2025 Sustainability Report

5N+

2025 Sustainability Report

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Business Context

In this section:

Message to Stakeholders

In 2025, we continued implementing our sustainability roadmap, consistent with the priorities and approach outlined in our comprehensive 2024 Sustainability Report. As the business grows, we are advancing our initiatives and assessing our practices across our governance, environmental and social pillars, to do more of what we do well, while also targeting areas where we can improve our performance.

In early 2026, we reinforced our ESG governance framework by formally adopting a Sustainability Policy. This policy establishes the principles and priorities that guide our sustainability work and the integration of ESG considerations into our business. We also further expanded our engagement with critical mineral suppliers on sustainability topics, through the extension of our Supplier Code of Conduct acknowledgement process.

On the environmental front, we advanced site-level initiatives aimed at improving operational and energy efficiency. Some of these efforts are described in the report, including heat recovery improvement, by-product recycling and, where feasible, increased access to renewable electricity. As our production output continues to increase, maintaining a strong focus on operational and energy efficiency, and the sharing of best practices across sites, will remain central to our strategy in the years ahead.

Our commitment to promoting a safe workplace remains unwavering as we continue to strengthen our health and safety culture through a structured, prevention-focused approach. We are equally committed to creating a dynamic work environment and attracting talent to support our growth. Efforts include promoting careers in STEM (Science, Technology, Engineering, and Mathematics) through internships and external engagement, as well as supporting employee development through ongoing training and skills building.

As we look ahead, we will continue to execute on our sustainability roadmap while remaining attentive to evolving ESG requirements and stakeholder expectations. We believe our measured approach will support long-term value creation as our business expands and strengthens its position as a responsible manufacturer of advanced materials critical to a sustainable future.

We thank our employees for their continued commitment to our core value of sustainable development, and our customers and shareholders for their trust and support.

Sincerely,

Gervais Jacques
Chief Executive Officer

Luc Bertrand
Chair of the Board

About this Report

Report Scope and Boundaries

The information contained in the 2025 Sustainability Report pertains to 5N Plus Inc. (TSX:VNP) ("5N+" or "the Company") and its subsidiaries, which encompass the operations of its two business segments: Specialty Semiconductors and Performance Materials. Unless otherwise indicated, the terms "we", "us", "our" and "the group" are used herein to refer to the Company together with its subsidiaries. Unless otherwise specified, all information in this report is presented as of, and for, the year ended December 31, 2025, and all dollar amounts are expressed in U.S. dollars.

Reporting Standards

The 2025 Sustainability Report produced by 5N+ was developed in alignment with select Global Reporting Initiative (GRI) indicators and by consulting other relevant ESG reporting frameworks and standards. These include:

- Sustainability Accounting Standards Board (SASB) Standards (Chemicals; Metals and Mining; Semiconductors, and Biotechnology and Pharmaceuticals) and Task Force for Climate-related Financial Disclosures (TCFD)
- Recommendations as consolidated under International Sustainability Standards Board (ISSB) Standards
- European Sustainability Reporting Standards (ESRS) under the European Union's Corporate Sustainability Reporting Directive (CSRD)

Materiality

The material sustainability topics covered in this report are informed by the reporting standards listed and the Company's materiality assessment and stakeholder engagement. For more information, see the Sustainability Management section.

Feedback

If you have questions or would like to provide feedback on our sustainability reporting, please contact: ehssupport@5nplus.com.

2025 Highlights

13,382 tons CO_2e
in Scope 1 and 2 greenhouse gas emissions

1.5
global lost-time injury frequency rate, compared to 1.2 in 2024

Expanded scope of critical suppliers subject to Supplier Code of Conduct

Purchase of renewable energy certificates in Europe and Asia in support of Scope 2 emission reductions

49 % increase
in average ESH training hours per employee compared to 2024, up to 7.9 hours

100 %
of in-scope critical mineral suppliers have signed or acknowledged our Supplier Code of Conduct

ISO 50001 certification for energy management achieved in Heilbronn, Germany

28.5 % increase
in average total training hours per employee, compared to 2024, up to 28.9 hours

Adoption of a Board-approved **Sustainability Policy**

Launch of critical life cycle impact assessment (LCIA) on germanium, following LCIA on CdTe

40 % female representation
on Board of Directors and 28% among employees globally

31 compliant products
under European Union REACH requirements

5N+ at a Glance

$391M
in revenues in 2025

7
manufacturing sites across three continents

4
R&D centres globally

850
Employees

- Leading supplier of specialty semiconductors in the high-growth renewable energy, space solar power, and sensing and imaging industries
- Market leader in health and pharmaceutical and technical performance materials

North America

Montréal, Canada ★ ● ● ●
- Terrestrial renewable energy
- Imaging and sensing

Bridgeport, United States ● ●
- Health and pharma
- Technical materials

St. George, United States ● ● ●
- Space solar power
- Imaging and sensing

Europe

Heilbronn, Germany ● ● ●
- Space solar power
- Terrestrial renewable energy

Lübeck, Germany ● ● ●
- Health and pharma
- Technical materials

Eisenhüttenstadt, Germany ●
- Terrestrial renewable energy

Asia

Shangyu, China ● ●
- Technical materials

Hong Kong, China ●

★ Head Office
● Specialty Semiconductors Manufacturing
● Performance Materials Manufacturing
● Research and Development
● Commercial Activities

Mission

To be critical to our customers, valued by our employees and trusted by our shareholders.

Vision

To enable critical industries through essential products based on advanced material technology.

Values

Commitment

Continuous improvement

Customer focus

Health and safety

Integrity

Sustainable development

Company History

Over the last quarter century, 5N+ has grown into a global vertically integrated producer of specialty semiconductors and performance materials. These advanced materials are critical to its customers' end-products in diverse and growing markets and contribute to reshaping the global economy and to building a sustainable future.

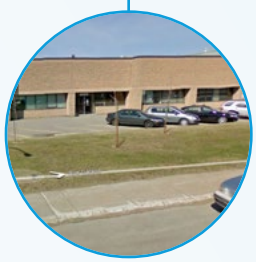
5N+

Enabling Performance

June 1, 2000

Through a management buyout, a group of employees of a major Canadian mining and metals company start their own enterprise to provide advanced materials for medical imaging to reduce X-ray exposure.

2003

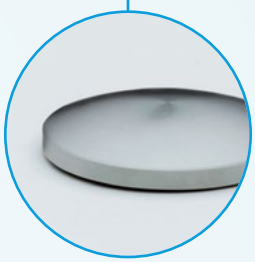


A primary refining plant is commissioned in Montréal, Canada with closed-loop hydrometallurgical operations which span from primary extraction of mining concentrates to recycling capabilities.

2007

5N+ becomes a publicly listed company with shares trading on the Toronto Stock Exchange under the ticker symbol VNP.

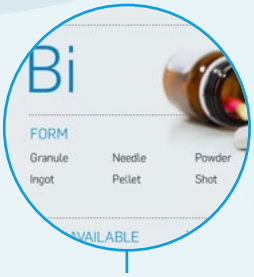
2009



5N+ strengthens its position in the development and production of specialty semiconductors and pure metals through the acquisition of Firebird Technologies.

2011

Through an acquisition, the Company strategically expands its global footprint and becomes a leading diversified producer of specialty metals and chemical products, including bismuth, one of the few heavy metals that have no detrimental effect on human health or the environment.

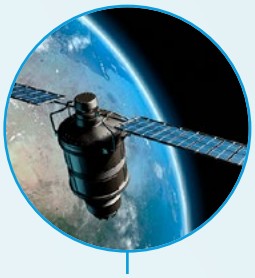


2014

With the acquisition of its remaining ownership interest in Sylarus Technologies in St. George, Utah, 5N+ solidifies its leadership in the production of substrates used for manufacturing imaging and sensing detector chips and solar cells.

2021

A transformational transaction, 5N+ acquires Heilbronn, Germany-based AZUR SPACE, a global leader in the development and manufacturing of multi-junction solar cells, thereby extending its highly competitive specialty semiconductor value chain.



2022

The Company undertakes a major expansion of its tellurium recovery and production capacity in Montréal to support growing demand for specialty semiconductors in the terrestrial renewable energy sector.

2024

Installed production capacity in Montréal increases by 100% compared to 2022 levels. AZUR SPACE completes a two-year program to increase its output capacity by 35%.

2025

5N+ celebrates its 25th anniversary since its founding. AZUR SPACE increases capacity by an additional 30%, with plans to increase capacity by another 25% in 2026.

Business Segments and Markets

Through our unique and proprietary processes and world-class technological expertise, we create advanced materials that enable a broad range of applications across our two business segments: Specialty Semiconductors and Performance Materials.

Specialty Semiconductors

Key Products

- Cadmium telluride semiconductor compounds
- Germanium semiconductor wafers
- Ultra-high purity metals
- Epitaxial semiconductor substrates
- Space solar cells and assemblies

Main End Markets

Terrestrial Renewable Energy
As a leading supplier to the renewable energy sector, our specialty semiconductor products are critical in moving towards a sustainable future. With gigawatts of solar panels incorporating our materials installed in utility-scale projects, our products convert the sun's power into renewable energy to provide electricity for consumers worldwide. In addition, our enabling materials are used in next generation energy storage infrastructure.

Space Solar Power
Our high-purity germanium wafers and epitaxial semiconductor substrates are used to produce ultra-high efficiency photovoltaic (PV) solar cells for satellite power generation and concentrated PV systems. Our enabling materials are frequently in orbit, powering satellites at various orbits such as LEO, MEO, GEO and beyond Earth orbit, as well as various space vehicles.

Imaging and Sensing
Our materials are used to manufacture radiation detector chips in medical, infrared and earth imaging applications in the medical, security and defense industries, helping to reduce patient exposure to x-rays and keep nations safe. We are a key player in the product value chain for the new CT scanning devices and photon counting detectors (PCD), which are to replace scintillator detectors.

Performance Materials

Key Products

- Bismuth-based chemicals and compounds
- Optical and low melting point alloys

Main End Markets

Health and Pharma

We produce bismuth chemicals that are non-toxic to human health or the environment and essential to the creation of everyday human care products. Our bismuth products are used as active pharmaceutical ingredients in over-the-counter antacids and antibiotic creams, as well as in cosmetics product applications.

Technical Materials

Whether as a substitute for toxic heavy metals in various applications or specialty alloys and chemicals, our technical materials are customizable and critical to a broad range of industries, from aviation to optics.

