

2024 SUSTAINABILITY REPORT





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LETTER FROM OUR PRESIDENT AND CEO

Nutrien works to cultivate agricultural solutions so farmers can increase food production for generations to come. The choices we make across our organization help build long-term value and resiliency for our industry. Our efforts strive to support the people around us, advance environmental stewardship, and develop economic growth and stability for our business and our customers.



Ken Seitz, President & CEO

Thank you for taking the time to read Nutrien's 2024 Sustainability Report. Each year, this document represents an important milestone, providing an update on our priority sustainability programs and performance.

As I reflect on 2024, it's been another year of significant global geopolitical and social change, and agriculture has experienced its share of challenges and opportunities as a result. Nutrien continues to take advantage of our unique position working directly with farmers and value chain partners as we endeavor to fulfill our purpose of *Feeding the Future*.

Reflecting on our commitment to safety

I want to start by addressing our Culture of Care and steadfast commitment to safety. In 2024, we achieved our lowest total recordable injury rate across our global operations but regrettably fell short of our goal for everyone to go home safe at the end of each day. We were devastated by the loss of three Nutrien employees this past year. Our deepest condolences go out to their families, friends and colleagues.

Continuous improvement is a key pillar of our safety culture and there is still more work to be done. We are taking actions to further address high-risk areas and are undertaking a third-party review by global safety experts to identify areas of opportunity. In addition, we are revisiting our incentive plans to support our journey towards an improved safety culture. Safety is a core value; we are making positive changes and we will be relentless in our pursuits to ensure the safety of our people.

Defining sustainability at Nutrien

Sustainability at Nutrien centers on the actions we take to help agriculture thrive. Through those actions, we aim to create long-term success by addressing relevant risks

and opportunities through the lens of people, planet and prosperity. In simple terms, our intent is to deliver strong business foundations, help build resilient communities and industries in which we operate, collaborate to advance innovative agricultural solutions for farmers, and manage our operational impact on the land, air and water.

Despite a year of ongoing change, I am proud of our ability to make measurable progress against several sustainability objectives, and I would like to take this opportunity to briefly summarize a few accomplishments.

I'm proud to share that we measured production and environmental outcomes on 3.7 million acres in our sustainable agriculture programs. These programs seek the adoption of farm management solutions, support farmers in recording field-level data, and report crop and environmental outcomes. They also offer Nutrien and our supply chain collaborators the opportunity to amplify and document the value of sustainable agricultural practices. We also reached a significant milestone in our Potash operations, with over CAD \$1.1 billion deployed since 2020 with potash suppliers that have a direct Indigenous economic impact. Approximately half of that spend has been with Indigenous-owned suppliers. Our Potash operations have been rooted in Saskatchewan for more than 65 years, and we aim to continue building relationships with Indigenous communities and stakeholders across the province. Finally, with regards to water stewardship and managing our environmental performance, in 2024, we reduced our freshwater use by approximately three million cubic meters compared to our 2018 base year, which is equivalent to roughly 1,200 Olympic-sized swimming pools. This also achieves our target of reducing annual freshwater use in operations at higher-risk and higher-use manufacturing facilities one year early by completing more than 20 water improvement projects since 2018.

Letter from Our President and CEO (continued)



FARMERS ARE AT THE HEART OF EVERYTHING WE DO

Getting it right

Sustainability is not a fixed destination, rather it is a continuous journey shaped by evolving political, economic, and societal factors. At Nutrien, we view our business decisions through a long-term lens, focusing on initiatives that create measurable value while addressing key risks and opportunities. This requires adaptability, continuously assessing the effectiveness of our work in alignment with our disciplined and intentional approach to capital allocation.

As part of this approach, we are reviewing our target to achieve at least a 30 percent intensity reduction in greenhouse gas (“GHG”) emissions (Scope 1 and Scope 2) per tonne of products produced by Nutrien, by 2030 compared to our 2018 base year. While we have made progress, certain assumptions that supported our target have materialized differently than originally projected, including clarity on regulatory policies and compliance frameworks, financially material opportunities for lower carbon intensity products and technological advancement. We are also reviewing our target to enable farmers to adopt sustainable agriculture programs on 75 million acres globally, by 2030. This initiative requires significant uptake and commitment from farmers and supply chain partners and, as a result, we are considering alternative engagement metrics.

These reviews align with our strategic priorities to simplify and focus, deliver operational excellence and align with our capital allocation approach. We expect to provide a further update on this work in 2026.

Leaving a lasting positive impact

With seven years under our belt, Nutrien’s path has never been clearer. We are a leading global provider of crop inputs and services, and we have built a foundation of production assets, systems, partnerships and talent that position Nutrien to support farmers. We will continue to address relevant risks and opportunities, build strategic plans, take action and, most importantly, measure the impact we have made.

As we move forward, we recognize that real progress requires collaboration beyond our own walls. Agriculture’s environmental and social challenges are complex, and no single company can solve them alone. Since we began reporting on our sustainability efforts, our understanding of what’s possible and what will drive the greatest impact has evolved significantly. However, one thing that will never change is our unwavering commitment to farmers. They hold the toughest role in the value chain – feeding a growing global population while ensuring the land remains prosperous for generations to come. Supporting them in this mission is both our responsibility and our greatest opportunity. I am energized by this challenge, and I know our employees around the world are too.

Sincerely,

Ken Seitz
President and Chief Executive Officer

March 2025



OVERVIEW

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ABOUT NUTRIEN

Nutrien is a leading global provider of crop inputs and services. We operate a world-class network of production, distribution and ag retail facilities that positions us to efficiently serve the needs of farmers.



We focus on creating long-term value by prioritizing investments that strengthen the advantages of our business across the ag value chain and by maintaining access to the resources and relationships with stakeholders needed to achieve our goals.

Our vision is to be the leading global agricultural solutions provider, delivering superior shareholder value through safe and sustainable operations. We are focused on strategic initiatives that we believe will help achieve our vision: improving safety and operating performance, and increasing earnings and cash flow, while generating higher risk-adjusted returns.

Our global reach provides competitive advantages to support higher upstream sales of manufactured fertilizer and proprietary products, drive supply chain efficiencies, optimize transportation and logistics, and efficiently supply our customers.

To learn more about Nutrien’s business, please see our **2024 Annual Report**.

Land acknowledgment

Nutrien acknowledges and pays respect to the traditional lands where, and near where, our global operations are located. We aim to build relations with Indigenous communities and support stewardship of the lands that we all inhabit. Read about Indigenous relations at Nutrien [here](#).





OUR GLOBAL PROFILE

● Retail	● Nitrogen	● Joint venture and investments
● Potash	● Phosphate	● European distribution

13

Nitrogen production and upgrade facilities in North America and Trinidad and Tobago

1,300

Retail locations in North America

6

Potash mines in Canada

6

Phosphate production and upgrade facilities in the US

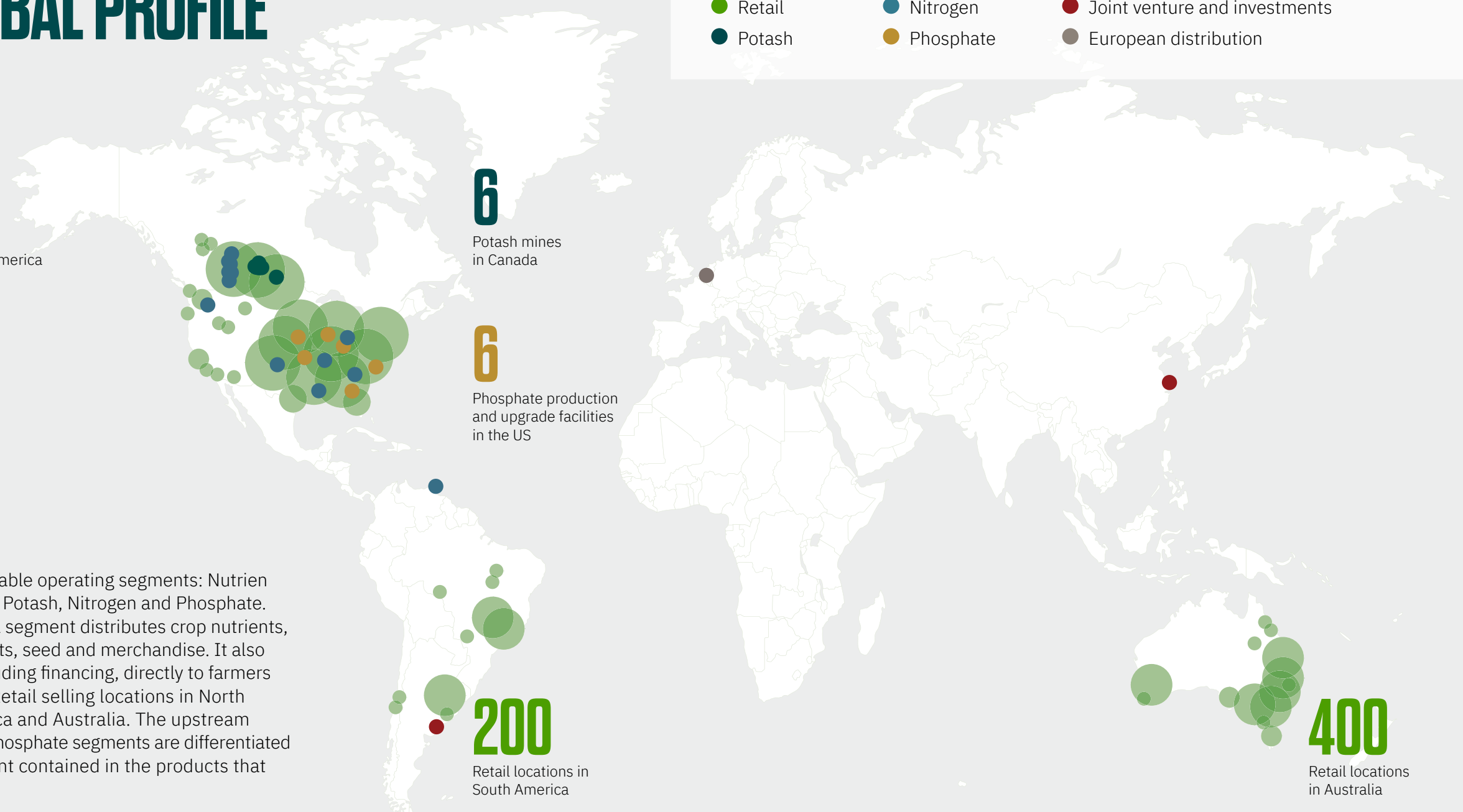
200

Retail locations in South America

400

Retail locations in Australia

Nutrien has four reportable operating segments: Nutrien Ag Solutions (“Retail”), Potash, Nitrogen and Phosphate. The downstream Retail segment distributes crop nutrients, crop protection products, seed and merchandise. It also provides services, including financing, directly to farmers through a network of Retail selling locations in North America, South America and Australia. The upstream Potash, Nitrogen and Phosphate segments are differentiated by the chemical nutrient contained in the products that each produces.





2024 SUSTAINABILITY HIGHLIGHTS



3.7 MILLION

sustainable agriculture program acres¹

15%

reduction in GHG emissions intensity (Scope 1 and Scope 2) per tonne of our products produced²

9%

reduction in Nitrogen GHG emissions intensity (Scope 1 and Scope 2) per tonne of ammonia produced³



\$1.1 BILLION

local Potash supplier spend with direct Indigenous economic impact⁴

65 YEARS

of potash production in Saskatchewan



3.0 MILLION

cubic meters reduction in freshwater use⁵

\$28 MILLION

in community investment

¹ See “Terms and Measures – Definitions”

² Compared to our 2018 base year

³ On an intensity basis vs 2018 base year GHG emissions intensity

⁴ Calculated between 2020-2024 in CAD\$

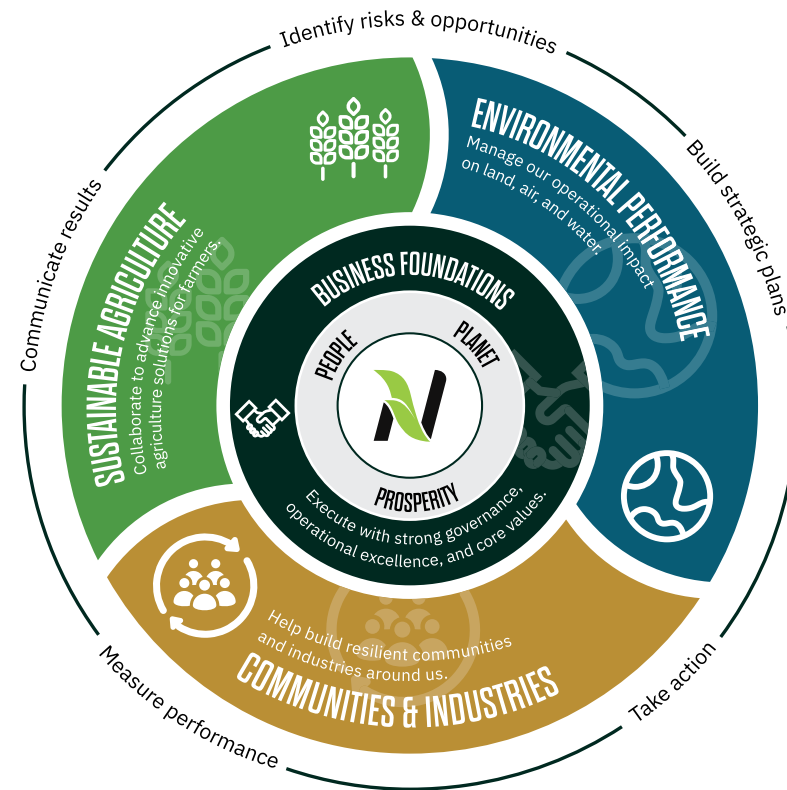
⁵ Compared to our 2018 base year at higher-risk and higher-use manufacturing facilities

NUTRIEN'S SUSTAINABILITY FRAMEWORK

Sustainability in agriculture is about the actions taken around the world to help the sector thrive for generations to come. At Nutrien, we endeavor to create long-term success by addressing relevant risks and opportunities through the lens of people, planet and prosperity.⁶

To mitigate risks and create value, we focus our efforts on the following sustainability priorities:

- Collaborating to advance innovative agricultural solutions for farmers such as:
 - **Farm Management Solutions** (related to Climate Change, GHG Emissions and Product Stewardship)
- Managing our operational impact on land, air and water, such as:
 - **GHG Emissions**
 - **Product Stewardship**
 - **Biodiversity**
 - **Water Stewardship**
 - **Tailings, Gypstacks and Waste**
 - **Air Quality**
- Helping build resilient communities and industries around us, such as:
 - **Community Relations**
 - **Indigenous Relations**
- Executing strong business foundations, such as:
 - **Safety and Health**
 - **Integrity**
 - **Cybersecurity and Data Privacy**
 - **Human Capital and Labor Practices**



To support our sustainability priorities, we aim to identify our relevant risks and opportunities, build strategic plans, take action to drive impact, measure performance and communicate our results.

NUTRIEN'S PURPOSE IS FEEDING THE FUTURE



Our ambition is to contribute to global food security by being the leading provider of crop inputs and services. Our efforts support the **United Nations' Sustainable Development Goal** ("SDG") 2: Zero Hunger. Specifically, SDG indicator 2.4.1, which is the proportion of agricultural area under productive and sustainable agriculture. We strive to provide solutions to help farmers increase their farm productivity, profitability and environmental stewardship. We recognize that the world cannot solve one SDG without influencing another, which is why we encourage a systems-based approach to the SDGs. We believe that collaboration with stakeholders across the globe is critical in helping to lower GHG emissions (SDG 13: Climate Action) in a manner that does not threaten food production (SDG 2).

DEFINITIONS

Sustainability⁷ at Nutrien

Aims to create long-term success by addressing relevant risks and opportunities through the lens of people, planet, and prosperity.

Sustainable agriculture⁷

Aims to increase farm productivity, support farmer profitability and livelihoods, and foster environmental stewardship.

⁶ This is a business framework only and does not, and should not be construed to, constitute a representation suggesting that our business and/or business activities are sustainable or have environmental or social benefits.



⁷ Developed in general alignment with the approach of the **Food and Agriculture Organization** of the United Nations



OUR TARGETS

We set targets⁸ to drive progress in priority areas, relevant to our business, as outlined in our Sustainability Framework. Oversight of our targets and progress is part of our **Sustainability Governance Framework**. Our targets may, from time to time, be modified as our business, technological advancement and operating environment evolve.

Every year, we measure performance and report on our progress. Our 2024 progress is below.





Theme	Target	2024 Progress Highlights	Read more
Farm Management Solutions 	Enable farmers to adopt sustainable agriculture programs on 75 million acres globally, by 2030.	<p>In 2024, we measured production and environmental outcomes on 3.7 million acres⁹ across North America and Australia in our sustainable agriculture programs. Nutrien has made strides in the development of our sustainable agriculture programs to support on-farm adoption of certain products and practices that aim to improve production, profitability, and environmental outcomes in the field. Our programs continued to support farmer onboarding, data collection, and outcome quantification and verification.</p> <p>Update: Achieving our 2030 target is largely dependent upon farmer and supply chain participation in these initiatives, requiring significant uptake to reach 75 million acres. Nutrien is, therefore, reviewing this target’s trajectory and considering alternative farmer engagement metrics. This evaluation will help identify the most effective strategy in consideration of financial materiality and value creation. We intend to continue to develop and offer programs that are innovative and collaborative while advancing the development of a revised climate strategic action plan to align with these initiatives. We expect to provide a further update in 2026.</p>	Page 15
	Leverage our farm-focused technology partnerships and investments to drive positive impact in industry and farmer innovation and inclusion, by 2030.	<p>We aim to have inclusive partnerships and investments, and our approach continues to focus on innovative and emerging technologies and solutions, such as our Digital Hub, seed breeding programs and biological crop inputs.</p> <p>Update: Previously, this was an inclusion target, but we have evolved and broadened our approach such that our activities are no longer limited to inclusive investments with underrepresented groups in agriculture. As a result, Nutrien will no longer pursue and track this target but will continue to support farmers as we advance innovation through our agricultural products, services and technology offerings.</p>	
Climate Change and GHG Emissions 	Achieve at least a 30 percent intensity reduction in greenhouse gas (GHG) emissions (Scope 1 and Scope 2) per tonne of our products produced, from a base year of 2018, by 2030.	<p>As of 2024, we achieved a 15 percent reduction in GHG emissions intensity (Scope 1 and Scope 2) per tonne of our products produced, compared to our 2018 base year. This was supported by the completion of the final projects in our Nitrogen segment’s GHG Phase 1 abatement program in 2023 and continued changes to our production mix.</p> <p>Update: Our current trajectory indicates this target will not be achieved by 2030 and is currently under review. Certain assumptions which supported our emissions intensity reduction target in 2021 have materialized differently than originally projected. At this point, we do not have clarity on regulatory policies or the future of compliance frameworks within the primary locations where we operate and have not seen financially material opportunities develop for products with a lower carbon intensity relative to conventionally produced products. These circumstances have led to greater uncertainty and higher execution and financial risk for the next phase of GHG abatement projects, which has deprioritized prospective investments within our capital allocation framework. We continue to monitor technological advancements, government incentives and tax policies, the emergence of premium markets for products with a lower carbon intensity relative to conventionally produced products, as well as industry partnerships that may make emissions reduction projects economically viable. We expect to provide a further update in 2026.</p>	Page 20

⁸ We set targets using our own independent assessment of what we determine is relevant, reasonable, achievable and will serve the best interest of our business and our customers. The targets herein are subject to other prerequisites and critical considerations, both within and outside our control, that may affect our ability to meet them, including the necessity of technological advancements; data quality and availability; the evolution of consumer behavior and demand; the business decisions of our customers; the need for thoughtful public policies; the potential impact of legal and regulatory obligations; market conditions; climate science; commercial considerations; and the challenge of balancing short-term targets with the need to facilitate an orderly transition and energy security and affordability.

⁹ Acres participating in programs that track field-level data, which can be analyzed for performance metrics that incentivize farmers to adopt practices and products resulting in quantifiable, incremental benefits which may be verified.



Our Targets (continued)

Theme	Target	2024 Progress Highlights	Read more
Water Stewardship 	Reduce annual freshwater use in current operations at higher-risk and higher-use manufacturing facilities by 3.0 million cubic meters by 2025, which cumulatively is expected to reduce freshwater use by 30 million cubic meters by 2030.¹⁰	As of December 2024, we achieved our 2025 target. Since our base year of 2018, over 20 projects across our North American upstream fertilizer production operations have been completed. Collectively, these projects reduced our freshwater use in 2024 by approximately three million cubic meters compared to our 2018 base year. This achieves our annual target a year ahead of schedule and represents a cumulative reduction of approximately 13 million cubic meters, to date. We are on track to meet our 2030 target.	Page 34
Tailings, Gypstacks and Waste 	Retail will continue to broaden and implement our Global Waste Minimization Standard, with a focus on improving our data management system and analytics with an aim to set a target by 2025.	Our Retail sites continued to implement our Global Waste Minimization Standard. We also completed a waste hierarchy mapping and continue to build a company-wide digital data management tool to collect, monitor and report waste management at a global level. Update: Nutrien was not able to set a target by 2025 due to limited baseline data within a supportive management tool and will review these requirements in 2025.	Page 36
Environmental Incidents 	Reduce the three-year moving average Environmental Incident Frequency¹¹ from 1.52 in 2022 to 1.25 by 2030.	In 2024, our three-year moving average Environmental Incident Frequency (“EIF”) was 1.45. During the year, we recorded 29 Loss of Containment (“LOC”) incidents, compared to 44 in our 2022 base year. As part of our EIF Reduction Strategic Plan, we aim to make continuous improvements in our process safety and risk management programs as we progress towards the target.	Page 46
Indigenous Relations 	By 2025, 25 percent of local relevant spend in our Potash business has direct Indigenous economic impact.¹²	In 2024, our Potash operating segment exceeded the target, reaching over CAD\$309 million (34 percent of local spend) with local, direct Indigenous economic impact. Cumulatively, since 2020, our Potash operating segment has deployed over CAD\$1.1 billion in the course of business towards achieving this target, of which approximately half has been with Indigenous-owned suppliers.	Page 41





¹⁰ Water target is supported by a series of projects executed and maintained between 2018 and 2030. Reductions are calculated on an absolute basis at a project level on a before/after basis and assumes such projects are maintained through 2030 and/or the life of the project.

¹¹ Previously called, “Loss of Containment Index.” EIF is a measure of LOC, which is an unplanned release of material from its process that has the potential to impact human health and/or the environment. EIF is calculated from the number of LOC incidents normalized to production/sales data. The 2030 target is approximately an 18 percent reduction from 2022 baseline LOC incidents.

¹² Economic impact is measured through Indigenous-owned businesses, or with suppliers having 15 percent or greater Indigenous employment.



Our Targets (continued)

Theme	Target	2024 Progress Highlights	Read more
Safety and Health 	Zero Serious Injury and Fatality incidents annually. ¹³	In 2024, Nutrien had eight Serious Injury and Fatality (“SIF”) incidents, including three incidents that tragically resulted in fatalities. Nutrien is determined to learn from all safety incidents and to take steps to prevent similar incidents from happening in the future. To strengthen our efforts, we have engaged with external resources to further advance organizational learnings and SIF prevention. We are committed to building a strong safety culture where employees go home safe, every day.	Page 47
	Achieve top-quartile safety performance across all operating segments by the end of 2025.	In 2024, our Potash segment exceeded peer Total Recordable Injury Frequency (“TRIF”) and Lost-Time Injury Frequency (“LTIF”) performance and was industry top-quartile for LTIF. Retail TRIF performance was industry top-quartile. Nitrogen and Retail LTIF exceeded peer performance and was industry top-quartile. Phosphate did not achieve industry top-quartile safety performance. Measuring against industry and globally recognized metrics ensures we critically evaluate and drive our performance for Nutrien as an enterprise, as well as individual operating segments.	Page 48
Integrity 	All employees, directors and officers complete mandatory Code of Conduct training, annually.	All employees, directors and officers have completed mandatory Code of Conduct training in 2024. We update and rotate topics from year to year, adding new content as required to address new or changing material legal and compliance risks.	Page 49
Cybersecurity and Data Privacy 	Host quarterly education and training on cybersecurity for our community partners and stakeholders, annually.	We hosted four external cybersecurity sessions in 2024. The sessions were virtual events connected with Nutrien stakeholders to bring awareness to the importance of cybersecurity. Throughout the year, we also offered internal cybersecurity education and training.	Page 52
Corporate Governance 	Women comprise no fewer than 30 percent of the Board of Directors (maintain annually).	We continue to exceed our target, with 33 percent women on our Board of Directors as of December 31, 2024. This is a consistent annual achievement since our base year of 2018.	Read our Proxy Management Circular

¹³ Target includes work-related fatality or life-altering injury/illness experienced by an employee or directly supervised contractor conducting work on behalf of Nutrien.



OUR SUSTAINABILITY PRIORITY TOPICS

We regularly assess our sustainability priority topics to help evaluate whether they reflect the expectations of internal and external stakeholders. Our Executive Sustainability Committee and the Board Safety and Sustainability Committee (“S&S Committee”) oversee the assessment process, described below, which helps us clarify stakeholder expectations, identify potential risks or opportunities for Nutrien, and inform our prioritization of sustainability topics. The process leverages both qualitative analysis and digital techniques such as artificial intelligence (“AI”) and machine learning to gather data that helps us clarify stakeholder expectations and identify potential risks or opportunities for Nutrien. The prioritization process used for sustainability topics is different than how we address materiality for disclosure requirements under applicable securities laws or accounting standards. Please see the cautionary forward-looking statements on [page 79](#).

Nutrien’s sustainability priority topics are those that have a current or potential impact on Nutrien. They are listed below.

Refer to our 2024 Annual Report and 2024 Annual Information Form for information on Nutrien’s Enterprise Risk Management (“ERM”) process, megatrends and risks relating to Nutrien’s business.

