UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 40-F

[Check one]

REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2022

Commission File Number 001-38336

NUTRIEN LTD.

(Exact name of Registrant as specified in its charter)

Canada
(Province or other jurisdiction of incorporation or organization)

2870
(Primary Standard Industrial Classification Code Number (if applicable))

98-1400416
(I.R.S. Employer Identification Number (if applicable))

Suite 1700, 211 19th Street East
Saskatoon , Saskatchewan , Canada
S7K 5R6
(306) 933-8500
(Address and telephone number of Registrant's principal executive offices)

CT Corporation System
28 Liberty St.
New York , NY 10005
(212) 894-8940
(Name, address (including zip code) and telephone number (including area code)

of agent for service in the United States)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares	NTR	New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Not Applicable
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

Not Applicable
(Title of Class)

For annual reports, indicate by check mark the information filed with this Form:

Annual information form **Audited annual financial statements**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

507,246,105 Common Shares outstanding as of December 31, 2022

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act.

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

This Annual Report on Form 40-F shall be incorporated by reference into the Registration Statements on Form S-8 (File Nos. 333-222384, 333-222385 and 333-226295) of the registrant. In addition, the registrant's Annual Information Form; Management's Discussion and Analysis; Audited Annual Consolidated Financial Statements for the fiscal year ended December 31, 2022, including Management's Annual Report on Internal Control over Financial Reporting; Consent of KPMG LLP, Independent Registered Public Accounting Firm; and Consent of Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., included as Exhibits 99.1, 99.2, 99.3, 99.4 and 99.8, respectively, to this Annual Report on Form 40-F, are incorporated by reference into and as an exhibit to the registrant's Registration Statement on Form F-10 (File No. 333-263275).

PRINCIPAL DOCUMENTS

The following documents have been filed as part of this Annual Report:

1. Annual Information Form for the fiscal year ended December 31 , 2022 (the "2022 AIF") (filed as Exhibit 99.1 hereto);
2. Management's Discussion and Analysis for the fiscal year ended December 31, 2022 (the "2022 MD&A") (filed as Exhibit 99.2 hereto); and
3. Audited Annual Financial Statements, including the Reports of Independent Registered Public Accounting Firm, for the fiscal year ended December 31, 2022 (the "2022 Audited Annual Financial Statements") (filed as Exhibit 99.3 hereto).

CONTROLS AND PROCEDURES

A. Certifications

The required disclosure is included in Exhibits 99.5, 99.6 and 99.7 to this Annual Report, and is incorporated herein by reference.

B. Evaluation of Disclosure Controls and Procedures

The required disclosure is included in " *Controls and Procedures—Disclosure Controls and Procedures* " in the 2022 MD&A, filed as Exhibit 99.2 to this Annual Report, and is incorporated herein by reference.

C. Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining an adequate system of 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. The required disclosure is included in " *Management's Responsibility—Management's Annual Report on Internal Control over Financial Reporting* " that accompanies the 2022 Audited Annual Financial Statements, filed as Exhibit 99.3 to this Annual Report, and is incorporated herein by reference.

D. Attestation Report of the Independent Registered Public Accounting Firm

The required disclosure is included in the " *Report of Independent Registered Public Accounting Firm* " that accompanies the 2022 Audited Annual Financial Statements, filed as Exhibit 99.3 to this Annual Report, and is incorporated herein by reference.

E. Changes in Internal Control over Financial Reporting

During the period covered by this report, there was no change in Nutrien's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting. See " *Controls and Procedures—Internal Control Over Financial Reporting* " in the 2022 MD&A, filed as Exhibit 99.2 to this Annual Report and incorporated herein by reference.

IDENTIFICATION OF THE AUDIT COMMITTEE

The Board has a separately-designated standing audit committee established in accordance with section 3(a)(58)(A) of the Exchange Act. The members of the Audit Committee are Maura J. Clark, Christopher M. Burley, Alice D. Laberge and Aaron W. Regent. Keith G. Martell was a member of the Audit Committee until January 1, 2023.

AUDIT COMMITTEE FINANCIAL EXPERT

The Nutrien Board of Directors (the "Board") has determined that it has at least one "audit committee financial expert" (as such term is defined in paragraph 8(b) of General Instruction B to Form 40-F) serving on its Audit Committee. Ms. Maura J. Clark has been determined to be such audit committee financial expert and was "independent" as such term is defined under the Canadian Securities Administrators' National Instrument 52-110 (Audit Committees) and the standards of the U.S. Securities and Exchange Commission (the "SEC") and the New York Stock Exchange (the "NYSE") relating to the independence of audit committee members.

The Board's designation of Ms. Maura J. Clark as an audit committee financial expert does not impose on her any duties, obligations or liability that are greater than the duties, obligations and liability imposed on her as a member of the Audit Committee and Board in the absence of such designation or identification. In addition, the designation of Ms. Maura J. Clark as an audit committee financial expert does not affect the duties, obligations or liability of any other member of the Audit Committee or Board. See also *"Item 17—Audit Committee"* of Nutrien's 2022 AIF, filed as Exhibit 99.1 to this Annual Report, and incorporated herein by reference.

COMPLIANCE WITH NYSE LISTING STANDARDS ON CORPORATE GOVERNANCE

Our common shares are listed on the NYSE, but as a listed foreign private issuer, the NYSE does not require us to comply with all of its listing standards regarding corporate governance. Notwithstanding this exemption, we are in compliance in all material respects with the NYSE listing standards and we intend to continue to comply with such standards so as to ensure that there are no significant differences between our corporate governance practices and those practices required by the NYSE of other publicly listed companies.

CODE OF CONDUCT AND ETHICS

Nutrien has adopted a "code of ethics" (as that term is defined in Form 40-F), entitled the Nutrien Code of Conduct that applies to all directors, officers, employees and representatives of Nutrien and its subsidiaries (the "Nutrien Code"). A copy of the Nutrien Code is posted on Nutrien's website at https://www.nutrien.com/what-we-do/governance. Copies may be obtained, free of charge, by contacting Nutrien in writing at 211 19th Street East, Suite 1700, Saskatoon, Saskatchewan, Canada S7K 5R6, by telephone at (306) 933-8500 or on Nutrien's website at www.nutrien.com. Nutrien intends to post any amendments to and waivers from the Nutrien Code on its website as identified above.

NOTICES PURSUANT TO REGULATION BTR

Not applicable.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets out the fees billed to Nutrien by KPMG LLP (PCAOB ID: 85 ; Calgary, AB, Canada) and its affiliates for professional services rendered during the years ended December 31, 2022 and 2021. During these years, KPMG LLP was the Company's only external auditor.

Category	Year Ended December 31,	
	2022 US$	2021 US$
Audit Fees [1]	8,777,700	8,284,800
Audit-Related Fees [2]	63,000	-
Tax Fees [3]	168,100	191,100
All Other Fees [4]	302,400	149,900
Total	**9,311,200**	**8,625,800**

1 For professional services rendered by KPMG LLP for the integrated audit of the Company's annual financial statements; interim review of the Company's interim financial statements; audits of statutory financial statements of controlled subsidiaries; attestation reporting in accordance with US environmental agency requirements and consent orders; attestation reports over various Nutrien subsidiaries for the purpose of compliance with local laws and regulations; and work in connection with the renewal of the Company's base shelf prospectus in 2022 and the Company's prospectus supplement relating to the offering of notes in 2022.

2 For professional services rendered by KPMG LLP for translation of the Company's annual and quarterly reports. Amounts previously reported in 2021 as audit-related fees have been reclassified as audit fees and all other fees to align with the current year's presentation.

3 For professional services rendered by KPMG LLP for assistance with preparation and review of tax filings and related tax compliance, assistance in responding to tax authorities, including reassessments and tax audits, routine tax planning and advice. These amounts include fees paid to KPMG LLP specifically for tax compliance and preparation services rendered in 2022 and 2021 in the amounts of $168,100 and $181,000, respectively.

4 For professional services rendered by KPMG LLP for the preparation of subsidiary statutory financial statements; an assessment of the Company's cyber security maturity level against a globally recognized framework and a readiness assessment for assurance over the Company's report on cyber security key performance indicators; and limited assurance over Nutrien Scope 1 and Scope 2 GHG emissions.

AUDIT COMMITTEE'S PRE-APPROVAL POLICIES AND PROCEDURES

The required disclosure is included in *"Item 17—Audit Committee—17.4—Pre-approval Policies and Procedures"* of Nutrien's 2022 AIF, filed as Exhibit 99.1 to this Annual Report, and incorporated herein by reference.

OFF-BALANCE SHEET ARRANGEMENTS

The information included in *"Off-Balance Sheet Arrangements"* of the 2022 MD&A, filed as Exhibit 99.2 to this Annual Report, is incorporated herein by reference.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The information included in *"Liquidity & Capital Resources—Cash Requirements"* of the 2022 MD&A, filed as Exhibit 99.2 to this Annual Report, is incorporated herein by reference.

RESERVE AND RESOURCE ESTIMATES

All mining terms used herein but not otherwise defined have the meanings set forth in National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101"), which references the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards on Mineral Resources and Mineral Reserves (the "CIM Standards").

In addition, the terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are defined in and required to be disclosed in accordance with NI 43-101. Investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into mineral reserves. "Inferred mineral resources" have a significant amount of uncertainty as to their existence, and significant uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category of mineral resources or mineral reserves. Under Canadian securities laws, estimates of inferred mineral resources may not form the basis of feasibility or prefeasibility studies,

except in certain specific cases. Additionally, disclosure of "contained ounces" in a mineral resource is permitted disclosure under Canadian securities laws.

The SEC adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the Exchange Act. These amendments became effective February 25, 2019 (the "SEC Modernization Rules"), with compliance required for the first fiscal year beginning on or after January 1, 2021. Under the SEC Modernization Rules, the historical property disclosure requirements for mining registrants included in SEC Industry Guide 7 were rescinded and replaced with the disclosure requirements in subpart 1300 of SEC Regulation S-K. Following the transition period, as a foreign private issuer that is eligible to file reports with the SEC pursuant to the multi-jurisdictional disclosure system, the Company is not required to provide disclosure under the SEC Modernization Rules and will continue to provide disclosure under NI 43-101. As a result of the adoption of the SEC Modernization Rules, the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources". In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be "substantially similar" to the corresponding definitions under the CIM Standards, as required under NI 43-101.

U.S. investors are cautioned that there are differences in the definitions under the SEC Modernization Rules and the CIM Standards. Accordingly, there is no assurance any mineral reserves or mineral resources that the Company may report as "proven mineral reserves", "probable mineral reserves", "measured mineral resources", "indicated mineral resources" and "inferred mineral resources" under NI 43-101 would be the same had the Company prepared the mineral reserve or resource estimates under the standard adopted under the SEC Modernization Rules. Accordingly, information contained in this Annual Report and the documents incorporated by reference herein containing descriptions of the Company's mineral reserves and resources may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements of U.S. federal securities laws and the rules and regulations thereunder.

MINE SAFETY DISCLOSURE

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 16 of General Instruction B to Form 40-F is included in Exhibit 99.9 to this Annual Report.

DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

WEBSITE INFORMATION

Notwithstanding any reference to Nutrien's website or other websites on the World Wide Web in this Annual Report or in the documents attached as exhibits hereto, the information contained in Nutrien's website or any other website on the World Wide Web referred to in this Annual Report or in the documents attached as exhibits hereto, or referred to in Nutrien's website, is not a part of this Annual Report and,

therefore, is not filed with the SEC.

UNDERTAKING AND CONSENT TO SERVICE OF PROCESS

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the SEC staff, and to furnish promptly, when requested to do so by the SEC staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

The Registrant has previously filed an Appointment of Agent for Service of Process and Undertaking on Form F-X with respect to the class of securities in relation to which the obligation to file the Form 40-F arises. Any change to the name or address of the Registrant's agent for service of process shall be communicated promptly to the SEC by amendment to the Form F-X referencing the file number of the Registrant.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

NUTRIEN LTD.

