





# Management's Discussion & Analysis

As at and for the year ended December 31, 2022



The following management's discussion and analysis ("MD&A") is the responsibility of management and is dated as of February 16, 2023. The Board of Directors ("Board") of Nutrien carries out its responsibility for review of this disclosure principally through its Audit Committee, composed entirely of independent directors. The Audit Committee reviews and, prior to its publication, recommends to the Board approval of this disclosure. The Board has approved this disclosure. The term "Nutrien" refers to Nutrien Ltd. and the terms "we", "us", "our", "Nutrien" and "the Company" refer to Nutrien and, as applicable, Nutrien and its direct and indirect subsidiaries on a consolidated basis. This MD&A is based on the Company's audited consolidated financial statements for the year ended December 31, 2022 ("consolidated financial statements") based on International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board, unless otherwise stated.

This MD&A contains certain non-IFRS financial measures and ratios, which do not have a standard meaning under IFRS and, therefore, may not be comparable to similar measures presented by other issuers. Such non-IFRS financial measures and ratios include:

- Adjusted EBITDA
- Adjusted net earnings and adjusted net earnings per share
- Adjusted EBITDA and adjusted net earnings per share guidance
- Growth capital and growth capital allocation
- Gross margin excluding depreciation and amortization per tonne – manufactured
- Potash controllable cash cost of product manufactured per tonne
- Ammonia controllable cash cost of product manufactured per tonne
- Retail adjusted average working capital to sales and Retail adjusted average working capital to sales excluding Nutrien Financial
- Nutrien Financial adjusted net interest margin
- Retail cash operating coverage ratio
- Retail normalized comparable store sales
- Return on invested capital
- Net operating profit after taxes
- Adjusted net debt

For definitions, further information and reconciliation of these measures to the most directly comparable measures under IFRS, see the "Non-IFRS Financial Measures" and "Other Financial Measures" sections.

Also see the cautionary statement in the "Forward-Looking Statements" section.

All references to per share amounts pertain to diluted net earnings (loss) per share. Financial data in this annual report are stated in millions of US dollars, which is the functional currency of Nutrien and the majority of its subsidiaries, unless otherwise noted. Information that is not meaningful is indicated by n/m.

See the "Other Financial Measures" and "Terms & Definitions" sections for definitions, abbreviations and terms used in this annual report including the MD&A.

Additional information relating to Nutrien (which, except as otherwise noted, is not incorporated by reference herein), including our Annual Information Form for the year ended December 31, 2022, can be found on SEDAR at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov). The Company is a foreign private issuer under the rules and regulations of the US Securities and Exchange Commission (the "SEC").

The information contained on or accessible from our website or any other website is not incorporated by reference into this MD&A or any other report or document we file with or furnish to applicable Canadian or US securities regulatory authorities.

# Our Approach to Annual Reporting

## Taking steps toward a more integrated approach to reporting

Nutrien is on a path to a more integrated approach in our annual reporting, with the goal to communicate how we evaluate the opportunities and challenges in our operating environment, which shape our approach to setting strategy, managing risk and governing our actions. The priorities of our key stakeholders impact the way we approach value creation, including addressing key sustainability priorities.



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### Our Company

Outlines who we are as a company, where we operate, how we create value and describes each of our operating segments

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## About Nutrien

Nutrien is the world's largest provider of crop inputs and services, helping to safely and sustainably feed a growing world. We operate a world-class network of production, distribution and retail facilities that positions us to efficiently serve the needs of growers. We focus on creating long-term value for all stakeholders by advancing our key environmental, social and governance priorities.



Our Company

# Global Profile

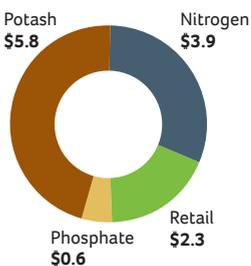
## Advantaged position across the agriculture value chain

Nutrien has operations and investments in 13 countries, supported by nearly 25,000 talented employees worldwide. We supply products and services to key markets in North America, South America, Asia and Europe.

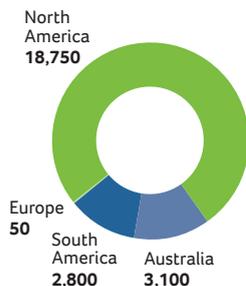


### WHERE OUR EARNINGS COME FROM

Adjusted EBITDA by operating segment in 2022 (\$ billions)

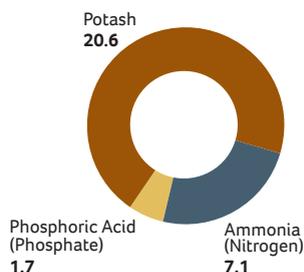


### WHERE OUR EMPLOYEES WORK

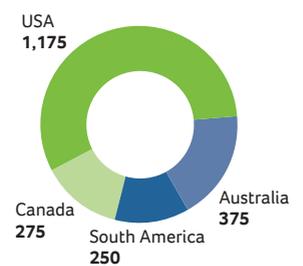


### WHAT IS OUR PRODUCTION CAPACITY

Nameplate production capacity (million tonnes of fertilizer N-P-K)



### WHERE OUR RETAIL SELLING LOCATIONS ARE SITUATED



Our Company

# How We Create Value

## Leveraging the advantages of our integrated business model

### 1 Advantaged Position Across the Ag Value Chain

Our integrated model provides competitive advantages to optimize operations, transportation and logistics, increase supply chain efficiencies and support volume growth.

### 2 Financial Strength & Stability

Our diversified Retail business enhances the stability of our earnings base and our low-cost fertilizer production assets have historically generated significant cash flow, providing the opportunity to grow our business and return incremental capital to our shareholders.

### 3 Provider of Sustainable Agriculture Solutions

Positioned to drive long-term value creation through integration of sustainability initiatives, from fertilizer production to grower practices in the field.

Our integrated business model provides a number of advantages compared to our competitors, including operational, financial and sustainability benefits. We continue to explore ways to further enhance the capabilities of our business to capture additional value across the supply chain.

## WORLD-CLASS PRODUCTION ASSETS

**25**MmtNPK Manufactured Sales Volumes  
in 2022**~2,000**

Proprietary products

## GLOBAL SUPPLY CHAIN

**~440**Wholesale fertilizer distribution  
points**>1,000**

Crop input suppliers

## LEADING AG RETAIL NETWORK

**>2,000**Retail selling locations across North  
America, South America and Australia**>4,000**

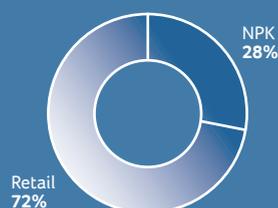
Crop consultants

## CASH GENERATION

**>\$21B**in cash provided by operating  
activities since 2018

## GROWTH CAPITAL ALLOCATION

(2018-2022) (percentage)



## SHAREHOLDER RETURNS

(2018-2022) (US\$ billions)



## INNOVATIVE PRODUCTS &amp; SERVICES

Leading provider of  
**INNOVATIVE**  
products and services  
(Agrible, Waypoint, Echelon)

## CARBON PROGRAM

**~10**suppliers  
and downstream partners in  
carbon pilot program

## LOW-CARBON AMMONIA

**1**Mmtof low-carbon annual ammonia  
production capability

Our Company

# Operating Segments

World-class network of production assets, distribution capabilities and premier retailer of crop inputs and services

**Nutrien Ag Solutions**

**#1 Global Ag Retailer**



Our network of retail selling locations in seven countries provides a wide range of complete agriculture solutions including crop nutrients, crop protection products, seed, application services and digital tools.

We produce and offer approximately 2,000 proprietary crop protection, nutritional, adjuvant and seed treatment products, including a suite of biologicals that complement evolving farming practices. Key brands include Loveland Products and Dyna-Gro seed.

We provide value-added agronomic services from crop plans to soil testing, a leading digital platform that utilizes data driven insights to provide efficient and accurate advice to our customers. We offer attractive working capital solutions for growers through Nutrien Financial and a leading-edge Carbon Program that is connecting farmers to downstream partners in the food value chain.

**>2,000**  
Retail Selling  
Locations

**~500,000**  
Grower  
Accounts

**>4,000**  
Crop  
Consultants

**Sustainability,  
Digital and  
Financial** Solutions

**Potash**

**#1 Global Potash Producer**



We operate low-cost potash mines in Saskatchewan, which have access to the best potash geology in the world and in a stable geopolitical environment. We employ world-class technologies intended to ensure safer and more responsible mining and have a team with decades of experience in producing potash.

Our six-mine network is diverse and flexible, minimizing supply risk for our customers and limiting the potential for lost sales due to unforeseen production downtime.

We produce granular and standard grade potash, which is primarily shipped by railcars and vessels for delivery to customers in approximately 40 countries around the world. Our extensive transportation and distribution network includes access to four North American marine terminals on both the Atlantic and Pacific coasts.

**20.6Mmt**  
Nameplate  
Potash Capacity

**6**  
Mines Situated in the  
Province of Saskatchewan

**~5,900**  
Owned or  
Leased Railcars

**285**  
Distribution  
Points

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

## Nitrogen #3 Global Nitrogen Producer



We produce nitrogen at nine strategically located facilities throughout Canada, the US and Trinidad. Our North American operations, which account for approximately 80 percent of our nitrogen sales volumes, have access to some of the lowest cost natural gas in the world and are in close proximity to key end markets. Our Trinidad operations are situated on tidewater, supporting our sales to over 30 countries, including the European market, and have gas supply contracts indexed to ammonia prices.

Our reliable production network serves a diversified set of agricultural and industrial end markets, with flexibility to optimize product mix and respond to changing market conditions.

We leverage carbon capture, utilization and storage at two of our facilities, and are expanding our low-carbon ammonia production capability. We continue to support our grower customers to reduce their environmental footprint by expanding our portfolio of products with lower environmental impact such as ESN®.

**7.1Mmt**  
Nameplate Ammonia  
Capacity

**~5,500**  
Leased  
Railcars

**190**  
Distribution  
Points

**1Mmt**  
Low-Carbon Ammonia  
Production Capability

## Phosphate #2 North American Phosphate Producer



Nutrien has two large integrated phosphate facilities and four regional product upgrade facilities in the US. The high quality of our phosphate rock enables production of a diverse mix of phosphate products, including solid and liquid fertilizers, feed and industrial acids.

This flexibility allows us to optimize our product mix during changing market conditions. We sell the majority of our product in the North American market and benefit from our extensive distribution network and customer relationships. Fertilizer sales historically represent approximately 75 percent of our phosphate sales.

**1.7Mmt**  
Nameplate P<sub>2</sub>O<sub>5</sub>  
Capacity

**2**  
Large Integrated  
Phosphate Mines

**4**  
Upgrade  
Facilities



## Our Operating Environment

We operate in a rapidly changing world. To thrive in these dynamic conditions, we must anticipate and adapt to our environment. As part of Nutrien’s strategic and enterprise risk management processes, we seek to understand broader trends and the specific markets where we operate. Understanding our operating environment allows us to better identify risks that could jeopardize our ability to deliver on our strategy and capitalize on emerging opportunities.



## Our Operating Environment

# Megatrends

## Key trends that shape our strategy and actions

We define megatrends as emerging macro-level trends and global dynamics that we believe will have ongoing impacts on business, government and society that shapes our operating environment over the next decade. Tracking and analyzing megatrends informs Nutrien's strategy. See page 22 for more information on our related strategy and page 35 for our related key enterprise risks.



### Food Security

Despite advances in modern agriculture, food security remains a global challenge. Producing enough nutritious food for the world's eight billion people, and transporting it to where it is needed, is straining existing global resources. It is estimated that over 10 percent of the world's population is food insecure. A rising population, expected to grow by two billion people in the next 30 years, is further increasing the scale of this challenge.

The agricultural landscape continues to evolve and be influenced by sustainability practices, climate change and social trends that could impact the ability to address global food security challenges. Nutrien is well positioned to develop products and innovative solutions to help our customers feed a growing population while addressing the environmental and social challenges the agriculture industry is facing.

**Related Enterprise Risks:** Agriculture changes and trends / Climate change / Stakeholder support



### Climate Change

Our business, industry, customers and others in the agriculture value chain face long-term challenges from climate change, including increasing expectations for climate actions and reductions of GHG emissions.

Physical risks from a changing climate can impact our operations, our customers and our supply chain. These include more intense weather events, longer droughts, rising sea levels, and changes in average temperature and precipitation patterns. Global decarbonization ambitions and the resulting energy transition are driving carbon regulations and informing capital allocation priorities of investors. Nutrien faces evolving risks related to potential regulatory changes, including carbon pricing.

At the same time, a transition to a low-carbon economy could create significant opportunities for Nutrien to help growers manage these impacts and improve their resilience by facilitating the adoption of climate-smart agriculture practices and developing products that can improve yields in more challenging conditions. The energy transition is accelerating the development of technologies that can support our GHG emission reduction efforts.

**Related Enterprise Risks:** Climate change



## Technology and Digitalization

Digital technologies and access to vast amounts of data are supporting the transformation of our industry and our company. In mining operations, advances in automation and autonomous mining are improving safety by removing workers from the more hazardous areas and enabling productivity increases. Agriculture and food systems are undergoing rapid technological changes driven by big data, digital connectivity, artificial intelligence and innovations in biotechnology. We also have an opportunity to help turn data into insights for our grower customers, and for our grower customers to turn those insights into actions that also presents further opportunities through the agriculture value chain.

The ubiquity of technology and data also creates increased risks to our systems and customer data. Our dependence on technology may contribute to cyber-related events becoming more disruptive and costly and as we gather increasingly more data from our customers, we are continually evolving our practices to align with data privacy regulations.

**Related Enterprise Risks:** Cybersecurity threats / Agriculture changes and trends



## Geopolitical Volatility

Geopolitical turmoil around the world is being driven by nationalism, polarization and economic instability. Due to globalization, regional events are having global impacts. In particular, the Russia and Ukraine war has resulted in, and may continue to result in, supply chain disruptions and higher prices for energy and several commodities, compounding existing energy and food supply chain bottlenecks.

Global geopolitical instability and resulting disruptions could impair our ability to distribute our products in a cost-effective and timely manner to our customers or disrupt our supply chains. If significant geopolitical events occur in one of the countries where we have significant operations, the impact could be more direct and affect our operations, production or revenues. Conversely, disruptions in markets could result in improvements to our financial performance through increased market share or higher sales.

**Related Enterprise Risks:** Political, economic and social instability



## Equality and Societal Expectations

Stakeholders are increasingly focused on corporate sustainability performance and disclosure. Investors are considering environmental and social principles alongside traditional financial metrics in capital allocation decisions and, along with regulators, are increasingly considering the same in evaluating disclosure enhancements. In addition to urgent climate-related matters, societal concerns include impacts on ecosystems and biodiversity, as well as inequality and inequities faced by Indigenous communities, people of colour, LGBTQ+ and disabled individuals inside and outside of the workplace. These societal pressures are reflected in government regulations, investors' priorities and employees' expectations for inclusion practices and for their work to contribute to their sense of personal purpose.

In response to these expectations, governments may impose new regulations or increase the stringency of existing ones. If we are not able to meet our investors' or stakeholders' expectations for environmental and social performance, it could be more difficult to access cost-efficient capital, retain talent or maintain our freedom to operate.

Nutrien believes that our response to these trends can not only help to address some of the world's most pressing challenges but also create opportunities to differentiate ourselves from our competitors. Delivering on our sustainability commitments can attract new investors, support internal engagement, and help attract and retain talent.

**Related Enterprise Risks:** Changing regulations / Stakeholder support

Our Operating Environment

# Market Fundamentals and Competitive Landscape

We carefully monitor market fundamentals and our competitive landscape to better position our company for long-term success.

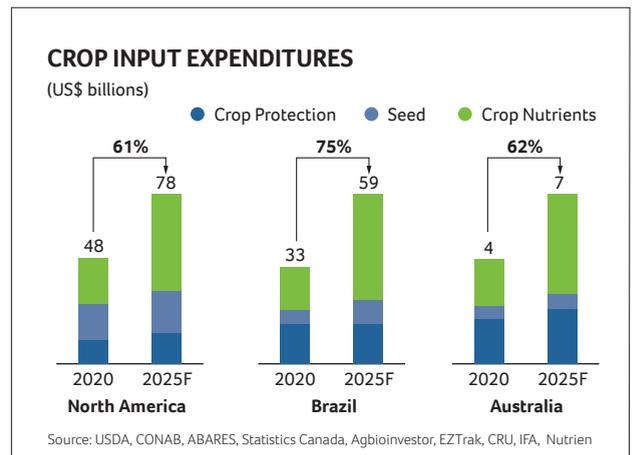
## Nutrien Ag Solutions

The agriculture retail industry is highly fragmented in most of the major markets in which we operate, primarily comprised of small and medium-sized competitors. We believe growers are increasingly looking for whole-acre solutions that include a full suite of products, services and solutions. Scale, reliability of supply, and the ability to provide innovative solutions, including digital and sustainability offerings, are increasingly important to growers and their evolving needs.

The US market largely consists of privately owned independent retailers and cooperatives and continues to be a key focus area for growth for Nutrien through tuck-in acquisitions. In Western Canada, Nutrien continues to lead the market and grow organically through our proprietary product offerings, including the Proven seed brand.

The Australian market is unique in that growers require a full suite of crop production inputs but also solutions for livestock, water and irrigation services. Brazil is one of the world’s largest and fastest-growing agriculture markets and is currently the largest soybean producer and the third largest producer

of corn globally. Compared with other countries, Brazil’s agriculture retail industry is significantly fragmented, with more than 14,000 players serving growers in this market.



Brazil is a **significant and growing** crop input market



## Market Fundamentals and Competitive Landscape

### Potash

Number of Major Producing Countries <sup>1</sup>	20-year Consumption CAGR <sup>2</sup> (2001–2021)	Largest Importers	Largest Exporters
10	2.8%	Brazil, US, China	Canada, Russia, Belarus

1 Countries producing more than 500,000 tonnes annually  
 2 Compound Annual Growth Rate

High quality potash reserves in significant quantities are limited to a small number of countries globally. Canada has the largest known global potash reserves, accounting for approximately 40 percent of the total. More than 75 percent of the world’s potash capacity is held by the six largest producers. Our primary competitors are located in Russia, Belarus, Canada, Germany, Israel and Jordan.

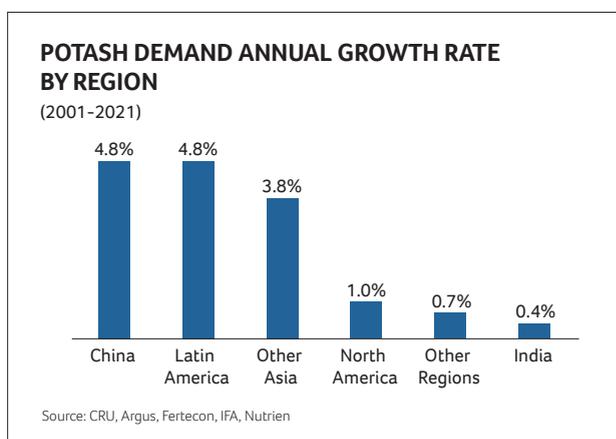
Building new production capacity requires significant capital and time to bring online. Brownfield projects, especially those already completed, have a significant per-tonne capital cost advantage over greenfield projects.

Geological and geopolitical events can result in disruptions to global supply, as was seen in 2022 with sanctions imposed on Belarus and Russia that limited the amount of potash shipments from these countries. In 2022, we estimate that Russian shipments were down approximately 30 percent and Belarussian shipments were down approximately 50 percent from 2021, constraining available supplies and resulting in shifting trade flow patterns.

Most major potash-consuming countries in Asia and Latin America have limited or no production capability and rely on imports to meet their needs. This is an important difference between potash and other major crop nutrients. Trade typically accounts for approximately three-quarters of demand for potash, resulting in a globally diversified

marketplace. Most product is sold on a spot basis, while customers in certain countries, such as China and India, purchase under contracts.

Global demand growth for potash has outpaced that of other primary nutrients, with an average annual growth of 2.8 percent between 2001 and 2021. Potash demand growth is driven by increasing nutrient requirements of higher-yielding crops and improving soil fertility practices, particularly in emerging markets where potash has been historically under-applied and crop yields lag.



## Nitrogen

Number of Major Producing Countries <sup>1</sup>	20-year Consumption CAGR <sup>2</sup> (2001–2021)	Largest Importers <sup>3</sup>	Largest Exporters <sup>3</sup>
~40	1.5%	India, Brazil, US	Russia, Qatar, China

1 Countries producing more than 500,000 tonnes annually

2 Compound Annual Growth Rate

3 Ammonia and urea combined

Production of nitrogen is the most geographically diverse of the three primary crop nutrients due to the widespread availability of hydrogen sources. Access to reliable and competitively priced energy feedstock supply is an increasingly important driver of profitability, as recent geopolitical events have created additional volatility in certain global energy markets. North American nitrogen producers currently have an advantaged cost position due to the relatively low price of natural gas compared to competitors in Europe and Asia.

Ammonia is primarily consumed close to the regions in which it is produced due to the cost of transportation, whereas urea and nitrogen solutions are more widely transported

and traded. The US remains one of the largest importers of nitrogen and a key driver of global trade despite a significant increase in domestic capacity and production over the past decade. China and India are the largest-consuming countries of nitrogen products, accounting for approximately 40 percent of the world's consumption.

In developed regions of the world, nitrogen producers are focused on reducing CO<sub>2</sub> emissions. In addition, new markets for low-carbon and clean ammonia are emerging, including marine fuels and as a hydrogen carrier for power generation, with the potential to significantly increase global demand for ammonia.

## Phosphate

Number of Major Producing Countries <sup>1</sup>	20-year Consumption CAGR <sup>2</sup> (2001–2021)	Largest Importers <sup>3</sup>	Largest Exporters <sup>3</sup>
~10	1.9%	India, Brazil	China, Morocco

1 Countries producing more than 500,000 tonnes annually

2 Compound Annual Growth Rate

3 DAP and MAP combined

Phosphate rock is found in significant quantity and quality in only a handful of geographic locations. Given the concentration of deposits in North Africa and the Middle East, government involvement is a major consideration when evaluating potential phosphate project developments. Access to low-cost ammonia and sulfur is also an important consideration in producing phosphate.

We compete with producers primarily from China, Morocco, Russia, Saudi Arabia and the US. The majority of new capacity added over the past decade was from producers in China, Morocco, Russia and Saudi Arabia. As a result, total US phosphate production declined by approximately 30 percent over this period.

China's trade policy has a major impact on the global phosphate market. In 2022, Chinese MAP/DAP exports were down approximately 50 percent from 2021 levels as a result of export restrictions. Variability in Chinese operating rates can also impact relevant raw material markets, resulting in volatile sulfur demand and prices. The rate of demand growth for industrial phosphate used in Lithium Iron Phosphate ("LFP") battery manufacturing is expected to grow rapidly over the medium term, and be concentrated in China, which could tighten Chinese phosphate supply.



## Our Strategy

### Positioning Our Company for Long-Term Growth and Sustainability

Our vision is to be the leading global integrated agriculture solutions provider. In pursuit of our vision, our strategy is to strengthen our business today while investing in strategic initiatives that we believe will grow and fortify our business for the future. We take a balanced and disciplined approach to capital allocation that is focused on delivering superior value through the agriculture cycle, while positioning our company for long-term growth and sustainability.