Step 1 – Identify	Step 2 – Assess and Prioritize	Step 3 – Validate	Step 4 – Communicate					
<p>Refer to and consider the applicability of disclosure topics in the Sustainability Accounting Standards Board’s (“SASB”) Sustainable Industry Classification System (“SICS”) for relevance to Nutrien’s operations and value chain.</p>	<p>Sustainability priority topics were assessed in light of both internal and external stakeholder perspectives and includes inputs from each.</p> <p>External inputs:</p> <ul style="list-style-type: none"> surveys of Nutrien and non-Nutrien customers and farmers, and community leaders analysis of industry risks and global trends, including non-governmental organization (“NGO”) and media activity reviews of peer companies’ sustainability reporting reviews of the evolving regulatory and policy landscape <p>Internal inputs:</p> <ul style="list-style-type: none"> alignment with Nutrien’s internal ERM process. 	<p>Review and approval by our Executive Sustainability Committee and the S&S Committee, with input from our Sustainability Working Group.</p>	Sustainability report coverage	Sustainability priority topics	Read more about these topics			
				Air quality	Page 37			
				Biodiversity	Page 32			
				Climate change and GHG emissions	Page 20	Page 23		
				Cybersecurity and data privacy	Page 52			
				Human capital and labor practices	Page 54			
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				Safety and health	Page 45			
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	Water stewardship	Page 34						



SUSTAINABLE AGRICULTURE

Collaborating to advance innovative agricultural solutions for farmers

Topics in this section

Farm Management Solutions

15



FARM MANAGEMENT SOLUTIONS

We work collaboratively with farmers and value chain partners to develop farm management solutions that aim to increase productivity, profitability and environmental stewardship.



How is this topic relevant to our business?

Farmers around the world face ever-changing growing conditions with increasing pressure to grow more food, fiber and fuel. In some countries, there is also pressure to do so with fewer resources, while improving and verifying environmental outcomes such as GHG emissions reductions. To help meet these global challenges, one option available to the agriculture industry is **sustainable crop production intensification**, which aims to increase agricultural production per unit of input, while also managing biodiversity and ecosystem services, employing regionally appropriate conservation practices, promoting improved crop variety selection, optimizing plant nutrient inputs (including nutrient use efficiency), and implementing best practices, such as 4R Nutrient Stewardship (“4R”) and Integrated Pest Management.

Climate change, GHG emissions and product stewardship are sustainability priority topics for Nutrien. We collaborate with farmers and value chain partners to address these topics and others as part of our farm management solutions work.

Key Links

Global alignment and standards:

Food and Agriculture Organization (“FAO”) of the United Nations – Sustainable Food and Agriculture principles and approaches

Climate Action Reserve’s U.S. Nitrogen Management Protocol Version 2.1 (December 2021)

Nitrous Oxide Emission Reduction Protocol (“NERP”)

A Review of the Recent Scientific Literature Documenting the Impact of 4R Management on N₂O Emissions Relevant to a Canadian Context, March 2018¹⁴

United States Department of Agriculture (“USDA”) Natural Resources Conservation Service Conservation Practice Standard for Cover Crop (May 2024)

USDA Natural Resources Conservation Service Conservation Practice Standard for Nutrient Management (May 2019)

USDA Natural Resources Conservation Service Conservation Practice Standard for Residue and Tillage Management, No Till (September 2016)

World Resources Institute GHG Protocol Corporate Accounting and Reporting Standard (2004)

Intergovernmental Panel on Climate Change (“IPCC”) Sixth Assessment Report (AR6)

Governance for this topic:

See **Sustainability Governance**

Farm Management Solutions (continued)

OUR APPROACH

We believe we have unique capabilities in the agricultural value chain because we have direct relationships with our farmer customers. From pre-season planning to facilitating post-harvest verification, we focus on farmers' needs by providing customized farm management solutions (products, services, technology, and programming) to help improve crop productivity while minimizing impact on the environment. Across our footprint, we tailor our global approach to meet regional needs. By identifying core activities, such as conducting field-level data analyses for our customers, we strive to validate and verify measurable outcomes, such as crop performance, nutrient use efficiency, GHG emissions, soil health and water quality and use, if applicable.

In addition, we collaborate with industry associations and value chain partners to collectively advance agriculture through initiatives, such as our Sustainable Nitrogen Outcomes ("SNO") program and the **Sustainable Phosphorus Alliance**, which benefits our customers and helps meet the global challenges in food security.



NUTRIEN'S FARM MANAGEMENT SOLUTIONS PROCESS

The following is one approach that supports farmers with customized solutions and aims to provide verified outcomes:



In 2024:

- we received verification on over 900 tonnes CO₂e emissions reductions based on the 2022 crop season from improved agricultural practices verified as impact units¹⁵ in SNO. [Read more.](#)
- we measured 3.7 million acres in our sustainable agriculture programs, nearly doubling the number of measured acres from 2023. [Read more.](#)

Planning

Our solutions begin with agronomic analysis and strategic field planning, sometimes years in advance of planting the field. Our field staff create a customized plan for implementation, which may include precise application and efficient use of crop inputs (such as crop nutrients, seed and crop protection products) and conservation practices (such as no-tillage and cover crops).



Application

We offer products and services tailored to meet farmers' needs based on the crop, local geography, climate, soil and agricultural market. We provide agronomic advice throughout each growing season and across multiple crop rotations, including best practices in nutrient management such as the **4R** and **Fertcare**®. Our precision agriculture platform, Echelon™, provides variable rate recommendations which may help reduce nutrient losses to the environment.



Measurement

Our digital platforms, such as Agrible® in North America, are available to establish baselines to track and measure outcomes (including yield, emissions, soil health, water quality and biodiversity impacts) over time. Where possible, we aim to collect field-level data for practices in the field and then analyze the outcomes using the Cool Farm Tool or the Fieldprint® Platform in North America, and Greenhouse Accounting Framework ("GAF") tools in Australia.



Facilitate verification

Nutrien manages the validation and verification of carbon outcomes through third-party verifiers, such as SustainCERT or our execution partners utilizing industry-accepted protocols and standards. We believe there is potential to certify additional field-level sustainability metrics in the future.



¹⁵ Impact units are the verified absolute emissions reduction or removal (in metric tonnes CO₂e) that result from the difference between GHG emissions of the baseline and the scenario of an intervention and which are linked to an impacted amount of product.



Farm Management Solutions (continued)

ENABLING ACTIVITIES

The following table summarizes our products, services, technologies and programs that we use or offer to enable our approach. We also collaborate with industry associations and value chain partners to collectively support the agriculture sector. [Read more.](#)

Products	Overview
Advanced plant nutrition	Fertilizers provide nutrients, such as nitrogen, phosphorus and potassium, that are essential for growing healthy crops. Advanced plant nutrition products, such as enhanced efficiency fertilizers (“EEFs”) also aim to improve environmental outcomes, such as reduced nitrous oxide emissions from applied fertilizer, reduced leaching to ground and surface waters, reduced ammonia loss to air and improved nitrogen-use efficiency. Other products in this category, such as biostimulants, aim to improve the availability and uptake of nutrients by the crop or help reduce stress reactions in plants.
Crop protection	Crop protection products and practices are designed to maintain crop quality and minimize yield losses by managing plant diseases, weeds and pests. Herbicides and pesticides aim to reduce crop loss and maximize crop yield. Nutrien determines crop protection product suitability based on scientific evidence, regulatory requirements and a holistic product rating system. We promote the safe and responsible use of products. Read more in Product Stewardship .
Seed	We offer customers a broad portfolio of high-quality seed options, such as pest- and drought-resistant seeds that can help maximize crop yields in difficult climates. Seed hybrids and varieties combined with the latest trait technology are tested across geographies and environments.
Livestock solutions	Nutrien’s Australian livestock business connects clients with buyers and provides products and services to manage and improve animal health, productivity and efficiency in the livestock, dairy and equine industries. We offer feed supplements that aim to improve feed efficiency and liveweight gains and/or reduce methane emissions from livestock.

Programs	Overview
Sustainable agriculture programs	Our programs seek to facilitate the adoption of farm management solutions. We offer a suite of comprehensive programs, which aim to establish performance and environmental baselines, identify opportunities for improvement, and connect farmers to value chain partners to create value. In 2024, we measured production and environmental outcomes on 3.7 million acres in our sustainable agriculture programs. Learn more about two programs: SNO Canada and SNO US .

The Nature Conservancy Collaboration in Brazil

In 2024, we contributed to The Nature Conservancy’s (“TNC”) Regenerative Agriculture project in Brazil’s Cerrado, Araguaia River Basin region. This project provides technical and agronomic support to help farmers adopt regenerative practices and livestock systems. Training includes topics such as improving productivity on degraded lands, soil conservation and management of natural landscapes.

Services & Technology	Overview
Agronomic advice	We employ over 4,500 crop consultants. With specializations in nutrient stewardship, crop protection, seed management and best management practices, our advisors and agronomists make recommendations that help farmers increase crop production and improve environmental outcomes (such as soil health and nutrient use efficiency). In Australia, where mixed farming (growing crops and raising livestock at the same time) is common, we also have livestock and animal health specialists working to improve productivity. Across our Retail network, we offer various forms of educational materials and training to share our knowledge with farmers. Nutrien is a strong advocate of the 4Rs , which refer to using the Right source of nutrients, at the Right rate, Right time and in the Right place. This provides a science-based framework for plant nutrition management and crop production while considering individual farmers’ specific needs. Nutrien also supports Fertcare in Australia.
Digital agronomic tools	Nutrien’s digital tools combine location, agronomic information (crop physiology, soil characteristics and pest or disease impact), environmental data (such as precipitation and temperature), geospatial data, weather forecasting and data science to make field-specific recommendations. Agrible® is our digital agronomy tool that inputs farmer’s field-level data and combines it with our agronomic data to help farmers track improvements in nutrient use efficiency, soil health and GHG emissions reductions for the creation and verification of carbon credits. Nutrien’s Echelon™ platform uses geospatial data processing analytics to help farmers precisely apply seed and fertilizer to their fields. Our crop consultants create detailed maps of farmers’ fields, targeting inputs on the areas that need it most.
Nutrien Financial	We pair agronomic and financial knowledge to help farmers optimize production through access to capital and cash management strategies. Financing is often a key enabler to the broad adoption of sustainable agricultural practices. Eligible Canadian customers in Nutrien’s SNO program may receive a lower promotional financing rate relative to the standard financing annual percentage rate, which can support participants who aim to improve production, profitability and environmental outcomes, including reducing their GHG emissions. Learn more here .
Irrigation management and water conservation practices	Irrigation management involves infrastructure and technology to efficiently water crops in dry regions, minimizing evaporation and improving crop yields. Our farmer customers rely on water for product blending and irrigation in arid growing environments. We promote water use efficiency and recommend approaches to reduce nutrient loss to groundwater and surface water. Nutrien Water (Australia) offers water conservation solutions.
Vegetation, forestry and aquatics management	Our Nutrien Solutions Forestry and Aquatics teams specialize in vegetation management for non-agricultural managed lands (that is, forestry, aquatics, range and pasture, roadside, railroad and utility markets) in the US. We support environmental stewardship with our local knowledge and wide range of products and value-added services. For example, our forestry team advises landowners regarding wildlife management and optimizing biological CO ₂ sequestration, and our aquatics specialists provide expertise for water resources such as water testing and algae management services.

Farm Management Solutions (continued)

SUSTAINABLE AGRICULTURE PROGRAMS

At Nutrien, sustainable agriculture programs are those designed to increase farm productivity, profitability and environmental stewardship. They aim to improve crop production and quality, expand on farmers' current stewardship practices, and differentiate their products. They also offer Nutrien and our supply chain collaborators the opportunity to amplify and document the value of sustainable agricultural practices.

Nutrien's sustainable agriculture programs, collectively called **FARMSMART**® in North America, seek the adoption of farm management solutions, support farmers in recording field-level data, and report crop and environmental outcomes. Some programs also identify potential additional revenue for farmers from their end customers based on measured outcomes. Our programs aim to influence outcomes such as crop productivity, nutrient use efficiency, GHG emissions, soil health and/or water quality, which can be validated and verified by a third party.

Working with farmers, our crop consultants, and supply chain partners, we seek to establish credible baselines and design programs that will drive continuous improvements at the field level, which could include:

- improving soil health and building soil organic matter¹⁶,
- enhancing nutrient recycling and optimizing nutrient use efficiency,
- reducing GHG emissions, increasing soil organic carbon¹⁷ ("soil carbon") sequestration and expanding the protection of existing carbon sinks,
- improving water quality and soil water retention,
- conserving and improving biodiversity, and
- increasing crop yields on current farmland, which may reduce additional lands from being converted for agriculture.

TWO TYPES OF PROGRAMS

We categorize our programs as follows:

- **Measuring outcomes from current practices:** Many farmers have long-standing best management agricultural practices in their operations (such as conservation tillage) but lack a way to demonstrate their impact. We use our digital platforms, such as Agrible®, to measure baseline outcomes of practices at the field and farm level and help farmers document the environmental and economic value of these existing practices using key metrics from tools, including the **Fieldprint® Platform** and the **Cool Farm Tool**, which are tools based on global standards and have published requirements for use and reporting.
- **Measuring outcomes after interventions:** In addition to measuring outcomes from current agricultural practices, our agronomic field teams are working with farmers with the aim of improving their environmental performance by recommending farm management solutions, tracking improvements from baseline performance, and connecting them with downstream certification bodies and customers.

Managing nitrogen fertilizer is critical to reducing emissions from agriculture. Learn more about the **nitrogen cycle** or watch a **video** here.

2024 highlights

In **Australia**, we launched the Farm Emissions Profile service and continued to build our digital capabilities to track sustainability-related field data. We released the Farm Emissions Profile service to farmers in July, providing an on-farm GHG accounting tool to assist farmers to better understand and manage their GHG emissions. Throughout 2024, we assessed GHG emissions from over 820,000 acres, including through partnerships with supply chain partners, including:

- Acting as a service provider for the Graincorp Next program in Northern Victoria and Southern New South Wales.
- Working with farmers to assess their GHG footprint to enable progress towards delivering a lower-GHG intensity canola oil to end-use consumers.
- Working with Viterra to deliver a GHG measurement program across South Australia and Western Australia.

In **North America**, we collaborated with farmers and our supply chain partners to incentivize practices and offer products and services that support the creation of carbon offsets or insets¹⁸.

- **US:** Working with farmers on nitrogen management in the production of the 2022 and 2023 crops, Nutrien has begun to facilitate third-party verification of GHG offsets following the **Climate Action Reserve's U.S. Nitrogen Management Protocol Version 2.1**. Once verified, we expect carbon credits will be issued into the voluntary offset market and available for purchase as offsets. In collaboration with supply chain partners, we are in the process of verifying Scope 3 insets for the 2022 and 2023 crop production years with SustainCERT, a globally recognized climate impact verifier.

- **Canada:** Working with SustainCERT, we continue to validate a pathway for GHG outcomes and verify emissions reduction from our SNO program. In 2024, we received verification on over 900 tonnes CO₂e emissions reductions based on the 2022 crop season from improved agricultural practices verified as impact units¹⁹ by SustainCERT in SNO. SNO is modeled on Alberta's Nitrous Oxide Emission Reduction Protocol ("NERP"), which uses field-level data to measure, track and validate CO₂e reductions from nitrogen fertilizer management. SustainCERT verified the GHG emissions reduction from this value chain intervention that involved a collaboration of farmers, Nutrien, Maple Leaf Foods and others. The collaboration will enable Maple Leaf Foods to co-claim a reduction against their Scope 3 emissions.



¹⁶ Soil organic matter is the portion of the soil that contains plant or animal tissue in various stages of decomposition. Soil organic matter contributes to soil productivity.

¹⁷ Soil organic carbon is derived from the decomposition of plant and animal materials. Increasing the input of plant residues, plant roots and manure can increase the amount of organic carbon in soil. The terms "total organic carbon", "organic carbon" and "soil carbon" are used interchangeably to represent soil organic carbon.

¹⁸ Carbon offsetting is a way for organizations to reduce their carbon footprint by paying another organization to reduce their emissions. Carbon insetting (also referred to as "GHG outcomes") refers to the actions taken by organizations to reduce emissions within its own supply chain.

¹⁹ Impact units are the verified absolute emissions reduction or removal (in metric tonnes CO₂e) that result from the difference between GHG emissions of the baseline and the scenario of an intervention and which are linked to an impacted amount of product.

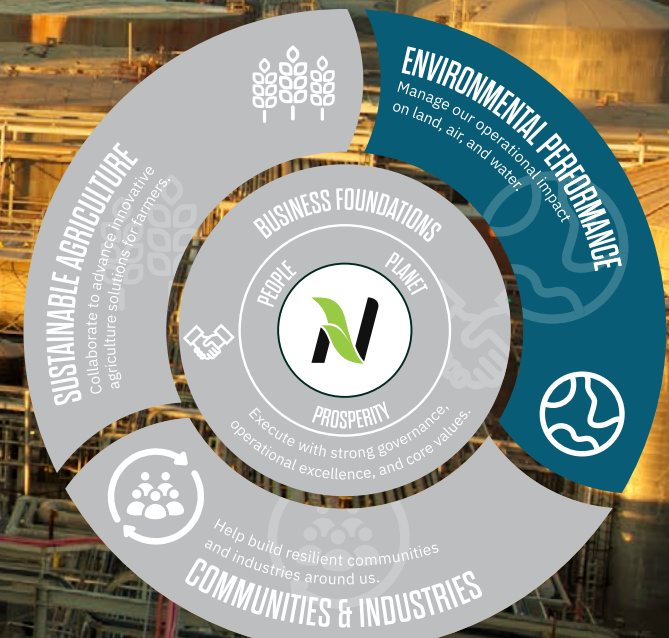


ENVIRONMENTAL PERFORMANCE

Managing our operational impact on land, air, and water

Topics in this section

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CLIMATE CHANGE AND GHG EMISSIONS

We take a pragmatic and collaborative approach to reducing GHG emissions from our operations and engaging value chain partners and farmers.



Nutrien’s climate-related disclosures are intended to inform our stakeholders about our priority climate-related risks and opportunities. The assessments we conduct to support these disclosures are intended to evaluate climate-related risk, assist in strategic planning and support informed capital allocation decisions for our business to adjust in transitioning to a lower-carbon economy. Our current climate-related disclosures are informed by the voluntary **Task Force on Climate-related Financial Disclosures** (“TCFD”) framework, whose monitoring responsibilities have now been transferred to the IFRS Foundation.

How is this topic relevant to our business?

Fertilizer production and use have complex and conflicting impacts on GHG emissions across the agricultural value chain. Fertilizer is critical to healthy and productive crops, enhancing soil carbon (the level of carbon directly tied to the level of organic matter in the soil) and increasing crop yields, which helps to feed the growing population from the same amount of arable land. However, nitrogen

fertilizer also generates GHG emissions when it is produced and after it is applied to the soil. **Read more.** Nutrien endeavors to cultivate agricultural solutions so farmers can increase food production for future generations. This will be accomplished while striving to reduce GHG emissions from agriculture and maintain existing arable land use.

Our internal and external stakeholders have identified potential impacts from climate-related risks as a top sustainability concern, both from the physical risk of increased weather pattern variability and its impact on our operations and customers, and the transitional risk of the expectation to reduce emissions from fertilizer use, among other risks. At the same time, we have an opportunity to help farmers mitigate and adapt to the changing climate and increase our operational efficiency, while also striving to reduce the associated GHG emissions. Our operations, facilities and fleet are associated with Scope 1 and Scope 2 GHG emissions and our value chain generates our Scope 3 GHG emissions.

Key Links

Global alignment and standards:

[World Resources Institute GHG Protocol Corporate Accounting and Reporting Standard \(2004\)](#)

[Intergovernmental Panel on Climate Change Sixth Assessment Report \(AR6\)](#)

[Nitrous Oxide Emission Reduction Protocol](#)

Nutrien’s policies and disclosures:

[Safety, Health and Environment \(“SH&E”\) Policy](#)
[GHG Inventory Management Plan](#)

Governance for this topic:

See [Sustainability Governance](#)

Climate Change and GHG Emissions (continued)

OUR APPROACH

Nutrien’s climate strategy is based on four priorities:

- Reduce emissions from our operations without the use of purchased voluntary carbon credits as offsets.
- Support improved farmer productivity and outcomes.
- Engage and collaborate to drive value-creation opportunities.
- Build resilience in our operations, product portfolio and communities around us.

Focusing on these priorities is expected to enable us to fulfill our purpose of *Feeding the Future*. This pragmatic approach balances a commitment to effectively reduce emissions from our operations, engaging value chain partners and farmers while continuing to focus on value creation by delivering meaningful capital returns.



EMISSIONS RELATED TO OUR OPERATIONS (SCOPE 1 AND SCOPE 2)

The production of fertilizer accounts for approximately 95 percent of our company-wide direct (Scope 1) and indirect (Scope 2) emissions. Direct emissions are generated on-site, from the combustion of natural gas and other fuels, or from processes at our operations. Indirect emissions are from the off-site generation of purchased electricity, steam and heat. The sources of GHG emissions related to the nitrogen, potash and phosphate fertilizer we produce are described in detail on our [website](#).

As we strive to reduce the emissions from our operations, we have undertaken the following initiatives.

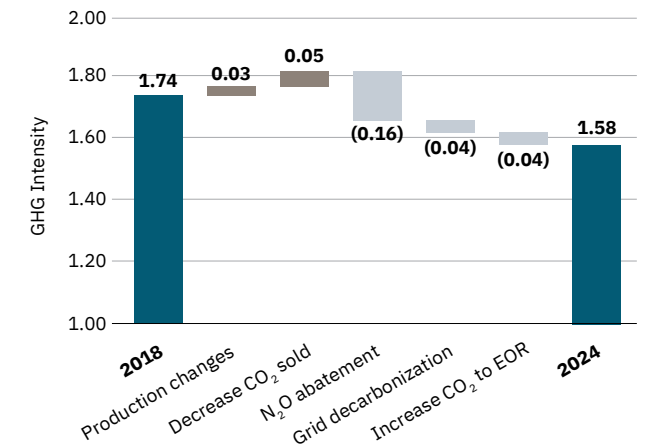
I. PROCESS IMPROVEMENTS

We look for opportunities to implement process efficiencies or equipment reliability improvements that can also reduce GHG emissions at our production facilities, with a focus on improving reliability and energy efficiency at our Nitrogen facilities. Projects have included N₂O abatement and since N₂O has a significantly higher global warming potential than CO₂ (approximately 270 times higher according to the [IPCC](#)). Many factors can negatively impact the efficacy of our emissions reduction efforts, including plant reliability and turnaround schedules, as plant start-ups and shutdowns consume energy without associated production.

2024 updates:

- **N₂O abatement:** In late 2023, we completed the final project in our suite of N₂O abatement projects by installing new equipment at our Geismar, LA site. Other projects were completed at Augusta, GA, Kennewick, WA, and Lima, OH in 2021 and 2022. At the end of 2024, after a full year of operation, these projects contributed to the removal of over 80 percent of N₂O emissions from nitric acid production in our Nitrogen fertilizer production facilities, or a 1,073,000 tonne CO₂e (10 percent) reduction in our overall Scope 1 emissions compared to 2021.
- **Redwater, AB vent sweep project:** In 2023, the completion of this project eliminated a source of methane emissions at the Redwater, AB Nitrogen facility. This contributed to an approximate 75 percent reduction in methane emissions from the Redwater facility in 2024 compared to 2022. Since methane has a global warming potential approximately 30 times higher than CO₂, this reduction equates to an approximate 17,000 tonne CO₂e reduction in Scope 1 emissions compared to 2022.

Changes in Nutrien’s Nitrogen GHG Intensity between 2018 Base Year and 2024
(MT CO₂e/MT NH₃)



By December 31, 2024, our Nitrogen Scope 1 and Scope 2 GHG emissions intensity decreased by 0.16 MT CO₂e/MT NH₃ produced, primarily as a result of our N₂O abatement projects and grid decarbonization, compared to our 2018 base year. This equates to a nine percent intensity reduction or 856,000 CO₂e absolute emissions reduction.

Climate Change and GHG Emissions (continued)

2. ENERGY EFFICIENCY AND COGENERATION

We aim to continually improve energy efficiency at our production facilities, which we expect to reduce our energy consumption and GHG emissions and improve production costs per tonne of product produced. Where feasible, as equipment is replaced for operational reasons or due to end of life, it is upgraded to a more energy-efficient option. Energy efficiency in Scope 2 emissions intensity can be achieved at the point of energy production or at the point of consumption. Our Carseland, AB Nitrogen facility and Cory, SK Potash mine use cogeneration to efficiently combine heat and power generation.

2024 updates:

- **Energy efficiency:** The centralization of all ammonia plant operating data and the use of advanced analytical tools to support our Nitrogen facilities has reinforced the identification of optimal production and energy efficiency points, supporting the priority of improving plant reliability, a core focus of Nutrien’s Nitrogen strategy. This coordination of effort helped contribute to the reduction of Nitrogen’s Scope 1 and Scope 2 emissions intensity by nine percent when compared to our 2018 base year. Learn more about [Nutrien’s Nitrogen Real-time Operations Center](#).



3. LOWER CARBON INTENSITY AMMONIA

Ammonia with a lower carbon intensity than conventionally produced ammonia²⁰ can be produced using one or a combination of technologies, including renewable electricity and/or carbon capture utilization and storage (“CCUS”), the permanent storage of CO₂ in underground reservoirs or for the use of CO₂ in a range of applications. These alternatives have the potential to reduce emissions from our operations, as well as reduce emissions in our value chain due to their reduced carbon footprint.

2024 updates:

- **CCUS:** Our short-term focus is on utilizing the convenient CCUS infrastructure available in Alberta. Our Redwater, AB Nitrogen facility has been capturing and exporting CO₂ into the [Alberta Carbon Trunk Line](#) since late 2020. For the year ended December 31, 2024, Nutrien captured and sold one million tonnes of CO₂ for further industrial use or permanent storage for Enhanced Oil Recovery (“EOR”) at various production facilities, including Redwater.



- **Verified Ammonia Carbon Intensity (“VACI”) program:** Nutrien collaborated with The Fertilizer Institute and other technical industry experts to develop and launch the VACI program. This program is designed to help ammonia consumers reduce emissions across their supply chains with an independent and certifiable carbon intensity score. The VACI certification framework standardizes the approach for calculating the carbon intensity of ammonia encompassing all aspects of ammonia production, from feedstock production through the finished product at the plant gate. Producers following the program can use the VACI standard to calculate the carbon intensity of ammonia produced at their facilities. Once calculated, an independent, third-party auditor will verify or validate that the carbon intensity score is accurate. Nutrien’s Redwater, AB facility was one of the initial facilities to be certified.
- **Clean ammonia:** Although we still believe in the technological potential of clean ammonia, in 2024, we decided to not pursue our previously announced Geismar, LA clean ammonia project. This decision was based on the strategic priority of taking a focused and disciplined approach to capital allocation and the continued uncertainty on the timing of emerging uses, market premiums, and incentives for clean ammonia.

