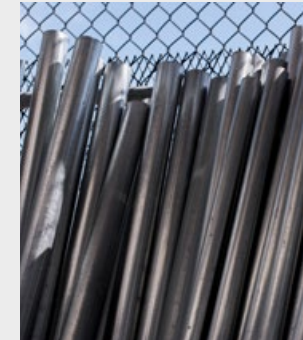
80 countries

 Optimize physical, electrical and optical properties – versatile and customizable.”

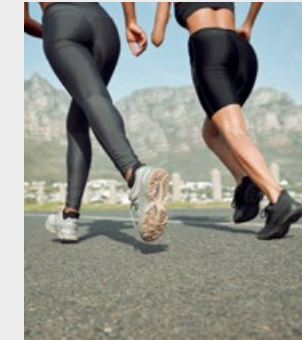
1. 14 are wholly owned by Orion and one is a joint venture.

## ENGINEERED CARBONS: UBIQUITOUS AND ESSENTIAL CHEMISTRY

### Wire and cable conductivity



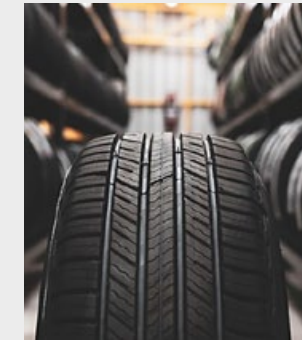
### Synthetic fibers



### Engineered plastics



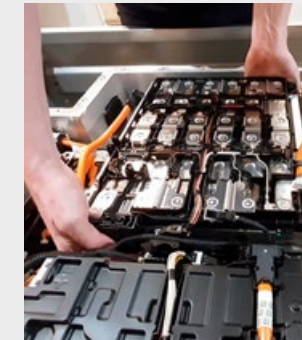
### Rubber



### Adhesives

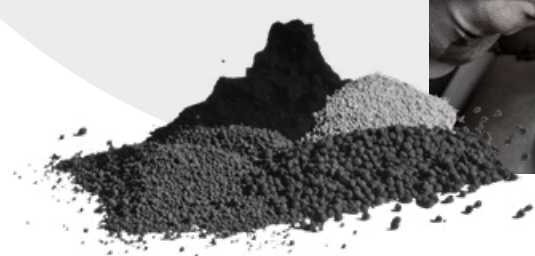


### Conductivity



## DIVERSE END MARKET PROFILE

End market	Application
<b>Rubber</b>	Reinforcing filler in tires and MRG components
<b>Batteries/Power</b>	Conductivity, carbon brushes, electrodes, battery cells
<b>Construction</b>	Cement and concrete pigmentation, conductivity
<b>Printing inks</b>	Pigmentation, rheology, tinting
<b>Coatings</b>	Black and grey pigmentation, tinting
<b>Plastics</b>	Black and grey pigmentation, tinting, UV protection
<b>Fibers</b>	Pigmentation
<b>Paper</b>	Black and grey pigmentation, deco/photo paper
<b>Metal Reduction Compounds</b>	Metal smelting, friction compound
<b>Metal Carbide</b>	Reduction compound, carbon source
<b>Fireproofing</b>	Reduction of mineral porosity
<b>Insulation</b>	Graphite furnaces, polystyrene, PU foam



# Orion at a glance

**OPERATIONAL HIGHLIGHTS**

80+

countries in which we support our customers

~1,600

employees

~1,150 k MT

functional carbon black production capacity

15<sup>2</sup>

plants

~1,000

customers supplied

30–40 yrs

length of average customer relationship

**FINANCIAL HIGHLIGHTS**

949 k MT

annual sales volume

\$1,806m

annual revenue

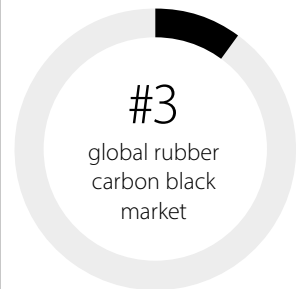
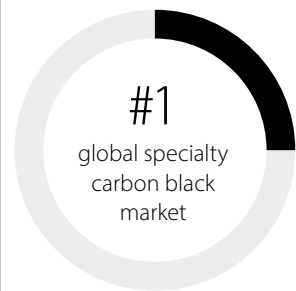
\$248m

annual adjusted EBITDA

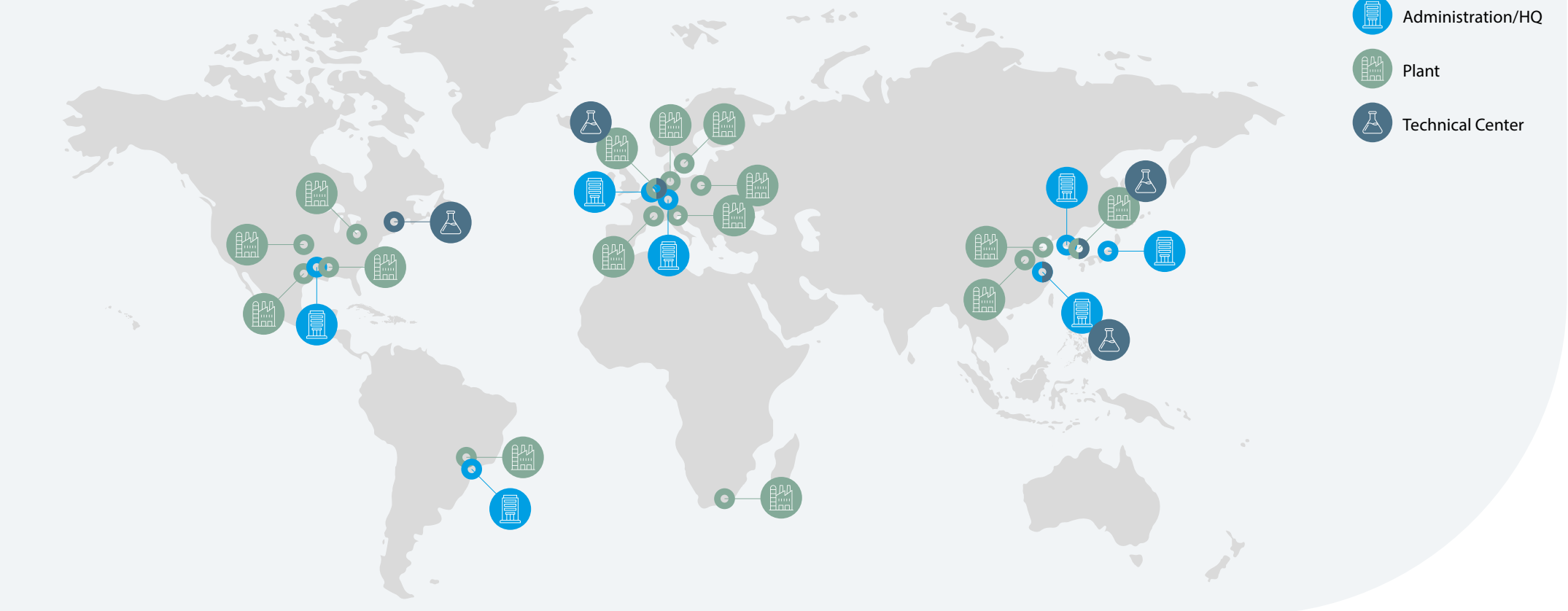
\$216m

annual operating cash generation

**MARKET POSITION**



**OUR GLOBAL REACH**



2. 14 are wholly owned by Orion and one is a joint venture.

# How we create value

We create value by operating profitably while staying within the environmental limits that support a healthy, functioning biosphere, growing the business in ways that respect nature and safeguard natural resources.

Some of Orion's solutions enable our customers to create environmentally efficient products and participate in a circular economy. This way, we create long-term value for all our stakeholders – from employees to investors and the communities in which we operate.

## STRENGTHS

1. Differentiated production capabilities with proprietary after-treatments
2. Low-carbon manufacturing of conductive carbon blacks for EV and energy storage batteries
3. Customer-centric products and solutions that are diverse, customizable and versatile
4. Technology-enabled to deliver the industry's broadest product portfolio
5. Global innovation capabilities with integrated R&D platform
6. Disciplined capital allocation strategy
7. Strong operational excellence
8. Competitive pricing strategy
9. High-performance colleagues and culture

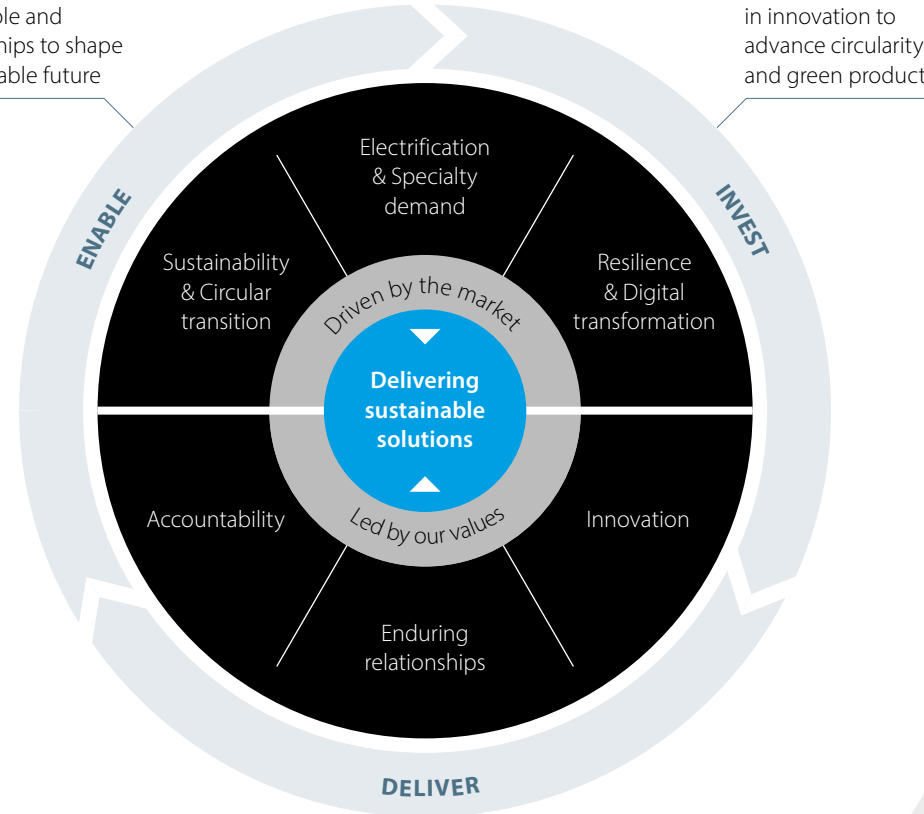
## HOW WE DELIVER

### ENABLE

our people and relationships to shape a sustainable future

### DELIVER

differentiated products that create sustainable value while decarbonizing our own operations



### INVEST

in innovation to advance circularity and green products

## INDUSTRY SEGMENTS ENABLED

### Tires



### Mechanical rubber goods



### Batteries



### Coating systems



### Printing systems



### Polymers



### Special applications



## VALUE CREATED

### Shareholders

Our adjusted EBITDA in 2025 was \$248m.

### Customers

We support our customers with their sustainability targets by creating sustainable products from our ECORAX® product lines which are made from bio-circular and circular feedstocks.

### Employees

We expanded our training offer to help employees upskill and grow, adding five role-based programs that provide clear paths for development and internal mobility.

### Environment

We continue to reduce our impact on the environment with a further reduction of our greenhouse gas emissions intensity in 2025.

### Communities

Globally, we generate safe jobs, pay fair wages and support communities through charitable activities and respectful workplaces.

# Letter from Corning Painter, Orion's CEO



## Climate policy must recognize the realities of chemistry and manufacturing

When I think about sustainability, one of the top issues on my mind this year has been the EU's Emissions Trading System (ETS). The climate policy, established in 2005, aims to get factories and power plants to gradually decarbonize by increasing the price they pay for their carbon emissions.

The cap-and-trade program requires companies to purchase permits to cover their emissions of carbon dioxide, or CO<sub>2</sub>. Although businesses receive a limited number of free allowances each year to cushion the burden, industry allowance thresholds are being phased out, provoking a backlash from companies and some politicians.

For my industry, the ETS is significant because making carbon black is energy-intensive and generates emissions. So, the policy directly affects production costs and therefore local manufacturing competitiveness, compared with imported carbon black.

In recent months, amid intense debate in Europe, I've been encouraged to see that EU officials have engaged industry. Driving the engagement are serious concerns about Europe deindustrializing and becoming less competitive with the U.S., India and China. This has been especially impactful on the broader chemicals industry, where numerous crackers have shut down or are targeted for closure. This simply shifts emissions to other regions of the world.

When talking to some officials about the ETS, their message is clear: The carbon black industry should have done more

to reduce emissions. I respectfully disagree with that assessment because it overlooks key challenges the industry faces.

I also question whether officials fully appreciate the ways our industry is already contributing to sustainability. Examples include developing circular products, converting waste heat to energy that benefits local communities and upcycling what would otherwise be waste material from the fossil fuels sector.

These topics are covered well in the rest of this report. But in my CEO letter, I feel compelled to address regulatory challenges, like the ETS, that are threatening the viability of Europe's industrial base.

Although I support the underlying goal that the ETS is intended to achieve, I contend the policy's expectation for the carbon black industry overlooks at least three basic realities about chemistry and manufacturing.

### Reality 1: CO<sub>2</sub> is a low-energy molecule.

CO<sub>2</sub> can be converted to useful products like methanol. But such processes demand significant energy, which often produces more CO<sub>2</sub>. This is because CO<sub>2</sub> is a low-energy molecule. Any other molecule you convert CO<sub>2</sub> into will have more energy, which means additional heat is needed to make such a reaction happen. And using more heat usually means creating more CO<sub>2</sub>.

### Reality 2: Separating CO<sub>2</sub> means creating order, and that takes energy.

The second law of thermodynamics states that systems naturally move toward disorder, or "entropy." For example, the gas

coming out of a carbon black factory's flue-gas stack is a disordered mix – mostly nitrogen mixed with less than 10% CO<sub>2</sub>. To do anything useful with CO<sub>2</sub>, such as converting it into another product or injecting it into an old gas field (a common carbon capture technology), it is useful, if not necessary, to isolate CO<sub>2</sub> from that mix. Any gas purification process would entail fighting entropy, in turn requiring a significant amount of energy. The more diluted the CO<sub>2</sub>, the more difficult and expensive this process step becomes. And unless that required energy comes from renewable sources, the process will generate additional emissions, adding cost and complexity for the industry that producers in China and India are generally not burdened with.

### Reality 3: Carbon trading conflicts with recycling and creating a circular economy

Carbon black can be made from circular feedstocks, which can be derived from end-of-life tires. Using this feedstock supports a circular economy, diminishes the use of fossil raw materials and consequently reduces emissions along the carbon black value chain. But the ETS doesn't distinguish between virgin feedstocks and circular feedstocks, so these efforts are not recognized. This, in turn, discourages recycling and innovation that could otherwise lower the industry's effective carbon footprint.

### Beyond chemistry: The cost to consumers

Capturing or converting CO<sub>2</sub> is expensive. Using old tires costs money, too. Consumers today are feeling economic pressures and are focused on price. When shopping for tires, they currently

care more about cost, and not about other attributes like quality and durability, let alone sustainability.

This puts tire producers and carbon black makers in Europe under pressure from low-value imports that do not have carbon trading costs, and are typically produced with lower, and sometimes subsidized, labor or other costs.

Some may say that the EU's Carbon Border Adjustment Mechanism (CBAM) could provide protection for carbon black. The policy is designed to put a fair price on carbon emissions embedded in certain goods imported into the EU. However, others have warned that success with CBAM is not guaranteed.

I hope the EU will choose a sensible path – one more based on science. There are ways to transition manufacturing toward sustainability with innovation coupled with incentives, as well as more judicious trade policies. The EU's current policy will simply result in European manufacturing being replaced by production in India and China. This will not help the environment, and it will make the EU more dependent on imports for essential raw materials, such as carbon black.

Sincerely,

**Corning F. Painter**  
Chief Executive Officer

# 2025 highlights

## Operational excellence

We installed and commissioned a quench boiler at our Malmö plant to recover heat from production, generating 3.5 GWh of steam for city district heating, 2.9 GWh of electricity, and reducing water use by about 8 million liters annually. We also reduced waste at our Nelson Mandela Bay plant by approximately 30%, through targeted operational improvements, including a decrease in carbon black leaks and a lower incidence of damaged big bags.

## Product innovation

Launched ECOLAR® 50 Powder, a 100% bio-circular carbon black that enables coatings applications, enabling manufacturers to create sustainable products with coloristic performance comparable to conventional carbon blacks.

100%  
**Bio-circular feedstock**

## Investing in knowledge

Expanded local leadership development by launching a new leadership training program in Portuguese. Additionally, we introduced five new role-based training programs tailored to specific competency frameworks and proficiencies, ensuring employees have the skills needed to excel in their roles.



## Occupational Health & Safety

Orion recorded a 2025 TRIR of 0.18, nine times better than the chemical manufacturing industry average of 1.6<sup>3</sup>, with only three employee injuries worldwide. This was the Company's second-best safety performance on record, just behind its 2017 TRIR of 0.17.

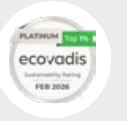
**TRIR**  
**(per 200,000 hours)**  
**0.18**

3. The average TRIR for the chemical manufacturing industry is 1.6, according to the latest data reported by the U.S. Bureau of Labor Statistics in 2024.

## AWARDS

### EcoVadis Platinum

Orion has been awarded a Platinum Medal by sustainability ratings organization EcoVadis. This result places us among the top 1% of companies assessed by EcoVadis in the past 12 months.



### CDP "B" score

Achieved the second highest score for Climate Change, reflecting strong progress on climate impact mitigation, and earned an "A" in CDP's Supplier Engagement Assessment, the highest possible score.



### Innovation

Orion received a Ringier Innovation Award for ECOLAR® 50 Powder, a carbon black made from 100% bio-circular feedstock. Judges praised its "excellent environmental protection properties and functionality in coatings applications."



### International Carbon Black Association's Safety Performance Recognition Program

Orion earned 10 ICBA safety awards including eight Gold honors for exemplary global safety standards and two Bronze for zero lost workdays, setting an industry benchmark in employee health and safety.



### The European Commission's Innovation Radar

recognized Orion as a "Key Innovator" for pioneering circular carbon black made entirely from tire pyrolysis oil, advancing sustainable alternatives to fossil-based materials.



### EMAS award

Our site in Ravenna, Italy, and partners in the Ravenna Industrial District received a special EMAS award at Ecomondo for exemplary environmental management and commitment to sustainable economic development and practices under the EU Eco-Management and Audit Scheme.



### Green Factory

Our Huaibei, China, facility was awarded China's "Green Factory" designation after a rigorous multi-stakeholder review.



## CERTIFICATIONS

### ISCC certifications

In 2025, five of our sites, Kalscheuren and Dortmund<sup>4</sup>, Germany, Jaslo, Poland, Ravenna, Italy, Borger, U.S., we have ISCC PLUS certifications, and in 2026 our Qingdao, China site will be certified as well, enabling customers to purchase bio-circular specialty carbon blacks with 100% ISCC PLUS certification.



### EHS certifications

All 14 Orion sites and the Eschborn HQ in Germany are certified to ISO 14001 and ISO 9001. Three U.S. sites – Spring HQ, Ivanhoe and Belpre – hold ACC Responsible Care certification. Our Huaibei plant earned the IATF 16949 automotive quality certification, joining our Qingdao site in China.



4. Partially owned.

# Our key metrics and targets

This section highlights our key performance indicators (KPIs) and progress toward targets that drive our contribution to a low-carbon, circular economy and responsible business practices. These metrics reflect our dedication to transparency and continuous improvement across Environmental, Social, and Governance pillars.

## KEY METRICS AND TARGETS

	2025	2024	2023	Status
<b>ENVIRONMENTAL</b>				
Scope 1 normalized intensity emissions reduction by 8% by 2029 <sup>5</sup>	-7%	-7 %	-4 %	On track
Scope 2 market-based reductions to 0 kMT CO <sub>2</sub> e by 2030	128	132	152	On track
Maintain a target of zero significant spills	0	0	0	On track
<b>SOCIAL</b>				
100% of employees trained annually	100%	100%	100%	Achieved
DAFW	0.06	0.29	0.23	Improved
TRIR	0.18	0.35	0.34	Improved
<b>GOVERNANCE</b>				
95% of employees receiving compliance training	100%	100%	100%	Achieved
60% of targeted suppliers based on spend covered by assessments or other recognized third-party assessments by 2029	46%	53%	25%	On track
90% annual average participation rate in Orion's cybersecurity awareness training program <sup>6</sup>	95%	–	–	Achieved

5. Baseline year of 2014.

6. 2025 figure published publicly for the first time.

Orion's plant in Cologne, Germany.



At Orion, sustainability is embedded in our strategy and operations. We are committed to reducing our environmental footprint, fostering a safe and inclusive workplace, and upholding the highest standards of governance.”

**JOCHEN ROTHER**  
Head of Corporate Sustainability

# The global trends shaping our business



Central to our sustainability strategy is moving from fossil-derived raw materials to plant-based or bio feedstocks and circular raw materials from recycling.”

**CORNING F. PAINTER**  
Chief Executive Officer



## SUSTAINABILITY & CIRCULAR CARBON

Demand for circular carbon – such as recovered carbon black (rCB), pyrolysis oil feedstock, and ISCC-certified supply chain – is growing as tire makers and manufacturers aim to cut lifecycle CO<sub>2</sub> emissions and align with a low-carbon future. This shift requires procurement teams to source traceable and verified low-carbon materials that align with stricter quality and consistency standards for circular grades.

### Our response

In step with demand, we are scaling partnerships for pyrolysis and rCB, expanding ISCC PLUS certification across our sites, and offering certified blended portfolios with technical assurance to tire and rubber customers.

## ELECTRIFICATION & SPECIALTY DEMAND

EVs, batteries, conductive polymers, high-voltage wires and cables and high-performance coatings require specialty and conductive carbon blacks with tighter specs and higher margins. Growth in electronics and battery markets favors R&D and tailored product portfolios.

### Our response

We are accelerating R&D and co-developing solutions with customers for conductive and battery-grade carbon blacks. We are investing in specialized quality-control labs and building strategic partnerships with battery and polymer manufacturers.

## REGULATION & EMISSIONS COMPLIANCE

Stricter air-emission standards and ESG disclosure requirements are increasing capital (CapEx) and operating costs. Regulators and customers expect clear evidence of emissions control and energy efficiency upgrades, as non-compliance risks could lead to plant restrictions and reputational damage.

### Our response

We continue modernizing emission control systems, publishing transparent ESG performance in our annual sustainability report, and prioritizing low-emission retrofits where they deliver strong returns on investment (ROI) and reduce regulatory risk.

## FEEDSTOCK VOLATILITY & SUPPLY CHAIN RESILIENCE

Price swings in oil and gas feedstocks and geopolitical supply disruptions create cost volatility. Customers want suppliers with diversified feedstock strategies and long-term contracts to ensure stable supply and pricing.

### Our response

We diversify feedstocks (including pyrolysis oil and alternative hydrocarbons), secure long-term supply agreements, deploy multi-fuel technology and use hedging and strategic inventory to protect margins – while assuring reliable supplies to customers.

## DIGITALIZATION, OPERATIONAL RESILIENCE & CYBER RISK

Competitiveness now depends on digital plant optimization – such as efficiency improvements and predictive maintenance – and strong cybersecurity controls. Cyberattacks and fraud can cause costly disruptions.

### Our response

We benchmark ourselves against recognized standards and upgrade our industrial control platforms, including process analytics and predictive maintenance. We implement robust cybersecurity and fraud-prevention controls, and train employees on digital risks to protect assets and avoid costly disruptions.

# Feature: Innovation at Orion

To strengthen our ability to deliver on Orion’s long-term strategy and to better align our sustainability priorities with technology, product development and innovation, Orion’s Corporate Sustainability function has been assigned to the Chief Technology Officer (CTO), effective December 1, 2025.



The organizational alignment underscores the strategic importance of sustainability as a core driver of Orion’s technology roadmap, portfolio evolution and value-chain partnerships. With the CTO assuming executive responsibility for Corporate Sustainability, sustainability is positioned as an integral component of innovation strategy, technology governance and long-term value creation. Embedding sustainability within innovation strengthens execution discipline, reinforces cross-functional alignment, and ensures sustainability objectives are systematically integrated into product development, process optimization and customer solutions.

Sustainability and innovation are deeply interconnected and mutually reinforcing corporate functions that drive long-term success, resilience and competitive advantage. Sustainability focuses on creating economic value while minimizing environmental impact and enhancing social wellbeing. Innovation, on the other hand, involves developing new ideas, technologies and processes that improve performance and efficiency. When combined, these two functions create a powerful synergy that fosters responsible growth and continuous improvement.

Sustainability challenges organizations to rethink how they operate – how they use resources, manage waste, design products, and engage stakeholders. This challenge naturally stimulates innovation, as companies must develop creative solutions to reduce emissions, optimize energy use and design circular products. For example, innovations in renewable energy, sustainable materials, and green logistics have emerged directly from the pursuit of sustainability goals. In turn,

## STRATEGY IN ACTION

### Clean Carbon

A particularly good example of how our focus on more sustainability and a more circular economy shapes our portfolio is Clean Carbon. This project is a publicly funded project supported by the German ministry of financial affairs and climate action as well as by the NextGenerationEU. During the utilization of renewable feedstocks, we learned the necessity to start with feedstocks offering a zero CO<sub>2</sub> footprint. As a demonstration project “end-of-life

tires” are targeted as feedstock. The total process covers the recovery of carbon black as well as the production of new virgin carbon black. The new concept will lead to physical CO<sub>2</sub> neutrality, assuming a green electric grid. Even assuming the current grid mix, we are targeting a reduction of more than 70% of the current CO<sub>2</sub> (eq) emissions.



## Innovation at Orion *continued*

innovation provides the tools and methods that make sustainability achievable and scalable. Technologies such as artificial intelligence, biotechnology and data analytics enable companies to monitor environmental performance, improve transparency and develop smarter, more sustainable business models.

Moreover, integrating sustainability into innovation strategies enhances corporate reputation, attracts investment and drives customer loyalty. Although end consumer willingness to pay for sustainability is limited, our customers continue to see sustainability as a key long-term driver of their business. Similarly, investors now recognize that sustainable innovation reduces risk and opens new markets, making it a key driver of long-term profitability.

We are convinced that the recent alignment of these two key functions equips Orion better to adapt to global challenges, anticipate regulatory and market shifts, and create shared value for society and business alike. It transforms sustainability from a compliance issue into a core engine of innovation and growth.

As an innovative organization, we align our portfolio with Orion's core strategy by focusing on five platforms: sustainability, electrification, productivity and efficiency, unique-selling-point products, and blue-horizon solutions. We see ourselves as pioneers who transform bold ideas into impactful, sustainable solutions. We embrace fast learning, and we are committed to delivering innovations that support Orion's long-term vision.

### STRATEGY IN ACTION

## Closing the loop: turning tire waste into global value

Another good example is the development of circular products: Orion leads in developing circular products, transforming tire waste into valuable raw materials. As the first carbon black producer to use 100% pyrolysis oils from end-of-life tires, our products are approved by global tire and rubber manufacturers. After scaling up in the U.S., we now produce at large scale in Poland and are conducting trials in China, serving global customers with a global manufacturing footprint.

Our innovation mission is rooted in customer-centricity, agile ways of working, and our role as a growth catalyst. We strive to be our customers' top choice by anticipating and exceeding their current and future needs.