# Nutrien's Strategy

## 1

### Enhancing Margins and Asset Efficiency

#### Approach

- Driving operational efficiencies and higher utilization rates, along with increasing the reliability of supply to our customers
- Investing in technology and digital tools that support competitive differentiation, operating and cost performance, and best-in-class safety

## 2

### Advancing Strategic Growth Initiatives

#### Approach

- Expanding our leading production and distribution capabilities in response to structural supply changes and to meet long-term global demand growth
- Focusing on Retail network expansion in large and growing agriculture markets

## 3

### Fortifying Our Business for the Future

#### Approach

- Reducing GHG emissions and other ESG impacts from our operations
- Focusing on initiatives that enhance on-farm environmental performance
- Investing in our people and procurement programs to foster a culture of inclusion and attract and retain the talent required to deliver on our current and future business needs

## Our Strategy

# R Nutrien Ag Solutions Focus

## Contributing towards a more sustainable agriculture industry

We are growing our world-class Retail network through a combination of organic growth initiatives and accretive acquisitions that enhance our ability to provide whole-acre solutions for growers around the world.

## Approach

## Key 2022 Activities

### 1 Enhancing Margins and Asset Efficiency

- Increase share of higher-margin proprietary products which also boosts yields and enhances soil health.
  - Strengthen the customer relationship by providing agronomic data and insights.
  - Invest in digital tools to deliver customer value, drive organic growth through improved customer retention and increased share of wallet.
- **Proprietary products:** Our proprietary products portfolio contributed \$1.2 billion of gross margin in 2022, an increase of approximately 60 percent over the past five years. These products generate ~2x higher margins than third-party branded products.
  - **Agronomic data and insights:** North America Retail digital platform sales <sup>1</sup> increased to \$2.8 billion, representing 18 percent of North America Retail sales.

### 2 Advancing Strategic Growth Initiatives

- Expand our network by focusing on growth in Brazil and tuck-in acquisitions in the US and Australia.
- **Expand our network:** We completed 21 acquisitions in Brazil, the US and Australia for a total investment of approximately \$400 million (net of cash acquired).

### 3 Fortifying Our Business for the Future

- Provide solutions that minimize our environmental footprint and enable traceability and emerging carbon markets.
- Launch and scale a comprehensive Carbon Program, empowering growers and our industry to accelerate climate-smart agriculture and soil carbon sequestration while rewarding growers for their efforts.
- **Whole-acre solutions:** In 2022, we more than tripled the North America Carbon Pilot Program enabled acres to approximately 685,000 pilot acres and expanded the program in Australia. Through our direct engagement with growers, we have advanced our capabilities to support program expansion and focused on a practical and science-based approach.



#### Brazil expansion

We continued to expand our presence in Brazil, acquiring a Brazilian company Casa do Adubo S.A., adding 39 retail locations and 10 distribution centers and expanded our footprint in Brazil from 5 states to 13.

<sup>1</sup> This is a supplementary financial measure. See the "Other Financial Measures" section.

## Our Strategy

# K Potash Focus

## Safely ramping up production to meet global market demand

We are utilizing our world-class network to respond quickly to changes in market supply and demand dynamics. We continue to invest in efficiency and new technologies to lower our costs, optimize and modernize our asset base, advance our sustainability commitments, and preserve the reliability and safety of our operations.

## Approach

## Key 2022 Activities

### 1 Enhancing Margins and Asset Efficiency

- Our Next Generation Potash program is a multi-year investment plan to optimize and modernize potash mining. Our focus is on autonomous mining and predictive maintenance initiatives that enhance safety and strengthen our competitive position by reducing production costs to help offset inflationary pressures.
- **Autonomous mining:** We cut over 6 million ore tonnes in 2022 using automation technologies, an increase of approximately 50 percent from 2021.
- **Predictive maintenance:** Our predictive maintenance platform detects and predicts asset failures and monitors critical assets. Our monitoring capacity is rapidly expanding with use of mobile equipment health sensors.

### 2 Advancing Strategic Growth Initiatives

- We continuously assess market needs, preserving the ability to flex our mine network and increase production as needed to meet demand. Our six-mine network positions us to bring on significant additional low-cost production that no other existing producer has the capability to deliver.
- **Ramp up production capability:** Announced plans to ramp up to 18 million tonnes of annual operational capability. In 2022, we completed underground mine development, secured additional mining equipment, increased site-based storage and loadout, and hired additional employees.

### 3 Fortifying Our Business for the Future

- Explore alternative energy supply initiatives such as the deployment of wind and solar projects, along with partnerships with renewables developers to complement our self-generation at Rocanville, while lowering our environmental footprint.
- Progress partnerships with Indigenous communities and a continued focus on spending with our Indigenous suppliers.
- **Exploring renewables:** We advanced the research and planning stages of our renewable energy projects by deploying meteorological and energy resource data collection stations at four additional potash sites, for a total of six stations deployed since 2021. These stations help us better evaluate wind and solar resources at our sites.
- **Indigenous procurement:** We exceeded our Indigenous procurement target for our Potash business, reaching approximately 30 percent of eligible local spend with direct Indigenous economic impact.



#### Potash production capability ramp up

We now intend to safely ramp up our annual operational capability to approximately 18 million tonnes in 2026 at a very low capital cost of \$150 to \$200 per tonne. We have adjusted the initial timing to optimize capital expenditures in-line with the pace of expected market demand. We have the ability to bring on these volumes in increments, to preserve our flexibility should market fundamentals change.

## Our Strategy

# N Nitrogen Focus

## Advancing the evolution of low-carbon and clean ammonia

We are growing the Nitrogen business through strategic investment projects that improve the reliability and energy efficiency of our facilities while increasing capacity and product flexibility. We are also taking steps to reduce Scope 1 and 2 GHG emissions and are advancing opportunities to further enhance our capability to produce low-carbon ammonia.

## Approach

## Key 2022 Activities

### 1 Enhancing Margins and Asset Efficiency

- Execute on high-return and low-risk debottlenecking projects that enhance reliability, efficiency and productivity.
- **Efficiency and reliability projects:** We completed energy efficiency projects on ammonia plants at our Trinidad and Carseland sites.

### 2 Advancing Strategic Growth Initiatives

- Execute on high-return brownfield expansion projects that add incremental volumes while enhancing product flexibility and energy efficiency of our plants.
- **Brownfield expansion projects:** The first phase of projects, completed in 2021, added just under 1 million tonnes of gross production capacity. The second phase of projects is underway and is expected to add approximately 0.5 million tonnes of incremental production capacity through 2025.

### 3 Fortifying Our Business for the Future

- Advance our emissions reduction commitments and position for future transformation through projects focused on process improvements, carbon capture, energy efficiency initiatives and renewables evaluation.
- Explore new decarbonization technologies.
- Pursue projects to manufacture low-carbon fertilizers, including clean ammonia.
- **Low-carbon ammonia:** As of December 31, 2022, Nutrien has annual production capability for approximately 1 million tonnes of low-carbon ammonia across our Geismar, Redwater and Joffre nitrogen facilities.
- **Clean ammonia production:** We announced we are evaluating building one of the world's largest clean ammonia plants at our Geismar, LA site.
- **Emissions Abatement:** Completed Nitrous Oxide ("N<sub>2</sub>O") abatement projects at Lima, Kennewick and Augusta nitrogen sites.



#### Geismar Clean Ammonia Facility

A final investment decision is expected in the second half of 2023 and, if approved, construction is expected to be completed in 2027. The project is expected to yield 1.2 million tonnes of clean ammonia production annually using auto-thermal reforming technology, with the ability to capture at least 90 percent of CO<sub>2</sub> emissions. The plant would have access to lower-cost, reliable natural gas supply, and tie into Nutrien's expansive transportation and distribution network. This includes direct access to tidewater, to serve existing and new end markets around the world.

## Our Strategy

# P Phosphate Focus

## Optimizing the base business

We remain focused on optimizing our existing phosphate business by lowering our controllable operating costs, increasing plant reliability and further diversifying our product mix.

## Approach

## Key 2022 Activities

### 1 Enhancing Margins and Asset Efficiency

- Optimize product portfolio.
- Increase asset utilization rates, operating rates and reliability.

- **Increase asset utilization:** We have various in-flight projects to improve operating rates such as evaporator modifications and increased excavator capacity.

### 2 Advancing Strategic Growth Initiatives

- Expand portfolio of industrial and specialty fertilizer products that have historically provided more stable and higher margins.
- Explore potential emerging markets such as high-tech markets for high purity phosphoric acid used for lithium iron phosphate (“LFP”) battery technology.

- **Enhancing portfolio:** We are expanding our capability to produce industrial and specialty fertilizer products, such as sulfuric acid, ammonium polyphosphate, anhydrous hydrogen fluoride (“AHF”) and hydrofluorosilicic acid (“HFSA”).
- **Emerging market potential:** Multiple reliability projects within our purified acid plants are underway to address supply shortages and enhance capacity to meet the emerging needs of the market.

### 3 Fortifying Our Business for the Future

- Continue focusing on successful land reclamation and tailings pond management.

- **Reclamation projects:** Our Aurora site has permanently protected approximately 3,330 acres of natural uplands and wetlands in the surrounding area to preserve native plant and animal habitat, and our White Springs site planted over 800,000 trees and reclaimed over 2,100 acres between 2020 and 2022.

## Our Strategy

# Capital Allocation Framework

## Creating long-term value through balanced and disciplined capital allocation

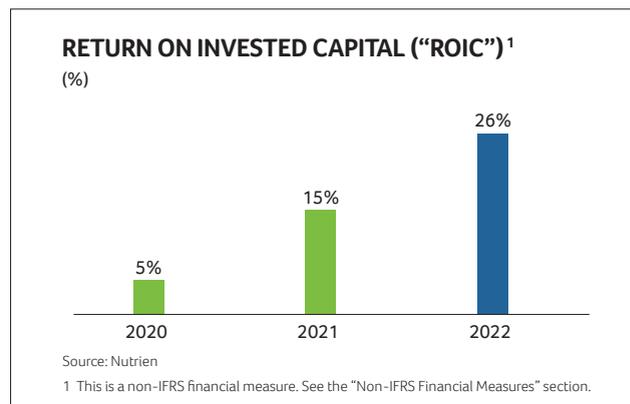
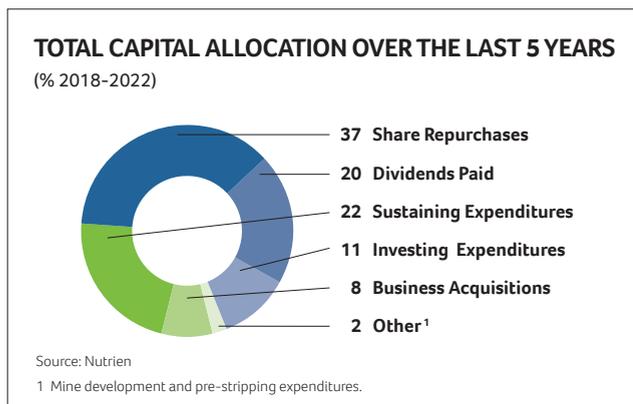
Nutrien takes a balanced and disciplined approach to capital allocation. Our framework prioritizes maintaining safe and reliable operations, a healthy balance sheet, investing in our business, and providing strong returns to shareholders through a stable and growing dividend and share repurchases.

Priorities		2022	2021
<b>Safe and Reliable Operations</b>	Sustaining Capital Expenditures <sup>1</sup>	\$1.4B	\$1.2B
<b>Strong Balance Sheet</b>	Adjusted Net Debt/ Adjusted EBITDA <sup>2</sup>	0.9x	1.4x
<b>Return Capital to Shareholders</b>	Cash Used for Dividends and Share Repurchases <sup>1</sup>	\$5.6B	\$2.1B
<b>High-Return Growth Opportunities</b>	Investing Capital Expenditures <sup>1</sup>	\$792M	\$510M
	Business Acquisitions <sup>3</sup>	\$407M	\$88M

<sup>1</sup> These are supplementary financial measures. See the "Other Financial Measures" section.

<sup>2</sup> This is a capital management financial measure that includes a non-IFRS component. See the "Non-IFRS Financial Measures" and "Other Financial Measures" sections.

<sup>3</sup> Net of cash acquired.



Since 2018 allocated **\$26B** in a balanced approach

Focused on **strategic initiatives** that enhance ROIC

#### Approach

#### Key 2022 Actions

- Our first priority is to sustain our assets to ensure we have safe and reliable operations.
- Continuous improvement initiatives and investments that enhance the utilization rates, reliability and efficiency of our assets.

- We replaced identified end-of-life assets at our Potash and Nitrogen sites.
- We invested in maintenance for our Retail distribution facilities.

- Provide sufficient and flexible access to liquidity while optimizing the cost of our capital through the cycle.
- Expect to maintain adjusted net debt/adjusted EBITDA leverage ratio below 3 times through the cycle.

- We maintained investment-grade credit ratings.
- We utilized our liquidity to fund higher working capital requirements due to high market prices and input costs.

- Return capital to shareholders through a combination of stable and growing dividends and share repurchases.
- Intend on factoring in reduction in share count in the decision criteria for future per share dividend growth.

- We returned a total of \$5.6 billion to shareholders through dividends and by repurchasing approximately 53 million shares.
- Average dividend yield of 2.3 percent throughout 2022. In February 2023, we announced a 10 percent increase to our quarterly dividend to \$0.53 per share.

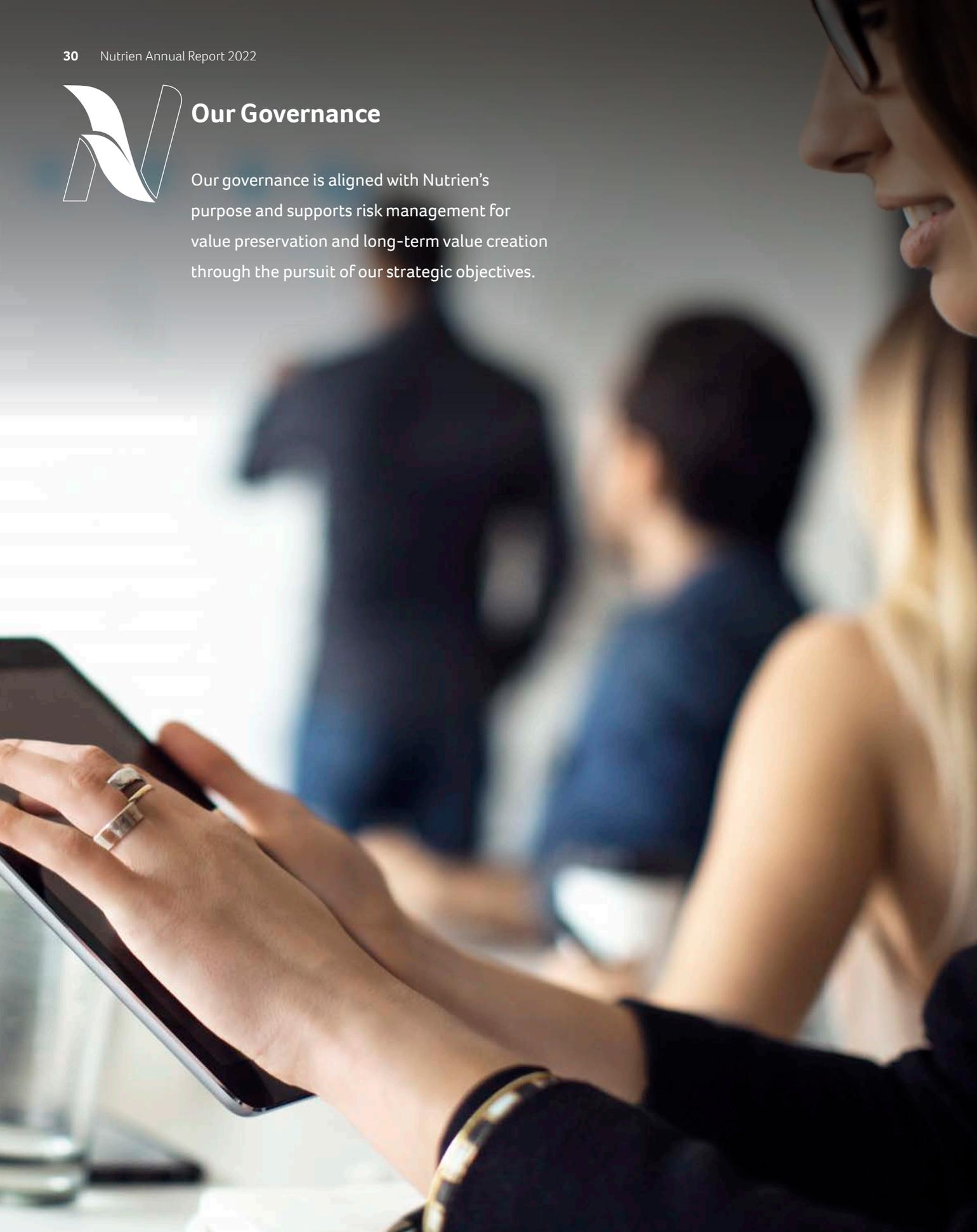
- When evaluating investment opportunities, we first consider the strategic fit, then we evaluate the economics of the projects using various financial return metrics. All projects are also evaluated on ESG factors to ensure alignment with our sustainability goals.

- We completed 21 acquisitions in Retail.
- We invested in Potash and Nitrogen operational capability growth.
- We invested in digital and ESG-related strategies to grow the business and reduce our environmental impact.



## Our Governance

Our governance is aligned with Nutrien's purpose and supports risk management for value preservation and long-term value creation through the pursuit of our strategic objectives.



## Our Governance

# Corporate Governance

## Strong corporate governance supports long-term value creation

Nutrien's Corporate Governance Structure includes policies and processes that define the roles of the Board and the Executive Leadership Team ("ELT"). Our Board oversees risk management and the execution of our corporate strategy. Below are a few highlights of our corporate governance practices. For more information, see our most recent Management Information Circular.

### Board Diversity

Having a mix of directors on the Board from varied backgrounds and with a diverse range of experience and skills fosters enhanced decision-making capacity and promotes strong corporate governance. Our Board Diversity Policy includes a target that women comprise no fewer than 30 percent of the Board members. As of December 31, 2022, four of our directors are women (33 percent of the total number of directors).

### Executive Compensation

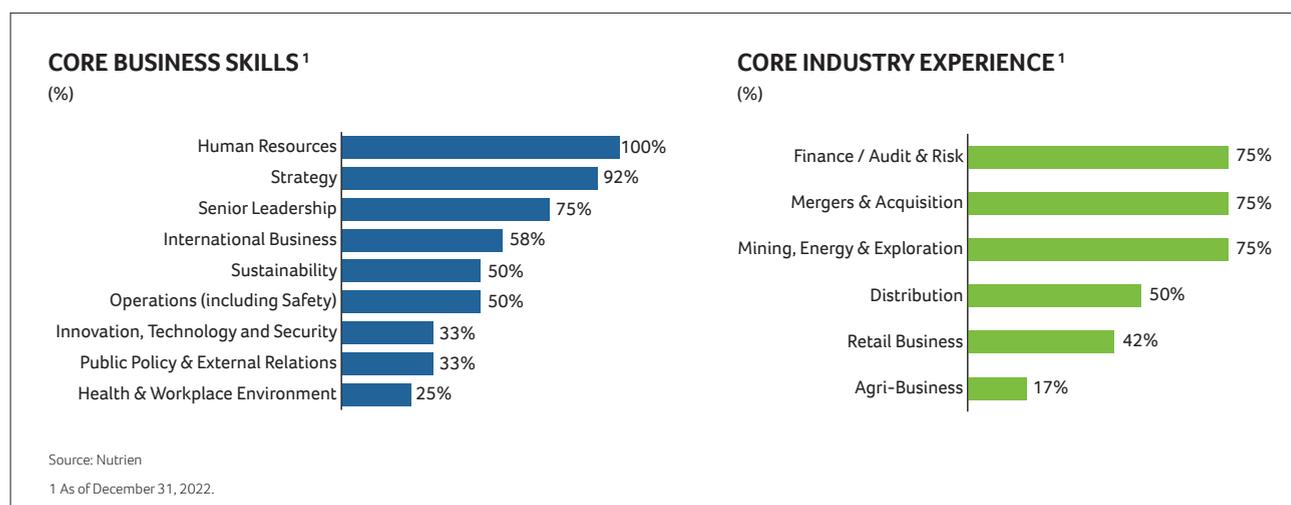
Nutrien's compensation framework is based on a pay-for-performance philosophy, with the majority of executive compensation being at risk. Since 2020, a component of executive compensation has been tied to demonstrated ESG performance, including the addition of progress on GHG emission projects and diversity-related metrics in 2021. Each year, we include an advisory "say on pay" vote at our annual meetings (in line with 2019 amendments in the Government of Canada's Bill C-97).

### Board Skills

Our Board competencies and skills matrices are essential tools to evaluate whether the Board has the right skills, perspectives, experience and expertise for proper oversight and effective decision-making. The Board regularly reviews the skills matrix.

Our Board orientation and education program helps new directors increase their understanding of their responsibilities and our operations, so that they can be fully engaged and contribute meaningfully to the Board and its committees. Our continuing education program provides regular and ongoing education to advance their knowledge of our business, industry, regulatory environment and other topical areas of interest.

## AREAS OF BOARD MEMBERS' SKILLS AND EXPERIENCE



## Our Board of Directors



**Russell Girling**  
Chair



**Ken Seitz**  
President and Chief  
Executive Officer



**Christopher Burley**  
Director



**Maura Clark**  
Director



**Michael Hennigan**  
Director



**Miranda Hubbs**  
Director



**Raj Kushwaha**  
Director



**Alice Laberge**  
Director



**Consuelo Madere**  
Director



**Keith Martell**  
Director



**Aaron Regent**  
Director



**Nelson Luiz Costa Silva**  
Director

## Our Executive Leadership Team



**Ken Seitz**  
President and Chief  
Executive Officer



**Noralee Bradley**  
Executive Vice  
President, External  
Affairs and Chief  
Sustainability and  
Legal Officer



**Pedro Farah**  
Executive Vice  
President and Chief  
Financial Officer



**Andy Kelemen**  
Executive Vice  
President and  
Chief Corporate  
Development and  
Strategy Officer



**Candace Laing**  
Senior Vice President,  
Chief Human  
Resources Officer



**Brent Poohkay**  
Executive Vice  
President and Chief  
Technology Officer



**Chris Reynolds**  
Executive Vice President  
and President, Potash



**Jeff Tarsi**  
Executive Vice President  
and President of  
Global Retail



**Mark Thompson**  
Executive Vice President,  
Chief Commercial Officer

## Our Governance

# Risk Governance

## Risk management is embedded throughout our organization

Risk management is an integral part of doing business and is governed by our Board, which has the highest level of oversight for risk governance. The Board is responsible for overseeing the execution and alignment of Nutrien's corporate strategy and risk management processes.

Nutrien's ELT has the responsibility of ensuring the Company's principal risks are being appropriately identified, assessed and addressed. Management keeps the Board and each of the Board committees regularly apprised of risks and developments relevant to their mandates.