A Sustainable Business Model

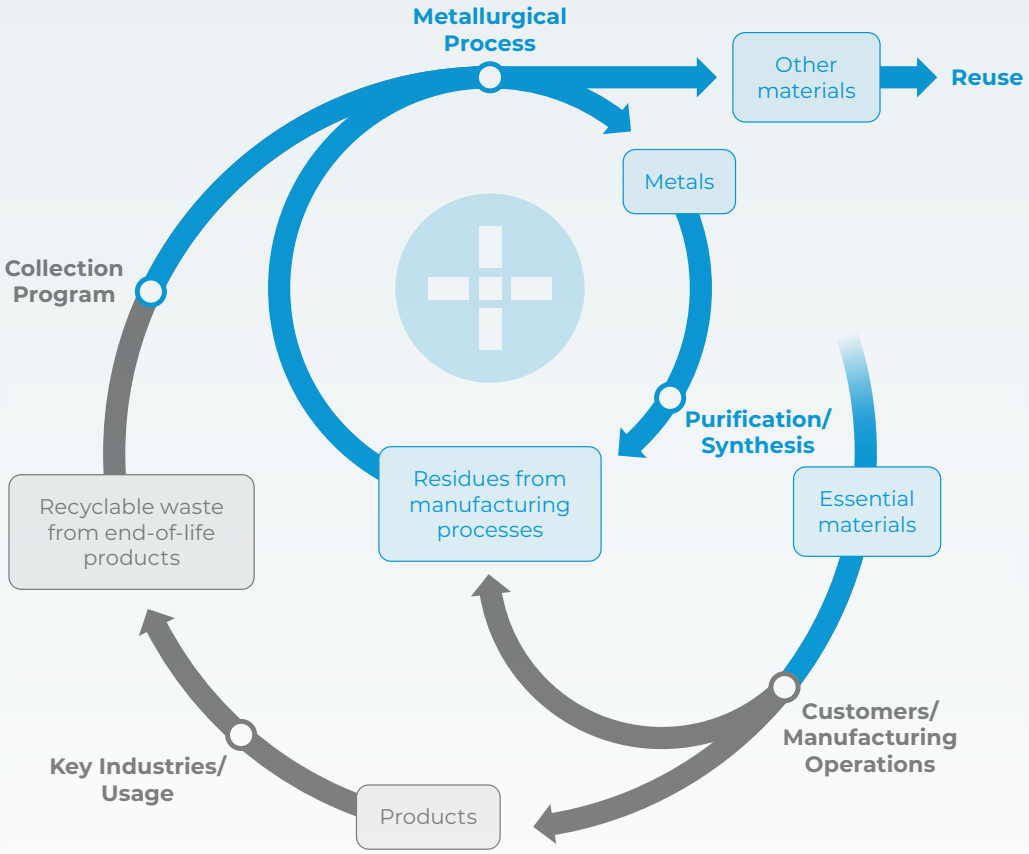
5N+ is committed to being a reliable source of advanced materials, enabling innovative products that are critical to our everyday lives. In addition to enabling industries essential to a sustainable future, we apply a sustainability lens to our own operations, our supply chain and practices.

Circular Economy Principles and a Closed-looped Model

We take an integrated, lifecycle approach to materials management and are constantly investing in sustainably sourcing our raw materials, integrating circular economy principles wherever possible. We have deep expertise and unique technologies for the recovery, treatment and valuation of degraded resources from other industries, with a mineral recycling program that spans three continents.

We procure degraded resources containing low grades of critical metals from upstream suppliers and extract the critical metals to develop and manufacture enabling materials for our customers. As an upcycler of by-products from other industries, we help reduce waste by promoting reuse, while broadening our source market, thereby strengthening our diversified supply chain.

5N+ Lifecycle



Certifications

We hold several certifications for various aspects of our business to demonstrate our commitment to high standards in health and safety, quality, energy, environment and resource management, including internationally recognized ISO standards.

In addition to our ISO certifications:

- Lübeck is a U.S. Food and Drug Administration (FDA) approved facility and meets Good Manufacturing Practices (GMP) requirements.
- Heilbronn / AZUR SPACE is EN 9100 (Quality Management System for Aviation Space and Defense) certified.
- Key space products manufactured by AZUR SPACE are qualified to European (ECSS) and U.S. (AIAA) standards, and concentrated photovoltaic products are manufactured in accordance to the International Electrotechnical Commission (IEC) standards.

ISO Certifications

	ISO 9001 Quality Management	**ISO 14001** Environment Management	**ISO 45001** Occupational Health and Safety	**ISO 50001** Energy Management
Eisenhüttenstadt, Germany	●	●		●
Heilbronn, Germany	●	●	●	●
Lübeck, Germany	●			●
Montréal, Canada	●	●	●	
Shangyu, China	●	●	●	
St. George, United States	●			

Sustainability Management

In this section:

Guiding Principles

Our approach to sustainability management, including the integration of ESG considerations into our strategy, operations and decision-making, is guided by our mission, vision and values, and by the principles and priorities set out in our Sustainability Policy.

- Uphold the highest standards of business ethics and compliance through proactive risk management and robust governance and operational frameworks, policies and processes.
- Minimize the environmental impacts of our operations through operational efficiency, continuous improvement and responsible resource management, supported by standardized frameworks for energy, water, substances, waste and air quality.
- Integrate circular economy principles through our closed-loop business model, leveraging our expertise in the recovery, treatment and upcycling of degraded resources into ultra-high-purity, advanced materials.
- Foster a safe and respectful work environment and a resilient workforce by continuously strengthening environmental, health and safety practices, supporting employee development and promoting a discrimination-free workplace.
- Have a positive impact on the communities in which we operate and maintain open dialogue with our community stakeholders.
- Adhere to responsible sourcing practices that support the procurement of conflict-free critical minerals, mitigate human rights risks and safeguard supply chain integrity.
- Develop and manufacture specialty semiconductors and performance materials that meet stringent industry requirements and enable products with positive societal impact.
- Promote a culture of innovation and sustainable product development built on continuous advancement, technological excellence, responsible industrial transformation and strong client partnerships.

Anchored by these principles and priorities, 5N+ is committed to conducting its business responsibly and pursuing its sustainability efforts with the objective of creating long-term value for our stakeholders.

RESOURCE

Sustainability Policy

Pillars and Material Topics

Our material sustainability pillars and topics are the foundation of our sustainability roadmap and considered as part of our enterprise risk management process. They were identified based on relevant ESG reporting standards, as well as our ongoing materiality assessments and stakeholder engagement.

Pillars		5N+ Material Topics
Governance	Maintain robust governance and operational frameworks that support ethical business conduct, proactive risk management, resilience, and responsible sourcing and product development.	▪ Corporate and ESG Governance ▪ Business Ethics and Compliance ▪ Responsible Supply Chain Management ▪ Information Security and Data Privacy ▪ Product Reliability, Quality and Safety ▪ Sustainable Product Innovation
Environment	Minimize our environmental impact through operational efficiency and responsible resource management, integrating circular economy principles where possible in our operations and product manufacturing.	▪ Climate Change ▪ Energy Management ▪ Water Management ▪ Waste Management ▪ Air Quality ▪ Product Stewardship ▪ Circular Economy ▪ Biodiversity
Social	Foster a safe and respectful work environment in which employees can grow and thrive and positively impact the communities in which we operate.	▪ Labour Practices ▪ Health and Safety Management ▪ Talent Development ▪ Inclusion and Diversity ▪ Community Engagement

Alignment with United Nations Sustainable Development Goals

While sustainability is often viewed as the long-term goal, sustainable development refers to the processes and actions that help achieve it. At 5N+, sustainable development is also a core value.

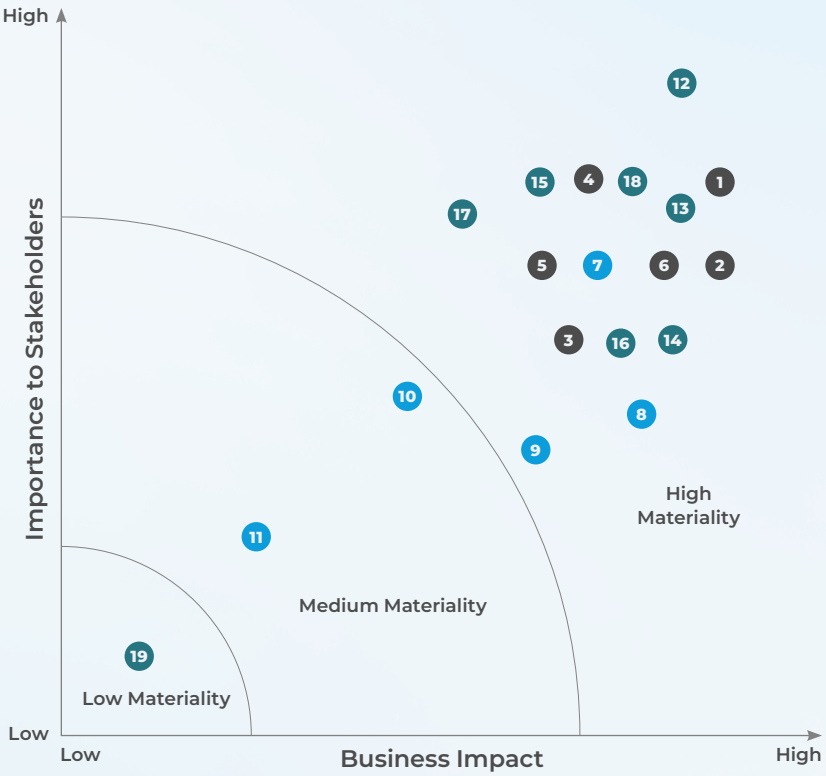
Since its last report, the Company reviewed the United Nations Sustainable Development Goals (UN SDGs) to identify those we believe we can most directly contribute to as a responsible supplier of advanced materials to critical industries.

UN SDGs		Relevant 5N+ Material Topics
	**Good Health and Well-Being** 5N+ maintains robust health and safety programs and produces materials with positive societal impact.	▪ Health and Safety Management ▪ Product Reliability, Quality and Safety ▪ Responsible Supply Chain Management
	**Affordable and Clean Energy** The Company manufactures products that enable the generation of renewable energy for utility-scale projects and space-based applications.	▪ Climate Change ▪ Sustainable Product Innovation ▪ Product Stewardship
	**Industry, Innovation and Infrastructure** 5N+ supports innovation through R&D capabilities, proprietary processes and the manufacturing of ultra-high-purity advanced materials that are critical to our customers' end products.	▪ Sustainable Product Innovation ▪ Product Reliability, Quality and Safety ▪ Product Stewardship
	**Responsible Consumption and Production** The Company applies circular economy principles through its closed-loop processes and business model, including the recovery, treatment and upcycling of degraded resources into critical advanced materials.	▪ Circular Economy ▪ Energy, Waste and Water Management ▪ Responsible Supply Chain Management ▪ Product Stewardship

Materiality Assessment

Our materiality matrix presents the relative importance of the material topics deemed significant to our business and our stakeholders. In 2025, the Company continued to pursue its double materiality assessment process started in 2024. This work did not result in any changes to its materiality topics or their relative importance.

Materiality Matrix



Governance

1. Corporate and ESG Governance
2. Business Ethics and Compliance
3. Information Security and Data Privacy
4. Product Reliability, Quality and Safety
5. Sustainable Product Innovation
6. Responsible Supply Chain Management

Social

7. Health and Safety Management
8. Talent Development
9. Labour Practices
10. Diversity and Inclusion
11. Community Engagement

Environmental

12. Climate Change
13. Energy Management
14. Water Management
15. Product Stewardship
16. Waste Management
17. Air Quality
18. Circular Economy
19. Biodiversity

Stakeholder Engagement

Stakeholder engagement continues to inform the advancement of our sustainability roadmap and materiality assessment process, to ensure that we understand and remain aligned with stakeholder expectations. This engagement continued in 2025 in the normal course of business across our key stakeholder groups, and with specific outreach on sustainability matters with industry associations and local communities.

- Employees
- Management
- Board of Directors
- Customers
- Suppliers
- Investors
- Industry Associations
- Government
- Local Communities
- NGOs and Advocacy Groups
- Academia and Experts

RESOURCE

For more information on the 2024 materiality assessment updates and stakeholder engagement activities, please consult our 2024 Sustainability Report.

Governance

Maintain robust governance and operational frameworks that support ethical business conduct, proactive risk management, resilience, and responsible sourcing and product development.