We work with the speed and adaptability required to meet emerging market expectations, and we contribute directly to Orion's financial performance through innovation-led value creation.

We translate science and engineering into real-world solutions, drawing on the expertise, curiosity, resilience and diversity of our global teams. To advance our innovation vision, we focus on several key opportunities: leading the transition to renewable, efficient solutions; leveraging megatrends such as electrification; activating a balanced and effective strategic innovation portfolio; strengthening visibility and value creation; and deepening global collaboration across regions, functions and external partnerships.

Our roadmap centers on five pillars:

1. We foster an empowered innovation culture that promotes agility, inclusion, and future-ready talent.
2. We manage a strategic innovation portfolio aligned with Orion's EBITDA ambition and evolving market needs.
3. We advance process excellence and customer value through strong technical expertise and digital tools such as numerical twins.
4. We reinforce governance through data-driven decisions and consistent innovation project management.
5. Finally, we invest in capabilities including digital innovation, advanced application and lab testing, and pilot facilities for rapid prototyping.

In a volatile market, we remain resilient by staying in motion – testing new paths, reprioritizing quickly and scaling solutions that deliver meaningful impact. Our ambition is clear: to position Orion as a market-leading technology company and elevate the contribution of innovation to our sustainable future.



Innovation is essential to delivering Orion's Corporate Sustainability Strategy, as it translates sustainability ambitions into scalable technologies, portfolio evolution and value-chain solutions that enable responsible growth and long-term value creation."

**NATALIA SCHERBAKOFF**

Chief Technology Officer and Corporate Sustainability



# Feature: Conductive additives in wires and cables

Modernizing electricity grids and accelerating renewable energy adoption are critical to achieving global decarbonization targets.

Orion is playing a pivotal role in this transformation through its conductive additives, which enable two essential technologies:

- High-voltage cable compounds for underground and subsea transmission
- Battery energy storage systems (BESS) for balancing renewable supply and demand

These solutions are foundational to “Grid 2.0” – a smarter, more resilient energy infrastructure that supports wind, solar and emerging power-hungry applications like AI-driven data centers.

## Driving sustainable energy infrastructure

Grid-scale BESS – using batteries often the size of shipping containers – are indispensable for balancing renewable energy supply and demand. Studies<sup>7</sup> forecast that \$1.2 trillion in global BESS investment will be required by 2034 to support over 5,900 GW of new renewable capacity. Also vital to grid expansion and modernization are high- and extra-high-voltage underground and submarine cables. At the same time, grid infrastructure spending is expected to rise to \$600 billion annually by 2030 due to decarbonization efforts, reflecting the urgent need for efficient, reliable power transmission. Our PRINTEX® kappa 100 grade of acetylene black has been qualified for use in future BESS development, showcasing how Orion’s conductive additives help make these investments more sustainable by improving performance and reducing lifecycle impacts.

## Our contribution

- Low-Carbon Materials: Orion’s acetylene-based carbon blacks are ultra-pure and have a minimal carbon footprint compared to alternatives like carbon nanotubes.
- Durability & Efficiency: Carbon black enhances UV resistance, mechanical strength and electrical performance – extending asset life and reducing resource use.
- Circular Thinking: By enabling longer-lasting cables and batteries, Orion supports reduced waste and better resource efficiency across the energy value chain.

## Building resilient supply chains

To minimize geopolitical and tariff risks, Orion is implementing a localization strategy – producing close to where customers operate.

## Looking ahead

With decades of innovation in battery technology and a robust portfolio of conductive solutions, Orion is positioned to help utilities, manufacturers and developers deliver on the promise of a low-carbon future. Our commitment is simple: enable cleaner energy systems through smarter and sustainable materials.

## DID YOU KNOW?

In high-voltage wires and cables, carbon black is used to create conductive shielding layers that control the electrical field and insulating materials that provide protection. Its benefits include reducing grounding losses, excellent weather and UV resistance, ensuring strong mechanical properties like abrasion and impact resistance, and offering cost-effective performance.

## Uses

- Conductive shielding: Carbon black is added to create the inner and outer semi-conductive layers of a cable’s insulation to smooth out the electrical field, which is crucial for high and extra-high voltage (EHV) cables.
- UV protection: In the outer jacketing of cables, carbon black acts as a UV absorber, protecting the cable from sunlight degradation, cracking and chalking.

## Benefits

- Enhanced durability: Carbon black significantly improves the cable’s resistance to UV radiation, ozone, rain and thermal aging, which increases the cable’s lifespan, especially for outdoor or underground installations.

- Strong mechanical properties: It boosts the cable’s mechanical strength, providing high impact and abrasion resistance, along with good elongation and tensile strength.
- Electrical performance: It can achieve the desired conductivity or insulation properties depending on the type of carbon black used. Conductive carbon black is used for shielding, while insulating grades provide high resistivity for electrical insulation.
- Chemical resistance: Carbon black provides inertness, making the cable resistant to most acids, alkalis, and moisture, which is ideal for harsh industrial environments.
- Cost-effectiveness: Compared to other conductive fillers like metal fibers, carbon black is often a more economical choice for achieving conductivity and UV protection.
- Processing stability: It is compatible with standard cable production techniques like extrusion and offers stable processing behavior.



7. Energy consultancy, Wood Mackenzie.

# Our strategy

// Our Materiality Assessment creates value for Orion by focusing our company's strategy, by improving our understanding of key business risks and opportunities and by meeting regulatory requirements."

**JOCHEN ROTHER**  
Head of Corporate Sustainability

## IN THIS SECTION

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# Double materiality

To ensure we keep our sustainability strategy up to date, every three to four years we conduct a double materiality assessment to identify sustainability topics that are important, or material, to the business. The latest one was performed in 2024.

The double materiality assessment is a requirement under the European Sustainability Reporting Standards (ESRS) to comply with the Corporate Sustainability Reporting Directive (CSRD), to which Orion might be subject in the future. This process also responds to the GRI 3: Material Topics 2021 guidelines and disclosure requirements.

The comprehensive double materiality process considers both how sustainability topics may affect the organization's financial performance (financial materiality), as well as how the organization's activities may affect society and the environment (impact materiality).

## HOW DOES DOUBLE MATERIALITY CREATE VALUE FOR ORION?

### Regulatory compliance

Double materiality forms the foundation of our sustainability strategy, CSRD compliance and determines which material topics are relevant to Orion and disclosed in our sustainability reports.

### Risk management

The double materiality process and outcomes provide a broad understanding of impacts, risks and opportunities (IROs) related to material topics, which contribute to effective management of key business risks and opportunities. IROs identified are routinely monitored, refreshed and assessed to determine whether they remain relevant to the business.

### Input into strategy

The results of this assessment help Orion not only to meet regulatory requirements, but also to conform to leading practices by aligning with a broad ESG framework. Material IROs can inform both the prioritization of human and capital resources and the creation of procedures supporting data collection and external reporting.

## PROCESS

Our double materiality process leveraged the views of internal and external stakeholders, as well as regulatory and value chain analysis, to identify and prioritize key sustainability topics.

The Orion double materiality assessment is aligned with the GRI and CSRD frameworks and therefore aligns to ESRS language and stated sustainability topics.

Desk-based research: value chain analysis and market scan

Identification of potentially material topics

Identification of impacts, risks & opportunities

Financial and impact scoring by internal and external stakeholders

Leadership calibration and final results

Orion's innovation hub in Cologne, Germany.



Double materiality *continued*

**Desk-based research: value chain and market scan**

We reviewed Orion's value chain to understand Orion's key business activities, dependencies and impacts, and to help identify IROs. The business activities across our value chain are summarized in Fig 1.

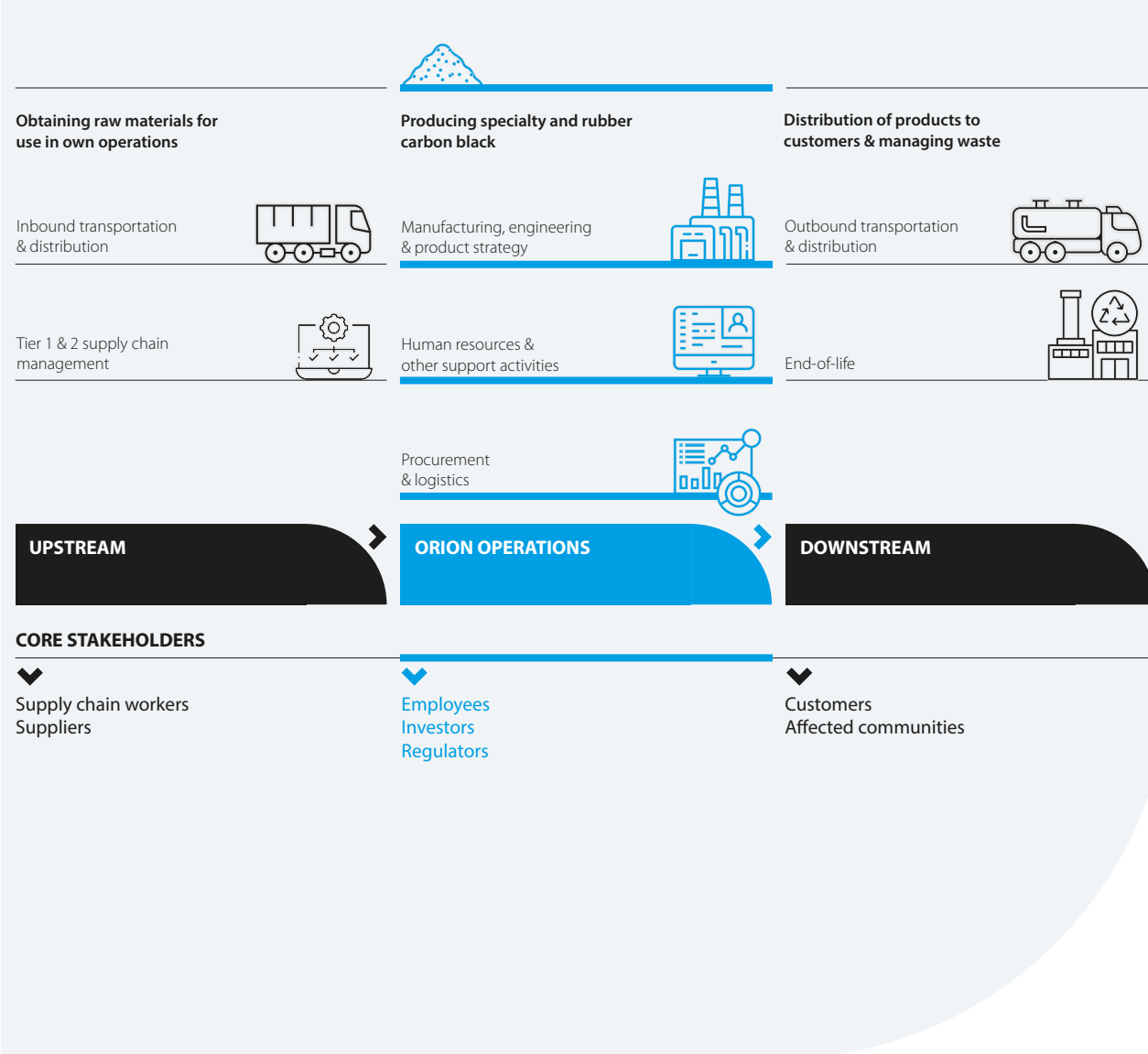
**Identification of potentially material topics**

Using sustainability topics identified in the desk-based research, we were able to consolidate the provided ESRS list of material topics into a shortlist of 20 potentially material topics.

**Identification of impacts, risks and opportunities (IROs)**

The IROs identification process was based on the shortlist of 20 potentially material topics, desk-based research and the analysis of our value chain. IROs were evaluated to determine the time horizon in which they were most likely to arise.

**FIG 1: ORION'S VALUE CHAIN AND RELATIONSHIPS**



**Financial and impact scoring by internal and external stakeholders**

Criteria for scoring negative impact materiality included severity and likelihood. Severity was based on scale, scope and irremediability. For positive impacts, materiality was based on the scale, scope and likelihood of the impact. Risks and opportunities were scored based on potential magnitude and likelihood of the financial effects. In line with ESRS guidance, we took an alternate approach to negative human rights impacts by applying a multiplier of two to the severity score of all human rights-related negative impacts. We identified five groups for engagement: employees, customers and competitors, investors, suppliers, and regulators. We determined representative internal proxy stakeholders for each external group.

We interviewed and surveyed 17 internal stakeholders assigning each internal stakeholder to specific IROs based on their topic area of expertise and ownership of responsibilities and held sessions in which IROs were discussed in detail to determine the validation of scoring, value chain mapping, time horizon and to align scoring across all IROs. Executives were engaged to validate the preliminary double materiality assessment results. External stakeholders' priorities were largely aligned with the preliminary findings of the double materiality assessment.

**Leadership calibration and final results**

Certain IROs were studied and calibrated to align their financial or impact materiality with leadership and core team insights gathered through stakeholder engagement, including executive interviews and external insights, and internal expertise.

At the end of the IRO assessment and stakeholder engagement and calibration processes, 13 topics were deemed material for Orion, see Fig 2.

Double materiality *continued*

**FIG 2: DETERMINED MATERIAL TOPICS**

**ENVIRONMENTAL**

	Financially material	Impact material	
Climate change	●		⊕ See page 20 for details
Emissions	●	●	⊕ See page 25 for details
Pollution		●	⊕ See page 29 for details
Circularity	●	●	⊕ See page 32 for details

**SOCIAL**

	Financially material	Impact material	
Talent management	●		⊕ See page 36 for details
People and culture	●		⊕ See page 38 for details
Occupational health and safety		●	⊕ See page 39 for details
Product quality, safety and stewardship	●		⊕ See page 40 for details

**GOVERNANCE**

	Financially material	Impact material	
Business ethics, compliance and corporate culture	●	●	⊕ See page 46 for details
Supply chain management		●	⊕ See page 50 for details
Public policy and engagement	●		⊕ See page 52 for details

**SECTOR-SPECIFIC MATERIAL TOPICS**

	Financially material	Impact material	
Cybersecurity		●	⊕ See page 53 for details
Innovation and IP	●	●	⊕ See page 53 for details

Orion's facility in Ravenna, Italy.



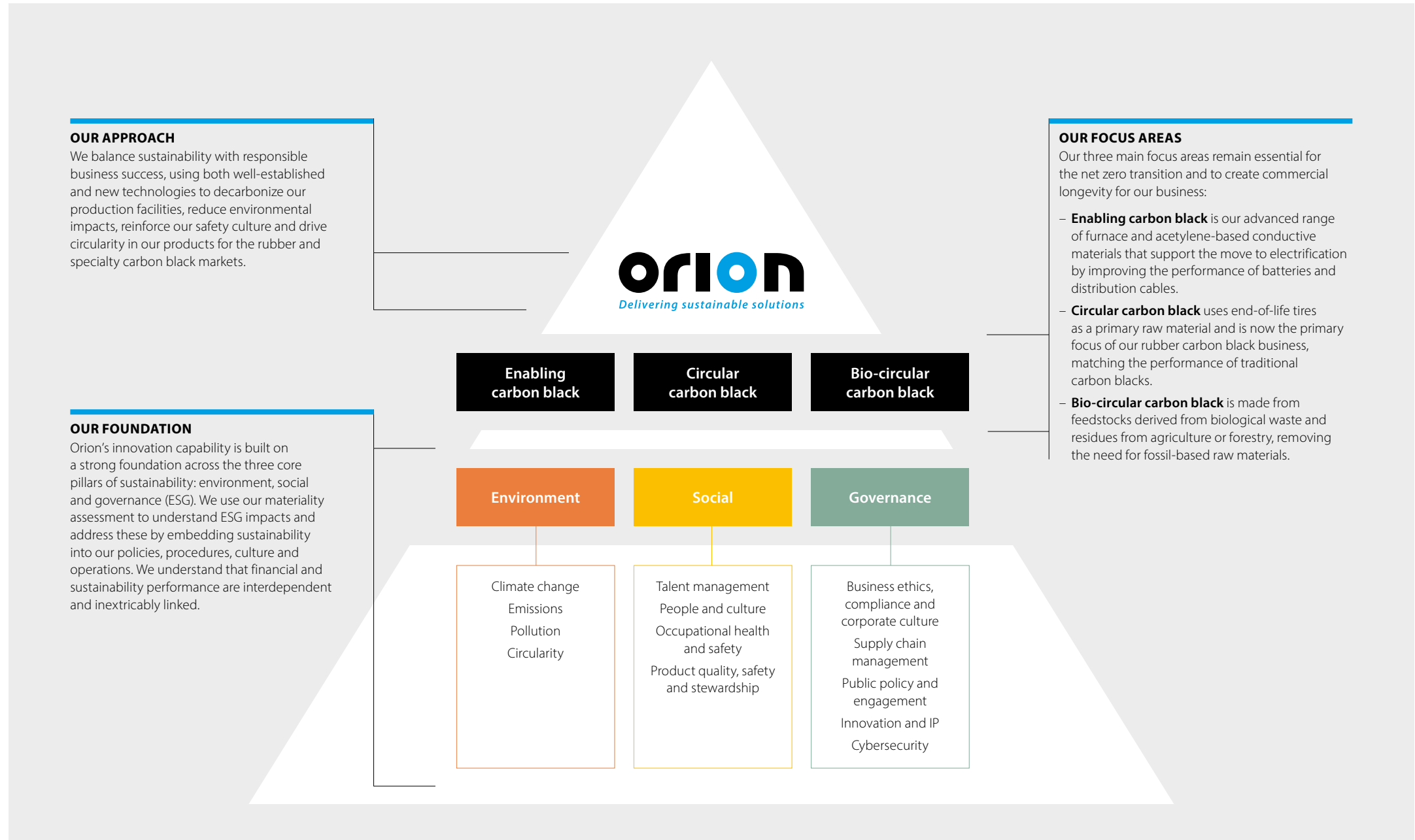
# Our strategy

Our approach to sustainability reflects the trends that shape our business and the outcomes of our materiality analysis.

These emphasize that we must achieve two objectives: operating to minimize environmental impact – especially in relation to greenhouse gas emissions – while helping to meet the growing need for sustainable products and electrification. As well as having a license to operate, this means continuing to earn the support of our communities by being a good neighbor and responsible steward of the environment.

“Our strategy – supporting electrification, building a cost-effective circular business model and using bio-circular materials – means Orion is well positioned to support the net zero transition.”

**JOCHEN ROTHER**  
Head of Corporate Sustainability



Our strategy *continued*

## Our global frames of reference

The foundation of our sustainability strategies and practices is our alignment to the United Nations Global Compact (UNGC). We support the 10 universal principles of the UNGC in the areas of human rights, labor, anti-corruption, and the environment.

These principles are embedded in our professional conduct guidelines for suppliers and employees and are applied to our business operations. Our annual commitment to progress on the UNGC can be found online.



Orion also contributes to the UN Sustainable Development Goals (SDGs), which address key global challenges such as poverty, inequality, climate change, environmental degradation, peace and justice. As confirmed by our materiality assessment, Orion can directly contribute to three SDGs:

### INDUSTRY, INNOVATION AND INFRASTRUCTURE

We are developing technologies that promote energy efficiency and sustainable transport.



Please refer to pages 9 and 32 for more information on how we are driving innovation.



### RESPONSIBLE CONSUMPTION AND PRODUCTION

We are using circular and bio-circular materials to reduce the need for primary and fossil-based materials.



Please refer to page 32 for more information on the work we are doing to drive circularity.



### CLIMATE ACTION

We are working to decarbonize our processes and are a partner in supporting the energy transition.



Please refer to page 20 for more information on how we are supporting the net zero transition.



By embedding the UN Global Compact principles and Sustainable Development Goals into our daily operations, we ensure that sustainability is a core part of how Orion does business."

**MARIA ESCOBAR GRANET**

Senior Manager Corporate Sustainability

Orion's facility in Ivanhoe, Louisiana.



# Environment

With its unique properties that enhance durability and strength, carbon black remains a vital component in product performance. As we move toward net zero, it will continue to play a key role – particularly in advancing electrification.”

**CARLOS QUINONES**  
Chief Operating Officer

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ENVIRONMENT	2025	2024	2023
Scope 1 normalized intensity emissions reduction by 8% by 2029 <sup>8</sup>	-7%	-7 %	-4%
Scope 2 market-based reductions to 0 k MT CO <sub>2</sub> e by 2030	128	132	152
Maintain a target of zero significant spills	0	0	0

8. Baseline year of 2014

# Our approach

Our commitment to the environment is central to our identity as a company. We take decisive action to reduce emissions, expand circular and bio-circular solutions, and continuously improve the efficiency of our technologies and processes to support a net zero future.

## 2025 ACHIEVEMENTS



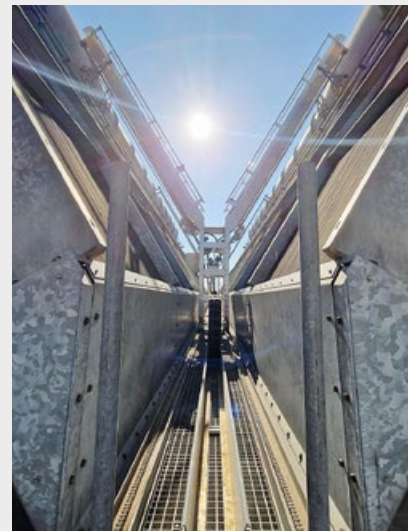
### New heat recovery system

We installed and commissioned a quench boiler at our Malmö plant to recover heat from production, generating 3.5 GWh of steam for city district heating, 2.9 GWh of electricity, and reducing water use by around 8 million liters annually.



### Launch of ECOLAR® 50

We launched ECOLAR® 50 powder, a 100% bio-circular carbon black that enables coatings applications, enabling manufacturers to create sustainable products with coloristic performance comparable to conventional carbon blacks.



### New water cleaning system

We installed a semi-automatic water cleaning system for the air condenser at our Ravenna site to keep condenser benches clean. The upgrade improves vacuum performance in summer and reduces air fan electricity use in winter.



### Reduced water wastage

We reduced waste at our Nelson Mandela Bay plant by approximately 30%, through targeted operational improvements, including a decrease in carbon black leaks and a lower incidence of damaged big bags.

Orion uses environmental management systems aligned with international standard ISO 14001 that guide our processes and procedures in relation to environmental protection. We use these in tandem with our Orion Integrated Global Management System (GMS), to ensure occupational and process safety, health protection and quality management, including sustainable compliance, social accountability and product stewardship.

We are taking decisive action to play our part in the transition to a net zero future. Orion is an inherently circular business, converting waste from the hydrocarbon industry, which would otherwise be burned, into materials that make everyday products perform better. This process diverts carbon from the atmosphere and creates materials that make our customers' products more durable and higher performing. To minimize our

environmental footprint and achieve our emissions reduction ambitions, we are developing new and more efficient technologies and processes, and developing products based on circular and bio-circular feedstocks.

Our environmental strategy covers the following areas:

- **Greenhouse gas (GHG) emissions and energy.** Reducing GHG emissions and energy use, and moving ahead on our journey to net zero.



See page 25 for detail.

- **Pollution and resource management.** Minimizing our environmental impacts and use of resources.



See page 29 for detail.

- **Product stewardship and circularity.** Developing quality products that support our customers' sustainability ambitions.



See pages 32 and 40 for details.

# Climate change

At Orion, we recognize that addressing climate change is fundamental to the resilience and long-term success of our business and the communities we serve.

As a committed partner in the global net zero transition, we are not only reducing our own emissions but also enabling others to accelerate their pathways to a low-carbon future. Guided by the Paris Agreement, we are advancing solutions that combine mitigation – through decarbonization and innovation – with adaptation strategies that strengthen climate resilience across our value chain. Our ambition is clear: to achieve net zero emissions by 2050 while helping shape a sustainable, climate-ready economy.

Achieving this goal requires continuing innovation in our products while simultaneously reducing the impact of our operations. To advance this transition, we are upgrading our plants and facilities to optimize energy use, investing in R&D to shift toward circular and renewable feedstocks for sustainable products, and developing ultra-clean conductive carbon additives to support electrification. This approach makes both commercial and environmental sense.

As leaders in specialty carbon blacks, we are well positioned to meet the growing demand for these products. The technologies at our disposal allow us to drive innovation and develop more sustainable grades of carbon black. While emissions may initially increase as we introduce new products and processes, we expect to improve efficiencies as we scale production and refine our manufacturing methods. By continuously optimizing our plants, we are confident we can grow our business while maintaining a strong focus on sustainability.

In line with our commitment to a low-carbon future, we have conducted impact assessments, set ambitious targets, implemented measures, and launched initiatives to help us achieve these goals.

## TARGETS

### BY 2029

**Normalized Scope 1 GHG emissions intensity reduced by**

**8%**

(baseline year of 2014)

### BY 2030

**Scope 2 market-based GHG emissions**

**0**

### BY 2050

**Net zero GHG emissions**

*“We routinely analyze our impacts and set ambitious targets to meet climate change expectations. We continuously monitor our activities to adjust our action plans to reach these targets.”*

**NICOLE LEWIS**  
VP Global EHS and Product Stewardship

## Climate change mitigation and adaptation

Climate change is now an immediate business reality. Rising temperatures, floods, droughts and extreme weather are disrupting operations, supply chains and markets worldwide. While reducing emissions (mitigation) remains essential, mitigation alone cannot shield businesses from the physical risks already unfolding. To remain competitive and resilient, companies must scale up climate adaptation – adjusting systems, operations and infrastructure to withstand climate impacts – while continuing to decarbonize.

Mitigation addresses the root causes of climate change by reducing greenhouse gas emissions and enhancing carbon sinks. Key actions include transitioning to renewable energy, improving energy efficiency, restoring forests and developing carbon capture and storage technologies. These measures deliver long-term benefits by slowing global warming and protecting the planet’s ecosystems, as outlined in our vision to net zero section.

Adaptation, in contrast, focuses on managing the effects of climate change that are already unavoidable. It is about strengthening resilience – ensuring people, assets and ecosystems can withstand shocks such as heatwaves, floods, and water stress. Examples include climate-resilient infrastructure, drought-resistant crops, and enhanced water management systems.

– Mitigation = tackling causes → reducing emissions

– Adaptation = tackling effects → coping with impacts

Both are essential. Mitigation protects the future; adaptation safeguards the present. Together, they form the foundation for sustainable, climate-resilient growth.

## Scaling corporate climate adaptation

Recent risk assessments across all our sites showed that several face high risks from multiple acute and chronic hazards over the next 30 years. These include heat stress, hail, water scarcity and river flooding. Scaling adaptation is becoming a strategic business imperative for cost protection, disaster preparedness, supply chain resilience and managing rising insurance premiums.

## Key drivers of adaptation

- 1. Cost Protection** – Proactive investments in resilient infrastructure and adaptive technologies prevent operational and financial losses from climate-related disasters.
- 2. Disaster Response** – Integrating adaptation into crisis planning – such as heat management and flood defenses – reduces downtime and accelerates recovery.
- 3. Supply Chain Resilience** – Water stress and flooding disrupt production and logistics; diversifying suppliers and using digital monitoring systems mitigates these risks.
- 4. Insurance Stability** – Demonstrating site-level adaptation efforts helps maintain insurability and favorable premium terms.

Climate change is a material business risk and adaptation is not optional. The companies that will thrive are those that cut emissions and adapt operations to an uncertain climate. By pursuing both mitigation and adaptation in parallel, we safeguard people, assets, and shareholder value while leading the transition toward a resilient, low-carbon global economy.

Climate change *continued*

**Orion’s vision to net zero**

As climate change and its impacts accelerate, so must the solutions and behavior changes needed from governments, businesses and consumers.