By: /s/ Robert A. Kirkpatrick
Name: Robert A. Kirkpatrick
Title: SVP & Corporate Secretary

Date: February 24, 2023

EXHIBIT INDEX

Exhibit Number	Description
99.1	Annual Information Form for the fiscal year ended December 31, 2022
99.2	Management's Discussion and Analysis for the fiscal year ended December 31, 2022
99.3	Audited Annual Consolidated Financial Statements for the fiscal year ended December 31, 2022
99.4	Consent of KPMG LLP, Independent Registered Public Accounting Firm
99.5	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
99.6	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
99.7	Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.8	Consent of Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo.
99.9	Mine Safety Disclosure
101	Interactive Data File (formatted as Inline XBRL)
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

Exhibit 99.1

Nutrien Ltd.

Annual Information Form
Year Ended December 31, 2022

February 16, 2023

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Following is a table of contents of this Annual Information Form ("AIF") referencing the applicable requirements of Form51-102F2 – Annual Information Form of the Canadian Securities Administrators. Certain information required to be disclosed in this AIF is contained in Nutrien Ltd.'s Management's Discussion & Analysis ("2022 MD&A"), and Consolidated Financial Statements for the years ended December 31, 2022 and 2021 ("2022 Consolidated Financial Statements") and is incorporated by reference herein to the extent noted below and throughout this AIF; these documents are available under Nutrien's corporate profile on the Canadian Securities Administrators' SEDAR website at www.sedar.com and on the EDGAR section of the United States ("US") Securities and Exchange Commission's ("SEC") website at www.sec.gov.

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2 – Advisories

2.1 Forward-Looking Information

Certain statements and other information included in this AIF, including within the documents incorporated by reference, 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” 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:

- our business strategies, plans, prospects and opportunities, and our sustainability, climate change and Environmental, Social and Governance (“ESG”) initiatives and proposed responses to climate change and ESG policies and regulations;
- expectations regarding performance of our operating segments;
- our market outlook for 2023, including agriculture and crop nutrient markets, 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 concerning future product offerings, including the planned expansion of our digital platform to markets in Australia and South America;
- expectations regarding continued natural gas curtailments at our Trinidad nitrogen facility;
- expectations regarding changes in the agriculture space, including continued farm consolidation in the US and other developed markets and the continued advancement and adoption of technology and digital innovations;
- expectations regarding acquisitions and divestitures;
- expectations regarding environmental compliance requirements and costs, including estimates of asset retirement obligations, federal and provincial carbon pricing, and site assessment and remediation costs;
- expectations regarding our sustainability, climate change and greenhouse gas (“GHG”) emissions reduction strategy and related programs and initiatives, including our various ESG performance goals, targets, commitments, and aspirations as set out in our Feeding the Future Plan and the ESG Report;
- our evaluation of the clean ammonia facility project at Geismar, Louisiana;
- our GHG emissions reduction target, including our plans with respect thereto and estimated capital expenditures required to achieve such target;
- the negotiation of sales and other contracts, including the anticipated expiry of existing contracts;
- initiatives to promote sustainable and productive agriculture; and
- expectations regarding our mineral reserve and resource estimates, and the annual nameplate capacity and annual operational capability of our mines and associated mine life estimates.

These forward-looking statements are subject to a number of assumptions, risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from such forward-looking statements. As such, undue reliance should not be placed on these forward-looking statements.

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

In respect of our GHG emissions reduction 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_2O”) abatement at our nitric acid production facilities, energy efficiency improvements, carbon capture, utilization and storage, 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, 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;
- our expectations regarding the impacts, direct and indirect, of the Ukraine and Russia war and the COVID-19 pandemic on our business, customers, business partners, employees, supply chain, other stakeholders and the overall economy;
- 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;
- assumptions with respect to our intention to complete share repurchases under our share repurchase program, including Toronto Stock Exchange ("TSX") approval and funding of such share repurchases;
- our ability to successfully negotiate sales and other contracts; and
- our ability to successfully implement new initiatives and programs.

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 target; the availability and commercial viability and scalability of emissions 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 in this document, such events or circumstances include, but are not limited to:

- general global economic, market and business conditions;
- failure to complete announced and future acquisitions or divestitures at all or on the expected terms and within the expected timeline;
- climate change and weather conditions, including impacts from regional flooding and/or drought conditions;
- crop planted acreage, yield and prices;
- the supply and demand and price levels for our products;
- governmental and regulatory requirements and actions by governmental authorities, including changes in government policy (including tariffs, trade restrictions and climate change initiatives), government ownership requirements, and changes in environmental, tax, antitrust, and other laws or regulations and the interpretation thereof;
- political risks, including civil unrest, actions by armed groups or conflict and malicious acts including terrorism;
- our ability to access sufficient, cost-effective and timely transportation, distribution and storage of products;
- the occurrence of a major environmental or safety incident or becoming subject to legal or regulatory proceedings;
- innovation and cybersecurity risks related to our systems, including our costs of addressing or mitigating such risks;
- counterparty and sovereign risk;
- delays in completion of turnarounds at our major facilities;
- interruptions of or constraints in availability of key inputs, including natural gas and sulfur;
- any significant impairment of the carrying amount of certain assets;
- risks related to reputational loss;
- risks related to impairment of assets or goodwill attributed to certain cash generating units;
- 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 the COVID-19 pandemic and their 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 SEC in the US.

For additional details regarding the risks listed above, see "Risk Factors" discussed in this AIF for a description of other risk factors affecting forward-looking statements.

The forward-looking statements in this document are made as of the date hereof and we disclaim any intention or obligation to update or revise any forward-looking statements in this AIF 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.

2.2 Basis of Presentation

Nutrien's consolidated financial information for 2022, 2021 and 2020 presented and discussed in this AIF is prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. This AIF is dated February 16, 2023, and the information contained herein is current as of such date, unless otherwise specified.

Unless expressly stated, the information contained on, or accessible from, our website or any other website or any other report or document we file with or furnish to applicable Canadian or US securities regulatory authorities is not incorporated by reference into this AIF.

3 – Corporate Structure

In this AIF, unless otherwise specified, the term "Nutrien" refers to Nutrien Ltd. and, unless the context requires otherwise, the terms "we", "us", "our", "Nutrien" and the "Company" refer to Nutrien and its direct and indirect subsidiaries, individually or in any combination, as applicable. Financial information in this AIF is presented in United States dollars and references to "dollars", "$", and "US$" are to United States dollars and references to "CAD$" are to Canadian dollars.

3.1 Name, Address and Incorporation

Nutrien is a corporation incorporated under the *Canada Business Corporations Act* ("CBCA").

Nutrien's registered head office is Suite 1700, 211 19th Street East, Saskatoon, Saskatchewan, Canada S7K 5R6. We also have corporate offices at 13131 Lake Fraser Drive SE, Calgary, Alberta, Canada T2J 7E8 and 5296 Harvest Lake Drive, Loveland, Colorado, US 80538.

3.2 Intercorporate Relationships

Principal Subsidiaries [1]	**Jurisdiction of Incorporation, Formation or Organization**	**Ownership**
Potash Corporation of Saskatchewan Inc. ("PotashCorp")	Canada	100%
Nutrien (Canada) Holdings ULC	British Columbia, Canada	100%
Agrium Canada Partnership	Alberta, Canada	100%
Agrium Potash Ltd.	Canada	100%
Nutrien US LLC	Colorado, US	100%
Cominco Fertilizer Partnership	Texas, US	100%
Loveland Products Inc.	Colorado, US	100%
Nutrien Ag Solutions (Canada) Inc.	Canada	100%
Nutrien Ag Solutions, Inc.	Delaware, US	100%
Nutrien Ag Solutions Limited	Western Australia, Australia	100%
PCS Nitrogen Fertilizer, LP	Delaware, US	100%
PCS Nitrogen Trinidad Limited	Trinidad	100%
PCS Phosphate Company, Inc.	Delaware, US	100%
PCS Sales (USA) Inc.	Delaware, US	100%
Nutrien Holding Company LLC	Delaware, US	100%

1 In aggregate, our remaining subsidiaries not listed herein accounted for less than 20 percent of our consolidated assets and less than 20 percent of our consolidated sales as at and for the year ended December 31, 2022.

4 – General Development of the Business

4.1 Three-Year History

Acquisitions

The table below provides information on our acquisitions of Nutrien Ag Solutions ("Retail") businesses, including Casa do Adubo S.A. ("Casa do Adubo"), completed during the last three fiscal years.

	Casa do Adubo	Other Acquisitions		
Acquisition date	**October 1, 2022**	**2022**	**2021**	**2020**
Purchase price, net of cash and cash equivalents acquired, and amounts held in escrow (US$ millions)	231 (preliminary) [1]	176	88	233
Number of Retail operating locations	39 retail locations and 10 distribution centers	43	36	43
Description	Agriculture retailer in Brazil	Various retail agricultural services and one wholesale warehouse location	Various retail digital agriculture, proprietary products, retail and agricultural services businesses in North America, South America and Australia	

1 The purchase price for Casa do Adubo is subject to adjustment as we are continuing to obtain and verify information required to finalize closing working capital and net debt adjustments. We expect to finalize the amounts recognized and the purchase price prior to October 1, 2023.

Dispositions

In 2020, due to a strategic decision, we sold our 26 percent equity investment in Misr Fertilizers Production Company S.A.E. ("MOPCO"), a nitrogen producer based in Egypt.

Company Name	**Proceeds [1] (US$ millions)**
MOPCO	540

1 Cash proceeds resulting from the sale of shares and settlement of legal claims.

Asset Impairment and Reversals

In the second and third quarters of 2022, we revised our pricing forecasts to reflect higher forecasted global prices and a more favorable outlook for phosphate margins. This resulted in a review of our previously impaired Phosphate cash-generating units ("CGUs"). As a result, in 2022, we recorded a full impairment reversal, net of depreciation, at Aurora, North Carolina and White Springs, Florida of $450 million and $330 million, respectively, in the statement of earnings relating to our property, plant and equipment.

In 2020, we identified an impairment indicator in our Phosphate CGUs due to lower long-term forecasted global phosphate prices. We recorded impairments to our property, plant and equipment at our Aurora and White Springs facilities of $545 million and $215 million, respectively.

Normal Course Issuer Bid ("NCIB")

The table below provides information on our share repurchase programs.

	Commencement Date	**Expiry**	**Maximum Shares for Repurchase**
2023 NCIB [1]	March 1, 2023	February 29, 2024	24,962,194
2022 NCIB [2]	March 1, 2022	February 7, 2023	55,111,110
2021 NCIB	March 1, 2021	February 28, 2022	28,468,448
2020 NCIB	February 27, 2020	February 26, 2021	28,572,458

1 On February 15, 2023, our Board of Directors ("Board") approved a share repurchase program for up to 5 percent of our outstanding common shares (the "2023" NCIB). The 2023 NCIB, which is subject to acceptance by the TSX, will expire earlier than the date above if we acquire the maximum number of common shares allowable or otherwise decide not to make any further repurchases.

2 The original expiry date of the 2022 NCIB was February 28, 2023, but we acquired the maximum aggregate number of common shares allowable thereunder on February 7, 2023.

The table below sets forth the number of common shares we have repurchased during the last three fiscal years, in each case, under the applicable NCIB through open market purchases at market prices.

Common shares repurchased	2022	2021	2020
Total amount (US$ millions)	4,496	1,105	160
Number of shares	53,312,559	15,982,154	3,832,580

Notes Issuances and Repayments

In March 2022, we filed a base shelf prospectus in Canada and the US qualifying the issuance of up to $5 billion of common shares, debt securities and other securities during a period of 25 months from March 11, 2022. On November 7, 2022, we issued an aggregate of $1.0 billion of notes, as described below, pursuant to the base shelf prospectus and a prospectus supplement.

The following tables summarize our long-term debt issuances and repayment activities during the last three fiscal years.

	Rate of Interest (%)	Maturity Date	Amount (US$ millions)
Notes issued 2022	5.900	November 7, 2024	500
Notes issued 2022	5.950	November 7, 2025	500
Notes issued 2020	1.900	May 13, 2023	500
Notes issued 2020	2.950	May 13, 2030	500
Notes issued 2020	3.950	May 13, 2050	500

The notes issued in 2022 and 2020 are unsecured, rank equally with our existing unsecured debt and have no sinking fund requirements prior to maturity. Each series is redeemable and provides for redemption prior to maturity, at our option, at specified prices. We did not issue any notes in 2021.