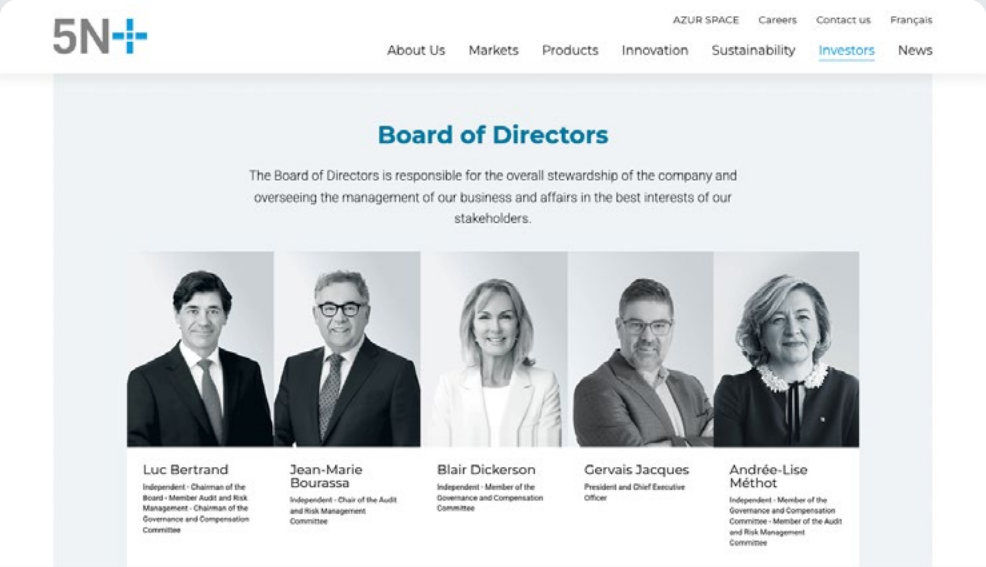
In this section:

Corporate and ESG Governance

5N+ has adopted several corporate governance guidelines, charters and policies to assist the Board and management in the exercise of their responsibilities and to ensure that all directors, officers and employees conduct themselves under and hold themselves to the highest ethical standards.

RESOURCE

The complete list of corporate governance policies, board charters and guidelines can be found on the 5N+ website.



Board Composition

The Board of Directors is responsible for the overall stewardship of the company and overseeing the management of our business and affairs in the best interests of our stakeholders. In 2025, the Board of Directors was comprised of five directors, unchanged from 2024.

BOARD COMPOSITION IN 2025

80%
Director independence

40%
Board female representation

8 years
Average director tenure

65 years
Average director age

ESG Governance

The governance and oversight of ESG matters is integrated to Board committee charters and is part of the official responsibilities of members of the Executive Committee, with implementation further supported by a cross-functional Sustainability Committee. The following outlines ESG Governance at 5N+:

Board of Directors

- Responsible for ESG governance, with specific ESG matters delegated to the relevant Board committees, which are comprised of independent Board members

Governance and Compensation Committee

- Oversees the Company's ESG strategy and integration within its business strategy

Audit and Risk Management Committee

- Responsible for identifying and managing the Company's risks, including relevant ESG-related risks, with climate risks integrated in the Enterprise Risk Management (ERM) process

Chief Executive Officer

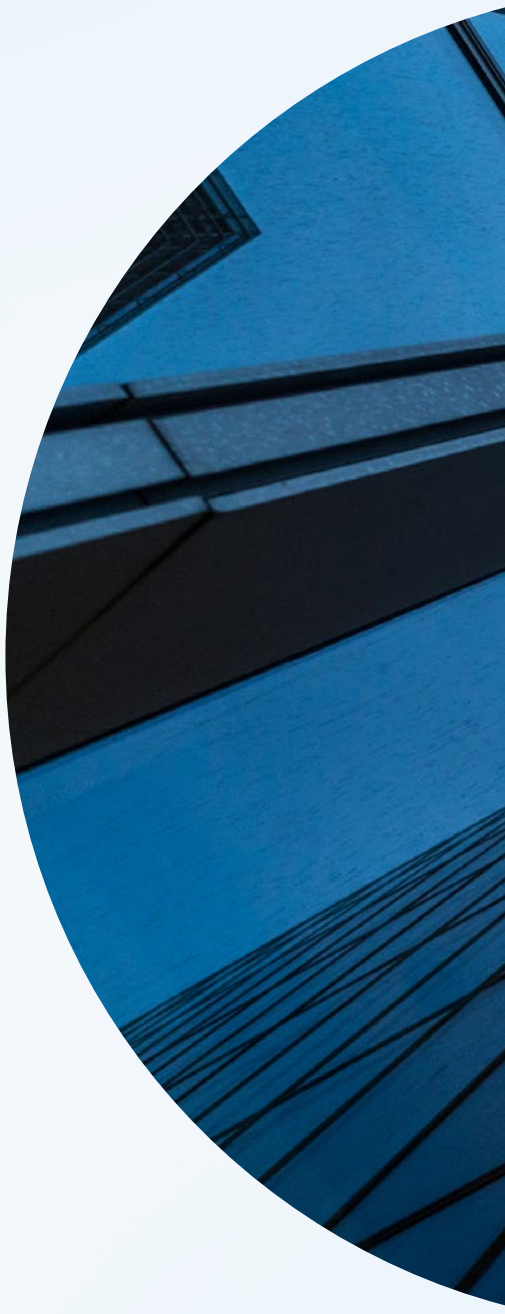
- Designated by the Board as responsible for sustainability management
- With the support of the Chief Financial Officer and other members of management, reports to the Board and its relevant committees on ESG considerations and risks on a quarterly basis

Chief Financial Officer

- Oversees the development and implementation of the Company's sustainability management system and roadmap, supported by the Corporate Director, EH&S and Product Stewardship

Sustainability Committee

- Cross-functional committee implemented in 2024, chaired by the Corporate Director, EH&S and Product Stewardship
- Provides support in the development and implementation of sustainability initiatives, monitors sustainability performance and reporting



Sustainability Policy

In early 2026, the Board of Directors formally adopted a Sustainability Policy setting out the principles and priorities that guide 5N+ in its sustainability efforts, and in the integration of ESG considerations into its strategy, operations and decision-making, with the objective of creating long-term value for our stakeholders. The policy is applicable to all employees and suppliers.

RESOURCES

Sustainability Policy

Sustainability Management

Business Ethics and Compliance

Across the organization, we are committed to the highest standards of business ethics and compliance, supported by robust policies and processes, proactive risk management and a structured management approach to ensure continuous oversight and accountability.

Code of Business Conduct and Whistleblower Policy

Our Code of Business Conduct (the "Code") explains the fundamental values and standards of behaviour that are expected from all employees, officers, directors, agents, consultants and partners of the Company. As outlined in the Code, we are responsible for complying with the laws and regulations governing the activities of 5N+, for acting with honesty at all times, and for adopting the highest standards of ethics and business conduct. All employees and directors complete an annual certification acknowledging that they have read and understood the Code.

Our Whistleblower Policy allows employees and external parties to report suspected violations of the Code or express concerns in good faith with the assurance that they will be protected against reprisals or victimization. If any party is aware of or suspects another party is acting unethically or illegally, they have a duty to report it and can make an anonymous report using available channels. The Whistleblower Policy is available on our website and regularly communicated internally.

Risk Management

The Board is responsible for overall risk management, and it is management's policy and responsibility to regularly assess and identify risk factors which may affect 5N+ and take steps to minimize their impact. All business risks are mandated to be reviewed twice a year through the Corporate Internal Audit, with all risks and mitigation measures undertaken reported to the Board of Directors on a regular basis. At the business level, 5N+ takes a proactive approach to risk management, continuously identifying, assessing, mitigating risks and seizing opportunities. This approach is reinforced by the Business Continuity Plan, in place since 2018, ensuring resilience and adaptability in an evolving business environment. The potential risks and uncertainties the business faces are outlined in our latest Management's Discussion and Analysis.

Anti-Corruption

In our commitment to ensuring ethical business operations, we comply with and train our employees on the requirements associated with the Corruption of Foreign Public Officials Act of Canada to avoid real or perceived corruption. The policies we have implemented provide guidance to our employees on situations that may be considered a conflict of interest or bribery, and include restrictions on receiving or giving gifts in the course of business. In 2025, 5N+ did not report any compliance cases related to allegations of bribery.

Human Rights

5N+ is committed to respecting the human rights and to adhere to the principles set forth in the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work, and the UN Guiding Principles on Business and Human Rights. We have no tolerance for human rights violations or any form of child labour, forced labour, sexual exploitation or abuse, modern slavery or human trafficking, a policy that extends to our suppliers, as outlined in our Supplier Code of Conduct and our Human Rights Statement. Our annual Report on Modern Slavery Act further outlines our initiatives to mitigate such risks. In 2025, there were no identified or reported instances of forced labour or child labour within the Company's operations or supply chain.

RESOURCES

- Code of Business Conduct
- Management's Discussion and Analysis
- Supplier Code of Conduct
- Human Rights Statement
- Report on Modern Slavery Act
- Whistleblower Policy

Responsible Supply Chain Management

As a global manufacturer of advanced materials, we procure a wide range of materials and services from diverse suppliers, both within and outside Canada. In line with our procurement policies, we are committed to fostering long-term business relationships while strengthening sustainability initiatives across our entire supply chain and enhancing measures for ethical and transparent transactions with our critical suppliers.

Supplier Mapping and Engagement

The Company has adopted a progressive, risk-based approach to supply chain risk management. It identifies and assesses suppliers based on spending influence and environmental and social risks, including the supplier's region of operation and industry. This procurement approach enables us to evaluate direct suppliers (Tier 1) based on their impact on sustainability and business continuity. By mapping our Tier 1 suppliers, we can also identify and assess risks associated with indirect suppliers (Tier 2 or Tier 3). In 2025, we pursued our supplier mapping and engagement activities.

We continue to actively engage with our critical suppliers to promote alignment on sustainability, quality and performance through:

- Purchasing Performance Meetings
- The Procurement Process
- Direct Engagement
- Supplier Code of Conduct Acknowledgement

Based on our assessments to date, China continues to represent the highest-risk country from which we source goods and services. Tier 1 suppliers of critical minerals represent the priority group, given the importance of such materials to our manufacturing operations and the heightened risks in global mineral supply chains.

Supplier Code of Conduct

In 2024, we implemented our Supplier Code of Conduct. It aims to reinforce and outline the standards we expect our suppliers to uphold regarding business ethics, human rights, labour relations, health and safety, and environmental protection, while also ensuring compliance with laws and regulations.

Based on our supplier mapping activities, we have focused our Code roll-out efforts to suppliers of critical minerals based in China. In 2025, this scope was expanded to include critical mineral suppliers located outside China. In 2026, we intend to further expand the applicability of our Code to suppliers of consumables and engineering services, based primarily in China.

Through expanded supplier engagement efforts in 2025, we also gained additional insight into the practices of certain large, multinational and established market participants in the metals and mining sector from which we procure critical minerals outside of China. These Tier 1 suppliers have implemented robust governance frameworks, policies, reporting and remediation mechanisms addressing the risks of forced labour and child labour in their operations and supply chain. Where these standards are assessed as equivalent to or more comprehensive than our own Code and related mechanisms, these suppliers apply their own frameworks.

Conflict-free Minerals

While 5N+ does not directly mine the materials it refines, it is of critical importance to us that all materials we receive from our suppliers (Tier 1) and indirect suppliers (Tier 2 or Tier 3) are ethically obtained. Our Code of Business Conduct and Supplier Code of Conduct cover the guidelines under which we operate for all our sourcing, including by following all applicable laws and regulations.

RESOURCES

Supplier Code of Conduct

Report on Modern Slavery Act

Information Security and Data Privacy

Our comprehensive information security program is designed to safeguard sensitive and identifiable information belonging to the Company, its subsidiaries, business units, partners, customers and employees.

Led by our Information Technology (IT) department and supported by senior management, the program aims to ensure compliance with applicable privacy and cybersecurity standards while protecting the confidentiality, integrity and availability of Company information.

In 2025, 5N+ continued strengthening its cybersecurity and data protection practices through initiatives focused on risk management, system resilience, employee awareness and infrastructure modernization. The Company did not experience any material data breach during the reporting period.