- **Dual-fuel vessels:** As a result of no longer pursuing the Geismar, LA clean ammonia project, we ceased our participation in EXMAR’s (our shipping partner) ammonia dual-fuel vessel project in 2024.
- **Other technologies:** Nutrien continues to partner with the U.S. Department of Energy (“DOE”) and other industry partners to develop a clean ammonia plant with technology developed from the Renewable Energy to Fuels Through Utilization of Energy-Dense Liquids (“REFUEL”) program.
- **Study and assessment:** In 2024, we assessed the technological feasibility of, developed preliminary engineering for, and outlined the overall business case for technologies to address the difficult-to-abate GHG emissions at our Redwater, AB ammonia production facility. Based on capital and operational cost estimates, Nutrien determined that the technologies analyzed in the study are not currently economically viable based on our key economic assumptions. We intend to continue monitoring technological advancements, the emergence of a premium market for products with a lower carbon intensity than conventionally produced ammonia²⁰, and climate policies that may make large-scale emissions reduction projects economically viable in the future.

²⁰ Conventionally produced ammonia is currently produced by Nutrien using the traditional Haber-Bosch process that relies on the steam reforming of methane as a hydrogen source without carbon capture.

Climate Change and GHG Emissions (continued)

EFFORTS TO REDUCE VALUE CHAIN EMISSIONS (SCOPE 3)

For Nutrien, GHG emissions from nitrogen fertilizer application contribute significantly to our total GHG emissions in the form of N₂O, through natural biological processes within the soil. Farm Management Solutions is our approach to help farmers reduce GHG emissions and may include nutrient-management advice.

In an effort to support the reduction of emissions from our value chain, Nutrien has undertaken the following initiatives:

1. SECTORAL DECARBONIZATION PATHWAYS

Nutrien continues to be a member of the **Science Based Target initiative's** ("SBTi") Expert Advisory Group for the development of the **Chemical Sector Guidance** and a Sectoral Decarbonization Approach ("SDA"). Nutrien provided extensive comments on the draft guidance in the first public consultation period which closed August 1, 2024. An internal review of comments by SBTi led to a second public consultation commencing in November 2024 and concluding in January 2025. We anticipate pilot testing will follow in 2025. We continue to believe the role of nitrogen in food production, soil health and land use optimization are unique attributes that differentiate nitrogen fertilizer production from other chemical industries. These attributes need to be considered in developing the SDA process. Any use of an SDA to set an emissions target will depend on several factors, including its suitability to Nutrien's operations and its technological and economic feasibility.

2. COLLABORATING FOR CLIMATE CHANGE

To address the agriculture industry's most pressing issues, we intend to use our role in the agriculture industry to advocate for action to transform the global food system.

As a partner of the **Canadian Alliance for Net-Zero Agri-food** ("CANZA"), Nutrien is helping develop a regionally representative and scalable monitoring, measurement, reporting and verification framework. This is anticipated to enable the quantification of environmental outcomes from sustainable agriculture practices and enable agri-food corporations to report these outcomes as part of their Scope 3 GHG emissions inventory. In Australia, Nutrien Ag Solutions is a partner in the Zero Net Emissions Agriculture Cooperative Research Centre, a government and industry collaboration with the goal of ensuring Australia's agricultural industries keep growing while decarbonizing production systems. In the US, Nutrien Ag Solutions partners with Field to Market in their Climate-Smart Agriculture Innovative Finance Initiative which seeks to provide nationwide funding opportunities through innovative finance mechanisms for further expansion of markets and implementation of strategies related to agriculture practices.

3. ADDRESSING SCOPE 3 GHG EMISSIONS THROUGH OUR SUSTAINABLE AGRICULTURE PROGRAMS

While we continue to refine our Scope 3 measurement estimates (read more on [page 18](#)), we remain focused on helping our customers reduce emissions from the agriculture value chain.

METRICS AND TARGETS

We focus on measuring our Scope 1, 2 and 3 emissions as the main indicator of our performance on emissions reduction activities and to assess the effectiveness of mitigating climate-related transition risks.

Measuring Scope 1 and Scope 2 GHG Emissions

Nutrien measures and reports Scope 1 and Scope 2 (location-based) GHG emissions in accordance with the GHG Protocol's Corporate Accounting and Reporting Standard (2004) on an operational control basis. We continue to refine our control environment, striving towards completeness, consistency and accuracy of our GHG emissions data. For more information on Nutrien's calculation methodology for reported Scope 1 and Scope 2 GHG emissions, please see our **GHG Inventory Management Plan**. KPMG LLP provided limited assurance over our 2024 Scope 1 and Scope 2 GHG emissions and their assurance report can be found [here](#).

Measuring Scope 3 GHG Emissions

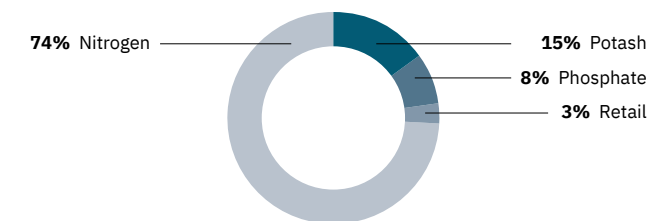
The measurement of Scope 3 emissions continues to be complex and iterative, and we anticipate the accuracy of our estimates will improve and evolve. We believe quantifying Scope 3 emissions is essential to productive engagement with value chain partners and measuring and/or demonstrating reduction efforts in our value chain.

Process: Our approach to Scope 3 measurement includes the following:

- We collect and quantify data using GHG Protocol-aligned methodologies for our relevant Scope 3 categories.
- We use emissions factors from the most recent information per the IPCC (AR6).
- We use consolidated Nutrien global data, refined emissions factors to be more representative of the underlying geographical data, and agronomic insights to represent our products and their associated emissions.
- We are taking concrete steps to be well prepared for the future mandatory reporting of Scope 3 emissions in the jurisdictions where we operate by implementing actions to support data collection in an effective control environment.

GHG Emissions by Operating Segment

(% of total Scope 1 and 2 emissions)



Our Nitrogen operating segment is the largest contributor to our overall GHG emissions and a key focus area of our reduction initiatives.

Preliminary results: Using high-level estimated emissions and criteria aligned with the GHG Protocol's technical guidance for calculating Scope 3 emissions, we identified eight of the 15 Scope 3 categories as relevant to Nutrien (see [table on next page](#)). Based on 2023 preliminary results, we estimate that Category 11 (Use of Sold Products) and Category 1 (Purchased Goods and Services) combined account for approximately 90 percent of the identified value chain Scope 3 emissions. Category 11 is associated with nitrogen fertilizer use on-field and the main driver of Category 1 emissions is associated with purchased nitrogen fertilizer. We intend to enhance the accuracy and precision of our Scope 3 measurement by refining data inputs and calculations.

GHG emissions

(millions of tonnes CO ₂ e)	2024	2023	2018 Base year
Scope 1	9.45	9.54	11.19
Scope 2 (location-based)	2.59	2.63	3.05
Scope 1 and Scope 2	12.04	12.17	14.24

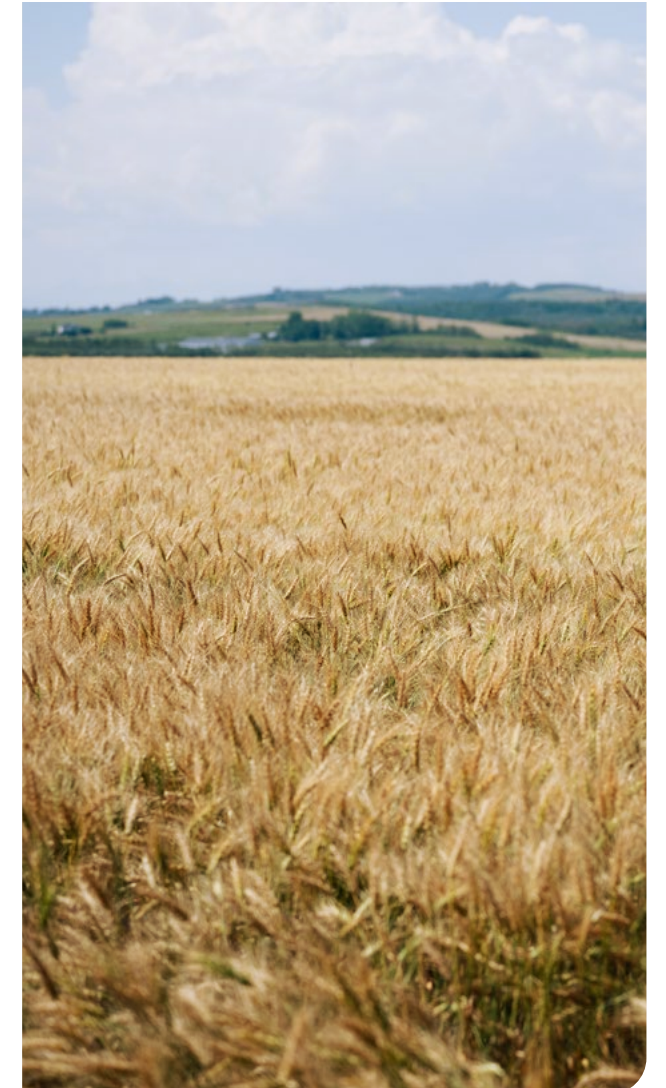
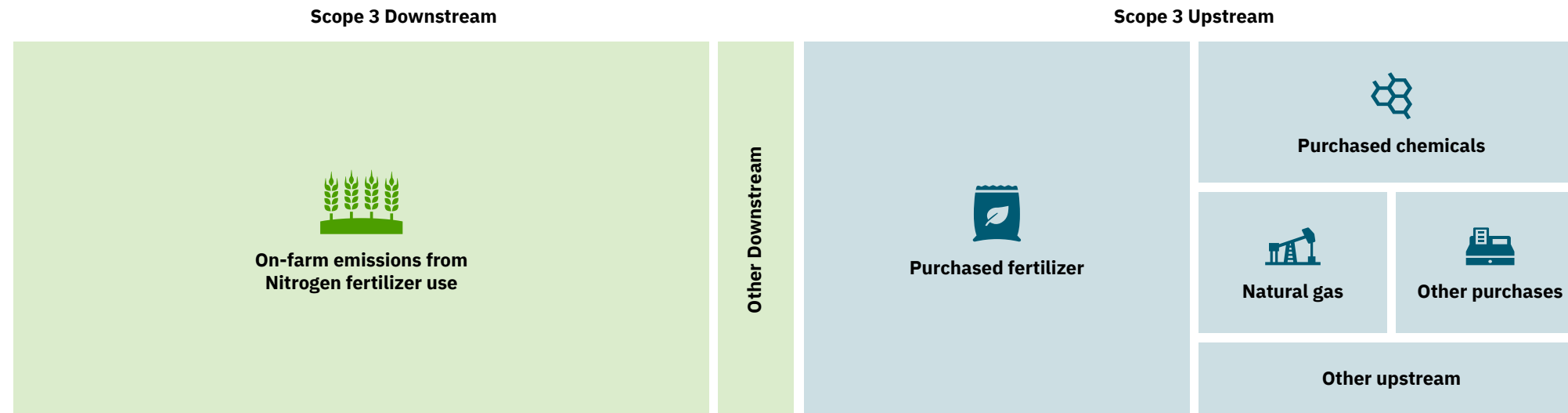
Climate Change and GHG Emissions (continued)

Nutrien’s relevant Scope 3 categories

Scope 3 category	Examples of items being evaluated in this category
Category 1: Purchased goods and services	Purchased fertilizer, chemicals and seed. Upstream emissions of natural gas used as feedstock.
Category 2: Capital goods	Purchased equipment, machinery, vehicles, buildings
Category 3: Fuel- and energy-related activities	Upstream emissions of natural gas used as fuel, electricity and steam not included in Scope 1 and Scope 2
Category 4: Upstream transportation and distribution	Internal movement of goods in vehicles not owned or operated by Nutrien
Category 9: Downstream transportation and distribution	Transportation of sold products in vehicles not owned or operated by Nutrien
Category 10: Processing of sold goods	Urea used in production of anti-icing agents, and ammonia used in production of adhesives
Category 11: Use of sold products	Nitrogen fertilizer applied to soils. Learn more: The nitrogen cycle
Category 15: Investments	Our investments in Canpotex, Profertil, Sinofert and financial investments

Scope 3 emissions by source

We currently estimate that Category 11 (Use of sold products) and Category 1 (Purchased goods and services) combined account for approximately 90 percent of the identified value chain Scope 3 emissions based on 2023 preliminary results.



Climate Change and GHG Emissions (continued)

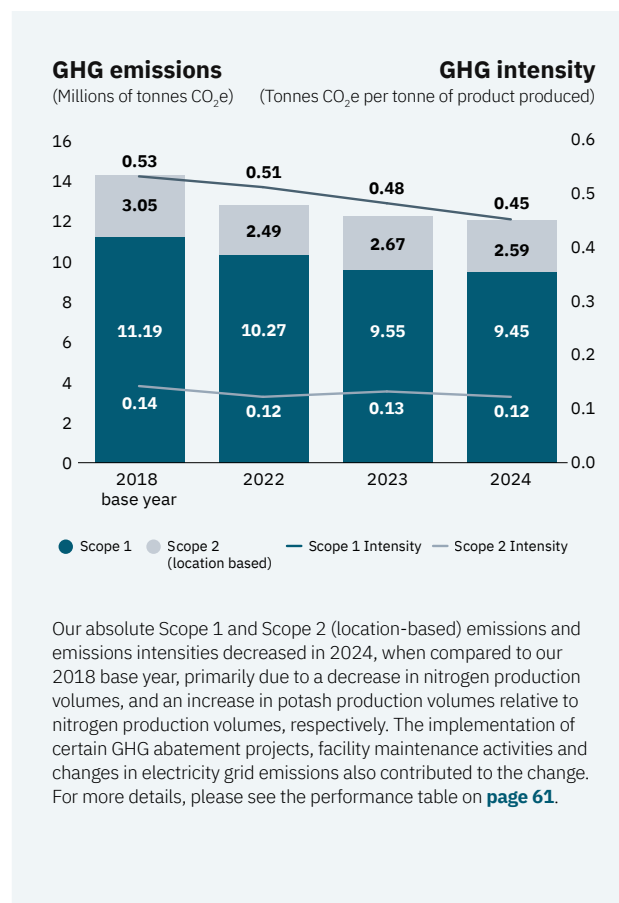
Climate-related targets

In 2021, we set a climate-related target to achieve at least a 30 percent reduction in GHG emissions intensity (Scope 1 and Scope 2) per tonne of product produced from the base year of 2018 to 2030 across our Nitrogen, Phosphate and Potash operations. For the year ended December 31, 2024, we achieved a 15 percent reduction in GHG emissions intensity (Scope 1 and Scope 2) per tonne of our products produced, compared to our 2018 base year. This reduction has been supported by the completion of the final projects in our Nitrogen operation’s GHG Phase 1 abatement program in 2023 and continued changes to our production mix.

Our current trajectory indicates this target will not be achieved by 2030 and is currently under review. Certain assumptions which supported our emissions intensity reduction target in 2021 have materialized differently than originally projected. At this point, we do not have clarity on regulatory policies or the future of compliance frameworks within the primary locations where we operate and have not seen financially material opportunities develop for products with a lower carbon intensity relative to conventionally produced products. These circumstances have led to greater uncertainty and higher execution and financial risk for the next phase of GHG abatement projects, which has deprioritized prospective investments within our capital allocation framework. We continue to monitor technological advancements, government incentives and tax policies, the emergence of premium markets for products with a lower carbon intensity than conventionally produced products, as well as industry partnerships that may make emissions reduction projects economically viable. We expect to provide a further update in 2026.

Capital expenditures related to our GHG target

Since 2021, we have invested \$49 million of capital expenditure related to the completion of our GHG Phase 1 abatement program. Due to high capital costs, limited opportunity for incremental revenue for products with a lower carbon intensity than conventionally produced products, and high execution risk of the next phase of GHG abatement projects, our ability to ensure return of capital on emissions reduction initiatives has changed. Therefore, we intend to continue monitoring technological advancements, the emergence of a premium market for products with a lower carbon intensity than conventionally produced products, and climate policies that may make large-scale emissions reduction projects economically viable in the future.



GOVERNANCE

For information on Nutrien’s governance for climate-related risks and opportunities, please see the [Sustainability Governance](#) section.

RISK MANAGEMENT

Risk management is a fundamental part of Nutrien’s activities and decision-making processes and is integrated into the structure, operations and processes of the organization.

Roles and Responsibilities

Annually, we identify and assess climate-related risks using our global risk management framework, which requires the identification, assessment and monitoring of risks to be embedded in business activities across the organization. The Executive Leadership Team (“ELT”) then reviews the risks for completeness. Our Executive Sustainability Committee, Sustainability Working Group, and ERM teams are involved in the escalation of climate-related risks and opportunities to our ELT and the Board.

Risk Identification

Our identification and assessment of climate-related risks is an integrated process that includes critical input from our enterprise risk assessment process, subject matter specialists and dedicated working groups, who bring in critical perspectives and information on stakeholder expectations and external context related to climate matters. For completeness, we also cross-reference our identified risks with industry-specific guidance in the relevant SASB Standards. We consider potential transition and physical risks and impacts associated with climate change across a wide spectrum of environmental, meteorological, human health, societal and financial domains.

Risk Assessment

We characterize a significant risk as a risk, or combination of risks, that could threaten the achievement of our business model, future financial performance, liquidity, or ability to deliver on our strategy. Risks are assessed using our common enterprise risk methodology based on their likelihood of impacting our business

and the potential severity of impact. Our assessment criteria are embedded in our global risk management framework allowing comparability to other non-climate-related risks.

Criteria include financial, reputational and SH&E impacts:

- For financial impacts, adjusted net earnings (loss) before finance costs, income taxes, and depreciation and amortization (“Adjusted EBITDA”) is used as a key quantifiable indicator. Financial impact may be assessed at the consolidated level and/or at the individual operating segment level, depending on the nature of the climate-related risk.
- Reputation impacts are based on several factors with key drivers being stakeholder or media attention/concern, legal concerns, effect on corporate value, and potential credit rating impacts.
- SH&E impacts are based on the potential for safety or health impacts to our employees or communities and/or potential impacts to the environment.

As climate change can pose unique and longer-term risks to our business, we also assess physical and transitional climate-related risks by building climate models and using scenarios to understand potential financial impacts, provide better insight on risk time horizons, and identify possible pathways from the outcomes. We create specialized working groups and leverage knowledge from internal specialists to provide input and review when assessing climate-related risks and developing scenarios. Additionally, when assessing physical climate risks, we look at the exposure and vulnerability from weather variability and climate factors and assess how future climate change could impact our sites.

Climate Change and GHG Emissions (continued)

SCENARIOS

We continue to evaluate, refine and consider various climate scenarios to help identify risks and opportunities and assess the resiliency of our business model. These scenarios are hypothetical and are not intended to be used as forecasts or predictions.

	Transition Scenarios	Physical Scenarios
Scenario models	<p>International Energy Agency (“IEA”) Scenarios:</p> <ul style="list-style-type: none"> Announced Pledges Scenario (“APS”) Sustainable Development Scenario Net Zero Emissions (“NZE”) by 2050 	<p>The IPCC Sixth Assessment Report (AR6):</p> <ul style="list-style-type: none"> SSP 1-2.6 SSP 5-8.5 SSP 2-4.5 <p>A combination of IPCC AR6 scenarios may be best suited for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty</p>
Time horizons	Impact models cover the time horizon over the next 25 years to 2050	Scenario models are focused primarily between 2030 and the 2050 time horizons as these relate to key milestones for global emissions reductions
Potential key inputs	<ul style="list-style-type: none"> Key internal inputs include production estimates, emissions factors and discount rates External inputs include carbon prices and CO₂ emissions assumptions based on the IEA’s World Energy Outlook for the relevant period 	<ul style="list-style-type: none"> Key internal inputs include our global operational footprint, customer regional locations, historical sales, acreage and crop yield data External inputs include historical and projected acres data, inflation rates and the latest IPCC climate datasets covering flood depth, extreme wind, extreme rainfall, wildfire, drought, hail and thunderstorms, heat and cold hazards
Key areas of our organization to be considered	<ul style="list-style-type: none"> Nitrogen, Potash and Phosphate operating segments, which account for most of our Scope 1 and Scope 2 GHG emissions profile Retail customers as nitrogen fertilizer application accounts for a significant portion of our Scope 3 GHG emissions 	<ul style="list-style-type: none"> Retail with its direct connection to customers Wholesale production operations and key transportation, storage and distribution sites
Potential climate-related risks and opportunities	<ul style="list-style-type: none"> Carbon pricing mechanisms Farmers expected to reduce emissions New technologies or products risk New strategies and technologies to reduce GHG emissions New markets for ammonia Helping farmers reduce emissions from agriculture Reputational risks associated with climate change, including our stakeholders’ perception of our role in the transition to a lower-carbon economy 	<ul style="list-style-type: none"> Physical risk to farmers Physical risks to our supply chain and our transportation, distribution and logistics networks Helping farmers deal with chronic impacts of climate change



Climate Change and GHG Emissions (continued)

CLIMATE-RELATED RISKS AND OPPORTUNITIES

An overall risk assessment is determined for each risk in accordance with our ERM framework, prioritized using a risk matrix, and managed by the organization accordingly. In 2024, we reviewed our previously identified climate-related risks and opportunities and concluded there had been no significant changes to them given their nature and related time horizons.

The list below captures our most significant climate-related risks and opportunities. These risks were identified over various time frames and will be monitored, evaluated and updated as necessary. For this analysis, management has deemed the time horizons as follows:

- Short-term timelines are up to three years;
- Medium-term timelines are three to 10 years; and
- Long-term timelines are 10 to 30 years.

These time horizons are representative of timelines associated with our short- and medium-term climate-related targets and our ERM framework.

Please note, the list below is not exhaustive. For a complete listing of Nutrien’s risk factors, including climate-related risks, refer to Nutrien’s [2024 Annual Information Form](#).

Transition-related risks

Issue	What is the risk?	Time Horizon	Likelihood and nature of impact	Magnitude of impact	Actions
Carbon pricing mechanisms	<p>Current: Our Canadian production facilities (located in Alberta and Saskatchewan) are subject to a variety of federal and provincial requirements to reduce Scope 1 and Scope 2 GHG emissions ranging from carbon taxes to emissions intensity reduction requirements.</p> <p>Emerging: Changes in regulations in the countries or jurisdictions where we operate, such as the implementation of new carbon taxes, increases in existing carbon pricing, or the establishment of absolute emissions limits could negatively impact our business.</p> <p>Current and emerging emissions regulations may impact our operations by requiring changes to our production processes; increasing raw material, energy, production or transportation costs; additional costs in the form of taxes, emissions allowances or other carbon pricing mechanisms; or increased input costs and compliance-related costs for agricultural customers.</p>	<p>Current: Short term</p> <p>Emerging: Medium to long term</p>	<p>Current: More likely than not: Increased costs, including capital</p> <p>Emerging: About as likely as not: Increased costs, including capital or emissions limits</p>	<p>Current: Low</p> <p>Emerging: Medium-High</p>	<p>CCUS</p> <p>N₂O abatement projects</p> <p>Energy efficiency and cogeneration</p> <p>Process improvements</p>
Expectations to reduce emissions from fertilizer use	<p>The world is transitioning to lower-carbon options for consumer products, including food. There are increased consumer and societal expectations for farmers to reduce emissions from agriculture. Meeting these expectations could increase costs for our customers and our Company. Failure to meet these expectations may negatively impact the reputation of our Company and our customers. Government mechanisms intended to support decarbonization goals might put additional pressure on farmers or our industry.</p>	Medium term	About as likely as not: Reduced demand for our current products and services	Medium	<p>Development of EEFs</p> <p>Sustainable agriculture programs</p> <p>Understanding our Scope 3 GHG emissions</p>
New technologies or products that could displace current Nutrien products or services	<p>The advancement and adoption of new technology, and digital innovations in agriculture and across the value chain, have increased and are expected to further accelerate as farmer demographics shift and pressures from consumer preferences, governments and climate change initiatives evolve.</p> <p>The development of seed traits, biological products and/or advancements in precision agriculture that materially improve nutrient use efficiency, have the potential to adversely affect the demand for fertilizer.</p>	Medium term	About as likely as not: Reduced demand for our current products and services	Medium	<p>R&D programs</p> <p>Digital solutions</p>



Climate Change and GHG Emissions (continued)

Physical risks

Issue	What is the risk?	Time Horizon	Likelihood and nature of impact	Magnitude of impact	Actions
Physical risk to farmers due to chronic changes in precipitation patterns and variability in weather patterns	Our customers are impacted by variable regional weather factors, primarily increasing temperatures and volatile precipitation, which may affect the availability and suitability of arable land, crop quality and soil health. These chronic changes in regional weather could also contribute to the loss of biodiversity and unpredictable shifts in the average growing season, types of crops produced, and/or crop yields. Individually or together, these impacts could affect the long-term demand for our products and services.	Medium to long term	Likely: Reduced demand for our products and services, and their margins	Medium	Weather analytics Diverse product range Irrigation management and water stewardship Nutrien Financial
Physical risks to supply chain and transportation, distribution and logistics network	Extreme weather events can strain our upstream or downstream supply chains and disrupt our distribution and logistics network of railcars, marine vessels and trucks, and therefore our connection between our Potash, Nitrogen and Phosphate businesses with our customers and/or Retail network.	Medium to long term	More likely than not: Inability to receive inputs or deliver products in a timely fashion or cost-effectively	Medium-low	Strategically positioned suppliers for critical feedstocks and a diverse retail distribution network

Transition-related opportunities

Issue	What is the risk?	Time Horizon	Likelihood and nature of impact	Magnitude of impact	Actions
Helping farmers reduce emissions from agriculture	Reducing our customers’ carbon footprint from the agricultural products we manufacture and sell, can help manage increasing environmental and societal pressures. We can offer farmers products and services and promote programs that can facilitate the wider adoption of agronomic best management practices, while supporting soil health and crop yields.	Medium term	Likely: Increased demand, new revenue sources, reduced Scope 3 GHG emissions	Medium	Sustainable agriculture program acres (75M acre target) Digital solutions
New strategies and technologies to reduce our Scope 1 and Scope 2 GHG emissions	The energy transition is accelerating the development of technologies that can help support our Scope 1 and Scope 2 GHG emissions reduction efforts. Market-driven advancements and government incentives are helping these technologies become more accessible and achieve faster commercialization.	Medium term	Likely: Reduced emissions, carbon taxes and operating costs	Medium	Nutrien continues to monitor programs and technology developments for potential fit in reducing our Scope 1 and Scope 2 GHG emissions such as: CCUS
Lower carbon intensity ammonia opportunities	The development and use of ammonia with a lower carbon intensity than conventionally produced ammonia has the potential to reduce the carbon intensity of our fertilizer production and provide other opportunities, including ammonia for industrial use, clean fuel for marine shipping, displacing coal in power generation and ammonia as a hydrogen carrier.	Long term	More likely than not: Decreased costs, new markets	Medium-high	REFUEL program We plan to continue to assess the techno-economic feasibility of opportunities for ammonia with a lower carbon intensity than conventionally produced ammonia and their alignment with Nutrien’s strategic priorities CCUS

Physical opportunities

Issue	What is the risk?	Time Horizon	Likelihood and nature of impact	Magnitude of impact	Actions
Helping farmers address and adapt to the chronic impacts of climate change	As weather patterns change, the ideal window of time to seed a crop and apply fertilizer can become more variable, making the selection of seed or other crop inputs especially important. Chronic impacts from climate change may also affect the availability and suitability of arable land, including crop quality and soil health, shifts in the average growing season, and types of crops produced.	Medium to long term	Very likely: Increased demand or margins for products and services	Medium	Through specialized program development and our data-based service offerings, we are positioned to adapt our offerings as farmers adapt to the impacts of climate change. Read more on: Digital solutions



PRODUCT STEWARDSHIP

We aim to enhance the health, safety, environmental and social benefits of our products and manage them from development and manufacturing through to distribution, sales and use.