Strategies and technologies for climate change adaptation present both challenges and opportunities. Our evolving net zero vision provides advantages for the future of our business.

**Our vision and strategy**

Our product development strategy is closely aligned with the goal of transitioning to a net zero future. By envisioning a model that incorporates bio-circular and circular raw materials, we aim to achieve carbon negativity by leveraging the natural carbon cycle. To bring this vision to life, we are pursuing a dual-track approach that involves utilizing biologically derived oils and contributing to the circularity of biogenic carbon. With our new portfolio of bio-circular

and circular products, we have proven that high-performance carbon black grades can be produced from these alternative feedstocks.

As part of this effort, we have invested in the French tire recycling company Alpha Carbone, enabling it to scale up production of tire pyrolysis oil and recovered carbon black. Orion will use the pyrolysis oil to manufacture circular carbon black for tire and rubber goods customers.

Our primary challenge lies in improving the competitiveness of these products and driving widespread industry adoption on a global scale. We will continue to innovate and develop new technologies to enhance production efficiency and accelerate progress toward our net zero target. This strategy is expected to reduce our reliance on fossil-derived feedstocks while contributing to a lasting solution for atmospheric CO<sub>2</sub>.



**DRIVERS FOR CHANGE**

**Increased consumer demand for sustainable products**

Delivering sustainable products in our industry requires innovation and a focus on the rapid development of the recycling and waste recovery market. This area is developing quickly, as the evolving tire pyrolysis industry shows. As a result, there will be more alternative circular feedstocks and wider availability of recovered carbon black (CB).

**More stringent governmental regulation**

Governments are pursuing a variety of approaches to reduce CO<sub>2</sub> emissions. The European approach is to implement a carbon emission trading system. To reduce carbon leakage, merely shifting CO<sub>2</sub> emissions from the EU to other regions, a Carbon Border Adjustment Mechanism (CBAM), has been introduced for some energy-intensive industries. It is designed to impose charges on the carbon content of imported products and ensure they are subject to the same costs as those manufactured locally. While this approach could level the playing field inside the EU, it needs to be simplified to be effective, expanded to carbon black to be relevant and it still leaves companies that export from the EU at a disadvantage.

A variation of these regulations could motivate a more rapid shift to a circular economy. Governmental incentives could further create an environment whereby businesses are encouraged to make bolder and more drastic changes to achieve more positive environmental outcomes.

We continue to monitor regulatory changes across our markets.

**BUILDING THE FOUNDATIONS FOR NET ZERO**

Certain EU stakeholders have called for the decarbonization of the carbon black industry, urging the adoption of renewable feedstocks, electrification and circular solutions as part of Europe’s climate ambitions. These proposals set a clear direction: the sector must innovate to substantially reduce greenhouse gas emissions.

Orion fully supports this vision. At the same time, we recognize the reality: carbon black production is a “hard-to-abate” process. It requires extremely high temperatures and involves unavoidable CO<sub>2</sub> emissions during particle formation. Today, no single technology can deliver a full-scale solution. Instead, progress will come through a combination of approaches and long-term investment in both R&D as well as in production facilities at pilot plant and industrial scale.

Forward-looking consultants and policy makers have outlined two promising pathways:

– **Renewable and recycled feedstocks:** Bio-based oils and recovered carbon black (rCB) from end-of-life tires offer potential, but serious technical and economic challenges remain. Limited availability, inconsistent quality, and high CapEx demands mean these solutions are not yet ready for widespread use.

– **Electrification:** Plasma-based processes could dramatically reduce emissions and even generate hydrogen as a valuable co-product. However, this technology is still in development and requires further breakthroughs to become disruptive and meet the full range of product specifications.

The message is clear: achieving net zero will require more than technology. It will require tremendous investments in R&D and new production plants as well as time. It will demand collaboration across the value chain, investment in infrastructure, and policies that support innovation and provide funding while maintaining competitiveness. Demanding significant additional environmental improvements by EU policy makers without realistic implementation strategies will lead to an ongoing deindustrialization of the European Chemical Industry and further emission leakage to countries with less strict environmental standards.

Climate change *continued*

**How we leverage the biological CO<sub>2</sub> cycle**

By shifting our emissions to CO<sub>2</sub> from biological sources, we can achieve net zero or even a negative carbon footprint, when long-term carbon storage in the carbon black is considered. The infographic illustrates the natural carbon cycle.

CO<sub>2</sub> is continuously absorbed from the atmosphere through photosynthesis and later released through natural processes such as respiration and the decomposition of biomass, for instance leaves and trees. The term “biogenic carbon” refers to the CO<sub>2</sub> that plants capture and utilize. When these organisms reach the end of their life cycle, they break down and release this biogenic carbon back into the atmosphere, completing the natural cycle.

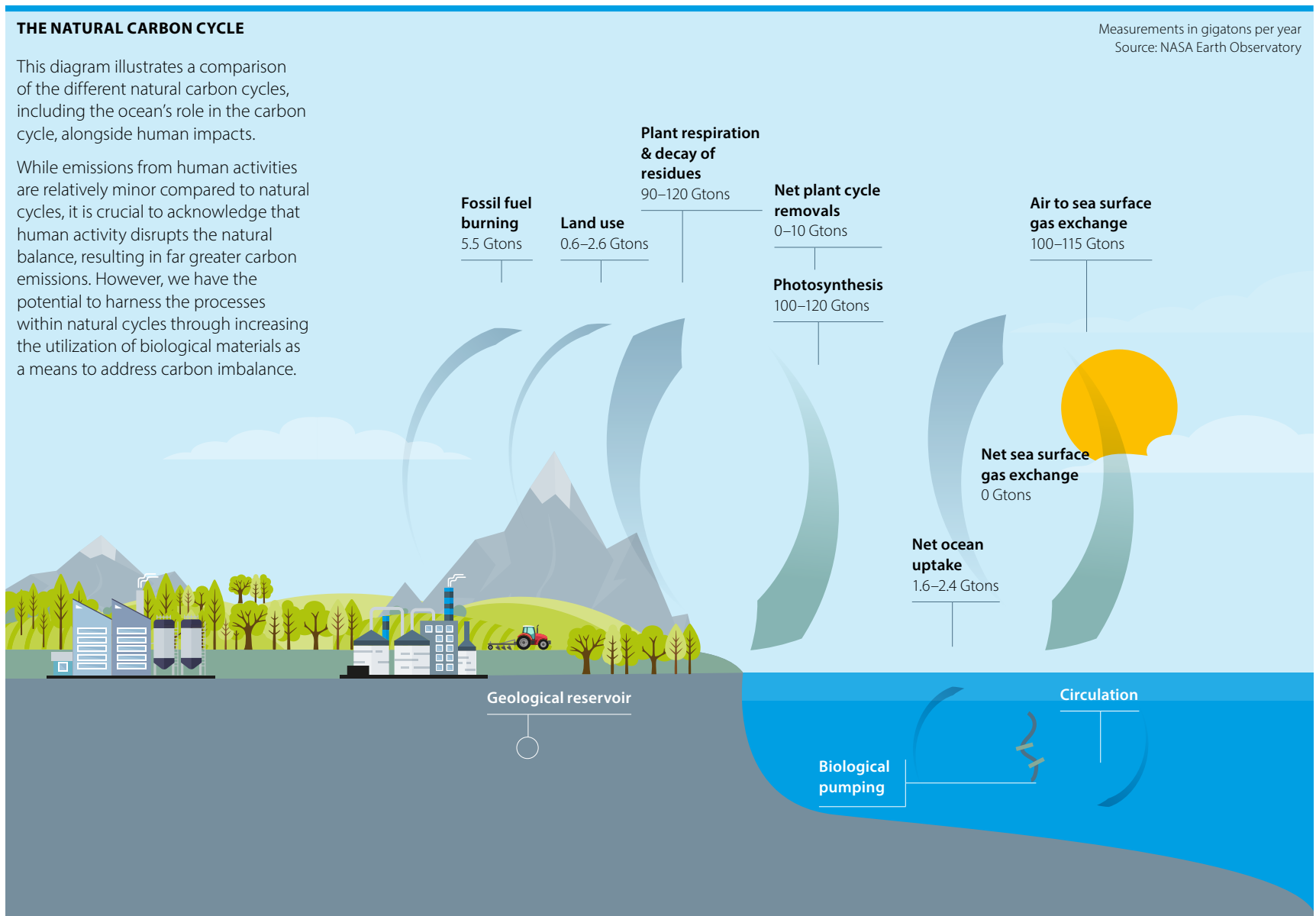
Using plant-based materials to make carbon black creates products that are more sustainable than carbon black made from fossil fuels. By incorporating biogenic carbon into our products, we can help keep the natural carbon cycle balanced. However, it is crucial to consider how we source these materials. If they take up land needed for other purposes, it can lead to problems such as deforestation. A good approach is to use bio-waste that would otherwise go unused.

Currently, around 70% of all carbon black produced is used in tires, many of which are eventually burned at the end of their lifespan. This process releases carbon – primarily fossil-derived – into the atmosphere, contributing to greenhouse gas emissions and environmental pollution. By utilizing oil derived from the pyrolysis

of used tires, we can recover this carbon and significantly reduce the environmental impact compared with incineration.

Larger tires, such as those used for trucks and buses, are made almost entirely from natural rubber, while passenger and light truck tires contain a roughly equal mix of natural and synthetic rubber. As a result, used tires have a high biogenic carbon content. By leveraging the pyrolysis process within the natural carbon cycle, we can establish a more permanent storage solution for this biogenic carbon. There is considerable potential to scale this approach, as demonstrated by our investment in Alpha Carbone.

 [Learn more at orioncarbons.com/news](https://www.orioncarbons.com/news)



Climate change *continued*

**Bio-circular feedstocks**

Plant-based feedstocks allow for up to 100% substitution of fossil-derived carbon with biogenic carbon, enabling the production of bio-circular carbon blacks. Currently, our processes predominantly utilize these bio-circular feedstocks. This refers to waste and residues of biological origin from agriculture, forestry and related industries including fisheries and aquaculture. Using bio-circular feedstocks allows us to temporarily remove carbon from the biological cycle, and using waste and residue-derived products means there is no need to grow feedstock crops that take up land which could be used for food crops. However, any carbon stored when we make carbon black from these materials will ultimately be released if the tire is burned at the end of its life. Our vision is that with the growth of tire recycling via pyrolysis, tires will not be burned, and the carbon can be used repeatedly.

**Circular feedstocks from recycling**

Pyrolysis companies recycle end-of-life tires by heating the rubber at high temperatures with little or no oxygen. After removing the wire and other materials, the process breaks the tires down into three products: synthetic gas, recovered carbon black (rCB) and tire pyrolysis oil (TPO). We source this pyrolysis oil and use it as a circular feedstock in our production.

Orion is the only company to produce circular carbon black made entirely from 100% TPO, and we have demonstrated that these circular grades can fully replace virgin carbon black in many applications.

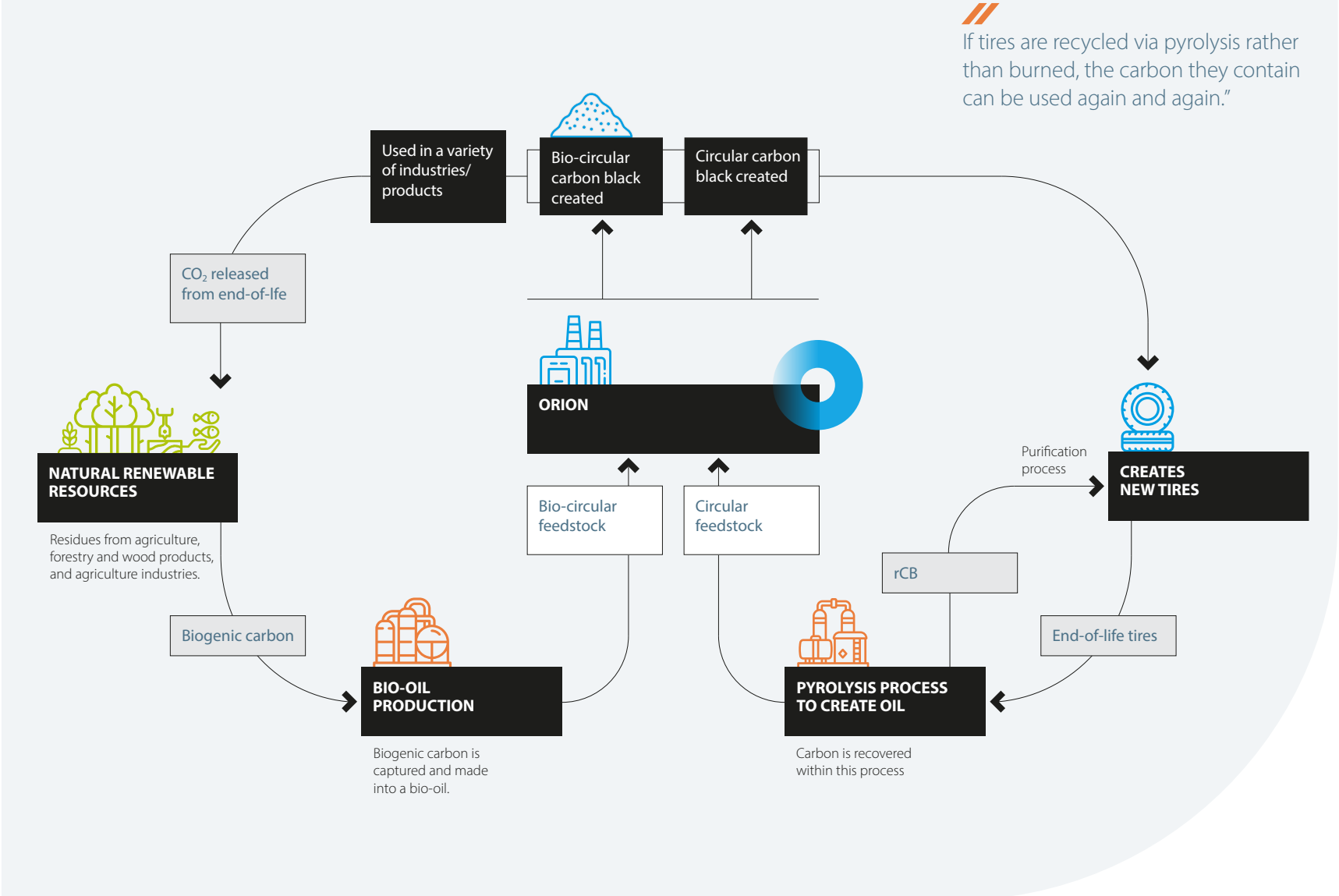
Through this process, we can also extend the temporary removal of CO<sub>2</sub> from the natural carbon cycle by creating circular carbon blacks from the biogenic carbon stored in TPO. As the usage of bio-circular and circular carbon blacks in conventional tires increases, both the rubber and the carbon black will contain biogenic carbon. This means that the total percentage of biogenic carbon in recycled tires will increase over time. Taken to its limit, with enough tire recycling, we could replace fossil fuels as a carbon black feedstock.

**Secondary feedstocks**

Secondary feedstocks provide the heat and atmosphere for carbon black-generating reactions. Most of our reactors use natural gas as a secondary feedstock today, which can, in principle, be replaced with biomethane as a bio-circular alternative. However, biomethane is both scarce and expensive, with prices twice that of natural gas.

When plant-based materials are used as feedstocks for carbon black, they become regenerative, and more beneficial than fossil oil.”

**STAYING IN THE CIRCLE: BIO-CIRCULAR AND CIRCULAR FEEDSTOCK**



“If tires are recycled via pyrolysis rather than burned, the carbon they contain can be used again and again.”

## Climate change *continued*

### Accomplishments and ongoing work

As well as being the first major carbon black manufacturer to develop a sustainable carbon black, we have now successfully made a range of bio-circular and circular grades that are commercially available to our customers and suitable for a wide scope of applications.

We have noted that a key step in permanently sequestering CO<sub>2</sub> from the atmosphere will involve recycling, particularly in the tire industry, which is the largest consumer of carbon black. A major challenge for the circular economy is improving the oil yield of bio-circular feedstocks, and we have set a goal to increase this yield by at least 50% from a 2015 baseline by 2030. To support this transition, we are developing a range of bio-circular and circular carbon blacks essential for modern tires. Available products include ECORAX® Nature 200; ECORAX® Circular 210, 215 and 220; and ECOLAR® 50 and PRINTEX® Nature 35 for specialty applications. Production of the ECORAX® Circular family is expanding into additional countries, reinforcing our commitment to circularity worldwide.

We already have ISCC PLUS certification at five<sup>9</sup> of our plants and are adding others worldwide. This allows us to certify the exact amount and type of sustainable content in our sustainable carbon black grades.

We continued our participation in the now completed BlackCycle project (see page 32), working with several organizations to advance tire circularity across the value chain. Beyond this work, Orion has begun its journey on a publicly funded project to develop a net zero, climate neutral process at a new pilot plant facility to be built at our site in Cologne, Germany, which is home to our most advanced innovation center. This initiative is supported by the German Federal Ministry for Economic Affairs and Climate Action and the European Union's NextGenerationEU fund. Through the use of renewable feedstocks, we learned the importance of starting with materials that offer a zero CO<sub>2</sub> footprint. In this demonstration project, end-of-life tires serve as the primary feedstock, enabling both the recovery of carbon black and the production of new virgin carbon black. Under a renewable electricity grid, the concept enables physical CO<sub>2</sub> neutrality; even under the current grid mix, it offers more than a 70% reduction in CO<sub>2</sub>-equivalent emissions. As the next step in this work, we aim to deliver a technology capable of producing soft and hard blacks in a CO<sub>2</sub>-neutral way by 2030.

**“We aim to deliver a technology capable of producing soft and hard blacks in a CO<sub>2</sub>-neutral way by 2030.”**

Orion's innovation hub in Cologne, Germany.



**“We aim to increase the oil yield of bio-circular feedstocks by at least 50% from our 2015 baseline by 2030.”**

### The path ahead

Enhancing the efficiency of our plants alone will not be enough to achieve carbon neutrality. The key lies in building a circular economy with renewable and circular carbon black grades. As global demand for tires and carbon black increases, CO<sub>2</sub> emissions will continue to rise – unless circular solutions become more widely adopted in the market. Additionally, we remain committed to evaluating emerging technologies that could support our journey toward net zero emissions.

We have already demonstrated the feasibility of producing bio-circular grades. Looking ahead, we will focus on improving the competitiveness of both circular and bio-circular grades by enhancing yield, optimizing process efficiency, and reducing production costs. This approach will enable us to advance our manufacturing capabilities, further cut CO<sub>2</sub> emissions and expand commercial sales of these sustainable products simultaneously.

To maximize the benefits, it is essential to integrate a bio-circular process within a modern, highly efficient facility. As part of this strategy, we will continue investing in plant upgrades, as outlined in our Life Cycle Assessment (LCA), targeting improvements such as waste heat recovery and process yield optimization to drive efficiency and sustainability.

The new tank infrastructure in Jasło, Poland, which began operations in early 2025, will enable us to scale up the use of circular tire pyrolysis oil (TPO) as a feedstock in our production processes. At the same time, our European sites maintain the capability to utilize bio-circular feedstocks, including high-quality materials sourced from the ethylene process. These feedstocks are delivered under ISCC PLUS certification and follow the mass balance approach, ensuring traceability and sustainability. Thanks to this successful scale-up, we are already supplying circular products to leading tire manufacturers.

However, we also see market changes in traditional sources of supply, which can have a negative impact on our efforts to reduce CO<sub>2</sub> emissions. The European steel industry is reducing its use of coke, with coke capacity already withdrawn from the market and further coke plant closures expected. We also see a short- to medium-term capacity reduction in the European ethylene cracker landscape.

Both these changes will have an impact on feedstock availability in Europe and could also lead to longer supply transport routes. The reduction in the availability of highly efficient feedstock qualities from traditional markets will lead to a decrease in yield and throughput performance in carbon black production.

9. Four are wholly owned by Orion, and one is a joint venture.

# Operational emissions management

We are committed to emissions reduction as part of integrating sustainability considerations into our operations.

Implementing best practices across all production sites is crucial for reducing global emissions and meeting our targets. To achieve this, we not only ensure strict compliance with operational permits and environmental regulations but also closely monitor emissions data at each facility. Additionally, we continuously invest in improving our air pollution control systems and enhancing operational expertise. By further optimizing efficiency, we can increase our yield and productivity and significantly reduce our Scope 1 and 2 emissions.

Our Scope 1 and Scope 2 emissions account for 62.9% (location-based), and 62.7% (market-based) of our GHG emissions, with our Scope 3 emissions accounting for less than 40%. We continue to work with our value chain to capture and measure our Scope 3 emissions and aim to set targets in the future. In 2025, we saw continued reduction in both Scope 1 and Scope 2 market-based GHG emissions.

GHG EMISSIONS					
Indicator	Unit	Target*	2025	2024	2023
Scope 1	mn MT CO <sub>2</sub> e		2.1	2.2	2.2
Scope 1 Intensity	MT CO <sub>2</sub> e / MT Production		2.39	2.45	2.47
Normalized Scope 1 Intensity <sup>10</sup>	MT CO <sub>2</sub> e / MT Production		2.28	2.28	2.36
Normalized Scope 1 Intensity reduction <sup>11</sup>	%	-8	-7	-7	-4
Scope 2 – Market-based <sup>12</sup>	k MT CO <sub>2</sub> e	0*	128	132	152
Scope 2 – Location-based	k MT CO <sub>2</sub> e		147	127	123
Scope 2 Intensity	MT CO <sub>2</sub> e / MT Production		0.15	0.14	0.17
Scope 3	mn MT CO <sub>2</sub> e		1.3	1.4	1.3

10. Normalized for product mix and feedstock mix in furnace black production.

11. Baseline year of 2014.

12. Baseline year of 2022.

\* All targets are aligned to the 2029 deadline except for KPIs with an asterisk denoting a 2030 deadline.

**//** We diligently monitor emissions data at individual production sites and continually invest in enhancing our air pollution control systems and operating know-how."

Orion's plant in Ivanhoe, Louisiana.



Operational emissions management *continued*

**Emissions data reporting, collection and third-party audit**

All our plants comply with the emissions and emissions reporting regulations of the jurisdiction in which they operate. Emissions calculations and assumptions are carried out at site level. The degree and complexity of the traceability of emissions data relating to each site varies according to regional requirements. We use the Benchmark Gensuite® and Anaplan platforms to collect and analyze emissions data. In 2025, we continued with the third-party audit of our global GHG emissions (Scopes 1, 2 and 3) for all plants, leveraging local government methodologies and verifications. The independent limited assurance report can be found on page 78.

**There are jurisdictional differences relating to Scope 1 CO<sub>2</sub> emissions at Orion locations:**

- **European Union** – emissions data is checked and verified by licensed third parties and published annually by the European Commission.
- **South Africa** – emissions are calculated using GHG Protocol standards, applying GHG Protocol multiples to production figures.
- **South Korea** – the emissions trading scheme (ETS) system is used by the government to calculate and verify data.
- **Brazil** – emissions are calculated using GHG Protocol standards and confirmed by the government.

– **China** – emissions calculations and assumptions are carried out using the internationally accepted mass balance method followed by the EU operations. No ETS guidance or calculations are currently provided locally.

– **U.S.** – we are aligned to the EPA rules on GHG reporting.

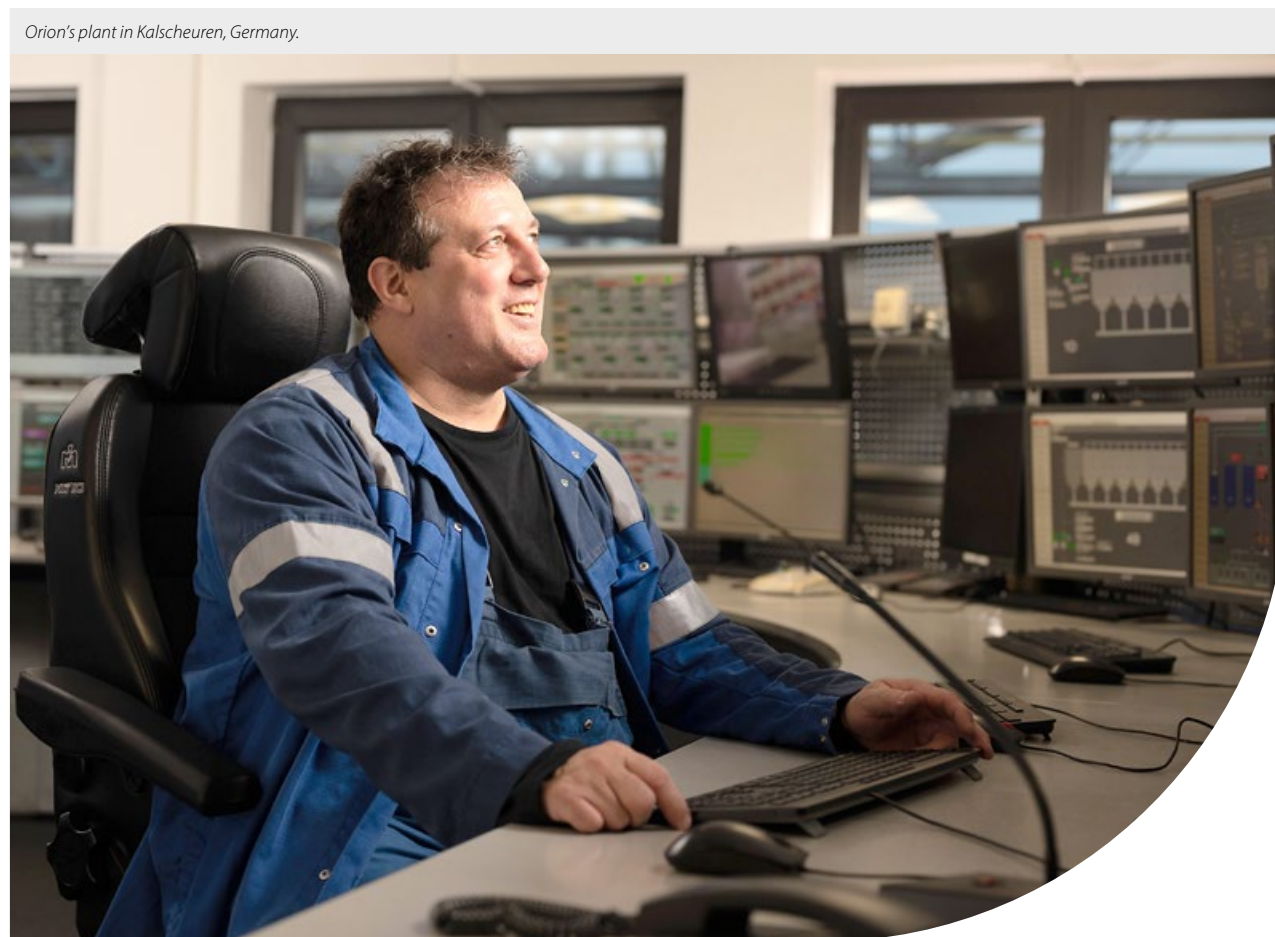
**Energy efficiency**

We approach energy management from two key perspectives: as a critical input in our production processes and as residual heat energy that can be effectively utilized. Our commitment lies in both minimizing the energy required for production and maximizing the recovery and use of excess heat energy. By improving productivity and yield, we can further reduce overall energy consumption while increasing the use of recovered heat.