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. By considering risk throughout our business, we seek to effectively manage the risks that could have an impact on our ability to deliver on our strategy.

### Role of the Board Committees

While the Board as a whole oversees our strategy and risk management processes, each Board committee has oversight over business topics and certain risk areas relevant to their committee mandate. More information can be found in Nutrien's Board and Board committee charters on our website at [www.Nutrien.com](http://www.Nutrien.com).

Board/ Board Committee	Oversight includes the following business topics or risk areas	
Board of Directors	<ul style="list-style-type: none"> <li>• Corporate strategy</li> <li>• Oversight of safety, health, environmental and security matters</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management</li> <li>• Human resources and compensation</li> <li>• Governance and compliance</li> </ul>
Audit Committee	<ul style="list-style-type: none"> <li>• Accounting and financial reporting</li> <li>• Internal controls</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance</li> <li>• Financial risk management</li> </ul>
Corporate Governance & Nominating Committee	<ul style="list-style-type: none"> <li>• Corporate governance</li> <li>• Board diversity</li> </ul>	<ul style="list-style-type: none"> <li>• Director orientation and continuing education</li> <li>• Board evaluation</li> </ul>
Human Resources & Compensation Committee	<ul style="list-style-type: none"> <li>• Executive compensation</li> <li>• Succession planning</li> </ul>	<ul style="list-style-type: none"> <li>• Equity, diversity and inclusion</li> <li>• Learning and development</li> </ul>
Safety & Sustainability ("S&S") Committee	<ul style="list-style-type: none"> <li>• Sustainability targets and goals</li> <li>• Risks, strengths and opportunities related to safety and sustainability including climate-related impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Safety and sustainability performance &amp; strategy</li> <li>• Cybersecurity and data privacy</li> <li>• Status of remediation projects and environmental provisions</li> </ul>

### Governance for Climate and Sustainability

The Board's Safety & Sustainability Committee has oversight over Nutrien's climate-related risks and opportunities. The S&S Committee generally meets on a quarterly basis and covers many sustainability-related issues within its mandate including those related to climate. Specifically, the S&S Committee's role includes overseeing: policies relating to sustainability and progress towards sustainability goals; approval of Nutrien's annual ESG Report; reviewing progress against Nutrien's Feeding the Future Plan and associated ESG targets and goals; and review of Nutrien's climate-related risks and opportunities. This committee directly advises the Board on these and other sustainability matters, including safety.

## Our Governance

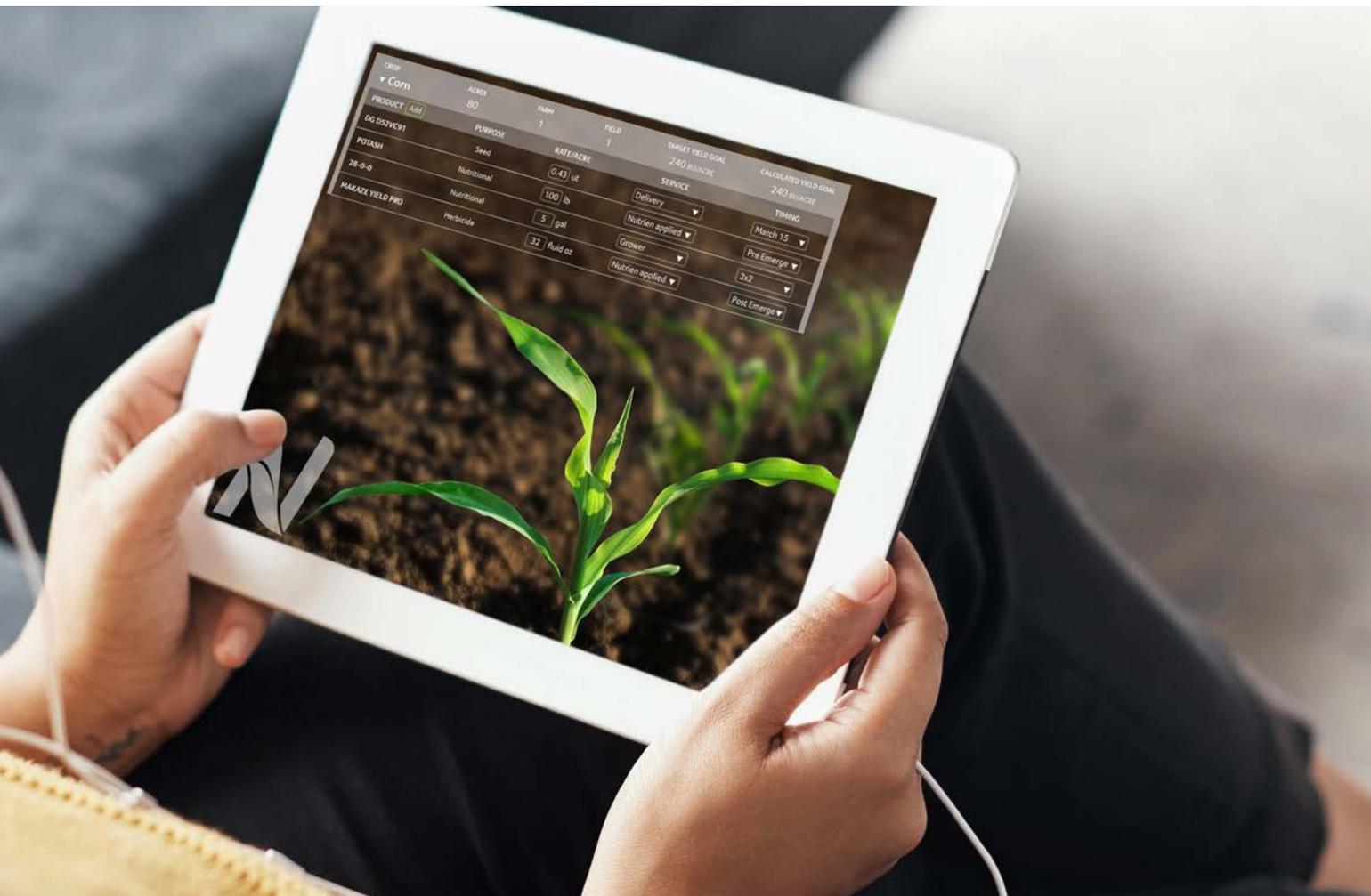
# Risk Management Process

## Nutrien integrates risk management into our strategy and business activities to facilitate informed risk taking and responsible management of resources

Our annual Enterprise Risk Management process is overseen by our Enterprise Risk Management Team and guided by our global risk management framework. The framework promotes consistent application of risk management principles and processes across our organization and is scalable to support all levels of the business.

All operating segments and corporate functions use this framework to identify, assess and develop mitigation strategies for key risks that could affect their strategy, operations or future performance. Assessment criteria embedded in the risk framework allow for comparability of different types of risks, including climate-related risks. Key criteria include the likelihood of impacting our business and the potential severity of impact.

Risks are evaluated individually and collectively at the management level to fully understand Nutrien's risk landscape and identify interdependencies between risks. A consolidated view of our risks is presented to our ELT and senior leaders for review and discussion, along with outputs from external environment scans and emerging risk workshops. Nutrien's significant enterprise-wide risks are then presented to the Board at least annually.





## Our Key Enterprise Risks

Nutrien characterizes a key risk as a risk or combination of risks that could threaten the achievement of our vision, our business model, future financial performance or ability to deliver on our strategy.



# Key Enterprise Risks

## Identifying and managing risks is critical to achieving our strategic objectives

Our key enterprise risks are discussed below. While these represent our significant risks, we also continue to be exposed to other important general business, operational and climate-related risks. For a more detailed discussion of these key risks and other risks that may affect us, refer to Nutrien's 2022 Annual Information Form.

### 1 Shifting Market Fundamentals

#### Description

Changes in global macroeconomic conditions – including trade tariffs and/or other trade restrictions, volatility in global markets, supply chain constraints, increased price competition, or a significant change in agriculture production or consumption trends – could lead to a low crop price environment and reduced demand for our products or increased prices or decreased availability of raw materials used in making our products.

#### Risk Management Approach

Our global footprint, diversified business model and portfolio of agricultural products, services and solutions are designed to enable us to respond to changing economic conditions. We have a favorable cost-structure and the flexibility to make operational changes across our portfolio in order to minimize the impact of changing market dynamics. We also engage in market development, education, training and customer relations initiatives that support growth.

### 2 Agriculture Changes and Trends

#### Description

The following agriculture-related factors, among others, could impact our strategy, demand for our products and/or services and/or financial performance: farm and industry consolidation; shifting grower demographics; agriculture productivity and development; changes in consumer preferences; increasing focus on sustainability in agriculture (including soil health; availability of arable land; diminishing biodiversity; water management); and technological innovation and digital business models.

#### Risk Management Approach

Our integrated business platform, global footprint, diversified portfolio and strategies are designed to adapt to changes in the agriculture industry and help position us to drive long-term value creation. We are focused on delivering value-added sustainable agriculture solutions for our growers and continued investment in digital tools and technologies.

**See page 22** of this report for more information on our strategic initiatives.



### 3 Climate Change

#### Description

Climate change may cause or result in, among other things, more frequent and severe weather events, diminishing biodiversity, impacts to growing seasons or crop yields, and changing weather factors such as temperature, precipitation, wind and water levels, and affect fresh water availability. Physical risks from climate change may also result in operational or supply chain disruption, depending on the nature of the event.

Impacts from transition risks could include, but not limited to, policy constraints on emissions, carbon pricing mechanisms, water restrictions, land use restrictions or incentives, changing consumer preferences, and market demand and supply shifts. We are also subject to reputational risks associated with climate change, including our stakeholders' perception of our role in the transition to a lower-carbon economy. These and other factors resulting from climate change could adversely impact our business, financial condition, results of operations or liquidity.

#### Risk Management Approach

Nutrien is focused on environmental and climate action by advancing sustainable agriculture practices at the farm level and reducing our carbon footprint of our operations. Key focus areas include providing whole-acre solutions to growers, advancing our Carbon Program, exploring renewable energy and pursuing low-carbon fertilizers.

Our capital allocation framework and preventive maintenance programs help support the long-term reliability and efficiency of our assets. Additionally our geographically diversified network of facilities and operations helps to minimize the overall impact of physical risk from climate change on our company.

For more information refer to our most recent ESG Report on our website at [www.Nutrien.com](http://www.Nutrien.com).

### 4 Changing Regulations

#### Description

Changing laws, regulations and government policies including those relating to environmental and climate change, including regulation of GHG emissions, as well as health and safety, taxes and royalties – could affect our ability to produce or sell certain products, reduce our efficiency and competitive advantage, increase our costs of raw materials, energy, transportation and compliance, or require us to make capital improvements to our operations – all of which could impact our strategy, operations, financial performance or reputation.

#### Risk Management Approach

Our Government & Industry Affairs Team has an active engagement strategy with governments and regulators. This allows us to keep current on regulatory developments affecting our business or industry, allowing us to anticipate new or changing laws and regulations and put us in the best position for success while leveraging our industry association allies.

We have initiatives and commitments supporting environment and climate action, as part of our Feeding the Future Plan, to assist in managing the impact of potential regulatory changes.

### 5 Cybersecurity Threats

#### Description

Cyberattacks, ransomware events, and breaches or exposure to potential computer viruses of our systems, third-party service providers' systems or cloud-based platforms could lead to disruptions to our operations, loss of data, or the unintended disclosure of confidential information and/or personally identifiable information or property damage. Any of these could result in business disruptions, reputational damage, personal injury or third-party claims, impacting our operations, financial performance or reputation.

#### Risk Management Approach

We maintain a heightened focus on cybersecurity and data privacy across our business, which is supported by our cybersecurity strategy, policy and framework.

Nutrien promotes a strong culture of cybersecurity awareness and focuses on minimizing threats and vulnerabilities. Threat and risk assessments are completed for all new information technology systems, and our cybersecurity incident response processes are backstopped by external response measures. We also conduct regular simulated phishing and targeted cybersecurity training.

For more information refer to our most recent ESG Report on our website at [www.Nutrien.com](http://www.Nutrien.com).

## Key Enterprise Risks

### 6 Political, Economic and Social Instability

#### Description

Political, economic and social instability may affect our business including, for instance, if any of the jurisdictions in which we operate or do business in introduce restrictions on monetary distributions, forced divestitures or changes to or nullification of existing agreements, mining permits or leases, or the imposition of tariffs, exchange controls, international trade restrictions, embargoes, barriers or other restrictions. Instability in political or regulatory regimes could also affect our ability to do business and could impact our sales and operating results, our reputation, or the value of our assets.

#### Risk Management Approach

Our Government & Industry Affairs Team has an active engagement strategy with governments, regulators and other stakeholders in the countries where we operate or plan to operate. We assess capital investments and project decisions against political, country and other related risk factors. Dedicated teams regularly monitor developments and global trends that may impact us.

### 7 Talent and Organization Culture

#### Description

An inability to attract, develop, engage or retain skilled employees, or establish the right organizational culture or promote and foster a respectful, diverse and inclusive workplace, could impact productivity, reliability, safety performance, costs, customer relationships and/or our reputation.

#### Risk Management Approach

Our Talent Attraction and Sourcing Team focuses on building a diverse, inclusive and talented workforce. We are committed to the career development of our employees and building a culture grounded in our organizational purpose and the values of safety and integrity. Our talent succession process focuses on identifying and managing critical roles and the proactive build-up of internal and external bench strength with an eye to diversity. Our incentive programs are competitive, performance-based and support our purpose-driven culture.

### 8 Stakeholder Support

#### Description

Our stakeholders may not support our business plans, structure, strategy, sustainability initiatives, or climate commitments and social responsibilities. Our inability to meet our sustainability and climate-related commitments and targets may also have an adverse effect on our stakeholder support, among others. Loss of stakeholder confidence could impair our ability to execute our business plans, negatively impact our ability to produce or sell our products, and may lead to reputational damage, increased costs, financial losses, shareholder action or negatively impact our access to or cost of capital.

#### Risk Management Approach

Our Issues Management Team monitors stakeholder issues and regularly engages with them to identify and address their concerns and communicate the long-term value opportunities associated with our business. We also have an active Community Relations Team and community investment programs. Our Feeding the Future Plan is structured to help support what matters most to our stakeholders.

**See page 5** of this report for more information on our 2030 sustainability commitments.

## 9 Supply Chains

### Description

Supply chain disruptions could result in difficulties supplying materials to our facilities and/or impair our ability to deliver products to our customers in a timely manner. If certain key raw materials, parts and/or supplies used in our operations are not available, our business could be disrupted. Ongoing geopolitical conflicts, including the war between Russia and Ukraine, and/or the COVID-19 pandemic could still create supply chain challenges and disruptions, and/or limit our ability to timely sell or distribute our products in the future, any of which could negatively impact our business, financial condition and operating results.

### Risk Management Approach

Our integrated model provides us the flexibility to optimize operations, transportation and logistics, or increase supply chain efficiencies to adapt to potential disruption. We regularly review our suppliers to ensure we can maintain critical feedstocks and can leverage our diverse retail distribution network and expansive fertilizer terminal and transportation network to effectively manage product logistic challenges.

## 10 Capital Redeployment

### Description

Our inability to deploy capital to efficiently achieve sustained growth, effectively execute on opportunities or meet investor preferences – whether due to market conditions, lack of options or otherwise, or deploying capital in a manner inconsistent with our strategic priorities – could impact our returns, operations, reputation or access to or cost of capital.

### Risk Management Approach

We are focused on creating long-term value through a balanced and disciplined approach to capital allocation. We prioritize maintaining safe and reliable operations, a healthy balance sheet, investing in our business and providing strong returns to shareholders.

**See page 29** of this report for more information on our capital allocation priorities and key actions during the year.

## 11 Safety, Health and Environment

### Description

Our operations are subject to safety, health and environmental risks inherent in mining, manufacturing, transportation, storage and distribution of our products. These factors could result in injuries or fatalities, or impact air quality, biodiversity, water resources or related ecosystems near our operations, impacting our operations, financial performance or reputation.

### Risk Management Approach

Our safety strategy and robust governance processes ensure we follow all regulatory, industry and internal standards of safety, health and environmental responsibility that involve independent audits and assessments. We have structured incident prevention and response systems in place and conduct regular security vulnerability assessments. We have crisis communication protocols and emergency response programs across our business and maintain environmental monitoring and control systems, including third-party reviews of key containment structures.

Refer to our website at [www.Nutrien.com](http://www.Nutrien.com) for more information on our safety strategy.



## Our Results and Outlook

We report our results in four reportable operating segments: Nutrien Ag Solutions (“Retail”), Potash, Nitrogen and Phosphate.

- Adjusted EBITDA is the primary profit measure used to evaluate the segments’ performance as it excludes the impact of non-cash impairments and impairment reversals and other costs that are centrally managed by our corporate function. Refer to Note 3 to the consolidated financial statements for details.
- Net sales (sales less freight, transportation and distribution expenses) is the primary revenue measure used in planning and forecasting in the Potash, Nitrogen and Phosphate operating segments.



## Our Results and Outlook

# 2022 Nutrien Ag Solutions (“Retail”) Financial Performance

Our Retail business delivered record adjusted EBITDA of \$2.3 billion driven by higher sales and gross margins across nearly all product categories and regions where we operate. This was supported by strong agriculture fundamentals, higher selling prices and growth in proprietary product margins. We improved our cash operating coverage ratio<sup>1</sup> to 55 percent compared to the prior year as a result of strong margins. Our proprietary products portfolio contributed 24 percent of total Retail gross margin, and Retail digital platform sales<sup>2</sup> increased to \$2.8 billion, representing 18 percent of Retail digital platform sales to total sales<sup>2</sup> in North America. Nutrien Financial generated growth in US finance offerings and program adoption and continued its expansion into Australia.

Acquisitions continue to be a significant part of our growth strategy. We completed 21 acquisitions in the US, Brazil and Australia in 2022 and were more selective given the stage of the agricultural cycle.

1 These are non-IFRS financial measures. See the “Non-IFRS Financial Measures” section.

2 These are supplementary financial measures. See the “Other Financial Measures” section.

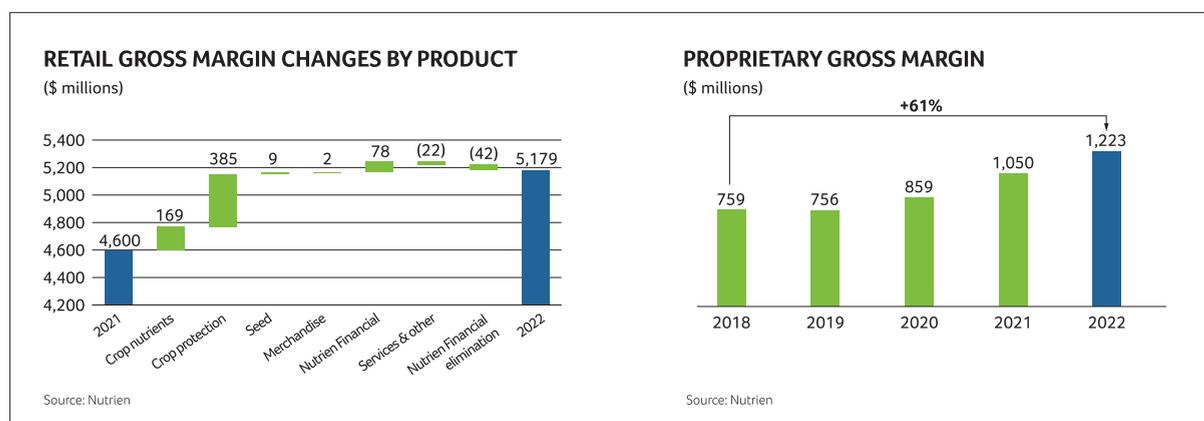
(millions of US dollars, except as otherwise noted)	Dollars			Gross Margin			Gross Margin (%)	
	2022	2021	% Change	2022	2021	% Change	2022	2021
<b>Sales</b>								
Crop nutrients	10,060	7,290	38	1,766	1,597	11	18	22
Crop protection products	7,067	6,333	12	1,936	1,551	25	27	24
Seed	2,112	2,008	5	428	419	2	20	21
Merchandise	1,019	1,033	(1)	174	172	1	17	17
Nutrien Financial	267	189	41	267	189	41	100	100
Services and other <sup>1</sup>	966	980	(1)	749	771	(3)	78	79
Nutrien Financial elimination <sup>1,2</sup>	(141)	(99)	42	(141)	(99)	42	100	100
	21,350	17,734	20	5,179	4,600	13	24	26
Cost of goods sold	16,171	13,134	23					
<b>Gross margin</b>	5,179	4,600	13					
<b>Expenses<sup>3</sup></b>	3,621	3,378	7					
<b>Earnings before finance costs and taxes (“EBIT”)</b>	1,558	1,222	27					
<b>Depreciation and amortization</b>	752	706	7					
<b>EBITDA</b>	2,310	1,928	20					
<b>Adjustments<sup>4</sup></b>	(17)	11	n/m					
<b>Adjusted EBITDA</b>	2,293	1,939	18					

1 Certain immaterial figures have been reclassified for the twelve months ended December 31, 2022.

2 Represents elimination for the interest and service fees charged by Nutrien Financial to Retail branches.

3 Includes selling expenses of \$3,392 million (2021 – \$3,124 million).

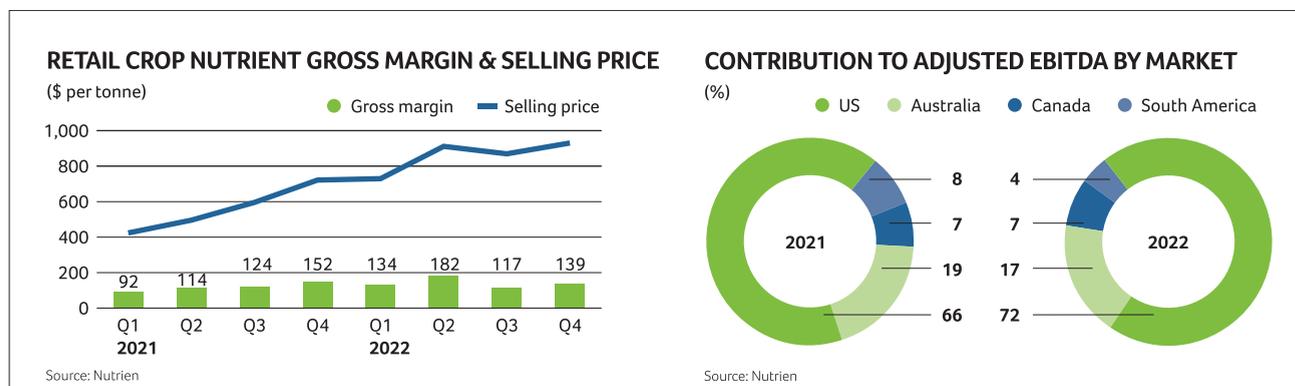
4 See Note 3 to the consolidated financial statements.