Key practices and initiatives include:

- **Risk Assessment:** Identifying and evaluating potential threats and vulnerabilities across the Company's systems and infrastructure to support proactive risk mitigation.
- **Access Control:** Applying strong identity and access management practices to ensure that only authorized personnel have access to sensitive information and critical systems.
- **System Updates and Vulnerability Management:** Continued enhancement of centralized endpoint management and patching processes to strengthen the identification, prioritization and remediation of known vulnerabilities across the Company's IT environment.
- **Secure Network Architecture**: Improvements to network segmentation and infrastructure architecture designed to enhance security controls and reduce exposure between systems and operational environments.
- **Technology Lifecycle Management:** Continued decommissioning of legacy systems and inactive devices to reduce security risks and maintain a modern and supported technology environment.
- **Employee Awareness and Training:** Strengthening cybersecurity culture through mandatory employee awareness training and simulated phishing exercises, with phishing susceptibility declining from approximately 27% at program launch to about 2% in recent campaigns, now below typical industry benchmarks.
- **Incident Response Preparedness**: Maintaining and regularly updating incident response procedures to support the timely detection, containment and resolution of potential security incidents.
- **Continuous Monitoring:** Monitoring systems and infrastructure for unusual activity in order to identify and respond to potential threats.
- **Data Encryption:** Protecting sensitive data through encryption and other safeguards to secure information both in transit and at rest.
- **Third-Party Risk Management:** Assessing and managing the cybersecurity practices of vendors and partners who may have access to Company systems or data.
- **Audits and Compliance**: Conducting periodic internal reviews and assessments to help ensure continued compliance with applicable regulations and industry standards.

RESOURCE

Privacy Policy and Workplace Privacy Policy

Product Reliability, Quality and Safety

As an integrated manufacturer of advanced materials, we utilize unique and proprietary process technologies which enable us to transform metals into value-added specialty materials that often form the core of our customers' products.

We have consistently demonstrated our commitment to delivering high-quality, value-added products, ensuring reliability through stringent quality control and maintaining safety in substance management—from product conception to distribution.

Our sites have successfully implemented robust management systems and adhere to stringent internationally recognized safety, quality, energy, environment and resource management standards. For example, all our operations are ISO 9001 certified for Quality Management.

Individual sites also hold additional certifications based on specific product, customer or industry requirements. Under Specialty Semiconductors, our Heilbronn facility which develops and manufactures advanced solar cells, is EN 9100:2018 certified, which is a globally recognized Quality Management System (QMS) for aviation, space and defense organizations. Key space products are also qualified to both European (ECSS) and U.S. (AIAA) standards, ensuring compliance with the highest industry benchmarks. Under Performance Materials, our health and pharmaceuticals operations in Lübeck are certified as an active pharmaceutical ingredient (API) producer in Germany, certified under Good Manufacturing Practices (GMP), and approved by the U.S. Food and Drug Administration (FDA).

RESOURCES

ISO Certifications

Business Segments and Markets

Photo credit: ESA/ATG medialab

Sustainable Product Innovation

Innovation is at the core of our business and sustainability strategy. Through R&D and a close collaboration with our long-standing partners, we contribute to products and processes that are critical to everyday life, such as active pharmaceutical ingredients and the conversion of solar power into energy.

Our name, 5N+, reflects the exceptional purity levels of our materials—5N (99.999% of purity) and beyond—achieved through proprietary technologies, advanced processing techniques, and the expertise of our strong R&D team. With robust purification processes and cutting-edge technology, we ensure the production of ultra-high purity materials that meet the most stringent industry requirements for semiconductors, optoelectronics, renewable energy, and life sciences.

We have a world-class technical team and four R&D centres located in Canada, the United States and Germany, close to suppliers and customers. Our specialist R&D teams are subject-matter experts with decades of experience, working with our customers, often sector-leaders themselves, in joint R&D partnerships for product advancement. We are constantly enhancing our processes, developing new products or accelerating their path to market to address the needs of our customers and their end markets.

Our culture of innovation remains the foundation for continuous advancement, technological excellence, and responsible industrial transformation, fostering strong partnerships with our clients.

SPOTLIGHT

Perovskite Precursors

After several years of development, 5N+ launched a suite of perovskite precursors drawing on its deep expertise and experience in low energy consumption hydrometallurgical process development, paired with highly efficient and scalable purification processes to help achieve superior and repeatable product quality.

Our suite of perovskite precursors is comprised of lead and cesium halides of 4N+ purity, as well as specialized halides that deliver stable product quality, tailored particle sizes, as well as quantities on demand. The longer term goal with this suite of products is to help solar industry customers improve the efficiency of their traditional solar modules, by reducing the amount of materials, energy and water used per watt of photovoltaic output installed, as well as reduce the land use of a given project.

RESOURCE

Business Segments and Markets

Environment

Minimize our environmental impact through operational efficiency and responsible resource management, integrating circular economy principles where possible in our operations and product manufacturing.

In this section:

Climate Change

Guided by TCFD recommendations, 5N+ monitors and measures the potential impact of climate change-related physical and transition risks through its annual climate risk assessment process, which covers all manufacturing sites. It also includes financial risk assessment and climate scenario analysis, in accordance with our material sustainability topics, enterprise risk management process and business strategy. This work is further informed by ongoing engagement and information gathering on our extended value chain. Our aim is to continue incorporating the latest available climate data, regulatory developments and evolving business needs.

In 2025, we reviewed climate assessment time horizons to ensure alignment with strategic objectives and sustainability priorities. Consistent with the prior year, we continue to face moderate to low physical risks in relation to flooding, earthquakes, landslides, cyclones, water scarcity, extreme heat, wildfire and other environmental challenges over the medium and long term. In terms of transition risks, our monitoring across the jurisdictions in which we operate confirms that we comply with established government regulations.

As part of our commitment to continuous improvement, the Company is working on further strengthening the risk and opportunities identification of its climate assessment process. In 2025, the updated process was utilized to assess sites in Germany. In 2026, we intend to extend it to additional sites globally. This will support a more consistent understanding of climate-related exposures across operations and allow deeper engagement with clients on emissions management and climate resilience.

In 2025, we reviewed our sustainability roadmap to harmonize our energy and climate initiatives. We also pursued efforts to reduce greenhouse gas emissions, optimize resource use, and ensure compliance with evolving climate-related regulations.

SPOTLIGHT

Advancing Climate Initiatives at AZUR SPACE

For the second consecutive year, our Heilbronn facility disclosed its environmental data to CDP and received a CDP SME Climate Score of B. While the overall score was on par with last year, it reflected improvement in select categories within the B range. Notably, the site gained compliance with ISO 50001 requirements in 2025 and demonstrated strong performance in impact, risk and opportunity management, as well as a robust GHG inventory. This achievement was complemented by ongoing initiatives to enhance site energy consumption and operational efficiency.

In 2025, AZUR SPACE also developed a climate roadmap, in coordination with a key space solar power end-market customer. The roadmap provides a clear understanding of business performance and climate objectives.

Scope 1 and 2 GHG Emissions

Our Scope 1 and 2 GHG emissions inventory is calculated in accordance with the GHG Protocol and each year, we work to improve data accuracy and calculation methodology.

2025 GHG Emissions by Scope (Metric Tons CO_2 eq)

Scope 1	2,246
Scope 2	11,136
Total	**13,382**

In 2025, our business units in Europe and Asia began procuring renewable energy certificates. Consequently, 5N+ is reporting Scope 2 emissions using the market-based method (MBM) for 2025, which was previously reported using the location-based method (LBM). Under the MBM, Scope 2 emissions were 11,136 tons of CO_2e in 2025, reflecting the impact of the renewable energy certificates purchased. If calculated under the LBM, reflecting average grid intensity of the regions where we operate, 2025 Scope 2 emissions were 15,439 tons of CO_2e. See Appendix for more information on calculation methodology and year-over-year comparisons.

Scope 1 emissions in 2025 increased by 2.6% compared to 2024, primarily due to higher production levels, while Scope 2 emissions, calculated using the location-based methodology for comparative purposes, increased by 3.7%, for the same reasons.

RESOURCES

Scope 1 and 2 GHG Emissions Calculations

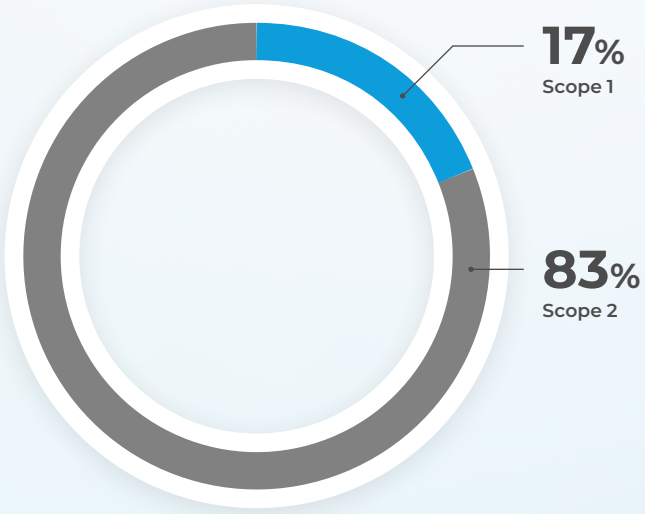
2024 Sustainability Report

Scope 1 emissions include stationary combustion, mobile combustion, refrigerants and fugitives from all our sites, as well as from company-owned vehicles. Scope 2 emissions are primarily comprised of purchased (grid) electricity consumed within our operations, as well as steam, heat and cooling used in industrial processes.

Our Scope 1 and 2 emissions vary by region and reflect differences in energy mix and operational intensity. Despite increased production, our operations in Montréal benefit from low-carbon hydroelectric power. Europe represents the largest share, due to more energy-intensive manufacturing and higher reliance on natural gas compared to operations in other regions. Operations in Asia, though smaller in scale, have a higher emissions footprint because of its more carbon-intensive electricity grid.

In 2025, our work on Scope 3 emissions, as outlined in our 2024 Sustainability Report, remained under review.

2025 Scope 1 and 2 GHG Emissions Breakdown



Energy Management

Through process optimization, equipment upgrades and operational best practices, we aim to standardize energy performance improvements while maintaining regulatory compliance and sustainability leadership in our industry. We also continue improving the accuracy and reliability of our energy data to enhance tracking and reporting.

Our Corporate Environmental, Health, and Safety (EHS) Policy serves as the foundation for our energy management approach, aligning with ISO 50001 standards for energy performance to drive efficiency across our operations. Our three facilities in Germany have implemented energy management systems that are ISO 50001 certified, with our Heilbronn facility having achieved certification at the end of 2025. All our sites have identified their Significant Energy Uses (SEUs) as defined by ISO 50001 and we intend to enhance the identification of SEUs at sites that have not yet implemented ISO 50001.

Our three sites in Germany have aligned their energy monitoring and management systems and conduct regular internal and external energy and carbon audits. Our other sites continue to monitor energy performance as part of their operational initiatives to enhance energy efficiency. We continue to work to expand energy monitoring capabilities, leveraging data analytics tools to track consumption patterns and optimize operational energy performance.

SPOTLIGHT

Increasing Access to Renewable Electricity in Europe and Asia

Where feasible, we assess strategic opportunities to integrate renewable energy sources to reduce our Scope 2 emissions and in 2025 several sites made important progress in this regard. By the end of 2025, three facilities had purchased renewable electricity. As a result, renewable energy, all of it purchased renewable electricity, accounted for 19% of our global energy consumption in 2025.

Our Shangyu facility procured renewable electricity through Renewable Energy Certificates (RECs) and secured contracts through 2026 that are expected to cover 80% of its electricity consumption that year. Our Lübeck facility secured renewable electricity contracts extending through 2028. AZUR SPACE in Heilbronn secured a contract to source 100% renewable electricity, fully backed by Guarantees of Origin (GoO), coordinated through a collective agreement within the industrial park where it is located.

SPOTLIGHT

Securing Verified Emission Reductions in Lübeck

In addition to its purchase of renewable electricity, the Lübeck facility has also secured carbon credits, or Verified Emission Reductions (VERs), to offset some of its emissions, particularly from natural gas use. These credits are certified under recognized standards and originate from climate protection projects evaluated for sustainability, and covering areas such as education, healthcare, gender equality and cultural support. A total of 486 t CO_2 equivalent has been offset in 2025 through these independently certified credits, which are permanently retired after use.