It is important to note that specialized carbon black, designed to meet specific customer requirements, generally requires more energy to produce than standard grades as defined by the global body ASTM International. Likewise, our advanced rubber grades – engineered to improve tire fuel efficiency by reducing rolling resistance – also have higher energy intensity. However, we believe the broader societal benefits outweigh these higher energy demands, as these specialized products contribute to better fuel economy and extended tire lifespan. Additionally, our portfolio's emphasis on specialty products, identified by our ECORAX® range and our focus on sustainability-led innovations in products

ENERGY				
	Unit	2025	2024	2023
Energy consumption	TWh	19.5	20.3	20.0
Tail gas utilization rate	%	83	84	84

**83%**  
Tail gas utilization rate at the Group level



Orion's plant in Kalscheuren, Germany.

(see page 32), aims to help reduce the overall greenhouse gas footprint within the industry value chain.

We remain dedicated to improving energy efficiency while reinforcing our role as a provider of innovative solutions that drive sustainability across the industry. A key part of our strategy involves recovering excess heat from our production and using it to preheat reactor inputs, thereby lowering our energy consumption. Additionally, we harness by-product tail gas – while utilizing combined heat and power (CHP) technologies – to generate steam for internal operations, provide district heating to communities in Europe and Asia, and produce electricity.

Operational emissions management *continued***Driving efficiency and lowering emissions across our operations**

Reducing emissions across our operations requires a comprehensive, coordinated approach. We focus on multiple levers – from improving production efficiency and controlling air pollution to optimizing energy management and engaging our suppliers. Together, these efforts help us reduce our environmental impact while maintaining operational excellence.

Our approach includes:

– **Improving yields**

We continue to improve the energy efficiency of converting hydrocarbon feedstock to carbon black, which means less carbon is converted to CO<sub>2</sub>.

– **Air pollution control systems**

Investments in these systems throughout our production sites ensure compliance with operating permits and licenses, and applicable environmental laws and regulations. We record and monitor data at each site to measure emission efficiencies with a focus on reduction. GHGs and other emissions are included and managed in our Group-level enterprise risk management program.

– **Reductions in SO<sub>2</sub>, NO<sub>x</sub> and particulate matter (PM) emissions intensity rates**

These reductions are the result of additional emissions control systems, such as scrubbing systems or the use of lower-sulfur feedstocks to reduce SO<sub>2</sub> emissions. To improve PM emission intensity rates, we tightened operating procedures and installed additional PM detectors in our U.S. sites.

– **Energy efficiency and cogeneration**

Where feasible, we use excess heat from our reactors in our production process to increase efficiency and reduce fuel consumption. We also utilize energy from by-product tail gas to provide power to our communities – for example, through district heating systems or by supplying electricity to the grid. In line with our commitment to energy efficiency and emissions reduction, several Orion sites are ISO50001 certified, reinforcing our systematic approach to energy management. Beyond our operations, we remain mindful of the efficiency impact we can have on downstream products during their use phase – such as lighter-weight materials in cars or batteries with longer life cycles. This is why we continue to work closely with our customers to advance energy efficiency across the entire value chain.

– **Continuous, coordinated energy management**

Our global operations, regions, individual production sites, procurement and R&D functions work together to manage our energy use. We collect and analyze individual production site-level energy input and output data and keep track of key performance parameters. This also allows us to identify hotspots in energy usage and opportunities for improvement.

– **Communication with suppliers**

Engagement along the value chain is key to improving emissions related to raw materials. As we continue to engage with suppliers, we can evaluate opportunities that will benefit the whole supply chain.



For more information on our engagement with suppliers, please refer to the Supply chain management section on page 50.

Orion's facility in Ivanhoe, Louisiana.



Operational emissions management *continued***Managing our Scope 2 emissions**

While we are focused on reducing our Scope 1 emissions, we also recognize the impacts and opportunities we have to reduce our Scope 2 emissions. Scope 2 emissions account for less than 10% of our total emissions, and we are reducing them through targeted measures aligned with our sustainability goals. These include:

**1. On-site electricity generation**

Using tail gas and waste heat from our production processes to generate electricity directly on-site at our plants. This reduces reliance on external power purchases and often generates a significant surplus that can be fed to the grid and reduce the need for fossil fuel power generation somewhere else. We have plants in all major regions that use this technology and where possible we also supply district heat (e.g., in Kalscheuren, Germany, and Malmö, Sweden), to use waste heat in the most efficient way.

**2. Energy efficiency measures**

Implementing energy-saving initiatives to reduce overall electricity consumption across all our sites, for example upgrading equipment and optimizing processes.

**3. Purchasing green electricity**

Procuring renewable energy from certified green electricity providers to minimize the carbon intensity of purchased power. Since most of our electricity consumption is covered by self-generation based on waste heat from our production process, the share of renewable electricity consumed was 17% in 2025 vs 8.6% in 2024 due to an increase in purchase of renewable electricity in one of our sites.

Our focus is on the first two options, as these are the most effective from a sustainability perspective. For our remaining electricity consumption, we explore opportunities to purchase green electricity where on-site generation or energy efficiency is not technically or economically feasible.

**Additional measures**

Beyond our current emissions reduction activities, we aim to support wider systemic change in the following ways:

**– Engagement with our employees**

Minimize business travel, apply emissions limits to fleet vehicles, use video conferencing tools as much as possible, and support hybrid working.

**– Transparency and wider industry engagement**

Maintain an open dialogue by reporting on environmental developments objectively, improving energy efficiency, and developing alternative solutions.

**– Product stewardship and innovation**

Continue to reduce energy consumption by improving our production technology and enhancing the performance of our products.

**– Commitment to standards in sustainable operations**

Ensure annual ISO 14001 reviews are conducted with re-certification every three years for all sites.

**– Government engagement**

Continue to collaborate with other companies and institutions on publicly funded projects to drive governmental initiatives for innovation and emissions reduction within the industry.

**CASE STUDY****ESG-incentivized financing strategies**

Orion has secured financing through a sustainability-linked term loan and a sustainability-linked revolving credit facility (RCF). These financing approaches are aligned to key ESG targets that, if met, reduce the overall financial costs through a reduction in the interest rate or other financial benefits (e.g., increased line of credit to enable growth). Orion achieved the emissions reduction targets for a term loan linked to the performance of our U.S. plants, saving the Company approximately \$650,000 in interest payments in 2025. If the targets continue to be met, Orion will reduce financing costs over the full term by a total of \$2.0 million. We have extended our RCF – linked to Orion's emissions intensity reduction targets and an improvement in its EcoVadis score – to €350 million. If these targets are met, the Company could also reduce the finance costs associated with the RCF.

**WHAT IS COGENERATION?**

Cogeneration makes industrial processes more efficient by capturing and reusing energy that would otherwise be wasted. At Orion, we take advantage of both the high temperature of the hot gas and its remaining calorific value when combusted (thermal recovery) – approximately 10% of the calorific value of natural gas, which is about five times higher than the heat energy alone.

This allows us to generate usable energy from our processes, such as heating water for communities or producing electricity that feeds the grid. Many Orion plants worldwide use this technology to maximize energy efficiency and reduce emissions.

*Orion's site in Borger, Texas.*



# Pollution

Making carbon black is resource intensive. We work hard to monitor and reduce its resource demands and to manage and mitigate pollution and waste from the production process.

## Air, soil and water pollution

Carbon black is a non-hazardous substance and is commonly incorporated into materials like plastics and rubber, where it remains largely inert. However, the carbon black oil used in its production has the potential to cause soil or water contamination if spilled, though such incidents are uncommon. To minimize this risk, we have established strict policies and procedures. Any spill, regardless of size, is reported and promptly addressed, with in-depth investigations (Root Cause Analyses) conducted for more significant incidents. Additionally, all employees have undergone training in environmental compliance and procedures.

Our carbon black production facilities release greenhouse gases (GHGs), sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), and water as part of their operations. To control these emissions, we employ various technologies, including thermal oxidizers to break down air pollutants, circulating dry scrubbers (CDS) to remove SO<sub>2</sub>, and

OTHER EMISSIONS					
Intensity Emissions	Unit	Target	2025	2024	2023
SO <sub>2</sub>	%	-50	-59	-60	-60
NO <sub>x</sub>	%	-25	-31	-30	-31
Particulate matter	%	-15	-48	-47	-37



We exceeded all our SO<sub>2</sub>, NO<sub>x</sub> and PM 2029 reduction targets for a third year in a row, and we will continue monitoring and disclosing our performance.”



For detail on how we manage GHG emissions, see page 25.



Orion's site in Nelson Mandela Bay, South Africa.

selective catalytic reduction (SCR) to reduce NO<sub>x</sub> levels. At our facility in Ivanhoe, U.S. we have implemented a combined catalyst to eliminate NO<sub>x</sub> and SO<sub>2</sub> while also producing sulfuric acid from waste gases. Some plants use low-sulfur feedstocks to limit SO<sub>2</sub> emissions. To manage PM emissions, we rely on advanced filtration systems, early warning mechanisms, and industry best practices to minimize particulate discharge into the air. Our emissions are monitored in accordance with local regulations, with most facilities using continuous emission monitoring systems for their thermal oxidizer and SCR systems as they are considered the main source of emissions into the air.

We exceeded all our SO<sub>2</sub>, NO<sub>x</sub> and PM 2029 reduction targets for a third year in a row, and we will continue monitoring and disclosing our performance.

All our emissions, including water discharged from our operations, are strictly managed in accordance with applicable laws and regulations. We have implemented a rigorous process to enhance waste efficiency and minimize environmental impact in the communities where we operate. While we recognize that no system can be entirely immune to accidents, we have implemented rigorous technical and practical control measures to minimize risk to the lowest possible level. As with all industrial and large-scale processes, a residual risk – however small – remains unavoidable, but our

comprehensive safety systems and continuous monitoring ensure that this risk is managed effectively and transparently.

## Raw materials management

Our raw materials purchasing strategy is designed to maximize yields while minimizing emissions. We work with reputable suppliers to reduce the risk of spillage as much as possible. Carbon black oil, our primary raw material, is stored in tanks that comply with local safety regulations and are maintained under the Orion Mechanical Reliability program. For heating processes, we mainly use natural gas delivered via pipeline, the safest transportation method for this feedstock.

## Water management

A reliable and continuous water supply is essential to our operations. Water is used in carbon black production and steam generation, with steam serving multiple purposes: it supports our manufacturing process, is sold to external customers, and is used to generate electricity. Additionally, we provide hot water for district heating through a continuous loop in Malmö, Sweden, and Hürth, Germany. Water sources include surface water, wells, municipalities and retention ponds, while discharge points include sanitary sewers, municipal systems, natural water bodies and collection ponds.

We continuously enhance our processes and technologies to minimize water discharge and outflow, and wherever possible, we promote circularity by recycling rainwater, quench water (used for rapid cooling) and gray water. Water management strategies are tailored to the specific needs of each site and its production process. However, all locations harvest rainwater in collecting basins, which also store steam condensate for reuse as process water.

To ensure responsible water usage, we monitor consumption through metering at most of our plants and carefully assess wastewater quality. Before discharge, all wastewater undergoes strict treatment to comply with legal requirements.

Six of our plants operate in areas of high or extremely high water stress: Qingdao and Huaibei, China; Ravenna, Italy; Port Elizabeth, South Africa; Yeosu, South Korea; and Berre l'Etang, France. We operate within local regulations and are working to better understand and address our impacts in water-stressed locations.

Pollution *continued*

**THE FLOW OF WATER THROUGH A CARBON BLACK FACILITY**

**Carbon black manufacturing is a water-intensive process, and water is a shared community resource.**

That is why carbon black manufacturing facilities are advancing water stewardship, with an emphasis on responsible water usage and conservation efforts.

1

- **Water may be withdrawn** from a river, lake, reservoir, groundwater, sea, public or private utility.
- **Permits can limit withdrawal** from water sources under certain circumstances (e.g., drought, regulatory limits, etc.), which can improve conservation and reuse efforts.
- Using only the water quantity necessary **avoids excessive energy and chemical use.**
- **Raw water undergoes treatment** to supply purified water for industrial use or steam.
- **Stored water in tanks or lagoons can supply quench cooling systems** and other facility operations.

2

- **Cooling systems** represent a significant portion of water used in a carbon black facility.
- Cooling water is treated and may be returned to the watershed.
- **A recirculating cooling system** uses the same water repeatedly to cool reactions and products. Heat absorbed from the process must be dissipated to allow reuse of the water. **Cooling towers or heat exchangers** are most commonly used for this purpose.

3

- **Steam generation** supports process heating and, when integrated with CHP technologies in a cogeneration approach, enables electricity and district heating production.
- Steam condensate is reused to **improve energy and water efficiency.**
- **Minerals and other materials are removed through reverse-osmosis** or ion exchange, as ultra-pure water is needed for this process.

4

- **On-site storage**
- Carbon black plants may store large volumes of water for **fire protection** in tanks or lagoons.
- Water also may be stored in tanks and collected for **on-site or off-site wastewater treatment.**

5

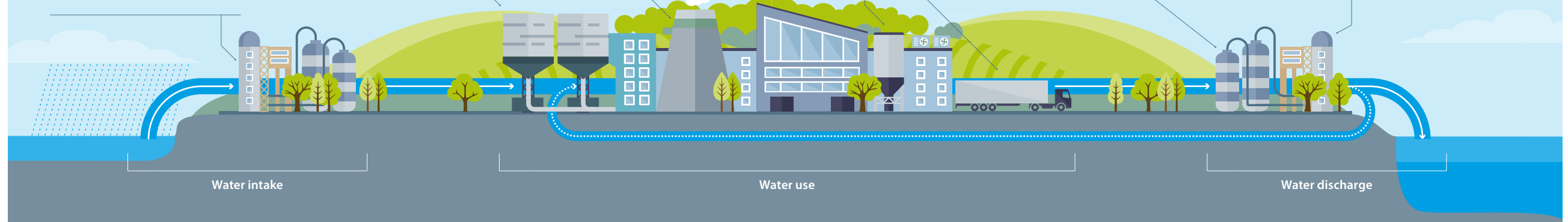
- **Ancillary use**
- Water is necessary for **cleaning, WASH (water, sanitation, hygiene) services, transportation** and other facility operations.
- **Water is also used in heating and ventilation systems (HVACs)** for both employees and processes.

6

- Water used in a carbon black plant **is treated prior to discharge** to remove organics and other compounds in accordance with established permit limits.
- **Wastewater treatment facilities** may be located on-site, or at an off-site Publicly or Privately Owned Treatment Works (POTW).
- Prior to discharge, treated water **must comply with discharge permit levels.**
- Wastewater treatment **requirements are location-specific, aiming to minimize environmental impacts** to local watersheds.

7

- **Key elements of responsible water discharge management include:**
- Monitoring water quantity and quality.
- Treating wastewater before discharge.
- Considering water stress, reuse opportunities and other factors.
- **Water recycle/reuse management includes:**
- Installing water-retention ponds, basins, and tanks that capture rainwater for treatment and reuse in our processes. This significantly reduces the amount of fresh water we need to draw, especially during rainy seasons.



Pollution *continued*

Orion's battery laboratory in Cologne, Germany.



**Waste management**

Our production processes generate both hazardous and non-hazardous waste, including bottom oil and sludge that accumulate in raw material tanks. We adhere to proper procedures aligned with applicable laws and regulations for waste handling and disposal, as well as for preventing potential spills. Waste management and disposal are governed by local laws and regulations, and Orion consistently meets or surpasses these requirements.

We maintain a robust compliance framework designed to uphold the highest standards of environmental, health, and safety performance. Through our Global Management System (GMS), we apply comprehensive policies and conduct regular internal and external audits to ensure adherence and drive continuous improvement. This system is managed by our global Environment, Health & Safety (EHS) function in collaboration with regional teams,

enabling consistent implementation across all operations. In addition to monitoring compliance, we invest in training programs for employees and contractors to embed best practices and strengthen our culture of safety and sustainability. By maintaining and advancing this approach, we proactively identify opportunities for improvement, reinforce governance, and deliver on our commitment to responsible operations.

We are committed to preventing hazardous material spills, with a target of zero incidents. Our comprehensive mechanical integrity program, along with specific standards for carbon black oil and tail gas, is designed to prevent leaks. Every plant is required to report and address any leaks – referred to as “losses of primary containment” (LOPC) – on a monthly basis, even those as small as drips. Each plant has emergency response plans in place for both minor and major leaks, and Orion has a global response plan for significant incidents.

To further minimize leaks, we prioritize strengthening mechanical integrity, evaluating the effectiveness of measures to prevent recurring issues, and enhancing root cause investigations. In 2024, we significantly increased capital investment in mechanical integrity, an initiative that continues to enhance reliability and reduce LOPCs in 2025, and we remain committed to sustaining these improvements into the future.

We are working to expand our waste recycling, reuse and recovery capabilities, such as using residual tail gas from our production processes.

// We did not have any major spills of oil or other toxic waste in 2025. We monitor and report very small leaks and losses of primary containment and then take action to resolve them.”

**WASTE**

Waste	Unit	2025	2024	2023
Total waste	k MT	23.2	23.0	25.1
Total hazardous waste	k MT	1.3	3.4	2.4

Relative to the total amounts of carbon black oil and carbon black that we produce, Orion creates very little waste. Fluctuations over the years reflect various levels of maintenance operations, for example, variations in the need to clean and reinspect large tanks.

**Production waste intensity**

26.4 kg/MT

# Circularity

As a technology leader in the carbon black industry, we are committed to developing products that help our customers advance their sustainability goals

Our circularity initiatives are managed on a global scale to ensure consistency across the business and are strengthened through collaborations with research institutes and universities. Our long-term success relies on continuous innovation – particularly in the development of alternative raw materials, circular products, and specialty grades that support the carbon transition.

## Circular products

In Jasło, Poland, Orion successfully scaled up its circular carbon black production following the installation of two large tire pyrolysis oil (TPO) tanks in late 2024. These tanks, designed to store TPO for furnace black reactors, enabled Orion to launch large-scale production of circular carbon black for the first time in our history. The operational startup in Q1 2025 was a success, and we are now actively selling our ECORAX® Circular 200 and 210 products to major tire manufacturers. Additional grades can be easily introduced as demand grows, reinforcing Orion's commitment to advancing circularity in the tire and rubber industry.

Our strategic investment in French tire recycling company Alpha Carbone remains

on track, with the plant expected to start operations in the second quarter of 2026. This partnership will enable Alpha Carbone to scale up production of TPO and recovered carbon black, supported by a long-term supply agreement making Orion the exclusive customer for Alpha Carbone's TPO. In the meantime, we have developed a robust network of TPO suppliers to ensure reliable supply and sustain the growth of our circular carbon black portfolio.

## Bio-circular products

Produced at our plant in Jasło, Poland, ECORAX® Nature 200 and Nature 205 are Orion's bio-circular carbon blacks sold to major tire manufacturers. These grades are made from second-generation, animal-free, bio-based feedstock that does not compete with the food chain, ensuring sustainability without compromising food resources.

All our circular and bio-circular grades are manufactured using the mass-balance principle and are ISCC PLUS certified. They have been rigorously tested and approved by customers as direct replacements for standard carbon black grades. Bio-circular products deliver two key environmental benefits: reducing the carbon footprint of products containing carbon black and reducing waste.

ECORAX® Nature complements Orion's portfolio of sustainable solutions. With its 100% biogenic content, it is the best choice for customers seeking maximum carbon footprint reduction through a simple raw-material substitution.

To further advance the performance and scalability of these materials, we aim to increase the oil yield of bio-circular feedstocks by at least 50% from a 2015 baseline by 2030 – addressing one of the main technical barriers to wider adoption.

## Packaging

We are striving for circularity in our value chain and have implemented packaging solutions to minimize waste and increase loading efficiency. We are also collaborating with our supply chain partners on the use of sustainable and recycled materials. For details on how we manage our packaging, see page 50.

## Partnerships

Carbon black supports sustainability by making products stronger and more durable. Many products, such as vehicle tires or rubber goods, would simply not be viable without it. In tires, for example, different grades of carbon black provide essential qualities such as wear resistance and stability, so they can last as long as possible. Elsewhere, among its many applications, carbon black enhances the performance of polymers, reinforces mechanical rubber goods and provides high-performance coatings for a wide range of products.

## How Life Cycle Assessment measures impact

To validate the environmental benefits of our circular and bio-circular products, Orion applies Life Cycle Assessment (LCA) methodologies aligned with global standards. Building on this foundation,

LCA, governed by ISO 14040/14044, provides a comprehensive evaluation of environmental impacts throughout a product's life cycle. Within this framework, the Product Carbon Footprint (PCF) serves as a key metric, quantifying a product's Global Warming Potential (GWP) in CO<sub>2</sub> equivalents. This metric is critical for guiding sustainability efforts and informing decision-making across industries.

To translate these principles into practice, we adopt a Cradle-to-Gate approach to assess emissions from raw material extraction through to the point of sale. This enables Orion to identify improvement opportunities and implement strategies to mitigate environmental impacts. Additionally, guidelines from Together for Sustainability (TfS) support accurate allocation of emissions across processes common in chemical manufacturing, including co-products, by-products, and recycle streams.

With this methodological structure in place, Orion can compare the GWP of fossil-based carbon blacks to equivalent circular and bio-circular grades using alternative feedstocks. While carbon black production still generates CO<sub>2</sub> emissions, even with biogenic-based feedstocks, the biogenic carbon stored in the product can contribute to a net reduction of atmospheric CO<sub>2</sub>.

To illustrate these insights, Orion conducted an internal LCA to compare conventional fossil grades with the alternative circular and bio-circular equivalents, both with and

## CASE STUDY

### Following on from the BlackCycle project

Launched in May 2020, BlackCycle was a €16 million EU-funded project aimed at promoting circularity in the tire industry by designing world first processes to produce new tires from end-of-life tires (ELTs). The project established a full value chain – from ELTs to raw materials for new tires – reducing waste and environmental impact. Orion's role was to develop grades of sustainable carbon black, while other partners advanced tire deconstruction, pyrolysis processes, and demonstrator tire production.

The project concluded in October 2024, following successful demonstrator tire evaluations at the final BlackCycle workshop in May 2024. Life Cycle Assessment (LCA) results confirmed that the BlackCycle value chain can significantly reduce climate change impacts compared with alternative end-of-life pathways, such as energy recovery via incineration in cement kilns and chemical recycling. BlackCycle has now progressed from research to commercial implementation, marking a major step toward a circular tire industry. What began as a European innovation project is now delivering circular carbon black at commercial scale across the U.S., Europe, and China.

As a follow-up, Orion invested in its Jasło, Poland plant to enable large-scale use of tire pyrolysis oil (TPO) and successfully launched ECORAX® Circular 200 and 210 in early 2025. Building on this momentum, Orion began production trials using TPO at its Qingdao, China, plant in November 2025, with plans to produce ECORAX® Circular 200, 210, and 215 there. These initiatives demonstrate Orion's commitment to scaling circular carbon black globally and supporting the tire industry's transition to sustainable raw materials.



Learn more at <https://blackcycle-project.eu/>



Circularity *continued*

without accounting for biogenic emissions and removals. For comparison, all results are presented as a percentage relative to the total PCF of reference product (CORAX® N326), set at 100%. The contribution to each PCF is broken down into the stages of biogenic CO<sub>2</sub> removals during biomass growth, upstream raw material production, Orion's plant, and net energy consumption minus surplus energy generated from Orion's cogeneration process.

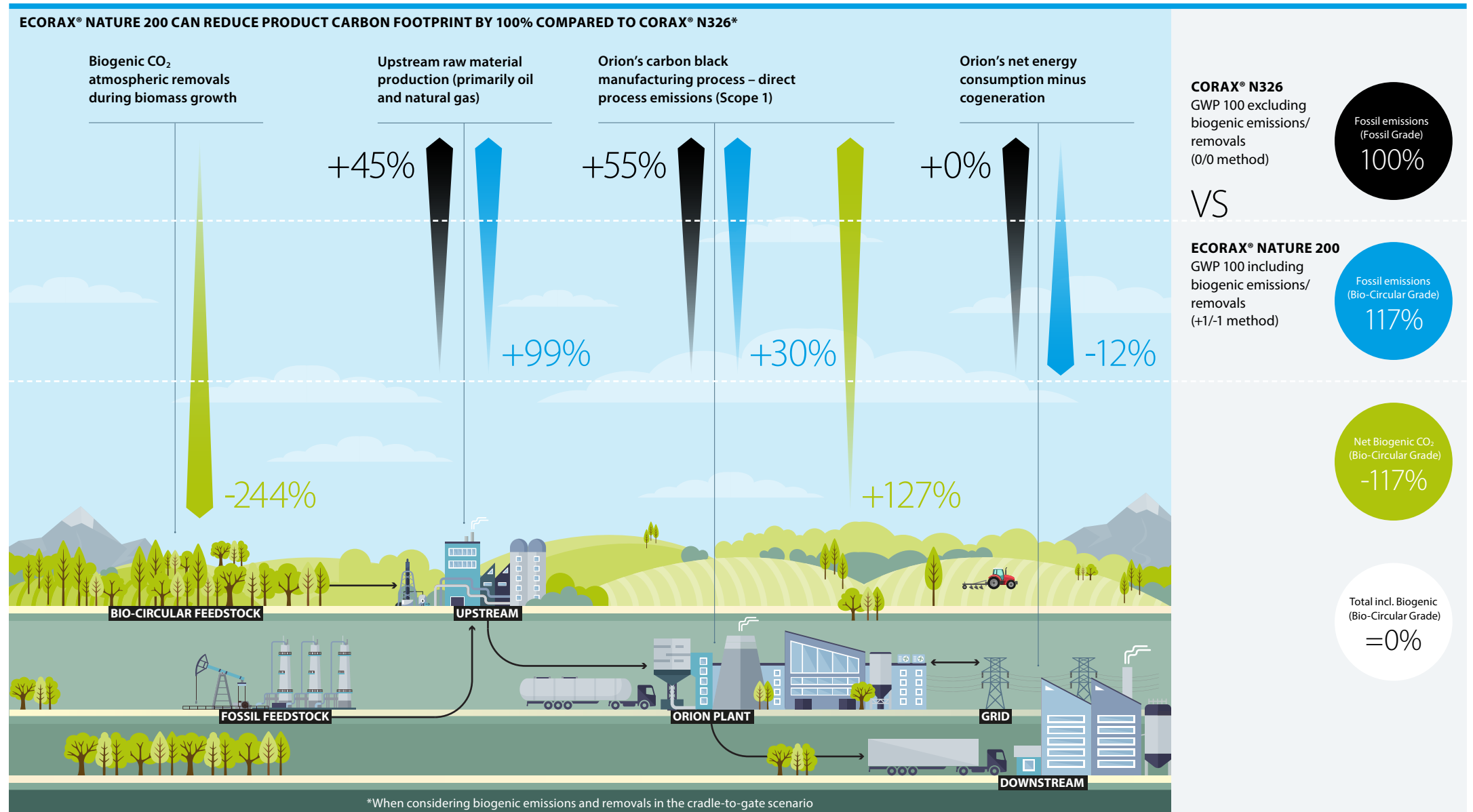
The higher upstream raw material production fossil emissions for the ECORAX® NATURE 200 are from the process of turning pulp industry waste to a usable bio-circular feedstock oil. Emerging technologies mostly operate below commercial scale, which can lead to higher emissions from lack of process optimization and infrastructure, an inherent advantage of the fossil fuel industry. As new technologies evolve, emissions are expected to improve over time.

**Industry leadership through ICBA**

In addition to applying LCA internally, Orion actively contributes to industry-wide standards. In May 2025, the International Carbon Black Association (ICBA) published the first average global furnace carbon black LCA, a major milestone for the industry. Orion continues to play a key role as part of the team developing Product Category Rules (PCR) for carbon black, ensuring consistency and transparency in environmental reporting.