The most significant contributors to the changes in our Retail financial performance were as follows:

#### 2022 vs 2021

Crop nutrients	Sales increased in 2022 due to higher selling prices. Gross margin increased in 2022, due to strategic procurement and the timing of inventory purchasing earlier in 2022. Sales volumes decreased in 2022 due to reduced application resulting from a delayed North American planting season and stronger fourth quarter engagement in 2021 due to a rising price environment.
Crop protection products	Sales and gross margin increased in 2022, particularly in North America, due to higher selling prices along with increased sales and gross margin in proprietary products. Gross margin percentage increased in 2022, supported by the reliability of our supply chain and strategic procurement in a rising price environment.
Seed	Sales and gross margin increased in 2022 due to higher pricing along with higher sales of corn in North America, soybean in South America and canola in Australia. Gross margin increased due to higher selling prices.
Merchandise	Gross margin increased in 2022 due to strong margin performance in Australia animal management, farm services and general merchandise partially offset by unfavorable foreign exchange rate impact on Australian dollars.
Nutrien Financial	Sales increased in 2022 due to higher utilization and adoption of our programs and a higher interest-bearing trade receivable balance, driven by strong commodity pricing.
Services and other	Sales and gross margin decreased in 2022 mainly due to lower livestock volumes in Australia, along with an unfavorable foreign exchange rate impact on Australian dollars.
Selling expenses	Expenses increased in 2022 due to higher sales activity, competitive pressure on wages and inflationary impacts.
Adjusted EBITDA	Adjusted EBITDA increased in 2022 due to higher sales and gross margins across nearly all product categories and regions where we operate. This was supported by strong agriculture fundamentals, higher selling prices and growth in proprietary products margins. Selling expenses as a percentage of sales improved compared to 2021.



### Selected Retail Measures

	2022	2021
<b>Proprietary products gross margin (millions of US dollars)</b>		
Crop nutrients	370	328
Crop protection products	675	527
Seed	166	183
Merchandise	12	12
All products	1,223	1,050
<b>Proprietary products margin as a percentage of product line margin (%)</b>		
Crop nutrients	21	21
Crop protection products	35	34
Seed	39	44
Merchandise	7	7
All products	24	23

	2022	2021
<b>Crop nutrients sales volumes (tonnes – thousands)</b>		
North America	8,106	9,848
International	3,407	3,535
Total	11,513	13,383
<b>Crop nutrients selling price per tonne</b>		
North America	916	556
International	774	512
Total	874	545
<b>Crop nutrients gross margin per tonne</b>		
North America	182	133
International	86	82
Total	153	119

Financial performance measures	2023 Target	2022 Actuals	2021 Actuals
Retail adjusted EBITDA margin (%) <sup>1</sup>	11	11	11
Retail adjusted EBITDA per US selling location (thousands of US dollars) <sup>1,2</sup>	1,100	1,923	1,481
Retail adjusted average working capital to sales (%) <sup>3</sup>	17	17	13
Retail adjusted average working capital to sales excluding Nutrien Financial (%) <sup>3</sup>	n/a	2	–
Nutrien Financial adjusted net interest margin (%) <sup>3</sup>	n/a	6.8	6.6
Retail cash operating coverage ratio (%) <sup>3</sup>	60	55	58
Retail normalized comparable store sales (%) <sup>3</sup>	n/a	(4)	7
Retail digital platform sales to total sales (%) <sup>1,4</sup>	50	18	17

1 These are supplementary financial measures. See the “Other Financial Measures” section.

2 Excluding acquisitions.

3 These are non-IFRS financial measures. See the “Non-IFRS Financial Measures” section.

4 Grower and employee Retail sales in North America entered directly into the digital platform as a percentage of total Retail sales in North America.

## Nutrien Financial

We offer flexible financing solutions to our customers in support of Nutrien’s agricultural product and service sales. Qualifying Retail customers in the US and Australia are offered extended payment terms, typically up to one year, to facilitate the alignment of grower crop cycles with cash flows. Nutrien Financial revenues are primarily earned through interest and service fees that are charged to our Retail branches.

We hold a significant portion of receivables from customers that have historically experienced a low-default rate. We manage our credit portfolio based on a combination of review of customer credit metrics, past experience with the customer and exposure to any single customer. Nutrien Financial, which is our wholly-owned finance captive, monitors and services the portfolio of our high-quality receivables from customers that have the lowest risk of default among Retail’s receivables from customers. We monitor the results of this portfolio of receivables separately because we calculate the cost of capital attributable to the high-quality receivables from customers differently from our other receivables. Specifically, we assume a debt to equity ratio of 7:1 in funding Nutrien Financial receivables, based on the underlying credit quality of the assets.

Nutrien Financial relies on corporate capital for funding. We estimate the deemed interest expense using an average borrowing rate of 1.4 percent applied to the notional debt required to fund the portfolio of receivables from customers monitored and serviced by Nutrien Financial. The balance of our Retail receivables (outside of Nutrien Financial) are subject to marginally higher credit risk.

	As at December 31,							2021 Net
(millions of US dollars)	Current	<31 Days Past Due	31–90 Days Past Due	>90 Days Past Due	Gross Receivables	Allowance <sup>1</sup>	2022 Net Receivables	Receivables
North America	1,658	225	75	78	2,036	(29)	2,007	1,488
International	574	53	14	28	669	(7)	662	662
Nutrien Financial receivables <sup>2</sup>	2,232	278	89	106	2,705	(36)	2,669	2,150

1 Bad debt expense on the above receivables for the twelve months ended December 31, 2022 was \$10 million (2021 – \$10 million) in the Retail segment.

2 Gross receivables include \$2,260 million (2021 – \$1,792 million) of very low risk of default and \$445 million (2021 – \$386 million) of low risk of default.

## Our Results and Outlook

## 2022 Potash Financial Performance

Our Potash business delivered record adjusted EBITDA of \$5.8 billion as higher realized prices and strong offshore volumes more than offset lower North American sales volumes, higher cash cost of goods sold per tonne and higher provincial mining taxes. Potash supply constraints from Russia and Belarus during 2022 resulted in higher prices in both spot and contract markets. Potash demand in North America and Brazil declined in the second half of 2022 as buyers worked through inventory that was built early in the year. These regions represent the two largest markets for Nutrien's potash, therefore the decline in demand and prices in the second half of 2022 had a more significant near-term impact on our business.

We adjusted our production plans in the second half of 2022 in response to lower market demand and pulled forward some maintenance activities.

(millions of US dollars, except as otherwise noted)	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
<b>Manufactured product</b>									
Net sales									
North America	2,485	1,638	52	3,729	5,159	(28)	667	317	110
Offshore	5,414	2,398	126	8,808	8,466	4	615	283	117
Cost of goods sold	7,899	4,036	96	12,537	13,625	(8)	630	296	113
	1,400	1,285	9				112	94	19
<b>Gross margin – total</b>	6,499	2,751	136				518	202	156
<b>Expenses <sup>1</sup></b>	1,173	512	129	<b>Depreciation and amortization</b>			35	36	(1)
<b>EBIT</b>	5,326	2,239	138	<b>Gross margin excluding depreciation and amortization – manufactured <sup>3</sup></b>			553	238	133
<b>Depreciation and amortization</b>	443	488	(9)						
<b>EBITDA</b>	5,769	2,727	112	<b>Potash controllable cash cost of product manufactured <sup>3</sup></b>			58	52	12
<b>Adjustments <sup>2</sup></b>	–	9	(100)						
<b>Adjusted EBITDA</b>	5,769	2,736	111						

<sup>1</sup> Includes provincial mining taxes of \$1,149 million (2021 – \$466 million).

<sup>2</sup> See Note 3 to the consolidated financial statements.

<sup>3</sup> These are non-IFRS financial measures. See the "Non-IFRS Financial Measures" section.

The most significant contributors to the changes in our Potash financial performance were as follows:

## 2022 vs 2021

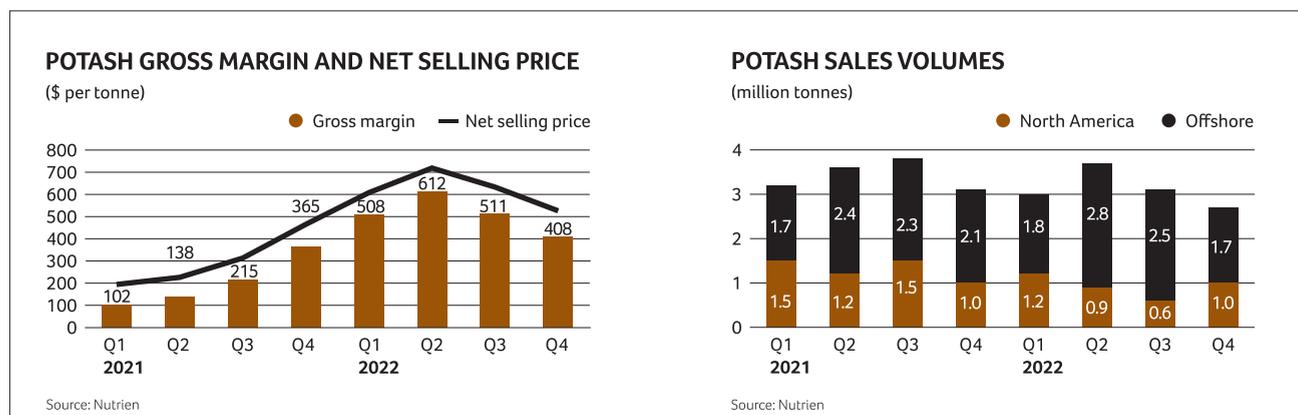
Sales volumes	North America sales volumes decreased in 2022 due to a compressed spring application season that resulted in high inventory carryover along with cautious purchasing in key markets caused by a declining price environment during the second half of the year. Offshore sales volumes were the highest of any full year on record due to reduced supply from Eastern Europe.
Net realized selling price	Average net realized selling prices increased in 2022 due to the impact of reduced supply, in particular related to uncertainty on future supply from Eastern Europe due to the imposition of sanctions on Belarus and financial restrictions on Russia.
Cost of goods sold per tonne	Costs increased in 2022 primarily due to higher royalties resulting from increased net realized selling prices. Potash controllable cash cost of product manufactured per tonne increased mainly due to lower production volumes and higher maintenance activities in the second half of 2022.
Expenses	Expenses increased in 2022 primarily due to higher provincial mining taxes from higher average potash selling prices, which are the basis for certain taxes. We are subject to Saskatchewan provincial resource taxes, including the potash production tax and the resource surcharge.
Adjusted EBITDA	Adjusted EBITDA increased in 2022 due to higher net realized selling prices and strong offshore sales volumes, which more than offset lower North American sales volumes, higher cost of goods sold and higher provincial mining taxes.

## Canpotex Sales by Market

(percentage of sales volumes, except as otherwise noted)

	2022	2021	Change
Latin America	34	38	(4)
Other Asian markets <sup>1</sup>	34	35	(1)
China	14	11	3
Other markets	10	10	–
India	8	6	2

<sup>1</sup> All Asian markets except China and India.



## Potash Production

(million tonnes KCI)	Nameplate Capacity <sup>1</sup>	Operational Capability <sup>2</sup>		Production	
		2023	2022	2022	2021
Rocanville Potash	6.5	5.2	5.2	4.89	5.00
Allan Potash	4.0	3.0	2.9	2.50	2.78
Vanscoy Potash	3.0	1.4	1.3	1.01	1.05
Lanigan Potash	3.8	3.1	2.8	2.46	2.91
Cory Potash	3.0	2.2	2.1	1.89	1.77
Patience Lake Potash	0.3	0.3	0.3	0.26	0.28
<b>Total</b>	<b>20.6</b>	<b>15.2</b>	<b>14.6</b>	<b>13.01</b>	<b>13.79</b>
Shutdown weeks <sup>3</sup>				<b>18</b>	14

1 Represents estimates of capacity as at December 31, 2022. Estimates based on capacity as per design specifications or Canpotex entitlements once determined. In the case of Patience Lake, estimate reflects current operational capability. Estimates for all other facilities do not necessarily represent operational capability.

2 Estimated annual achievable production level at current staffing and operational readiness (2023 was estimated at the beginning of the year, and may vary during the year, and year-to-year, including between our facilities). Estimate does not include inventory-related shutdowns and unplanned downtime. In 2022, we increased capability by 0.3 million tonnes as part of our announced operational capability ramp-up plan.

3 Represents weeks of full production shutdown, excluding the impact of any periods of reduced operating rates and planned routine annual maintenance shutdowns and announced workforce reductions.

## Our Results and Outlook

# 2022 Nitrogen Financial Performance

Nutrien delivered record Nitrogen adjusted EBITDA of \$3.9 billion primarily due to higher net realized prices and higher earnings from equity-accounted investees, which more than offset higher natural gas costs and lower sales volumes.

Nitrogen benchmark prices strengthened in 2022 due to higher energy prices in key nitrogen producing regions and global supply constraints. Record high European natural gas prices led to reduced nitrogen operating rates in Europe, particularly in the second half of the year. Russian ammonia exports were approximately one quarter of pre-conflict levels and Chinese urea exports were down approximately 50 percent year-over-year driven by export restrictions. Gas curtailments in Trinidad, unplanned plant outages and a compressed North America spring application season resulted in lower volumes sold. Cost of production increased due to higher natural gas, raw material and other input costs.

(millions of US dollars, except as otherwise noted)	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
<b>Manufactured product</b>									
Net sales									
Ammonia	2,641	1,393	90	2,715	2,919	(7)	973	477	104
Urea	1,920	1,463	31	2,757	3,059	(10)	696	478	46
Solutions, nitrates and sulfates	1,829	1,128	62	4,551	4,747	(4)	402	238	69
	6,390	3,984	60	10,023	10,725	(7)	638	371	72
Cost of goods sold	3,197	2,353	36				319	219	46
Gross margin – manufactured	3,193	1,631	96				319	152	110
<b>Gross margin – other <sup>1</sup></b>	88	95	(7)	<b>Depreciation and amortization</b>			56	52	7
<b>Gross margin – total</b>	3,281	1,726	90	<b>Gross margin excluding depreciation and amortization – manufactured <sup>4</sup></b>			375	204	84
<b>(Income) expenses <sup>2</sup></b>	(92)	(3)	n/m						
<b>EBIT</b>	3,373	1,729	95	<b>Ammonia controllable cash cost of product manufactured <sup>4</sup></b>			59	50	18
<b>Depreciation and amortization</b>	558	557	–						
<b>EBITDA</b>	3,931	2,286	72						
<b>Adjustments <sup>3</sup></b>	–	22	(100)						
<b>Adjusted EBITDA</b>	3,931	2,308	70						

1 Includes other nitrogen (including ESN<sup>®</sup> and Rainbow) and purchased products and comprises net sales of \$1,143 million (2021 – \$705 million) less cost of goods sold of \$1,055 million (2021 – \$610 million).

2 Includes earnings from equity-accounted investees of \$233 million (2021 – \$76 million).

3 See Note 3 to the consolidated financial statements.

4 These are non-IFRS financial measures. See the “Non-IFRS Financial Measures” section.

The most significant contributors to the changes in our Nitrogen financial performance were as follows:

### 2022 vs 2021

Sales volumes	Sales volumes for ammonia and urea decreased in 2022 mainly due to Trinidad natural gas curtailments, unplanned plant outages and a compressed North American spring application season.
Net realized selling price	Average net realized selling prices increased in 2022 due to higher benchmark prices resulting from tight global supply and higher energy prices in key nitrogen producing regions.
Cost of goods sold per tonne	Costs increased in 2022 primarily due to higher natural gas costs. Raw materials and other input costs were also higher in 2022 compared to 2021. Ammonia controllable cash cost of product manufactured per tonne increased due to lower production and higher input costs (mainly electricity).
(Income) expenses	Other income increased in 2022 mainly due to higher earnings from our equity-accounted investment in Profertil. Profertil's earnings were higher mainly due to higher urea net selling prices from higher benchmark prices.
Adjusted EBITDA	Adjusted EBITDA increased in 2022 primarily due to higher net realized selling prices and higher earnings from equity-accounted investees, which more than offset higher cash cost of goods sold per tonne and lower sales volumes.

## Natural Gas Prices in Cost of Production

(US dollars per MMBtu, except as otherwise noted)

	2022	2021	% Change
Overall gas cost excluding realized derivative impact	7.82	4.60	70
Realized derivative impact	(0.05)	0.01	n/m
Overall gas cost	7.77	4.61	69
Average NYMEX	6.64	3.84	73
Average AECO	4.28	2.84	51

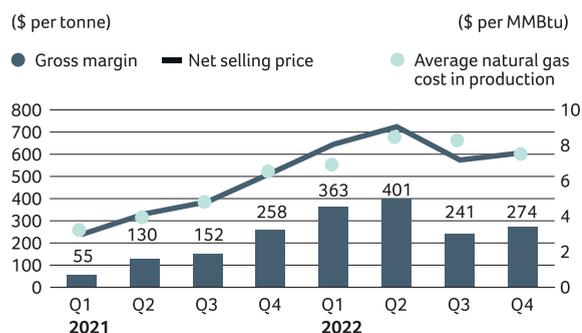
### 2022 vs 2021

Overall gas cost	Gas prices in our cost of production increased in 2022 as a result of higher North American gas index prices and increased gas costs in Trinidad, where our gas prices are linked to ammonia benchmark prices.
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## Selected Nitrogen Measures

	2022	2021
<b>Sales volumes (tonnes – thousands)</b>		
Fertilizer	5,371	6,028
Industrial and feed	4,652	4,697
<b>Net sales (millions of US dollars)</b>		
Fertilizer	3,512	2,364
Industrial and feed	2,878	1,620
<b>Net selling price per tonne</b>		
Fertilizer	654	392
Industrial and feed	619	345

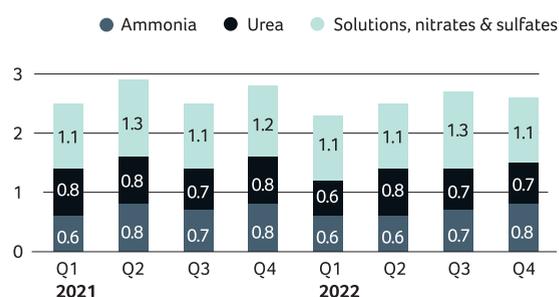
### NITROGEN GROSS MARGIN, NET SELLING PRICE AND NATURAL GAS COST



Source: Nutrien

### NITROGEN SALES VOLUMES

(million tonnes)



Source: Nutrien

## Nitrogen Production

(million tonnes product, except as otherwise noted)	Ammonia <sup>1</sup>			Urea <sup>2</sup>		
	Annual Capacity <sup>3</sup>	Production		Annual Capacity <sup>3</sup>	Production	
		2022	2021		2022	2021
Trinidad Nitrogen <sup>4</sup>	2.2	1.46	1.66	0.7	0.42	0.72
Redwater Nitrogen	0.9	0.78	0.72	0.7	0.55	0.53
Augusta Nitrogen	0.8	0.59	0.73	0.7	0.40	0.55
Lima Nitrogen	0.7	0.71	0.76	0.5	0.50	0.50
Geismar Nitrogen	0.5	0.58	0.50	0.4	0.37	0.33
Carseland Nitrogen	0.5	0.39	0.52	0.7	0.50	0.72
Fort Saskatchewan Nitrogen	0.5	0.47	0.46	0.4	0.44	0.41
Borger Nitrogen	0.5	0.41	0.25	0.6	0.49	0.31
Joffre Nitrogen	0.5	0.37	0.40	–	–	–
<b>Total</b>	<b>7.1</b>	<b>5.76</b>	<b>6.00</b>	<b>4.7</b>	<b>3.67</b>	<b>4.07</b>
Adjusted total <sup>5</sup>		<b>3.93</b>	3.94			
Ammonia operating rate <sup>5</sup> (%)		<b>90</b>	90			

1 All figures are shown on a gross production basis.

2 Reflects capacity and production of urea liquor prior to final product upgrade. Urea liquor is used in the production of solid urea, UAN and DEF.

3 Annual capacity estimates include allowances for normal operating plant conditions.

4 In 2022, Trinidad production was restricted due to natural gas curtailments, which is expected to extend into 2023.

5 Excludes Trinidad and Joffre.



## Our Results and Outlook

# 2022 Phosphate Financial Performance

We generated record Phosphate adjusted EBITDA of \$594 million as higher net realized selling prices more than offset higher raw material costs and lower sales volume. Global phosphate prices increased in the first half of 2022 due to global supply constraints, including export restrictions by China and uncertainty about Russian phosphate exports. The strength in first half shipments of 2022 led to an inventory build-up in key markets, which contributed to weakness in demand and prices in the second half of 2022. Higher raw material costs were driven by significantly higher sulfur and ammonia input costs, with a condensed North American spring application season and lower production volumes contributing to lower sales volumes.

(millions of US dollars, except as otherwise noted)	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
<b>Manufactured product</b>									
Net sales									
Fertilizer	1,367	1,108	23	1,696	1,840	(8)	806	602	34
Industrial and feed	706	520	36	682	779	(12)	1,035	667	55
	2,073	1,628	27	2,378	2,619	(9)	872	622	40
Cost of goods sold	1,562	1,227	27				657	469	40
Gross margin – manufactured	511	401	27				215	153	41
<b>Gross margin – other <sup>1</sup></b>	(18)	20	n/m	<b>Depreciation and amortization</b>			79	58	37
<b>Gross margin – total</b>	493	421	17	<b>Gross margin excluding depreciation and amortization – manufactured <sup>2</sup></b>			294	211	40
<b>(Income) expenses</b>	(693)	36	n/m						
<b>EBIT</b>	1,186	385	208						
<b>Depreciation and amortization</b>	188	151	25						
<b>EBITDA</b>	1,374	536	156						
<b>Adjustments <sup>3</sup></b>	(780)	4	n/m						
<b>Adjusted EBITDA</b>	594	540	10						

1 Includes other phosphate and purchased products and comprises net sales of \$304 million (2021 – \$201 million) less cost of goods sold of \$322 million (2021 – \$181 million).

2 This is a non-IFRS financial measure. See the “Non-IFRS Financial Measures” section.

3 See Note 3 to the consolidated financial statements. Includes impairment reversal of assets of \$780 million (2021 – nil).

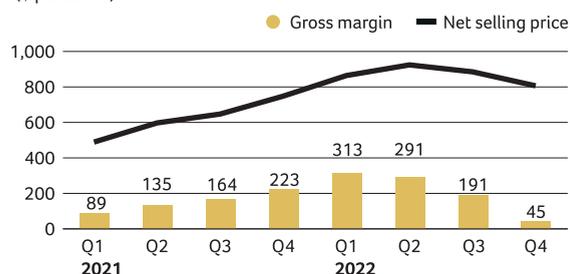
The most significant contributors to the changes in our Phosphate financial performance were as follows:

### 2022 vs 2021

Sales volumes	Sales volumes decreased in 2022 due to a condensed North American spring application season and lower production volumes.
Net realized selling price	Average net realized selling prices increased in 2022 consistent with higher global benchmark prices.
Cost of goods sold per tonne	Costs increased in 2022 primarily due to higher sulfur and ammonia input costs, along with lower production volumes. Depreciation and amortization was also higher due to an increase in depreciable asset values resulting from asset impairment reversals (see details below).
(Income) expenses	In 2022, we recorded \$780 million of impairment reversals relating to our property, plant and equipment at Aurora and White Springs of \$450 million and \$330 million, respectively, primarily due to higher forecasted global phosphate prices and a more favorable outlook for phosphate margins. The impairment reversals are included within (income) expenses and EBITDA in the table above and then deducted from adjusted EBITDA.
Adjusted EBITDA	Adjusted EBITDA increased in 2022 mainly due to higher net realized selling prices, which more than offset higher input costs and lower sales volumes.