Energy Consumption

To gain a more precise understanding of our energy usage and energy efficiency improvements, we differentiate between primary and secondary energy consumption. Primary energy consumption consists of natural gas and diesel directly used in our facilities for heating, production processes, and backup power generation. These energy sources are required for high-temperature operations and fuel-dependent equipment. Secondary energy consumption consists of purchased electricity, purchased heating, purchased steam, and purchased cooling. These are externally supplied sources used to power production lines, maintain optimal facility conditions, and support auxiliary systems such as lighting, ventilation and process cooling.

To maintain and enhance energy efficiency and performance, we have identified and implemented initiatives based on SEUs across our sites. These include continuous energy monitoring, preventive maintenance to optimize equipment performance, peak-hour energy management to reduce demand spikes, work schedule adjustments for off-peak energy efficiency, raw material improvements to lower processing energy needs and technological process optimization.

SPOTLIGHT

Heat Recovery Initiative in Heilbronn

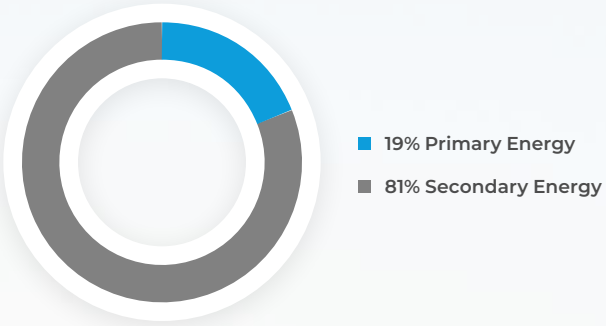
Our Heilbronn site is developing a system to recover heat that would otherwise be lost from its high-temperature cleanrooms. The design phase was completed in 2025 in collaboration with external partners, with adjustments made to address corrosion risks and ensure the system can support the Company's reactor's growth. Installation is planned for 2026–2027, when the exact energy savings will be measured. Once operational, the project is expected to improve energy efficiency and reduce emissions by improving heat recovery and reuse.

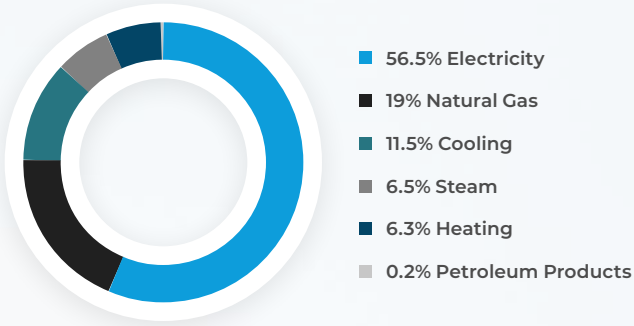
SPOTLIGHT

Major Engineering Enhancement to Eisenhüttenstadt Reactor

In 2025, our Eisenhüttenstadt facility implemented upgrades to a reactor that combined process optimization and equipment redesign. Our R&D team optimized the reactor's stoichiometric parameters, while engineers carefully designed the precise expansion of the reactor's dimensions. This combined effort resulted in a 5% reduction in electricity consumption at the facility in the latter half of the year. Preliminary analysis indicates these changes could deliver even greater energy efficiency at the process level, supporting operational efficiency and the site's ongoing sustainability efforts.

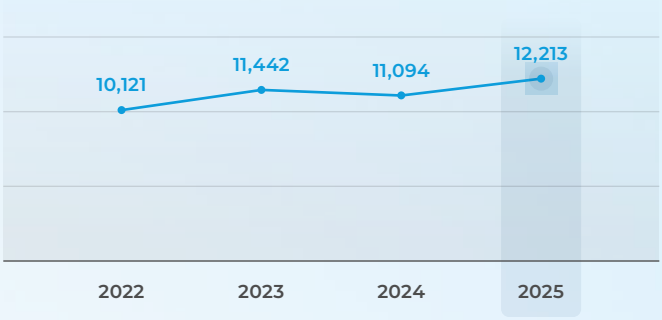
2025 Energy Distribution





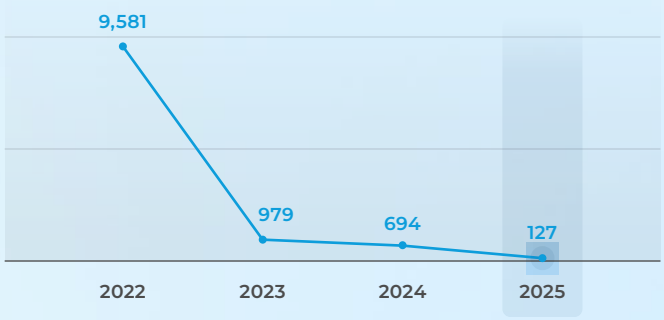
PRIMARY ENERGY

Natural Gas Consumption (MWh)



10.1% natural gas increase compared to 2024

Petroleum Products Consumption (MWh)

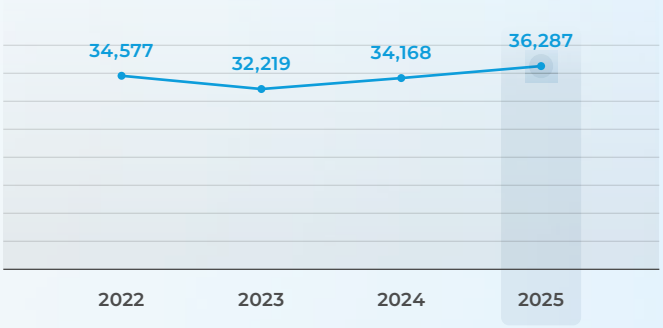


81.7% petroleum decrease compared to 2024

4.7% total primary energy consumption increase compared to 2024

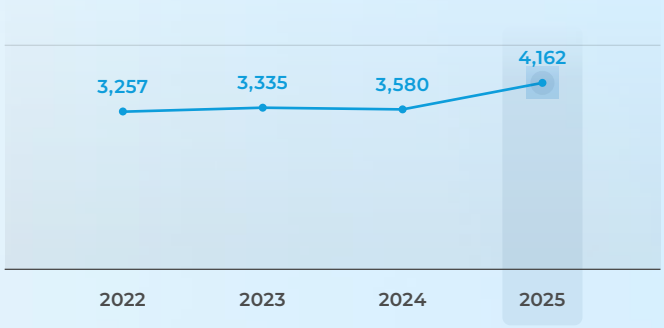
SECONDARY ENERGY

Electricity Consumption (MWh)



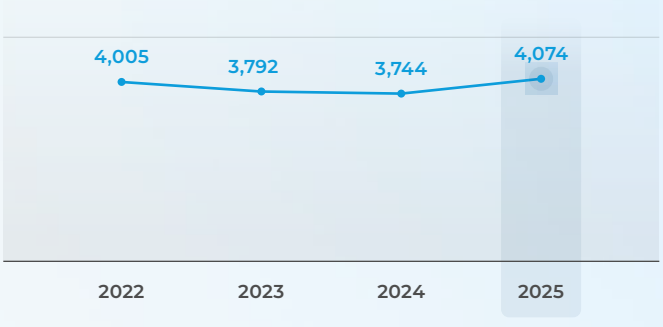
6.2% electricity consumption increase compared to 2024

Steam Consumption (MWh)



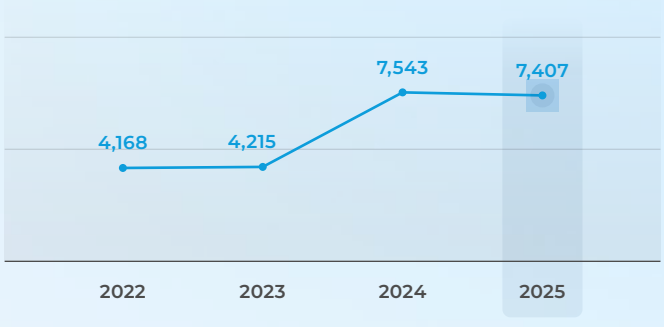
16.3% steam consumption increase compared to 2024

Heating Consumption (MWh)



8.8% heating consumption increase compared to 2024

Cooling Consumption (MWh)



1.8% cooling consumption decrease compared to 2024

5.9% total secondary energy consumption increase compared to 2024

Water Management

While most of our sites are currently considered to have low water scarcity risks, we recognize that our operations are water-intensive for production, cooling and chemical processes. We actively track water consumption and implement initiatives to improve efficiency, reduce withdrawals, and improve treatment and reuse systems to mitigate risks related to water supply. Areas of focus include optimizing water sourcing and implementing recirculation systems to lower overall site demand, implementing process optimization to minimize water losses and maximize water reuse, and enhancing treatment systems to ensure compliance with regulations and environmental stewardship.

Our three sites in Germany and our Shangyu plant have in-house water treatment facilities, enabling water reuse and efficiency improvements. Shangyu operates a closed-loop system, achieving zero wastewater discharge by reusing process water. Eisenhüttenstadt operates a closed-loop system for cadmium telluride (CdTe) production, which represents most of its production. While Heilbronn, Lübeck and Montréal do not have closed-loop systems, we ensure compliance with environmental discharge regulations through trusted external partners and regular performance audits.

Following the addition of an indium recycling line at our Eisenhüttenstadt site, a portion of operations now generates wastewater, managed in full compliance with environmental regulations. This initiative supports the recovery of indium, a critical raw material used in semiconductors, displays and photovoltaic technologies, thus contributing to reduced reliance on virgin resources. For 2025, these process improvements resulted in a reduction in water withdrawal of 5.5%.

SPOTLIGHT

Increased Silver Recovery in Heilbronn

A new wet bench, including a silver precipitation unit, has been installed in the Heilbronn plant's solar cell production to clean parts coated with silver. Silver is applied to the conductive grid of our triple-junction solar cells using Physical Vapor Deposition (PVD), which is essential for efficient electricity flow. The wet bench not only cleans these parts but also captures and recovers silver from wastewater, reducing material loss and environmental impact.

Pilot production and process optimization will begin in 2026, when recovery rates are confirmed. The treated wastewater will meet all regulatory requirements. This initiative builds on existing efforts to recover precious metals and supports more efficient resource use and circular economy practices.

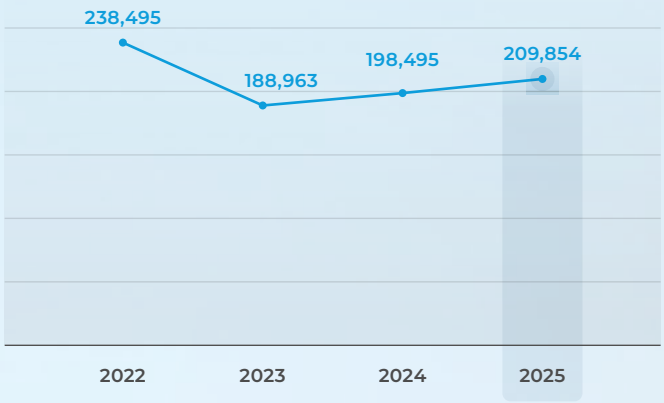
Water Performance

In 2025, total water withdrawal increased by 5.7% and total wastewater discharge increased by 3.9%, primarily due to increased production at several facilities. This was partially offset by continued water efficiency measures across other operations.

Shangyu and Eisenhüttenstadt maintained high levels of water recovery, supported by established closed-loop systems. In Shangyu, the use of reverse osmosis technology continued to contribute to improved water efficiency by reducing chemical usage and optimizing overall water consumption. Additionally, the implementation of water recirculation processes at other sites supported more efficient water use.