How is this topic relevant to our business?

Product stewardship is a component of our operational processes and an expectation of our customers, suppliers, governments, regulators, investors, public interest groups, and employees. We strive to provide the information needed to use our products safely and effectively and aim to reduce potential negative impacts from the products we manufacture and sell. We endeavor to procure products and services in an economical, ethical and responsible way. We believe this creates mutual benefit for Nutrien, our customers and the communities where we operate.

OUR APPROACH

Our Product Stewardship team is part of our internal SH&E team. They collaborate with our procurement, product innovation and operational teams, along with industry peers, organizations and other stakeholders to share practices and promote continuous improvement in our operations. We have policies to guide ingredient and finished product sourcing decisions and are developing procedures to pre-screen potential suppliers to ensure they align with Nutrien’s values. We consider opportunities to mitigate waste which informs our approach to product stewardship.

We adhere to the principles of evidence-based decision-making throughout our product stewardship activities. To make informed decisions about product suitability and use, we monitor research closely and follow product and ingredient reviews by regulatory agencies, including toxicology and environmental impact studies, chemical hazard classification reviews, substances of very high concern bulletins, government chemical risk assessment reports, and others.

Key Links

Global alignment and standards:

[The Ten Principles of the United Nations Global Compact](#)

Nutrien’s policies and disclosures:

[SH&E Policy](#)

[Supplier Code of Conduct \(“Supplier Code”\)](#)

[Procurement Policy](#)

[Modern Slavery Report](#)

Governance for this topic:

See [Sustainability Governance](#)

Product Stewardship (continued)

PRODUCT DEVELOPMENT AND MANUFACTURING

Product stewardship starts in the early stages of product development and carries across the entire product life cycle. Our evaluation process considers a broad scope of product information to ensure product registration, licensing, labeling, chemical safety communication (that is, safety data sheets or “SDS”) and data submission are compliant with appropriate regulations.

We have developed product profiles for more than 200 fertilizer products, additives and unique components used in our North American and European upstream manufacturing business. Digital profiles were created for products such as anhydrous ammonia, potash, urea, ammonium sulfate and phosphoric acid. The profiles include information on product identity, hazard classification and chemical class, and jurisdiction-specific information that provides the foundation for discussion and decision-making. These profiles aggregate data regarding our products in a single source, improving and enabling informed decision-making regarding the safety and sustainability of our products.

We evaluate potential product-related risks and disclose our efforts in the following categories:

Genetically modified organisms (“GMOs”)

While Nutrien does not own any GMO traits, we are directly involved in breeding canola, cotton, rice, wheat and soybean seeds using native and GMO traits, and we sell genetically modified seeds for many crops. Research conducted by national and international scientific authorities has concluded that GMO food crops do not pose additional risks to people, animals or the environment. Learn more about the [health and safety of GMOs](#). GMO crops are generally designed to result in higher crop yields, improved disease tolerance, insect resistance and stronger tolerance in drought conditions. Learn more about [GMOs and the environment](#).

Performance	2024	2023	2022
Percentage of Nutrien seed sales that contain GMOs	7	78	86
Percentage of total Nutrien sales that contain GMOs	7	6	5

Pesticides

Pesticides are an important tool for many of our customers for protecting crops from pests like insects, weeds and fungal diseases. The use of pesticides can result in better crop yields, which makes food more affordable and supports global food supply. Governmental agencies such as [Health Canada](#) and the [U.S. Environmental Protection Agency](#) (“U.S. EPA”) provide significant regulatory oversight for the registration and use of these products. We believe that farmers should strictly adhere to the approved label uses and applications when using pest management products to grow the crops that feed the world.

PROCUREMENT

Procurement Policies

Nutrien’s Procurement Policy establishes procurement guidelines for the Company. The Procurement Policy assists Nutrien personnel responsible for procuring goods and/or services, in collaboration with internal stakeholders, to evaluate the level of risk suppliers may create for Nutrien. Supplier risks we intend to assess per the Procurement Policy include modern slavery, performance quality, financial viability, litigation, regulatory compliance, supply disruption, intellectual property, insurance and cybersecurity risks.

Our Supplier Code communicates Nutrien’s requirements for suppliers of goods and services to Nutrien, whether directly or indirectly. It includes requirements related to human rights and labor in our supply chains, including prohibitions on illegal, forced, compulsory and child labor and human trafficking, along with requirements regarding health and safety, working conditions, wages, hours of work and others. Learn more in Nutrien’s [Supplier Code](#).

Commitments by our suppliers to the principles of the Supplier Code are an important part of our decision-making process. Where suppliers refuse to follow the principles of the Supplier Code or show signs that they are not committed to improving their practices to comply with its principles, Nutrien will review its relationship with the supplier. Where contractual commitments and applicable laws permit, this review may include termination of our relationship with the non-compliant supplier.

Feedstock evaluation

Our Product Stewardship and Procurement teams are working together to operate and expand a vendor program for feedstock evaluation to confirm the regulatory status, origin, and manufacturing quality of materials and chemicals before approval for incorporation into Nutrien’s manufactured finished products. This work is part of the procurement supplier risk screening initiative.





Product Stewardship (continued)

STORAGE AND DISTRIBUTION

Product storage, safety and security

We promote the responsible storage, distribution, and handling of Nutrien products. Our Retail selling and storage facilities follow industry practices for storage, including ResponsibleAg in the US and Agsafe in Australia.

Performance	2024	2023	2022
Percentage of Nutrien Ag Solutions facilities enrolled in ResponsibleAg (US)	90	89	90
Percentage of Nutrien Ag Solutions agricultural chemical centers accredited by Agsafe (Australia)	100	100	100

Safety data sheets and product labeling

In accordance with federal regulations in multiple jurisdictions, SDSs, where applicable, accompany any hazardous chemical products that Nutrien manufactures and sells. SDSs contain essential information about the properties of each chemical, including any physical, health and environmental hazards, in addition to safety precautions required for handling, storing and transporting the chemical. SDSs are available at our production facilities, during product transport and at our Retail selling locations, and are accessible on our website or through third-party providers for our customers 24 hours a day. Certain products and safety documents may be regulated by as follows: in US by the U.S. EPA, U.S. Department of Labor’s Occupational Safety and Health Administration (“OSHA”) or other agencies; in Canada by the Canada Pest Management Regulatory Agency (“PMRA”) and Canadian Food Inspection Agency (“CFIA”); in Europe by the European Chemicals Agency (“ECHA”) and the Fertilizer Act and Chemical Labelling and Packaging (“CLP”). Nutrien monitors changes to applicable laws as they impact SDSs and labels.

END-USE APPLICATION

Nutrien promotes best management practices that strive to improve crop yields and farming economics while mitigating potential environmental and/or human health impacts.

Minimizing nutrient loss

To help keep products and nutrients where they are most effective, reduce losses to the environment and support economical product application, we promote best management practices in nutrient application. Read more in [Farm Management Solutions](#).

Safe product handling and application

Many of the products that Nutrien produces or sells are developed for specific applications and uses. Product use outside of the mandated scope as described on the label, in contravention of regulatory standards or misuse in general, has the potential to cause negative impacts. Pesticides are highly regulated products in the markets where we operate, and Nutrien has policies and procedures for the appropriate use of the products we sell.

Training

Nutrien applicator employees are required to have and maintain any and all appropriate authorizations and qualifications specific to the handling and application of products applied.



BIODIVERSITY

We work with our customers and the agri-food value chain to maintain and/or enhance the productivity of land.



How is this topic relevant to our business?

Biodiversity refers to the variety of all living things and their interactions with each other and their environment to create a self-balancing ecosystem. Agriculture is dependent on healthy ecosystems to sustain the global food supply. The greater the biodiversity of an ecosystem, the greater the stability and resilience of that system.

OUR APPROACH

Nutrien works to understand our role in supporting biodiversity throughout our value chain. This means evaluating our dependencies on, and our impacts to, nature, our associated risks, and the opportunities we have to mitigate those risks in ways that support our business, our customers, and the agri-food value chain. We consider impacts on biodiversity directly at our fertilizer production facilities.

We recently developed an internal process to assess nature-related dependencies, impacts, risks and opportunities using guidance from the **Taskforce on Nature-related Financial Disclosures** (“TNFD”) framework and the **Locate, Evaluate, Assess, Prepare** (“LEAP”) approach within that framework. In 2024, we applied this process to our upstream fertilizer production footprint and shared it with The Strengthening Understanding and Strategies of Business to Assess and Integrate Nature (“SUSTAIN”) project. Our assessment was featured as a case study in the SUSTAIN 2024 publication **“Assessing and acting on nature-related issues: Insights from business case studies in the agri-food system”**.

Our biodiversity-related activities fall into four areas:

- Remediation, reclamation, and restoration, which includes the management of materials generated by mining and mineral processing, land reclamation and revegetation programs, general clean-up activities aimed at returning the areas to environmentally acceptable conditions and post-closure care and maintenance.
- Our agronomic services help to restore degraded agricultural lands through partnerships in our operating regions and aim to enhance productivity on current agricultural lands.
- Advancing management practices through our offered agronomic services can help foster biodiversity outcomes such as healthier soil and water systems, to maintain and enhance the productivity of the land. Read more in **Farm Management Solutions**.
- Conservation can help reduce further biodiversity loss. We support land and habitat conservation programs with partners such as Ducks Unlimited Canada.

Key Links

Nutrien’s policies and disclosures:

[SH&E Policy](#)

Governance for this topic:

See [Sustainability Governance](#)

Biodiversity (continued)

IN OUR OPERATIONS

We strive to manage mine tailings and byproducts in compliance with applicable laws, regulations and environmental standards. We recognize the intrinsic value of protected areas and legally recognized areas of high biodiversity. If a planned project may impact protected land or species, or is subject to a regulatory review (for example, the Impact Assessment Act in Canada or the National Environmental Policy Act in the US), we work through proper permitting measures to identify and, where possible, mitigate potential impacts.

Remediation and Reclamation

We aim to manage our impacts on the environment during the full life cycle of our mines and production facilities. Remediation, which refers to the removal, treatment and/or containment of impacts to soil or groundwater, can occur during operations or at the time of closure. Nutrien has a regulatory obligation to reclaim mined land and return it for beneficial uses. We work with regulatory authorities to develop and implement reclamation and closure plans. Reclamation may include revegetating the area using local and native plant varieties, converting the area to a body of water, establishing wildlife habitats, and other reclamation strategies.

In Canada, our potash mining and milling activities produce potash tailings consisting of salt, brine (salt water) and clay. Although salt, clay and brine are non-hazardous, spilled brine could reduce soil productivity or impact the salinity levels of fresh

surface or groundwater. Nutrien has six active Potash mines with tailings management areas (“TMAs”) in Saskatchewan, and one inactive facility undergoing decommissioning in New Brunswick, Canada. Learn more about our tailings management activities in Nutrien’s [Mine Tailings Disclosure](#), our [2024 Annual Information Form](#) and the [Tailings, Gypstacks and Waste](#) section of this report.

Phosphate rock is mined at our Aurora, NC and White Springs, FL facilities. Mined lands are reclaimed to productive environmental and economic uses at both operations in accordance with applicable regulations and permits. Our phosphate processing activities in the US produce phosphogypsum, a silt-like byproduct of phosphate fertilizer production primarily composed of hydrated calcium sulfate, and small amounts of trace metals and naturally occurring radioactive materials that were originally in the phosphate rock. At our Aurora, NC Phosphate operations, as part of current phosphate mine reclamation practices, the material that is removed from the upper layers of the mine (overburden) is backfilled into the area being mined; we blend a portion of phosphogypsum with clay and lime to reclaim mined lands. We seek to preserve surface water quality through the implementation of appropriate phosphate mine reclamation plans.

Nutrien also has phosphogypsum stacks that have been closed or are undergoing closure at facilities in Geismar, LA; White Springs, FL; Redwater, AB; and Fort Saskatchewan, AB. Phosphogypsum is not a mine tailings material, however, we have included information pertaining to the management of phosphogypsum in Nutrien’s [Mine Tailings Disclosure](#). Learn more in Nutrien’s [2024 Annual Information Form](#) and the [Tailings, Gypstacks and Waste](#) section of this report.



IN OUR VALUE CHAIN

Biodiversity provides a buffer against variability in farm productivity, improves crop pollination, and increases natural resistance to weed, pest, and disease invasions. We offer customized [farm management solutions](#) with measurable outcomes such as crop performance, nutrient use efficiency, GHG emissions, soil health and water quality.

Advancing best practices

Some of the best practices we promote with farmers include:

- Land management options, including diversified crop rotations, intercropping, reduced or no tillage, cover cropping, and diversifying marginal lands.
- Nutrient management recommendations that include practices such as agronomic, science-based nutrient management plans, direct seeding with slow/controlled release fertilizers and variable rate application.
- Water management recommendations, including practices that support efficient in-field use of water (for example, irrigation scheduling and drip systems) and build farmland resilience by increasing the water-holding capacity of the soil.

We also pursue collaborations in our value chain to bring farmers and partners together. For example, in 2024, we continued collaborating on the Conservation Exchange Pilot in Canada in partnership with governments, NGOs and other companies.

This pilot initiative explores ways to shift marginally productive agricultural land to acres that foster more biodiverse ecosystems on managed lands. The program includes collecting field-level information to help us understand the value creation to farmers and the environment of converting marginal areas within annually cropped fields to perennial forages, while evaluating the impact on production. [Learn more.](#)

In a second example, we continue to provide funding to the Cacau Floresta (Cocoa Forest) Project, coordinated by TNC in Brazil. This initiative encourages family farmers to plant cocoa and recover deforested or unproductive lands in the Amazon biome. Cocoa is a species native to the Amazon with high market value, which can help to improve farmers’ income and family food security. [Learn more.](#)

Socio-environmental compliance in Brazil

Nutrien opposes illegal deforestation. We acknowledge that deforestation is a shared challenge across both the industry and its supply chain that must be addressed through collaborative leadership within the agriculture sector.

Certain operations in Brazil are using a third-party digital tool to automate the screening of new and existing farmer customers for indications of illegal deforestation activity and slave labor. The tool prevents the placement of orders for customers in certain operations who are not in compliance. If the database results indicate potential issues, we work with that farmer to bring the expected change to their practices within a reasonable period. If farmers do not agree to this engagement or meet the compliance within the expected time frame, we will cease to do business with them.

WATER STEWARDSHIP

We endeavor to efficiently use and safely discharge water from our operations, and we are working to understand how to address shared water challenges in certain regions where we operate through collaborative opportunities within the agri-food value chain.



How is this topic relevant to our business?

Water is a global resource with localized challenges, including availability and quality, which can vary significantly by region.

Nutrien’s water footprint is relevant in three key areas of our value chain: raw material supply, direct production and mining operations, and product use. Water is needed for raw material transportation and processing in our Potash and Phosphate mining and milling operations, and for steam generation and process cooling at our Potash and Nitrogen fertilizer production facilities. Nutrien’s operations are subject to strict water use and discharge requirements mandated through environmental acts and regulations in the jurisdictions where we operate.

Our customers are also highly dependent on water. Through our offered agronomic services, Nutrien can help support farmers’ efficient use of this resource and can help protect water quality for the communities and ecosystems that draw on this shared and finite resource. By using water efficiently and protecting water quality, Nutrien and our farmer customers can support long-term operational and agricultural viability while continuing to meet the needs of a growing global population.

OUR APPROACH

Assessing both site- and watershed-based actions, Nutrien strives for the efficient use and safe discharge of water from our operations in accordance with environmental statutes and regulations in the jurisdictions where we operate, and we are working to address shared water-related challenges and opportunities in current operations at higher-risk and higher-use production facilities. We are exploring an approach that focuses on water stewardship at a watershed level, looking outside our operational boundaries to understand the environmental and social aspects of the watersheds where we operate.

Key Links

Global alignment and standards:

[Global Reporting Initiative \(“GRI”\) topic standard 303: Water and Effluents 2018](#) (effective date January 2021)

Nutrien’s policies and disclosures:

[SH&E Policy](#)

Governance for this topic:

See [Sustainability Governance](#)

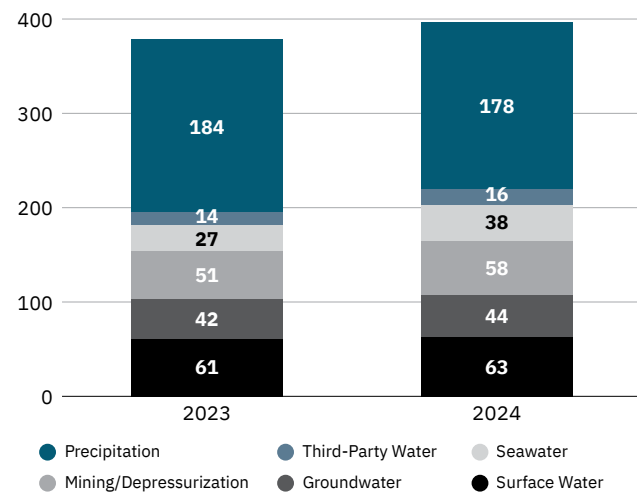
Water Stewardship (continued)

IN OUR OPERATIONS

Our primary uses of water in our operations are for producing nutrients, such as milling in mining operations, steam generation, and process cooling at our fertilizer production facilities. Water is also used to produce some of our liquid products. Nutrien’s operational water management activities focus on reducing freshwater use by, as an example, increasing the amount of water we recycle where technically and economically feasible, and protecting water quality in our watersheds.

While only about one percent of our water withdrawal²¹ is from regions with high or extremely high baseline water stress, we continue to evaluate opportunities for improvement in water use efficiency and conservation.

Water Withdrawal by Source
(million m³)



The 2023 reported water data was restated due to changes in calculation methodology and continued alignment with internationally recognized frameworks. Our reported water metrics include our upstream fertilizer manufacturing sites and US Retail manufacturing sites. We include an estimate of precipitation as an intake, defined as water released from the clouds in the form of rain, sleet, snow or hail.

For example, our Carseland, AB Nitrogen operations is located in a high water-stress area, where we have continued to increase the water efficiency. Over the last several years we have also worked collaboratively with other water users in the watershed, including the local watershed group, to better understand shared challenges related to water withdrawals and availability for all water users in the watershed. In 2024, we participated in a basin-wide water-sharing agreement process with other major water users and signed a memorandum of understanding. This process is designed to proactively use drought modeling scenarios, to enable improved water stewardship and encourage actions so that water use does not outpace supply.

Using water efficiently

Most of our fertilizer production facilities use freshwater resources (for example, rivers or groundwater) to supply the water needed for operations. At some locations, we use alternative water sources, including gray water or ocean water. We recycle water where practical to reduce freshwater use and increase production efficiencies. For example, in our Potash operations, excess liquid from tailings piles (that is, saturated brine) is reused in the production process, and in our Phosphate operations, process water is reused in phosphoric acid production.

Since 2018, over 20 projects across our North American upstream fertilizer production operations have been completed to collectively reduce freshwater use. These projects covered a wide range of actions including: upgrading pump seals at our Aurora, NC phosphate facility; incorporating variable flow controls and brine water blending in emissions scrubbers at our Allan, SK potash facility; installing a mixing system to incorporate brine water into the live ore water supply at our Vanscoy, SK potash facility; upgrading water filtration systems at our Lima, OH nitrogen facility; and installing a new condensate stripper at our Carseland, AB nitrogen facility. Collectively, these projects reduced our freshwater use in 2024 by approximately three million cubic meters compared to our 2018 base year.

This achieves our annual target a year ahead of schedule and represents a cumulative reduction of approximately 13 million cubic meters.

Protecting water quality

Communities with whom our operations share watersheds rely on access to sufficient quantities of clean water for health, quality of life, economic well-being and local environmental preservation. We design and operate systems and process controls to maintain the quality of our water discharges within permitted levels to protect receiving waters, lands and public works. We care for water quality in our watersheds by managing:

Water discharges: We use engineering controls, testing, and monitoring programs, and treatment when required, to maintain water quality of facility water discharges.

Storm water: Storm water can transport sediment and/or other constituents resulting from our operations. Our operations are permitted, constructed and maintained to protect receiving waters, lands and public works. For example, where necessary, some of our operations are engineered to manage large rain events during which excess storm water is routed to diversion channels and directed to storm water impoundments, permitted injection wells and/or storm water discharge facilities.

Gypstack water discharge and treatment: Process water within our gypstacks (stockpiles of phosphogypsum from phosphoric acid production) and storm water runoff from open gypstacks may be acidic. Process water that drains from closed gypstacks is collected and treated, or alternatively managed (reused), according to regulatory requirements before final discharge or disposition.

Closure and reclamation: See [page 36](#) for information about how we work to protect water during gypstack closure and mine reclamation.

IN OUR VALUE CHAIN

Throughout Nutrien’s extensive retail network, our agronomists and field experts promote agricultural management practices that meet the needs of the farm and make sense for the region in which they operate. For example, we leverage best management practices like the 4Rs and our water management recommendations include practices that support efficient in-field use of water (for example, irrigation scheduling and drip systems) and build farmland resilience by increasing the water holding capacity of the soil. Read more in the [Farm Management Solutions](#) section.

Nutrien also owns a retail water business in Australia, known as Nutrien Water. Nutrien Water specializes in the design, supply, installation and maintenance of suitable and cost-effective on-farm water infrastructure solutions, such as irrigation. Additionally, Nutrien Water’s Engineering team provides water treatment solutions for human and livestock consumption and domestic, industrial and mining wastewater management. [Learn more.](#)

Supporting water stewardship

Nutrien is investigating projects with value chain partners to explore ways to improve nature-related outcomes and create benefits for farmers, the value chain and our business from nature-based solutions. An example is the Lake Winnipeg Basin (“LWB”) Project, a collaborative water stewardship project demonstrating how on-farm management practices, through a water stewardship lens, can enable social, financial and environmental value creation. [Learn more.](#)

21 Our reported water metrics include our upstream fertilizer manufacturing sites and US Retail manufacturing sites.

TAILINGS, GYPSTACKS AND WASTE

We strive to manage mine tailings and byproducts in compliance with applicable laws, regulations and environmental standards.



How is this topic relevant to our business?

Reducing and effectively managing waste from our operations promotes efficient resource use, helps minimize our environmental impact, and reduces regulatory and reputational risks. Transparent and compliant management of mine tailings and byproducts is essential for protecting the environment and maintaining trust with our employees, the communities where we operate and other stakeholders.

Tailings from our Potash operations and phosphogypsum from our Phosphate operations make up the vast majority of Nutrien’s waste profile. Each year we produce approximately 28 million tonnes of mine tailings and byproducts. Nutrien also produces non-mining waste from our upstream fertilizer production facilities, midstream transportation and distribution network, downstream retail selling locations, and corporate offices.

OUR APPROACH

We aim to manage our impacts on the environment during the full life cycle of our mines and production facilities. Nutrien aims to reduce and manage our non-mining waste.

Our non-mining non-hazardous waste typically consists of construction and demolition debris, municipal waste, and paper, cardboard and plastic. Nutrien’s Global Waste Minimization Standard outlines waste management requirements for all operations and locations. Requirements include a biennial waste review completed by each site to prioritize site-specific waste minimization strategies to reduce, reuse and recycle materials. In 2024, we completed a waste hierarchy mapping and continue to build a company-wide digital data management tool to collect, monitor and report waste management at a global level.

For non-mining hazardous waste, Nutrien works with third-party waste management suppliers to transport, treat, and recycle or dispose of these materials. Where feasible, spent catalysts are sent to recycling where the metals can be recovered for reuse.

Key Links

Nutrien’s policies and disclosures:

[SH&E Policy](#)

[Tailings Safety Disclosure](#)

Governance for this topic:

See [Sustainability Governance](#)

Tailings, Gypstacks and Waste (continued)

REDUCING PLASTIC WASTE ACROSS OUR GLOBAL LOCATIONS

Nutrien is progressing our global waste management strategy for plastic containers, our downstream retail operation's largest category of non-hazardous waste. While plastic is an ideal packaging material for our crop protection and seed products (that is, it is lightweight and cost-effective) we strive to use this resource as efficiently as possible and to reuse or recycle it. We participate in a variety of plastic packaging collection and recycling programs where available. For example, our Retail selling locations participate in drumMUSTER in Australia, Cleanfarms in Canada, Sistema Campo Limpo (Clean Field System) in Brazil, and Ag Container Recycling Council in the US.

TAILINGS AND GYPSTACK MANAGEMENT

In Canada, our potash mining and milling activities produce potash tailings consisting of salt, brine (salt water) and clay. We sell small quantities of salt for winter road application, but the majority of potash tailings are stored in tailings management areas ("TMAs"). TMAs are engineered containment facilities to store solid tailings and brine. Containment typically consists of engineered dykes, engineered slurry-walls or compacted earth trench barriers. Nutrien's internal Tailings Management Standard defines Nutrien's minimum requirements for tailings and brine management within TMAs in our Potash business.