**PHOSPHATE GROSS MARGIN AND NET SELLING PRICE**

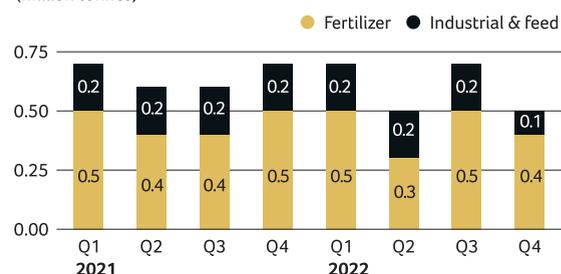
(\$ per tonne)



Source: Nutrien

**PHOSPHATE SALES VOLUMES**

(million tonnes)



Source: Nutrien

**Phosphate Production**

(million tonnes, except as otherwise noted)	Phosphate Rock		Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Liquid Products			Solid Fertilizer Products			
	Annual Capacity	Production		Annual Capacity	Production		Annual Capacity	Production		Annual Capacity	Production	
		2022	2021		2022	2021		2022	2021		2022	2021
Aurora Phosphate	5.4	3.43	3.77	1.2	0.93	1.05	2.7 <sup>1</sup>	1.87	2.12	0.8	0.68	0.80
White Springs Phosphate	2.0	1.42	1.62	0.5	0.42	0.47	0.7 <sup>2</sup>	0.39	0.44	0.8	0.30	0.40
<b>Total</b>	<b>7.40</b>	<b>4.85</b>	<b>5.39</b>	<b>1.70</b>	<b>1.35</b>	<b>1.52</b>	<b>3.40</b>	<b>2.26</b>	<b>2.56</b>	<b>1.60</b>	<b>0.98</b>	<b>1.20</b>
P <sub>2</sub> O <sub>5</sub> operating rate (%)					79	89						

1 A substantial portion is consumed internally in the production of downstream products. The balance is exported to phosphate fertilizer producers or sold domestically to dealers who custom-mix liquid fertilizer. Capacity comprised of 2.0 million tonnes merchant grade acid and 0.7 million tonnes superphosphoric acid.

2 Represents annual superphosphoric acid capacity. A substantial portion is consumed internally in the production of downstream products. The balance is exported to phosphate fertilizer producers or sold domestically to dealers who custom-mix liquid fertilizer.

In addition to the production above, annual capacity (in millions of tonnes) for phosphate feed and purified acid was 0.7 and 0.3, respectively. Production in 2022 was 0.33 and 0.18, respectively, and 2021 production was 0.31 and 0.24, respectively.



## Our Results and Outlook

# 2022 Corporate and Others Financial Performance

“Corporate and Others” is a non-operating segment comprising corporate and administrative functions that provide support and governance to our operating segments.

(millions of US dollars, except as otherwise noted)	2022	2021	% Change
Selling expenses	(1)	(21)	(95)
General and administrative expenses	326	275	19
Share-based compensation expense	63	198	(68)
Other expenses	227	253	(10)
EBIT	(615)	(705)	(13)
Depreciation and amortization	71	49	45
EBITDA	(544)	(656)	(17)
Adjustments <sup>1</sup>	146	348	(58)
Adjusted EBITDA	(398)	(308)	29

<sup>1</sup> See Note 3 to the consolidated financial statements.

The most significant contributors to the changes in our Corporate and Others financial performance were as follows:

### 2022 vs 2021

General and administrative expenses	Increase in expenses was mainly due to increased depreciation and amortization expense, higher donations and higher information technology-related expenses.
Share-based compensation expense	Decrease in expense was due to a decrease in the fair value of share-based awards outstanding relative to 2021.
Other expenses	Decrease in other expenses was mainly due to lower COVID-19 related expenses, the absence of cloud computing related expenses from our change in accounting policy in 2021, and lower expenses related to asset retirement obligations and accrued environmental costs for our non-operating sites from the changes in our cost and discount rate estimates. These factors were partially offset by higher information technology project feasibility costs and an employee special recognition award expense in 2022.

## Eliminations

Eliminations are not part of the Corporate and Others segment. Eliminations of sales between operating segments in 2022 were \$(2,333) million (2021 – \$(1,612) million) with gross margin elimination of \$(28) million (2021 – \$(89) million). We had significant eliminations in 2021 due to higher-margin inventories held by our Retail segment as global commodity benchmark prices increased. The magnitude of the rise in prices was lower in 2022.

# Finance Costs, Income Taxes and Other Comprehensive (Loss) Income

(millions of US dollars, except as otherwise noted)	2022	2021	% Change
Finance costs	563	613	(8)
Income tax expense	2,559	989	159
Other comprehensive (loss) income	(177)	78	n/m

The most significant contributors to the changes in our finance costs, income taxes and other comprehensive (loss) income were as follows:

## 2022 vs 2021

<b>Finance costs</b>	<p>Finance costs decreased mainly due to the absence of a loss of \$142 million on early extinguishment of a portion of our long-term debt in 2021. Short-term interest was higher in 2022 from increased interest rates and a higher average short-term debt balance compared to 2021, which more than offset a decrease in long-term interest due to a lower average outstanding balance in 2022.</p> <p><b>Weighted Average Debt Balances and Rates</b> (millions of US dollars, except as otherwise noted)</p> <table border="1"> <thead> <tr> <th></th> <th style="text-align: right;">2022</th> <th style="text-align: right;">2021</th> </tr> </thead> <tbody> <tr> <td>Short-term balance <sup>1</sup></td> <td style="text-align: right;">3,975</td> <td style="text-align: right;">648</td> </tr> <tr> <td>Short-term rate (%) <sup>1</sup></td> <td style="text-align: right;">3.0</td> <td style="text-align: right;">1.0</td> </tr> <tr> <td>Long-term balance (excluding lease obligations)</td> <td style="text-align: right;">7,839</td> <td style="text-align: right;">9,689</td> </tr> <tr> <td>Long-term rate (excluding lease obligations) (%)</td> <td style="text-align: right;">4.6</td> <td style="text-align: right;">4.5</td> </tr> <tr> <td>Lease obligations balance</td> <td style="text-align: right;">1,209</td> <td style="text-align: right;">1,163</td> </tr> <tr> <td>Lease obligations rate (%)</td> <td style="text-align: right;">2.9</td> <td style="text-align: right;">2.8</td> </tr> </tbody> </table> <p><sup>1</sup> North American weighted average short-term debt balances were \$3,529 million (2021 – \$451 million) and rates were 2.6 percent (2021 – 0.2 percent).</p>		2022	2021	Short-term balance <sup>1</sup>	3,975	648	Short-term rate (%) <sup>1</sup>	3.0	1.0	Long-term balance (excluding lease obligations)	7,839	9,689	Long-term rate (excluding lease obligations) (%)	4.6	4.5	Lease obligations balance	1,209	1,163	Lease obligations rate (%)	2.9	2.8
	2022	2021																				
Short-term balance <sup>1</sup>	3,975	648																				
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Lease obligations balance	1,209	1,163																				
Lease obligations rate (%)	2.9	2.8																				
<b>Income tax expense</b>	<p>Income tax expense increased mainly due to higher earnings in 2022.</p> <p><b>Effective Tax Rates and Discrete Items</b> (millions of US dollars, except as otherwise noted)</p> <table border="1"> <thead> <tr> <th></th> <th style="text-align: right;">2022</th> <th style="text-align: right;">2021</th> </tr> </thead> <tbody> <tr> <td>Actual effective tax rate on earnings (%)</td> <td style="text-align: right;">25</td> <td style="text-align: right;">24</td> </tr> <tr> <td>Actual effective tax rate including discrete items (%)</td> <td style="text-align: right;">25</td> <td style="text-align: right;">24</td> </tr> <tr> <td>Discrete tax adjustments that impacted the rate</td> <td style="text-align: right;">30</td> <td style="text-align: right;">(15)</td> </tr> </tbody> </table>		2022	2021	Actual effective tax rate on earnings (%)	25	24	Actual effective tax rate including discrete items (%)	25	24	Discrete tax adjustments that impacted the rate	30	(15)									
	2022	2021																				
Actual effective tax rate on earnings (%)	25	24																				
Actual effective tax rate including discrete items (%)	25	24																				
Discrete tax adjustments that impacted the rate	30	(15)																				
<b>Other comprehensive (loss) income</b>	<p>Other comprehensive loss in 2022 compared to income in 2021 was primarily driven by changes in the currency translation of our foreign operations and share price movement related to our investment in Sinofert Holdings Ltd (“Sinofert”). In 2022 we had fair value losses on our investment in Sinofert due to share price decreases, compared to fair value gains due to share price increases in 2021. In addition, we had higher losses on foreign currency translation of our Retail foreign operations, mainly in Canada, compared to 2021, as this currency depreciated relative to the US dollar, partially offset by higher gains in Brazil, as this currency appreciated relative to the US dollar.</p>																					

## Our Results and Outlook

## Performance Against 2023 Targets

## Executing on our financial and operating targets

We made good progress towards many of our financial metrics and plan on disclosing new long-term targets in the second half of 2023. As we enhance our Retail digital platform with new rollouts in the first half of 2023, we will evolve our digital targets to align with areas of focused grower engagement. Our Nitrogen sales volumes are expected to fall below our 2023 target of 11.5 to 12.0 million tonnes, due to the timing for completion of our brownfield projects and anticipation of Trinidad gas curtailments in 2023. We have updated our Nitrogen sales volume target to 10.8 to 11.4 million tonnes to align with our 2023 guidance range.

	2023 Targets	2022	2021
<b>Nutrien Ag Solutions (“Retail”)</b>			
Total Retail adjusted EBITDA margin <sup>1</sup>	>10.5%	10.7%	10.9%
US Retail adjusted EBITDA margin <sup>1,2</sup>	–	12.2%	11.6%
Retail adjusted average working capital to sales <sup>3</sup>	17%	17%	13%
Retail cash operating coverage ratio <sup>3</sup>	60%	55%	58%
Retail adjusted EBITDA per US selling location (thousand dollars) <sup>1,4</sup>	>\$1,100	\$1,923	\$1,481
Retail proprietary products as a % of total Retail margin	29%	24%	23%
Retail digital platform sales to total Retail sales <sup>1,5</sup>	>50%	18%	17%
Retail digital platform sales (million dollars) <sup>1,2,5</sup>	–	\$2,837	\$2,148
<b>Potash and Nitrogen</b>			
Potash sales volumes (million tonnes)	14.0-16.0	12.5	13.6
Potash controllable cash cost of product manufactured per tonne <sup>2,3</sup>	–	\$58	\$52
Nitrogen sales volumes (million tonnes) <sup>6</sup>	10.8-11.4	10.0	10.7
Ammonia operating rate <sup>7</sup>	96%	90%	90%
Ammonia controllable cash cost of product manufactured per tonne <sup>3</sup>	~\$42	\$59	\$50
<b>IFRS Comparable Information</b>			
Potash cost of goods sold (“COGS”) (million dollars) <sup>2</sup>	–	\$1,400	\$1,285
Nitrogen manufactured cost of goods sold (“COGS”) (million dollars) <sup>2</sup>	–	\$3,197	\$2,353

1 This is a supplementary financial measure. See the “Other Financial Measures” section.

2 No target was provided.

3 This is a non-IFRS financial measure. See the “Non-IFRS Financial Measures” section.

4 Calculation is based on number of selling locations only, excluding acquisitions.

5 Digital Platform generated revenue includes grower and employee orders that are entered directly into the digital platform. North American digital Retail sales as a proportion of total North American Retail sales.

6 2023 target includes ESN® products that prior to 2023 were included in the other category.

7 Capacity utilization represents production volumes divided by production capacity (excluding Joffrey and Trinidad facilities).

## Our Results and Outlook

## 2023 Market Outlook

## Expect structural supply issues to persist and demand for crop inputs to increase in 2023

## Agriculture and Retail

Agricultural fundamentals remain historically strong and are supported by the lowest global grain stocks-to-use ratio in over 25 years. We expect that Ukrainian crop production and exports will continue to be constrained by the impact of the war with Russia and it will take more than one growing season from the end of the war to alleviate the supply risk from the market. Spot prices for corn, soybeans and wheat are up 25 to 50 percent compared to the 10-year average, which we expect will support grower returns and provide an incentive to increase production in 2023.

We anticipate that US major crop acreage will increase by approximately 4 percent in 2023, assuming a more normal planting window compared to the spring of 2022. We expect corn plantings to increase from approximately 89 million acres

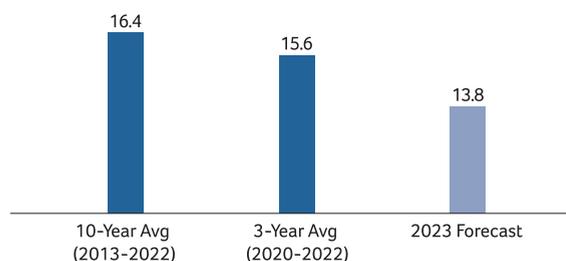
in 2022 to between 91 to 93 million acres in 2023.

Brazilian grower economics for soybeans and corn are strong, which we expect will support another year of above-trend acreage growth in that market. Australian growers have benefited from multiple years of above-average yields and historically high crop prices, positioning them very well financially entering 2023, and we would expect another year of strong production assuming favorable weather conditions.

Nutrien Ag Solutions 2023 adjusted EBITDA guidance assumes strong demand for crop inputs in each of the markets we serve. We expect gross margins for crop nutrients and crop protection will be lower in 2023 compared to record levels achieved in 2022.

## GLOBAL GRAIN STOCKS/USE RATIO

(% (excluding China)<sup>1</sup>)

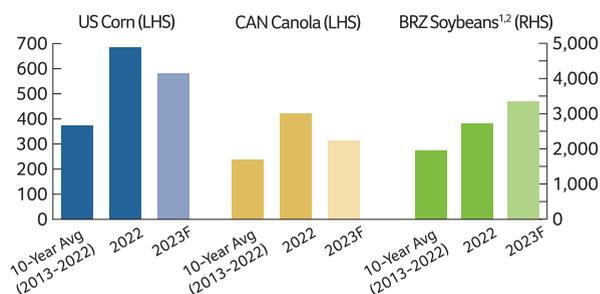


Source: USDA, Nutrien

<sup>1</sup> Excluding China, grains refer to barley, corn, millet, mixed grain, oats, rice, rye, sorghum and wheat.

## KEY CROP GROWER CASH MARGINS

(local currency margin/acre)



Source: USDA, IMEA, Bloomberg, ICE, Nutrien

<sup>1</sup> Brazil is local currency margin/hectare.

<sup>2</sup> Due to crop year timing in Brazil the 2022 references the 2022/23 crop year, which was planted in Q3 & Q4 2022 with growers realizing returns in 2023. The 2023F references the 2023/24 crop year.

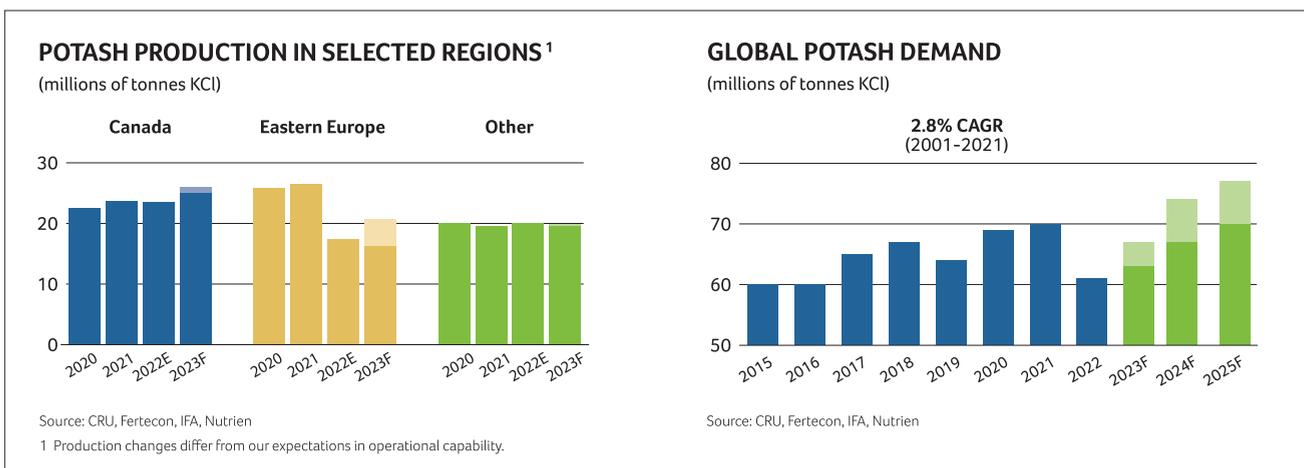
## Potash

We believe potash inventories have been drawn down in Brazil and the US following a historic decline in the pace of potash shipments in the second half of 2022. We have seen improved potash demand in early 2023, however buyers continue to take a cautious approach to managing inventories that could lead to a more condensed shipment period as we approach the primary application seasons. Our estimate for global potash shipments in 2023 is 63 to 67 million tonnes, which is still constrained compared to the historical trend demand estimated at around 70 million tonnes.

Belarus potash shipments in 2023 are projected to be down 40 to 60 percent and Russian shipments down 15 to 30 percent compared to 2021. We anticipate the reduction in supply will be most apparent in the first quarter of 2023 compared to the same period in 2022, as both Belarusian and Russian exports were heavily weighted to early 2022 before sanctions and export restrictions were imposed.

Nutrien’s potash sales tonnes guidance of 13.8 to 14.6 million tonnes assumes increased demand in our key markets of North America and Brazil and continue global supply constraints in

2023. We have maintained capability to increase sales volumes to our previous expectation of approximately 15 million tonnes if we see stronger demand in the market.



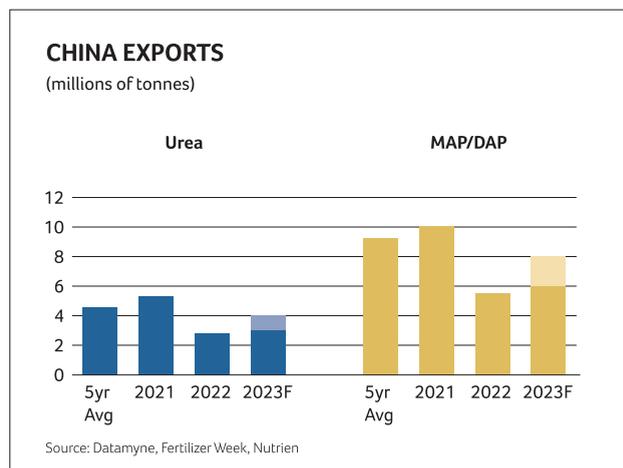
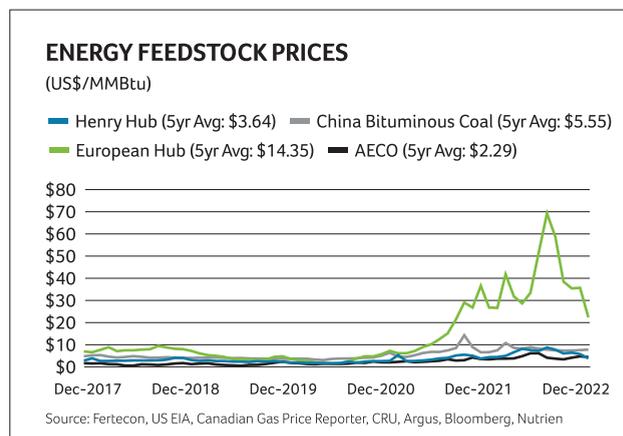
## Nitrogen

Global nitrogen prices have declined during the first two months of 2023 due to lower European natural gas prices and buyer deferrals. We expect European natural gas prices to be volatile throughout the year with around 30 percent of the regions’ nitrogen capacity offline at the beginning of 2023. North American gas prices remain highly competitive compared to Europe and Asia and we expect Henry Hub prices to average between \$2.50 and \$4.50 per MMBtu in 2023.

Nitrogen supply constraints, including lower Russian ammonia exports, reduced European operating rates and Chinese urea export restrictions are expected to persist in 2023, all of which we expect to have an impact on pricing volatility in periods of high seasonal demand. We expect a tight US supply and demand balance ahead of the spring season due to higher corn acreage and increased nitrogen exports over the past six months.

Global economic growth is a potential risk to industrial demand in 2023. Macroeconomic pressures impacted Asian markets throughout 2022 and there is the potential that the reopening of the Chinese economy has a positive impact on economic growth in the region later in 2023, depending on the impacts of COVID-19 and related policy decisions.

Nutrien’s nitrogen sales tonnes guidance of 10.8 to 11.4 million tonnes in 2023 assumes higher operating rates at our North American plants and a continuation of gas curtailments in Trinidad in 2023. Nitrogen sales tonnes guidance includes 300,000 to 350,000 tonnes of projected ESN® product sales that prior to 2023 were included in the other product category.



## Phosphate

We expect Chinese phosphate export restrictions to be in place until at least April 2023, anticipate improved demand in North America and Brazil, and the continuation of strong demand in India. Phosphate product margins are expected to be supported by lower raw material sulfur prices due to reduced operating rates and demand in China.

# 2023 Guidance

(billions of US dollars, except as otherwise noted)	2023 Guidance Ranges <sup>1</sup>	
	Low	High
Adjusted net earnings per share in US dollars ("Adjusted EPS") <sup>2,3</sup>	8.45	10.65
Adjusted EBITDA <sup>2</sup>	8.4	10.0
Retail adjusted EBITDA	1.85	2.05
Potash adjusted EBITDA	3.7	4.5
Nitrogen adjusted EBITDA	2.5	3.2
Phosphate adjusted EBITDA (in millions of US dollars)	550	750
Potash sales tonnes (millions) <sup>4</sup>	13.8	14.6
Nitrogen sales tonnes (millions) <sup>4</sup>	10.8	11.4
Depreciation and amortization	2.1	2.2
Effective tax rate on adjusted earnings (%)	23.5	24.5

1 See the "Forward-Looking Statements" section.

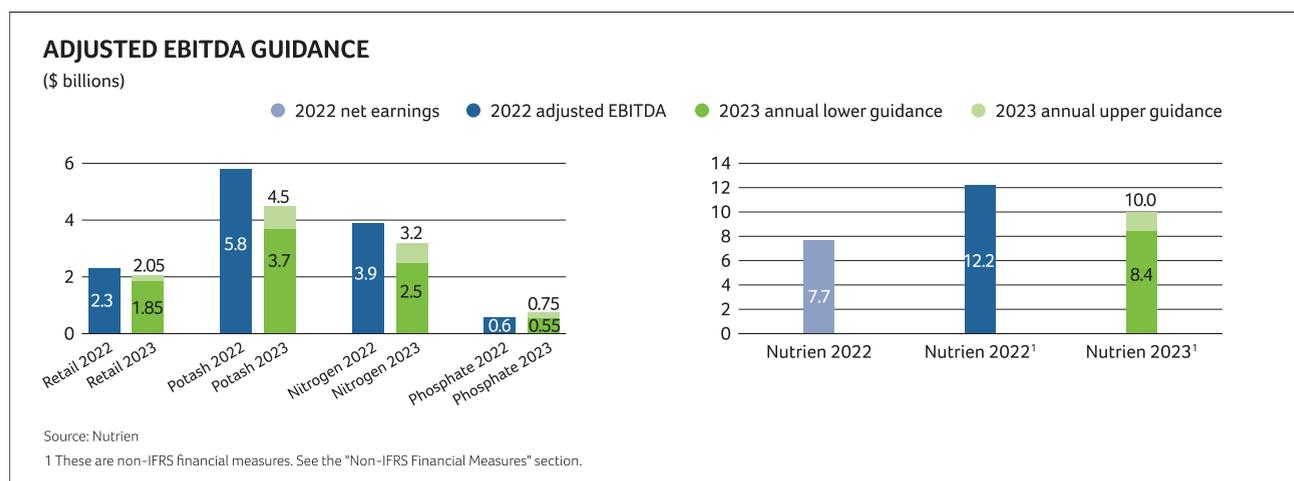
2 These are non-IFRS financial measures. See the "Non-IFRS Financial Measures" section.