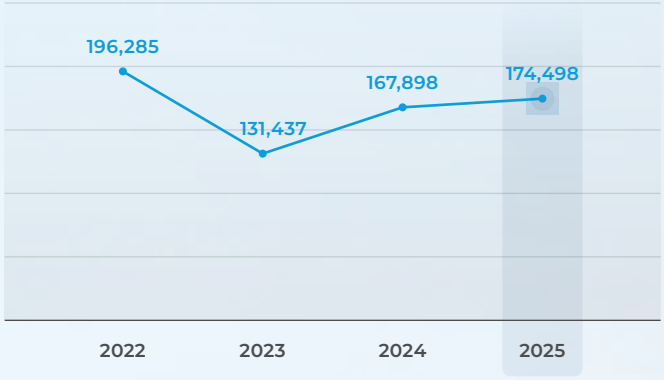
Water consumption is primarily driven by evaporation losses, residual concentrates from water treatment, and chemical reactions within refining. High-temperature processes, such as refining and purification, contribute to evaporation losses, while cooling systems, especially those in open-loop configurations, further increase water loss. Reverse osmosis and chemical purification generate concentrated brine, which cannot always be fully reintegrated, necessitating specialized disposal or recovery. Additionally, optimized reactor temperature management likely alters evaporation rates, influencing water retention across refining operations.

Process Water Withdrawal (m^3)



5.7% increase in water withdrawal compared to 2024

Process Wastewater Discharged (m^3)



3.9% increase in wastewater discharged compared to 2024

RESOURCES

Circular Economy

Waste Management

Ensuring compliance with hazardous and non-hazardous waste management regulations, while maximizing resource recovery, is integral to our approach to responsible waste management. Our operations prioritize waste reduction, recycling and responsible disposal, leveraging process improvements and material efficiency strategies to minimize environmental impact. We adhere to strict waste management regulations across all our operations and submit annual waste reports to the appropriate regulatory authorities in each jurisdiction. To ensure compliance and minimize environmental impact, we partner with certified operators for proper waste disposal, recycling, and treatment.

Regarding non-hazardous waste, the most significant management occurs in our German operations, where national and European Union initiatives provide a strong framework for effective waste handling. Over the medium term, we aim to leverage these best practices and extend them across all our operations.

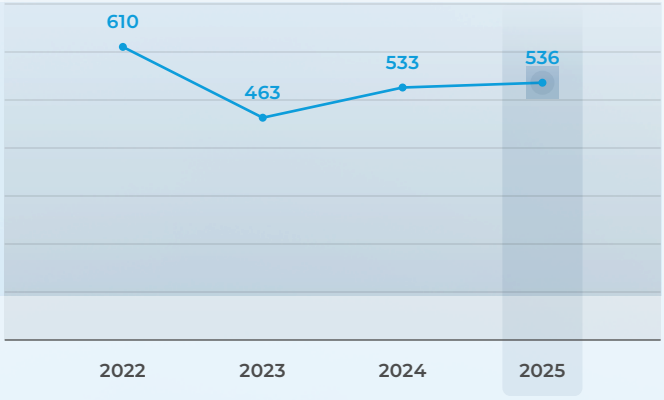
Metal Recovery

We are dedicated to developing reuse solutions that prevent some of the metals we use from being wasted in landfills. We are continuously working to reduce waste by reusing residues from our processes to create valuable products.

Hazardous Waste

Hazardous waste produced at our facilities includes input material packaging, used personal protective equipment, laboratory waste and potential production spills. As per our global standard, any hazardous waste must be disposed of by certified waste operators and is not stored for more than 90 days in any of our facilities. In 2025, our hazardous waste remained consistent with the prior year, increasing by 0.6%. The slight improvement is primarily due to initiatives such as the recovery of indium residues, which helped reduce the final disposal of hazardous materials.

Hazardous Waste (Metric Tons)



SPOTLIGHT

Driving Circularity Through Germanium Recovery

In 2025, 5N+ announced the planned expansion of its germanium recovery and recycling capabilities, supported by a significant financial award from the U.S. government. With this support, 5N+ will increase the recovery of germanium from industrial residues and mining by-products at its St. George facility over the next four years. This initiative will enable the reintroduction of critical materials into the supply chain, reinforcing circular economy principles. It will also increase the site's capacity to provide space-qualified materials for solar cells for commercial and national security applications.

RESOURCES

A Sustainable Business Model

Circular Economy

Air Quality

At every 5N+ manufacturing site, we are committed to compliance with local atmospheric emissions regulatory requirements. Air quality sampling is conducted at all our sites where required, with frequency determined by applicable regulatory requirements.

Air quality management is a key priority in the processing of CdTe, bismuth-based products and solar cell materials to ensure compliance with regulatory standards, workplace safety and environmental responsibility. The primary emissions from 5N+ sites are mostly related to the use of natural gas, nitrogen-based raw materials and chemical processes that may produce sulfates in our manufacturing operations.

In Heilbronn, processes to produce solar cells require controlled thermal conditions, leading to potential air emissions, including volatile compounds and metal particles. These are carefully managed through filtration, exhaust ventilation and emission control systems. Similarly, CdTe processing, essential for thin-film photovoltaic solar cells, involves thermal and chemical processes that generate fine particulate matter, cadmium-bearing vapors, nitrogen oxides and acidic gas emissions that may produce sulfates. To mitigate these, we implement high-efficiency dust collection, local exhaust ventilation systems, and scrubbing technologies, while optimizing energy efficiency. Bismuth-based product processing requires metallurgical refining, chemical synthesis and powder processing. These activities generate metal dust, nitrogen oxides from nitric acid reactions and sulfate emissions. Our advanced filtration systems, acid gas scrubbers and fuel optimization strategies help minimize these impacts while enhancing overall air quality.

Product Stewardship

Product stewardship is at the core of our commitment to sustainability, regulatory compliance and circular economy principles. Our approach aims at efficient and responsible material sourcing and product innovation, while minimizing environmental impact.

Substance Management

Our substance management strategy covers core materials, final products and operational substances, ensuring:

- Responsible sourcing and purification of high-purity metal compounds, alloys and pharmaceutical materials, meeting strict safety, environmental and quality standards.
- Compliance with global regulations, including:
  - REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) – ensuring safe handling and use of regulated substances.
  - PFAS (Per- and polyfluoroalkyl substances) monitoring and reduction – actively working to minimize the use of per- and poly-fluoroalkyl substances in our operations.
  - Applicable regional and international regulatory frameworks governing hazardous substances.
- Responsible management of operational substances and chemical vetting.

Substance Registrant	Number of Compliant Products in 2025
EU REACH	31

Product stewardship also goes beyond substance registration for human health, encompassing potential impacts on biodiversity, including aquatic ecosystems. We maintain robust systems to mitigate these risks, focusing primarily on bismuth and cadmium-based products.

Product Innovation

Eco-design is embedded in our product development to promote material efficiency, sustainability and performance. Initiatives include:

- Development of next-generation materials, such as multijunction solar cells and semiconductor compounds, improving energy efficiency class and performance in solar applications.
- Integration of recovered metals from our recycling unit into new products, reducing reliance on virgin material.
- End-of-life product recovery and reintegration by working closely with customers to collect and reprocess materials, reintroducing valuable metals into our production cycle.
- Optimizing the composition of solar cells, wafers, and advanced semiconductor materials to improve efficiency and performance, while reducing resource consumption.

Product Carbon Footprint Assessments

In 2024, the Company quantified the product carbon footprint for CdTe when produced in Montréal and Eisenhüttenstadt, to help our customers assess the environmental impact of our materials based on its completed product lifecycle impact assessment (LCIA). The work was conducted in alignment with ISO 14040 standards. In 2025, we launched an LCIA for a second critical mineral, germanium, which will enable us to quantify the carbon footprint of germanium wafers, covering emissions from raw material extraction to the moment the product leaves our facilities. This information helps support our customers' sustainability goals and our own efforts to continuously improve our footprint.

Circular Economy

5N+ integrates circular economy principles wherever possible through its closed-loop business model. Our upstream business model is driven by our recycling unit, which specializes in processing industrial by-products and secondary feeds. Our downstream business model focuses on advanced manufacturing and high-purity metal processing.

Through our recycling unit, we recover valuable materials from internal process residues and external secondary sources. Our refining processes and technological advancements also support continuous innovation in material recovery methods and resource reutilization. As an example, the tellurium supply we secure from Rio Tinto in Utah is a by-product of their copper mining operations, which we process primarily in Montréal. Following investments made in our Montréal operations, we significantly improved the overall recovery yield on the tellurium present in complex feedstocks, thereby increasing our recycling capacity.

We apply an end-of-life approach by recovering and reprocessing materials from internal residues and customer returns. This process contributes to resource efficiency.

Product Lifecycle Impact Assessments

In early 2026, following completion of a comprehensive LCIA for CdTe, we initiated a second LCIA focused on our germanium-based products. This reflects germanium's status as a critical raw material and strengthens our ability to assess environmental impacts across our advanced semiconductor materials value chain.

The LCIA will assess the functional performance of germanium using a cradle-to-gate approach, covering indicators such as climate change, energy use, resource depletion, human health and ecosystem quality. Conducted by CIRAIG in accordance with ISO 14040 and ISO 14044, the study will undergo independent critical review to ensure credibility and alignment with best practices.

A pre-assessment completed in 2025 defined the project scope and system boundaries, with the full study launching in 2026. It will cover the entire germanium pathway, from germanium dioxide and metallic germanium through to wafers, triple-junction solar cell manufacturing and associated recycling processes.

Building on collaborations with the ESA and Airbus, this work will provide a comprehensive view of environmental impacts across the value chain, supporting improved sustainability performance and carbon footprint modelling.

SPOTLIGHT

LCA for Solar Arrays in Partnership with ESA and Airbus

In 2025, the Heilbronn site participated in a multi-stakeholder initiative led by the European Space Agency (ESA) and Airbus, contributing to Life Cycle Assessment (LCA) studies for several space missions. These missions, which include FORUM, LSTM and Galileo, support climate monitoring and Earth observation objectives. As a manufacturer of high-efficiency solar cells, we took part in the LCA of the satellite solar array, providing detailed and precise environmental data related to our equipment and manufacturing processes. The initiative aimed to improve the accuracy of equipment-level LCAs, develop robust datasets for future assessments, and initiate eco-design considerations in space systems. The work was conducted in alignment with ISO 14040 standards, the Space System Life Cycle Assessment framework and EU Product Environmental Footprint (PEF) recommendations, enhancing understanding of both product and organizational environmental footprints. This collaboration represents the realization of a climate-related opportunity identified through Airbus' climate risk and opportunity analysis framework.

RESOURCES

Product Innovation

A Sustainable Business Model

Biodiversity

Through our Life Cycle Impact Assessment (LCIA) initiatives, we have begun identifying how our operations and value chain contribute to ecosystem impacts, an important step in integrating biodiversity into our sustainability approach.

In 2025, we conducted a qualitative assessment and value chain analysis to better understand these impacts and strengthen how biodiversity is integrated into our sustainability roadmap. The preliminary findings identified that the most significant negative effects are concentrated upstream, particularly in the extraction of natural resources by critical material suppliers in our extended supply chain.

By assessing our direct and indirect environmental impacts, we aim to develop a more comprehensive approach to mitigating risks, protecting natural ecosystems, and incorporating biodiversity into future analyses and decision-making processes over the long term.

Social

Foster a safe and respectful work environment in which employees can grow and thrive and positively impact the communities in which we operate.