Our Phosphate processing activities in the US produce phosphogypsum, a silt-like byproduct of phosphate fertilizer production primarily composed of hydrated calcium sulfate, and small amounts of trace metals and naturally occurring radioactive materials that were originally in the phosphate rock. At Nutrien, phosphogypsum is primarily stored in engineered stacks referred to as phosphogypsum stacks or gypstacks. To maintain the stability of gypstacks, they are constructed and operated in accordance with applicable engineering standards, codes and regulations. Typically, a third-party engineer develops gypstack construction designs, operating plans and closure plans, guided by applicable laws and regulations.

Read more about our remediation and reclamation efforts in the [Biodiversity](#) section and how we endeavor to protect water quality in the [Water Stewardship](#) section of this report.

AIR QUALITY

Our operations generate emissions of carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂), particulates, volatile organic compounds ("VOCs") and ammonia from process and combustion emissions sources. Data on our releases of air emissions are available on [page 61](#).





COMMUNITIES & INDUSTRIES

Helping to build resilient communities and industries around us

Topics in this section

Community Relations	39
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COMMUNITY RELATIONS

We support our business through collaborations and partnerships with community stakeholders that aim to achieve impactful and enduring outcomes in the communities where we operate.



How is this topic relevant to our business?

Positive and transparent community relationships are crucial for successful business operations, particularly in smaller communities where our presence is proportionately more significant. Strong community ties offer advantages in employee recruitment, engagement and retention. Supportive relationships with community stakeholders help mitigate business risks and enhance our reputation through increased connection and collaboration.

OUR APPROACH

Nutrien is dedicated to supporting programs and initiatives that positively affect the communities where we operate. We aim to foster meaningful results create genuine connections and promote positive outcomes through engagement, collaboration, volunteerism, and education.

We strategically focus our community investments on initiatives where we can make a substantial impact. By directing our efforts towards specific issues that resonate with our business values and purpose, we can effectively drive progress in the following focus areas: sustainable agriculture, environmental stewardship, inclusive industry, and resilient communities. We believe that this targeted approach ensures that our presence not only supports, but also actively contributes to, meaningful community advancements.

GOVERNANCE

Nutrien’s Executive Leadership Team oversees and approves major initiatives and budgets, ensuring alignment with the Company’s strategic goals. Site-level committees steward to the community investment focus areas, creating valuable partnerships across communities where we operate. The Corporate Relations and Investment (“CRI”) team enhances company-wide impact by defining the strategy, implementing budgets, and driving corporate-level programs. Additionally, the team supports site-level efforts to foster meaningful community connections.

COMMUNITY ENGAGEMENT

Meaningful relationships are fundamental to our communities. We prioritize genuine collaboration with community partners to create opportunities for dialogue, information sharing, and fostering mutual understanding. Nutrien representatives participate in community-based meetings and initiatives with Community Advisory Panels, industry associations, and Chambers of Commerce. We empower our employees to volunteer with charitable and non-profit organizations, as well as Local Emergency Planning Committees in the communities where we operate. The level of participation with these groups can vary depending on the specific location, ensuring our efforts are tailored to meet the needs of each community.

Key Links

Nutrien’s policies and disclosures:

[Code of Conduct](#)

Community Relations (continued)

COMMUNITY INVESTMENT

As business objectives and societal needs evolve, our CRI program is designed to remain effective and responsive. We aim to achieve this through continuous evaluation of contribution opportunities. Our Community Investment Impact Measurement Framework (the “Framework”) is instrumental in defining our areas of focus for investment and identifying the partners with whom we collaborate. The Framework strengthens our ability to meet our primary CRI objectives, supports evaluation of requests, monitoring progress, and consolidating results across our community investment portfolio.

Below are some examples of activities that support our key focus areas:

1. Strategic partnerships and investment

In 2024, Nutrien invested nearly \$28 million in charitable causes in the communities where we operate. We value authentic collaboration and partnerships and work closely with community partners to achieve impactful and lasting results for their projects and programs.

2. Employee engagement

Nutrien employees are instrumental in achieving our purpose of *Feeding the Future*. Through engagement programs, Nutrien employees are empowered to meaningfully contribute to the causes and communities they value through three main giving initiatives:

- Matching Gifts:** Nutrien fosters a culture of giving through our matching gift program, enabling employees to support the causes they are passionate about. This program matches eligible employee donations up to \$5,000 (local currency) each year.
- Volunteerism:** Volunteering is a powerful way to enrich our communities and support our employees’ growth. Our Employee Volunteer program allows eligible employees to dedicate up to three workdays annually to engage with charitable or non-profit organizations. This initiative not only fosters community development but also empowers our employees to contribute to causes they are passionate about, promoting a culture of giving and involvement.
- United Way Campaigns:** The United Way plays a crucial role in improving lives by mobilizing the caring power of communities to advance the common good. Complementing our ongoing Matching Gifts program, Nutrien encourages employee generosity by matching donations up to \$5,000 (local currency) per employee, specifically for contributions to United Way campaigns based in Canada or the US. In 2024, Nutrien’s campaigns pledged a total of \$1.5 million, including our Company’s match and employee contributions, highlighting our dedication to community support and employee engagement.

Performance	2024	2023	2022
Community investment	\$28M	\$23M	\$33M*
Community partnership (count)	2,600	2,800	3,000
Employee volunteer (hours)	25,000	26,700	17,580

* In 2022, Nutrien allocated additional funds on a one-time basis to advance our strategic priorities.

3. Emergency relief

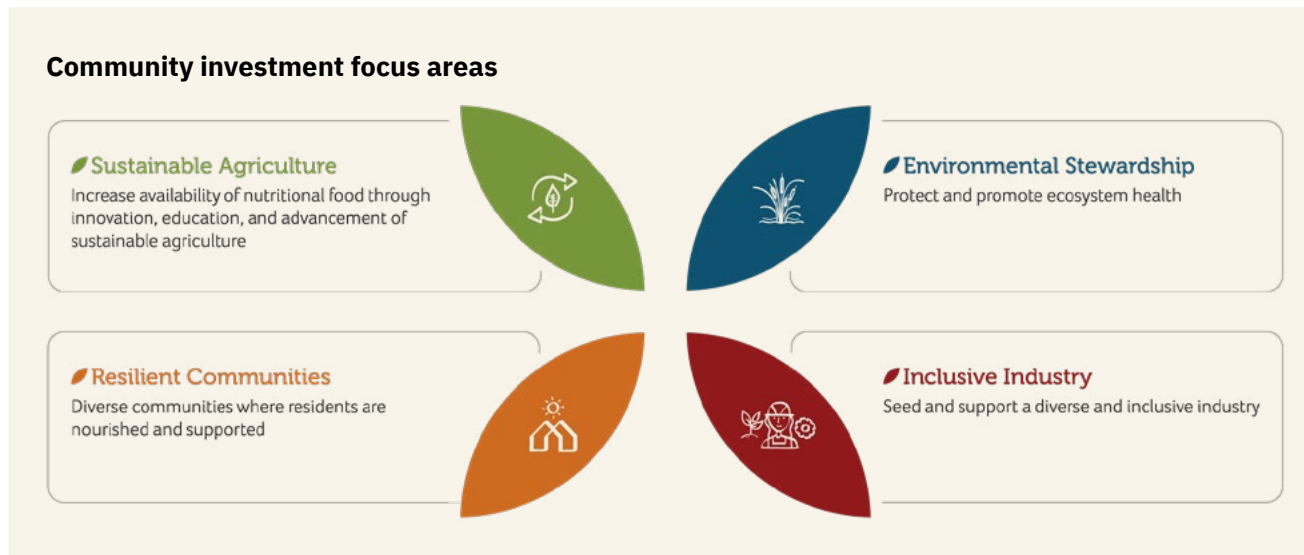
Nutrien’s approach to making a significant impact on the many communities and customers we serve is both proactive and responsive. Our Disaster Relief Program plays a critical role during natural disasters, offering financial assistance and facilitating employee match campaigns to bolster charitable relief efforts. Local Nutrien operations also provide essential in-kind support and services for these efforts.

In 2024, Nutrien provided over \$250,000 to disaster relief organizations addressing the devastating effects of wildfires in Texas, tornadoes in Ohio, flooding in Rio Grande do Sul (Brazil), and hurricanes Helene and Milton impacting multiple states, including Florida, Georgia, South Carolina and North Carolina.

[Learn more.](#)

4. Education programs

We recognize that today’s youth are tomorrow’s decision-makers, industry leaders and employees. They play an essential role in shaping the future of our industry and the future of our planet. Nutrien’s education programs are strategically implemented in the communities where we operate and raise awareness about sustainable agriculture, safety in agriculture and environmental stewardship. [Learn more.](#)



INDIGENOUS RELATIONS

We strive to engage with Indigenous Peoples and communities, aiming for a positive impact on our workforce, industry and communities where we operate.



How is this topic relevant to our business?

Nutrien has a long track record of working with Indigenous Peoples and communities in proximity to our upstream Potash fertilizer operations in Canada.

In Canada, economic reconciliation with Indigenous Peoples is a contributor to delivering on our purpose of *Feeding the Future* where knowledge, worldviews and values are shared openly and intentionally. Our efforts aim to align with the **Truth and Reconciliation Commission's** ("TRC") **Call to Action #92** for the corporate sector. We recognize that we have a collective interest in advancing Indigenous economic participation and contribution throughout our operations. We work with our Indigenous partners and local supply chains to collaboratively create a business environment where positive impacts are realized and sustained for future generations.

OUR APPROACH

Nutrien strives to respect and value the uniqueness of each territory in which we operate. We recognize that Indigenous Peoples, communities, and lands provide the foundation from which good relations and generational stewardship can flourish.

Nutrien is on a learning journey, recognizing the impacts of our shared histories, and working towards a collective understanding. As a global company with significant operations in Western Canada, we aim to grow employment and business opportunities for Indigenous communities, individuals and businesses. We believe that their meaningful economic participation creates benefits for society, and building relationships with Indigenous Peoples and communities provides stability in the local economy.

Nutrien's Potash Indigenous Supply Chain Strategy was launched in 2024 and is intended to build understanding and opportunities both internally and externally that ultimately enhance Indigenous economic impact throughout our supply chain and across industries. This strategy is designed to foster long-term growth and development for Indigenous businesses, communities and people by supporting our business, thoughtfully engaging external stakeholders, and seeking to lead our industry partners in this space. [Learn more.](#)

Key Links

Global alignment and standards:

[The Ten Principles of the United Nations Global Compact](#)

Nutrien's policies and disclosures:

[Code of Conduct](#)

[Supplier Code of Conduct](#)

Indigenous Relations (continued)

STRENGTHENING OUR INTERNAL KNOWLEDGE

Nutrien aims to build relationships and connect with Indigenous communities in ways that advance mutual understanding and promote cultural awareness, which is foundational for other initiatives such as workforce planning and supporting our commitment to Indigenous supply chain participation.

Each year, we recognize Canada's National Day for Truth and Reconciliation. Public commemoration of the history and ongoing impacts of residential schools is a vital component of the reconciliation process. In 2024, some of our employees attended:

- Several Saskatchewan events that gave our employees the opportunity to demonstrate their personal commitment to reconciliation. [Learn more.](#)
- The Elders Story Project events in Calgary, AB, where Elders shared personal stories about their residential school experiences and healing journeys. [Learn more.](#)

In addition, Nutrien supports inclusion and reconciliation efforts by:

- Making Indigenous awareness training available for Nutrien employees which provides an overview of the shared history of Canada, the Indigenous Peoples of Canada, the concept of cultural awareness and Nutrien's approach to Indigenous relations.
- Partnering with the Saskatchewan Industrial and Mining Suppliers Association to provide Indigenous awareness training for our suppliers to support their own efforts.

GROWING INDIGENOUS SUPPLY CHAINS

By partnering with Indigenous businesses and non-Indigenous businesses who create a positive impact, we enhance our supply chain and also contribute to the advancement of reconciliation and economic participation. We aim to build authentic relationships with our suppliers and engage in meaningful dialogue about building and supporting a business environment that appropriately reflects the diversity of the communities in which we operate.

We strive to minimize or eliminate potential barriers to Indigenous economic participation through supplier engagement. As part of our Potash Indigenous Supply Chain Strategy, we attribute at least 10 percent of contract evaluations within our Potash operations towards local Indigenous content commitments, increasing Indigenous participation through our supply chain. To amplify our impact, we engage and support our suppliers in their own inclusion efforts. We have developed an **Indigenous Content Playbook** (the "Playbook") that offers guidance for suppliers to develop their own Indigenous content plans and strengthen their relationship with the Indigenous community. The Playbook specifies criteria for business opportunities, which can include employment, subcontracting, workplace preparedness and training, and community and education investment.

Nutrien has made considerable progress towards creating opportunities for Indigenous contribution and inclusion through our Potash operations. In 2024, 34 percent of our local relevant spend had a direct Indigenous economic impact due to CAD\$309 million spent with Indigenous suppliers and suppliers who had at least 15 percent Indigenous employment. We are proud of our journey and look forward to continuing to build on our foundation of Indigenous economic impact through procurement.

INVESTING IN THE INDIGENOUS WORKFORCE THROUGH EDUCATION AND TRAINING

We view investing in education as investing in our future. We invest in education and training to support Indigenous Peoples' access to meaningful potential career opportunities in our operations and address the value an Indigenous workforce can offer our future operations. Some of our initiatives include:

- **Indigenous internship program:** This program enables Indigenous Peoples to gain work experience in roles ranging from geology and engineering to information technology and procurement. It gives students a chance to work with mentors, meet peers and participate in Nutrien's community initiatives in Saskatchewan, Canada. Interns have opportunities to interact with senior leaders and expand their networks, as well as participate in professional development and training that enhance their employability. In 2024, Nutrien employed 14 Indigenous interns.
- **Partnerships:**
 - **Saskatchewan Indian Institute of Technologies ("SIIT"):** Nutrien partnered with SIIT to create the Nutrien MakerLodge (named Pawâcikêwikamik – a Cree word meaning "a lodge supporting those who dream"), a community hub focused on supporting and mentoring Indigenous Peoples. It provides access to technologies, training and mentorship to foster successful business start-ups, emphasizing culture, language, kinship and connection. [Learn more.](#)
 - **Saskatoon Tribal Council ("STC"):** Our multi-faceted partnership with STC focuses on engaging with community members across their seven member Nations. Our shared objectives are to advance education for youth, specifically in Science, Technology, Engineering, the Arts and Mathematics ("STEAM") areas, as well as focusing on employment and training both within our industry and others. Through our annual contribution, STC is able to staff an Industry Liaison position which connects qualified job seekers with employment opportunities.
 - STC and **White Buffalo Youth Lodge:** Providing Saskatoon's inner-city kids with the right tools to ensure a successful school year continues to be a priority of Nutrien and the STC. Nutrien annually sponsors the White Buffalo Youth Lodge Back-to-School backpack giveaway event while also encouraging our supplier network to contribute their own time and resources. The event began in 2015 by providing 500 backpacks filled with school supplies, which increased to 3,500 backpacks in 2024.



Indigenous Relations (continued)

INVESTING IN INDIGENOUS COMMUNITIES

Nutrien aims to build relationships and invest in Indigenous communities in ways that advance mutual understanding and promote cultural awareness and economic reconciliation.

- **Student Nutrition Kitchen:** In 2024, Nutrien contributed CAD\$250,000 to the new St. Frances Cree Bilingual School in Saskatoon, SK to develop state-of-the-art kitchen facilities intended to support food security for students. Guided by elders and residential school survivors, this new school aims to provide future generations with access to safe, inclusive education that reflects Indigenous worldviews. By investing in a student nutrition kitchen, Nutrien is helping to ensure that hunger will not be a barrier to learning. The kitchen will be named *kā asamikiwisiwak kicawāsimisinawak* – a Cree phrase meaning “our children will be fed”. [Learn more.](#)
- **Project Forest Siksika Nation Community Shelterbelt Program:** This multi-year partnership with Project Forest and the Siksika Nation will plant shelterbelts on the Siksika Nation, the second largest Indigenous reserve in Canada. Shelterbelts, up to five rows wide with food-bearing and medicinal plants interspersed, will benefit the members of Siksika Nation by creating privacy from the road, mitigating extreme weather and offering spaces for traditional land use activities like berry picking. In 2024, Nutrien volunteers assembled and distributed seedling bags to Siksika Nation members, whose goal is to reach one million trees and shrubs planted over the next five years. [Learn more.](#)
- **Wanuskewin Heritage Park:** For over a decade, Nutrien has supported Wanuskewin Heritage Park, including sponsored admission days, festivals, and a renovation of the Cultural Centre facilities. Nutrien is also one of the community partners to support Wanuskewin’s UNESCO Ready Campaign, which is needed to meet rigorous UNESCO criteria and is an opportunity to showcase the Northern Plains Indigenous Cultures on a global stage. [Learn more.](#)



INDUSTRY COLLABORATIONS

We aim to contribute to the growth of the industries and supply chains we operate within (mining, production, agriculture retail). We collaborate with value chain partners and industry organizations to collectively support a more sustainable agriculture sector. The following table summarizes partnerships and collaborations that seek to enable our approach. Read more about our [sustainable agriculture programs](#).

Partnerships	Overview	Examples
Value chain partnerships	Our external partnerships endeavor to amplify our impact across our value chains (mining, production and retail). Working with farmers, industry associations, governments, NGOs and other corporations, we seek to advance agricultural outcomes such as crop and livestock productivity, nutrient use efficiency, GHG emissions reduction, soil health and water quality. We also have the potential to bring farmers and value chain partners together to leverage validated and verified pathways for crop emissions reduction.	<ul style="list-style-type: none"> • Bunge and Nutrien Ag Solutions form Alliance to Support U.S. Farmers • Maple Leaf Foods Hogs and Feed Program • Manitoba Lake Winnipeg Basin Project • Conservation Exchange Pilot Project
Industry collaborations	<p>Nutrien representatives serve on a variety of boards with the goal of learning and collaborating on initiatives to advance the industries in which we operate.</p> <p>We established two independent Academic Councils of scientists from Canada, the US and Australia, one for soil health and one for sustainability with a focus on nutrient use efficiency. The Councils help steer our research focus and peer review our results and approach to sustainable agriculture.</p> <p>Nutrien also has representation on many fertilizer industry and retail association boards and committees, which creates opportunities to engage industry and others on agricultural issues and collaborate in addressing challenges.</p>	<ul style="list-style-type: none"> • Sustainable Phosphorus Alliance • International Fertilizer Association (“IFA”) and University of Nebraska-Lincoln Sustainable Potash Project • Field to Market • Strategies of Business to Assess and Integrate Nature (“SUSTAIN”) • Canadian Alliance for Net-Zero Agri-food (“CANZA”) • Zero Net Emissions Agriculture Cooperative Research Centre • Canadian Nitrous Oxide Network (“CANN₂ONET”)



BUSINESS FOUNDATIONS

Maintaining strong governance and operational excellence, and living our core values

Topics in this section

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SAFETY AND HEALTH

We are pursuing our vision of “Everyone Home Safe, Every Day.”



How is this topic relevant to our business?

Safety is one of Nutrien’s core values. To us, nothing is more important than the safety, health and wellness of our employees, our contractors and the communities where we operate. Our safety programs are as varied as our operations, and span activities that cover all of our business and target specific mining, chemical and driving hazards.

OUR APPROACH

At Nutrien, our vision is “Everyone Home Safe, Every Day.” To achieve this vision, we focus on enhancing our Culture of Care and having a clear plan of action, The Nutrien Way.

Our Culture of Care demonstrates care for ourselves and each other through deliberate, principled behaviors and actions.

These include leading in a way that reflects Nutrien’s values, collaborating to amplify our impact, and challenging the status quo, while building and maintaining trust. Our Culture of Care is embedded throughout Nutrien, from our Board of Directors to our individual sites, and extends to our communities, customers, contractors, industry members and other partners.

The Nutrien Way comprises formal programs and informal practices we use daily with the aim to keep our people, facilities and communities safe and bring our Culture of Care to life. Our safety programs are as varied as our operations. They include activities that span across our business as well as targeted programs for specific mining, chemical and driving hazards. Nutrien’s Safety, Health and Environment (“SH&E”) Management System is embedded throughout The Nutrien Way. **Learn more.**

Key Links

Global alignment and standards:

[The Ten Principles of the United Nations Global Compact](#)

[U.S. Environmental Protection Agency](#)

[U.S. Department of Labor Mine Safety and Health Administration](#)

[U.S. Department of Labor Occupational Safety and Health Administration](#)

Nutrien’s policies and disclosures:

[SH&E Policy](#)

[Supplier Code of Conduct](#)

[The Nutrien Way](#)

Governance for this topic:

See [Sustainability Governance](#)

Safety and Health (continued)

SH&E MANAGEMENT SYSTEM

The Nutrien SH&E Management System provides a framework, direction, governance and tools which support our collective goal of excellence in safety, health, environment, and process safety across our operations and supply chain. We have invested capital, technology and human resource efforts to meet our evolving business needs for a collaborative, consistent enterprise SH&E management system.

SH&E Policy and Standards

Nutrien’s SH&E Management System is a collection of SH&E standards supporting safe work across our organization. Nutrien recognizes the diversity of our business considering season, customer, operation, market, change and human capital. As a result, the SH&E Management System offers empowerment for specific operations, regions and facilities to evolve specific standards aligned to their needs from the consistent baseline of policy, management system elements and global standards.

SH&E Policy: Our **SH&E Policy** is active and endorsed at all levels of Nutrien, focusing on commitment, care, and protection of people, environment, community and customers.

Elements: Key themes of Nutrien’s SH&E Management System include leadership and commitment; competency and training; risk management; incident management; emergency management; change management; information management; and continual improvement.

Global Standards: Nutrien Global Standards provide direction, expectations and guidance across safety, health, environment, and security. Additionally, we have established Life Critical Global Standards for activities where the potential for serious injury or fatality exists in Nutrien operations or industry, such as confined space, engulfment prevention, fall protection and energy isolation.

Business and Operations Standards: Our operating segments and operations supplement global requirements with standards, programs and performance expectations necessary to manage the risks unique to their operations.

Site Documents/Standards: Our individual facilities implement standards and procedures, and augment these with system controls necessary to manage the risks unique to their site and activities.

Measurement, Communication and Continual Improvement

Nutrien measures safety performance using industry-recognized safety metrics such as SIFs, Lost Time Injury Frequency and Recordable Injury Frequency. Our environmental performance is measured by tracking our GHG emissions, other air emissions, water use, waste generation and LOC. Measuring and reporting our SH&E Metrics supports and validates our continual efforts to eliminate serious injury and fatality, improve safety, and reduce our environmental footprint. We work diligently to identify, evaluate and eliminate health and safety risks where we can. Additionally, Nutrien utilizes technology, process improvement, organizational learning, and other actions to mitigate risks as low as possible.

Externally, we share our safety and environmental performance through the annual publication of Nutrien’s Annual Reports and Sustainability Reports. Internally, we use a variety of communication methods to regularly share safety and environmental information.

Alignment with Regulations and Standards

Nutrien’s SH&E Management System adheres to Federal, State, Provincial, Territorial and Local legislated requirements and industry expectations, while leveraging learning and best practice from legacy organizations, industry members and associations.

Application

The scope of our SH&E Management System includes Nutrien operations, suppliers, service providers and contractors.

Focus Areas

As part of a holistic, consistent approach, our SH&E Management System includes:

- **Safety:** employee and contractor
- **Health:** employee mental health, wellness, injury, case management and return-to-work arrangements
- **Environment:** climate, chemicals, water, air, waste and tailings, soil, biodiversity and remediation
- **Process safety:** management, process hazard analysis and mitigation
- **Product stewardship:** regulatory compliance, chemical classification, supply chain risk, environmental and sustainability impacts, safe use information
- **Chemical and physical security:** evaluation and management of actual and potential security issues and requirements

Environmental Incidents

When working with hazardous substances, LOC incidents – an unplanned or uncontrolled release of hazardous substances above certain thresholds to the environment from a process, pipe or vessel – improves the safety of site personnel and the public, minimizes the impact on the surrounding environment and reduces regulatory and reputational risk. Our LOC reduction strategy, launched in 2022, has helped reduce the number of LOC incidents in our operations by 34 percent in 2024, compared to the 2022 base year. Nutrien continues to advance its LOC reduction strategy to meet its 2030 target.



Safety and Health (continued)

Contractor Management

Our distinct operations have varying on-site contractor needs. Nutrien’s contractors are screened during onboarding and are continually monitored while on site. During the initial procurement process, we screen contractors for safety and environmental performance, integrity, and financial and cybersecurity risks. For example, on-site contractors must be registered and in compliance (that is, with an A or B rating) with ISNetworld, an online contractor and supplier management platform that collects and verifies key contractor information.

Mergers and Acquisitions Due Diligence

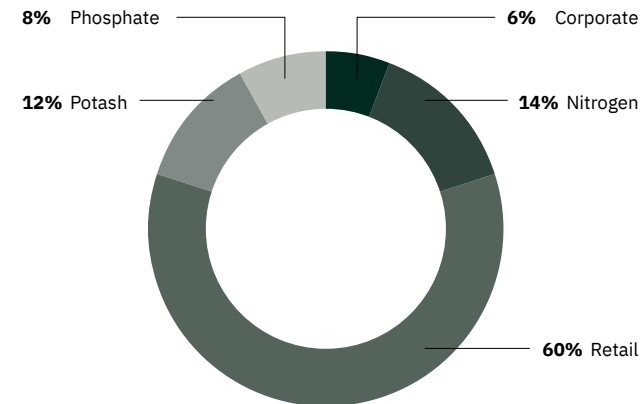
A cross-functional team, which includes members from safety, environmental and operations, conduct SH&E due diligence related to mergers and acquisitions to explore, identify, evaluate and report on real or potential risk(s).



PERFORMANCE

Tracking our performance, setting targets and benchmarking holds us accountable and drives improvement. Peer comparisons are one way to demonstrate commitment, transparency, and continuous improvement. Since Nutrien is the only publicly traded company with operations across the agriculture value chain, comparing our company-wide safety data with single-industry chemical peers or benchmarks can be misleading. As a result, our operating segments are compared to organizations closely matching their operation, culture, size, market and geography.