Find more about our work with ICBA here: <https://www.carbon-black.org/>



# Social

//  
 At Orion, our success is rooted in the strength of our people and the culture we create. By valuing and leveraging different perspectives and creating an environment of respect and growth, we empower our people to share, collaborate, innovate, and reach their full potential.”

**PAT TUTTLE**  
 SVP, Global Human Resources

**IN THIS SECTION**

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Talent development	36
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Occupational health and safety	39
Product quality, safety and stewardship	40

**OTHER TOPICS**

Human rights	41
Community impact	42

<b>SOCIAL</b>	2025	2024	2023
100% of employees trained annually	100%	100%	100%
DAFW	0.06	0.29	0.23
TRIR	0.18	0.35	0.34

# Our approach

Our deep commitment to our people and social responsibility is central to our identity as a company. Employees are the foundation of our business, and our ongoing success relies on ensuring everyone feels engaged, enabled, valued and empowered.

## 2025 ACHIEVEMENTS



### Learning and development

Expanded local leadership training programs with launch of new leadership training program in Brazil conducted in Portuguese.



### Career progression

Introduced five new role-based training programs tailored to specific competency frameworks and proficiencies, ensuring employees have the skills needed to excel in their roles.



### Employee survey results

Continued improvement in employee effectiveness trend with 58% of 2025 employee survey participants responding as both highly engaged and highly enabled (compared to 55% for the prior survey).

### Expanded employee benefit offerings

Introduced several new employee benefit programs in 2025, including expanded parental leave benefits, additional employer-provided health care options, and a gym membership program.

### Strong safety performance

Orion recorded a 2025 TRIR of 0.18 – nine times better than the chemical manufacturing industry average of 1.6 – with only three employee injuries worldwide. This was the Company's second-best safety performance on record, just behind its 2017 TRIR of 0.17.

We focus on cultivating a positive workplace culture, promoting an inclusive, learning and challenging professional environment, and supporting employees' career growth and work-life balance. Beyond our organization, we are dedicated to being a valued and trusted partner in the communities where we operate and upholding safe and ethical working practices across our business and supply chain.

Our social strategy covers the following areas:

#### – Talent development

Striving to be an employer of choice, providing interesting and challenging work with competitive rewards and benefits. Offering learning and development opportunities, work-life balance, and a welcoming and inclusive environment where everyone can belong, grow and thrive.

#### – Occupational health and safety

Protecting our employees and contractors.

#### – Product safety, quality and stewardship

Taking action to ensure the manufacture, sale, transportation and use of our products comply with applicable legal requirements.

#### – Human rights

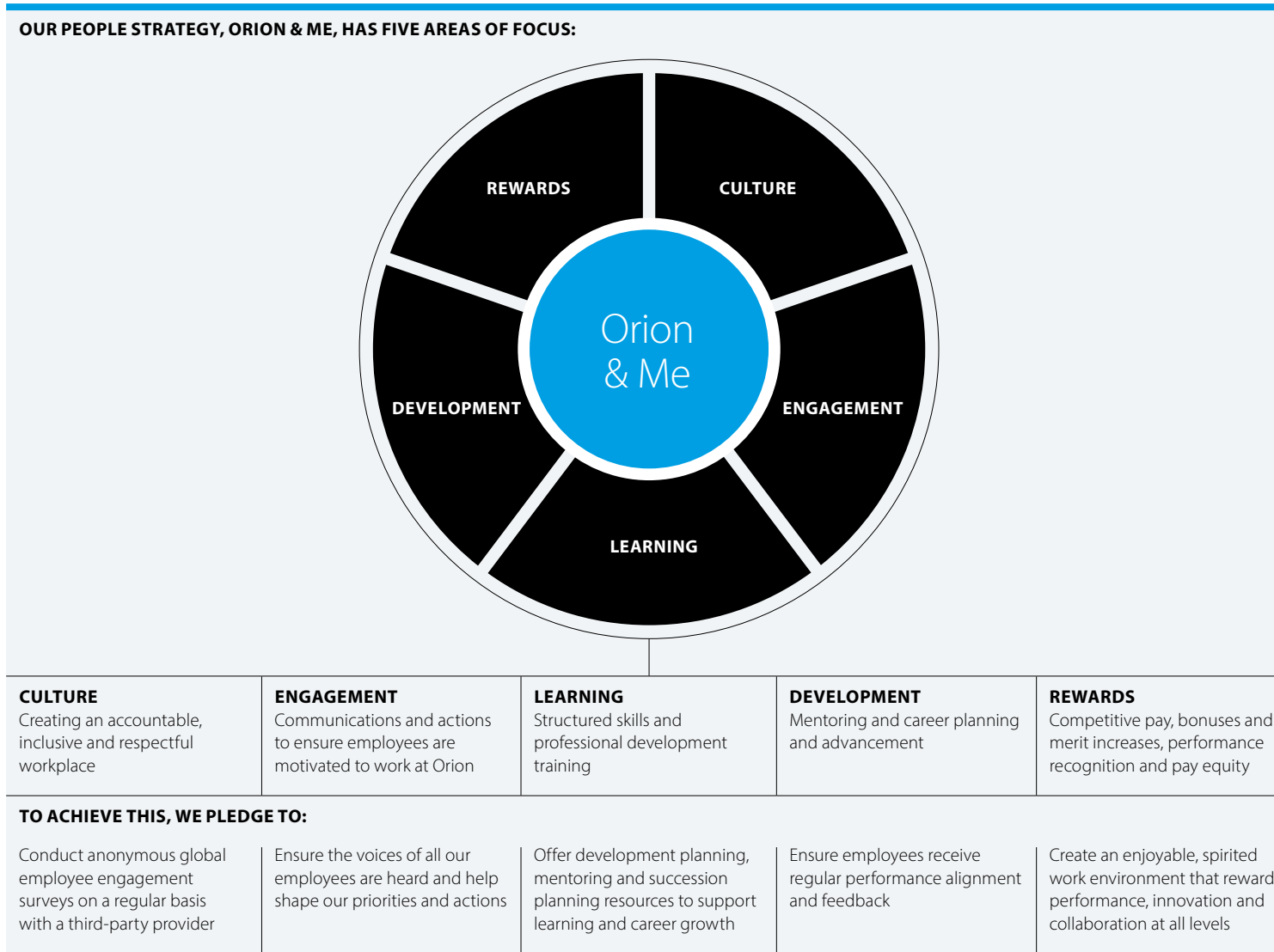
Supporting and promoting human rights throughout our value chain.

#### – Communities

Enhancing knowledge, prosperity, health and quality of life in the communities where we live and work.

# Talent development

We aim to create an inclusive culture where our employees are informed, engaged and enabled to do their best work. We provide opportunities for learning and personal growth in an environment where creativity and innovation are encouraged.



Talent development *continued*

**Employee engagement**

At Orion, our people are at the heart of everything we do. Every 18 months, we conduct an employee engagement survey delivered by a trusted third-party provider. The survey is available in local languages and fully anonymized to ensure honesty and transparency. This process gives us an opportunity to listen, learn and act on what matters most to our teams. Measuring engagement is critical to supporting employee satisfaction and retaining top talent. In 2025, the feedback reflected resilience and commitment, even in a year marked by market challenges. We achieved an outstanding 81% (up 6% over the prior survey) response rate, a clear sign of a healthy engagement culture and confidence in the process.

The results highlighted meaningful progress. Over the past few years, we have expanded and improved our learning and development programs, and this investment has paid off as we continue to see higher scores in the quality of training programs, career development opportunities, mentoring, and the valuable feedback provided through our performance management programs. We saw record scores with 71% of employees responding as favorably engaged (the “want to”) and 76% as favorably enabled (the “can do”). When combining the two, a record 58% of employees reported feeling both highly engaged and highly empowered.

In the 2025 survey, internal mobility also stood out as a strength – 38% of non-entry-level open positions were filled by Orion employees, nearly double the industry norm. This demonstrates our commitment to creating career pathways and developing talent from within. At the same time, the survey identified opportunities for improvement, including work structure, processes, customer focus and leadership. We are actively exploring and developing programs to address this feedback and will continue to communicate openly as we implement changes.

**Development**

At Orion, we believe that strong leadership is essential to building a resilient and sustainable organization. Developing leaders is not just about filling roles, it is about empowering individuals to guide teams, drive innovation and uphold our values in a rapidly changing world. Our approach combines structured programs with personalized support to ensure every leader has the tools to succeed.

To achieve this, we offer:

- Individual Development Plans tailored to career aspirations.
- A mentoring program that fosters knowledge sharing and growth.
- Succession planning to prepare for future leadership needs.

We have three flagship leadership programs:

- Emerging Leaders – preparing high-potential talent early in their careers.
- Orion Leadership Academy – equipping managers with advanced leadership skills.
- Leaders of Leaders Agile Management – supporting senior leaders in driving transformation.

These initiatives reflect our commitment to investing in people and creating pathways for growth at every level of the organization.

**Employee benefits**

Our benefits package reflects our commitment to supporting employees and their families across our operations. Benefits provided to full-time employees in significant operations include:

- Health care
- Life insurance
- Disability
- Employee Assistance
- Retirement
- Vacation/Holiday
- Family/parental leave
- Education/Tuition reimbursement
- Service awards
- Bonus opportunity

**2025 engagement survey**

81%

of employees completed the 2025 employee engagement survey.

**Average training hours per employee year**

40hrs

**Voluntary turnover rate**

We maintained a

4%

voluntary turnover rate in 2025.

**Performance reviews**

95%

of eligible employees received an annual performance review.

**CASE STUDY**

Orion’s Green Belt Initiative

Participants across multiple regions took part in a two-week training course focused on technical Lean Six Sigma knowledge. The program also covered leadership skills to enable our business processes and plants to better identify and execute projects and deliver results. This training was the first step in the certification process for participants. Those on the course have projects ongoing in Innovation, IT, HR, Quality, Project Execution, Operational Excellence and in our plants. The impact of these projects ranges from the following:

- IT software for operators
- People analytics process improvement
- Statistical process control in quality labs
- Stability of process control in reactors

As Orion continues to grow skills and knowledge in Continuous Improvement and Lean Six Sigma, we will make further opportunities for development in key skills such as root cause analysis, cause mapping, 5S for manufacturing and non-manufacturing, and more.”

**VICTORIA OYENEKAN**  
Global Lean Six Sigma Black Belt



# Orion & Me

We are a global organization where regardless of location, language, gender or orientation, our employees are empowered to express opinions, own their processes, take decisions and be responsible for their actions.

Orion & Me is focused on people and on building an inclusive and accountable culture. Its programs bring together mentoring, training, awareness programs and employee resource groups to drive innovation, enhance decision-making and create a workplace where employees feel valued and engaged.

### Love HR, Hate Racism

Our HR team uses this platform to network with other companies and learn and share best practice to ensure there is no room for racism or exclusion in corporations.



Orion's laboratory in Carlstadt, New Jersey.

### Employee resource groups EmpowHER

This Orion Employee Resource Group advocates for women in the workplace, celebrates successes and equips colleagues to better support the women they work with. The group holds various training, networking and awareness sessions, including a session with Kerry Galvin, a member of our Board of Directors, where she highlighted her journey and how she found success in her own way.

### Society of Women Engineers

Orion supports this advocacy group that aims to empower women to achieve their full potential in careers as engineers and leaders. We sponsor membership and send our female engineers to national delegations and conferences to represent Orion. We also sponsor students to participate in the Society's various programs.

### Women in Science

Orion supports this advocacy group that aims to raise broad awareness and ensure the voice of women scientists is widely heard.

## CASE STUDY

### My position is top-notch

Getting young people interested in the chemical industry and Orion is crucial for the future of our industry and business. One way Orion lives our values is by participating in the "Meine Position ist spitze" initiative in Germany. The initiative enables students to spend a day working as an executive at a chemical company. Orion joined 25 other chemical companies to host 44 students as they shadowed leaders for a day. Students gained insights into our work processes, key issues and critical strategies for our industry. It was an opportunity to showcase a particularly wide variety of career paths for students aged 16 and older, as they shadowed managers first-hand, giving them practical insights into the chemical industry.



This is yet another great opportunity for Orion to show leadership in the community and gives interested students a real-life perspective of what it means to be a leader in the chemical industry. Our leaders benefit too, as it is a natural opportunity for them to build and develop their mentoring skills with the next generation."

#### MARC SCHMIT

Director, EMEA Human Resources



# Occupational health and safety

At Orion, occupational health and safety are fundamental to our core values. Safety is ingrained in our culture, and we integrate robust protocols and training programs to eliminate or reduce risks to our workforce, communities and the environment in which we operate.

We are dedicated to ensuring a safe and healthy workplace for our employees and contractors, striving each year to achieve zero recordable incidents, lost time cases, and process safety events. Our operational safety standards and procedures are anchored in globally recognized frameworks, including ISO 45001, ANSI/ASSP Z10.0, and OSHA VPP. Comprehensive risk assessments have been conducted across our operating sites in accordance with local rules and regulations – for example, in Germany, employers must perform a job safety analysis for every ordered task. These assessments ensure that applicable rules and best practices are formalized within our operating manuals.

As part of our ongoing commitment to advancing safety, we are implementing Responsible Care Certification 14001 across our Americas plants and maintain membership with the American Chemistry Council (ACC). All these efforts are covered by our extensive, well-maintained, and continuously updated Global Management System (GMS) – a unified framework that drives consistency, accountability, and continuous improvement across all operations.

Before any maintenance or site activity begins, our work permit process includes a thorough safety analysis and definition of respective risk control measures. This ensures all personnel are fully informed of potential hazards and that the necessary precautions are in place to create a safe working environment.

We actively report and analyze near misses to strengthen our safety rules and procedures, fostering a culture of continuous improvement. Our safety protocols are consistently updated to align with best practices and evolving industry standards. Recognizing that safety is a shared responsibility, operating sites maintain joint management-labor safety committees,<sup>13</sup> ensuring employee representation and active participation in shaping safer workplaces.

## WE ENGAGE EMPLOYEES IN THE FOLLOWING AREAS:

- Improving access to work permits.
- Transparent reporting of near miss, root cause elimination and small losses of primary containment (LOPC).
- More focused and effective action to eliminate incidents.
- Ensuring a timely response time to employee safety concerns.
- Improving mechanical integrity and accelerating access to equipment upgrades.
- Encouraging employees to confidently address and provide feedback on unsafe behaviors, whether observed in peers or supervisors, as an act of caring and shared responsibility.

Our people are critical to our success and sustainability as a business. We continue to uphold best-in-class standards that safeguard employees and communities.



To read more about EHS compliance and governance, please refer to page 47.

## TRIR (per 200,000 hours worked)

0.18

## DAFW (per 200,000 hours worked)

0.06

## Total incidents that occurred in 2025

1  
lost time injuries

3  
OSHA recordable injuries

0  
fatalities

Employees are encouraged and empowered to report safety concerns via our Benchmark Gensuite® EHS platform, where issues are tracked by EHS and plant managers. This reporting process is critical to maintaining a safe work environment. We aim to resolve all concerns within 30 days, and any outstanding issues beyond this timeframe are monitored in our global monthly report.

To reinforce transparency and shared learning, we also conduct a monthly global incident review call, where EHS performance and individual incidents are discussed across sites. This ensures timely communication, accountability and continuous improvement. In addition, all sites have begun implementing Behavior-Based Safety (BBS) programs, empowering peer-to-peer job safety observations that help reduce at-risk behaviors and strengthen our safety culture.

Service contractors are governed by our GMS standards and procurement procedures. We use the Avetta platform to ensure that service contractors performing high-risk work meet our safety and environmental criteria. If a contractor falls below our required safety standards, an action plan and approvals from both EHS and operations managers are required. New suppliers are evaluated through Avetta and/or internal pre-qualification process to ensure they comply with our safety expectations.

To maintain high safety standards, we conduct regular training for employees and contractors, as well as EHS compliance audits to prevent any procedural or substantive gaps. We continue to strengthen our GMS standards and process safety practices, building a collaborative and sustainable safety culture that empowers our workforce to take an active role in keeping our workplaces safe.

Orion provides comprehensive occupational health services across all plants, including medical advice and examinations for new employees. When needed, we engage third-party medical experts to support job structuring or restructuring to accommodate specific medical needs, whether short-term or acute. Each site has dedicated EHS personnel to facilitate communication on health issues and ensure employee concerns are addressed promptly.

Beyond occupational health, Orion promotes overall worker wellbeing by offering healthcare programs to full-time employees in significant operations. In addition, we provide voluntary health promotion services to address major non-work-related health risks, such as programs for stress management, nutrition, smoking cessation, and physical fitness. These services are accessible through on-site initiatives, digital platforms and partnerships with external providers, ensuring employees can easily participate and benefit from these programs.

13. Joint management-worker health and safety committees exist in certain locations. For example, in Germany, regular safety meetings (four times per year) are mandated by national regulations and a managing director or deputy/delegate, legally certified safety engineer, medical and safety officers, and representatives of the workers council must participate. To document these meetings, official minutes must be taken with listed participants, subjects discussed, and actions derived. Meanwhile all sites in the U.S and Brazil conduct safety meetings with plant employees.

# Product quality, safety and stewardship

Orion takes a comprehensive approach to ensuring that the manufacture, sale, transportation, and use of our products comply with all applicable legal requirements.

Our carbon black products are specifically designed to be safe for handling and use, fully compliant with legal regulations, free from significant risks to human health and the environment, and optimized for superior performance in customer applications.

To maintain product integrity, we implement rigorous process controls, conduct shipment sample testing, and follow a structured change management process. This ensures that any modifications – such as new machinery or process adjustments – do not negatively impact product quality or performance. We regularly assess customer requirements and conduct periodic reviews to confirm regulatory compliance. Additionally, in-application testing is performed at regular intervals to verify product consistency and performance.

Our adherence to ISO 9001 standards ensures we maintain site-specific, regionally or globally aligned processes that support product consistency, continuous improvements and responsiveness to customer feedback.

Across all production sites, we follow global management standards for product testing and evaluation, with internal and external audits conducted periodically to assess and refine our processes.


We closely monitor the quality and safety of our products to ensure they meet all regulatory requirements while providing detailed product information. In collaboration with research institutes and universities, we stay at the forefront of developments in product quality, safety and health. We also supply

comprehensive regulatory information, including best practices for safe handling, storage and use.

Safety data sheets for all our products are accessible on the Orion website, available in multiple languages for all the regions and countries we supply. In 2025, 100% of Safety Data Sheets were provided to customers.

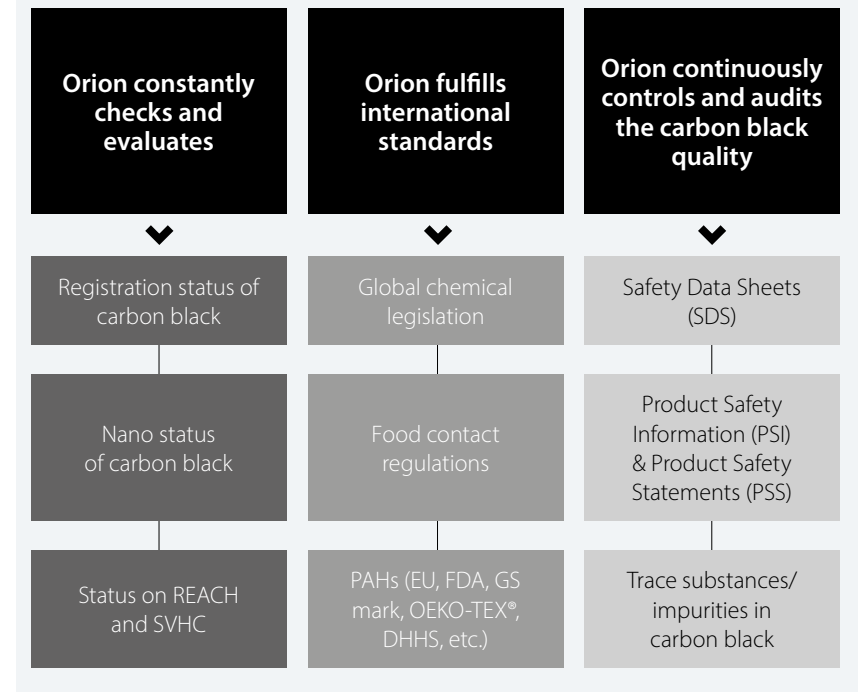
Product Stewardship is overseen by our Environment, Health, and Safety team, while the Quality function is managed either by the Quality team or site

management, depending on the issue. Any negative feedback undergoes thorough root cause investigation, and confirmed complaints are addressed through a “quality alert” system, ensuring proper documentation and communication across all sites.

 Safety data sheets for all our products are available on the Orion website



## PRODUCT QUALITY FRAMEWORK



**100%**  
of Safety Data Sheets were provided to customers.

# Human rights

While the topic of human rights was not found to be material through our double materiality assessment, we believe our long-term business success will only be achieved if human rights are acknowledged, respected and protected. Therefore, we continue to ensure strong human rights practices, setting a high bar for ourselves and our value chain, and we monitor potential risks.

Our Human Rights Policy sets out the principles embedded in our business operations, values and culture to ensure Orion does not engage in activities that directly or indirectly violate human rights. We respect and support international standards of human rights, social, cultural and labor rights. In addition to our Whistleblower policy, which aims to create a safe and comfortable working environment that fosters healthy and productive relationships, Orion grievance mechanisms are determined on a local regulatory basis.

We aim for:

- Zero fair bargaining violation findings.
- Age verification for all employees upon hire.
- Annual competitive pay practices benchmarking.

Touring New Plant in La Porte, Texas.



## Standards

The following global standards are embedded in our policy and practices:

- The United Nations Guiding Principles on Business and Human Rights.
- The United Nations Universal Declaration of Human Rights.
- The International Labour Organization's Declaration on Fundamental Principles and Rights at Work.
- The International Covenant on Civil and Political Rights.
- The International Covenant on Economic, Social and Cultural Rights.
- OECD Guidelines for Multinational Enterprises.

## Principles

We adhere to human rights principles in many areas including:

- Ethical business conduct.
- Safe and healthy workplace.
- Forced labor and human trafficking.
- Freedom of association and collective bargaining.



See our Human Rights Policy for further detail. Employees, business partners, customers and other stakeholders are invited to report violations of our human rights policy via our Whistleblower Portal.

Touring New Plant in La Porte, Texas.



# Community impact

Earning and maintaining the trust and acceptance of our local host communities is essential for our business continuity and our license to operate.

While community impact was not found to be material through our double materiality process, we are committed to contributing to community development and to engaging with our local neighbors and other stakeholders transparently and on an ongoing basis.

Our charitable giving policy is designed to strengthen connections between our sites and the communities where we operate while also helping to protect our license to operate. Additionally, we support groups such as emergency responders, who play a vital role in our operations but may not benefit directly from them. Our charitable giving budget is determined as a fixed percentage of our budgeted adjusted EBITDA. Under this policy, each site develops its own local community engagement plan to ensure our initiatives are aligned with the specific needs of the community.

We support local communities in three ways: through direct donations, by matching employee contributions to approved beneficiaries, and by encouraging employee volunteering. Beneficiaries are selected at the site level and shared with regional and group controllers, as well as our Chief Compliance Officer.

In 2025, 86.7% of our sites engaged in charitable giving vs. a target of 100%.

## DISTRIBUTION OF CHARITABLE GIVING IN 2025

### Community support

79%

### First/emergency responders

4%

### Charitable organizations

14%

### Others

3%

/// Earning and maintaining the trust and acceptance of our local host communities is essential for our business continuity and our license to operate."

**JOCHEN ROTHER**  
Head of Corporate Sustainability

## CASE STUDIES

### Mobilizing help: Supporting vulnerable communities in Italy

Our plant in Ravenna continued its long-standing collaboration with and support of "Pubblica Assistenza", the city's public assistance service, which began with the funding of an ambulance for local use. This year, the team financed a nine-seater minibus, suitable for transporting non-self-sufficient people (a free service for indigent people), service personnel, and – critically – emergency teams in the event of disasters or serious incidents. Equipped with a tow hook for transporting emergency equipment, the minivan was handed over to city authorities at an official ceremony in November 2025.



### Hand in Hand for hope: Orion joined youth empowerment effort

Orion recently participated in a Youth Aspiration Camp hosted by the Qingdao Hand in Hand Dream Fulfillment Charity Service Center, a local organization dedicated to supporting orphans and vulnerable children. Our colleagues donated food for the event along with much-needed school supplies. The camp, which supports orphans aged 10 and above, welcomed more than 400 children and volunteers for a day of interactive educational activities designed to motivate, build confidence and spark curiosity. Prizes for the sessions were donated by caring members of the community, creating a warm and encouraging environment for every child involved.



Community impact *continued*

**CASE STUDIES CONTINUED**

## Supporting youth development at Ravenna

In 2025, the Ravenna plant committed to sponsoring the Guidarello Giovanni award, a long-running initiative that connects local schools with businesses and helps students explore the world of work. The program encourages young people to develop new skills, sharpen critical thinking and creatively portray the companies they visit through reportage-style storytelling.

The initiative involved 350 fourth-year high school students from across the province, representing 11 institutes and 20 classes involved. Students visited companies throughout the region and produced reports capturing their experience from their own perspective. The award ceremony, attended by local authorities and Confindustria representatives, also included participation from Dr. Maria Assunta Taccone, financial manager of Orion Ravenna – underscoring the plant’s commitment to investing in future generations.



## Investing in Education: Supporting teachers and students in La Porte, Texas

Teachers should not have to spend their own money to buy supplies for their classrooms. Unfortunately, many do in the U.S. because school budgets are so tight. Orion is working to change this in La Porte, Texas – the site of our next plant – by supporting the La Porte Education Foundation. The organization collects donations from industry and uses the funds to provide microgrants to teachers to buy books, software, lab equipment and other items for their classrooms. This year, more than \$140,000 was raised from local industry for more than 100 classroom grants, impacting thousands of students. Orion contributed \$5,000 in 2025.

In October, the Foundation organizes what it calls the “Dollar Patrol.” Teams of school officials join representatives from companies that donated money. They go from school to school, surprising the grant-winning teachers by visiting their classrooms and handing out big checks. Orion representatives presented a \$500 check to third-grade teacher Cori Ripley, who applied for a microgrant to buy headphones for her students so they can be successful with their reading program.

“Our children need headphones with microphones nowadays, and their parents have a hard time buying them. The \$10 ones you buy at Walmart, they don’t work. They don’t acknowledge the students’ voices when they’re reading into them. We need some better-quality ones, and they’re hard to come by.”

**CORI RIPLEY**  
Third-grade teacher



## Day of Caring at Orion Orange in Texas

Every year, Orion’s Orange plant partners with local organizations to give back to the community through the Day of Caring event, organized by United Way – a global network of non-profit organizations dedicated to supporting education, financial stability, and health in local communities across the U.S.

This year, our team volunteered to enhance the local youth soccer fields. Orion contributed by installing new goal netting, building a safety fence, and refurbishing picnic tables to create a more welcoming and enjoyable space for families and players.

The project aimed to improve an area where local youth can play and families can gather, fostering community spirit and promoting healthy, active lifestyles. Events like this strengthen the bond between our plant and the community, and we are grateful for the opportunity to make a positive impact.



# Governance

“At Orion, ethical conduct and compliance are essential. We uphold transparency, integrity and ethical principles as core standards in our interactions, within the Company and beyond.”