3 Assumes 503 million shares outstanding for all EPS guidance and sensitivities.

4 Manufactured product only. Nitrogen sales tonnes guidance includes ESN<sup>®</sup> products that prior to 2023 were included in the other category.

## Assumptions

2023 Average Canadian to US dollar exchange rate	1.33
2023 NYMEX natural gas (US dollars per MMBtu)	~3.50



# 2023 Sensitivities

## Price and Volume Sensitivities

(millions of US dollars, except EPS amounts)		Effect on	
		Adjusted EPS	Adjusted EBITDA
Price	Potash changes by \$25/tonne	± 0.45	± 300
	Ammonia changes by \$25/tonne	± 0.07	± 50
	Urea changes by \$25/tonne	± 0.12	± 80
	Solutions, nitrates and sulfates changes by \$25/tonne	± 0.20	± 130
Volume	Potash changes by 100,000 tonnes	± 0.04	± 30
	Nitrogen changes by 50,000 N tonnes	± 0.03	± 20
Retail	Crop nutrients changes by 1% <sup>1</sup>	± 0.15	± 100
	Crop protection changes by 1% <sup>1</sup>	± 0.12	± 80
	Seed changes by 1% <sup>1</sup>	± 0.03	± 20

<sup>1</sup> Gross margin as a percentage of sales.

## Input Cost Sensitivities

(millions of US dollars, except EPS amounts)		Effect on	
		Adjusted EPS	Adjusted EBITDA
NYMEX natural gas price changes by \$1/MMBtu (impact on Nitrogen)		± 0.27	± 180
Canadian to US dollar changes by \$0.02		± 0.01	± 5

## Our Results and Outlook

## Financial Highlights

(millions of US dollars, except as otherwise noted)

	2022	2021	2020
Sales	37,884	27,712	20,908
Net earnings	7,687	3,179	459
Basic net earnings per share (US dollars)	14.22	5.53	0.81
Diluted net earnings per share (US dollars)	14.18	5.52	0.81
Total assets	54,586	49,954	47,192
Total non-current financial liabilities	8,939	8,455	10,947
Dividends declared per share (US dollars)	1.92	1.84	1.80

## 2022 vs 2021

## 2021 vs 2020

<b>Sales</b>	Sales increased primarily due to higher net realized selling prices from global supply uncertainties across our nutrient segments, partially offset by lower sales volumes. Strong Retail performance due to higher selling prices and increased sales of proprietary products, which more than offset a reduction in crop nutrients sales volumes from a delayed North American planting season and earlier engagement in the prior year in a rising price environment.	Sales increased due to strong demand for global crop inputs and tight global fertilizer supply resulting in higher net realized selling prices across our segments and higher Potash sales volumes.
<b>Net earnings and earnings per share</b>	Net earnings and earnings per share increased due to higher gross margins from higher net realized selling prices across our nutrient segments and strong Retail performance supported by the strength of agriculture fundamentals, partially offset by higher operating costs, including provincial mining taxes, Retail selling expenses, royalties, natural gas and other input costs. In 2022, we recorded non-cash impairment reversals of our Phosphate property, plant and equipment at the Aurora and White Springs facilities.	Net earnings and earnings per share increased in 2021 compared to 2020 due to higher gross margins from higher net realized selling prices. In 2020, we recorded a non-cash impairment of our Phosphate property, plant and equipment at Aurora and White Springs facilities and a net gain from disposal of our investment in Misr Fertilizers Production Co SAE ("MOPCO"), which we did not incur in 2021.
<b>Assets and non-current financial liabilities</b>	Total assets increased approximately 10 percent from 2021. Our working capital assets increased due to higher sales and input costs along with acquisition impacts resulting in higher receivables and inventories. Property, plant and equipment increased primarily due to impairment reversals in the Phosphate segment.  Non-current financial liabilities increased due to the higher long-term debt from the issuance of new notes.	Total assets increased slightly from 2020. Our working capital assets increased due to higher actual and anticipated sales activity resulting in higher receivables, inventories and prepaid expenses.  Non-current financial liabilities decreased due to the early extinguishment of debt in 2021.  The COVID-19 pandemic had a limited impact on our financial condition as at December 31, 2021 and 2020.
<b>Dividends declared per share</b>	Dividends declared per share increased as we declared a quarterly dividend per share of \$0.48 in 2022 compared to \$0.46 in 2021.	Dividends declared per share increased as we declared a quarterly dividend per share of \$0.46 in 2021 compared to \$0.45 in 2020.

# Financial Condition Review

## Balance Sheet Analysis

### Assets

For information regarding changes in cash and cash equivalents, refer to the “Sources and Uses of Cash” section and the consolidated statements of cash flows in our consolidated financial statements.

Receivables increased due to higher sales across all of our segments. The increase was mainly from our Retail segment, the result of higher crop nutrient net realized selling prices and increased usage of Nutrien Financial programs. Receivables also increased due to the recent Retail acquisitions in Brazil, primarily from Casa do Adubo S.A. (“Casa do Adubo”).

Inventories increased due to higher costs to produce and/or purchase inventory across all our segments.

Property, plant and equipment increased due to impairment reversals in our Phosphate segment.

### Liabilities

Short-term debt increased due to higher borrowings under our credit facilities as part of our working capital management and for share repurchases.

Long-term debt (including the current portion thereof) increased due to the addition of \$1 billion in notes issued in November 2022, which exceeded the repayment of \$500 million in notes upon maturity in October 2022.

Payables and accrued charges increased due to higher payables balances from rising input costs due to inflation and tight global supply, extended Retail payment terms for crop nutrients, along with a higher income tax payable balance due to higher earnings. The recent acquisition of Casa do Adubo also contributed to the increase.

Deferred income tax liabilities increased due to accelerated deductions for income tax purposes primarily related to property, plant and equipment.

### Shareholders' Equity

Share capital decreased from shares repurchased under our normal course issuer bid program partially offset by exercise of stock options.

Retained earnings increased as net earnings exceeded dividends declared and share repurchases.

We do not hold material cash and cash equivalents in currencies other than the US dollar and Canadian dollar. We held approximately \$315 million US dollar equivalent in other jurisdictions outside the US and Canada. We do not depend on repatriation of cash from our foreign subsidiaries to meet our liquidity and capital resource needs in North America.

# Liquidity and Capital Resources

## Sources and Uses of Liquidity

Liquidity risk arises from our general funding needs and in the management of our assets, liabilities and capital structure. We manage liquidity risk to maintain sufficient liquid financial resources to fund our financial position and meet our commitments and obligations in a cost-effective manner. Our 2022 significant liquidity sources are listed below along with our expected ongoing primary uses of liquidity:

### Primary Uses of Liquidity

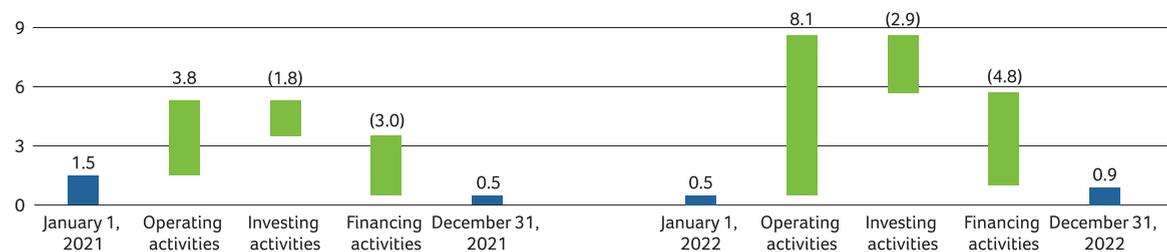
- inventory purchases and production
- operational expenses
- seasonal working capital requirements
- investing to sustain and grow our safe, reliable and cost-efficient operations through sustaining and investing capital
- business acquisitions
- returning cash to our shareholders through dividends and share repurchases (see Note 23 to the consolidated financial statements)
- principal payments of debt securities (see Note 18 to the consolidated financial statements)

### Primary Sources of Liquidity

- cash from operations (including customer prepayments)
- commercial paper issuances
- increase of credit facility limits and drawdowns
- debt capital markets

### CASH FLOWS 2021 & 2022

(\$ billions)



Source: Nutrien

We believe that our internally generated cash flow, supplemented by available borrowings under new or existing financing sources, if necessary, will be sufficient to meet our anticipated capital expenditures, planned growth and development activities, and other cash requirements for the foreseeable future. We do not reasonably expect any presently known trend or uncertainty to affect our ability to access our historical sources of liquidity.

## Sources and Uses of Cash

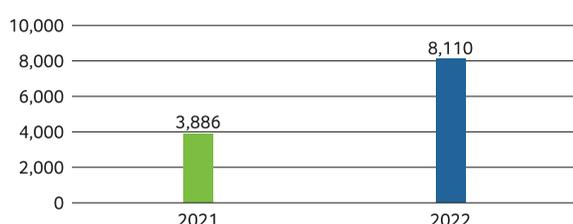
(millions of US dollars, except as otherwise noted)

	2022	2021	% Change
Cash provided by operating activities	8,110	3,886	109
Cash used in investing activities	(2,901)	(1,807)	61
Cash used in financing activities	(4,731)	(3,003)	58
Effect of exchange rate changes on cash and cash equivalents	(76)	(31)	145
Increase (decrease) in cash and cash equivalents	402	(955)	n/m

Cash provided by operating activities

### CASH PROVIDED BY OPERATING ACTIVITIES

(\$ millions)



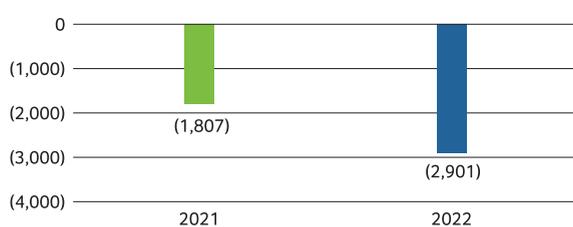
Source: Nutrien

- Higher cash provided by operating activities due to higher net realized selling prices across our nutrient segments and strong Retail performance supported by the strength of agriculture fundamentals, partially offset by higher working capital needs due to higher costs to purchase and produce inventory and higher receivables balance from higher sales.

Cash used in investing activities

### CASH USED IN INVESTING ACTIVITIES

(\$ millions)



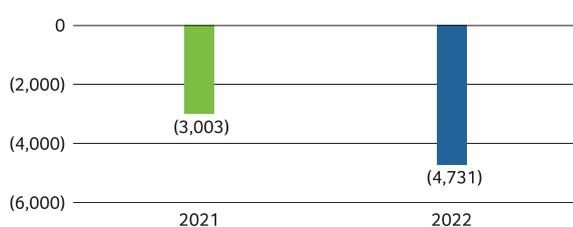
Source: Nutrien

- Higher cash used in investing activities due to higher capital expenditures, in order to maintain the safety and reliability of assets in our Nitrogen segment and to increase our potash production capabilities, along with investments in our brownfield expansion plans and decarbonization projects.
- Higher spending on business acquisitions primarily due to our Casa do Adubo acquisition in Brazil in the fourth quarter of 2022, with no similarly sized acquisition in 2021.

Cash used in financing activities

### CASH USED IN FINANCING ACTIVITIES

(\$ millions)



Source: Nutrien

- Higher cash used in financing activities due to increased share repurchases as we focused on shareholder returns in 2022.
- Short-term debt increased from higher borrowings under our credit facilities in 2022 as part of our seasonal working capital requirements and to temporarily support repurchases of common shares through our normal course issuer bid program.
- Net long-term debt proceeds in 2022 due to issuance of an aggregate of \$1 billion in notes compared to a net long-term debt repayment in 2021 from the early extinguishment of \$2 billion in debt.

## Cash Requirements

The following aggregated information about our contractual obligations and other commitments summarizes our liquidity and capital resource requirements as at December 31, 2022:

(millions of US dollars)	Financial Statement Note Reference	Payments Due by Period				
		Total	Within 1 Year	1 to 3 Years	3 to 5 Years	Over 5 Years
Long-term debt	Notes 18, 26	8,344	542	1,573	675	5,554
Estimated interest payments on long-term debt	Note 26	5,076	390	719	574	3,393
Lease liabilities	Notes 19, 26	1,204	305	384	172	343
Estimated interest payments on lease liabilities	Note 26	170	32	43	27	68
Purchase commitments	Note 26	1,749	1,533	72	24	120
Capital commitments	Note 26	218	178	40	–	–
Other commitments	Note 26	444	169	143	74	58
Derivatives	Note 10	35	35	–	–	–
Asset retirement obligations and accrued environmental costs <sup>1</sup>	Note 22	4,023	213	184	114	3,512
<b>Total</b>		<b>21,263</b>	<b>3,397</b>	<b>3,158</b>	<b>1,660</b>	<b>13,048</b>

<sup>1</sup> Commitments reflect the estimated cash outflows for these obligations. See Note 22 to the consolidated financial statements for details.

The information presented in the table above excludes:

- planned (but not legally committed) cash requirements;
- annual outflows for sustaining capital expenditures, business acquisitions and shareholder returns including share repurchases and dividends; and
- estimated capital investment requirements of more than \$500 million by 2030 to achieve our 30 percent operational GHG emissions intensity reduction target. Specific project execution will depend on a range of factors, including the final investment decision with respect to the Geismar, Louisiana clean ammonia plant.

For information on income taxes and pension and other post-retirement benefits funding, refer to Note 8 and Note 21, respectively, to the consolidated financial statements. Future cash requirements are subject to changes in regulations, actuarial assumptions and our expected operating results.

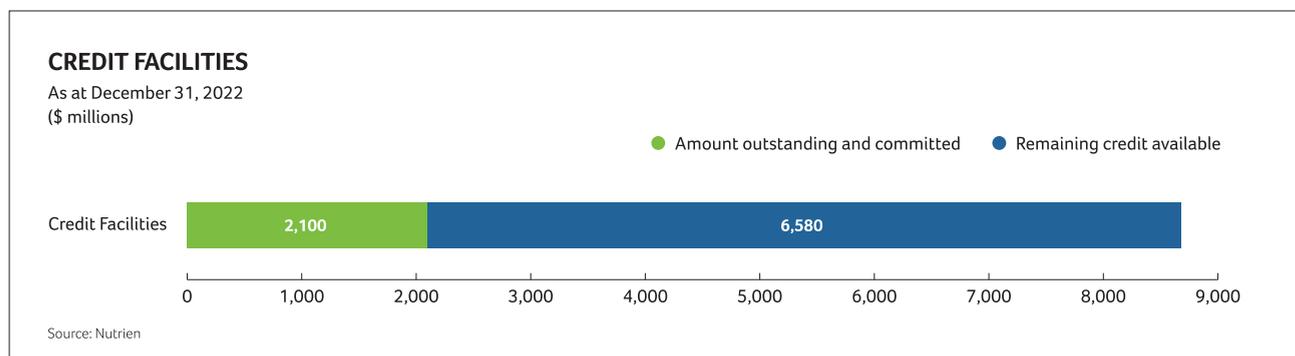
On February 15, 2023, our Board approved a share repurchase program of up to a maximum of 24,962,194 representing 5 percent of Nutrien's outstanding common shares. Subject to acceptance by the TSX, the 2023 share repurchase program will commence on March 1, 2023, and will expire on the earlier of February 29, 2024, the date on which we have acquired the maximum number of common shares allowable or the date we determine not to make any further repurchases.

# Capital Structure and Management

We manage our capital structure with a focus on maintaining a strong balance sheet, enabling a strong investment-grade credit rating.

## Principal Debt Instruments

We use a combination of cash generated from operations and short-term and long-term debt to finance our operations. As at December 31, 2022, we had the following debt instruments available:



(millions of US dollars, except as otherwise noted)	Rate of Interest (%)	Total Facility Limit	Outstanding and Committed			
			Short-Term		Long-Term	
			As at December 31, 2022	As at December 31, 2021	As at December 31, 2022	As at December 31, 2021
Credit facilities						
Unsecured revolving term credit facility <sup>1</sup>	n/a	4,500	–	–	–	–
Unsecured revolving term credit facility <sup>2</sup>	5.3	2,000	500	–	–	–
Uncommitted revolving demand facility <sup>3</sup>	n/a	1,000	–	–	–	–
Other credit facilities		1,180				
South America	1.3–76.0		453	74	162	137
Australia	3.9		190	211	–	–
Other	2.1–4.0		9	28	3	4
Commercial paper	4.8–5.2		783	1,170	–	–
Other short-term and long-term debt	n/a		207	77	7	–
<b>Total</b>			<b>2,142</b>	<b>1,560</b>	<b>172</b>	<b>141</b>

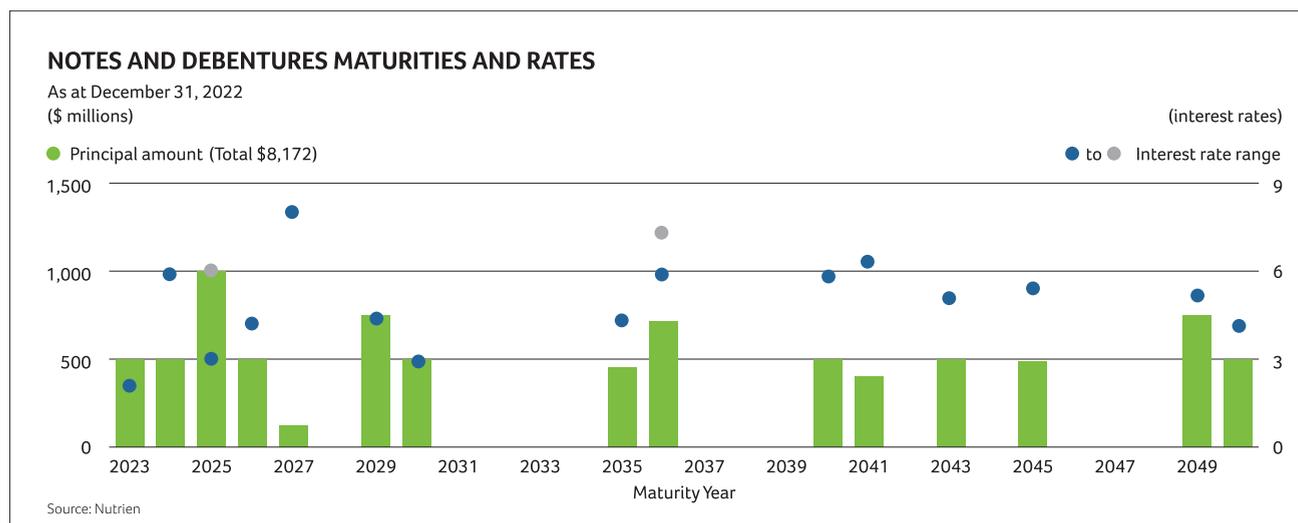
1 In 2022, we extended the maturity date from June 4, 2026 to September 14, 2027, subject to extension at the request of Nutrien provided that the resulting maturity date may not exceed five years from the date of request.

2 In 2022, we entered into a new \$2,000 unsecured revolving term credit facility, with the same principal covenants and events of default as our existing \$4,500 unsecured revolving term credit facility.

3 In 2022, we increased our uncommitted revolving demand facility limit by \$500.

Our commercial paper program is limited to the undrawn availability of backup funds under the \$4,500 million unsecured revolving term credit facility and excess cash invested in highly liquid securities. As at December 31, 2022, \$227 million in letters of credit were outstanding and committed, with \$145 million of remaining credit available.

Our long-term debt consists primarily of notes and debentures with the following maturities and interest rates:



On October 1, 2022, we repaid \$500 million in principal amount of our notes. On November 7, 2022, we issued \$500 million principal amount of 5.90 percent notes due in 2024 and \$500 million principal amount of 5.95 percent notes due in 2025. See Note 18 to the consolidated financial statements.

We also have lease obligations totaling \$1,204 million (including current portion) with a weighted average effective interest rate of 3.2 percent as at December 31, 2022.

## Debt Covenants

Our credit facilities have financial tests and other covenants with which we must comply at each quarter-end. Non-compliance with any such covenants could result in accelerated payment of amounts borrowed and termination of lenders' further funding obligations under the credit facilities. We were in compliance with all such covenants as at December 31, 2022.

The table below summarizes the limit and result of our key financial covenant:

As at December 31	Limit	2022
Debt to capital ratio <sup>1</sup>	0.65 : 1.00	0.32 : 1.00

<sup>1</sup> Refer to Note 24 to the consolidated financial statements for the detailed calculation.

## Credit Ratings

Our ability to access reasonably priced debt in the capital markets depends, in part, on the quality of our credit ratings. We continue to maintain investment-grade credit ratings for our long-term debt. A downgrade of the credit rating of our long-term debt could increase the interest rates applicable to borrowings under our credit facilities.

Commercial paper markets are normally a source of same-day cash for us. Our access to the US commercial paper market primarily depends on maintaining our current short-term credit ratings as well as general conditions in the money markets.

As at December 31,	Long-Term Debt Rating (Outlook)		Short-Term Debt Rating	
	2022	2021	2022	2021
Moody's	Baa2 (stable)	Baa2 (stable)	P-2	P-2
S&P	BBB (positive)	BBB (stable)	A-2	A-2

A credit rating is not a recommendation to buy, sell or hold securities. Such ratings may be subject to revision or withdrawal at any time by the respective credit rating agency and each rating should be evaluated independently of any other rating.

S&P's positive outlook on Nutrien's credit ratings means that the ratings may be raised over the intermediate term (typically six months to two years).

## Outstanding Share Data

	February 16, 2023
Common shares	499,243,897
Options to purchase common shares	3,884,894

For more information on our capital structure and management, see Note 24 to the consolidated financial statements.

For more information on our short-term and long-term debt, see Note 17 and Note 18 to the consolidated financial statements.