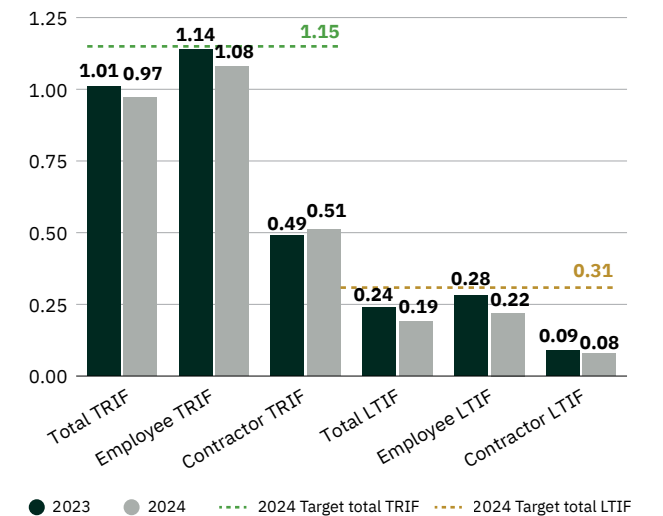
Total Working Hours by Operating Segment



Nutrien’s business is comprised of four distinct types of operating segments along with our corporate segment.

Safety Rates

(incidents 200,000 hours/total actual hours)



TRIF: Recordable Injury Frequency
 LTIF: Lost-Time Injury Frequency

Safety and Health (continued)

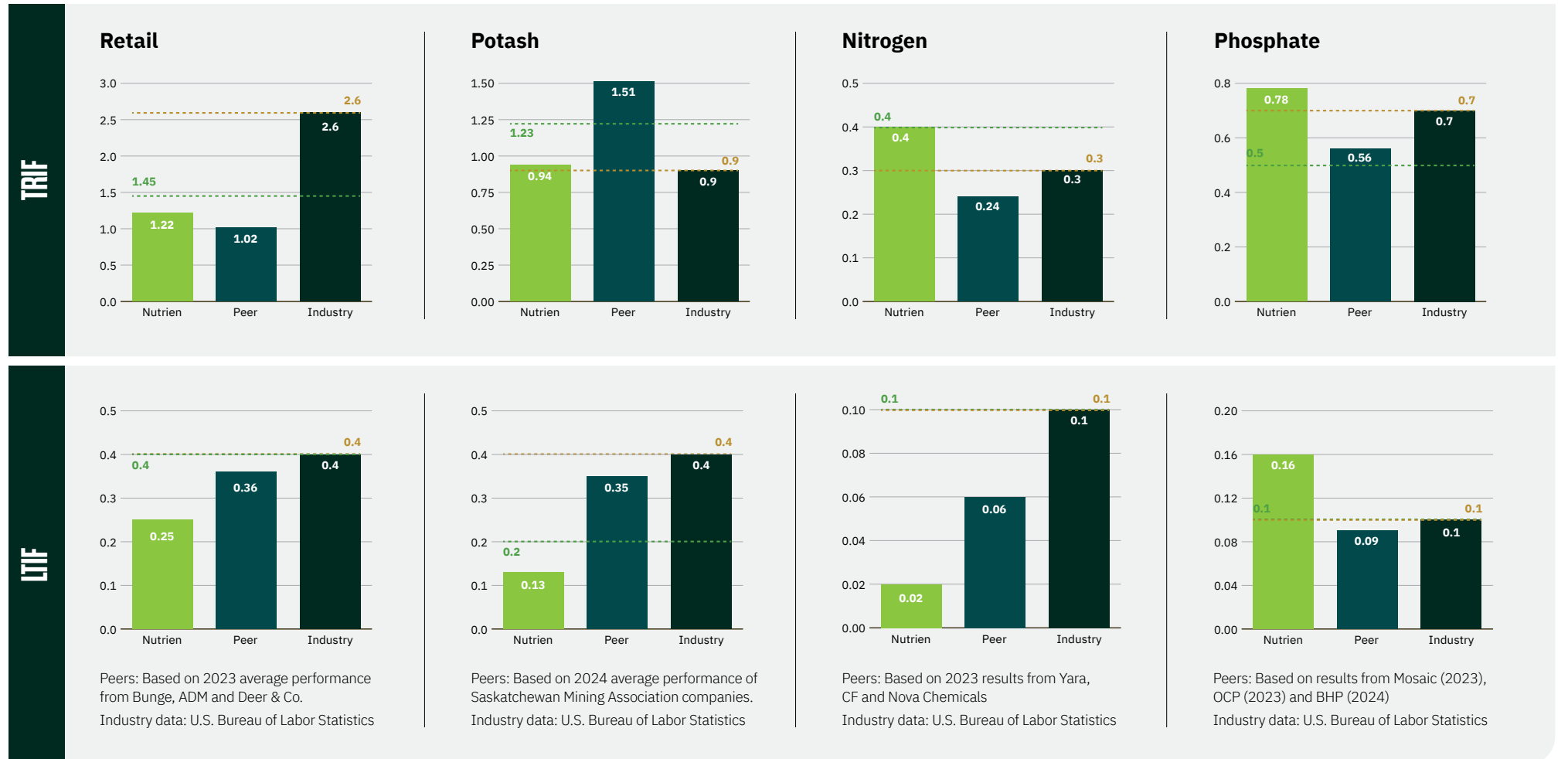
Nutrien 2024 Safety and Health Performance compared to peers and industry

In 2024:

- Potash, Retail and Nitrogen segments met or exceeded their internal TRIF and LTIF targets.
- Potash exceeded peer TRIF and LTIF performance, and LTIF was top-quartile according to the U.S. Bureau of Labor Statistics (“industry”).
- Retail TRIF performance was industry top-quartile.
- Nitrogen and Retail LTIF exceeded peer performance and was industry top-quartile.
- Phosphate did not achieve industry top-quartile safety performance.

In 2024, Nutrien had eight SIF incidents, including three incidents that tragically resulted in fatalities. Our response teams actioned each of these incidents immediately, offering comprehensive assistance and wellness resources to everyone impacted, including coworkers and family members. Nutrien is determined to learn from these incidents and continue our focus on proactively assessing potential SIF risks. We have undertaken a third-party safety review across the Company, and once the results are received, we will evaluate them to further advance organizational learnings with the goal of preventing similar incidents from happening in the future. We strive to build a strong safety culture where employees go home safe, every day.

--- Nutrien's 2024 targets - - - Top quartile





INTEGRITY

We operate globally, striving to uphold all laws in the communities where we operate. We are committed to conducting business with integrity, honesty and transparency.



How is this topic relevant to our business?

At Nutrien, integrity is a core value. We provide systems and tools for employees to uphold this value globally. We believe our reputation for honest and respectful business is crucial for maintaining stakeholder trust and minimizing legal, reputational and financial risk.

OUR APPROACH

Key aspects of integrity that we focus on include respect for human rights, avoiding anti-competitive behavior, and preventing bribery and corruption.

POLICIES

Nutrien’s Code of Conduct (the “Code”) and associated policies outline our expectations for all Nutrien directors, officers and employees as we fulfill our commitment to doing business with integrity in jurisdictions in which we operate. We continually

review and, where necessary, update our policies striving towards clarity and effective guidance. Policies that guide our integrity work include:

- Our commitment to respecting and observing human rights, in accordance with applicable law and the principles set forth in applicable international standards listed below.
- Our Competition Law Policy outlines Nutrien’s strict expectations of all employees, officers and directors, as well as third parties, including distributors, agents, resellers, consultants, and contractors. Anti-competitive behaviors with competitors or customers and other third parties (for example, governments) are prohibited, including but not limited to, price fixing, agreements to limit production, exchanging competitive information and predatory pricing.
- Our Anti-Corruption Policy sets forth acceptable behaviors for interacting with government officials and commercial partners. We have zero tolerance for bribery, whether our own employees are involved or third parties who are acting on our behalf. Supporting policies are listed below.

Key Links

Global alignment and standards:

[Voluntary Principles on Security and Human Rights](#)

[Universal Declaration of Human Rights](#)

[Declaration on the Rights of Indigenous Peoples](#)

[Guiding Principles on Business and Human Rights](#)

[The Ten Principles of the United Nations Global Compact](#)

Nutrien’s policies and disclosures:

Code of Conduct, supported by these and other policies:

[Competition Law Policy](#)

[Anti-Corruption Policy](#)

[Gift and Entertainment Policy](#)

[Conflicts of Interest Policy](#)

Supplier Code of Conduct

Modern Slavery Report

Integrity (continued)

INTEGRITY PROGRAM

Nutrien’s Integrity Program provides the knowledge and tools for all employees to achieve business results with integrity.

This program consists of four pillars: risk intelligence, learning, speaking up and investigations. Policies, information and resources on each of these pillars are available to all employees through multiple formats and channels in all of Nutrien’s working languages.



I. RISK INTELLIGENCE

Nutrien’s risk intelligence activities include assessment and mitigation tools for human rights, compliance, integrity and legal factors that are available to employees on a risk basis considering their specific role and, sometimes, location. These tools include trade sanctions due diligence, customer and supplier reputation due diligence, and our ERM program.

Human rights and anti-corruption: Nutrien has a number of controls and processes in place to assess and address the risk of human rights in our supply chain and operations. Responsibility and accountability for risk management are embedded in all levels of our organization, and we strive to integrate risk management into key decision-making processes and strategies. Nutrien has no operations in countries with high levels of corruption risk as determined by Transparency International’s Corruption Perceptions Index (that is, the countries that are part of the 20 lowest rankings).

Mergers and acquisitions: We integrate compliance and integrity assessments and training into our due diligence and integration process for new acquisitions to verify that our Company continues to build and maintain a culture of integrity in line with our core values. These activities also serve to mitigate legal and financial risks, such as those related to bribery and corruption, as well

as environmental and social sustainability issues. Compliance and integrity integration activities are risk-based and range from deployment of Nutrien policies, to alignment of key processes with Nutrien’s programs and provision of training.

Third-party due diligence: Our Procurement team is primarily responsible for our supplier due diligence processes, with support from the Legal, Integrity and other subject matter teams. Nutrien’s Modern Slavery Report outlines the steps Nutrien has taken to prevent and reduce the risk of modern slavery in the production of our goods in Canada or elsewhere, and of goods we import into Canada. Learn more in Nutrien’s **Modern Slavery Report**. In 2024, our Integrity Group continued working closely with Nutrien’s operating segments to provide guidance on evolving trade sanctions.

Integrity culture questionnaire: Since 2021, we have been conducting monthly surveys of a representative sample of employees across Nutrien about our integrity culture, including psychological safety. The anonymous responses enable us to understand what we are doing well and where we have room to improve by region, operating segment and corporate function.



2. LEARNING

Training and communications: All employees, directors and officers must complete mandatory Code of Conduct training annually. We update and rotate topics from year to year as part of our risk-based training strategy. The 2024 training included Nutrien’s purpose and values; respect in the workplace; safety, health and environment; protecting company assets (including conflicts of interest); and fostering a “speaking up” culture. In addition, leaders completed an additional section on leading with integrity, which included content on psychological safety, receiving employee concerns, and their elevated responsibility to demonstrate Nutrien’s values.

Our training program also includes refresher training and communications on a periodic basis. This is to address the ever-changing legal and compliance landscape by providing our employees with the necessary tools to recognize and respond to any potential risks. We provide regular live and online training on anti-corruption and fair competition for employees who work in potentially higher-risk roles. We send timely reminders, for example an anti-corruption reminder when booking travel to a high-risk country (according to Transparency International’s Corruption Perceptions Index), and a gift and entertainment reminder before the holiday season. We also have a repository of job aids available on our intranet covering risk areas such as conflicts of interest, harassment, speaking up, anti-corruption and fair competition.

Integrity Moments: Integrity Moments involve sharing stories that show integrity in action (personal or otherwise) at the start of meetings. Integrity Moments help to foster and normalize discussions about our core value of Integrity in our everyday work. We continue to encourage employees to share an Integrity Moment at the beginning of meetings.

Integrity (continued)

3. SPEAKING UP

We believe one of the most important ways to do business with integrity is to speak up, ask questions and report concerns about situations that may violate the Code, an associated policy or the law. There are several options for speaking up (for example, in person, email, instant messaging, direct phone calls), but Nutrien also provides an externally administered Integrity Helpline for employees and anyone outside Nutrien to ask questions and report integrity concerns. Service is available in seven languages and can be accessed by calling a localized phone number or using an online form. Reports can also be made anonymously. Nutrien has zero tolerance for any retaliation against someone who raises a concern or otherwise participates in the investigation process in good faith.

Speaking up is promoted throughout the year with various communications on Nutrien’s intranet, in town hall sessions, through memos, during integrity and safety shares, and via training. The communications are aimed at increasing employee understanding of the types of concerns to report, when to speak up and how, and the process and confidentiality they can expect when concerns are raised. Leaders are also expected to adhere

to and promote our “open door” policy. This means that they are available to anyone with integrity concerns or questions, and they encourage an environment where our employees feel comfortable speaking up.

Nutrien tracks a variety of datapoints related to a number of concerns disclosed by employees. We continue to review these and other factors, to assess how well our Integrity Program is identifying, assessing, and addressing issues and risks related to doing business with integrity.

Nutrien’s compliance reporting rate has increased by over 20 percent compared to 2023. This is a positive trend as it demonstrates the strength of our speaking-up culture and the level of trust employees have in the investigation process. Employees show their commitment to integrity by reporting behavior that does not meet the expectations we have for each other set forth in the Code, or its associated policies. Employee concerns related to workplace conduct were most common once again in 2024. Learn more on [page 69](#).

Key integrity metrics	2024	2023	2022
Employees who have completed Code of Conduct training	All	All	All
Employees who have received anti-corruption training (live and online)	1,270	2,180	420
Employees who have received fair competition training (live and online)	1,210	2,878	390
Compliance reporting rate (reports per 100 employees)	1.34	1.11	0.77

4. INVESTIGATIONS

We strive to maintain a speaking-up culture where all concerns related to the Code (as well as an associated policy) will be investigated under the oversight of the Integrity Group. All questions and concerns are taken seriously and handled promptly, confidentially and professionally, in accordance with our compliance investigation principles.

All necessary and appropriate actions are taken based on the investigation findings. On a quarterly and annual basis, we provide reports on investigation statistics and other data to our operations leadership teams, the Executive Leadership Team, and the Audit Committee of the Board of Directors. These reports are the basis for regular discussions regarding any trends and insights that lead to process or other improvements to our Integrity Program.



CYBERSECURITY AND DATA PRIVACY

We are committed to staying ahead of evolving threats and establishing a culture of data protection and privacy for the data we steward within Nutrien.



How is this topic relevant to our business?

Our cybersecurity, data protection and global privacy programs work together to protect Company assets and information about certain identified or identifiable individuals (“Personal Information”). Increasing digitization and advances in technology afford us significant business opportunities. However, our interconnectedness and reliance on digital systems also expose us to the potential for business disruptions or the release of sensitive information. Our commitment to protecting our business systems and safeguarding data under our control is important to Nutrien.

OUR APPROACH

We are committed to staying ahead of evolving threats and establishing a culture of data protection and privacy for the data we steward within Nutrien. We maintain enterprise-wide cybersecurity, data protection and privacy programs designed to manage the risks to Company assets, customer data, and Personal Information.

GOVERNANCE

Our cybersecurity practices are externally evaluated against recognized information security standards such as the National Institute of Standards and Technology (“NIST”) Framework. For information on Nutrien’s governance for Cybersecurity and Data Privacy, please see the **Sustainability Governance** section.

Key Links

Global alignment and standards:

National Institute of Standards and Technology Framework

Governance for this topic:

See **Sustainability Governance**

Data privacy is managed in accordance with Nutrien’s ERM system

Nutrien’s policies and disclosures:

Code of Conduct

Privacy Notices

Privacy Policy

Records and Information Management Policy

Cybersecurity Policy

Cybersecurity and Data Privacy (continued)

POLICIES AND STATEMENTS

We endeavor to protect an individual’s right to control how their Personal Information is collected and used. The following policies and procedures guide our cybersecurity, data protection and privacy programs:

- Our **Privacy & Cookies Statement** describes how Nutrien collects, uses, shares, and otherwise processes Personal Information. This Statement applies to Personal Information that we obtain in connection with the provision of products and services and/or the operation of our business.
- Our **Records and Information Management Policy** is intended to establish expectations to manage information in accordance with regulatory requirements and sound business practices.
- The **Privacy Policy** outlines the principles and guidelines that govern the collection, use, storage, and disclosure of Personal Information within Nutrien.
- The **Cybersecurity Policy** outlines which information security and risk management principles apply to our people, processes and technology.

TRAINING

We focus on providing global awareness to our employees and partners as they are the first line of defense in protecting company data and Personal Information. Helping them to detect, identify and report suspicious behavior is fundamental to Nutrien’s Cybersecurity, Data Protection and Global Privacy programs. Components of our awareness programs include a module on protecting confidential information in our mandatory annual Code of Conduct training, privacy literacy training, deployment of simulated phishing campaigns, and specific training for groups who work in potentially higher-risk business processes.

Our Cybersecurity, Data Protection and Privacy teams collaborate on multiple educational sessions during our annual Cybersecurity Awareness Month campaign. These sessions provide Nutrien personnel with information and resources to help protect our assets and data, and understand emerging cybersecurity and data privacy risks. We also share practical cybersecurity fundamentals with key external customers, suppliers and community stakeholders through training sessions and articles on our external website.

Key cybersecurity and data privacy metrics	2024	2023	2022
Participants in online cybersecurity refresher (as part of Code of Conduct)	25,090	27,630	25,740
Tabletop exercises to practice responding to cybersecurity events	2	3	3
Participants in data privacy literacy training ²²	19,700	2,190	not applicable

SECURITY BY DESIGN

Proactive risk management is crucial to Nutrien’s Cybersecurity, Data Protection and Privacy programs. We have evolved our existing Threat and Risk Assessments (“TRA”), which initially focused on cybersecurity, data protection and privacy, to now include other vital functions such as disaster recovery, application security, third-party risk management and data management. By identifying risks early and involving other supporting teams in the initial stages of the TRA, we can create solutions that are better integrated, more cost-effective and secure-by-design. We continue to enhance our cybersecurity risk assessment framework by working with our process control teams and developers to identify risks by conducting cybersecurity reviews of new initiatives and cyber process hazard assessments for Nutrien’s mining and fertilizer production facilities.



²² In November 2023, we began a multi-year data protection program for all employees and contractors. Data privacy training was rolled out in Australia, and to the human resources, information technology and SH&E teams in North America. In 2024, training was extended to the remaining North American employees and contractors, and to those in Trinidad and Tobago.

HUMAN CAPITAL AND LABOR PRACTICES

We are committed to listening to our employees and creating an environment where they feel valued, respected and engaged in their own success.



How is this topic relevant to our business?

The knowledge and skills of our valued employees represent our greatest asset. To maintain that valuable human capital means we focus on attracting new talent and retaining and engaging everyone who works at Nutrien. Ensuring that Nutrien employees feel valued, respected and engaged in their own success is essential in attracting and retaining the talented people who will help us achieve our purpose of *Feeding the Future*.

OUR APPROACH

With more than 25,000 employees, Nutrien offers a wide range of roles, from underground potash mining to designing digital platforms that provide products and services for farmers. We are investing in attracting talent, providing an engaging and supportive employee experience, offering opportunities to learn and grow, and employing effective succession management processes.

Our approach is to focus on inclusion for all at Nutrien. This is part of our journey towards aligning with a unified vision, helping all employees develop their careers, work safely, and feel valued. Our goal is to create a Culture of Care for everyone, ensuring a supportive environment throughout all aspects of our workplace.

Key Links

Global alignment and standards:

[The Ten Principles of the United Nations Global Compact](#)

[International Labour Organization](#)

Nutrien's policies and disclosures:

[Code of Conduct](#)

[Inclusive workplace commitment](#)

Human Capital and Labor Practices (continued)

ATTRACTING TALENT

To help us attract the right people for the right roles, we regularly request feedback from applicants and new hires on what they look for in a role, and continually survey social media channels to gauge sentiment towards Nutrien. We also conduct exit interviews, “stay” interviews (informal conversations meant to identify the factors that drive retention and engagement), and request feedback from employees with service milestones to further inform our programs.

Nutrien continues to be an employer of choice, with an over 97 percent acceptance rate on all employment offers in 2024. In 2024, Nutrien was recognized for excellence in the workplace. We were celebrated as one of **Canada’s Top 100 Employers**, emerged as a top employer in Saskatchewan, and were acknowledged as a leading employer for young people.

Nutrien’s recruitment processes are designed to attract and promote a broad selection of candidates. We do this in many ways, including strategic recruitment, marketing, partnerships and campaigns. Nutrien also supports scholarships and internships associated with various talent pools across our North American and South American regions. Read more about Indigenous recruitment and supply chain participation on [page 42](#).

Examples of strategic recruitment efforts include the following:

- In Australia, we launched a new “Harvesting the Future” scholarship program which offers four scholarships at Nutrien partner universities with a total investment of around AUD \$80,000 over the next few years.
- Our Alberta Nitrogen facilities have partnered with trade schools across the province for the trades program. The program was created to build an inclusive and effective talent pool for trades and technical positions, specifically process operators within the Nitrogen facilities in Alberta.
- We are broadening our recruitment efforts by partnering with alternative providers. For example, Nutrien now partners with various elite sporting organizations resulting in broad outreach to talent, including diverse fanbases and athletes.

ENGAGING AND RETAINING EMPLOYEES

Employees who have positive experiences at work are more likely to be engaged in working safely and collaboratively towards our shared company goals. We promote employee engagement and retention by focusing on the overall employee experience: providing the right rewards, gathering feedback by listening, offering learning and development opportunities for all, and supporting mental and physical well-being.

Total rewards

Nutrien provides a competitive total rewards program that is guided by our purpose of *Feeding the Future*, core values and Culture of Care to attract, retain, motivate, and engage our talent. The design of our total rewards program reflects a performance-driven culture that supports fairness and equality.

We provide an attractive, market-driven compensation package and comprehensive benefit and retirement programs that demonstrate our care for the health, well-being, and safety of our employees and their eligible family members. Our programs offer flexibility to meet the needs of our global workforce while remaining competitive in local markets.

Our paid time-away-from-work policies include vacation time, sick time, personal days, and parental leave. Additional resources may include Employee Assistance Programs, education and tuition reimbursement for eligible employees, fitness classes, discount programs, scholarships and more. Eligible employees can also contribute to their community with our matching gift program and paid volunteer days. While we aim to provide one suite of programs to our employees, in some circumstances plans vary by operating segment and/or geography to remain competitive in local markets. Nutrien’s **Code of Conduct** outlines our commitment to compliance with all applicable laws in any jurisdiction where we do business.

Active listening

Listening to our employees helps us identify ways we can improve the employee experience and retain our talented people. We listen to employees through global “town halls” throughout the year, regular engagement and Culture of Care surveys, pulse surveys to gauge employee sentiment on time-sensitive matters, and ad hoc focus groups.



Human Capital and Labor Practices (continued)

CAREER AND LEADERSHIP DEVELOPMENT

We aim to empower everyone with the meaningful opportunities and individual development support needed to set and reach career goals. This includes in-person and virtual learning and development offerings, targeted leadership programs at all levels, regular performance management, and support for career planning.

Virtual learning

Nutrien’s Learning Management System (“LMS”) is an online platform that provides online courses and additional resources for employees to learn more about owning their career. Nutrien’s LMS is available for our North American, Trinidad and Tobago, and Australian employees. This centralized location for learning and development creates an improved educational experience and has greatly expanded the learning opportunities and development paths available to employees. The LMS houses an array of learning content, including soft skills training such as influencing and communication skills. Benefits of the LMS include the ability to self-assign courses, leader insights into training needs, and personal dashboards for employees and leaders to help track and report on training. A suite of professional development courses and content are available through virtual eLearnings through LMS, as well as in-person training.

Leader development

Our leaders play a critical role in helping us achieve our purpose. Nutrien provides all employees with opportunities to tap into their leadership potential, including:

- Nutrien’s Leadership Development Program is a workshop series designed for new leaders, those who aspire to be leaders, and existing leaders looking to sharpen their skills. This program covers topics ranging from establishing trust and emotional intelligence to performance management.
- Nutrien Academy is a year-long program that empowers employees to increase their leadership potential by expanding their business acumen and developing leadership capabilities.
- Nutrien’s High Performance Institute (the “Institute”) offers unique programs and services aimed at developing individual and organizational performance. With a focus on senior leaders, the Institute builds detailed individual profiles and enables data-based decisions using behavioral science and personality assessments to understand candidate growth potential and development needs. It currently supports performance development for more than 100 senior and executive leaders and will progressively expand in the coming years.

Performance management

At Nutrien, performance management is a continuous process of coaching and communication between team leaders and team members, aligning individual objectives and behaviors with the Company’s strategic goals. In 2024, our online performance management process was available to approximately 18,000 employees, with projects underway to roll out to additional employees.

SUCCESSION MANAGEMENT

Our Succession Management program enables the retention of talent, identification of talent gaps and creation of succession plans, aligning organizational needs with employee knowledge and career aspirations. Succession planning also supports continuity within our operations when changes occur. At senior leadership levels, succession management is integrated with the Institute’s programming to identify and develop future executive leaders. Within our operating segments, we conduct succession planning for the roles that are most critical to the achievement of our business strategy as well as highly specialized roles and difficult-to-fill positions.



COLLECTIVE BARGAINING, UNIONS AND LABOR RELATIONS

Nutrien supports freedom of association and values, effective communication, collaboration with unions, and dispute resolution procedures for grievance processes. Maintaining positive relations with unions is important to our business. Our employees can join an employee association or labor union, consistent with national or regional laws and practices. We strive for productive relationships with the unions representing our employees. In North America, some of our permanent employees are represented by third-party trade unions. As of December 31, 2024, Nutrien has entered into 13 collective bargaining agreements with labor unions, of which three are currently expired and under negotiation, and five others will expire in the next six months. In our North-American jurisdictions, employees are self-represented through other forms of collective bargaining such as enterprise award agreements or work councils. Across our global operations, 37 percent are covered by some form of collective bargaining agreement.

Performance	2024
North American employees represented by third-party trade unions	16%
Non-North American employees represented by another form of collective bargaining (not involving third-party trade unions)	100%

SUSTAINABILITY GOVERNANCE

We embed strong corporate governance systems and principles in our business to place the interests of our shareholders and stakeholders at the center of every decision we make.



How is this topic relevant to our business?

Nutrien's sustainability governance includes an internal strategic oversight structure that supports the roles and responsibilities of the Board and the ELT for the management of sustainability-related risks and opportunities.

Nutrien's governance structure and processes help identify and manage our sustainability-related risks and opportunities, related regulations, and societal expectations for the purpose of ensuring alignment with business decisions. This enhances our resilience, helping us capitalize on opportunities for growth, mitigate potential risk, and effectively deliver on our strategy. Sound management of priority sustainability topics, underpinned by our balanced and disciplined approach to capital allocation, aims to facilitate having the financial, human and natural resources for the creation and preservation of Nutrien's long-term value.