In this section:

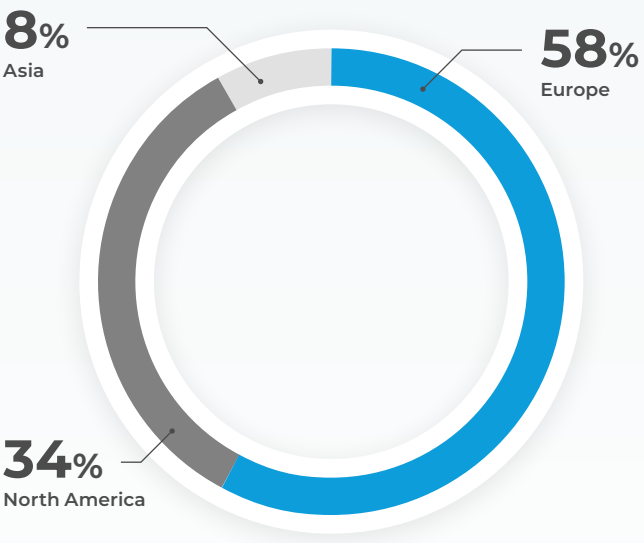
Labour Practices

Our Workforce

Our success is driven by our diverse and highly skilled workforce. Our team of some 850 employees working on three continents brings together expertise in engineering, physical sciences and technical fields, along with operational and business experience. The skills and experience they bring directly supports innovation, continuous improvement and decision-making across our Company.

To stay at the forefront of our industry, we invest in our employees through career development, training and continuous learning opportunities and programs. We foster an inclusive and respectful workplace, and engage with employees through surveys, focus groups and open discussions. We also prioritize health and safety, working to minimize risks and promote prevention, supporting workplace well-being.

2025 Employees by Region
(% of total number of employees)



Human Rights in our Workforce

We are committed to respecting human rights in all aspects of our operations and business activities as outlined in our Human Rights Statement and Report on Modern Slavery. We have zero tolerance for any form of child labour, forced labour, sexual exploitation or abuse, modern slavery or human trafficking whether in our direct operations or extended supply chain. Our Whistleblower Policy provides for several mechanisms through which concerns or suspected human rights violations can be reported.

A Fair and Inclusive Work Environment

We are committed to providing a fair and inclusive working environment for our employees. All employment decisions, including hiring, training and compensation, are based on merit, performance, skills and experience. We are committed to ensuring pay equity across the Company and to offering comprehensive compensation packages that include health insurance, retirement contributions and paid time off.

We respect the rights of employees to freely join labour unions, seek representation and join workers' councils in accordance with local laws, and to bargain collectively. At the end of 2025, approximately 46% of our employees were covered by collective bargaining agreements, up from 10% at the end of the previous year. We are committed to fostering open, transparent and constructive dialogue with all our employees and their labour representatives, where applicable.

RESOURCES

- Human Rights Statement
- Whistleblower Policy
- Report on Modern Slavery

Health and Safety Management

The health and safety of our employees is a top priority embedded in every aspect of our operations, ensuring a structured, proactive and continuous improvement approach and a focus on prevention.

Every manufacturing site operates under a rigorous health and safety management system. Three sites are ISO 45001 certified, while four have self-implemented systems based on ISO 45001 principles. Regardless of certification status, all operate under a unified approach, ensuring consistency across the organization. Our health and safety management system is built on six key pillars: culture, leadership, standards, communication, competency and governance. These provide the framework for implementation, monitoring, continuous improvement and compliance with our policies and practices, applicable regulations and best practices.

Our leadership team regularly analyzes safety metrics, incidents and audit findings to evaluate the effectiveness of safety programs and establish new action plans.

In 2025, our safety priorities focused on expanding high risk control protocols, increasing employee participation in safety initiatives and enhancing digital safety tracking and reporting. We also continued to enhance our health and safety communications, delivered through newsletters, digital platforms and global safety meetings. These initiatives promote cross-functional collaboration and leadership engagement, while supporting the sharing of best practices and lessons learned.

Also in 2025, 5N+ launched a contractor safety initiative, starting at its Montréal site, to enhance contractor evaluation, training and onboarding, as well as compliance monitoring (permits and certifications). These measures aim to help reduce occupational health and safety risks at our facilities and ensure that all personnel onsite, whether employees or contractors, follow the same health and safety standards. 5N+ intends to expand this initiative to additional sites in North America in 2026.

SPOTLIGHT

Celebrating World Day for Safety and Health at Work

During the week of April 28, 2025, teams across our sites marked the Annual World Day for Safety and Health at Work through a variety of activities. This included interactive quizzes, prize-winning games, training sessions, shared lunches, safety reminders and open discussions. These events brought colleagues together and helped raise awareness of the importance of health and safety as a shared responsibility. It also reinforced our company-wide commitment to a strong safety culture.

Shangyu employees participating in World Day for Safety activities.

Health and Safety Management Approach at 5N+

Management System

- OHS-MS ISO 45001 Standard
- Health and Safety Policy
- High-Risk Control Protocols
- Sustainable Development Policy
- Code of Business Conduct
- Supplier Code of Conduct

Outcomes

- Improvement Performance
- Compliance and Obligations
- Achievements of Objectives

Plan

Risk Management

Compliance

Objectives and Targets

Do

Resource Competence and Accountability

Training and Awareness

Communication and Participation

Documentation

Operational Preventions and Control

Emergency Preparedness and Response

Check

Environmental, Health and Safety Audits

Control of Records

Incident Investigation

Preventive and Corrective Actions

Measurement and Monitoring

Performance Evaluation

Act

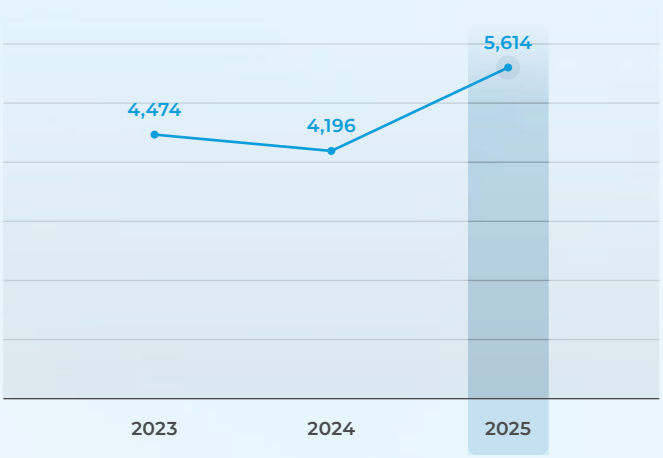
Management Review

Continuous Improvement

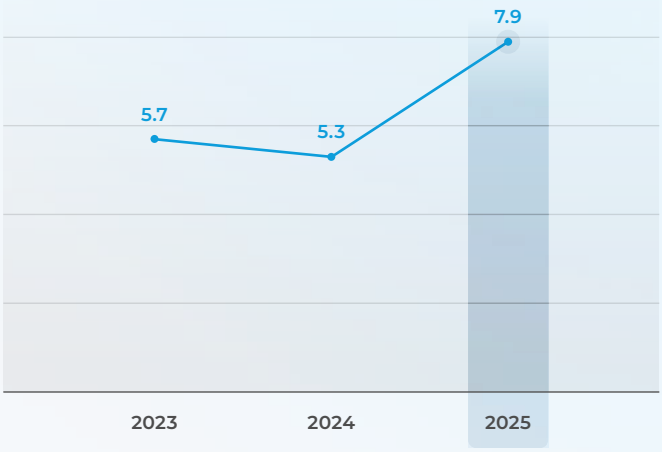
Training and Awareness

We provide comprehensive environmental, health and safety (EHS) training to all employees on our EHS policies and programs, which all include a training and certification dimension. Training can take many forms, including through structured programs, digital learning tools, onsite sessions and coaching. This is supplemented by regular awareness initiatives such as safety talks, emergency drills and leadership engagement. In 2025, we increased the average EHS training hours per employee through targeted instruction including on operational risks, mandatory compliance requirements and best practices.

Total Number of EHS Training Hours



Average EHS Training Hours per Employee



Operational Prevention, Incident and Emergency Management

High-risk Control Protocols

To ensure a comprehensive risk mitigation approach, high-risk operations are managed through strict safety protocols and control measures, including engineering controls, administrative measures and specialized training. To enhance engagement, accessibility and protocol adoption, we use a high-risk control protocol visual standard so employees can easily reference critical safety measures in their daily work.

Hazardous materials handling	Work at heights
Occupational exposure to hazardous agents	Confined space entry
Molten metal safety	Equipment safeguarding
Energy isolation (lockout/tagout)	Lifting operations
Electrical safety	Vehicle and mobile equipment driving

Chemical Handling and Risk Management

We uphold rigorous health and safety standards for the handling of input materials and finished products, contributing to the safe management of substances used or produced in our operations. Employees adhere to our high-risk control protocols, supported by Safety Data Sheet (SDS) classifications for all applicable substances. We ensure compliance with global chemical safety regulations, including REACH in Europe, WHMIS/SIMDUT in Canada, Occupational Safety and Health Administration (OSHA) and Hazard Communication Standard (HazCom) in the U.S., and equivalent regional requirements in Asia. Continuous training, assessments and sharing of best practices reinforce our commitment to safety across our sites.

Incident Management

To mitigate risks associated with chemical spills, leaks and other incidents, we maintain emergency response plans at all locations with specific action plans for different types of incidents. These plans support risk mitigation, employee health and safety and our ability to maintain business continuity in the event of an incident.

Our response protocols focus on containment, cleanup, investigation and corrective actions. Emergencies are managed locally first, and all incidents are reported, investigated and tracked centrally through our internal platform and assessed by our EHS team. Lessons learned from one facility are applied globally, reinforcing a proactive and collaborative approach to safety and continuous improvement. We also have a comprehensive emergency preparedness plan for critical situations which includes site-specific emergency protocols, evacuation procedures and crisis communication strategies. Regular emergency drills are conducted to reinforce preparedness.

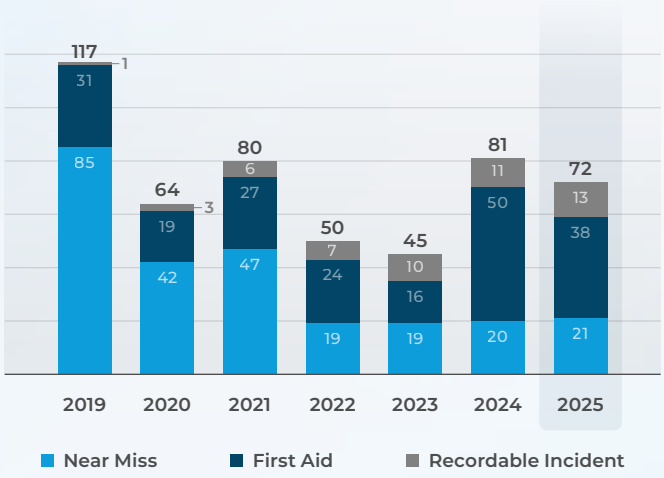
Safety Performance Evaluation

Work-related incidents are comprised of near misses, first aid cases and recordable incidents according to U.S. OSHA standards. Recordable incidents include medical treatment cases, lost-time and restricted work or job transfer cases. Such incidents necessitate medical treatment beyond first aid, lead to days away from work or require job restrictions or transfers due to severity.

To evaluate safety performance, we monitor our Lost Time Injury Frequency Rate (LTIFR) and Total Recordable Incident Rate (TRIR). LTIFR offers insights into frequency while TRIR provides a comprehensive measure of workplace safety relative to total hours worked.

We continuously monitor and evaluate our performance through audits, inspections and data-driven assessments to evaluate the effectiveness of our management system and identify areas for improvement. Since 2019, the number of total work-related incidents has been significantly reduced, and no fatalities have occurred at any of our facilities.

Total Work-related Incidents



	2023	2024	2025
Hours of Work	1,301,718	1,442,912	1,498,355
Total Number of Worked-related Incidents	45	81	72
Global Total Recordable Injury Rate	1.5	1.5	1.8
Global Lost Time Injury Frequency Rate	1.2	1.2	1.5

In 2025, the total number of work-related incidents decreased compared to 2024, primarily due to a reduction in first-aid cases. While LTIFR and TRIR remain above our internal targets and are aligned with industry benchmarks, both increased in 2025 over 2024, primarily due to an increase in recordable incidents at one site, where targeted actions are being implemented to improve performance. Based on our learnings in 2025, we are deploying an injury prevention program in 2026 focused on front-line supervisors to enhance training, early hazard detection and risk communication, in addition to our existing training programs.