## Off-Balance Sheet Arrangements

Principal off-balance sheet activities primarily include:

- Agreement to reimburse losses of Canpotex (see Note 29 to the consolidated financial statements).
- Issuance of guarantee contracts (see Note 22 and Note 27 to the consolidated financial statements).
- An agency arrangement with a financial institution in relation to certain customer loans (see Note 10 and Note 11 to the consolidated financial statements).
- Certain non-financial derivatives that were entered into and continued to be held for the purpose of the receipt or delivery of a non-financial item in accordance with expected purchase, sale or usage requirements. Other derivatives are included on our balance sheet at fair value (see Note 10 to the consolidated financial statements).

We do not reasonably expect any presently known trend or uncertainty to affect our ability to continue using these arrangements, except as indicated above.

# Other Financial Information

## Related Party Transactions

Our most significant related party is Canpotex, which provides us with low-cost marketing and logistics for the offshore potash markets that we serve. Refer to Note 28 to the consolidated financial statements for information on our related party transactions.

## Market Risks Associated With Financial Instruments

Market risk is the potential for loss from adverse changes in the market value of financial instruments. The level of market risk to which we are exposed varies depending on the composition of our derivative instrument portfolio, as well as current and expected market conditions. See Note 10 to the consolidated financial statements for information on our financial instruments, including the risks and risk management associated with such instruments.

## Critical Accounting Estimates

We prepare our consolidated financial statements in accordance with IFRS, which requires us to make judgments, assumptions and estimates in applying accounting policies. Critical accounting estimates are those which are highly uncertain at the time they are made or where different estimates would be reasonably likely to have a material impact on our financial condition or results of operations. We have discussed the development, selection and application of our key accounting policies, and the critical accounting estimates and assumptions they involve, with the Audit Committee of the Board.

Refer to the notes to the consolidated financial statements for additional information on the following critical accounting estimates including methodology used for calculating our estimates (when applicable), key assumptions used, and factors considered in our estimates and judgments.

In 2022, we amended our critical accounting estimates to exclude long-lived asset impairment and reversals because, during the year, we fully reversed the previously recorded impairments related to property, plant and equipment at Aurora and White Springs. Refer to Note 13 to the consolidated financial statements for further details.

### Financial Statement Reference

### Critical Accounting Estimate Description

Financial Statement Reference	Critical Accounting Estimate Description
Note 14 and Note 30	<p><b>Goodwill impairment indicators</b></p> <p>We test our operating segments that have goodwill allocated to them when events or circumstances indicate that there could be an impairment, or at least annually. Based on our assumptions at the time of our impairment testing, the recoverable amount of each of our CGUs or groups of CGUs was greater than or approximately equal to their carrying amounts. The key assumptions with the greatest influence on the calculation of the recoverable amounts are the discount rates, terminal growth rates and cash flow forecasts. The key forecast assumptions were based on historical data and our estimates of future results from internal sources considering industry and market trends. Key assumptions in our testing models may change, and changes that could reasonably be expected to occur may cause impairment. Such change in assumptions could be driven by global supply and demand, other market factors, changes in regulations, and other future events outside our control.</p> <p>The Retail – North America group of CGUs have \$6.9 billion in associated goodwill. In 2022, North American central banks increased their benchmark borrowing rates; these rates are a component of our discount rate for impairment testing. As a result of these increases, we revised our discount rates throughout 2022, which triggered impairment testing for our Retail – North America group of CGUs as at June 30, 2022 and September 30, 2022. No impairment was recognized during these interim testing periods.</p> <p>Goodwill is more susceptible to impairment risk if there is an increase in the discount rate, or a deterioration in business operating results or economic conditions and actual results do not meet our forecasts. As at September 30, 2022, the Retail – North America group of CGUs carrying amount approximated its recoverable amount. A 25 basis point increase in the discount rate would have resulted in an impairment of the carrying amount of goodwill of approximately \$500 million. A decrease in forecasted EBITDA and cash flows or a reduction in the terminal growth rate could result in impairment in the future.</p>

Financial Statement Reference	Critical Accounting Estimate Description
Note 8, Note 29 and Note 30	<p><b>Income taxes – measurement</b></p> <p>Significant estimates for the measurement of our income taxes include assessing the probability and measurement of our uncertain tax provisions related to complex global tax regulations and assessing the probability of future taxable income used to recognize deferred tax assets. Although we believe our assumptions and estimates are reasonable, our tax assets are realizable, and our accruals for tax liabilities are adequate for all open tax years based on our interpretation of tax laws and prior experience, actual results could differ. Changes in the income tax legislations, regulations and interpretations may result in a material impact on our consolidated financial statements. Income taxes are recorded in our Corporate and Others segment.</p>
Note 22 and Note 30	<p><b>Asset retirement obligations (“AROs”) and accrued environmental costs (“ERLs”) – measurement</b></p> <p>The Potash and Phosphate segments have AROs and ERLs (which have a high degree of estimation uncertainty for future costs and estimated timelines) associated with their mining operations while the Corporate and Others segment has these liabilities associated with non-operational mines.</p> <p>For the Nitrogen segment, we have not recorded any AROs as no significant asset retirement obligations have been identified or there is no reasonable basis for estimating a date or range of dates of cessation of operations. We considered the historical performance of our facilities as well as our planned maintenance, major upgrades and replacements, which can extend the useful lives of our facilities indefinitely.</p>

# Quarterly Results

(millions of US dollars, except as otherwise noted)	2022				2021			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Sales	7,533	8,188	14,506	7,657	7,267	6,024	9,763	4,658
Net earnings	1,118	1,583	3,601	1,385	1,207	726	1,113	133
Net earnings attributable to equity holders of Nutrien	1,112	1,577	3,593	1,378	1,201	717	1,108	127
Net earnings per share attributable to equity holders of Nutrien								
Basic	2.15	2.95	6.53	2.49	2.11	1.26	1.94	0.22
Diluted	2.15	2.94	6.51	2.49	2.11	1.25	1.94	0.22

Seasonality in our business results from increased demand for products during the planting season. Crop input sales are generally higher in the spring and fall application seasons. Crop nutrient inventories are normally accumulated leading up to each application season. Our cash collections generally occur after the application season is complete, while customer prepayments made to us are concentrated in December and January and inventory prepayments paid to our vendors are typically concentrated in the period from November to January. Feed and industrial sales are more evenly distributed throughout the year.

Our earnings are significantly affected by fertilizer benchmark prices, which have been volatile over the last two years and are affected by demand-supply conditions, grower affordability and weather.

In the second and third quarters of 2022, earnings were impacted by \$450 million and \$330 million non-cash impairment reversals at Aurora and White Springs, respectively, of property, plant and equipment in the Phosphate segment related to higher forecasted global prices and a more favorable outlook for phosphate margins. In the fourth quarter of 2021, earnings were impacted by a \$142 million loss resulting from the early extinguishment of long-term debt.

# Fourth Quarter Financial Performance

(millions of US dollars, except as otherwise noted)

Three months ended December 31	Sales			Gross Margin		
	2022	2021	% Change	2022	2021	% Change
<b>Retail</b>						
Crop nutrients	2,320	2,035	14	349	428	(18)
Crop protection products	981	1,113	(12)	413	414	–
Seed	251	189	33	46	57	(19)
Merchandise	264	270	(2)	41	45	(9)
Nutrien Financial	62	51	22	62	51	22
Services and other <sup>1</sup>	237	243	(2)	194	201	(3)
Nutrien Financial elimination <sup>1,2</sup>	(28)	(23)	22	(28)	(23)	22
<b>Total</b>	<b>4,087</b>	<b>3,878</b>	<b>5</b>	<b>1,077</b>	<b>1,173</b>	<b>(8)</b>

1 Certain immaterial figures have been reclassified for the three months ended December 31, 2021.

2 Represents elimination for the interest and service fees charged by Nutrien Financial to Retail branches.

(US dollars, except as otherwise noted)

Three months ended December 31	Manufactured Product Sales Tonnes (thousands)			Manufactured Product Average per Tonne		
	2022	2021	% Change	2022	2021	% Change
<b>Potash</b>						
North America	959	1,002	(4)	560	494	13
Offshore	1,659	2,054	(19)	506	450	12
Sales	2,618	3,056	(14)	526	465	13
Cost of goods sold				118	100	18
Gross margin				408	365	12
<b>Nitrogen</b>						
Ammonia	776	790	(2)	887	656	35
Urea	705	824	(14)	657	670	(2)
Solutions, nitrates and sulfates	1,056	1,221	(14)	368	316	16
Sales	2,537	2,835	(11)	607	514	18
Cost of goods sold				333	256	30
Gross margin				274	258	6
<b>Phosphate</b>						
Fertilizer	391	509	(23)	700	741	(6)
Industrial and feed	140	202	(31)	1,107	766	45
Sales	531	711	(25)	807	749	8
Cost of goods sold				762	526	45
Gross margin				45	223	(80)

Highlights of our 2022 fourth quarter compared to the 2021 fourth quarter results were as follows:

**Q4 2022 vs Q4 2021**

Retail	Gross margin decreased in 2022 compared to the record quarter experienced in 2021 as strong sales in most product categories were offset by lower volumes and higher cost of inventory. Crop nutrients sales increased in 2022 due to higher selling prices and gross margin decreased due to the higher cost of inventory relative to 2021. Crop protection products gross margin was flat as higher sales pricing and a favorable sales mix in North America offset a decline in sales volumes compared to a very strong period of demand in 2021. Seed sales increased in 2022 due to higher pricing along with strong North America corn sales, South America soybean sales and Australia canola sales. Seed gross margin decreased in 2022 attributed to the timing and mix of seed sales compared to the same period in 2021.
Potash	Gross margin decreased due to lower volumes from cautious purchasing in a declining pricing environment partially offset by higher net realized selling prices. Cost of goods sold per tonne increased due to lower production, a pull forward of maintenance activities, higher royalties due to higher net selling prices and higher supply costs resulting from inflation.
Nitrogen	Gross margin decreased due to lower sales volumes and higher costs more than offsetting higher net realized selling prices. Volumes decreased primarily due to natural gas curtailments in Trinidad and unplanned plant outages that included the impact of extreme cold weather in the quarter and cautious buyer activity. Cost of goods sold per tonne increased due to higher natural gas, higher raw material costs and other operating costs further impacted by production outages.
Phosphate	Gross margin decreased due to lower sales volumes more than offsetting higher industrial and feed net realized selling prices. Volumes decreased as a result of unplanned production outages, which reduced operating rates. Cost of goods sold per tonne increased due to higher raw material input costs combined with higher costs from the production outages.
Other fourth quarter financial highlights	<p>Corporate and Others share-based compensation was a recovery in 2022 due to a decrease in share price and an expense for the comparative period in 2021 due to an increase in share price. Corporate and Others other expenses decreased from \$112 million to \$67 million. Other expenses were lower due to net foreign exchange gains in 2022 compared to net foreign exchange losses in 2021 and lower expenses related to asset retirement obligations and accrued environmental costs for our non-operating sites from the changes in our cost and discount rate estimates. This was partially offset by an employee special recognition award expense in 2022.</p> <p>Finance costs were lower in 2022 mainly due to the absence of a loss of \$142 million on early extinguishment of a portion of our long-term debt in the comparative period in 2021.</p> <p>We had higher cash flows from operating activities in the fourth quarter of 2022 from a higher release of working capital in 2022 compared to the same period in 2021 slightly offset by lower net earnings. Higher capital expenditures and business acquisitions resulted in higher cash used in investing activities. The repurchase of common shares in the fourth quarter of 2022 led to a higher use of cash flows from financing activities.</p>

# Controls and Procedures

## Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed by Nutrien in its annual filings, interim filings (as these terms are defined in National Instrument 52-109 – *Certification of Disclosure in Issuers' Annual and Interim Filings* ("NI 52-109")) and other reports filed or submitted by us under securities legislation is recorded, processed, summarized and reported within the required time periods. Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures as of the end of the period covered by the annual filings, being December 31, 2022, have concluded that, as of such date, our disclosure controls and procedures were effective in providing reasonable assurance that information required to be disclosed by Nutrien in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is (a) recorded, processed, summarized and reported within the time periods specified in the securities legislation, and (b) accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

## Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended, and NI 52-109. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and preparation of consolidated financial statements for external purposes in accordance with IFRS.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the design and effectiveness of our internal control over financial reporting as of the end of the fiscal year covered by this report based on the framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework* (2013). Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as at December 31, 2022, Nutrien Ltd. did maintain effective internal control over financial reporting. There have been no changes that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

The effectiveness of the Company's internal control over financial reporting as at December 31, 2022 was audited by KPMG LLP, as reflected in their report, which is included in this 2022 Annual Report.

# Forward-Looking Statements

Certain statements and other information included in this document, including within the “2023 Outlook and Guidance” section, 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”, “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 and opportunities; Nutrien’s 2023 annual guidance, including our expectations regarding our adjusted net earnings per share, adjusted EBITDA (consolidated and by segment); expectations regarding our adjusted net debt to adjusted EBITDA leverage ratios; expectations regarding adjusted EBITDA growth; expectations regarding our growth and capital allocation intentions and strategies; capital spending and allocation expectations for 2023 and beyond; expectations regarding performance of our operating segments in 2023 and beyond, including our operating segment market outlooks and market conditions, and the anticipated supply and demand for our products and services, expected market and industry conditions with respect to crop nutrient application rates, planted acres, crop mix, prices and the impact of import and export volumes; expectations regarding our operating segment production and capacity, including the proposed increase in potash operational capacity and anticipated benefits in connection with the Phase 2 brownfield nitrogen expansion project and the timing thereof; expectations regarding global population growth and our initiatives to respond thereto through product development and innovative solutions; expectations concerning future product offerings, including the planned expansion of our digital platform to markets in Australia and South America; expectations regarding repurchases of our common shares and our planned dividend growth, including the timing thereof; expectations regarding the sufficiency of Nutrien’s liquidity, including the sources thereof, to meet our anticipated capital expenditures and other cash requirements; the negotiation of sales contracts and the associated prices thereunder; expectations regarding acquisitions and divestitures; expected timing for the natural gas supply curtailments at our Trinidad facility; expectations regarding our sustainability, climate-change and ESG initiatives, including our GHG emissions reduction strategy and related programs and initiatives, as well as our various sustainability commitments and ESG performance goals, targets, commitments and aspirations as set out in our Feeding the Future Plan; our pursuit of opportunities relating to our low-carbon ammonia, including evaluation of the clean ammonia facility project at Geismar, LA, and other opportunities for reducing GHG emissions associated

with ammonia production; the launching, scaling and implementation of our Carbon Program and the anticipated benefits to Nutrien and growers therefrom; our GHG emissions reduction target, including our plans with respect thereto and estimated capital expenditures required to achieve that target; initiatives to promote safe, sustainable and productive agriculture; our ability to successfully reclaim land and our asset retirement obligations, including the cost, timing and anticipated results of future reclamation expenditures; our ability to leverage farm-focused technology partnerships and investments to drive positive impact in industry and grower innovation and inclusion; our commitment to create new financial solutions to strengthen social, economic and environmental outcomes in agriculture; our equity, diversity and inclusion initiatives and expected timing thereof; expectations regarding contributions to pensions and post-retirement plans; our ability to implement changes to make our business processes more resilient to cyberattacks; and expectations in connection with our ability to deliver long-term returns to shareholders and other stakeholders, including integrated reporting initiatives. 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 list of assumptions set forth below is not exhaustive of the factors that may affect any of the forward-looking statements and the reader should not place an 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 and other sustainability and climate-related initiatives and targets, we have made assumptions with respect to, among other things: that such target is achievable by deploying capital into nitrous oxide (“N<sub>2</sub>O”) 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; 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 us of proposed or potential plans in respect thereof; projected capital investment levels, the flexibility of our capital

spending plans and the associated sources of funding; our ability to otherwise implement all technology necessary to achieve our GHG emissions reduction 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; that future business, regulatory and industry conditions will be within the parameters expected by us, including with respect to prices, margins, demand, including demand for our products and services, supply, product availability, supplier agreements, product distribution agreements, availability and cost of labor and interest, exchange, inflation and effective tax rates; assumptions with respect to global economic conditions and the accuracy of our market outlook expectations for 2023 and in the future; assumptions with respect to our intention to complete share repurchases under our share repurchase program, including the funding and TSX approval thereof, existing and future market conditions, including with respect to the price of our common shares, and compliance with respect to applicable limitations under securities laws and regulations and stock exchange policies; our expectations regarding the impacts, direct and indirect, of the war between Ukraine and Russia and the COVID-19 pandemic on, among other things, global supply and demand, 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; and our ability to redeploy capital to generate higher returns for shareholders.

Events or circumstances could cause actual results to differ materially from those in the forward-looking statements.

With respect to our GHG emissions reduction and other sustainability and climate-related initiatives and targets, such events or circumstances include, but are not limited to: our ability to deploy sufficient capital to fund the necessary expenditures to implement the necessary operational changes to achieve these initiatives and targets; our ability to implement requisite operational changes; our ability to implement some or all of the technology necessary to efficiently and effectively

achieve expected future results, including in respect of such GHG emissions reduction targets; the availability and commercial viability and scalability of emission reduction strategies and related technology and products; and the development and execution of implementing strategies to meet such GHG emissions reduction target.

With respect to our business generally and our ability to meet the other targets, commitments, goals, strategies and related milestones and schedules disclosed herein, such events or circumstances include, but are not limited to: general global economic, market and business conditions, including inflation; failure to complete announced and future acquisitions or divestitures at all or on the expected terms and within the expected timeline; 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, changes in environmental, tax and other laws or regulations and the interpretation thereof; political risks, including civil unrest, actions by armed groups or conflict and malicious acts including terrorism; the occurrence of a major environmental or safety incident; 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; risks related to reputational loss; certain complications that may arise in our mining processes; the ability to attract, engage and retain skilled employees and strikes or other forms of work stoppages; the war between Ukraine and Russia and its potential impact on, among other things, global market conditions and supply and demand, energy and commodity prices; interest rates, supply chains and the global economy generally; and other risk factors detailed from time to time in Nutrien reports filed with the Canadian securities regulators and the Securities and Exchange Commission in the US.

The purpose of our expected adjusted net earnings per share and adjusted EBITDA (consolidated and by segment) guidance ranges, as well as our adjusted net earnings per share and adjusted EBITDA price and volume sensitivities ranges, are to assist readers in understanding our expected and targeted financial results, and this information may not be appropriate for other purposes.

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.

# Appendix A – Non-IFRS Financial Measures

We use both IFRS measures and certain non-IFRS financial measures to assess performance. Non-IFRS financial measures are financial measures disclosed by a company that (a) depict historical or expected future financial performance, financial position or cash flow of a company, (b) with respect to their composition, exclude amounts that are included in, or include amounts that are excluded from, the composition of the most directly comparable financial measure disclosed in the primary financial statements of the company, (c) are not disclosed in the financial statements of the company, and (d) are not a ratio, fraction, percentage or similar representation. Non-IFRS ratios are financial measures disclosed by a company that are in the form of a ratio, fraction, percentage or similar representation that has a non-IFRS financial measure as one or more of its components, and that are not disclosed in the financial statements of the company.

These non-IFRS financial measures and non-IFRS ratios are not standardized financial measures under IFRS and, therefore, are unlikely to be comparable to similar financial measures presented by other companies. Management believes these non-IFRS financial measures and non-IFRS ratios provide transparent and useful supplemental information to help investors evaluate our financial performance, financial condition and liquidity using the same measures as management. These non-IFRS financial measures and non-IFRS ratios should not be considered as a substitute for, or superior to, measures of financial performance prepared in accordance with IFRS.

The following section outlines our non-IFRS financial measures and non-IFRS ratios, their compositions, and why management uses each measure. It also includes reconciliations to the most directly comparable IFRS measures. Except as otherwise described herein, our non-IFRS financial measures and non-IFRS ratios are calculated on a consistent basis from period to period and are adjusted for specific items in each period, as applicable. As additional non-recurring or unusual items arise in the future, we generally exclude these items in our calculations.

## Adjusted EBITDA (Consolidated)

**Most directly comparable IFRS financial measure:** Net earnings (loss).

**Definition:** Adjusted EBITDA is calculated as net earnings (loss) before finance costs, income taxes, depreciation and amortization, share-based compensation and certain foreign exchange gain/loss (net of related derivatives). We also adjust this measure for the following other income and expenses that are excluded when management evaluates the performance of our day-to-day operations: integration and restructuring related costs, impairment or reversal of impairment of assets, COVID-19 related expenses, gain or loss on disposal of certain businesses and investments, and IFRS adoption transition adjustments.

**Why we use the measure and why it is useful to investors:** It is not impacted by long-term investment and financing decisions, but rather focuses on the performance of our day-to-day operations. It provides a measure of our ability to service debt and to meet other payment obligations, and as a component of employee remuneration calculations.

(millions of US dollars)	2022	2021
Net earnings	7,687	3,179
Finance costs	563	613
Income tax expense	2,559	989
Depreciation and amortization	2,012	1,951
EBITDA <sup>1</sup>	12,821	6,732
Share-based compensation expense	63	198
Foreign exchange loss, net of related derivatives	31	39
Integration and restructuring related costs	46	43
(Reversal of) impairment of assets	(780)	33
COVID-19 related expenses <sup>2</sup>	8	45
Gain on disposal of investment	(19)	–
Cloud computing transition adjustment <sup>3</sup>	–	36
Adjusted EBITDA	12,170	7,126

<sup>1</sup> EBITDA is calculated as net earnings (loss) before finance costs, income taxes, and depreciation and amortization.

<sup>2</sup> COVID-19 related expenses primarily consist of increased cleaning and sanitization costs, the purchase of personal protective equipment, discretionary supplemental employee costs, and costs related to construction delays from access limitations and other government restrictions.

<sup>3</sup> Cloud computing transition adjustment relates to cloud computing costs in prior years that no longer qualify for capitalization based on an agenda decision issued by the IFRS Interpretations Committee in April 2021.

## Adjusted Net Earnings and Adjusted Net Earnings Per Share

**Most directly comparable IFRS financial measure:** Net earnings (loss) and net earnings (loss) per share.

**Definition:** Adjusted net earnings and related per share information are calculated as net earnings (loss) before share-based compensation and certain foreign exchange gain/loss (net of related derivatives), net of tax. We also adjust this measure for the following other income and expenses (net of tax) that are excluded when management evaluates the performance of our day-to-day operations: certain integration and restructuring related costs, impairment or reversal of impairment of assets, COVID-19 related expenses (including those recorded under finance costs), gain or loss on disposal of certain businesses and investments, IFRS adoption transition adjustments, and gain/loss on early extinguishment of debt or on settlement of derivatives due to discontinuance of hedge accounting. In 2022, we amended our calculation of adjusted net earnings to adjust for a gain on settlement of a derivative due to discontinued hedge accounting. There was no similar gain or loss in the comparative period. We generally apply the annual forecasted effective tax rate to our adjustments during the year and, at year-end, we apply the actual effective tax rate. If the effective tax rate is significantly different from our forecasted effective tax rate due to adjustments or discrete tax impacts, we apply a tax rate that excludes those items. For material adjustments, we apply a tax rate specific to the adjustment.

**Why we use the measure and why it is useful to investors:** Focuses on the performance of our day-to-day operations and is used as a component of employee remuneration calculations.