For relevant corporate governance disclosures, please refer to our latest Management Proxy Circular on **Nutrien's financial reporting webpage**.

OUR APPROACH

Nutrien is governed by our Board and Board committees who, in whole or at the committee level, oversee management in ensuring our business' principal risks and opportunities are being appropriately identified and addressed. This includes sustainability risks. Responsibility and accountability for managing risk are embedded in all levels of our organization, with risk management integrated into key decision-making process strategies. Our sustainability function is part of the external affairs and legal function and collaborates with the operating segments and other corporate functions of the business.

BOARD OVERSIGHT

Nutrien's objectives, goals, associated risks and related strategies are subject to appropriate Board oversight and approval. In conjunction with the Board Committees, the Board takes reasonable steps to foster a culture where management identifies and understands Nutrien's principal risks, implements appropriate measures to manage these risks, and achieves a proper balance between risk and returns. Finally, the Board oversees safety, health, environment and security activities, and the integrity of related policies.

Key Links

Nutrien's policies and disclosures:

[Board of Directors Charter](#)

[Safety & Sustainability Committee Charter](#)

[Management Proxy Circular](#)

[Code of Conduct](#)

Sustainability Governance (continued)

Nutrien’s Sustainability Governance Framework



Board Committee responsibilities for sustainability

Safety and Sustainability Committee: The S&S Committee has responsibility for the oversight of the Company’s activities as they relate to ensuring that appropriate policies, systems and personnel are in place to support safe and sustainable operations and the long-term viability of the Company, including its consideration of stakeholders relevant to the creation and preservation of long-term value. This oversight includes the ongoing monitoring and development of the Company’s sustainability strategy and incorporates safety, environmental stewardship, health, climate-related risks and opportunities, cybersecurity and data privacy. The S&S Committee directly reports to and advises the Board on these matters. While a component of sustainability, we have retained a specific reference to safety in the name of the S&S Committee and have also retained a significant focus on safety in the S&S Committee workplan given its importance as a Nutrien core value.

EXECUTIVE RESPONSIBILITIES FOR SUSTAINABILITY

Executive Leadership Team: Seeks to ensure Nutrien’s priority sustainability risks are being appropriately identified, assessed, managed, and addressed, and for performance related to sustainability strategy and targets. In particular, the Executive Vice President, External Affairs and Chief Sustainability & Legal Officer provide executive-level oversight, strategic vision and leadership for sustainability-related matters, including developing and monitoring Nutrien’s *Feeding the Future* objectives and providing direction to the Executive Sustainability Committee.

Executive Sustainability Committee: Oversees sustainability priority assessment, oversight of risk mitigation for sustainability matters, and approves external disclosures and communications related to priority sustainability matters.

MANAGEMENT RESPONSIBILITIES FOR SUSTAINABILITY

To develop plans to manage specific sustainability risks and opportunities, we coordinate among the following cross-functional groups, employee-level councils and committees, and our corporate risk function.

Sustainability Working Group: Directs alignment, awareness, approval and accountability for functional strategy and disclosure on sustainability issues.

Corporate SH&E Committee: Establishes priorities and strategically aligns with the SH&E Management System to shape the overall SH&E strategy for the Company and our various operating segments. Areas of focus include the SH&E strategy and performance, with the goal of protecting our employees, environment, communities, and customers, as well as overseeing the Product Stewardship and Security functions.

Enterprise Risk Management team: Establishes frameworks and facilitates processes to identify and assess risk (including sustainability and climate-related risks) across the organization and contributes to the annual sustainability priority assessment process.

STRATEGIC ISSUE TEAMS

Strategic Issue Teams (“SITs”) provide the foundation of Nutrien’s sustainability governance. SITs are cross-functional platforms that provide guidance for alignment for Nutrien. Our Sustainability Governance Framework supports the collective goal for Nutrien to conduct business with integrity in all aspects of our operations. SITs report to the Sustainability Working Group.

Climate Strategic Issue Team: Provides oversight to workstreams related to our climate strategy.

Product Stewardship Strategic Issue Team: Provides oversight and strategic recommendations on cross-functional elements of product stewardship associated with our global sustainability framework.

Soil Health Strategic Issue Team: Identifies relevant and impactful soil-health-related science focused on sustainable agriculture and provides strategic recommendations to address related risks and opportunities.

Water Strategic Issue Team: Provides oversight to the current sustainability target and is working to identify additional actions required to achieve goals related to water management and stewardship across our operations.

Biodiversity Strategic Issue Team: Provides strategic recommendations related to biodiversity risks and opportunities across our value chain.

²³ Includes representation from relevant corporate functions and operating segments.



ADDITIONAL CONTENT

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ABOUT THIS REPORT

Our sustainability disclosures are informed by best practices, including metrics from the **Sustainability Accounting Standards Board** (“SASB”) Standards and recommendations from the **Task Force on Climate-related Financial Disclosures** (“TCFD”), which now form part of the **IFRS Foundation’s International Sustainability Standards Board** (“ISSB”). In addition, we report with reference to the **Global Reporting Initiative** (“GRI”) Standards and the **World Business Council for Sustainable Development** (“WBCSD”) **ESG Disclosure Handbook**.

This report is dated March 13, 2025, and focuses on Nutrien’s sustainability priority topics, performance and key initiatives for the year ended December 31, 2024, including:

- Performance for the year ended December 31, 2024 for Nutrien Ltd., and our subsidiaries, unless otherwise noted. Any exceptions to the performance period or Nutrien’s entities are explicitly noted with the relevant data. When available, historical data is provided for comparison.
- Data included in our reporting relates to our operations where we have control, unless otherwise noted. Reports from previous years and supplementary sustainability information are available on our website.
- For any business asset we acquire, environmental, safety and community performance data are first provided for the year after acquisition, if available, to enable full integration of data systems. If data is unavailable, we will assess the expected significance of the data and estimate if deemed necessary.
- We continually strive to better define performance indicators and improve our measurement systems. Any reporting limitations and exceptions are noted with the data.
- Financial data in this report is stated in US dollars, unless otherwise noted, and product and environmental data are stated in metric units. Please refer to our **2024 Annual Report** for more details on our financial performance.
- References to Nutrien, our, we or the Company mean Nutrien Ltd., and its subsidiaries, unless the context indicates otherwise.
- Please see the cautionary statement on forward-looking statements on **page 79**.
- Prioritization of topics is used in a sustainability context for this report and is different than how we address materiality for disclosure requirements under applicable securities laws or accounting standards.
- Non-financial data subtotals may not add to total figures due to rounding.

TERMS AND MEASURES

Scientific terms

KCl	potassium chloride
P ₂ O ₅	diphosphorus pentoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CH ₄	methane
N ₂ O	nitrous oxide
CO	carbon monoxide
NOx	nitrogen oxides
SOx	sulfur oxides
PM ₁₀	particulate matter that is 10 micrograms per cubic meter or less in diameter
VOCs	volatile organic compounds
NH ₃	ammonia (anhydrous)
MAP	monoammonium phosphate
UAN	urea ammonium nitrate solution

Terms and product measures

tonne, mt	metric tonne
Mmt	million metric tonnes
gigajoule	one billion joules
terajoule	one trillion joules
petajoule	one quadrillion joules
CAD	Canadian dollar
AUD	Australian dollar
USD	United States dollar

Definitions

CCUS	Carbon capture, utilization and storage. Process by which CO ₂ produced from various industrial processes is captured and either utilized for further industrial processes or transported to a permanent storage location to prevent release into the atmosphere.
Clean ammonia	Ammonia made using the next generation of ammonia production technology such as autothermal reforming with CCUS or electrolysis of water using renewable power.
Greenhouse gas (“GHG”)	Gases that contribute to the greenhouse effect and global warming by trapping heat in the atmosphere. These gases include those outlined by the Kyoto Protocol and covered under the Greenhouse Gas Protocol Accounting and Reporting Standards. They include the following seven major greenhouse gases: Carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), sulfur hexafluoride (SF ₆), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and nitrogen trifluoride (NF ₃).
Scope 1	Direct greenhouse gas emissions produced by Nutrien owned or controlled facilities.
Scope 2	Indirect greenhouse gas emissions resulting from the generation of purchased or acquired electricity, heating, cooling and steam consumed by Nutrien owned or controlled facilities.
Scope 3	Indirect greenhouse gas emissions not included in Scope 2 emissions occurring as a result of the activities of Nutrien, from sources not owned or controlled by Nutrien, including both upstream and downstream emissions.
Sustainability at Nutrien	Aims to create long-term success by addressing relevant risks and opportunities through the lens of people, planet, and prosperity. Definition was developed in general alignment with the approach of the Food and Agriculture Organization of the United Nations.
Sustainable agriculture	Aims to increase farm productivity, support farmer profitability and livelihoods, and foster environmental stewardship. Definition was developed in general alignment with the approach of the Food and Agriculture Organization of the United Nations.
Sustainable agriculture program acres	Acres participating in programs that track field-level data, which can be analyzed for performance metrics that incentivize farmers to adopt practices and products resulting in quantifiable, incremental benefits which may be verified. (Formerly referred to as “Sustainably Engaged Acres”)



PERFORMANCE TABLE

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Environment							
Emissions							
GHG – Total Scope 1 Direct	million tonnes CO ₂ e	9.45	9.54	10.27	11.05	10.43	Direct (Scope 1) emissions occur from sources such as combustion in owned or controlled facilities or fleet or emissions from chemical production. We apply the operational control approach to define our organizational boundary. Emissions are quantified following US EPA 40 CFR Part 98 Mandatory Greenhouse Gas Reporting methods, except for the Saskatchewan Potash facilities which follow Environment and Climate Change Canada (ECCC) Greenhouse Gas Reporting Program (GHGRP) methods. Reported emissions include CO ₂ , CH ₄ and N ₂ O. Emissions exclude CO ₂ produced in the ammonia production process and subsequently captured and used to produce urea or sold to a third party. Global Warming Potentials used are from the Intergovernmental Panel on Climate Change (“IPCC”) Sixth Assessment Report (AR6). Our inventory excludes nitrogen trifluoride (NF ₃), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF ₆) as they are either not emitted by or are immaterial to Nutrien’s operations. To understand Nutrien’s calculation methodology for reported Scope 1 and 2 GHG emissions, please see our GHG Inventory Management Plan . In 2022, reported emission intensities were re-calculated to integrate previously segregated “Specialty” and “TD&L” facilities into the Nutrien Ag Solutions, Nitrogen, Potash, and Phosphate operating segments.
GHG – Scope 1 direct by type							
Carbon dioxide (CO ₂)	million tonnes CO ₂	9.18	8.73	9.40	9.48	9.11	
Methane (CH ₄)	thousand tonnes CH ₄	1.07	1.30	5.78	4.93	2.67	
Nitrous oxide (N ₂ O)	thousand tonnes N ₂ O	0.89	2.81	2.44	4.85	4.20	
GHG Intensity – Scope 1 (company-wide)	tonnes CO ₂ e per tonne product (weighted average)	0.45	0.48	0.51	0.52	0.52	
Potash GHG intensity – Scope 1	tonnes CO ₂ e per tonne KCl produced	0.03	0.04	0.04	0.04	0.04	
Nitrogen GHG intensity – Scope 1	tonnes CO ₂ e per tonne NH ₃ produced	1.41	1.50	1.52	1.58	1.48	
Phosphate GHG intensity – Scope 1	tonnes CO ₂ e per tonne P ₂ O ₅ produced	0.55	0.50	0.48	0.47	0.47	
Scope 1 emissions covered under emissions-limiting regulations	percent	28	28	28	26	27	
GHG – Scope 2 Energy Indirect	million tonnes CO ₂ e	2.59	2.63	2.49	2.70	2.74	Indirect (Scope 2) emissions relate to emissions from the generation of purchased electricity, heat or steam. We apply the operational control approach to define our organizational boundary. Scope 2 emissions reported are location-based emissions. Emission factors for imported electricity are region-specific as published in the most recent Canadian National Inventory Report (“NIR”), the US EPA Emissions & Generation Resource Integrated Database (“eGRID”), and other country or regional published grid averaged emission factors. Emission calculations include CO ₂ , CH ₄ and N ₂ O. Global Warming Potentials used are from the IPCC Sixth Assessment Report (AR6). To understand Nutrien’s calculation methodology for reported Scope 1 and 2 GHG emissions, please see our GHG Inventory Management Plan .
GHG Intensity – Scope 2 (company-wide)	tonnes CO ₂ e per tonne product (weighted average)	0.12	0.13	0.12	0.13	0.14	
Potash GHG Intensity – Scope 2	tonnes CO ₂ e per tonne KCl produced	0.09	0.10	NPR	NPR	NPR	
Nitrogen GHG Intensity – Scope 2	tonnes CO ₂ e per tonne NH ₃ produced	0.17	0.19	NPR	NPR	NPR	
Phosphate GHG Intensity – Scope 2	tonnes CO ₂ e per tonne P ₂ O ₅ produced	0.22	0.19	NPR	NPR	NPR	
CO ₂ Captured and Sold	million tonnes CO ₂	1.0	1.0	1.1	1.1	1.0	At some Nitrogen facilities, a portion of the industrial process CO ₂ generated in ammonia manufacturing is captured and exported for commercial application (methanol production, industrial gas products or other). The CO ₂ captured and sold is net against Scope 1 process emissions.



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Criteria Air Contaminants							Includes CO, NO _x , SO ₂ , particulates and VOCs as required by the Canadian National Pollutant Release Inventory.
Carbon monoxide	thousand tonnes	7.0	5.9	7.9	8.3	6.6	
Oxides of nitrogen	thousand tonnes	7.0	6.8	7.4	7.8	7.4	
Sulfur dioxide	thousand tonnes	3.1	3.2	3.4	3.8	3.6	
Total particulate matter	thousand tonnes	9.1	7.0	7.3	7.4	7.7	
Volatile organic compounds	thousand tonnes	1.9	1.8	2.0	2.0	2.2	
Other Air Emissions	thousand tonnes	9.5	9.4	9.1	9.7	10.1	Includes air emissions reported to the National Pollutant Release Inventory (“NPRI”) or Toxic Release Inventory (“TRI”), that are not considered Criteria Air Contaminants (“CACs”) or Hazardous Air Pollutants (“HAPs”) including ammonia, nitric acid and sulfuric acid. Emissions are determined for each emission source at each manufacturing facility using either source emission tests, published emission factors or engineering estimates.
Hazardous Air Pollutants	thousand tonnes	1.2	1.1	1.5	1.6	1.5	Includes substances classified as EPA Hazardous Air Pollutants.
Energy							
Total Energy Use	petajoules	273.1	260.8	273.3	281.1	279.2	Includes natural gas, fuel and electricity use at our facilities. The majority of our energy use is from natural gas as feedstock.
Natural gas consumed as feedstock	petajoules	140.5	136.0	143.2	146.1	146.0	
Fossil fuels consumed	petajoules	110.1	102.8	110.1	114.3	110.7	
Electricity purchased	petajoules	17.6	16.5	16.3	16.7	16.8	
Imported steam	petajoules	3.8	4.2	3.6	4.0	4.1	
Self-generated	petajoules	1.1	1.3	1.3	1.3	1.3	Electricity generated from waste heat in manufacturing operations.
Energy Intensity (company-wide)	gigajoules per tonne of product (weighted average)	12.9	13.2	13.6	13.2	13.9	



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Water							The 2023 reported data was restated due to changes in calculation methodology and continued alignment with internationally recognized frameworks. The refined calculations will be applied prospectively to ensure improved comparability and accuracy. Our reported water metrics include our upstream fertilizer manufacturing sites and US Retail manufacturing sites.
Total Water Withdrawal	million m ³	397	380	N/Av.	N/Av.	N/Av.	We include an estimate of precipitation as an intake at our six Potash mining and processing facilities in Saskatchewan, and our two Phosphate mining and processing facilities located in Aurora, NC and White Springs, FL. We define precipitation as water released from the clouds in the form of rain, sleet, snow or hail.
Water withdrawal, by source:							
Surface Water	million m ³	63	61	N/Av.	N/Av.	N/Av.	
Groundwater	million m ³	44	42	N/Av.	N/Av.	N/Av.	
Mining/Depressurization	million m ³	58	51	N/Av.	N/Av.	N/Av.	
Seawater	million m ³	38	27	N/Av.	N/Av.	N/Av.	
Third-Party Water	million m ³	16	14	N/Av.	N/Av.	N/Av.	
Groundwater Remediation	million m ³	0	0	N/Av.	N/Av.	N/Av.	
Precipitation	million m ³	178	184	N/Av.	N/Av.	N/Av.	
Water withdrawal, by type:							
Freshwater	million m ³	359	352	N/Av.	N/Av.	N/Av.	
Other Water	million m ³	38	28	N/Av.	N/Av.	N/Av.	
Total Water Discharge	million m ³	272	198	N/Av.	N/Av.	N/Av.	We exclude brine injection and deep well injection from water discharge values. They are reported separately under effluents and waste as “discharges to on-site disposal wells”.
Water discharge, by destination:							
Surface Water	million m ³	244	178	N/Av.	N/Av.	N/Av.	
Seawater	million m ³	27	19	N/Av.	N/Av.	N/Av.	
Third-Party Water	million m ³	1	1	N/Av.	N/Av.	N/Av.	
Water discharge, by type:							
Freshwater	million m ³	244	178	N/Av.	N/Av.	N/Av.	
Other Water	million m ³	28	20	N/Av.	N/Av.	N/Av.	



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Total Water Consumption	million m ³	125	182	N/Av.	N/Av.	N/Av.	We define water consumed as the sum of water drawn into the organizational boundaries of the organization and not discharged back to the water environment or a third party over the course of the reporting period.
Nitrogen	million m ³	45	41	N/Av.	N/Av.	N/Av.	
Phosphate	million m ³	61	127	N/Av.	N/Av.	N/Av.	
Potash	million m ³	19	14	N/Av.	N/Av.	N/Av.	
Retail Manufacturing	million m ³	0	0	N/Av.	N/Av.	N/Av.	
Areas with water stress							According to the World Resources Institute's Water Risk Atlas tool (Aqueduct) baseline water stress indicator, our Carseland, AB Nitrogen facility is located in an area with water stress.
Water withdrawal in areas with water stress, by source:							
Surface Water	million m ³	4	4	N/Av.	N/Av.	N/Av.	
Groundwater	million m ³	0	0	N/Av.	N/Av.	N/Av.	
Water withdrawal in areas with water stress, as a percentage of total water withdrawal	percent	1	1	N/Av.	N/Av.	N/Av.	
Water discharge in areas with water stress, by type:							
Freshwater	million m ³	0	0	N/Av.	N/Av.	N/Av.	
Other Water	million m ³	0	0	N/Av.	N/Av.	N/Av.	
Water Consumption	million m ³	4	4	N/Av.	N/Av.	N/Av.	We define water consumed as the sum of water drawn into the organizational boundaries of the organization and not discharged back to the water environment or a third party over the course of the reporting period.
Water consumption in areas with water stress, as a percentage of total water consumption	percent	3	2	N/Av.	N/Av.	N/Av.	
Effluents and Waste							
Discharges to On-site Disposal Wells	million m ³	20	17	22	15	18	
Total Non-Hazardous Waste							
Mining waste or byproducts disposed	million tonnes	28	28	27	29	27	Includes potash mining tailings and phosphogypsum.
Non-mining waste disposed	thousand tonnes	211	164	97	113	119	Excludes non-hazardous recycled materials and hazardous waste. Excludes South America Retail, Australia, and Europe. In 2024, we observed an increase in non-mining waste, primarily due to including additional facilities in our reporting.
Hazardous Waste Disposed	thousand tonnes	2	10	3	7	4	Includes hazardous recycled materials and disposed hazardous waste. Excludes South America Retail, Australia, and Europe. Excludes deepwelled wastewaters.
Recycled Materials	thousand tonnes	140	41	35	38	28	Includes hazardous and non-hazardous materials. Excludes South America Retail, Australia, and Europe. In 2024, we observed an increase in recycled materials, primarily due to including additional facilities in our reporting.



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Environmental Incidents							
Total Loss of Containment ("LOC") Incidents	count	29	23	44	31	36	Includes RQ, PSM and Level 2 Environmental Incidents if not classified an RQ or PSM. Incidents or events with multiple classifications only qualify as one LOC incident, which may result in the incidents by type not adding to the total.
Reportable Quantity ("RQ") Releases	count	22	10	22	14	17	Includes non-permitted releases to the environment (on-site, off-site) of a US EPA Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") hazardous substance (40 CFR 302.4) and/or Emergency Planning and Community Right-to-Know Act ("EPCRA") Extremely Hazardous Substance (40 CFR §355.40) in a quantity that equals or exceeds the EPCRA/CERCLA reportable quantity in a 24-hour period at all non-Potash operations; or when a non-permitted release to the environment (on-site, off-site) occurs in a quantity that equals or exceeds the Saskatchewan Reportable Release Quantity in a 24-hour period at all Potash operations. Releases that exceed both CERCLA and EPCRA RQs are considered one RQ incident.
Process Safety Management ("PSM") events	count	16	10	10	9	20	Includes Tier 1 and 2 PSM incidents that exceed a threshold quantity for a chemical stewarding to the third edition of American Petroleum Institute Recommended Practice ("API") 754 "Process Safety Performance Indicators for the Refining and Petrochemical Industries". PSM is not applicable to the Potash operating segment.
Level 2 Environmental Incidents	count	0	2	2	2	2	Includes any environmental release that is reported as Level 2 (Significant Event) through the "Nutrien Global Standard: Incident Notification" due to its environmental consequences.
Environmental Incident Frequency	LOC Incidents/production * 1,000,000	1.45	1.25	1.66	1.16	1.60	Environmental Incident Frequency ("EIF") is equal to the total number of LOC incidents for the period divided by actual production for each operating segment multiplied by 1,000,000. LOC incidents include Reportable Quantity releases, PSM Tier 1 and 2 incidents, and Level 2 Environmental Incidents not classified RQ or PSM.
Tier 1 Process Safety Total Incident Rate	incidents*200,000 hours/total actual hours worked	0.02	0.03	0.04	0.01	0.04	Rate includes exposure hours for Nutrien Ag Solutions (North America), Nitrogen and Phosphate, and Transportation & Distribution.
Tier 2 Process Safety Total Incident Rate	incidents*200,000 hours/total actual hours worked	0.04	0.03	0.05	0.12	0.12	Rate includes exposure hours for Nutrien Ag Solutions (North America), Nitrogen and Phosphate, and Transportation & Distribution.
Non-accidental Ammonia Releases Rate	releases per thousand railcar movements	0.00	0.00	0.04	0.00	0.00	Includes the unintentional release of ammonia while in transit, including loading and dispensing of the product, which is not caused by a derailment, collision or other rail-related accident.
Environmental Remediation Liabilities	\$ million	360	396	449	505	550	Calculated on a discounted basis.
Internal SH&E Audits	count	788	598	674	695	667	



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Social							
Workplace							
Total Employees	count	27,800	28,200	26,800	25,600	25,600	Includes full-time and part-time permanent, temporary and casual employees as of December 31.
Permanent employees	count	25,500	25,900	24,700	23,500	23,100	
Temporary & Casual Employees	count	2,300	2,300	2,100	2,100	2,500	
Permanent Employees by Region							Figures may not add to total due to rounding.
North America	count	19,200	19,000	18,750	18,050	18,000	
South America	count	3,250	3,900	2,800	2,450	2,000	Includes Trinidad and Tobago.
Australia	count	3,000	3,000	3,100	2,950	3,050	
Europe	count	50	50	50	50	50	
Total Employee Turnover Rate	percent	13	14	12	15	13	The number of permanent employees who left the Company due to voluntary and involuntary terminations, including retirements and deaths, as a percentage of average permanent employees for the year. Does not include South America.
Voluntary employee turnover rate	percent	9	10	9	12	9	The number of permanent employees who left the Company due to voluntary terminations as a percentage of average permanent employees for the year. Includes voluntary retirements and resignations. Does not include South America.
Involuntary employee turnover rate	percent	4	4	3	4	4	The number of permanent employees who left the company due to involuntary terminations as a percentage of average permanent employees for the year. Does not include South America.
Employee Learning and Development							
Average learning and development spend	\$ per employee	878	814	838	517	380	
Average hours of training	hours per employee	25	26	22	32	26	
Employee engagement	percent	N/A	75	N/A	N/A	89	The 2023 score represents a 75% favorable response when it comes to the employee experience with Nutrien in dimensions like communication, work-life balance, leadership, purpose and engagement, with a survey participation rate of 56%. In 2020, the score represents the average response to five engagement questions, with a survey participation rate of 48%.



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Total Employees Covered by Collective Bargaining Agreements	percent	36.5	38.4	28.9	N/Av.	N/Av.	Based on permanent full-time and part-time employees as of December 31. The previously reported data was restated where possible due to changes in calculation methodology.
Employees represented by third-party trade unions	percent	15.8	15.9	16.0	N/Av.	N/Av.	Based on North American permanent full-time and part-time employees as of December 31. Includes employees represented by a formal third-party organization authorized to act on behalf of employees regarding wages and other working conditions of employment. The previously reported data was restated where possible due to changes in calculation methodology.
Employees represented by another form of collective bargaining (not involving third-party trade unions)	percent	100	100	100	N/Av.	N/Av.	Based on non-North American permanent full-time and part-time employees as of December 31. Includes employees covered by a representative body or work council to negotiate wages and/or working conditions that are legally binding agreements between the employer and employees. The previously reported data was restated where possible due to changes in calculation methodology.
Diversity							
Women at Various Levels							Based on permanent full-time and part-time employees as of December 31.
Board	percent	33	33	33	36	36	
Vice President and above	percent	24	22	21	23	25	
Director and above	percent	24	23	21	21	19	
Non-senior Leaders	percent	15	13	14	15	15	
All management	percent	16	14	13	16	14	
All employees	percent	22	20	21	20	20	
Permanent Employee Age Profile							Based on permanent full-time and part-time employees as of December 31. Figures may not add to 100 due to rounding.
Under 25	percent	6	6	7	5	5	
25-34	percent	24	24	24	23	23	
35-44	percent	26	26	25	25	25	
45-54	percent	22	22	22	22	22	
55-64	percent	17	17	18	19	20	
Over 65	percent	5	5	4	4	5	



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Safety							
Total Recordable Injury Frequency	incidents*200,000 hours/total actual hours worked	0.97	1.01	1.16	1.11	1.13	
Employee Recordable Injury Frequency	incidents*200,000 hours/total actual hours worked	1.08	1.14	1.30	1.25	1.30	
Contractor Recordable Injury Frequency	incidents*200,000 hours/total actual hours worked	0.51	0.49	0.64	0.57	0.41	
Total Lost-Time Injury Frequency	incidents*200,000 hours/total actual hours worked	0.19	0.24	0.24	0.27	0.26	
Employee Lost-Time Injury Frequency	incidents*200,000 hours/total actual hours worked	0.22	0.28	0.26	0.31	0.30	
Contractor Lost-Time Injury Frequency	incidents*200,000 hours/total actual hours worked	0.08	0.09	0.14	0.11	0.09	
Employee Lost-Time Days Rate	Lost-time days*200,000 hours/actual hours worked	5.34	7.22	7.60	7.14	7.66	Rates may change as the number of days lost can be incurred outside of the calendar year.
Serious Injury and Fatality Incidents (employee and contractor)	count	8	5	5	0	1	
Employee Fatalities	count	3	1	0	0	0	
Contractor Fatalities	count	0	0	0	0	0	
Stewardship of Chemicals							
Percentage of products by revenue that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances	percent	36	34	33	32	32	Includes Nutrien North American manufactured fertilizer-feed-industrial and European distributed fertilizer products. Our fertilizer-feed-industrial Category 1 and 2 products generally fall into the corrosive (acids and ammonia) or irritancy (UAN, nitrate solutions, polyphosphates) categories.
Percentage of GHS 1 and 2 products by revenue that have undergone a hazard assessment	percent	57	58	64	62	58	Includes Nutrien North American manufactured fertilizer-feed-industrial and European distributed fertilizer products.
Percentage of products by revenue that contain genetically modified organisms (GMOs)	percent	7	6	5	6	7	2021 is restated to reflect improvements in data collection and increased data granularity.