Talent Development

Employee Training

Through a combination of technical training, leadership development, and health and safety programs, we work to ensure that employees across all regions receive the necessary training to develop their skills and succeed in their roles. Our structured training includes onsite workshops, digital learning platforms and specialized certifications.

In Heilbronn, we also continue to offer language training to facilitate the integration and career development of employees who migrated to Germany for work, providing online language classes that are accessible 24/7 since 2020.

In 2025, we continued to strengthen our training mechanisms to support talent development, with a focus on health and safety awareness, sustainability, cybersecurity and other relevant department-specific topics. This resulted in an increase in total training hours per employee in 2025, compared to 2024.

SPOTLIGHT

Demystifying and Applying Sustainability at 5N+

In 2025, the Sustainability team developed a sustainability training module to help employees understand sustainability, how it has evolved, and how it applies to 5N+'s operations and everyday decision-making. The training aims to contribute to fostering sustainability at 5N+ by raising awareness and strengthening employees' ability to understand, measure and communicate sustainability performance. Available in English, French, Mandarin and German, the training will be launched in 2026 companywide.

	2023	2024	2025
Global Training Hours	19,028	17,854	24,554
Global Training Hours per Employee	24.4	22.5	28.9

Fostering Future Talent

At 5N+, we invest in the next generation through internship and apprenticeship programs which involve integration and collaboration, providing students and recent graduates invaluable experience and skills, including exposure to our industry. 5N+ also regular engages in various recruitment activities, including college and university job fairs, to educate students on the opportunities available to them in STEM (Science, Technology, Engineering, and Mathematics) and to encourage them pursue a career with 5N+.

Members of our R&D team attending a student career and networking event at Polytechnique Montréal.

	Montréal	Lübeck	Heilbronn	St. George
Number of Interns/Apprentices	9	10	11	3
Number of hours	7,119.4	3,442.5	2,639	2,114

SPOTLIGHT

Promoting STEM Careers in St. George

At our St. George site, we support STEM education within the community by providing guided tours of our facility for elementary schools, high schools and Utah Tech STEM classes.

We also offer summer internships to students in Utah Tech's engineering program and by contributing to the university's academic mission through participation in the instruction of the MECH 2160 course.

Inclusion and Diversity

With integrity as a core value, we are committed to establishing and maintaining respectful work environment free from all forms of harassment and discriminatory conduct, that recognizes and welcomes differences, and that promotes diversity, equality and fairness. This is governed by our Code of Business Conduct and Policy for Preventing and Addressing Workplace Harassment, Including Discrimination.

In 2025, our Board of Directors had 40% female representation, a proportion maintained since 2023, while women represented 28% of our global workforce in 2025. This is compared to 29% in 2024.

Gender Pay Equity

To advance gender equality and fair pay, 5N+ has implemented standardized job evaluation across its operations on three continents. This involves conducting gender pay gap reviews, aligning compensation for roles with comparable responsibilities regardless of tenure or personal characteristics and establishing clear, standardized salary structures to ensure consistency and fairness through the use of recognized frameworks.

RESOURCE

Code of Business Conduct

Community Engagement

Across our operations, we strive to have a positive impact in the communities where we are present through support and engagement. We are also committed to recognizing the contributions of our employees and supporting the causes they care about. Here are some examples of local contributions in 2025.

Montréal

Our head office continued to support the Moisson Montréal food bank, Fondation Tel-jeunes through its annual Lobster event, as well as the Fondation Charles-Bruneau and the Youth In Mind Foundation through their annual golf tournament fundraising events throughout 2025.

The Company also expanded its partnership with Polytechnique Montréal by becoming a sponsor of its Oronos fuselage student team and by formalizing a partnership with its chemical engineering department. In addition, 5N+ is sponsoring the second edition of the Québec chemical engineering competition for the 2025-2026 academic year.

Shangyu

Our team in Shangyu continued to support the Free Lunch for Children initiative, a program aimed at combating child hunger in rural China. 5N+'s donation helped provide 668 free meals in 2025.

The site also maintained its support for the "100 Million Suosuo Project" led by the Society of Entrepreneurs and Ecology (SEE) Foundation, which focuses on combating desertification in Inner Mongolia.

Heilbronn

Our AZUR SPACE site in Heilbronn supports philanthropic initiatives through employee engagement. While the Company provides the funding, employees take an active role in identifying initiatives where contributions can make a meaningful impact, with some 14 organizations supported in 2025.

Left: Québec Chemical Engineering Competition.
Right: Shangyu employees participating in the Happy 14th Anniversary Free Lunch for Children Charity Run held in Hangzhou in May 2025.

Appendix

In this section:

Index of GRI-Related Information

This section provides select GRI-related information.

Business Context

	FY 2025	FY 2024	(+/-)	Standard
Total revenue (millions of dollars)	391.1	289.3	35.2%	GRI 201-1
Net income (millions of dollars)	50.6	14.7	244.2%	GRI 201-1

Governance

	FY 2025	FY 2024	(+/-)	Standard
Compliance case reported (allegations of bribery)	0	0	-	GRI 205-3, GRI 2-27

Social

		FY 2025	FY 2024	(+/-)	Standard
Employees (total number)		849	793	7.1%	GRI 2-7
Employee geographic representation (total number)	Europe	495	490	1.0%	GRI 2-7
	North America	287	232	23.7%	GRI 2-7
	Asia	67	71	-5.6%	GRI 2-7
Health and Safety Management	Number of sites with health and safety management system ISO 45001 certification	3	3	0%	5N+
	Percentage of sites with health and safety management system ISO 45001 certification	43%	43%	0%	5N+
	Number of sites with self implemented health and safety management system	4	4	0%	5N+

Social (cont'd)

		FY 2025	FY 2024	(+/-)	Standard
Health and Safety Management	Percentage of sites with self-implemented health and safety management system	57%	57%	0%	5N+
	Global total recordable injury rate (per 200,000 hours)	1.8	1.5	20.0%	GRI 403-9
	Global lost time injury frequency rate (per 200,000 hours)	1.5	1.2	25.0%	GRI 403-9
	Number of work-related incidents (recordable, first aid and near miss)	72	81	-11.1%	GRI 403-9
	Number of work-related fatalities	0	0	-	GRI 403-9
	Rate of high-consequence work-related injuries	0	0	-	GRI 403-9
	Total hours worked	1,498,355	1,442,912	3.8%	GRI 404-1
	Total training hours on environment, health and safety	5,614	4,195.6	33.8%	GRI 404-1
	Average health and safety training hours per employee	7.9	5.3	49.1%	GRI 404-1
Talent Development	Total training hours different from environment, health and safety	18,940	13,658	38.7%	GRI 404-1
	Total training hours	24,554	17,854	37.5%	GRI 404-1
	Average training hours per employee	28.9	22.5	28.5%	GRI 404-1
Inclusion and Diversity	Percentage of men in workforce	72%	71%	1.4%	GRI 405-1
	Percentage of women in workforce	28%	29%	-3.4%	GRI 405-1
	Female representation on Board	40%	40%	0%	GRI 405-1

Environment

		FY 2025	FY 2024*	(+/-)	Standard
Climate Change	Total Scope 1 GHG emissions (metric tons CO_2 eq)	2,246	2,189	2.6%	GRI 305-1
	Scope 2 (LBM) (metric tons CO_2 eq)	15,439	14,884	3.7%	GRI 305-2
	Scope 2 (MBM) (metric tons CO_2 eq)	11,136			
	Total Scope 1 and Scope 2 (LBM) (metric tons CO_2 eq)	17,685	17,073	3.6%	GRI 305-1 GRI 305-2
	Total Scope 1 and Scope 2 (MBM) (metric tons CO_2 eq)	13,382			
Energy Management	Number of sites with environmental managment system ISO 14001 certification	4	4	0%	5N+
	Percentage of sites with environmental managment system ISO 14001 certification	57%	57%	0%	5N+
	Sites with energy managment system ISO 50001 certification	3	2	50.0%	5N+
	Share of sites with energy managment system ISO 50001 certification	43%	29%	48.3%	5N+
	Electricity consumption (MWh)	36,287	34,168	6.2%	GRI 302-1
	Steam consumption (MWh)	4,162	3,580	16.3%	GRI 302-1
	Heating consumption (MWh)	4,074	3,744	8.8%	GRI 302-1
	Cooling consumption (MWh)	7,407	7,543	-1.8%	GRI 302-1
	Natural gas consumption (MWh)	12,213	11,094	10.1%	GRI 302-1
	Petroleum consumption (MWh)	127	694	-81.7%	GRI 302-1
Water Management	Water withdrawal (m^3)	209,854	198,495	5.7%	GRI 306-2
	Wastewater discharged (m^3)	174,498	167,898	3.9%	GRI 306-2
	Water consumption (m^3)	35,356	30,597	15.6%	GRI 306-2
Waste Management	Hazardous waste (metric tons)	536	533	0.6%	GRI 306-3
Product Stewardship	Life Cycle Impact Assessment (LCIA)	1	1	0%	5N+
	Product Carbon Footprint	1	1	0%	5N+
	Substance Registrant under EU REACH	31	31	0%	5N+

*Select data has been revised to reflect actual results previously based on accrued estimates.

Scope 1 and 2 GHG Emissions Calculations

All data used to calculate Scope 1 and Scope 2 GHG emissions is calculated in accordance with the GHG Protocol. The GHG Protocol is a multistakeholder partnership of businesses, nongovernmental organizations (NGOs), governments, and others convened by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

For certain countries in which we have operations the data for electricity comes from Carbon Footprint Ltd, based on emission factors specific of several countries. GHG emissions not covered by the Kyoto Protocol, e.g., chloroflurocarbons (CFCs), NOx, etc. are excluded from Scope 1 emissions calculations.

Starting in 2025, Scope 2 GHG emissions are now presented using the market-based method (MBM), which reflects emissions from electricity that companies have purposefully chosen, using supplier-specific emission factors where available, or residual mix factors when contractual instruments are not in place. Prior to 2025, Scope 2 GHG emissions were calculated using the Location-Based Method (LBM), which quantifies emissions based on average energy generation emission factors for defined geographic locations, including local, subnational, or national boundaries.

Cautionary Statement Regarding Forward-Looking Information

Certain statements in this Sustainability Report may be forward-looking within the meaning of applicable securities laws. These statements are not guarantees of future performance and involve assumptions, risks and uncertainties that are difficult to predict and may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Factors of uncertainty and risk that might result in such differences include the risks associated with interest rate, foreign currency, credit, liquidity, global economic conditions, international operations including China and trade protectionist measures and any retaliatory action from affected countries, environmental regulations, crisis and climate change management, environmental social and governance (ESG) considerations, safety and hazards, geopolitical uncertainty, disease outbreaks, availability and retention of qualified employees, collective agreements, litigation, our growth strategy, competition, commodity price, sources of supply, protection of intellectual property, inventory price, business interruptions, loss of an important customer, changes to backlog, acquisitions, systems, network infrastructure and data failure interruption and breach, privacy, market price of the common shares, as well as grants and other incentive programs. A description of the risks affecting the Company's business and activities appears under the heading "Risk and Uncertainties" of our management discussion and analysis dated February 24, 2026.

Forward-looking statements can generally be identified by the use of terms such as "may", "should", "would", "believe", "expect", the negative of these terms, variations of them or any similar terms. No assurance can be given that any events anticipated by the forward-looking statements in this Sustainability Report will transpire or occur, or if any of them do so, what benefits that 5N+ will derive therefrom. In particular, no assurance can be given as to the future financial performance of 5N+. The forward-looking statements contained in this Sustainability Report are made as of the date hereof and 5N+ has no obligation to publicly update such forward-looking information to reflect new information, subsequent or otherwise, unless required by applicable securities laws. The reader is warned against placing undue reliance on these forward-looking statements.

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