**CHRISTIAN EGGERT**  
SVP, General Counsel and Chief Compliance Officer

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## ENTITY-SPECIFIC MATERIAL TOPICS

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GOVERNANCE	2025	2024	2023
95% of employees receiving compliance training	100%	100%	100%
60% of targeted suppliers based on spend covered by assessments or other recognized third-party assessments by 2029	46%	53%	25%
90% annual average participation rate in Orion’s cybersecurity awareness training program <sup>14</sup>	95%	–	–

14. Metric publicly disclosed for the first time in reporting year 2025.

# Our approach

We believe that integrity is the foundation of stakeholder trust, which is essential to our long-term business success.

This integrity is expressed through our commitment to compliance in the way we conduct our business. We expect a high degree of social, legal and ethical compliance from all employees and those with whom we do business. Orion does not tolerate corruption, bribery, fraud, money laundering, anti-competitive practices, conflicts of interest, child labor or threats to information security.

## Governance structure

The Board of Directors of Orion Group is the Group's highest decision-making forum and acts also as a supervisory body. The Board of Directors advises our senior executive management and oversees its conduct. Board members are elected by our shareholders at the Annual General Meeting. The Board performs its tasks partially through dedicated committees, including the Nominating, Sustainability and Governance Committee. This Committee oversees environmental, social and governance (ESG) matters and makes recommendations to the full Board. The Chief Compliance Officer and the Head of Sustainability keep the Board of Directors regularly updated on the progress of corporate sustainability, legal developments and trends in sustainability.

Our CEO is accountable to the Board for sustainability and has the mandate for strategy, risk management, opportunity capture, the setting of targets, and the monitoring and reporting of our performance and progress, resource allocation and culture. The CEO is supported by direct reports who ensure that the Board-mandated responsibilities connected to sustainability are embedded in our wider global management framework as well as into our compensation approach.

### OUR GOVERNANCE STRUCTURE



Further information on the composition of the Board, its committees and responsibilities can be found on our website and within our Corporate Governance Guidelines.

## Integration of sustainability into Orion's management framework

Until November 30, 2025, the Head of Corporate Sustainability reported to the Company's CFO. As of December 1, 2025, he reports to the Company's Chief Technology Officer to further strengthen the alignment of our Sustainability priorities with technology, product development and innovation. The Head of Corporate Sustainability liaises regularly with the Board's Nominating, Sustainability and Governance Committee. He is responsible for executing the Company's Sustainability strategy and for the monitoring, reporting and disclosure of Group-wide sustainability activities. He receives feedback from functions across the business to confirm that the ESG strategic framework is embedded.

### – Managers

ESG aspects are incorporated into short- and long-term performance incentives. Our environmental health and safety (EHS) department reports to the Senior Vice President of Global Operations and is active at all Orion sites.

### – Employees

ESG targets are a factor in the Group's annual bonus program, in which our employees participate (except in South Korea, where the annual bonus program is governed by a collective bargaining agreement). ESG aspects of incentive plans are linked to our EcoVadis score so that they can be independently evaluated.

### – Operational and financial targets

Targets are oriented toward the reduction of CO<sub>2</sub> emissions. The more carbon black that can be produced from our feedstock, i.e., the higher the yield, the less carbon is emitted as CO<sub>2</sub> into the atmosphere.

### – Processes

ESG risks are systematically integrated into our risk management system and undergo ongoing evaluation and differentiation. This is done for extreme weather events, for example, but also for other climate risks that are critical to our business model. We also integrate social risks, e.g., the shortage of skilled labor, vocational training gaps and the management of health and safety.

# Business ethics and compliance, corporate culture and risk management

The level of risk and the legal compliance standards can vary from country to country in which we operate or do business. For matters such as the prevention of corruption, we believe that it is important to have an enhanced, strict common standard that uniformly applies globally to all of Orion and meets or exceeds local requirements.

In addition to general adherence to laws, we have codified best practices into a Code of Conduct. This code applies to all Orion employees and associated individuals who provide services for or on behalf of Orion. In addition to our Code of Conduct, a Supplier Code of Conduct specifically targets the suppliers we work with.

Compliance is assured through proactive engagement at all levels of the organization, starting with our CEO and Board of Directors, and the compliance controls in place, as well as verification processes, which include internal audits. We have a whistleblower program (managed by our General Counsel in his responsibility as Chief Compliance Officer) that assures anonymity of whistleblowers for countries in which this is allowed. We also verify compliance with the Code of Conduct through a semi-annual certification process in which Regional Compliance Officers report on issues of concern if any. These matters are analyzed, and appropriate actions are taken where warranted, including investigations. Our compliance is regularly reviewed by management and, depending on the topic, reported to the Audit Committee or the Nominating, Sustainability and Governance Committee of the Board of Directors.

Material concerns are reported to the Audit Committee quarterly. There was one material concern reported in 2025.

We conduct mandatory compliance training for all employees, including annual web-based training and (as far as feasible) regular, recurring classroom training. Compliance training is conducted by Orion's legal department, in some instances with the support of local legal counsel, under the supervision of the Chief Compliance Officer. It is designed to familiarize our employees with the Code of Conduct, our compliance management system and the most important policies accompanying it, such as the anti-bribery, anti-trust and insider trading policies. Our goal is to enhance the awareness of potential risks. We aim for 100% of our workforce to attend compliance training each year but have set our target at 95% to account for computer access and employees in transition. In 2025, 100% of our employees received a compliance training.

Our Board has adopted a Code of Ethics for Senior Financial Officers, applicable to the Chief Executive Officer, Chief Financial Officer and Chief Accounting Officer, in order to:

- Promote honest and ethical conduct including the ethical handling of conflicts of interest.

- Promote full, fair, accurate, timely and transparent disclosure.
- Promote compliance with applicable laws and governmental rules and regulations, NYSE Rules, accounting standards and Company policies.
- Deter wrongdoing.

The Code of Ethics for Senior Financial Officers is complemented by the Company's Clawback Policy, which applies in the event of material misstatements in our financial reporting. In addition, our Board has adopted Corporate Governance Guidelines which describe the Board's view on several governance topics. The Corporate Governance Guidelines, along with the charters of the Board committees and the Company's Code of Conduct as well as the Company's Code of Ethics for Senior Financial Officers, provide the corporate governance framework of Orion. Our Corporate Governance Guidelines and the Company's Code of Ethics for Senior Financial Officers can be found under "Investors and Corporate Governance" on our website.

## 100%

All employees were trained on anti-bribery and anti-corruption policies in 2025

## IMPLEMENTATION OF POLICIES

Our policies are aligned to meet international standards, regulation and frameworks. These are reviewed annually and updated as required.

List of policies:

- Code of Conduct
- Supplier Code of Conduct
- Code of Ethics for Senior Financial Officers
- Insider trading policy
- Anti-corruption policy
- Anti-trust policy
- Human rights policy
- Whistleblower policy
- Conflict minerals policy
- Political contributions policy
- Regulation FD policy
- Clawback policy
- OEC Governance Documentation



Our policies can be found online here

## Business ethics and compliance, corporate culture and risk management *continued*

### Creation of nine policies aligned with ESRS

As part of Orion's commitment to transparency and compliance with the European Sustainability Reporting Standards (ESRS), we have developed nine additional policies addressing the material topics identified through our double materiality assessment. These policies establish clear governance structures, responsibilities and processes to ensure that sustainability considerations are embedded across our operations and decision-making on these topics. The material topics covered by these policies include areas such as climate change, pollution, own workforce, customer and end-users<sup>15</sup> among others. Each policy is designed to meet ESRS disclosure requirements, ensuring that our reporting is robust, comparable and aligned with regulatory requirements.

### ESG target streamlining exercise

Following the creation of these policies, Orion performed a target streamlining exercise to align all ESG targets with the material topics defined in our double materiality assessment. This process ensures that:

- **Relevance**  
Every ESG target directly supports one or more material topics, eliminating redundant or non-material objectives.
- **Consistency**  
Targets are harmonized across business units, creating a unified approach to sustainability performance.

### – Transparency

Clear publishing rules have been established for all targets, to guarantee accurate and timely disclosure

The results of this exercise were presented to the Sustainability Committee and the Board of Directors for their approval. This alignment strengthens our ability to deliver meaningful impact, enhances stakeholder trust, and positions Orion in advance for the future sustainability reporting under ESRS.

### Environmental Health and Safety (EHS) compliance

We maintain continued compliance with the Orion Global Management System (GMS) EHS standards, which are designed to uphold high EHS performance globally in our plant operations, and to meet or exceed local standards and regulations. Each manufacturing site has an EHS Manager and additional EHS professional staff are available depending on the size and complexity of the site. Each area also has a Regional EHS Manager who is supported by the Global EHS organization.

To identify and assure compliance with applicable regulatory requirements, each site's EHS team uses a range of tools, including:

- Access to EHS regulatory websites, industry associations and internal subject-matter experts.
- Annual regulatory compliance self-assessments as required by the applicable GMS standard.

- Periodic compliance assessment conducted by the Regional EHS Manager and the Global EHS organization.

- Monthly Compliance checks regulated by our compliance calendar in Benchmark Gensuite®.

- Frequent interaction between the site EHS team and global EHS organization.

Self-assessments and internal audits are supplemented by third-party audits, whose results are reported to the Orion executive leadership team, documented, and tracked for timely closure. Global EHS compliance audits typically focus on environmental, occupational and process safety systems. The frequency of these audits ranges from one to three years, depending on the size and complexity of the operation and the corresponding level of EHS risk. The audit protocols are periodically reviewed by Orion and external EHS experts and updated where necessary to incorporate changes.

All internal and third-party findings are classified as either regulatory or non-regulatory findings and tracked in a database. If issues are identified, there is a rigorous audit closure tracking process in place that involves assignment of individual accountability, a fixed period for closure and continual status tracking until the audit finding has been closed. All our manufacturing sites are certified to ISO 9001 and ISO 14001 and undergo the required internal and third-party audits.

### Investigation and corrective measures

All EHS incidents within Orion are considered important and are investigated as needed to prevent recurrence. Incidents are reported, evaluated according to severity to determine the appropriate classification, and investigated to determine the root causes. Incident learnings are summarized and communicated with the appropriate work group and the corrective actions are tracked to closure through Benchmark Gensuite®, an electronic database that facilitates an incident management system. This system is searchable by all employees so that they can learn from incidents at other sites.

The most significant incidents are discussed globally on a monthly basis to support the investigation process, share learnings and to get additional insight and suggestions from plants with similar experience. Investigation report information is automatically retained in the database and can be mined for trend analysis to be used for continual improvement in our facilities around the world.

### EHS governance

The CEO has set the expectation of creating a healthy and safe working environment for everyone who works at any of our operating, research & development, and administrative sites. The Head of Global Operations, supported by the EHS function, is responsible for establishing the standards, procedures and rules that must be observed at all

operating Orion sites. Safety performance is monitored globally and locally, and corrective actions are taken where warranted. Site leaders are responsible for overseeing EHS performance at their respective sites, supported by EHS professionals and subject matter experts. Safety performance forms a component of the executive team's performance reviews, which take place at regular intervals.

Safety incidents are reviewed by the operations function and the EHS function with a view to ensuring that corrective actions are taken not only at the site in question, but also at other sites where applicable. Significant safety issues are reported to and reviewed by the CEO and the Board of Directors.

Our long-term target is to maintain a culture that is characterized by strong teamwork and a commitment to safety performance, supported by interdependent collaboration between employees and leadership.

Orion's facility in Belpre, Ohio.



15. These topics use the ESRS language.

Business ethics and compliance, corporate culture and risk management *continued*

**THE WORLD ECONOMIC FORUM RISK REPORT 2026: GLOBAL RISKS RANKED BY SEVERITY, SHORT-TERM (2 YEARS) AND LONG-TERM (10 YEARS)**

**Short-term (2 years)**

1st	Geoeconomic confrontation
2nd	Misinformation and disinformation
3rd	Societal polarization
4th	Extreme weather events
5th	State-based armed conflict
6th	Cyber insecurity
7th	Inequality
8th	Erosion of human rights and/or civic freedoms
9th	Pollution
10th	Involuntary migration or displacement

**Long-term (10 years)**

1st	Extreme weather events
2nd	Biodiversity loss and ecosystem collapse
3rd	Critical change to Earth systems
4th	Misinformation and disinformation
5th	Adverse outcomes of AI technologies
6th	Natural resource shortages
7th	Inequality
8th	Cybersecurity
9th	Societal polarization
10th	Pollution

**Risk categories**

■ Economic 
 ■ Environmental 
 ■ Geopolitical 
 ■ Societal 
 ■ Technological

**Risk management**

In its Global Risks Report 2026, the World Economic Forum (WEF) highlights a clear shift in global risk exposure: while the most severe short-term risks are driven by geopolitical tensions, societal polarization and misinformation, the long-term outlook is dominated by environmental threats. Over the 10-year horizon, five of the top 10 global risks – including extreme weather events, biodiversity loss and critical changes to Earth’s life-support systems – are environmental in nature. This perspective is important when reviewing our risk-management strategy and considering both short- and long-term impacts.

Risk management at Orion is a defined process of identifying, assessing and prioritizing potential risks, then working to mitigate or circumvent those risks by actively monitoring, managing, controlling and reducing their probability. Our goal is to focus on preventing or minimizing the consequences of events that could adversely affect Orion’s performance in terms of EBIT, cash flow and broader societal impact.

We assess the financial impact of operational risks within an 18-month time horizon and strategic risks over five years or longer. We follow a Three Lines of Defense model to manage and mitigate risk:

- **First line**  
Business lines and corporate functions own and manage risks first-hand.
- **Second line**  
Chief Risk Officer, Risk Committee and subject matter experts carry out ongoing risk oversight.
- **Third line**  
Board of Directors provides governance and periodic oversight of the second line.

We monitor advances in production technologies and develop and use renewable and circular feedstocks where this is economically feasible. Expert consultants support us to quantify our full value-chain GHG footprint and to develop a high-level GHG abatement roadmap, as well as to evaluate U.S. and EU sustainability disclosure requirements and to assess our assurance readiness. All Orion production plants identified location-specific climate-related risks, both acute (i.e., flooding) and continuously growing (i.e., water stress), covering potential impacts with 30-year time horizons. This will further support us in defining and prioritizing mitigation actions.

Business ethics and compliance, corporate culture and risk management *continued*

SUSTAINABILITY RISKS			
Risk	Description	Potential impact	Mitigation
<b>CO<sub>2</sub> price mechanisms could lead to increased costs</b>	<p>Regulations such as the EU Emissions Trading System (ETS) will increase direct costs and pose operational risks. CO<sub>2</sub> certificate prices are expected to rise, and free credits will likely be further curtailed. The EU ETS could impact us through fewer free credits and higher costs for purchased offsets. As an energy-intensive business, Orion may also face indirect effects from external energy consumption.</p> <p>If carbon black is included in the EU's Carbon Border Adjustment Mechanism (CBAM), there will be both risks and opportunities. While it would level the playing field with imports, free credits would be phased out more quickly.</p>	<ul style="list-style-type: none"> <li>– Higher operational costs</li> <li>– Reduced competitiveness</li> <li>– Increased compliance burden</li> </ul>	<ul style="list-style-type: none"> <li>– Improve energy efficiency to reduce consumption and lower greenhouse gas emissions.</li> <li>– Enhance production technology for higher yields, fewer emissions and reduced costs.</li> <li>– Utilize carbon-rich feedstocks from waste streams, minimizing CO<sub>2</sub> emissions compared to burning for fuel.</li> <li>– Invest in R&amp;D for more efficient, higher-yield technologies and renewable feedstocks.</li> <li>– Integrate CO<sub>2</sub> management into corporate strategy with clear targets and continuous monitoring.</li> <li>– Prepare for CBAM by aligning compliance and competitiveness strategies as free allowances phase out.</li> </ul>
<b>Raw materials are becoming scarce or more costly</b>	<p>The global shift toward a low-carbon economy will reduce long-term demand for petroleum and coal. As a result, by-products and waste streams from refining – such as slurry oil and coal tar, which serve as key feedstocks for carbon black – will become less available.</p>	<ul style="list-style-type: none"> <li>– Increased raw material costs and supply constraints</li> </ul>	<ul style="list-style-type: none"> <li>– Improve yields to reduce reliance on traditional feedstocks.</li> <li>– Develop alternative sources, such as renewable feedstocks and oil recovered from end-of-life tire (ELT) pyrolysis (e.g., BlackCycle project).</li> <li>– Adapt production processes to increase use of raw material substitutes.</li> <li>– Invest in alternative technologies, such as acetylene-based carbon black, to shift away from fossil-based raw materials.</li> </ul>

SUSTAINABILITY OPPORTUNITIES		
Opportunity	Description	Actions
<b>Upcycling to conserve resources</b>	<p>We aim to reduce reliance on fossil-based raw materials to conserve resources and lower environmental impact. Through initiatives like the BlackCycle project, we are demonstrating circular solutions for the tire industry. Carbon black is essential for tires, yet their life cycle creates significant waste. Recycling end-of-life tires into high-value products offers a transformative opportunity.</p> <p>Our approach begins with tire pyrolysis – heating used tires to extract oil for carbon black production. This circular model reduces waste and incineration, positioning us to lead in sustainable solutions for our customers.</p>	<ul style="list-style-type: none"> <li>– Invest in R&amp;D for circular product portfolio.</li> <li>– Continue to collaborate with 13 EU companies (formerly all partners in the BlackCycle initiative).</li> <li>– Partner with Alpha Carbone to secure tire pyrolysis oil for circular carbon black.</li> </ul>
<b>Developing “Green” carbon black</b>	<p>Demand for bio-circular carbon black is growing as industries seek renewable feedstocks. Our first-generation products, PRINTEX® Nature 11 and ECORAX® Nature 12, show that using renewable oil is technically feasible and cost-efficient for decarbonization. While challenges remain in fully replacing fossil-based oils, the potential is significant.</p> <p>We are addressing these challenges through research and partnerships. Our focus includes non-edible renewable oils to avoid conflicts with food supply. Collaborations, such as with RISE Research Institutes of Sweden, explore renewable oils from forest products and industrial-grade vegetable oils.</p>	<ul style="list-style-type: none"> <li>– Continue research and collaborations.</li> <li>– Explore non-edible renewable oils.</li> <li>– Partner with RISE Research Institutes of Sweden.</li> <li>– Assess oils from forest products and industrial-grade vegetable oils.</li> </ul>
<b>Global demand for electrification</b>	<p>The global shift toward electrification creates strong demand for conductive carbon additives in EV batteries, power grids and energy storage systems. EV batteries rely on carbon black, graphene and carbon nanotubes for performance. Our acetylene-based additives, including PRINTEX® kappa 100 and kappa 400, deliver high purity and competitive performance.</p> <p>We also provide advanced carbon black solutions for EV tires, addressing higher weight and torque requirements.</p>	<ul style="list-style-type: none"> <li>– Build new plant in La Porte, Texas, to quadruple acetylene-based additive capacity.</li> <li>– Offer advanced carbon black for EV tires to meet higher weight and torque requirements.</li> </ul>

# Supply chain management

Sustainability is a core pillar of our procurement strategy, alongside quality, cost, delivery and compliance. We pursue decisive action across our value chain to accelerate the transition to a sustainable future.

We therefore focus on sustainable procurement, striving to work with suppliers that align with our sustainability efforts. We work with suppliers and subcontractors to ensure their compliance with the applicable laws, regulations and our core values and standards as expressed in our Supplier Code of Conduct, which has a focus on suppliers' sustainability practices. The Supplier Code of Conduct is an integral part of our General Terms and Conditions for purchasing.

## What we expect from our suppliers

We look at the entire value chain, including suppliers of feedstocks, chemical additives, process equipment, packaging materials, maintenance and repair services, engineering services, logistics, and other professional services. All suppliers are expected to comply with our Supplier Code of Conduct and manage ESG risks responsibly, particularly in areas such as:

- Environment
- Health and Safety
- Labor (e.g., working conditions, the right to collective bargaining)
- Business ethics
- Human rights (e.g., prohibition of underage workers and forced labor)
- Social policy matters
- Water consumption
- Sustainable procurement
- Disclosure requirements

Our Supplier Code of Conduct requires all suppliers across our operations to provide a safe and healthy working environment that minimizes health and safety risks to employees and third parties.

We use the EcoVadis platform to ensure a high level of transparency along our global supply chain. At the end of 2025, approximately 46% of our relevant spend (suppliers with whom we spend over \$10,000 per annum) was assessed by EcoVadis or other recognized third-party providers. Following a strong performance in 2024, our progress this year has returned to a more gradual trajectory toward our 2029 target. EcoVadis annual assessments and ongoing "360° Watch Findings" provide visibility into the CSR-related risks and impacts of our suppliers. Our goal is for at least 60% of our spend (value based) to be with CSR-assessed suppliers by 2029, and we continue to monitor our progress towards this target on a regular basis.

To manage our supply chain's contribution to our Scope 3 emissions in the medium term, we developed a model in partnership with a sustainability consultancy to estimate our Scope 3 emissions share (emissions per dollar of spend and volume of purchased carbon black oil) generated by the supply chain which consist of our Category 1 "Goods and Services" and Category 2 "Capital Goods" suppliers.

76%

of Orion procurement teams trained to identify and overcome purchasing risks around social, ethical and environmental practices in 2025

95%

(by value) of Orion's targeted supplier contracts in 2025 included clauses on environmental, labor and human rights requirements

26%

recycled of reusable FIBCs in 2025

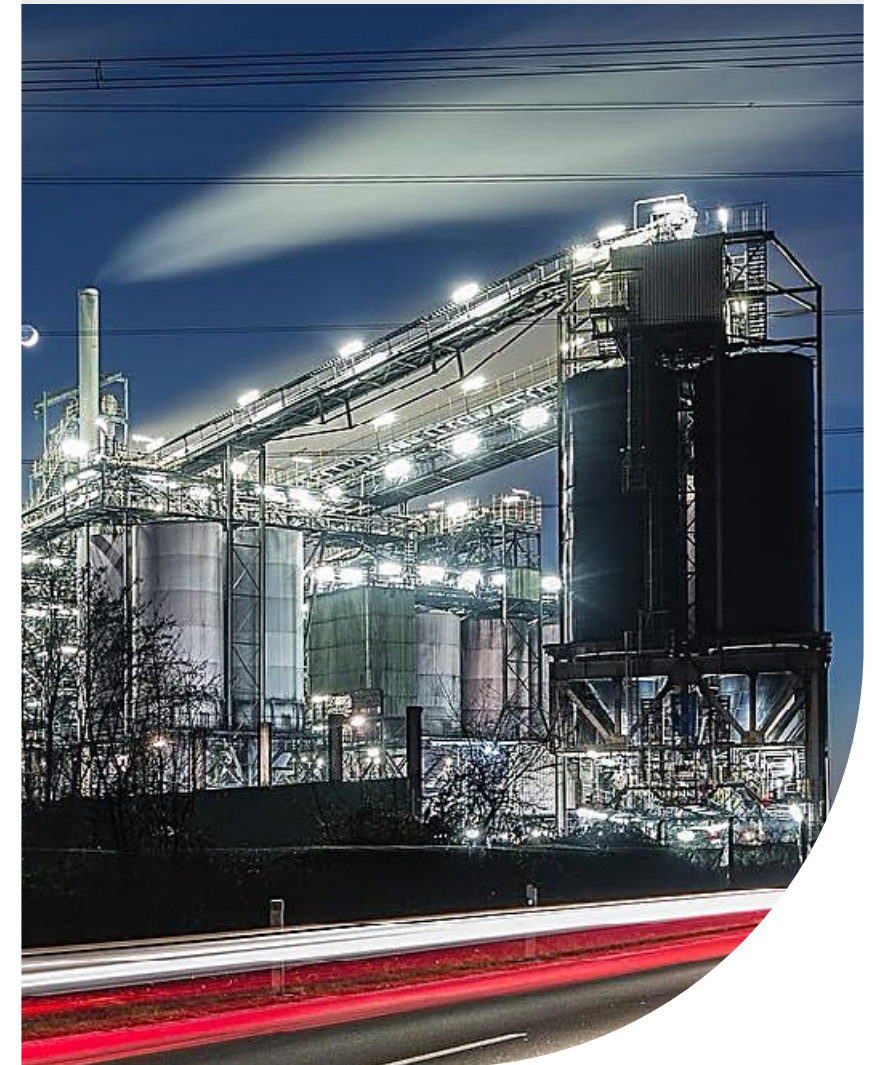
46%

of our relevant spend (suppliers with whom we spend over \$10,000 per annum) was assessed by EcoVadis or other recognized third-party providers



Our goal is for at least 60% of our spend (value based) to be with CSR-assessed suppliers by 2029."

Orion's site in Cologne, Germany.



## Supply chain management *continued*

### Supplier selection procedure

Our suppliers are selected and managed through global and regional collaboration. Suppliers are typically first vetted for financial performance, quality aspects, warranties, pricing and payments terms. For CSR-related qualification, we use a risk-based approach that builds on a holistic CSR assessment conducted via third parties such as EcoVadis. Depending on the assessment results, we conduct follow-up inquiries and – where warranted – request affected suppliers to engage in corrective action.

Buyers undergo annual training via the EcoVadis Academy Platform, covering key aspects of sustainable procurement. To maintain high standards, we have embedded regular training to raise awareness of purchasing risks related to sustainability. In 2025, 76% of the team completed the training with the target of at least 75% of the procurement team to be trained annually, reinforcing our commitment to responsible procurement. Training topics include implementing sustainable procurement criteria in purchasing processes and using suppliers' sustainability scores when awarding business and evaluating performance.

We aim to have all our suppliers meet our most critical standards. Part of the vetting process includes the assessment of a supplier's compliance assurance basis. We help suppliers with less robust foundations to establish a compliance assurance baseline at an acceptable level and monitor their performance periodically. This process enables us to work with suppliers from developing

economies, where our engagement not only provides quality employment opportunities for local economies but also enables our suppliers to adopt and incorporate sustainable values into their business and management practices. In 2025, around 99% of our relevant suppliers (by value) have agreed to comply with our Supplier Code of Conduct or its equivalent. In addition, 95% (by value) of Orion's targeted supplier contracts in 2025 included clauses on environmental, labor and human rights requirements.