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Governance							
Integrity							
Compliance Reporting Rate	reports per 100 employees	1.34	1.11	0.77	0.74	0.67	
Total Compliance Reports	count	388	320	207	190	172	Compliance report categories were changed in 2021 to better align with the issue types used for internal reporting. As a result, the number of 2020 reports by category do not sum to the total.
Business practices	count	48	42	20	36	9	
Discrimination	count	18	22	20	14	24	
Environmental	count	4	3	0	0	NPR	
Financial matters	count	58	36	15	30	12	
Harassment	count	45	44	27	24	25	
Labor and employment	count	14	14	11	12	NPR	
Retaliation	count	12	9	6	2	NPR	
Worker safety and health	count	28	16	16	22	NPR	The 2023 value has been restated since original publication.
Workplace conduct	count	145	117	79	46	NPR	
Other	count	16	17	13	4	14	
Participants in Anti-Corruption Training							
Live	count	650	470	320	200	390	
Online course	count	620	1,710	100	40	40	
Online refresher	count	0	27,630	5,030	22,850	3,930	In 2024, the topic was not included in Code of Conduct training. In 2022, new hires and return-from-leave employees received a refresher on anti-corruption as part of the Code of Conduct training.
Participants in Fair Competition Training							
Live	count	620	500	390	305	410	
Online course	count	590	2,370	0	NPR	NPR	
Online refresher	count	0	27,630	5,030	22,850	3,930	In 2024, the topic was not included in Code of Conduct training. In 2022, new hires and return-from-leave employees received a refresher on fair competition as part of the Code of Conduct training.



Performance Table (continued)

Metric	Units	2024	2023	2022	2021	2020	Footnotes
Cybersecurity							
Tabletop Exercises to Practice Responding to Cybersecurity Events	count	2	3	3	2	2	
Participants in Online Cybersecurity Refresher (as part of Code of Conduct Training)	count	25,090	27,630	25,740	22,850	23,900	
Cybersecurity Education and Training Sessions Held for Our Community Partners and Stakeholders	count	4	5	5	5	NPR	
Economic							
Community investments	\$ million	28	23	33	19	18	Represents cash disbursements, matching of employee gifts and in-kind contributions of equipment, goods and services, and employee volunteerism (on corporate time). In 2022, Nutrien allocated additional funds on a one-time basis to advance our strategic priorities.
Coverage of Defined Benefit Retirement Obligations	percent	93	92	89	87	83	Calculated on an accounting basis for registered defined benefit pension plans, and other post-employment benefit plans.
Employees who are active members of defined benefit pension plans	percent	6	9	9	14	13	For North America, the remaining eligible employees can participate in a defined contribution retirement plan.
Political Donations in Canada	\$ CAD	12,000	1,000	10,500	11,500	6,000	
Political Donations in US	\$ USD	63,250	117,250	40,250	17,000	52,500	
Political Donations in Australia	\$ AUD	0	0	0	0	NPR	
Number of Community Partners	count	2,600	2,800	3,000	2,700	2,500	Represents unique charitable and not-for-profit organizations within a community or region.
Company Context							All figures are provided on a gross production basis.
Potash Production (KCl tonnes produced)	thousand tonnes	14,205	12,998	13,007	13,790	12,595	
Nitrogen Production (NH ₃ tonnes produced)	thousand tonnes	5,608	5,357	5,759	5,996	6,063	
Phosphate Production (P ₂ O ₅ tonnes produced)	thousand tonnes	1,327	1,406	1,351	1,518	1,444	Excludes Redwater, AB.



SASB INDEX

SASB Reference	Metric	Page
GHG Emissions		
RT-CH-110a.1 EM-MM-110a.1	Gross global Scope 1 emissions, percentage covered under emissions limiting regulations	Performance table
RT-CH-110a.2 EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	25
Air Quality		
RT-CH-120a.1	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Performance table
EM-MM-120a.1	Air emissions of the following pollutants: (1) CO, (2) NO _x (excluding N ₂ O), (3) SO _x , (4) particulate matter (PM ₁₀), (5) mercury (Hg), (6) lead (pb), and (7) volatile organic compounds (VOCs)	Performance table
Energy Management		
RT-CH-130a.1 EM-MM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, and (4) total self-generated energy	Performance table*
Water Management		
RT-CH-140a.1 EM-MM-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with high or extremely high baseline water stress	Performance table
RT-CH-140a.2 EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations	(not reported)
RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	34-35
Hazardous Waste Management		
RT-CH-150a.1	(1) Amount of hazardous waste generated, (2) percentage recycled	Performance table
EM-MM-150a.4-10	<ul style="list-style-type: none"> Total weight of non-mineral waste generated Total weight of tailings produced Total weight of waste rock generated Total weight of hazardous waste generated Total weight of hazardous waste recycled Number of significant incidents associated with hazardous materials and waste management Description of waste and hazardous materials management policies and procedures for active and inactive operations 	(not reported)

*Partially meets the disclosure suggested by the SASB Standards

**SASB Index (continued)**

SASB Reference	Metric	Page
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EM-MM-160a.1	Description of environmental management policies and practices for active sites	32-33
EM-MM-160a.2	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	(not reported)
EM-MM-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	(not reported)
Community Relations		
RT-CH-210a.1 EM-MM-210b.1	Discussion of engagement processes to manage risks and opportunities associated with community rights and interests	39-40
EM-MM-210b.2	(1) Number and (2) duration of non-technical days	(not reported)
Security, Human Rights & Rights of Indigenous Peoples		
EM-MM-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	(not reported)
EM-MM-210a.2	Percentage of (1) proved and (2) probable reserves in or near Indigenous land	(not reported)
EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, Indigenous rights, and operation in areas of conflict	49-51, 41-43
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EM-MM-310a.1	Percentage of active workforce employed under collective agreements	Performance table
EM-MM-310a.2	(1) Number and (2) duration of strikes and lockouts	(not reported)
Workforce Health & Safety		
RT-CH-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Performance table
RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	45-48
EM-MM-320a.1	(1) All-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) direct employees and (b) contract employees	Performance table*
Product Design for Use-phase Efficiency		
RT-CH-410a.1	Revenue from products designed for use-phase resource efficiency	(not reported)

*Partially meets the disclosure suggested by the SASB Standards

**SASB Index (continued)**

SASB Reference	Metric	Page
Safety & Environmental Stewardship of Chemicals		
RT-CH-410b.1	(1) Percentage of products that contain Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Category 1 and 2 Health and Environmental; Hazardous Substances, (2) Percentage of such products that have undergone a hazard assessment	Performance table
RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human or environmental impact	29-31
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EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	49-51
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RT-CH-540a.2	Number of transport incidents	(not reported)
Tailings Storage Facilities Management		
EM-MM-540a.1	Tailings storage facility inventory table	Tailings Safety Disclosure
EM-MM-540a.2	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	Tailings Safety Disclosure
EM-MM-540a.3	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	Tailings Safety Disclosure

*Partially meets the disclosure suggested by the SASB Standards



GRI INDEX

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2-2 Entities included in the organization’s sustainability reporting	About This Report
2-3 Reporting period, frequency and contact point	About This Report, back cover
2-4 Restatements of information	2024 Sustainability Report: Performance Table
2-5 External assurance	2024 KPMG Independent Limited Assurance Report
2-6 Activities, value chain and other business relationships	About Nutrien Our Global Profile 2024 Annual Report: Our company, Operating environment
2-7 Employees	2024 Sustainability Report: Performance Table Workplace section
2-9 Governance structure and composition	Nutrien Management Information Circular: Board of directors and corporate governance section
2-10 Nomination and selection of the highest governance body	Corporate Governance & Nominating Committee Charter Nutrien Management Information Circular: Board of directors and corporate governance section
2-11 Chair of the highest governance body	Nutrien Management Information Circular: Board of directors and corporate governance section
2-12 Role of the highest governance body in overseeing the management of impacts	Board of Directors Charter Nutrien Management Information Circular: Board of directors and corporate governance section
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2-14 Role of the highest governance body in sustainability reporting	Nutrien Management Information Circular: Board of directors and corporate governance section 2024 Sustainability Report: Sustainability Governance section
2-15 Conflicts of interest	Nutrien Management Information Circular: Board of directors and corporate governance section
2-16 Communication of critical concerns	2024 Sustainability Report: Integrity section, Performance Table Integrity section
2-17 Collective knowledge of the highest governance body	Nutrien Management Information Circular: Board of directors and corporate governance section
2-18 Evaluation of the performance of the highest governance body	Nutrien Management Information Circular: Board of directors and corporate governance section
2-19 Remuneration policies	Nutrien Management Information Circular: Board of directors and corporate governance section, Executive compensation section
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**GRI Index (continued)**

Disclosure	Location
2-22 Statement on sustainable development strategy	2024 Sustainability Report: Nutrien’s Sustainability Framework, Our Targets 2024 Annual Report: Megatrends, Strategy
2-23 Policy commitments	Code of Conduct Supplier Code of Conduct
2-24 Embedding policy commitments	2024 Sustainability Report: Integrity section
2-25 Processes to remediate negative impacts	Code of Conduct 2024 Sustainability Report: Integrity section
2-26 Mechanisms for seeking advice and raising concerns	Code of Conduct
2-30 Collective bargaining agreements	2024 Sustainability Report: Human Capital and Labor Practices section
GRI Standard 3: Material Topics 2021	
3-1 Process to determine material topics	2024 Sustainability Report: Our Sustainability Priority Topics
3-2 List of material topics	2024 Sustainability Report: Our Sustainability Priority Topics
3-3 Management of material topics	2024 Sustainability Report: sections by topic
GRI Standard 101: Biodiversity 2024	
101-2 Management of biodiversity impacts	2024 Sustainability Report: Biodiversity section
101-4 Identification of biodiversity impacts	2024 Sustainability Report: Biodiversity section
GRI Standard 201: Economic Performance 2016	
201-1 Direct economic value generated and distributed	2024 Annual Report: Financial statements
201-2 Financial implications and other risks and opportunities due to climate change	2024 Sustainability Report: Climate-related risks and opportunities
201-3 Defined benefit plan obligations and other retirement plans	2024 Sustainability Report: Performance Table Economic metrics
GRI 204: Procurement Practices 2016	
204-1 Proportion of spending on local suppliers	2024 Sustainability Report: Indigenous Relations section
GRI 205: Anti-corruption 2016	
205-2 Communication and training about anti-corruption policies and procedures	2024 Sustainability Report: Integrity section

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Disclosure	Location
GRI 302: Energy 2016	
302-1 Energy consumption within the organization	2024 Sustainability Report: Performance Table Energy section
302-3 Energy intensity	2024 Sustainability Report: Performance Table Energy section
GRI 303: Water and Effluents 2018	
303-1 Interactions with water as a shared resource	2024 Sustainability Report: Water Stewardship section, Performance Table Water section
303-2 Management of water discharge-related impacts	2024 Sustainability Report: Water Stewardship section
303-3 Water withdrawal	2024 Sustainability Report: Performance Table Water section
303-4 Water discharge	2024 Sustainability Report: Performance Table Water section
303-5 Water consumption	2024 Sustainability Report: Performance Table Water section
GRI 305: Emissions 2016	
305-1 Direct (Scope 1) GHG emissions	2024 Sustainability Report: Performance Table Emissions section GHG Emissions Scope 1 and 2 Inventory Management Plan
305-2 Energy indirect (Scope 2) GHG emissions	2024 Sustainability Report: Performance Table Emissions section GHG Emissions Scope 1 and 2 Inventory Management Plan
305-4 GHG emissions intensity	2024 Sustainability Report: Performance Table Emissions section
305-5 Reduction of GHG emissions	2024 Sustainability Report: Our Targets, Climate Change and GHG Emissions section
305-7 Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	2024 Sustainability Report: Performance Table Emissions section
GRI 306: Effluents and Waste 2016	
306-3 Significant spills	2024 Sustainability Report: Performance Table Environmental Incidents section
GRI 306: Waste 2020	
306-2 Management of significant waste-related impacts	2024 Sustainability Report: Tailings, Gypstacks and Waste section
306-3 Waste generated	2024 Sustainability Report: Performance Table Effluents and Waste section
306-4 Waste diverted from disposal	2024 Sustainability Report: Performance Table Effluents and Waste section
306-5 Waste directed to disposal	2024 Sustainability Report: Performance Table Effluents and Waste section

**GRI Index (continued)**

Disclosure	Location
GRI 401: Employment 2016	
401-1 New employee hires and employee turnover	2024 Sustainability Report: Performance Table Workplace section
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	2024 Sustainability Report: Human Capital and Labor Practices section
GRI 403: Occupational Health and Safety 2018	
403-1 Occupational health and safety management system	2024 Sustainability Report: Safety and Health section
403-8 Workers covered by an occupational health and safety management system	2024 Sustainability Report: Safety and Health section
403-9 Work-related injuries	2024 Sustainability Report: Performance Table Safety section
GRI 404: Training and Education 2016	
404-1 Average hours of training per year per employee	2024 Sustainability Report: Performance Table Workplace section
404-2 Programs for upgrading employee skills and transition assistance programs	2024 Sustainability Report: Human Capital and Labor Practices section
GRI 405: Diversity and Equal Opportunity 2016	
405-1 Diversity of governance bodies and employees	2024 Sustainability Report: Performance Table Workplace section
GRI 415: Public Policy 2016	
415-1 Political contributions	2024 Sustainability Report: Performance Table Economic section



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VCMDA DISCLOSURE

Nutrien AB-1305 Disclosure

Disclosure provided pursuant to the California Voluntary Carbon Market Disclosures Act (“VCMDA”)

VCMDA Section 44475.2 Disclosure

Nutrien has set targets, and reports on its progress, to reduce GHG emissions intensity (Scope 1 and Scope 2) by 30 percent per tonne of our products produced, from a base year of 2018 by 2030. The information in the table below represents details related to the disclosures required under Section 44475.2 of the VCMDA.

Reductions to Nutrien’s GHG emissions [Read more](#)

How interim progress is being measured	Read more about emissions related to our operations, page 21 Read more about our TCFD metrics and targets, page 23
Relevant methodology	Read more about emissions related to our operations, page 21 Read more about how we are working towards sectoral decarbonization pathways, page 23
Whether there is independent third-party verification of the company data	KPMG LLP provided limited assurance over our 2024 Scope 1 and Scope 2 GHG emissions and their assurance report can be found here .



FORWARD-LOOKING STATEMENTS

Certain statements and other information included in this document constitute “forward-looking information” or “forward-looking statements” (collectively, “forward-looking statements”) under applicable securities laws (such statements are often accompanied by words such as “anticipate”, “forecast”, “expect”, “believe”, “may”, “will”, “should”, “estimate”, “project”, “intend”, “plan” or other similar words). All statements in this document, other than those relating to historical information or current conditions, are forward-looking statements, including, but not limited to: Nutrien’s business strategies, plans, prospects, opportunities and its sustainability, climate change and ESG plans, initiatives and strategies; Nutrien’s sustainability and ESG opportunities and expectations and the risks related thereto; expectations regarding Nutrien’s *Feeding the Future* Plan commitments, targets and goals for 2025 and beyond, its 2030 targets and ESG performance targets and goals; Nutrien’s 2030 GHG emissions reduction targets and goals, including its plans, expectations, programs, strategies and ongoing review with respect thereto; the potential deployment of additional emissions abatement projects; Nutrien’s initiatives to promote sustainable and productive agriculture and food production and its targets and goals related thereto, including our 75 million sustainable agriculture acres target and ongoing review of such target, including consideration of alternative farmer engagement metrics; our ability to integrate energy efficiency initiatives throughout our operations; expectations regarding global population growth; expectations with respect to and the anticipated benefits of our innovative Retail products, including our plant nutrition, crop protection, seed and livestock solutions products; expectations regarding operational water use and our water stewardship goals and projects, including the expected benefits of the Lake Winnipeg Basin Project; expectations regarding our waste management goals, including the expected benefits and continued use of our Global Waste Minimization Standard and our initiatives to reduce packaging and plastic waste and/or increasing plastic reuse; expectations regarding investments in new technologies to support a transition to low- and zero-carbon fertilizers, including low-carbon and clean ammonia as well as the use of CCUS infrastructure; our initiatives and projects relating to the reduction of Scope 1 and 2 GHG emissions and assessments of Scope 3 GHG emissions, including, but not limited to, process improvements at Nutrien’s Nitrogen facilities; the implementation of our VACI Program and the anticipated benefits to Nutrien and producers therefrom; expectations and anticipated benefits of the expansion of our vendor program for feedstock evaluation; Nutrien’s ability to implement technology to reduce GHG emissions and leverage data analytics in our pursuit to meet our ESG targets; our commitment to leverage partnerships and investments to drive innovation and inclusion and the anticipated benefits thereof; our expectations regarding Nutrien Financial and the potential social, economic and environmental outcomes resulting therefrom; our expectations regarding future ESG reporting, including ESG ratings; our strategies, plans, opportunities and initiatives relating to the decarbonization priority project areas and related expectations; Nutrien’s ability to successfully reclaim land and its asset retirement obligations, including the cost, timing and anticipated results of future reclamation expenditures; expected market and industry conditions with respect to planted acres; expectations regarding our health and safety initiatives and goals, including achieving top-quartile safety performance across all of our operating segments and the future reporting of

results and performance in connection therewith; expectations regarding our learning and leadership initiatives, including our High Performance Institute; Nutrien’s community relations and investment initiatives; our expectations and anticipated benefits regarding our Indigenous inclusion initiatives; expectations regarding our cybersecurity, data protection and privacy programs; and expectations in connection with our ability to deliver long-term value for all stakeholders. These forward-looking statements are subject to a number of assumptions, risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from such forward-looking statements. As such, undue reliance should not be placed on these forward-looking statements.

All of the forward-looking statements are qualified by the assumptions that are stated or inherent in such forward-looking statements, including the assumptions referred to below and elsewhere in this document. Although we believe that these assumptions are reasonable, having regard to our experience and our perception of historical trends, the assumptions set forth below are not exhaustive of the factors that may affect any of the forward-looking statements and the reader should not place undue reliance on these assumptions and such forward-looking statements. Current conditions, economic and otherwise, render assumptions, although reasonable when made, subject to greater uncertainty.

In respect of our GHG emissions reduction targets and goals and other sustainability and climate-related initiatives and targets, we have made assumptions with respect to, among other things: that deploying capital into N₂O abatement at our nitric acid production facilities, energy efficiency improvements, carbon capture, utilization and storage, the use of natural gas to generate electricity and waste heat recovery will drive progress towards such targets and goals; our ability to successfully deploy capital and pursue other operational measures, including the successful application to our current and future operations of existing and new technologies; the successful implementation by Nutrien of proposed or potential plans in respect thereof; projected capital investment levels, the flexibility of Nutrien’s capital spending plans and the associated sources of funding; our product mix; grid decarbonization; our ability to otherwise implement all technology necessary to progress towards our GHG emissions reduction targets and goals and other sustainability and climate-related initiatives and targets; and the development, availability and performance of technology and technological innovations and associated expected future results.

Additional key assumptions that have been made in relation to the operation of our business as currently planned and our ability to achieve our business objectives include, among other things: assumptions with respect to our ability to successfully complete, integrate and realize the anticipated benefits of our already completed and future acquisitions and divestitures, and that we will be able to implement our standards, controls, procedures and policies in respect of any acquired businesses and realize the expected synergies on the anticipated timeline or at all; assumptions regarding our ability to meet our ESG and sustainability targets and goals, and complete the related initiatives and programs on the anticipated timeline or at all; that future business, regulatory and industry conditions will be within the parameters expected

by us, including with respect to prices, expenses, margins, demand, supply, product availability, shipments, consumption, weather conditions, supplier agreements, product distribution agreements, inventory levels, exports, tariffs, trade restrictions, crop development and cost of labor and interest, exchange, inflation and effective tax rates; the receipt, in a timely manner, of regulatory and third-party approvals; assumptions with respect to global economic conditions and the accuracy of our market outlook expectations for 2025 and beyond; our expectations regarding the impacts, direct and indirect, of certain geopolitical conflicts, including the war between Ukraine and Russia and the conflict in the Middle East on, among other things, global supply and demand, including for crop nutrients, energy and commodity prices, global interest rates, supply chains and the global macroeconomic environment, including inflation; the adequacy of our cash generated from operations and our ability to access our credit facilities or capital markets for additional sources of financing; our ability to identify suitable candidates for acquisitions and divestitures and negotiate acceptable terms; our ability to maintain investment-grade ratings and achieve our performance targets; our ability to successfully negotiate sales and other contracts; our ability to successfully implement new initiatives and programs; Nutrien’s ability to successfully deploy capital and pursue other operational measures, and the anticipated benefits therefrom; the successful implementation by Nutrien of proposed or potential strategies and plans in respect thereof; projected capital investment levels; the flexibility of Nutrien’s capital spending plans and the associated source of funding; and the development and performance of technology and technological innovations and the future use and development of technology and associated expected future results. Additional key assumptions relating to the operation of Nutrien’s business as currently planned and the ability to achieve its business objectives are detailed from time to time in Nutrien reports, including its 2024 annual report dated February 20, 2025 and its annual information form dated February 20, 2025 for the year ended December 31, 2024, filed with the Canadian securities regulators and the Securities and Exchange Commission in the US.

Events or circumstances could cause actual results to differ materially from those in the forward-looking statements. Such events or circumstances include, but are not limited to: (i) with respect to Nutrien meeting its 2030 climate and GHG emissions reduction target, including: our ability to deploy sufficient capital to fund the necessary expenditures to implement the necessary operational changes to drive progress towards this target; our ability to implement requisite operational changes; our ability to implement some or all of the strategy and technology necessary to efficiently and effectively achieve expected future results; the availability and commercial viability and scalability of emission reduction strategies and related technology and products; the ability for the grid to decarbonize; the development and execution of implementing strategies to drive progress towards such GHG emissions reduction target; (ii) in respect of Nutrien’s other 2030 targets and goals, including: our ability to deploy sufficient capital to fund the necessary expenditures to implement the necessary operational changes to achieve these targets and goals; our ability to implement requisite operational changes; our ability to implement some or all of the technology necessary to efficiently and effectively achieve and measure expected future results; the

availability and commercial viability and scalability of required technology and products; development and growth of end market demand for sustainable products and solutions; the performance of third parties; the development and execution of implementing strategies to meet such targets and goals; and (iii) with respect to Nutrien’s business generally and its ability to meet its other targets, commitments, goals, strategies, and related milestones and schedules disclosed in this document: general global economic, market and business conditions; failure to complete announced and future acquisitions or divestitures at all or on the expected terms and within the expected timeline; the successful and timely implementation of capital projects; seasonality, climate change and weather conditions, including impacts from regional flooding and/or drought conditions; crop planted acreage, yield and prices; the supply and demand and price levels for our products; governmental and regulatory requirements and actions by governmental authorities, including changes in government policy (including tariffs, trade restrictions and climate change initiatives), government ownership requirements, and changes in environmental, tax, antitrust, and other laws or regulations and the interpretation thereof; political or military risks, including civil unrest, actions by armed groups, or conflict and malicious acts, including terrorism and industrial espionage; our ability to access sufficient, cost-effective and timely transportation, distribution and storage of products; the occurrence of a major environmental or safety incident or becoming subject to legal or regulatory proceedings; innovation and cybersecurity risks related to our systems, including our costs of addressing or mitigating such risks; counterparty and sovereign risk; delays in completion of turnarounds at our major facilities; interruptions of or constraints in availability of key inputs, including natural gas and sulfur; any significant impairment of the carrying amount of certain assets; the risk that deterioration of business operating results may result in further impairment of assets or goodwill attributed to certain cash-generating units; risks and uncertainties associated with obtaining regulatory, third-party and stakeholder approvals outside of Nutrien’s control for its operations, projects, initiatives and activities and the satisfaction of any conditions to such approvals; the impact of technology and risks associated with developing and implementing new technologies; the accuracy of cost estimates; risks related to reputational loss; certain complications that may arise in our mining processes; the ability to attract, engage and retain skilled employees; labor strikes or other forms of work stoppages; geopolitical conflicts, including the war in Ukraine, the conflict in the Middle East, and their potential impact on, among other things, global market conditions and supply and demand, including crop nutrients, energy and commodity prices, interest rates, supply chains, and the global economy generally; and other risk factors detailed from time to time in Nutrien’s reports, including its 2024 annual report dated February 20, 2025 and its annual information form dated February 20, 2025 for the year ended December 31, 2024, filed with the Canadian securities regulators and the Securities and Exchange Commission in the US.

The forward-looking statements in this document are made as of the date hereof and Nutrien disclaims any intention or obligation to update or revise any forward-looking statements in this document as a result of new information or future events, except as may be required under applicable Canadian securities legislation or applicable US federal securities laws.

We welcome and value your feedback on this report and all of our sustainability initiatives.

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