	Rate of Interest (%)	Maturity Date	Principal Amount Repaid/Redeemed (US$ millions)
Notes repaid 2022	3.150	October 1, 2022	500
Notes repaid 2021 [1]	3.500	June 1, 2023	500
Notes repaid 2021 [1]	3.625	March 15, 2024	750
Notes repaid 2021 [1]	3.375	March 15, 2025	550
Notes repaid 2020	4.875	March 30, 2020	500

1 In 2021, we redeemed the entire outstanding principal amount of these notes in accordance with the optional redemption provisions provided in the indentures governing these notes.

In 2021, we also completed a cash tender offer to purchase the following debentures and notes up to a maximum aggregate purchase price of $300 million.

	Rate of Interest (%)	Maturity Date	Principal Amount Redeemed (US$ millions)
Debentures	7.800	February 1, 2027	5
Notes	7.125	May 23, 2036	88
Notes	6.125	January 15, 2041	99
Notes	5.250	January 15, 2045	11

The 2021 redemption and cash tender offer were funded by using cash on hand and proceeds from the issuance of commercial paper. The total cash spend for the early redemption and tender offer, including accrued interest was $2.2 billion.

Credit Facilities

In 2022, we entered into a new $2.0 billion unsecured revolving term credit facility, with the same principal covenants and events of default as our existing $4.5 billion unsecured revolving term credit facility. In addition, we increased our uncommitted revolving demand facility credit limit by $500 million to $1.0 billion.

In July 2022, to help temporarily manage normal seasonal working capital swings, we entered into non-revolving term credit facilities with an aggregate principal amount of $2.0 billion and fully repaid and terminated such credit facilities in September 2022 after the new $2.0 billion unsecured revolving term credit facility was established as described above.

In the third quarter of 2022, we amended the terms of our existing $4.5 billion unsecured revolving term credit facility to extend the maturity date from June 4, 2026 to September 14, 2027. The new maturity date is subject to extension at our request, provided that the resulting maturity date may not exceed five years from the date of such extension.

In 2021, we amended the terms of our existing $4.5 billion unsecured revolving term credit facility to extend the maturity date from April 10, 2023 to June 4, 2026.

In the first half of 2020, in response to the COVID-19 pandemic, we took steps to enhance our liquidity position. We added $1.5 billion of new credit facilities in March and April 2020, which we subsequently closed in May 2020 after the issuance of the new notes in 2020 described above.

5 – Description of the Business

We are an integrated provider of crop inputs and services, playing a critical role in helping growers around the globe increase food production in a sustainable manner. We supply growers through our leading global Retail network – including crop nutrients, crop protection products, seed and merchandise, as well as agronomic and application services. We operate more than 2,000 retail locations across the US, Canada, Australia and South America, servicing approximately 500,000 grower accounts.

Nutrien is the world's largest provider of crop inputs and services, producing the three crop nutrients: potash, nitrogen and phosphate. We sold approximately 25 million tonnes of crop nutrient products from our facilities in Canada, the US and Trinidad.

As of December 31, 2022, we estimate our Potash operations represented 21 percent of global potash nameplate capacity, our Nitrogen operations represented 3 percent of global nitrogen nameplate capacity and our Phosphate operations represented 3 percent of global phosphate nameplate capacity.

We report our results in four operating segments: Retail, Potash, Nitrogen and Phosphate. Our reporting structure reflects how we manage our business. Sales classified by operating segment and applicable category of products and services are provided in Note 3 of the 2022 Consolidated Financial Statements. Sales or transfers to certain entities in which the Company has an investment that is accounted for under the equity method are provided in Note 3 of the 2022 Consolidated Financial Statements.

5.1 Nutrien Ag Solutions ("Retail") Operations

Overview

Our Retail segment markets crop nutrients, crop protection products, seed and merchandise, as well as agronomic application services and solutions through more than 2,000 retail locations across the US, Canada, Australia and South America. In 2022, our total Retail sales represented 56 percent of our total consolidated sales (2021 – 64 percent). Retail's products and services are as follows:

Product	% of Retail Sales	Description
Crop nutrients	2022 – 47 2021 – 41	- dry and liquid macronutrient products, which include potash, nitrogen and phosphate, proprietary liquid micronutrient products, and nutrient application services, which are sold globally: ○ custom blended to suit specific nutrient requirements for each grower's field typically based on soil fertility tests or plant tissue sampling ○ custom crop nutrient application services using a large fleet of application equipment to apply these nutrients at prescribed rates
Crop protection products	2022 – 33 2021 – 35	- third-party supplier and proprietary products designed to maintain crop quality and manage plant diseases, weeds and other pests - private label and proprietary crop protection products through our Loveland Products, Inc. business across North America, South America and Australia

Product	% of Retail Sales	Description
Seed	2022 – 10 2021 – 11	- third-party supplier seed brands and proprietary seed product lines, which are sold globally - private label seed product line under the brand names Dyna-Gro® and Proven™ - proprietary seed product line in Brazil under the brand name Sementes Goiás - seed treatment applying chemicals to seeds prior to planting to protect them from pests and disease
Nutrien Financial	2022 – 1 2021 – 1	- flexible financing solutions offered to our customers in the US and Australia: ○ extended payment terms, typically up to one year, to facilitate alignment of grower crop cycles with cash flows - revenue primarily earned through interest and service fees charged to our Retail branches
Merchandise	2022 – 5 2021 – 6	- livestock-related merchandise including fencing, feed supplements, animal identification merchandise and various animal health products and services - storage and irrigation equipment and other products - primarily offered in Australia
Services and other	2022 – 4 2021 – 6	- custom application services, crop scouting and precision agriculture services, soil and leaf testing - precision application using global positioning system ("GPS") technology, which allows nutrient application rates to be adjusted when required, based on GPS grid soil sample test results and other data - performance of soil and leaf testing for growers in the US - monitoring of crop disease conditions and irrigation requirements for high-value crops using a system of weather tracking stations in Western US - digital tools that provide customer account management, online ordering, agronomic insights and hands-on customer support that drive economic value and can provide environmental benefits for our growers, including our Echelon® precision agriculture offering, which includes services such as yield data mapping, record keeping, soil fertility management, variable-rate fertility and variable-rate seeding recommendations - various other services, including wool sales and marketing, livestock marketing and auction services, water services, insurance products, and real estate agency services in Australia - primarily offered in the US and Australia

Transportation, Storage and Distribution

We have an extensive infrastructure system to store and transport our Retail products, strategically located across distribution points in regions where we operate to serve our customers across the US, Canada, Australia and South America.

Number	Nature	Description
95	Terminals	- used to receive large quantities of crop nutrients for redistribution to Retail centers and to growers directly
33	Distribution centers	- used to effectively distribute crop protection products and seed - used to coordinate product supply to the Retail centers and allow us to manage inventory levels across our distribution network
2,113	Branches, satellites, others	
30,544	Vehicles and application equipment	

Supply chain management, utilizing our extensive storage and distribution network and transportation capabilities, allows us to efficiently deliver crop nutrients and seed products to our customers as growers have a short application and planting window, the precise timing of which is unpredictable due to both the seasonal nature of crop planting and the impact of weather. We regularly review our suppliers to maintain critical feedstocks, and we believe we can leverage our diverse retail distribution network and expansive fertilizer terminal network to effectively manage product logistic challenges.

Competitive Position

The market for Nutrien's Retail products and services is highly competitive in the countries in which we operate. The principal competitors in the distribution of crop production inputs include agricultural co-operatives, other major agriculture retailers, and smaller independent retailers and distributors. Retail also produces a range of high-quality proprietary crop protection, seed and crop nutrient products that generate higher margins for our Retail segment. Retail offers a digital platform in North America that provides customer

account management and online ordering, and leverages field data to drive agronomic insights, which we believe drives economic value for our growers. We expect to continue to expand and enhance the functionality of our digital platform while growing its capabilities in Australia and South America, including introducing a digital platform for Nutrien Financial offerings and tools to advance our livestock agency business.

5.2 Potash Operations

Overview

Our Potash operations include the mining and processing of potash, which is predominantly used as fertilizer. The Saskatchewan Ministry of Energy and Resources has granted Nutrien the exclusive right to mine potash on approximately 383,000 hectares (or approximately 947,000 acres) of Crown land pursuant to subsurface mineral leases. Of the 383,000 hectares leased from the Crown, approximately 282,000 hectares comprise our Potash operations at the Allan, Cory, Lanigan, Patience Lake, Rocanville and Vanscoy mines. Leases also exist with freehold mineral rights owners within the Crown subsurface mineral lease areas and elsewhere in Saskatchewan.

Subsurface mineral leases with the Province of Saskatchewan are for21-year terms, renewable at our option at each of our producing mines. Our subsurface mineral leases with other parties are also for 21-year terms. Such other leases are renewable at our option, provided generally that production is continuing and that there is continuation of the applicable lease with the Province of Saskatchewan.

The potash we produce in Canada for sale to destinations outside Canada and the US is sold exclusively to Canpotex Limited (“Canpotex”). Canpotex is owned in equal shares by us and another potash producer in Canada. Canpotex, which was incorporated in 1970 and commenced operations in 1972, acts as an export company providing integrated sales, marketing and distribution for all Canadian potash produced by its shareholders/producers that is exported to destinations outside the US and Canada. Each shareholder of Canpotex has an equal voting interest as a shareholder and a right to equal representation on the Canpotex board of directors. In 2022, our total Potash sales represented 22 percent of our total consolidated sales (2021 – 16 percent). Our total offshore sales in 2022 represented 66 percent of our total potash sales (2021 – 54 percent).

In general, Canpotex sales volumes are allocated among Canpotex producers based on production capacity. In 2022, Nutrien supplied approximately 64 percent of Canpotex’s product supply requirements (2021 – approximately 67 percent). Canpotex sells potash to buyers in export markets pursuant to term and spot contracts at agreed upon prices. Canpotex has a long history of being a reliable supplier of potash to international markets and of proven logistics and marketing capabilities. Other major potash exporting countries include Russia, Belarus, Israel and Germany.

Transportation, Storage and Distribution

Transportation costs can be a significant component of the total cost of potash. Producers may have an advantage in serving markets close to their sources of supply depending on prevailing transportation costs. International shipping cost variances permit offshore producers to effectively compete with our potash production in many geographies.

Most of our potash for North American customers is shipped by rail. We believe we have a strategic advantage in this market with approximately 285 owned or leased potash distribution points and a fleet of approximately 5,900 owned or leased railcars as at December 31, 2022. We believe this is the most extensive domestic distribution network in the potash business. Shipments are also made by rail from each of our Saskatchewan mines to Thunder Bay, Ontario for shipment by lake vessel to our warehouses and storage facilities in Canada and the US.

In the case of our sales to Canpotex, Canpotex is responsible for managing and directing all aspects of its logistics infrastructure platform, including the transportation of its potash by way of rail to marine facilities where it is handled, stored and loaded onto ocean-going vessels. We have an equity interest in Canpotex Bulk Terminals Limited, which is a part owner of the marine facilities utilized by Canpotex in Vancouver, British Columbia. Canpotex also utilizes marine facilities in Portland, Oregon, Saint John, New Brunswick and Thunder Bay, Ontario.

Production Methods

We generally produce potash primarily using conventional mining methods, except for our Patience Lake mine, which was originally a conventional underground mine, but began employing a solution mining method in 1989. In conventional operations, shafts are sunk to the ore body, which is approximately one kilometer below the surface. Mining machines cut the ore, which is then hoisted to the surface for processing. The ore is a mixture of potassium chloride, salt and insoluble particles. In solution mining, the potash is dissolved in warm brine and pumped to the surface for processing. Removing salt and insoluble particles through a milling process produces saleable potash. Six grades of potash are produced to suit different preferences of the various markets we serve.

In 2022, our nameplate capacity represented 55 percent of the North American total capacity (based on our nameplate capacity, see the table below for further information) and our potash production represented 57 percent of North American production. We allocate production among our mines on the basis of various factors, including cost efficiency and the grades of product that can be produced.