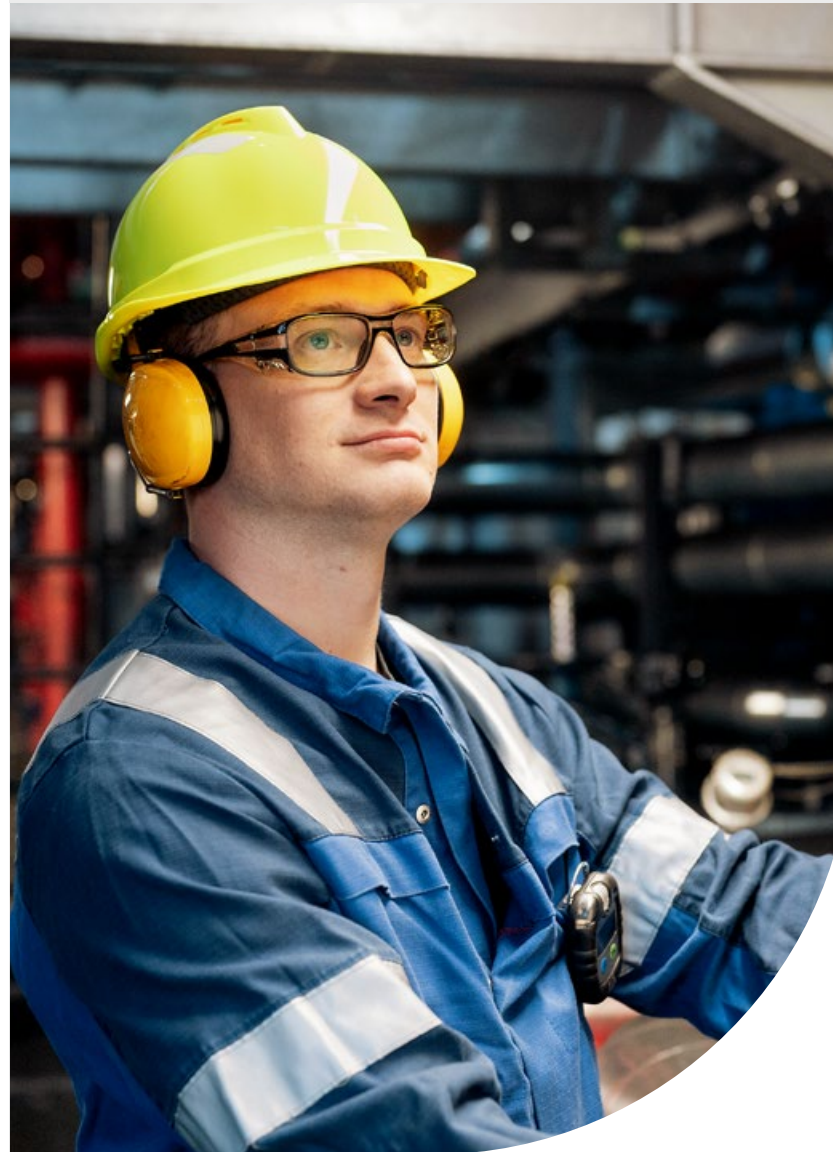
### Maintaining global standards

Our global digital procurement tools provide data transparency and accuracy, enabling us to apply consistent standards worldwide. In 2025, we advanced these capabilities by rolling out a global digital Procurement Suite (Coupa), which automates key processes, strengthens compliance, and embeds sustainability criteria into procurement workflows. This transformation lays the foundation for stronger supplier engagement and ESG risk management.

Key benefits include:

- Improved efficiency through automation
- Enhanced compliance with sustainability standards
- Real-time visibility and strategic sourcing for cost savings
- Supplier analytics for informed decisions and ESG risk mitigation
- Benchmarking tools to identify best practices

A worker in Cologne, Germany.



Our efforts with respect to our environmental footprint include supporting our supply chain partners to minimize their own impact on the environment and to reduce CO<sub>2</sub> emissions from outbound freight.

We are striving for circularity in our value chain and have implemented packaging solutions to minimize waste and increase loading efficiency. We are also collaborating with our supply chain partners on the use of sustainable, reusable and recycled materials. We utilize railcars or bulk trucks whenever possible (around 25% in volume of carbon black shipments), a solution which is intrinsically reusable and avoids consumption of resources for packaging materials.

In 2025, 100% of plastic pallets used at all sites were reusable and contained at least 60% recycled materials. Moreover, 100% of all pallets used at our sites were reusable. We are working on solutions to meet our targets for paper bags and flexible intermediate bulk containers (FIBCs). (See page 58 for progress against these targets.)

Until 2023, paper bags used for packaging our final products were made only of virgin materials. After an intensive period of development and testing, we certified our first recycled paper bags. At present, however, only a few of our paper bags meet the minimum recycling or reusability criteria set out in our targets. Their implementation started in 2023 in EMEA and will be continued globally. In 2025, 17% of paper bags used at Orion contained at least 50% of recycled paper. For FIBCs, in 2022 we introduced new variants with a minimum of 30% recycled polypropylene and aim to achieve our target by 2029 at the latest. In 2025, 26% of FIBCs used at all sites were recycled or reusable. We encourage our customers to use recycled materials for packaging and to collect packaging waste for reuse.

# Public policy and engagement

Orion monitors policies and legislation that may impact our business, and if we deem it helpful or important, we provide information and views about issues.



Building enduring relationships is one of Orion's core values, and this especially applies to the policymakers and elected officials whose decisions shape the communities where we operate. By sharing our expertise and real-world experience, we can help ensure that public policy is informed, practical and beneficial to everyone involved."

**WILLIAM FOREMAN**

Director of Government Relations at Orion

In the EU, we interact with Members of the European Parliament, European Commission officials, and industry representatives. We provide information on how new regulations will impact our operations and businesses. In 2023, Orion joined the European Chemical Industry Council (Cefic) and became involved in relevant working groups that are preparing advocacy positions toward EU institutions. Cefic provides information on new regulations and shares intelligence about regulatory processes. Orion also engages with national governments and industry associations in EU member states like Verband der Chemischen Industrie (VCI) in Germany and Federchimica in Italy. Engagements vary from dialogues on policy and regulation, receiving politicians at our plants, to applying for government grants.

Orion is a member of the International Carbon Black Association (ICBA), and in the U.S., Orion is a member of the American Chemistry Council (ACC), which provides educational workshops, guidance on public policy and access to industry groups focused on issues affecting the chemical industry. Engagements include hosting elected officials at our plants for tours and briefings; visiting members of Congress in their district and Washington, D.C., offices to discuss legislation and policy; engaging with officials on the local and national level to discuss policy issues; and applying for government grants.

European Parliament Building, Brussels, Belgium.



# Artificial intelligence

**Corporate AI Program & Responsible Use**

Orion operates a Corporate AI Program governed by our internal AI Policy to ensure AI is used ethically, transparently and securely, with human oversight and clear guardrails. The program is closely aligned with the EU AI Act.



# Cybersecurity

## Cybersecurity

Our approach to managing cybersecurity is designed to ensure oversight and strategic leadership. Leading the Company's cybersecurity risk management is our Chief Information Security Officer (CISO), who has more than 10 years of experience in the field of cybersecurity.

In the case of cybersecurity incidents, our CISO leads our Cyber Emergency Response Team and coordinates the respective disclosure process, which is a collaborative process by which our CISO is advised of cyber incidents and communicates and collaborates with relevant departments across the organization to develop and execute an appropriate response. In 2025, there were no material data breaches based on Orion's cybersecurity scorecard.

While our Board of Directors has delegated the continuous cybersecurity monitoring responsibility to the Board's Audit Committee, it remains apprised of relevant cybersecurity updates, risks and incidents. The regular updates on cybersecurity status, material cyber incidents and cyber risk management from either the Chief Information Officer (CIO) or CISO are provided to both our Board and Audit Committee. In addition, the Company's executive management, through its CIO, briefs the Audit Committee at each quarterly Audit Committee meeting on the Company's IT and cybersecurity status, including its Operational Technology systems. Our Audit Committee reviews also cover current IT cybersecurity scorecards, which reflect among others the status of awareness training programs, phishing incidents, penetration tests, endpoint security findings and an overall cybersecurity vulnerability assessment score. The Audit Committee regularly discusses identified security risks with senior management and reviews management proposed mitigation measures, as well as key cybersecurity initiatives and programs.

We perform IT external network penetration testing and table-top exercises and regularly benchmark our measures to top marketplace security standards such as the U.S. National Institute of Standards and Technology's (NIST) cybersecurity standards. Orion has implemented security systems designed to identify security risks to our business (including cybersecurity), protect our assets and be capable of responding effectively to security threats. A security hazard analysis and vulnerability assessment has been conducted at each facility and security standards have been met consistent with the specific risks identified. The site-specific security asset protection programs include perimeter protection, access control, security monitoring, incident reporting, and emergency response planning. We have a goal to achieve a 90% annual average participation rate in Orion's cybersecurity awareness training program. In 2025, we achieved a rate of participation of 95%.

# Innovation and IP

## IP Protection

Orion recognizes the critical importance of protecting intellectual property. We maintain and develop a robust intellectual property portfolio designed to safeguard our freedom to operate and to support the continued growth of the business.

We protect intellectual property by registering for intellectual property rights such as trademarks, copyrights, and patents. Orion's domain name matches the name used by our Company. Furthermore, Orion holds and protects certain trade secrets and – if deemed necessary – establishes proof for being the legitimate owner in its research and development results.



# Appendix

## IN THIS SECTION

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# About this report

## Structure

This report is designed to introduce general information about Orion's sustainability status and endeavors, as well as to communicate the results of our materiality analysis, which acts as the basis for the chapters: Environmental, Social, and Governance. The appendix shows the Global Reporting Initiative Index, a glossary of abbreviations and contact information. To ensure data integrity, we implemented a comprehensive data collection platform that serves to consolidate the ESG data from several departments, drive alignment and ensure data reliability throughout the ESG data collection process.

## Scope and reporting period

The information stated about Orion in this Sustainability Report concerns and covers all the consolidated Company's business entities from January 1 to December 31, 2025.

## Boundary and reporting approach

The reported data is based on an operational control approach and excludes minority interests, except where noted (e.g., JV emissions included in Scope 3 Category 15). No mergers, acquisitions or disposals occurred during the reporting period; therefore, no adjustments were required. If such changes occur, Orion restates prior-year data where material to ensure comparability. The approach applied to GHG emissions is consistent across disclosures; however, for other material topics (e.g., water, waste), boundaries may differ based on data availability and relevance, as detailed in respective sections.

## GHG emissions

GHG emissions, encompassing Scope 1, Scope 2, and Scope 3 are calculated using a methodology in accordance with the publicly available GHG Protocol Corporate Accounting and Reporting Standard: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>.

- The values reported for 2025 for Scope 1, Scope 2 (Market-based), Scope 2 (Location-based), and Scope 3 have been independently assured.
- In accordance with our operational control approach, GHG emissions reported under Scope 1 and Scope 2 only include Orion's wholly owned 14 operational plants and exclude

emissions from mostly leased office buildings (including administration, headquarters, technical centers, and related operations). The latter are not disclosed under Scope 2, but instead under Scope 3 Category 1 since energy usage in leased offices is typically embedded in rental costs, and Orion neither has control over energy procurement nor access to primary consumption data such as utility invoices. Consequently, Scope 3 Category 8 – Upstream leased assets – is irrelevant.

- It should be noted that our 15th plant is a joint venture (JV) that Orion has no operational control over, and the reported Scope 1 and Scope 2 GHG emissions do not cover this plant which is located in Germany. However, the JV's Scope 1 and Scope 2 emissions are included in our Scope 3 Category 15 emissions.

## Scope 3 Category emissions

The reported Scope 3 emissions represent only nine out of a total 15 categories as reported in the ESG performance table.

- It is important to note that Category 4, pertaining to Orion, encompasses only the emissions associated with the transportation of Carbon Black Oil (CBO) to its production facilities. Presently, the transportation of all other upstream purchases is not captured or tracked.

– Similarly, with respect to Category 12, Orion accounts solely for the emissions resulting from the end-of-life treatment of product packaging. The end-of-life treatment of sold carbon black is not included in the accounting due to uncertainties involved.

- The remaining Scope 3 emission categories are classified as either:
  - “irrelevant” to Orion's operations (specifically categories 8, 13 and 14) or
  - “potentially relevant but not presently calculated” (categories 9, 10 and 11), owing to the uncertainties associated with customer processing.

- Our calculation methodology applies an inflationary adjustment, back to 2018, on emission calculations that uses “spend” as source data. This includes:

- Cat 1 – Non-CBO
  - Emissions from CBO purchases are based on Metric Tonnes and CO<sub>2</sub> factor and therefore not adjusted for inflation
- Cat 2 – Capital Goods
- Cat 4 – Outbound freight, Intercompany freight, and Warehousing components
  - Inbound freight (re: CBO) is not adjusted for inflation as it is calculated using Metric Tonnes and KM travelled.



## About this report *continued*

### External assurance

As part of its committee duties and responsibilities, Orion's Audit Committee is directly responsible for the appointment, compensation, retention and oversight of the work of any registered public accounting firm engaged by Orion. This covers any and all of their audit work as well as other reviews and attestations, including the issuance of respective reports. The Audit Committee discusses with our independent auditors any relationships or services disclosed in their assurance statement that may impact the quality of audit services or the objectivity and independence of the auditors. Additionally, the Audit Committee obtains and reviews the timely reports from the independent auditors in connection with any audit, review or attestation services provided.



More information can be found in our 2026 Proxy statement pg. 101–110.

### Standards and compliance

This report is prepared in accordance with the GRI standards 2021. Following GRI standards allows us to report in standardized form on the Sustainable Development Goals (SDGs) relevant to Orion and our progress to advance climate action and a respective just transition. Orion applies its Code of Conduct throughout all its activities, at the same time complying with local legislation at its respective locations.

Orion leadership visits Orange, Texas, plant.



### Forward-looking statements and disclaimer

The content in this Sustainability Report and all statements made herein, as well as documents or reports incorporated herein by reference, should be read in conjunction with Orion's 2025 Annual Report on form 10-K, which contains additional information about our Company and risk factors we have identified. However, this report is not incorporated into our 10-K filing by reference or otherwise and our 10-K filing is vice versa not incorporated into this report. This Sustainability Report may contain certain forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements of future expectations that are based on current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Statements on what "we will" do or comparable expression of intent, reflect only our current intent but should not be interpreted as a firm commitment irrespective of future developments and circumstances. You should not place undue reliance on forward-looking statements. Each forward-looking statement speaks only as of the date of the statement and is based only on the information available and known by Orion at the time the statement is made. New risk factors and uncertainties emerge from time to time, and it is not possible to predict all risk factors and uncertainties,

nor can we assess the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We undertake no obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information, other than as required by applicable law.

All information and statements contained herein are believed to be accurate; however, Orion Engineered Carbons GmbH (as well as all other Orion engineered carbons Group companies including Orion SA), its agents and/or affiliates (OEC) give no warranty or guarantee (express or implied) with respect to the content of this publication or any product described herein, including but not limited to any properties, the suitability of a product to a specific purpose or use, results to be obtained or the existence or non-infringement of any proprietary right. Use or application of information, statements, the material or systems described herein is at the user's sole discretion and risk, and consequently the user acknowledges that OEC shall bear no responsibility or liability for same. Nothing herein shall be construed as a license of or recommendation for use. All information disclosed by OEC herein shall remain the property of OEC. All information and statements contained herein may change at any time without prior or subsequent notification and do not constitute a description of an agreed contractual quality of a product.

# ESG performance data

These data tables present year-on-year ESG performance. Unless otherwise stated, targets are set for delivery by 2029.

ENVIRONMENT					
Indicator	Unit	Target	2025	2024	2023
<b>Production</b>					
Production	MT		879,040	905,365	878,396
<b>GHG emissions</b>					
Scope 1	mn MT CO <sub>2</sub> e		2.1	2.2	2.2
Scope 1 Intensity	MT CO <sub>2</sub> e / MT Production		2.39	2.45	2.47
Normalized Scope 1 Intensity <sup>1</sup>	MT CO <sub>2</sub> e / MT Production		2.28	2.28	2.36
Normalized Scope 1 Intensity reduction	%	-8 <sup>2</sup>	-7	-7	-4
Scope 2 – Market-based <sup>3</sup>	k MT CO <sub>2</sub> e	0 <sup>4</sup>	128	132	152
Scope 2 – Location-based	k MT CO <sub>2</sub> e		147	127	123
Scope 2 Intensity	MT CO <sub>2</sub> e / MT Production		0.15	0.14	0.17
<b>Scope 3 by category</b>					
Scope 3	mn MT CO <sub>2</sub> e		1.3	1.4	1.3
1. Purchased goods and services	MT CO <sub>2</sub> e		964,678	1,010,940	989,583
2. Capital goods	MT CO <sub>2</sub> e		30,709	31,545	30,698
3. Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	MT CO <sub>2</sub> e		41,495	33,795	28,101
4. Upstream transportation and distribution	MT CO <sub>2</sub> e		101,314	104,372	101,859
5. Waste generated in operations	MT CO <sub>2</sub> e		11,123	11,051	11,078
6. Business travel	MT CO <sub>2</sub> e		3,498	3,870	4,110
7. Employee commuting	MT CO <sub>2</sub> e		1,685	1,709	1,773

Indicator	Unit	Target	2025	2024	2023
Total upstream Scope 3 emissions	MT CO <sub>2</sub> e		1,154,501	1,197,282	1,167,202
12. End-of-life treatment of sold products	MT CO <sub>2</sub> e		5,513	5,829	5,261
15. Investments	MT CO <sub>2</sub> e		165,996	164,943	167,851
Total downstream Scope 3 emissions	MT CO <sub>2</sub> e		171,509	170,772	173,112
<b>SO<sub>2</sub></b>					
Emissions	k MT SO <sub>2</sub>		6.8	6.9	6.8
Intensity	kg SO <sub>2</sub> / MT Production		7.83	7.58	7.68
Intensity reduction <sup>5</sup>	%	-50	-59	-60	-60
<b>NOx</b>					
Emissions	k MT NOx		3.18	3.4	3.2
Intensity	kg NOx / MT Production		3.63	3.71	3.65
Intensity reduction <sup>5</sup>	%	-25	-31	-30	-31
<b>Particulate matter<sup>6</sup></b>					
Emissions	k MT PM		0.29	0.30	0.37
Intensity	kg PM / MT Production		0.33	0.34	0.42
Intensity reduction <sup>5</sup>	%	-15	-48	-47	-37
<b>Energy</b>					
Energy consumption <sup>7</sup>	TWh		19.5	20.3	20.0
Intensity <sup>8</sup>	cf. footnote <sup>8</sup>		1.99	2.09	2.13
Tail gas utilization rate <sup>9</sup>	%		83	84	84
Renewable electricity <sup>10</sup>	%		17	8.6	

1. Normalized for product mix and feedstock mix in furnace black production.

2. Baseline year of 2014.

3. Baseline year of 2022.

4. Target set for delivery by 2030.

5. Baseline year of 2019.

6. PM emissions based on the local authorities' requirements, which can differ across the different legislations.

7. Energy consumption includes fuel oil, make oil, and other energy (e.g., electric power) consumed at the operating sites under our management control and ownership.

8. Total energy consumed in TWhs divided by total useful energy in TWhs (including carbon black and energy produced).

9. Tail gas usage in the production of energy for internal or third-party consumption.

10. 2024 is the first year this figure was publicly stated.

ESG performance data *continued*

Indicator	Unit	Target	2025	2024	2023
<b>Water inflow</b>					
Inflow	million m <sup>3</sup>		12.1	12.9	13.6
Surface water	%		55	57	27
Well water	%		12	14	22
Municipality	%		26	27	48
Retention pond	%		7	2	3
<b>Water outflow</b>					
Outflow	million m <sup>3</sup>		5.3	5.2	4.5
Sanitary sewer	%		1	1	1
Municipality	%		26	26	30
Natural body of water / collection pond	%		73	73	69
<b>Water intensity</b>					
Water intensity <sup>11</sup>	m <sup>3</sup> / MT Production		7.7	8.5	10.4
<b>Waste intensity</b>					
Waste intensity	kg / MT Production		26.4	25.4	28.6
<b>Waste generation</b>					
Total waste generation	k MT		23.2	23.0	25.1
General & non-hazardous waste	k MT		21.9	19.6	22.7
Hazardous waste	k MT		1.3	3.4	2.4
<b>Waste disposal method General and non-hazardous waste</b>					
Landfilled	k MT		14.1	13.5	16.0
Recycled, reused & recovered	k MT		7.4	5.7	6.5
Incinerated	k MT		0.4	0.4	0.3

Indicator	Unit	Target	2025	2024	2023
<b>Hazardous waste</b>					
Landfilled	k MT		0.5	1.8	1.3
Recycled, reused & recovered	k MT		0.2	0.7	0.3
Incinerated	k MT		0.6	0.9	0.8
<b>Packaging</b>					
Use of plastic pallets made of recycled material <sup>12</sup>	%	100	100	100	100
Use of reusable pallets at all sites <sup>13</sup>	%	90	100	95	95
Paper bags from recycled paper <sup>14</sup>	%	95	17	6	2
Use of reusable FIBCS or recycled FIBC <sup>15</sup>	%	100	26	24	14
<b>Significant spills<sup>16</sup></b>					
Number of incidents	number	0	0	0	0
<b>ISO 14001 Certification</b>					
Percentage of sites certified ISO 14001 <sup>17</sup>	%	100	100	–	–

11. Calculated as net water usage (inflow less outflow) per million metric tonnes of carbon black produced.

12. Applies to sites using plastic pallets. Minimum recycled material content set at 60%.

13. Applies to pallets used in outbound logistics as we have no control over inbound pallets. Target has been increased from 75% to 90%.

14. Minimum recycled paper content set at 50%.

15. Given the separate target for paper bags, this target has been reset for FIBCS. Reusability has been set at six, and minimum recycling content at 20%.

16. Significant spill is defined as a reportable release of a substance that is large enough to be included in our financial statements and is recorded as such in our EHS registry.

17. With annual surveillance audits completed. First year this figure is publicly disclosed.

ESG performance data *continued*

<b>SOCIAL</b>					
*Many of the people metrics reported are recent introductions, with public disclosure commencing in 2025.					
Indicator	Unit	Target	2025	2024	2023
<b>Employees by gender<sup>18</sup></b>					
Total	number		1,639	1,658	1,652
Male	%		83	81	81
Female	%		17	19	19
Females in management roles	%		22	21	21
<b>Employees by contract<sup>19</sup></b>					
Permanent	number		1,631	1,646	1,634
Female permanent employees	number		316	–	–
Male permanent employees	number		1,311	–	–
Undisclosed/undefined permanent employees <sup>20</sup>	number		4	–	–
Permanent employees Americas	number		417	–	–
Permanent employees APAC	number		365	–	–
Permanent employees EMEA	number		849	–	–
Temporary	number		8	12	18
Female temporary employees	number		4	–	–
Male temporary employees	number		4	–	–
Temporary employees Americas	number		0	–	–
Temporary employees APAC	number		0	–	–
Temporary employees EMEA	number		8	–	–
Non-guaranteed hours	number		821	269	–
Female non-guaranteed hours employees	number		93	–	–

Indicator	Unit	Target	2025	2024	2023
Male non-guaranteed hours employees	number		726	–	–
Undisclosed/undefined non-guaranteed hours employees <sup>20</sup>	number		2	–	–
Non-guaranteed hours employees Americas	number		209	–	–
Non-guaranteed hours employees APAC	number		174	–	–
Non-guaranteed hours employees EMEA	number		438	–	–
Full-time	number		1,582	1,604	1,606
Female full-time employees	number		279	–	–
Male full-time employees	number		1,300	–	–
Undisclosed/undefined full-time employees <sup>20</sup>	number		3	–	–
Full-time employees Americas	number		416	–	–
Full-time employees APAC	number		365	–	–
Full-time employees EMEA	number		801	–	–
Part-time	number		57	54	46
Female part-time employees	number		41	–	–
Male part-time employees	number		15	–	–
Undisclosed/undefined part-time employees <sup>20</sup>	number		1	–	–
Part-time employees Americas	number		1	–	–
Part-time employees APAC	number		0	–	–
Part-time employees EMEA	number		56	–	–

18. Gender dispersion – Orion operates in the Chemical manufacturing industry which is predominantly a male workforce, and our gender dispersion is consistent with the industry. Approximately 2/3 of our workforce are in blue-collar roles.

19. Part-time/temporary employees – Approximately 2/3 of our workforce are in blue-collar roles and the nature of this work in the chemical industry lends itself to regular full-time roles so that employees are professionally trained. Our unions and works counsels generally prefer for employees to have the security of regular full-time employment.

20. In several countries, gender disclosure is voluntary.

ESG performance data *continued*

Indicator	Unit	Target	2025	2024	2023
<b>Employees by region</b>					
Americas	number		417	417	418
APAC	number		365	374	383
EMEA	number		857	867	851
<b>Employee by age group</b>					
<30	number		171	181	186
30–50	number		835	783	757
>50	number		633	694	709
<b>Employees in bargaining unit<sup>21</sup></b>					
Number of employees	number		814	809	808
As a percentage of total	%		50	49	49
<b>Voluntary turnover</b>					
Voluntary turnover rate	%		4	3	3
Total voluntary departures	number		67	–	–
<b>Voluntary turnover by gender</b>					
Voluntary departures male employees	number		56	–	–
Voluntary departures female employees	number		11	–	–
<b>Voluntary turnover by region</b>					
Voluntary departures Americas	number		37	–	–
Voluntary departures APAC	number		8	–	–
Voluntary departures EMEA	number		22	–	–
<b>Voluntary turnover by age</b>					
Voluntary departures <30 years of age	number		23	–	–
Voluntary departures >50 years of age	number		13	–	–

Indicator	Unit	Target	2025	2024	2023
Voluntary departures 30–50 years of age	number		31	–	–
<b>New hires</b>					
New hires	number		163	–	–
New hires female employees	number		26	–	–
New hires male employees	number		137	–	–
New hires Americas	number		73	–	–
New hires APAC	number		20	–	–
New hires EMEA	number		70	–	–
New hires <30 years of age	number		63	–	–
New hires >50 years of age	number		20	–	–
New hires 30–50 years of age	number		80	–	–
<b>Employees receiving performance review</b>					
As a percentage of total	%		72	72	68
As a percentage of employees eligible employment contract <sup>22</sup>	%	95	97	97	94
Percentage of female employees who received a regular performance review (eligible by contract)	%		99	–	–
Percentage of male employees who received a regular performance review (eligible by contract)	%		96	–	–
Percentage of plant employees who received a regular performance review (eligible by contract)	%		95	–	–
Percentage of non-plant employees who received a regular performance review (eligible by contract)	%		98	–	–

21. Collective bargaining – Orion recognizes and respects our employees' right to be represented under a collective bargaining agreement; however, we strive to provide a safe working environment and competitive wages and benefits for all employees regardless of representation.

22. Employees are defined to include only those whose contracts (including collective bargaining agreements) do not restrict the Company from conducting individual performance reviews.

ESG performance data *continued*

Indicator	Unit	Target	2025	2024	2023
<b>Workforce receiving training</b>					
As percentage of total	%	100 <sup>23</sup>	100	100	100
<b>Average training hours</b>					
Average training hours	hrs	40 <sup>23</sup>	40	66	69
Average hours of training per year female employees	hrs		31.5	–	–
Average hours of training per year male employees	hrs		41.6	–	–
Average hours of training per year plant employees	hrs		42.8	–	–
Average hours of training per year non-plant employees	hrs		29.5	–	–
<b>Non-discrimination</b>					
Claims alleged	number		0	0	0
Substantiated	number		0	0	0
Unsubstantiated	number		0	0	0
Claims closed	number		0	0	0
Corrective Actions taken <sup>24</sup>	number		0	0	0
<b>Operational safety</b>					
DAFW	number per 200,000 worked hours		0.06	0.29	0.23
TRIR	number per 200,000 worked hours		0.18	0.35	0.34
PSE <sup>25</sup>	number		17	24	19

Indicator	Unit	Target	2025	2024	2023
Lost time injuries <sup>26</sup>	number		1	5	–
OSHA recordable injuries <sup>26</sup>	number		3	6	–
Employee fatalities	number		0	0	0
Contractor fatalities	number		0	0	0
<b>Product quality, safety and stewardship</b>					
Percentage of Safety Data Sheets provided to customers <sup>27</sup>	%	100	100	–	–
<b>Community impact</b>					
Distribution of charitable giving					
Community support	%		79	75	67
First/emergency responders	%		4	4	20
Charitable organizations	%		14	21	11
Others	%		3	–	–
Percentage of budgeted adjusted EBITDA dedicated to charitable giving <sup>27</sup>	%	0.2	0.2	–	–
Percentage of sites engaged in charitable giving <sup>27</sup>	%	100	86.7	–	–

23. This is a yearly target.

24. Options include no action, policy review, training, discipline, and termination.

25. Following CCPS guidelines, a process safety event is defined as an event involving the release or loss of containment of hazardous materials that can result in large-scale health and environmental consequences. While we have been collecting and reviewing the underlying data, we started categorizing the relevant data under this classification in 2020.