(millions of US dollars, except as otherwise noted)	2022			2021		
	Increases (Decreases)	Post-Tax	Per Diluted Share	Increases (Decreases)	Post-Tax	Per Diluted Share
Net earnings attributable to equity holders of Nutrien		7,660	14.18		3,153	5.52
Adjustments:						
Share-based compensation expense	63	47	0.10	198	151	0.27
Foreign exchange loss, net of related derivatives	31	23	0.05	39	30	0.05
Integration and restructuring related costs	46	35	0.06	43	33	0.06
(Reversal of) impairment of assets	(780)	(619)	(1.15)	33	25	0.04
COVID-19 related expenses	8	6	0.01	45	34	0.06
Gain on disposal of investment	(19)	(14)	(0.03)	–	–	–
Gain on settlement of discontinued hedge accounting derivative	(18)	(14)	(0.03)	–	–	–
Cloud computing transition adjustment	–	–	–	36	27	0.05
Loss on early extinguishment of debt	–	–	–	142	104	0.18
Adjusted net earnings		7,124	13.19		3,557	6.23

## Adjusted EBITDA (Consolidated) and Adjusted Net Earnings Per Share Guidance

Adjusted EBITDA and adjusted net earnings per share guidance are forward-looking non-IFRS financial measures. We do not provide a reconciliation of such forward-looking measures to the most directly comparable financial measures calculated and presented in accordance with IFRS because a meaningful or accurate calculation of reconciling items and the information is not available without unreasonable effort due to unknown variables, including the timing and amount of certain reconciling items, and the uncertainty related to future results. These unknown variables may include unpredictable transactions of significant value that may be inherently difficult to determine without unreasonable efforts. The probable significance of such unavailable information, which could be material to future results, cannot be addressed. Guidance for adjusted EBITDA and adjusted net earnings per share excludes certain items such as, but not limited to, the impacts of share-based compensation, certain foreign exchange gain/loss (net of related derivatives), integration and restructuring related costs, impairment or reversal of impairment of assets, COVID-19 related expenses (including those recorded under finance costs), gain or loss on disposal of certain businesses and investments, IFRS adoption transition adjustments, and gain/loss on early extinguishment of debt or on settlement of derivatives due to discontinuance of hedge accounting.

## Growth Capital and Growth Capital Allocation

**Most directly comparable IFRS financial measure:** Cash used in investing activities.

**Definition:** Cash used in investing activities related to growth initiatives consisting of investing capital expenditures, which are a component of capital expenditures, plus business acquisitions, net of cash acquired per the consolidated statements of cash flows. Growth Capital Allocation allocates growth capital as a percentage by operating segments or a combination of operating segments.

**Why we use the measure and why it is useful to investors:** To demonstrate how we allocate our capital to our various priorities including growth and expansion projects and acquisitions.

(millions of US dollars)	2022	2021
Cash used in investing activities	(2,901)	(1,807)
Sustaining capital expenditures	1,449	1,247
Mine development and pre-stripping capital expenditures	234	156
Borrowing costs on property, plant and equipment	(37)	(29)
Other <sup>1</sup>	12	(64)
Net changes in non-cash working capital <sup>1</sup>	44	(101)
Growth capital	(1,199)	(598)

<sup>1</sup> Included in investing activities as per the consolidated statement of cash flows.

## Gross Margin Excluding Depreciation and Amortization Per Tonne – Manufactured

**Most directly comparable IFRS financial measure:** Gross margin.

**Definition:** Gross margin per tonne less depreciation and amortization per tonne for manufactured products. Reconciliations are provided in the “Our Results and Outlook – Operating Segment Performance” section.

**Why we use the measure and why it is useful to investors:** Focuses on the performance of our day-to-day operations, which excludes the effects of items that primarily reflect the impact of long-term investment and financing decisions.

## Potash Controllable Cash Cost of Product Manufactured (“COPM”) Per Tonne

**Most directly comparable IFRS financial measure:** Cost of goods sold (“COGS”) for the Potash segment.

**Definition:** Total Potash COGS excluding depreciation and amortization expense included in COPM, royalties, natural gas costs and carbon taxes, change in inventory, and other adjustments, divided by potash production tonnes.

**Why we use the measure and why it is useful to investors:** To assess operational performance. In 2022, we replaced Potash cash COPM with this new financial measure. Potash controllable cash COPM excludes the effects of production from other periods and the impacts of our long-term investment decisions. Potash controllable cash COPM also excludes royalties and natural gas costs and carbon taxes, which management does not consider controllable, as they are primarily driven by regulatory and market conditions.

(millions of US dollars, except as otherwise noted)	2022	2021
Total COGS – Potash	1,400	1,285
Change in inventory	58	22
Other adjustments <sup>1</sup>	(41)	(6)
COPM	1,417	1,301
Depreciation and amortization in COPM	(406)	(430)
Royalties in COPM	(190)	(107)
Natural gas costs and carbon taxes in COPM	(62)	(51)
Controllable cash COPM	759	713
Production tonnes (tonnes – thousands)	13,007	13,790
Potash controllable cash COPM per tonne	58	52

<sup>1</sup> Other adjustments include unallocated production overhead that is recognized as part of cost of goods sold but is not included in the measurement of inventory and changes in inventory balances.

## Ammonia Controllable Cash COPM Per Tonne

**Most directly comparable IFRS financial measure:** Total manufactured COGS for the Nitrogen segment.

**Definition:** Total Nitrogen COGS excluding depreciation and amortization expense included in COGS, cash COGS for products other than ammonia, other adjustments, and natural gas and steam costs, divided by net ammonia production tonnes.

**Why we use the measure and why it is useful to investors:** To assess operational performance. Ammonia controllable cash COPM excludes the effects of production from other periods, the costs of natural gas and steam, and long-term investment decisions, supporting a focus on the performance of our day-to-day operations.

(millions of US dollars, except as otherwise noted)	2022	2021
Total Manufactured COGS – Nitrogen	3,197	2,353
Total Other COGS – Nitrogen	1,055	610
Total COGS – Nitrogen	4,252	2,963
Depreciation and amortization in COGS	(465)	(473)
Cash COGS for products other than ammonia	(2,560)	(1,740)
Ammonia		
Total cash COGS before other adjustments	1,227	750
Other adjustments <sup>1</sup>	(210)	(96)
Total cash COPM	1,017	654
Natural gas and steam costs in COPM	(855)	(515)
Controllable cash COPM	162	139
Production tonnes (net tonnes <sup>2</sup> – thousands)	2,754	2,769
Ammonia controllable cash COPM per tonne	59	50

<sup>1</sup> Other adjustments include unallocated production overhead that is recognized as part of cost of goods sold but is not included in the measurement of inventory and changes in inventory balances.

<sup>2</sup> Ammonia tonnes available for sale, as not upgraded to other Nitrogen products.

## Retail Adjusted Average Working Capital to Sales and Retail Adjusted Average Working Capital to Sales Excluding Nutrien Financial

**Definition:** Retail adjusted average working capital divided by Retail adjusted sales for the last four rolling quarters. We exclude in our calculations the sales and working capital of certain acquisitions during the first year following the acquisition. We also look at this metric excluding Nutrien Financial revenue and working capital.

**Why we use the measure and why it is useful to investors:** To evaluate operational efficiency. A lower or higher percentage represents increased or decreased efficiency, respectively. The metric excluding Nutrien Financial shows the impact that the working capital of Nutrien Financial has on the ratio.

(millions of US dollars, except as otherwise noted)	2022	2021
Average current assets	11,952	9,332
Average current liabilities	(8,249)	(7,093)
Average working capital	3,703	2,239
Average working capital from certain recent acquisitions	–	–
Adjusted average working capital	3,703	2,239
Average Nutrien Financial working capital	(3,311)	(2,316)
Adjusted average working capital excluding Nutrien Financial	392	(77)
Sales	21,350	17,734
Sales from certain recent acquisitions	–	–
Adjusted sales	21,350	17,734
Nutrien Financial revenue	(267)	(189)
Adjusted sales excluding Nutrien Financial	21,083	17,545
<b>Adjusted average working capital to sales (%)</b>	17	13
<b>Adjusted average working capital to sales excluding Nutrien Financial (%)</b>	2	–

## Nutrien Financial Adjusted Net Interest Margin

**Definition:** Nutrien Financial revenue less deemed interest expense divided by average Nutrien Financial receivables outstanding for the last four rolling quarters.

**Why we use the measure and why it is useful to investors:** Used by credit rating agencies and other users to evaluate the financial performance of Nutrien Financial.

(millions of US dollars, except as otherwise noted)	2022	2021
Nutrien Financial revenue	267	189
Deemed interest expense <sup>1</sup>	(41)	(36)
Net interest	226	153
Average Nutrien Financial receivables	3,311	2,316
Nutrien Financial adjusted net interest margin (%)	6.8	6.6

<sup>1</sup> Average borrowing rate applied to the notional debt required to fund the portfolio of receivables from customers monitored and serviced by Nutrien Financial.

## Retail Cash Operating Coverage Ratio

**Definition:** Retail selling, general and administrative, and other expenses, excluding depreciation and amortization expense, divided by Retail gross margin excluding depreciation and amortization expense in cost of goods sold, for the last four rolling quarters.

**Why we use the measure and why it is useful to investors:** To understand the costs and underlying economics of our Retail operations and to assess our Retail operating performance and ability to generate free cash flow.

(millions of US dollars, except as otherwise noted)	2022	2021
Selling expenses	3,392	3,124
General and administrative expenses	200	168
Other expenses	29	86
Operating expenses	3,621	3,378
Depreciation and amortization in operating expenses	(740)	(694)
Operating expenses excluding depreciation and amortization	2,881	2,684
Gross margin	5,179	4,600
Depreciation and amortization in cost of goods sold	12	12
Gross margin excluding depreciation and amortization	5,191	4,612
Cash operating coverage ratio (%)	55	58

## Retail Normalized Comparable Store Sales

**Most directly comparable IFRS financial measure:** Retail sales from comparable base as a component of total Retail sales.

**Definition:** Prior year comparable store sales adjusted for average selling price (which generally moves with published potash, nitrogen and phosphate benchmark prices), acquisitions of new stores and foreign exchange rates used in the current year.

**Why we use the measure and why it is useful to investors:** To evaluate sales growth by adjusting for fluctuations in commodity prices and foreign exchange rates. Includes locations we have owned for more than 12 months.

(millions of US dollars, except as otherwise noted)	2022	2021
Sales from comparable base		
Prior period	17,734	14,785
Adjustments <sup>1</sup>	(64)	(476)
Revised prior period	17,670	14,309
Current period	21,092	17,511
Comparable store sales (%)	19	22
Prior period normalized for average selling prices and foreign exchange rates	21,867	16,350
Normalized comparable store sales (%)	(4)	7

<sup>1</sup> Adjustments relate to prior period sales related to closed locations or businesses that no longer exist in the current period in order to provide a comparable base in our calculation.

## Return on Invested Capital (“ROIC”)

**Definition:** ROIC is calculated as net operating profit after taxes divided by the average invested capital for the last four rolling quarters.

Net operating profit after taxes, a non-IFRS financial measure, is calculated as earnings before finance costs and income taxes, depreciation and amortization related to the fair value adjustments as a result of the Merger (the merger of equals transaction between PotashCorp and Agrium), share-based compensation and certain foreign exchange gain/loss (net of related derivatives) and Nutrien Financial revenue. The most directly comparable IFRS financial measure to net operating profit after taxes is earnings before finance costs and income taxes. We also adjust this measure for the following other income and expenses that are excluded when management evaluates the performance of our day-to-day operations: integration and restructuring related costs, impairment or reversal of impairment of assets, COVID-19 related expenses, gain or loss on disposal of certain businesses and investments, and IFRS adoption transition adjustments. A tax rate of 25 percent is applied on the calculated amount.

Invested capital is calculated as last four rolling quarter average of total assets less cash and cash equivalents; payables and accrued charges; Merger fair value adjustments on goodwill, intangible assets, and property, plant and equipment; and average Nutrien Financial working capital.

We exclude in our calculations the related financial information of certain acquisitions during the first year following the acquisition.

**Why we use the measure and why it is useful to investors:** In 2022 we added a new financial measure to evaluate how efficiently we allocate our capital. ROIC provides useful information to evaluate our after-tax cash operating return on invested capital and is used as a component of employee remuneration calculations.

(millions of US dollars, except as otherwise noted)	2022	2021	2020
Earnings before finance costs and income taxes	10,809	4,781	902
Merger adjustments <sup>1</sup>	231	277	297
Integration and restructuring related costs	46	43	60
Share-based compensation	63	198	69
(Reversal of) impairment of assets	(780)	33	824
COVID-19 related expenses	8	45	48
Foreign exchange loss, net of related derivatives	31	39	19
(Gain) loss on disposal of business	–	–	6
Gain on disposal of investment	(19)	–	(250)
Cloud computing transition adjustment	–	36	–
Nutrien Financial revenue	(267)	(189)	(129)
Net operating profit	10,122	5,263	1,846
Tax (calculated at 25%)	2,531	1,316	462
Net operating profit after tax	7,591	3,947	1,384

<sup>1</sup> Depreciation and amortization related to the fair value adjustments as a result of the Merger (the merger of equals transaction between PotashCorp and Agrium).

Total assets	54,228	48,880	47,533
Cash and cash equivalents	(753)	(862)	(1,629)
Payables and accrued charges	(10,687)	(8,773)	(6,991)
Merger adjustments <sup>1</sup>	(10,232)	(10,516)	(10,668)
Average Nutrien Financial receivables	(3,311)	(2,316)	(1,502)
Invested capital	29,245	26,413	26,743

<sup>1</sup> Merger fair value adjustments on goodwill, intangible assets, and property, plant and equipment.

Return on invested capital (%)	26	15	5
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# Appendix B – Other Financial Measures

## Supplementary Financial Measures

Supplementary financial measures are financial measures disclosed by a company that (a) are, or are intended to be, disclosed on a periodic basis to depict the historical or expected future financial performance, financial position or cash flow of a company, (b) are not disclosed in the financial statements of the company, (c) are not non-IFRS financial measures, and (d) are not non-IFRS ratios.

The following section provides an explanation of the composition of those supplementary financial measures if not previously provided.

**Retail adjusted EBITDA margin:** Retail adjusted EBITDA divided by Retail sales for the last four rolling quarters.

**Retail digital platform sales:** Grower and employee Retail sales in North America entered directly into the digital platform.

**Retail digital platform sales to total sales:** Grower and employee Retail sales in North America entered directly into the digital platform as a percentage of total Retail sales in North America.

**Sustaining capital expenditures:** Represents capital expenditures that are required to sustain operations at existing levels and include major repairs and maintenance and plant turnarounds.

**Investing capital expenditures:** Represents capital expenditures related to significant expansions of current operations or to create cost savings (synergies). Investing capital expenditures excludes capital outlays for business acquisitions and equity-accounted investees.

**Mine development and pre-stripping capital expenditures:** Represents capital expenditures that are required for activities to open new areas underground and/or develop a mine or ore body to allow for future production mining and activities required to prepare and/or access the ore, i.e., removal of an overburden that allows access to the ore.

**Retail adjusted EBITDA per US selling location:** Calculated as total Retail US adjusted EBITDA for the last four rolling quarters, representing the organic EBITDA component, which excludes acquisitions in those quarters, divided by the number of US locations that have generated sales in the last four rolling quarters, adjusted for acquired locations in those quarters.

**Cash used for dividends and share repurchases (shareholder returns):** Calculated as dividends paid to Nutrien's shareholders plus repurchase of common shares per the consolidated statements of cash flows. This measure is useful as it represents return of capital to shareholders.

## Capital Management Measures

Capital management measures are financial measures disclosed by a company that (a) are intended to enable an individual to evaluate a company's objectives, policies and processes for managing the Company's capital, (b) are not a component of a line item disclosed in the primary financial statements of the company, (c) are disclosed in the notes of the financial statements of the company, and (d) are not disclosed in the primary financial statements of the company.

The following section outlines our capital management measure, its composition and why management uses the measure.

**Adjusted net debt to adjusted EBITDA:** Calculated as adjusted net debt to adjusted EBITDA. Both components are non-IFRS financial measures. This ratio measures financial leverage and our ability to pay our debt.

The most directly comparable measure for adjusted net debt is total short-term and long-term debt and lease liabilities less cash and cash equivalents and is defined as the total of short-term and long-term debt plus lease liabilities less cash and cash equivalents and unamortized fair value adjustments. This measure is useful as it adjusts for the unamortized fair value adjustments that arose at the time of the Merger and is non-cash in nature.

(millions of US dollars, except as otherwise noted)	2022	2021
Short-term debt	2,142	1,560
Current portion of long-term debt	542	545
Current portion of lease liabilities	305	286
Long-term debt	8,040	7,521
Lease liabilities	899	934
<b>Total debt</b>	<b>11,928</b>	<b>10,846</b>
Cash and cash equivalents	(901)	(499)
Unamortized fair value adjustments	(310)	(325)
<b>Adjusted net debt</b>	<b>10,717</b>	<b>10,022</b>

# Terms & Definitions

## Terms

<b>AECO</b>	Alberta Energy Company, Canada
<b>Argus</b>	Argus Media group, UK
<b>Bloomberg</b>	Bloomberg Finance L.P., USA
<b>CDP Climate</b>	CDP Worldwide, England
<b>CDP Water</b>	CDP Worldwide, England
<b>CRU</b>	CRU International limited, UK
<b>ESG</b>	Environmental, social and governance
<b>FTSE Russell</b>	FTSE International Limited, England
<b>ISS Quality Scores</b>	Institutional Shareholder Services Inc., USA
<b>Moody's</b>	Moody's Corporation (NYSE: MCO), USA
<b>MSCI ESG Rating</b>	MSCI Inc., USA
<b>NYMEX</b>	New York Mercantile Exchange, USA
<b>NYSE</b>	New York Stock Exchange, USA
<b>S&amp;P/S&amp;P Global Corporate Sustainability Assessment</b>	S&P Global Inc., USA
<b>TSX</b>	Toronto Stock Exchange, Canada
<b>USDA</b>	United States Department of Agriculture, USA
<b>CAD</b>	Canadian dollar
<b>USD</b>	United States dollar
<b>AUD</b>	Australian dollar

## Scientific Terms

<b>Potash</b>	KCl	potassium chloride, 60–63.2% K <sub>2</sub> O (solid)
<b>Nitrogen</b>	CO <sub>2</sub> e	carbon dioxide equivalent
	DEF	diesel exhaust fluid
	ESN <sup>®</sup>	environmentally smart nitrogen, 44% nitrogen
	NH <sub>3</sub>	ammonia (anhydrous), 82.2% N (liquid)
	N <sub>2</sub> O	nitrous oxide
	UAN	nitrogen solutions, 28–32% N (liquid)
<b>Phosphate</b>	AS	ammonium sulfate (solid)
	DAP	diammonium phosphate, 46% P <sub>2</sub> O <sub>5</sub> (solid)
	MAP	monoammonium phosphate, 52% P <sub>2</sub> O <sub>5</sub> (solid)
	MGA	merchant grade acid, 54% P <sub>2</sub> O <sub>5</sub> (liquid)
	MST	micronized sulfur technology, P + S
	P <sub>2</sub> O <sub>5</sub>	phosphorus pentoxide
	SPA	superphosphoric acid, 70% P <sub>2</sub> O <sub>5</sub> (liquid)

## Product Measures

<b>K<sub>2</sub>O tonne</b>	Measures the potassium content of products having different chemical analyses
<b>N tonne</b>	Measures the nitrogen content of products having different chemical analyses
<b>P<sub>2</sub>O<sub>5</sub> tonne</b>	Measures the phosphorus content of products having different chemical analyses
<b>Product tonne</b>	Standard measure of the weights of all types of potash, nitrogen and phosphate products

## Definitions

<b>Low-carbon ammonia</b>	Ammonia made with direct GHG emissions typically reduced by approximately 60 percent but up to 80 percent, produced by primarily using carbon capture, utilization and storage (“CCUS”) or other low-emission production technologies; this definition does not include end product use.
<b>Brownfield</b>	New project expanding or developing an existing facility or operation.
<b>Community investment</b>	Represents cash disbursements, matching of employee gifts and in-kind contributions of equipment, goods and services, and employee volunteerism (on corporate time).
<b>Clean ammonia</b>	Ammonia made with direct GHG emissions reduced by at least 90 percent, produced from hydrogen obtained using the next generation of ammonia production technology, such as auto-thermal reforming or water electrolysis with renewable power; this definition does not include end product use.
<b>Cumulative annual growth rate (“CAGR”)</b>	Represents the rate of return that would be required for an investment to grow from its beginning balance to its ending balance assuming the profits were reinvested at the end of each year of the investment’s lifespan.
<b>COVID-19</b>	COVID-19 coronavirus pandemic.
<b>Environmental incidents</b>	Number of incidents includes non-permitted release quantities that equal or exceed the US Comprehensive Environmental Response, Compensation, and Liability Act limits in a 24- hour period at all non-potash facilities; in potash facilities any non- permitted release that equals or exceeds Saskatchewan release limits in a 24- hour period (based on the Saskatchewan Environmental Code); non-compliance incidents that exceed \$10,000 in costs to reach compliance; or enforcement actions with fines exceeding \$1,000.
<b>Greenfield</b>	New project on a previously undeveloped site.
<b>Greenhouse gas (“GHG”)</b>	Gas that contributes to the greenhouse effect by absorbing infrared radiation.
<b>Latin America</b>	South America, Central America, Caribbean and Mexico.
<b>Lost-time injury frequency</b>	Total lost-time injuries for every 200,000 hours worked for all Nutrien employees, contractors and others on site. Calculated as the total lost-time injuries multiplied by 200,000 hours worked divided by the actual number of hours worked.
<b>Merger</b>	The merger of equals transaction between PotashCorp and Agrium completed effective January 1, 2018, pursuant to which PotashCorp and Agrium combined their businesses pursuant to a statutory plan of arrangement under the Canada Business Corporations Act and became wholly owned subsidiaries of Nutrien Ltd.
<b>Mmt</b>	Million metric tonnes.
<b>North America</b>	Canada and the US.
<b>Offshore</b>	All markets except Canada and the US.
<b>Serious injury and fatality</b>	A work-related fatality or life-altering injury/illness experienced by an employee or directly supervised contractor conducting work on behalf of Nutrien.
<b>Scope 1</b>	Direct greenhouse gas emissions produced by Nutrien owned or controlled facilities.
<b>Scope 2</b>	Greenhouse gas emissions resulting from the generation of purchased or acquired electricity, heating, cooling and steam consumed by Nutrien owned or controlled facilities.
<b>Scope 3</b>	Indirect greenhouse gas emissions not included in Scope 1 or Scope 2 emissions occurring as a consequence of the activities of Nutrien, from sources not owned or controlled by Nutrien, including both upstream and downstream emissions.
<b>Total employee turnover rate</b>	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.
<b>Total recordable injury frequency</b>	Total recordable injuries for every 200,000 hours worked for all Nutrien employees, contractors and others on site. Calculated as the total recordable injuries multiplied by 200,000 hours worked divided by the actual number of hours worked.
<b>Total shareholder return</b>	Return on investment in Nutrien shares from the time the investment is made based on two components: (1) growth in share price and (2) return from reinvested dividend income on the shares.
<b>Voluntary employee turnover</b>	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.