The following table sets forth, for each of the past two years, the production of ore, mill feed grade and finished product for each of our potash mines in Saskatchewan.

	Annual Nameplate Capacity [1]	Annual Operational Capability [2]		2022 Production			2021 Production		
		2023	2022						
	Finished Product (millions of tonnes)	Finished Product (millions of tonnes)	Finished Product (millions of tonnes)	Ore (millions of tonnes)	Grade % K_2O	Finished Product (millions of tonnes)	Ore (millions of tonnes)	Grade % K_2O	Finished Product (millions of tonnes)
Rocanville	6.5	5.2	5.2	16.34	21.7	4.89	16.64	21.8	5.00
Allan	4.0	3.0	2.9	6.96	25.0	2.50	7.74	25.3	2.78
Vanscoy	3.0	1.4	1.3	3.03	25.2	1.01	2.98	26.3	1.05
Lanigan	3.8	3.1	2.8	7.55	24.8	2.46	9.22	23.9	2.91
Cory	3.0	2.2	2.1	6.07	23.3	1.89	5.77	22.7	1.77
Patience Lake	0.3	0.3	0.3	–	–	0.26	–	–	0.28
Totals [3]	**20.6**	**15.2**	**14.6**	**39.95**		**13.01**	**42.35**		**13.79**

1 Represents estimates of capacity as of December 31, 2022. Estimates are based on capacity as per design specifications or Canpotex entitlements once determined. Estimates do not necessarily represent operational capability.
2 Estimated annual achievable production level at current staffing and operational readiness (estimated at beginning of 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.
3 2022 average mineral grade of 23.36 percent potassium oxide ("K_2O") mined and an average grade of 60.84 percent K_2O produced. Averages are weighted proportionately to tonnes produced at our conventional mines.

The mining of potash is a capital-intensive business subject to the normal risks and capital expenditure requirements associated with mining operations. The production and processing of ore may be subject to delays and costs resulting from mechanical failures and hazards, such as unusual or unexpected geological conditions, subsidence, water inflows, and other conditions involved in mining potash ore.

Competitive Position

Potash is a commodity, characterized by minimal product differentiation, and, consequently, producers compete based on price, quality and service. We price competitively, sell high-quality products and provide high-quality service to our customers. Our service includes maintaining warehouses, leasing railcars and chartering vessels to enhance our delivery capabilities. The high cost of transporting potash affects competition in various geographic areas.

In 2022, our principal competitors in North America included EuroChem Group AG, Intrepid Potash Inc., K+S Group, The Mosaic Company ("Mosaic"), ICL Group Ltd. ("ICL") and PJSC Uralkali. In 2022, Canpotex competed with producers such as Arab Potash Company, PA Belaruskali, EuroChem Group AG, ICL, K+S Group, SQM and PJSC Uralkali. In 2022, potash production and exports from Eastern Europe were impacted by sanctions on Belarus and restrictions on Russia relating to the war between Ukraine and Russia, which have caused significant supply uncertainties in the marketplace.

Sources of Raw Materials

The production of potash requires a sustained fresh water supply for the milling process, which comes from nearby sources including subsurface aquifers, reservoirs and the Saskatchewan River.

5.3 Nitrogen Operations

Overview

We own and operate nitrogen production facilities at which we produce the following products:

Plant Locations	Nitrogen Products Produced
Augusta, Georgia	Ammonia, urea, urea ammonium nitrate ("UAN"), urea solutions, nitric acid and ammonium nitrate
Borger, Texas	Ammonia, urea and urea solutions
Carseland, Alberta	Ammonia and urea
Fort Saskatchewan, Alberta	Ammonia and urea
Geismar, Louisiana	Ammonia, UAN, urea solutions and nitric acid
Joffre, Alberta	Ammonia
Lima, Ohio	Ammonia, urea, UAN, urea solutions, nitric acid and ammonium nitrate
Point Lisas, Trinidad	Ammonia and urea
Redwater, Alberta	Ammonia, urea, ammonium nitrate liquor, UAN and ammonium sulfate

We operate a number of facilities that upgrade ammonia and urea to other products such as UAN, ammonium nitrate, nitric acid and Environmentally Smart Nitrogen® ("ESN®").

Plant Locations	Nitrogen Products Produced
Carseland, Alberta	ESN®
Granum, Alberta	UAN
Kennewick, Washington	UAN, ammonium nitrate liquor and nitric acid
New Madrid, Missouri	ESN®
Standard, Alberta	UAN

Our owned and operated facilities have a combined annual gross ammonia nameplate capacity of approximately 7.1 million tonnes.

We also have a 50 percent joint venture ownership in Profertil S.A. ("Profertil"), a joint venture that owns a nitrogen facility in Bahia Blanca, Argentina.

Transportation, Storage and Distribution

We distribute our nitrogen products by vessel, barge, railcar and truck to our customers and, in high-consumption areas, through our strategically located storage terminals. In North America, as at December 31, 2022, we owned or leased approximately 190 nitrogen distribution points, as well as a fleet of approximately 5,500 leased railcars. We also lease dry and liquid storage capacity in Europe. These locations provide a network of field and production site storage capacity sufficient to serve local dealers during the peak seasonal demand period and are also used to provide off-season storage.

We distribute products from Trinidad primarily to markets in the US, South America, Europe and North Africa. We employ five long-term chartered ocean-going vessels and utilize short-term and spot charters as necessary for the transportation of ammonia for our marine distribution operations in Trinidad. All bulk urea production from Trinidad is shipped through third-party carriers. In addition, Profertil's terminal on the Parana River includes a dedicated berth and two 100,000 tonne dry storage buildings in a key agricultural region of Argentina.

Production Methods

Ammonia is produced by taking nitrogen from the air and reacting it with a hydrogen source, usually natural gas reformed with steam. Carbon dioxide is produced in ammonia production in two primary ways – first, as a product of the chemical reactions involved and, second, as a product of burning fuels that generate the heat required to make those chemical reactions occur. In most plants, the carbon dioxide produced as a chemical by-product is captured and used as an input to urea production.

Ammonia is the feedstock used to produce a full line of upgraded products, including urea, ammonium nitrate, nitric acid and nitrogen solutions, including both UAN solutions and urea solution products, ammonium sulfate and ESN®. Urea is produced by combining ammonia with carbon dioxide ("CO_2") and forming liquid urea, which can be further processed into a solid form. UAN solutions are liquid fertilizers that are produced by combining urea, liquid ammonium nitrate and water. Urea liquor is a urea liquid solution sold into the diesel exhaust fluid market. When combined with diesel in larger vehicles and machinery, it can improve fuel efficiency and reduce emissions. Urea liquid solutions are produced by combining liquid urea with water. Ammonium sulfate is produced by reacting ammonia and sulfuric acid, which is then granulated to form a solid granular product. We produce sulfuric acid from purchased sulfur

at our Redwater, Alberta facility. ESN® is a patented coated-fertilizer product that is made by coating the urea substrate with layers of polymers, allowing for more efficient delivery of nitrogen to the plant.

Ammonia, urea and nitrogen solutions are sold as fertilizers to agricultural customers and to industrial customers for various applications. Nitric acid and ammonium nitrate are sold to industrial customers for various applications. Urea is also sold for feed applications. ESN® is sold to agricultural customers. Urea solution is sold to industrial and agricultural customers.

Competitive Position

Nitrogen-based fertilizer is a global commodity, and customers, including end-users, dealers, and other fertilizer producers and distributors, base their purchasing decisions principally on the delivered price and availability of the product. The relative cost of, and availability of transportation for, raw materials and finished products to manufacturing facilities are also important competitive factors.

Within North America, transportation costs play a factor in regional price differences and we compete with other domestic producers, including CF Industries Holdings, Inc., CVR Partners, L.P., Koch Industries, Inc., LSB Industries, Inc., Incitec Pivot Ltd., OCI N.V., and Yara International ASA, and with imported product from suppliers in the Middle East, North Africa, Trinidad, Central and Eastern Europe, and Russia. In the offshore market, we compete with a wide range of offshore and domestic producers. Nitrogen is also an input into industrial production of a wide range of products. Many manufacturers want consistent quality and just-in-time delivery to keep their plants running.

Our North American plants are geographically well positioned to service agriculture, industrial and feed customers across Canada and the US. Our robust North American distribution network provides in-market support, during seasonal peak demand, ensuring timely product availability. Trinidad mainly supplies our international fertilizer and industrial customers.

Our US production has continued to benefit from the low cost of natural gas and, to a greater extent, our Western Canadian production, which utilizes natural gas indexed to the Alberta benchmark price, has also benefited from the low cost of natural gas. In Trinidad, the price at which we purchase natural gas varies primarily with ammonia market prices, and annual escalating floor prices. Ammonia and urea predominate our offshore sales of nitrogen and originate primarily from Trinidad, with other sales coming from purchased product locations. In 2022, our total Nitrogen sales represented 21 percent of our total consolidated sales (2021 – 19 percent). For 2022, our offshore sales of nitrogen products represented 29 percent (2021 – 22 percent) of our total nitrogen sales.

Sources of Raw Materials

Natural gas is the primary raw material used for producing ammonia, which is the base for virtually all nitrogen products. Our Joffre, Alberta facility uses hydrogen as its raw material to produce ammonia.

In North America, we may enter into natural gas hedging transactions with the goal of minimizing risk from volatile gas prices. We purchase most of our natural gas from producers or marketers at the point of delivery of the natural gas into the pipeline system, then pay the pipeline company and, where applicable, the local distribution company to transport the natural gas to our nitrogen facilities. Approximately 90 percent of our North American consumption of natural gas by our Nitrogen operations is delivered pursuant to firm transportation contracts, which do not permit the pipeline or local distribution company to interrupt service to, or divert natural gas from, the plant.

In Trinidad, natural gas is purchased under contract using a pricing formula related to the market price of ammonia. We are currently operating under a five-year gas supply contract, set to expire in 2023, which includes minimum take or pay requirements, to provide the entire Trinidad ammonia complex with approximately 90 percent of its expected requirements for 2019 through 2023. In 2022, the Trinidad facility received force majeure notices from its gas supplier and has been operating at reduced rates.

Profertil has various gas contracts denominated in US dollars that account for virtually all of Profertil's gas requirements. The gas contracts are renewed on a periodic basis and are scheduled to expire in December 2023. Negotiations are currently ongoing to renew these gas contracts. YPF S.A., our joint venture partner in Profertil, supplies approximately 70 percent of the gas under these contracts.

5.4 Phosphate Operations

Overview

Our Phosphate operations include the manufacture and sale of solid and liquid phosphate fertilizers, phosphate feed, and purified phosphoric acid, which is used in feed and industrial products. We have phosphate mines and mineral processing plant complexes in Aurora, North Carolina and White Springs, Florida. We also have three phosphate feed plants in the US.

Our Phosphate properties include:

Plant Locations	Primary Products Produced [1]
Aurora, North Carolina	MAP, SPA, liquid fertilizer, purified acid, merchant grade phosphoric acid ("MGA"), hydrofluorosilicic acid ("HFSA"), defluorinated merchant grade acid, low magnesium SPA ("LOMAG") and anhydrous hydrogen fluoride ("AHF") [2]
Cincinnati, Ohio	Blended purified acid products
Joplin, Missouri	Animal feed
Marseilles, Illinois	Animal feed
Weeping Water, Nebraska	Animal feed
White Springs, Florida	SPA, MGA [3], LOMAG, HFSA [4], MAP and MAP MST

1 The following scientific terms have the following meanings:
MAP monoammonium phosphate, 52 percent P_2O_5 (solid)
MAP MST sulfur enhanced MAP
SPA superphosphoric acid, 70 percent P_2O_5 (liquid)
2 Production of AHF is expected to commence in the first half of 2023.
3 All of the MGA from White Springs is consumed internally in the production of additional products.
4 HFSA production commenced in January 2022.

We have long-term supply and offtake agreements with Itafos Conda LLC, which extend through 2023. Under these agreements, we expect to market an estimated 330,000 tonnes per year of MAP produced at Conda, Idaho.