26. 2024 is the first year this figure was publicly stated.

27. 2025 is the first year this figure is publicly stated.

ESG performance data *continued*

<b>GOVERNANCE</b>					
Indicator	Unit	Target	2025	2024	2023
<b>Compliance incidents</b>					
Number of environmental non-compliance incidents <sup>28</sup>	number		0	0	0
Number of substantiated, material non-compliance incidents (excluding environmental non-compliance incidents) <sup>27</sup>	number		1	–	–
<b>Compliance training<sup>29</sup></b>					
Employees receiving compliance training	%	95 <sup>30</sup>	100	100	100
<b>Cybersecurity</b>					
Number of material data breaches annually based on Orion's cybersecurity scorecard <sup>27</sup>	number	0	0	–	–
Annual average participation rate in Orion's cybersecurity awareness training program <sup>27</sup>	%	90	95	–	–
<b>Sustainable procurement</b>					
Suppliers signing up to the Supplier Code of Conduct <sup>31</sup>	%	100	99	98	99
Share of spend from targeted suppliers having our CSR assessments or other recognized third-party assessments (EcoVadis, etc.)	%	60	46	53	25
Targeted supplier contracts (by value) including clauses on environmental, labor and human rights requirements	%		95	96	95
Procurement team receiving training on sustainability purchasing risk identification and management	%	75 <sup>32</sup>	76	90	–

28. An environmental non-compliance level A incident as described in Orion's management system: an incident causing community evacuation, shelter in place and significant property damage.

29. This was formerly called "Code of Conduct Training". However, the Code of Conduct is only one of several elements of our comprehensive compliance training.

30. Yearly target.

31. Measured in terms of value. Excludes suppliers with whom we transact on an ad hoc basis without a formal contract for a monetary value of less than \$10,000 per annum.

32. At least 75% annually.

# GRI/UNGC content index

FOUNDATION 2021					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 1: Foundation 2021	Statement of use		Orion S.A. has reported the information cited in this GRI content index for the period of January 1 to December 31, 2025, in accordance with the GRI Standards.		

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 2: General Disclosures 2021	2-1 Organizational details		We are Orion pg. 2 Orion at a Glance, pg. 3		
	2-2 Entities included in the organization’s sustainability reporting		About this report pg. 55–56 2025 10K pg. 22		
	2-3 Reporting period, frequency and contact point		Scope and reporting period pg. 55 Contact point pg. 80		
	2-4 Restatements of information		Information about any restatements is provided in the footnotes to the relevant data		
	2-5 External assurance		About this report pg. 56 Independent practitioner’s limited assurance report on Orion S.A.’s Greenhouse Gas (GHG) emissions pg. 77–78		
	2-6 Activities, value chain and other business relationships		We are Orion pg. 2. Orion at a glance pg. 3. Orion’s value chain and relationships pg. 14		
	2-7 Employees		ESG performance data: Social pg. 59–61		
	2-8 Workers who are not employees		ESG performance data: Social pg. 59 (Referenced as non-guaranteed hours employees)		

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	<b>1,2,4,5,6,10</b>	Our Governance structure pg. 45 2026 Proxy Statement pg. 22–56		
	2-10 Nomination and selection of the highest governance body	<b>1,2,4,5,6,10</b>	Corporate Governance Guidelines for the Board of Directors of Orion Engineered Carbons S.A pg. 2–3 2026 Proxy Statement pg. 22–56		
	2-11 Chair of the highest governance body	<b>1,2,4,5,6,10</b>	2026 Proxy Statement pg. 41		
	2-12 Role of the highest governance body in overseeing the management of impacts	<b>1,2,4,5,6,10</b>	Our Governance structure pg. 45 2026 Proxy Statement pg. 45–56		
	2-13 Delegation of responsibility for managing impacts	<b>8</b>	Our Governance structure pg. 45 2026 Proxy Statement pg. 45–56		
	2-14 Role of the highest governance body in sustainability reporting		Double materiality pg. 13 Our Governance structure pg. 45 Charter of the Nominating, Sustainability and Governance committee of the Board of Directors of Orion Engineered Carbons S.A pg. 2 2026 Proxy Statement pg. 53		
	2-15 Conflicts of interest	<b>10</b>	Business ethics and compliance, corporate culture and risk management pg. 46		
	2-16 Communication of critical concerns	<b>2</b>	Human rights pg. 41 Policy on Whistleblower Protection pg. 1–3		
	2-17 Collective knowledge of the highest governance body		2026 Proxy statement pg. 24–33		
	2-18 Evaluation of the performance of the highest governance body		Corporate Governance Guidelines for the Board of Directors of Orion Engineered Carbons S.A pg. 7 2026 Proxy Statement pg. 44		
2-19 Remuneration policies		Our Governance structure pg. 45 2026 Proxy Statement pg. 58–60			

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 2: General Disclosures 2021	2-20 Process to determine remuneration		Our Governance structure pg. 45 2026 Proxy Statement pg. 58–60		
	2-21 Annual total compensation ratio		2026 Proxy Statement pg. 94–95 (Information in Proxy in accordance with SEC guidelines)		
	2-22 Statement on sustainable development strategy	<b>7,8,9</b>	Letter from Corning Painter, Orion's Chief Executive Officer pg. 5		
	2-23 Policy commitments	<b>1,2,3,4,5,6,10</b>	Our global frames of reference pg. 17 Human rights pg. 41 See also Human Rights policy, Supplier Code of Conduct, Code of Conduct and Global EHSQ, Energy and Sustainability Policy		
	2-24 Embedding policy commitments	<b>1,2,3,4,5,6,10</b>	Human rights pg. 41 Business ethics and compliance, corporate culture and risk management pg. 46–47 2026 Proxy Statement pg. 52–56		
	2-25 Processes to remediate negative impacts	<b>1</b>	Business ethics and compliance, corporate culture and risk management pg. 46		
	2-26 Mechanisms for seeking advice and raising concerns	<b>1,2</b>	Policy on Whistleblower Protection pg. 1–3		
	2-27 Compliance with laws and regulations	<b>1</b>	Business ethics and compliance, corporate culture and risk management pg. 46 ESG performance data pg. 62		
	2-28 Membership associations		Public policy and engagement pg. 52		
	2-29 Approach to stakeholder engagement		Double materiality pg. 13 2026 Proxy Statement pg. 46		
2-30 Collective bargaining agreements	<b>3</b>	ESG performance data pg. 60 For other employees not determined by collective bargaining agreement, but equivalent working conditions.			

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
<b>MATERIAL TOPICS</b>					
GRI 3: Material Topics 2021	3-1 Process to determine material topics	<b>1,6,7,8,9,10</b>	Double materiality pg. 13–15		
	3-2 List of material topics		Double materiality pg. 15		
<b>Climate Change and Emissions</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	<b>7,8,9</b>	Double materiality pg. 13 Climate change pg. 20–24 Operational emissions management pg. 25–26		
GRI 201: Economic Performance 2017	201-2 Financial implications and other risks and opportunities due to climate change	<b>7,8,9</b>	Orion’s vision to net zero pg. 21 Business ethics and compliance, corporate culture and risk management pg. 46–48 2025 CDP Questionnaire section 3.1.1		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions		Operational emissions management pg. 25 ESG performance data pg. 57 2025 CDP Questionnaire section 7.5, 7.6		
	305-2 Energy indirect (Scope 2) GHG emissions		Operational emissions management pg. 25 and 28 ESG performance data pg. 57 2025 CDP Questionnaire section 7.7		
	305-3 Other indirect (Scope 3) GHG emissions		Operational emissions management pg. 25 ESG performance data pg. 57 2025 CDP Questionnaire section 7.8		
	305-4 GHG emissions intensity		Operational emissions management pg. 25 ESG performance data pg. 57 2025 CDP Questionnaire section 7.45		
	305-5 Reduction of GHG emissions	<b>8</b>	Orion’s vision to net zero pg. 21 2025 CDP Questionnaire section 7.55		

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
<b>Pollution</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	<b>7,8,9</b>	Double materiality pg. 13 Pollution pg. 29–31		
GRI 305: Emissions 2016	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		Pollution pg. 29 ESG performance data pg. 57	b. Source of the emission factors used. c. Standards, methodologies, assumptions, and/or calculation tools used.	<i>Reason:</i> Information unavailable/incomplete. <i>Explanation:</i> Our emissions are monitored in accordance with local regulations, with most facilities using continuous emission monitoring systems for their thermal oxidizer and SCR systems.
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	<b>7,8,9</b>	Pollution pg. 29–31		
	303-2 Management of water discharge-related impacts	<b>7,8,9</b>	Pollution pg. 29–31		
GRI 303: Water and Effluents 2018	303-3 Water withdrawal		ESG performance data pg. 58	b. Total water withdrawal from all areas with water stress in megaliters, and a breakdown of total water withdrawal from each of the sources listed in Disclosures 303-3-a and 303-3-b in megaliters.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> To ensure responsible water usage, we monitor consumption through metering at most of our plants and carefully assess wastewater quality. Before discharge, all wastewater undergoes strict treatment to comply with legal requirements.  Six of our plants operate in areas of high or extremely high water stress: Qingdao and Huaibei, China; Ravenna, Italy; Port Elizabeth, South Africa; Yeosu, South Korea; and Berre l'Etang, France. We operate within local regulations and are working to better understand and address our impacts in water-stressed locations.

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 303: Water and Effluents 2018	303-4 Water discharge		ESG performance data pg. 58	a. Breakdown of total water discharge to all areas in megaliters by categories. b. Total water discharge to all areas with water stress in megaliters, and a breakdown of this total by categories. c. Priority substances of concern for which discharges are treated, including: how priority substances of concern were defined, and any international standard, authoritative list, or criteria used.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> To ensure responsible water usage, we monitor consumption through metering at most of our plants and carefully assess wastewater quality. Before discharge, all wastewater undergoes strict treatment to comply with legal requirements.  Six of our plants operate in areas of high or extremely high water stress: Qingdao and Huaibei, China; Ravenna, Italy; Port Elizabeth, South Africa; Yeosu, South Korea; and Berre l'Etang, France. We operate within local regulations and are working to better understand and address our impacts in water-stressed locations.
	303-5 Water consumption		ESG performance data pg. 58	a. Total water consumption from all areas in megaliters. b. Total water consumption from all areas with water stress in megaliters.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> To ensure responsible water usage, we monitor consumption through metering at most of our plants and carefully assess wastewater quality. Before discharge, all wastewater undergoes strict treatment to comply with legal requirements.  Six of our plants operate in areas of high or extremely high water stress: Qingdao and Huaibei, China; Ravenna, Italy; Port Elizabeth, South Africa; Yeosu, South Korea; and Berre l'Etang, France. We operate within local regulations and are working to better understand and address our impacts in water-stressed locations.
GRI 306: Effluents and Waste 2016	306-3 Significant spills		ESG performance data pg. 58		
<b>Circularity</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	<b>7,8,9</b>	Double materiality pg. 13 Pollution pg. 29 Circularity pg. 32–33		

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 301: Materials 2016	301-1 Materials used by weight or volume		Circularity pg. 32–33	Total weight or volume of materials that are used to produce the organization’s primary products and services during the reporting period.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> To minimize our environmental footprint and achieve our emissions reduction ambitions, we are developing new and more efficient technologies and processes, and developing products based on circular and bio-circular feedstocks. We do not disclose information on the weight or volume of materials used in production.
	301-2 Recycled input materials used		Circularity pg. 32–33	Percentage of recycled input materials used to manufacture the organization’s primary products and services.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> To minimize our environmental footprint and achieve our emissions reduction ambitions, we are developing new and more efficient technologies and processes, and developing products based on circular and bio-circular feedstocks. We do not disclose information on the percentage of recycled input materials used in production.
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	<b>7,8,9</b>	Pollution pg. 31 ESG performance data pg. 58		
	306-2 Management of significant waste-related impacts	<b>7,8,9</b>	Pollution pg. 31 ESG performance data pg. 58		
	306-3 Waste generated		Pollution pg. 31 ESG performance data pg. 58		
GRI 306: Waste 2020	306-4 Waste diverted from disposal	<b>8</b>	ESG performance data pg. 58	d. For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal: i. on-site; ii. off-site.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> We adhere to proper procedures aligned with applicable laws and regulations for waste handling and disposal, as well as for preventing potential spills. Waste management and disposal are governed by local laws and regulations, and Orion consistently meets or surpasses these requirements.

GRI/UNGC content index *continued*

GENERAL DISCLOSURES						
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission		
				Requirement(s) omitted	Reason and explanation	
GRI 306: Waste 2020	306-5 Waste directed to disposal		Pollution pg. 31 ESG performance data pg. 58	For each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal: i. on-site; ii. off-site.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> We adhere to proper procedures aligned with applicable laws and regulations for waste handling and disposal, as well as for preventing potential spills. Waste management and disposal are governed by local laws and regulations, and Orion consistently meets or surpasses these requirements.	
<b>Talent Management &amp; People and Culture</b>						
GRI 3: Material Topics 2021	3-3 Management of material topics	<b>1,3,6</b>	Double materiality pg. 13 Our strategy pg. 16			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover		ESG performance data pg. 60			
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees		Orion & me pg. 38			
GRI 401: Employment 2016	401-3 Parental leave	<b>6</b>	Talent development pg. 37	Retention and return to work rates.	<i>Explanation:</i> Parental leave benefits vary country by country. We do not track the retention and return to work rates globally.	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	<b>6</b>	ESG performance data pg. 59–60 2026 Proxy Statement pg. 25			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee		ESG performance data pg. 61			
	404-2 Programs for upgrading employee skills and transition assistance programs	<b>6</b>	Talent development pg. 36–37 ESG performance data pg. 60			
	404-3 Percentage of employees receiving regular performance and career development reviews	<b>6</b>	ESG performance data pg. 60			

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
<b>Occupational health and safety</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics		Double materiality pg. 13 Occupational health and safety pg. 39 Business ethics and compliance, corporate culture and risk management pg. 47		
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system		Occupational health and safety pg. 39 Business ethics and compliance, corporate culture and risk management pg. 47		
GRI 403: Occupational Health and Safety 2018	403-2 Hazard identification, risk assessment, and incident investigation		Occupational health and safety pg. 39 Business ethics and compliance, corporate culture and risk management pg. 47		
	403-3 Occupational health services		Occupational health and safety pg. 39		
	403-4 Worker participation, consultation, and communication on occupational health and safety		Occupational health and safety pg. 39 Business ethics and compliance, corporate culture and risk management pg.47		
	403-5 Worker training on occupational health and safety		Occupational health and safety pg. 39 Business ethics and compliance, corporate culture and risk management pg. 47		
	403-6 Promotion of worker health				
GRI 403: Occupational Health and Safety 2018	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		Occupational health and safety pg. 39		

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 403: Occupational Health and Safety 2018	403-8 Workers covered by an occupational health and safety management system		Our approach pg. 19 Occupational health and safety pg. 39	i. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system; ii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited; iii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party.	<i>Reason:</i> Information unavailable/ incomplete <i>Explanation:</i> Our operational safety standards and procedures are based on the principles outlined in the ISO 45001 Safety Management System, the American National Standards Institute/American Society of Safety Professionals (ANSI/ASSP) Z10.0, and the Occupational Safety and Health Administration Voluntary Protection Programs (OSHA VPP).
	403-9 Work-related injuries		ESG performance data pg. 61 Occupational health and safety pg. 39	All except requirement a.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> Our safety protocols are consistently updated to align with best practices and evolving industry standards. Recognizing that safety is a shared responsibility, all our operating sites have joint management-labor safety committees, ensuring employee representation and participation.  Employees continue to be both encouraged and empowered to report safety concerns via our Benchmark Gensuite® EHS platform, where issues are tracked by the EHS and plant managers. This reporting process is critical to maintaining a safe work environment. We aim to resolve all concerns within 30 days, and any outstanding issues beyond this timeframe are monitored in our global monthly KPI report.

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 403: Occupational Health and Safety 2018	403-10 Work-related ill health		ESG performance data pg. 61 – Orion treats work-related ill health as work-related injuries	All except requirement a.	<p><i>Reason:</i> Information unavailable/incomplete</p> <p><i>Explanation:</i> Our safety protocols are consistently updated to align with best practices and evolving industry standards. Recognizing that safety is a shared responsibility, all our operating sites have joint management-labor safety committees, ensuring employee representation and participation.</p> <p>Employees continue to be both encouraged and empowered to report safety concerns via our Gensuite® EHS platform, where issues are tracked by the EHS and plant managers. This reporting process is critical to maintaining a safe work environment. We aim to resolve all concerns within 30 days, and any outstanding issues beyond this timeframe are monitored in our global monthly KPI report.</p>
<b>Product quality, safety and stewardship</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics		Double materiality pg. 13 Product quality, safety and stewardship pg. 40		
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories		Product quality, safety and stewardship pg. 40	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.	<p><i>Reason:</i> Information unavailable/incomplete</p> <p><i>Explanation:</i> Our carbon black products are specifically designed to be safe for handling and use, fully compliant with legal regulations, free from significant risks to human health and the environment, and optimized for superior performance in customer applications. We do not disclose the number of incidents of non-compliance with regulations and/or voluntary codes concerning product and service information and labeling.</p>

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 416: Customer Health and Safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services		Product quality, safety and stewardship pg. 40	Total number of incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> Our carbon black products are specifically designed to be safe for handling and use, fully compliant with legal regulations, free from significant risks to human health and the environment, and optimized for superior performance in customer applications. We do not disclose the number of incidents of non-compliance with regulations and/or voluntary codes concerning product and service information and labeling.
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	8	Product quality, safety and stewardship pg. 40	Total number of incidents of non-compliance with regulations and/or voluntary codes concerning product and service information and labeling.	<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> Our carbon black products are specifically designed to be safe for handling and use, fully compliant with legal regulations, free from significant risks to human health and the environment, and optimized for superior performance in customer applications. We do not disclose the number of incidents of non-compliance with regulations and/or voluntary codes concerning product and service information and labeling.
	417-2 Incidents of non-compliance concerning product and service information and labeling		Product quality, safety and stewardship pg. 40		
<b>Business ethics, compliance and corporate culture</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	1,2,3,6,10	Double materiality pg. 13 Our approach pg. 45 Business ethics and compliance, corporate culture and risk management pg. 46		


GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	10	Business ethics and compliance, corporate culture and risk management pg. 46	The number and percentage of operations assessed for risks related to corruption.	<p><i>Reason:</i> Confidentiality constraints</p> <p><i>Explanation:</i> Risk management at Orion is a defined process of identifying, assessing and prioritizing potential risks, then working to mitigate or even circumvent those risks by actively monitoring, managing, controlling and reducing their probability. We do not disclose the number and percentage of operations assessed for risks related to corruption.</p>
	205-2 Communication and training about anti-corruption policies and procedures	10	Business ethics and compliance, corporate culture and risk management pg. 46 ESG performance data pg. 62 2026 Proxy Statement pg. 22		
	205-3 Confirmed incidents of corruption and actions taken	10	Business ethics and compliance, corporate culture and risk management pg. 46		<p><i>Reason:</i> Confidentiality constraints</p> <p><i>Explanation:</i> For the prevention of corruption, we believe that it is important to have an enhanced, strict common standard that uniformly applies to all of Orion and meets or exceeds local requirements. We do not disclose the number of confirmed incidents of corruption and actions taken.</p>
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	10	2025 10K pg. 22 and 70		
<b>Supply chain management</b>					
GRI 308: Supplier Environmental Assessment 2016	3-3 Management of material topics		Double materiality pg. 13 Supply chain management pg. 50–51		

GRI/UNGC content index *continued*

GENERAL DISCLOSURES					
GRI Standard	Disclosure	Reference 2025 UNGC	Location (response/page number)	Omission	
				Requirement(s) omitted	Reason and explanation
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	8	Supply chain management pg. 50–51 ESG performance data pg. 62 100% of new suppliers with more than 100K € in spent are screened using environmental criteria		
	308-2 Negative environmental impacts in the supply chain and actions taken	8	Supply chain management pg. 50–51 ESG performance data pg. 62		<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> We aim to have all our suppliers meet our most critical standards. Part of the vetting process includes the assessment of a supplier's compliance assurance basis. We help suppliers with less robust foundations to establish a compliance assurance baseline at an acceptable level and monitor their performance periodically.
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	1	Supply chain management pg. 50–51 ESG performance data pg. 62 100% of new suppliers with more than 100K € in spent are screened using social criteria		
	414-2 Negative social impacts in the supply chain and actions taken	1	Supply chain management pg. 50–51 ESG performance data pg. 62		<i>Reason:</i> Information unavailable/incomplete <i>Explanation:</i> We aim to have all our suppliers meet our most critical standards. Part of the vetting process includes the assessment of a supplier's compliance assurance basis. We help suppliers with less robust foundations to establish a compliance assurance baseline at an acceptable level and monitor their performance periodically.
Public Policy and Engagement					
GRI 3: Material Topics 2021	3-3 Management of material topics		Double materiality pg. 13 Public policy and engagement pg. 52		
GRI 415: Public Policy 2016	415-1 Political contributions		Orion made no political contributions in 2025		

# Independent practitioner's limited assurance report on Orion S.A.'s Greenhouse Gas (GHG) emissions



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**Independent practitioner's limited assurance report**

Orion S.A.  
Att.: Board of Directors  
6 Route de Trèves  
L-2633 Senningerberg  
Grand Duchy of Luxembourg

**Scope**

We have been engaged by the Board of Directors of Orion S.A. (the "Company") to perform a 'limited assurance engagement', as defined by International Standards on Assurance Engagements, here after referred to as the engagement, to report on the Company's Greenhouse Gases ("GHG") emission values which include Scope 1, Scope 2 and Scope 3 emissions (the "Subject Matter") contained in the Company's Annual Sustainability Report for the year ended December 31, 2025 (the "Report").

Other than as described in the preceding paragraph, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.


**Criteria applied by the Board of Directors of the Company**

In preparing the Greenhouse Gases (GHG) emission values which include Scope 1, Scope 2 and Scope 3 emissions contained in the Report, the Board of Directors of the Company applied the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard ("the Criteria"). The Criteria can be accessed on the website of the GHG Protocol.

**Responsibilities of the Board of Directors of the Company**

The Board of Directors of the Company is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the GHG emission values reported in the Report, such that it is free from material misstatement, whether due to fraud or error.

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**Responsibilities of the Réviseur d'entreprises agréé**

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our engagement in accordance with the International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ("ISAE 3000 (Revised)") established by the International Auditing and Assurance standards Board ("IAASB") as adopted for Luxembourg by the Institut des Réviseurs d'Entreprises ("IRE"), and the terms of reference for this engagement as agreed with the Company on January 23, 2026. Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter in order for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

**Inherent Limitations**

The GHG emission values which include Scope 1, Scope 2 and Scope 3 emissions, quantification process is subject to scientific uncertainty, which arises because of incomplete scientific knowledge about the measurement of GHG emissions. Additionally, GHG emission procedures are subject to estimation (or measurement) uncertainty resulting from the measurement and calculation processes used to quantify emissions within the bounds of existing scientific knowledge.

**Our independence and quality management**

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA Code) as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier" (CSSF) and have the required competencies and experience to conduct this assurance review.

Our firm also applies International Standard on Quality Management 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services engagements, as adopted for Luxembourg by the CSSF, which requires that we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

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Independent practitioner's limited assurance report on Orion S.A.'s Greenhouse Gas (GHG) emissions *continued*



**Description of procedures performed**

Procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information and applying analytical and other appropriate procedures.

Our procedures included:

- Conducting interviews with personnel to understand the business and the overall Greenhouse Gases (GHG) emission reporting process;
- Conducting interviews with key personnel to understand the process for collecting, processing, collating and reporting the Subject Matter during the reporting period;
- Comparing the calculation criteria applied with the methodologies outlined in the Criteria;
- Comparing the Company's internal Greenhouse Gases ("GHG") Emissions Inventory Management Plan (IMP) with the methodologies outlined in the Criteria;
- Undertaking analytical procedures of the reported Greenhouse Gases ("GHG") emission data and making inquiries of management to obtain explanations for any significant differences we identified;
- Identifying and testing significant assumptions supporting calculations;
- Checking the emission factors applied to obtain Greenhouse Gases ("GHG") emission;
- Tracing data, on a sample basis, to underlying source information.

We also performed such other procedures as we considered necessary in the circumstances.



**Conclusion**

Based on our procedures and the evidence obtained, nothing has come to our attention that causes us to believe that the reported GHG emission values in the Subject Matter which include Scope 1, Scope 2 and Scope 3 emission for the year ended December 31, 2025, has not been prepared, in all material respects in accordance with the Criteria.

**Restricted use**

This report is intended solely for the information and use of Orion S.A. and is not intended to be and should not be used by anyone other than those specified parties.

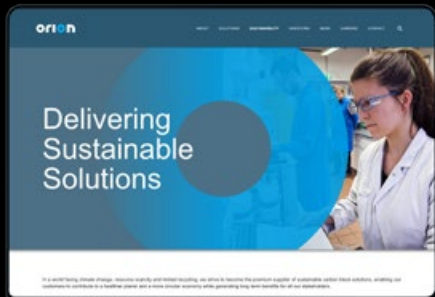
Ernst & Young  
Société anonyme  
Cabinet de révision agréé

Romain Swertvaeger

Luxembourg, 26 May 2026

# Abbreviations

American Chemistry Council	ACC	Environment, Social and Governance	ESG	National Institute of Standards and Technology	NIST
American Society for Testing and Materials	ASTM	Environmental Protection Agency (U.S.)	EPA	Nitrogen Oxide	NO <sub>x</sub>
Artificial intelligence	AI	European Sustainability Reporting Standards	ESRS	Occupational Health and Safety Assessment Series	OHSAS 18001
Battery Energy Storage Systems	BESS	Europe, Middle East and Africa	EMEA	Occupational Safety and Health Administration Voluntary Protection Program	OSHA VPP
Carbon Black Oil	CBO	Flexible Intermediate Bulk Container	FIBC	Particulate Matter	PM
Carbon Border Adjustment Mechanism	CBAM	International Carbon Black Association	ICBA	Process Safety Event	PSE
Carbon Dioxide	CO <sub>2</sub>	Internal Combustion Engine	ICE	Product Carbon Footprint	PCF
Carbon Disclosure Project	CDP	Global Management System	GMS	Recovered Carbon Black	rCB
European Chemical Industry Council	Cefic	Global Reporting Initiative	GRI	Revolving Credit Facility	RCF
Combined Heat and Power	CHP	Global Warming Potential	GWP	Selective Catalytic Reduction	SCR
Corporate Social Responsibility	CSR	Greenhouse Gas Emissions	GHG	Sustainable Development Goals	SDGs
Corporate Social Responsibility Directive	CSRD	International Organization for Standardization	ISO	Sulfur Dioxide	SO <sub>2</sub>
Days Away From Work	DAFW	International Sustainability & Carbon Certification	ISCC	Sulfur Oxide	SO <sub>x</sub>
Earnings Before Interest, Taxes, Depreciation and Amortization	EBITDA	Impact, Risk and Opportunities	IRO	Tire Pyrolysis Oil	TPO
Electric Vehicles	EVs	Kilo Metric Tonnes	k MT	Together for Sustainability	TFS
Emissions Trading System	ETS	Life Cycle Assessment	LCA	Total recordable incident rate	TRIR
End-Of-Life Tires	ELT	Losses Of Primary Containment	LOPC	United Nations Global Compact	UNGC
Environment, Health & Safety	EHS	Metric Tonnes	MT		



We welcome your feedback on this report and our sustainability progress, as well as any other comments or questions you may have. You may contact us at:

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