We execute offshore marketing and sales of our solid phosphate fertilizer through PCS Sales (USA), Inc.

Transportation, Storage and Distribution

As at December 31, 2022, we had approximately 120 owned or leased phosphate distribution points and a fleet of approximately 5,000 owned or leased railcars. We have access to ocean-based shipping terminal capacity in North Carolina through which we store the Aurora facility's finished product. Most of our offshore phosphate sales are shipped through the terminal at Morehead City. We use barges and tugboats to transport solid products and phosphoric acid between the Aurora facility and shipping terminals. Raw materials and products, including sulfur, are also transported to and from the Aurora facility by rail and truck.

Sulfur is delivered to the White Springs facility by rail and truck from Canada and the US. Most of the phosphoric acid and chemical fertilizers produced at the White Springs facility are shipped to North American destinations by rail. Ammonia for the Aurora and White Springs facilities is supplied by rail and truck from our production facilities in Lima, Ohio and Augusta, Georgia.

Production Methods

We extract phosphate ore using surface mining techniques. At each mine site, the ore is mixed with recycled water to form a slurry, which is pumped from the mine site to our processing facilities. The ore is then screened to remove coarse materials, washed to remove clay and floated to remove sand to produce phosphate "rock." The annual production capacity of our mines is currently 7.4 million tonnes of phosphate rock. During 2022, the Aurora facility's total production of phosphate rock was 3.43 million tonnes and the White Springs facility's total production of phosphate rock was 1.42 million tonnes. The sequence for mining portions of the Aurora property was identified in the permit issued by the US Army Corps of Engineers in June 2009. The permit authorizes mining in excess of 20 years, although the mine life has been estimated at 20 years at current production rates. Phosphate rock is the major input in our phosphate processing operations. Substantially all the phosphate rock produced is used internally for the production of phosphoric acid, SPA, chemical fertilizers, purified phosphoric acid and animal feed products.

In addition to phosphate ore, the other principal raw materials we require are sulfur and ammonia. We produce sulfuric acid at the Aurora and White Springs facilities from purchased sulfur.

Our Phosphate operations purchase all their ammonia at market rates from or through our Nitrogen sales subsidiaries. Phosphoric acid is reacted with ammonia to produce MAP and MAP MST as well as liquid fertilizers.

We produce MGA at our Aurora and White Springs facilities. Some MGA from the Aurora facility is sold to foreign and domestic fertilizer producers and industrial customers. We further process the balance of the MGA to make solid fertilizers (MAP), liquid fertilizers, animal feed supplements for the poultry and livestock markets, and purified phosphoric acid for use in a wide variety of food, technical and industrial applications.

Competitive Position

Markets for phosphate fertilizer products are highly competitive and based largely on price, reliability and deliverability. Significant low-cost capacity has been commissioned over the past few years, most notably in Morocco and Saudi Arabia. The ability of these countries to add low-cost capacity and operate under less restrictive environmental regulation is resulting in a long-term oversupply in the global market. Our principal advantages at the Aurora and White Springs facilities are that we produce higher-value, diversified products and that we operate integrated phosphate mine and phosphate processing complexes. Our in-market distribution network ensures product supply during peak demand periods.

Our key competitors for North American phosphate fertilizer sales are Mosaic, J.R. Simplot Company, and offshore imports primarily from Mexico, Russia, Australia, Saudi Arabia and various other smaller importers. A petition for countervailing duties filed in 2020 by Mosaic with the US Department of Commerce led to Morocco and Russia stopping shipments to the US and a resultant increase in phosphate fertilizer prices. A final ruling on this matter was issued in March 2021, with the US Department of Commerce issuing countervailing duty orders on imports of phosphate fertilizers from Morocco and Russia, which will remain in place for at least five years.

In offshore markets, we compete primarily with OCP S.A. ("OCP") from Morocco and other producers from Africa, China, the Middle East and Russia. In 2022, our total Phosphate sales represented 7 percent of our total consolidated sales (2021 – 7 percent). For 2022, our offshore sales of phosphate products represented 20 percent (2021 – 11 percent) of our total phosphate sales.

Within the animal feed supplement business in the Phosphate segment opportunities exist to differentiate products based on nutritional content. We have a significant presence in the domestic feed supplement market segments. We compete with Mosaic, J.R. Simplot Company, OCP, and Chinese and Russian producers for feed sales.

Industrial products are the least commodity-like of the phosphate products as product quality is a more significant consideration for customer buying decisions. We market industrial phosphate products principally in the US and we compete with ICL, Innophos Holdings, Inc., Prayon Group, Emaphos and Chinese producers for North American industrial sales.

Sources of Raw Materials

Phosphate rock is the major input in our phosphate processing operations and is mined at our Aurora and White Springs facilities.

In addition to phosphate ore, the other principal raw materials we require are sulfur and ammonia. The production of phosphoric acid requires substantial quantities of sulfur, which we purchase from third parties. Any significant disruption in our sulfur supply to the phosphate facilities could adversely impact our financial results. We produce sulfuric acid at the Aurora and White Springs facilities from purchased sulfur. Ammonia for our Aurora facility is supplied by rail and truck from our production facilities in Lima, Ohio and Augusta, Georgia. Ammonia for our White Springs facility is primarily supplied by truck from our Augusta nitrogen plant.

5.5 Specialized Skill and Knowledge

We believe our success is dependent on the performance of our management and key operational employees, many of whom have specialized skills and knowledge relating to the retail, potash, nitrogen and phosphate industries, and to the conduct of the Retail, Potash, Nitrogen and Phosphate operations. We believe that we have adequate personnel with the specialized skills and knowledge to successfully carry out our business and operations.

5.6 Intangible Properties

We have registered and pending trademarks and patents in Canada, the US and other countries where our products are sold. In addition, it has been our practice to seek patent protection for inventions and improvements that are likely to be incorporated into our products, where appropriate, and to protect the freedom to use our inventions in our manufacturing processes. We consider several factors in assessing the materiality of our patents including, but not limited to, scope and breadth of claims, sales volumes of products incorporating the technology, strategic importance, and patent duration.

While these trademarks and patents constitute valuable assets, we do not regard any single trademark or patent as being material to our operations as a whole. See Note 14 of the 2022 Consolidated Financial Statements for disclosure on estimated useful lives of intangible assets.

5.7 Seasonality

The agricultural products business is seasonal. 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. See “Risk Factors” below for a description of the risks related to seasonality.

5.8 Environmental Matters

Our operations are subject to numerous environmental requirements under federal, provincial, state and local laws, regulations and permits of the countries in which we operate. These laws, regulations and permits govern matters such as air emissions, wastewater discharges, land use and reclamation, groundwater quality, soil and groundwater remediation, and solid and hazardous waste management. Many of these laws, regulations and permit requirements continue to become increasingly stringent, and the cost of compliance with these requirements can be expected to increase over time.

Future environmental capital expenditures are subject to a number of uncertainties, including changes to environmental laws and regulations and interpretations by regulatory authorities or changes in circumstances affecting the Company’s operations. At this time, we are unable to estimate the capital expenditures we may make in future years to meet pollution prevention and emissions control objectives, as well as other environmental requirements.

Environmental Requirements, Permits and Regulatory Approvals

Many of our operations and facilities are subject to a variety of regulatory requirements, permits and approvals, all of which vary depending on the specific operation. Licenses, permits and approvals at operating sites are obtained in accordance with applicable laws and regulations, which may limit or regulate: operating conditions, rates and efficiency; land, water and raw material use and management; product storage, quality and transportation; waste storage and disposal; and emissions and other discharges. Additional legal requirements may apply where site impacts predate the current applicable regulatory framework, where remediation is ongoing or where there is otherwise evidence that historic remediation activities have not been successful in minimizing impacts to the environment. These additional requirements may result in an environmental remediation liability that must be mitigated.

We believe that we are currently in material compliance with existing regulatory requirements, permits and approvals. Permits and approvals are typically required to be renewed or reissued periodically. We may also become subject to new laws or regulations that impose new requirements or require us to obtain new or additional permits or approvals; however, there can be no assurance that such permits or approvals will be issued in the ordinary course of operations. Further, the terms and conditions of future regulations, permits and approvals may be more stringent and may require increased expenditures by the Company.

Air Quality

With respect to air emissions, we anticipate that additional actions and expenditures may be required to meet increasingly stringent federal, provincial and state regulatory and permit requirements in the areas in which we operate, including existing and anticipated regulations under the US federal *Clean Air Act*. We continue to monitor developments in these various programs and assess their potential impact on our operations. In 2015, we entered a consent decree with the US Environmental Protection Agency (“EPA”) that requires reductions in sulfur dioxide emissions at specified sulfuric acid plants with the final compliance dates occurring in 2020. All such emission limits have been met by the dates specified in the consent decree schedule. As such, we have requested termination of the sulfuric acid consent decree.

In Canada, the *Multi-Sector Air Pollutant Regulations* (“MSAPR”) were issued in 2016. These regulations established oxides of nitrogen (“NOx”) emission standards for gas-fired boilers, heaters and stationary spark-ignition engines. Facilities must ensure regulated equipment meets mandated emission standards by either 2026 or 2036, depending on the equipment’s baseline emission levels. Our Canadian nitrogen and potash facilities operate equipment subject to the regulations. Equipment testing is ongoing to assess the baseline emission levels in order to determine if any equipment will require replacement or modification. Testing has confirmed that boiler replacement is required by 2026 at one of our Potash facilities. In 2019, we replaced a boiler at our Redwater nitrogen facility with a low-NOx alternative and installed a new MSAPR-compliant ammonia loadout heater at the Fort Saskatchewan nitrogen facility in 2021.

In late 2022, a medium pressure condensate stripper was installed in the ammonia plant at the Carseland Nitrogen facility. This project is expected to reduce NOx and ammonia emissions at the Carseland facility.

Water Quality

There are international, federal, provincial and state regulatory initiatives underway that may result in new regulatory restrictions on discharges of nutrients, including discharges of nitrogen and phosphorus to waters in the US ("Nutrient Criteria"). There are also ongoing litigation efforts in several jurisdictions of the US that seek to require US environmental agencies to develop new Nutrient Criteria. These litigation and regulatory proceedings may result in new Nutrient Criteria that apply to water discharges from several of the Company's facilities in the US. Some of the proposed restrictions imposed through Nutrient Criteria also have the potential to require our customers to reduce or eliminate their uses of the Company's products. These Nutrient Criteria could have a material effect on either the Company or its customers, but the impact is not currently predictable or quantifiable with reasonable certainty because many of these initiatives are in relatively early stages and compliance alternatives may be available that do not create material impacts. We are closely monitoring and evaluating the impact of these initiatives on our operations.

Waste Management

In 2003, the US EPA began investigating the phosphate industry as part of its National Enforcement Initiative regarding the mineral processing industry. The purpose of the EPA's National Enforcement Initiative is to ensure that waste resulting from mineral processing is managed in accordance with regulations under *The Resource Conservation and Recovery Act*, which is the US federal statute that governs the generation, transportation, treatment, storage and disposal of hazardous wastes. The EPA is also evaluating the mineral processing industry's compliance with the *Emergency Planning and Community Right to Know Act* and the *Comprehensive Environmental Response, Compensation and Liability Act of 1980*("CERCLA").

Several of the Company's phosphoric acid production facilities have received notices of violation or entered orders with the EPA as a result of the EPA's National Enforcement Initiative. These facilities include the Aurora, North Carolina, White Springs, Florida, and Geismar, Louisiana facilities, as well as the Conda, Idaho Phosphate production facility divested in 2018, for which we retain environmental liabilities attributable to our historic activities. Nutrien settled with the EPA and the Louisiana Department of Environmental Quality at our former Geismar phosphoric acid production facility in October 2022. We are negotiating with the EPA and the relevant state environmental agencies to resolve the outstanding matters relating to the other facilities, and these negotiations are ongoing. In these negotiations, we are seeking to minimize the costs and impacts to our future operations consistent with applicable legal requirements, including financial assurance for the future closure, maintenance and monitoring of phosphogypsum stack systems. The full scope of the costs that we may ultimately incur to bring these matters to a conclusion could be material to our operations but are not currently predictable or quantifiable with reasonable certainty. See Note 29 of the 2022 Consolidated Financial Statements for additional information.

Asset Retirement Obligations

Provisions are recognized when: (i) the Company has a present legal or constructive obligation as a result of past events; (ii) it is probable that an outflow of resources will be required to settle the obligation; and (iii) the amount can be reliably estimated.

The major categories of our asset retirement obligations include reclamation and restoration expenditures at our Potash and Phosphate mining operations (phosphate mining, in particular), including the management of materials generated by mining and mineral processing, such as: various mine tailings and phosphogypsum stacks; land reclamation and revegetation programs; decommissioning of underground and surface operating facilities; general clean-up activities aimed at returning the areas to an environmentally acceptable condition; and post-closure care and maintenance.

The estimation of the costs of asset retirement obligations depends on the development of environmentally acceptable closure and post-closure plans. In some cases, this may require significant research and development to identify preferred methods for such plans that are economically sound and that, in most cases, may not be implemented or completed for several decades. We continue to use appropriate technical resources, including outside consultants, to develop specific site closure and post-closure plans in accordance with the requirements of the various jurisdictions in which we operate.

Asset retirement obligations are generally incurred over an extended period. As of December 31, 2022, we had accrued a total of $1,187 million for asset retirement obligations, the current portion of which totaled $165 million. For additional information, see Note 22 of the 2022 Consolidated Financial Statements.

Site Assessment and Remediation

We are also subject to environmental statutes that may require investigation and, where appropriate, remediation of impacted properties. Canadian federal and provincial laws as well as CERCLA and other US federal and state laws impose liability on, among others, past and present owners and operators of properties or facilities at which hazardous substances have been released into the environment. Liability under these laws may be imposed jointly and severally and without regard to fault or the legality of the original actions, although such liability may be divided or allocated according to various equitable and other factors. We have incurred and

expect to continue to incur costs and liabilities in respect of our current and former operations, including those of divested and acquired businesses. We have generated and, with respect to our current operations, continue to generate substances that could result in liability for us under these laws.

As at December 31, 2022, we had accrued environmental costs of $450 million for expenditures associated with site assessment and remediation, including consulting fees, related to the clean-up of impacted sites currently or formerly associated with the Company or its predecessors' businesses. As at December 31, 2022, the current portion of these costs totaled $69 million. The accrued amounts include the Company's and its subsidiaries' expected final share of the costs for the site assessment and remediation matters to the extent future outflow of resources is probable and can be reliably estimated. For additional information, see Note 22 of the 2022 Consolidated Financial Statements.

It is often difficult to estimate and predict all of the potential costs and liabilities, including natural resource damages, associated with our current and former operations, and there is no guarantee that we will not in the future be identified as potentially responsible for additional costs associated with our operations, either as a result of changes in existing laws and regulations or as a result of the identification of additional matters or properties subject to environmental costs. For certain matters, we are unable to make a reliable estimate of the amount and timing of any financial effect in excess of the amounts accrued for various reasons including: complexity of the matters; early phases of most proceedings; lack of information on the nature and timing of future actions in the matters; dependency on the completion and findings of investigations and assessments; and the lack of specific information as to the nature, extent, timing and cost of future remediation with respect to those matters. Until we have greater clarity as to our liability and the extent of our financial exposure, it is not practicable to make a reliable estimate of the financial effect. For additional information, see Note 29 of the 2022 Consolidated Financial Statements.

Climate Change and GHG Emissions

Nutrien generates GHG emissions directly and indirectly through the production, distribution and use of its products. Some of these emissions are subject to climate change policies and regulations, all of which are developing in unique ways within various federal, provincial and state jurisdictions. Increasing regulation of GHG emissions may impact our operations by requiring changes to our production processes or increasing raw material, energy, production or transportation costs in order to ensure compliance. There are also significant differences in the climate change policies of countries where Nutrien operates as only some are parties to the Paris Agreement, negotiated in December 2015, under the United Nations Framework Convention on Climate Change. Furthermore, even when Nutrien operates in a country that is a party to the Paris Agreement, different jurisdictions have different compliance obligations.

Sources of GHG emissions from our production operations include emissions from the reforming of natural gas to produce hydrogen, which is used to synthesize ammonia, as well as process emissions from some of our nitric acid plants. We estimate that the production stage of our operations accounts for approximately 95 percent of our overall Scope 1 and Scope 2 GHG emissions. Approximately two-thirds of the natural gas required to produce ammonia – the basic building block of all nitrogen fertilizer – is used to provide the necessary hydrogen for the process. The remaining one-third is used as fuel to provide heat for the ammonia production process. Given current economically viable technologies, the CO_2 emissions related to this process are fixed by the laws of chemistry and cannot be reduced. We have developed strategies to attempt to improve energy efficiency in our production operations, capture and store carbon, generate lower-carbon energy, and reduce the amount of N_2O emissions from our nitric acid facilities. We are also investing in developing new precision agriculture technologies and agronomic services that are expected to improve the efficiency of fertilizer applications within our Retail operations, so more grain can be produced with the same amount of fertilizer and with reduced impact to the environment. We are also investing in initiatives focused on autonomous mining and tele-remote mining, and other advanced technologies to continue to reduce our environmental impact, and improve our safety performance, lower our production costs, and optimize throughput.

Our Canadian manufacturing facilities are primarily located in the provinces of Alberta and Saskatchewan and are subject to a variety of federal and provincial requirements to reduce GHG emissions ranging from carbon taxes to emissions intensity reduction requirements. We attempt to minimize our Canadian compliance costs through the implementation of various efficiency and emissions reduction projects, including: overall efforts to increase operational efficiency; operating a cogeneration facility in partnership with TransCanada Energy Ltd., a subsidiary of TC Energy Corporation, at Carseland, Alberta that captures waste heat and produces emission performance credits; operating a cogeneration facility in partnership with SaskPower at our Cory, Saskatchewan potash mine that captures waste heat and provides all of the mine's steam requirements; and the implementation of the Quantification Protocol for Agricultural Nitrous Oxide Emissions Reduction designed to generate emission offset credits for Alberta growers who reduce their N_2O emissions. We have also partnered with Enhance Energy Inc. to supply CO_2 from the Redwater Nitrogen facility to the Alberta Carbon Trunk Line to be captured and used for enhanced oil recovery in Central Alberta. The project began its first CO_2 injection in December 2019 and continues to supply CO_2 for enhanced oil recovery. The Redwater facility sent approximately 160,000 tonnes of CO_2 to the Alberta Carbon Trunk Line in 2022.

In 2018, Canada enacted the *Greenhouse Gas Pollution Pricing Act* ("GGPPA"), which establishes minimum standards for carbon pricing that makes up part of Canada's strategy for meeting its commitments under the Paris Agreement. The GGPPA is designed to

act as a backstop to apply in provinces that do not establish their own carbon pricing systems that meet the minimum federal stringency criteria. The GGPPA is comprised of two parts: a federal fuel charge that was CAD$50 per tonne of carbon dioxide equivalents ("CO_2e") in 2022 ("Federal Fuel Charge"), and an output-based pricing system ("OBPS") for large industrial emitters. The Federal Fuel Charge applies to all carbon-based fuels in provincial jurisdictions that have not implemented their own provincial carbon tax. Similarly, the federal OBPS applies in those provinces that have not enacted systems deemed equivalent to the federal OBPS. Large emitting facilities regulated under an acceptable OBPS are exempt from the Federal Fuel Charge. On October 29, 2022, the Canadian federal government issued an Order that amended Schedule 4 of the GGPPA. Under the Order, the Federal Fuel Charge will increase by an additional CAD$15 per CO_2e tonne per year for the years 2023 to 2030, resulting in a Federal Fuel Charge of CAD$65 in 2023 and a final Federal Fuel Charge of CAD$170 per CO_2e tonne in 2030.

Nutrien is currently evaluating Geismar, Louisiana as the site to build potentially the world's largest clean ammonia facility. Building on the Company's expertise in low-carbon ammonia production, the facility, if built, is intended to manufacture clean ammonia using innovative technology. The project is currently in the front-end engineering design phase, with a final investment decision expected to follow in the second half of 2023. If approved, construction of the approximately US$2 billion facility is anticipated to begin in 2024 with full production expected by 2027. The new clean ammonia plant is expected to leverage low-cost natural gas, tidewater access to world markets, and high-quality carbon capture and sequestration infrastructure at the Company's Geismar, Louisiana facility to serve growing demand in agriculture, industrial and emerging energy markets. The plant is expected to have an annual production capacity of 1.2 million metric tonnes of clean ammonia and capture at least 90 percent of CO_2 emissions, permanently sequestering more than 1.8 million metric tonnes of CO_2 in dedicated geological storage per annum. The new plant is expected to use autothermal reforming technology to achieve the lowest carbon footprint of any plant at this scale as of the date hereof and has the potential to transition to net zero emissions with future modifications.

Application of Federal Fuel Charge in Alberta and Saskatchewan

As of January 1, 2023, Ontario, Manitoba, Saskatchewan, Alberta, Yukon and Nunavut have the Federal Fuel Charge in place, while the remaining provinces and territory have provincial/ territorial fuel levies.

Application of Federal OBPS in Alberta and Saskatchewan

As of January 1, 2023, the federal OBPS applies in Manitoba, Prince Edward Island, Saskatchewan (for electricity generation and natural gas transmission only), Yukon and Nunavut, while the other provinces and territory have provincial/territorial systems that have been deemed equivalent to the federal OBPS. In 2018, the Province of Saskatchewan proclaimed the *Management and Reduction of Greenhouse Gases Act*, which provided the authority to establish a provincial output-based emissions management framework. This legislation, along with its supporting regulations, was considered to meet the stringency criteria of the federal GGPPA for large industrial facilities. As such, all six of our potash facilities received exemptions from the federal GGPPA fuel charge. Under the Saskatchewan framework, potash facilities must achieve a 5 percent emissions intensity reduction from a site-specific three-year baseline by 2030. Beginning in 2019, the facility intensity baseline benchmark will decline 0.42 percent per year until the full 5 percent intensity reduction target is established in 2030. All six of our potash facilities submitted third-party verified baseline applications in 2019, which were subsequently approved by the Saskatchewan Ministry of Environment in the fall of 2020. The 2019 emissions year was the first compliance year under the Saskatchewan output-based framework, and our 2019 potash facility emission returns were submitted in the fourth quarter of 2020 and approved in the fourth quarter of 2021. The 2020 emissions returns were submitted in the fourth quarter of 2021 and subsequently approved by the Saskatchewan Ministry of Environment in the third quarter of 2022. Emission returns and compliance payments will be submitted every second year per the provincially established Emissions and Compliance Return Schedule. As the Saskatchewan provincial framework that will create a credit trading system and provincial technology fund for meeting emission compliance obligations is still under development as of December 1, 2022, details around payment and credit options are not yet fully known; however, our aggregated potash compliance obligation for the 2019 and 2020 emission years are due on February 28, 2023 and will be a maximum of CAD$848,000. The compliance obligation for the 2021 emission year is estimated to be a maximum of CAD$483,000 based on the 2021 regulated carbon price of CAD$40 per CO_2e tonne. Emissions for 2022 are still subject to final data collection and third-party verification, but the associated compliance obligation for 2022 is estimated to be approximately CAD$270,000.

In Alberta, large emitters (industrial facilities emitting over 100,000 tonnes of CO_2e per year) have been subject to emissions reduction requirements and a GHG pricing system in various forms since 2007. The current large emitter regime is the *Technology Innovation and Emissions Reduction* ("TIER") *Regulation*, which has been in place since January 1, 2020. Under this program, facilities that emit 100,000 tonnes or more of CO_2e per year are subject to the less stringent of a product-specific high-performance benchmark based on the emissions intensity of the most efficient facilities, or a facility-specific benchmark based on a 10 percent emissions intensity reduction relative to the facility's own historical baseline. The stringency of facility-specific benchmarks increased by 1 percent annually through 2022. Following a regulatory review and December 2022 amendment to the TIER Regulation, a 2 percent annual tightening rate will be applied to facility-specific benchmarks and high-performance benchmarks beginning in 2023. The tightening rate does not apply to industrial process emissions, which are fixed by chemistry and cannot be reduced through efficiency improvements. The TIER Regulation has been deemed equivalent to the federal OBPS under the GGPPA. Emissions in excess of the facility emission benchmark allowance are subject to a compliance obligation, including use of provincially generated offset or

performance credits, or payment into a TIER fund. In 2022, the carbon price for TIER fund payments was CAD$50 per CO_2e tonne. This cost will rise by CAD$15 per year to $170 by 2030, consistent with the Federal Fuel Charge schedule. By aligning TIER compliance costs with the Federal Fuel Charge rate schedule, large emitting facilities are not subject to the Federal Fuel Charge.

Under TIER, facilities that emit less than 100,000 tonnes of CO_2e per year but compete with facilities subject to TIER, or facilities that belong to an energy intensive trade exposed sector regulated under TIER, may opt into the TIER program. Nutrien's Joffre ammonia facility opted into the TIER program, which grants it an exemption from the Federal Fuel Charge on purchased fuels. Since the Joffre facility manufactures ammonia using a hydrogen by-product feedstock supplied by an industrial neighbor rather than producing it on site from a natural gas feedstock using an emission intensive steam methane reforming process, Joffre is able to generate emission performance credits as its emissions intensity is below the Alberta TIER ammonia intensity benchmark. These credits can be banked and used to offset a portion of future TIER compliance obligations for Nutrien's other Alberta-based large emitter facilities.

Our TIER compliance reports and payment for 2022 are due by June 30, 2023. Emission quantification and compliance costs are subject to third-party verification prior to submission, and as such are not yet finalized; however, our aggregated TIER compliance costs for 2022 are estimated to be approximately CAD$12.2 million. This estimate is based on the emissions information available at the time of this report. Actual final costs may vary following collection and verification of the full year emission and production data in Q2 2023.

In June of 2022, the Canadian federal government implemented a federal Clean Fuel Standard through the enactment of the *Clean Fuel Regulations* ("CFR"). The CFR applies to liquid fuels beginning in 2023. The CFR has been designed to incentivize the development and use of lower-carbon fuels. Nutrien is tracking the development of the Federal Clean Fuel Standard, CFR and associated compliance obligations and expects to remain engaged through the consultation process.

In the US, the EPA has issued GHG emissions regulations that establish a reporting program for emissions of CO_2, methane and other GHGs, as well as a permitting program for certain large GHG emissions sources. Several legislative bills have passed or are proposed that offer incentives for clean hydrogen production and carbon sequestration, which could impact sustainability efforts. Some US states have also enacted laws concerning GHG emissions that we are monitoring for impacts on our operations.

The impacts of climate change and future restrictions on emissions of GHGs on the Company's operations could be material but cannot be determined with any certainty at this time.

Facility and Product Security

Our Global Security department works closely with our Safety, Health and Environment department, to regularly evaluate and address actual and potential security issues and requirements associated with our operations in the US and elsewhere using approved security vulnerability methodologies. In accordance with our safety management process, additional actions and expenditures may be required in the future to address identified vulnerabilities, particularly those with the potential to violate applicable regulatory standards. In the US, chemical facilities are regulated under the *Maritime Transportation Security Act*, the Chemical Facility Anti-Terrorism Standards and the *Food Safety Modernization Act (Mitigation Strategies to Protect Food Against Adulteration)*. It is anticipated that the US Congress will continue to maintain federal legislation designed to reduce the risk of terrorist acts using chemicals produced and stored at our facilities, and to ensure food security. We believe that we are in material compliance with applicable security requirements, and have developed and adopted security measures and enhancements beyond those presently required at both our regulated and non-regulated facilities. To date, neither the security regulations nor our expenditures on security matters have had a material adverse effect on our financial position or results of operations. We are unable to predict the potential future costs of any new governmental programs or voluntary initiatives.

5.9 Employees

At December 31, 2022, we employed approximately 24,700 employees. The approximate breakdown of employees is as follows:

Business Unit	Number of Employees
Retail	16,100
Potash	3,100
Nitrogen	1,800
Phosphate	1,500
Corporate	1,900
Shared services group [1]	300
Total	**24,700**

1 Our shared services group provides sales and logistics services to our Potash, Nitrogen and Phosphate operations.

We have entered into 13 collective bargaining agreements with labor organizations representing our employees. The following table sets forth the plant locations where we have entered into collective bargaining agreements and their respective expiry dates.

Plant Location	Collective Bargaining Agreement Expiry Date
Allan, Saskatchewan	April 30, 2022[1]
Cory, Saskatchewan	April 30, 2022[1]
Lanigan, Saskatchewan	January 31, 2024
Patience Lake, Saskatchewan	April 30, 2022[1]
Regina, Saskatchewan	December 31, 2024
Regina, Saskatchewan	December 31, 2024
Rocanville, Saskatchewan	May 31, 2023
Vanscoy, Saskatchewan	April 30, 2023
Mulberry, Florida	May 31, 2024
White Springs, Florida	March 3, 2025
Greenville, Mississippi	August 27, 2025
Cincinnati, Ohio	November 1, 2024
Lima, Ohio	October 31, 2027

1 The terms of this collective bargaining agreement, including new expiry date, remain under renegotiation as of the date hereof.

In jurisdictions such as Italy, Australia and Brazil, employees are self-represented through other forms of collective bargaining such as enterprise award agreements or work councils. We believe we have an effective working relationship with our employees, and the unions representing them.

5.10 Social and Environmental Policies

Environmental, Social and Governance

In 2021, we published our Feeding the Future Plan, which highlighted six priority sustainability commitments that we aim to achieve by the year 2030. We believe we will create lasting change and sustainably feed a growing population by committing to working with growers to feed the planet sustainably, reducing our environmental footprint and taking climate action while promoting inclusive agriculture. These commitments demonstrate our desire to drive innovation in agriculture and deliver positive value to our stakeholders and our planet. We believe Nutrien is uniquely positioned to drive sustainability across the agricultural value chain for economic, social and environmental outcomes.

We also reported our climate strategy in 2021 with clear short- and long-term reduction targets for Scope 1 and 2 GHG emissions, demonstrating our support of the Paris Agreement goals and our commitment to the Science Based Targets initiative ("SBTi") to set a science-based target. We continue to work with the World Business Council for Sustainable Development, fertilizer peers and the SBTi to produce a sectoral decarbonization approach for the fertilizer industry.

In addition to our six sustainability commitments, we provided key ESG goals and targets in our 2022 ESG Report, helping to drive short- and medium-term action and provide support for our longer-term 2030 commitments. We continue to move forward on our existing commitments and targets and expect to provide additional targets in the future for developing key issues applicable to Nutrien. Both the Feeding the Future Plan and the 2022 ESG Report can be viewed on the Company's website at www.nutrien.com. We expect to release our 2023 ESG Report, which will focus on our integrated ESG topics, performance and key initiatives for the year ending December 31, 2022, in March 2023.

In June 2022, Nutrien held an Investor Update for shareholders and other stakeholders, with our leadership team speaking to our sustainability strategy, commitments and action taken to date. A key focus of the Investor Update was Nutrien's identified climate-related opportunities and a discussion on how they are integrated across our operations.

See the "Risk Factors" section below for a description of the risks related to our ESG targets and initiatives.

Code of Conduct

Nutrien's most important assets are our employees, customers, shareholders, value-chain partners, suppliers and the communities in which we operate. It is critical that we maintain the trust of each of these stakeholders. Our Code of Conduct ("Code") [1] helps us fulfill our responsibilities by: committing to the public and our stakeholders our uncompromising integrity in every aspect of our

[1] In September 2021, we published an updated Code (formerly called the Code of Ethics) to better align our business-oriented approach with our commitments to our stakeholders. We also updated our approach to safety, speaking up and compliance investigation principles. Further, we created a standalone Conflicts of Interest Policy that leveraged content that was previously in the Code of Ethics and guidance on our intranet.

business; describing our values and principles of business conduct, including our own high standards and fundamental respect for the rule of law; guiding employees on how to engage in integrity-based decision making in all of our operations around the world; and outlining our approach to interacting the right way with stakeholders and acting in the best interest of shareholders. The Code also outlines our commitment to the safety of people and protection of the environment.

We actively promote integrity through the Code and numerous supporting policies, which are reinforced by risk assessments, due diligence procedures, training and our speaking up process. In 2022, all Nutrien employees received formal training on the Code and other compliance-related topics. Our confidential 24-hour, 365 days a year, externally administered Integrity Helpline [1] complements other methods of speaking up that enable employees to report any violations or suspected violations of the Code and other associated Nutrien policies, or any behavior that does not comply with applicable laws. The Code also clearly sets out our no-retaliation policy, which is designed to enable employees to raise good faith issues in a safe environment without fear of retaliation.

Anti-Corruption Policy

We operate in a wide range of jurisdictions and are vigilant and proactive in detecting and preventing corruption. Our Anti-Corruption Policy requires those who work on behalf of Nutrien to ensure that their own conduct fulfills Nutrien's commitment to compliance with all applicable anti-bribery and anti-corruption laws. It applies to Nutrien's directors, officers, employees, representatives, consultants, and other agents of Nutrien and each of its subsidiaries and in every country where we do business.

Nutrien maintains an anti-corruption program that includes:

- identifying high-risk third parties, including acquisition targets and potential joint venture partners, and conducting appropriate diligence;
- incorporating anti-corruption clauses in contracts and/or obtaining certifications that include anti-corruption language for high-risk third parties;
- requiring anti-corruption training and other risk mitigation steps where appropriate, such as annual certification or continued monitoring to identify and address any potential issues; and
- maintaining appropriate books and records and an appropriate system of internal accounting controls.

Workplace Policies

We have adopted a robust Strategic Inclusion Plan with a workplace and workforce component that focuses on becoming representative across all job categories. Representation is focused on a match-to-market model including a variety of diversity dimensions, with a particular focus on women and Indigenous Peoples. In order to reach our goal of being representative of the communities in our operating territories across all job categories, we are focused on building capacity in our talent attraction and succession planning processes to ensure competency in our people to execute, particularly functional and people leaders. We are taking action to address physical and industry cultural barriers to ensure a welcoming workplace where all employees feel they are respected, valued and belong. We implemented a Respect in the Workplace Policy and an Equal Employment and Affirmative Action Policy. Implementation of our Strategic Inclusion Plan is supported by training and workshops, employee resource groups, and ongoing monitoring of internal and external employment trends (new hires, promotion and turnover) for under-represented employee groups and outside opportunities for attracting talent. We are committed to playing a leadership role in our industries, contributing to more equitable outcomes through opportunities not only in our workforce but also in all areas where we have opportunity for impact, including our supply chain, communities, industries, and society. Cascading responsibilities and accountabilities to become representative across all job categories and the removal of physical and industry cultural barriers for participation are integrated into our processes. We benchmark our inclusion maturity using a comparison of our practices to the Global Diversity and Inclusion Benchmark model as a basis for continuous improvement.

Supplier Code of Ethics and Procurement Procedure

Our Supplier Code of Ethics ("Supplier Code") is aligned with our commitment to the 10 principles of the United Nations Global Compact and international standards. The Supplier Code identifies the values that we expect our suppliers to embrace and applies to suppliers that provide products or services to us around the world.

Commitment by our suppliers to the principles of the Supplier Code is significant in our decision-making process. Our Legal and Integrity teams provide guidance and support to the business regarding risk-based due diligence for suppliers, which includes ensuring that appropriate language is included in contracts with various suppliers and appropriate requirements regarding our Supplier Code are communicated. Where suppliers refuse to follow the principles of the Supplier Code or show signs that they are not committed to improving their practices to comply with its principles, Nutrien will review its relationship with the supplier. Where contractual commitments and applicable laws permit, this review may include termination of our relationship with the non-compliant supplier.

1 The Integrity Helpline was previously called the Compliance Hotline.

We are also committed to supporting diversity and inclusion throughout the procurement process. Our procurement policies and procedures – including our Procurement Diversity and Inclusion Procedure – are designed to ensure that fair consideration is given to all potential suppliers. We have developed an Indigenous Content Playbook to assist suppliers in developing local Indigenous content in their own organizations and supply chains. In addition, we work with Indigenous opportunity partner companies to provide contracting opportunities at our worksites. We believe in building and maintaining relationships of mutual respect with Indigenous communities through our procurement practices and extend this further by providing employment and training opportunities and community investments.

Safety, Health and Environment ("SH&E") Policy

We are committed to the care and protection of our people, environment, community and customers. We honor that commitment by making safety a core value of our organization, as we grow our world from the ground up.

Under our SH&E Policy, our goals are to:

- protect our people, assets, facilities, communities and environment;
- proactively prevent incidents and minimize risk by continuously improving our safety, health and environmental performance;
- promote employee physical and mental health and well-being; and
- drive excellence in safety, health and environment across our operations and supply chain.

We strive to accomplish these goals through our SH&E Vision "Everyone home safe, every day," which brings our SH&E Strategy (Culture of Care) and Actions (Nutrien Way) to life, guiding daily actions and behaviors. Nutrien ensures leaders, and their teams, are well supported with SH&E expertise and resources to help everyone go home safe, every day.

Our SH&E culture continues to evolve, purposefully focused on "Growing a Culture of Care" rallying around four pillars: Lead, Collaborate, Challenge and Trust as our consistent base. Nutrien's SH&E management further focuses on people, systems, processes and tools to accomplish continual improvement.

SH&E performance, measurement, analysis and continuous improvement occur with engagement at multiple organizational levels. The Safety and Sustainability Committee of the Board (the "S&S Committee") has responsibility for the oversight of the Company's activities as they relate to ensuring that appropriate policies, systems, and personnel are in place to support safe and sustainable operations and the long-term viability of the Company, including its consideration of stakeholders relevant to the creation and preservation of long-term value. This oversight includes the ongoing monitoring and development of the Company's ESG strategy and incorporates safety, environmental stewardship, health, climate change-related risks and opportunities, cybersecurity, and data privacy. The S&S Committee directly reports to and advises the Board on these matters. The S&S Committee oversees the Company's general strategy, policies, resources, and initiatives relating to safety as appropriate. The S&S Committee meets on a recurring basis to monitor performance against annual and longer-term performance goals, and discusses plans, strategies, and processes, in addition to reviewing our SH&E systems. Policies and strategy are reviewed annually for relevance and modified as appropriate. Committees meet on a recurring basis to monitor performance against annual and longer-term performance goals, and discuss plans, strategies and processes, in addition to evaluating opportunities for improving our SH&E systems.

Leadership, commitment, resource allocation, responsibility, communication, learning and technology are examples of our continually evolving SH&E systems. Nutrien provides further details in its defined SH&E policies, programs and processes addressing specific hazards, risks, operations and tasks.

We lead through the integration of an SH&E management system, including methods of governance, expectations, reference documentation and communication. This infrastructure provides consistency while permitting flexibility to encompass our diversity of operations, risks and geographies. Our business units and, where appropriate, individual facilities reinforce management system expectations through further evaluation, elimination, mitigation and controls necessary to manage risks unique to their operations. Development of SH&E systems, guidance, standards and continuous improvement occurs at the business unit level through operational committees integrated with the central SH&E teams. Performance and risk management conditions are continuously identified, evaluated, addressed and communicated throughout our organization.

Technical support and assurance for our operations are managed at multiple levels within the organization, including central or corporate, business unit, and site levels. We share responsibility for maintaining integrated systems, performance monitoring, providing technical expertise and conducting business unit SH&E audits. The use of an integrated and structured assurance program enables us to achieve continuous improvement and consistent management practices at our facilities and in our operations. In addition to a central SH&E team providing a consistent resource across our organization, we have established SH&E organizations in each business unit with clear lines of responsibility, accountability and visibility. This central and distributed structure enables us to focus on both oversight and governance as well as direct engagement in our operations and activities.

We maintain global, ongoing working relationships with multiple industry associations and regulatory agencies. These relationships ensure new or changing regulations are identified, understood, evaluated and communicated in advance of change. Industry association relationships enhance our risk management compliance with regulatory expectations and provide opportunities to share best practice, innovation and leading SH&E enhancement technologies.

5.11 Risk Factors

Our performance and our future operations are and may be affected by a wide range of risks. The following section describes our key risks and uncertainties. Any or all of these risks, or other risks not presently known to us or that we do not consider material, could have a material adverse effect on our business, financial condition, results of operations, cash flows, value of our common shares and debt securities and, in certain cases, our reputation.

Shifting market fundamentals may result in a prolonged agriculture downturn

Global macroeconomic conditions and shifting market fundamentals, including trade tariffs and restrictions and increased price competition, or a significant change in agriculture production or consumption trends, could lead to a sustained environment of reduced demand for our products, and/or low commodity prices.

We are subject to intense price competition from both domestic and foreign sources, including state-owned and government-subsidized entities. Crop nutrients, including potash, nitrogen and phosphate, are global commodities with little or no product differentiation, and customers make their purchasing decisions principally on the basis of delivered price and, to a lesser extent, on customer service and product quality. Historically, selling prices for our products have fluctuated in response to periodic changes in global and regional supply and demand conditions. Supply is affected by available capacity and operating rates, raw material costs and availability, government policies and global trade that could adversely affect our operating results.

Periods of high demand, high-capacity utilization and increasing operating margins tend to result in investment in production capacity, which may cause supply to exceed demand and capacity utilization and realized selling prices for our products to decline, resulting in possible reduced profit margins. Such conditions could also include writedowns in the value of our assets, and temporary or permanent curtailments of production. Competitors and potential new entrants in the markets for potash, nitrogen and phosphate have in recent years expanded capacity, begun construction of new capacity, or announced plans to expand capacity or build new facilities. The extent to which current global or local economic and financial conditions, changes in such conditions, or other factors may cause delays or cancellation of some of these ongoing or planned projects or result in the acceleration of existing or new projects, is uncertain. Future growth in demand for our products may not be sufficient to absorb excess industry capacity. Furthermore, our business is cyclical, which can result in periods of industry oversupply during which our results of operations may be negatively impacted, as the price at which we sell our products typically declines during such period, resulting in possible reduced profit margins, and could include writedowns in the value of our assets and temporary or permanent curtailments of production.

We are impacted by global market and economic conditions that could adversely affect agriculture commodity trade flows and demand for crop nutrients or increase prices for, or decrease availability of, raw materials and energy necessary to produce our products. These conditions include international trade disputes (including withdrawal from or modification to existing trade agreements, negotiation of new trade agreements, non-tariff trade barriers, local content requirements, and the imposition of new or retaliatory tariffs), international crises or risks thereof (including the continued volatility in the global market resulting from the ongoing Ukraine and Russia war and the COVID-19 pandemic), rising incomes in developing countries, the relative value of the US dollar and its impact on the importation of fertilizers, foreign agricultural policies, and the existence of, or changes in, import or foreign currency exchange barriers in certain foreign markets, and other regulatory policies of foreign governments, as well as the laws and policies affecting foreign trade and investment.

The current war between Ukraine and Russia and the international response has, and may continue to have, potential wide-ranging consequences for global market volatility and economic conditions, including energy and commodity prices. Certain countries including Canada, the United States, Australia and certain European countries have imposed strict financial and trade sanctions against Russia, with Russia and Belarus imposing retaliatory sanctions of their own, which have had, and may continue to have, far-reaching effects on the global economy, energy and commodity prices, food security, and crop nutrient supply and prices. The short-, medium- and long-term implications of the war in Ukraine are difficult to predict with any degree of certainty at this time. While Nutrien does not have operations in Ukraine or Russia, there continues to remain uncertainty relating to the potential impact of the conflict and its effect on global food security, growers, and the market outlook for crop nutrient market supply and demand fundamentals and nutrient prices, and it could have a material and adverse effect on our business, financial condition and results of operations. Depending on the extent, duration, and severity of the conflict, it may have the effect of heightening many of the other risks Nutrien is subject to and which are described herein.

Trade disputes, tariffs and other restrictions may lead to volatility in commodity prices, disruptions in historical trade flows and shifts in planting patterns that could have an adverse effect on our business, financial condition and results of operations. Additionally, some of our customers require access to credit to purchase our products and a lack of available credit to customers in one or more countries, due to this deterioration, could adversely affect demand for crop nutrients as there may be a reluctance to replenish inventories in such conditions.

Significant changes and trends in agriculture could adversely impact our business

The agricultural landscape continues to evolve at an increasingly fast pace as a result of factors including, but not limited to, farm and industry consolidation, agricultural productivity, technology developments, sustainability practices, climate change, and social trends, many of which vary from jurisdiction to jurisdiction.

Farm consolidation in the US and other developed markets has been ongoing for decades and is expected to continue as grower demographics shift and advancements in innovative technology and equipment enable growers to manage larger operations to create economies of scale in a lower-margin, more capital-intensive environment. Consolidation in the crop nutrient industry has resulted in greater resources dedicated to expansion, research and development opportunities, leading to increased competition in advanced product offerings and innovative technologies. Some of our competitors have greater total resources than us or are state-supported, which make them less vulnerable to industry downturns and better positioned to pursue new expansion and development opportunities.

The advancement and adoption of technology and digital innovations in agriculture and across the value chain have increased and are expected to further accelerate as grower demographics shift and pressures from consumer preferences, governments and climate change initiatives evolve. The development of seeds that require less crop nutrients, development of full or partial substitutes for our products, or developments in the application of crop nutrients such as improved nutrient use or efficiency through use of precision agriculture could also emerge, all of which have the potential to adversely affect the demand for our products and our financial condition, results of operations and cash flows.

Further, digital innovations and use of new technology in the agriculture market, among other things, by new or existing competitors could alter the competitive environment, resulting in existing business models being disrupted, which may adversely impact our Retail operations and financial performance.

Agriculture is dependent on a healthy ecosystem to sustain our global food supply. Growers are dealing with an increasing focus on sustainability in the agriculture industry including changing consumer behavior and preferences, food supply chain ethics and transparency and traceability, soil health and nutrient preservation, regulatory requirements such as potential nutrient application, diminishing biodiversity, and GHG emissions, among other things.

The impact of climate change on our operations and those of our grower customers remains uncertain. The physical risks associated with climate change include changing rainfall patterns, water shortages, wildfires, rising sea levels, changing storm patterns and intensities, increasing temperature levels, drought, loss of biodiversity, and deforestation. These risks vary by geographic location and could include acute risks resulting from increased severity of extreme weather events and chronic risks resulting from longer-term changes in climate patterns. Climate change may also affect the availability and suitability of arable land and contribute to unpredictable shifts in the average growing season and types of crops produced.

These factors as well as other factors affecting long-term demand for our products and services (such as population growth and changes in dietary habits) could adversely impact our strategy, demand for our products and financial condition, financial performance, results of operations and cash flows.

Climate change may have an adverse effect on our business

Our business and our customers are subject to risks related to or resulting from climate change, which are commonly grouped into physical risk and transition risk categories.

Physical risks include the impact that climate change could have on our operations, our grower customers, and our supply chain. Climate change may cause or result in, among other things, more frequent and severe weather events, such as storms, floods, heat waves, droughts, and/or changing weather factors such as changing temperatures, precipitation, wind, and water levels. Chronic physical impacts from climate change may also affect the availability and suitability of arable land, including crop quality and soil health, and contribute to loss of biodiversity and unpredictable shifts in the average growing season and types of crops produced and/or crop yields, which could impact the long-term demand for our products and services. The results of climate change may also affect the water levels of certain waterways used in our supply chain network. Freshwater availability is critical to our operations and our grower customers, but localized challenges exist regarding availability and quality of water, which may be intensified by the effects of climate change. Physical risks from climate change may also result in operational or other supply chain delays, depending on the

nature of the event. These events may impact the demand for our products, availability and/or cost of transportation and distribution, resource inputs, materials or insurance, or increase the costs to our operations or capital projects.

Transition risks relate to the risk inherent in changing strategies, policies or investments as society and industry work to reduce the reliance on carbon and impact on the climate. Impacts of transition risks include, among other things, policy constraints on carbon emissions, imposition of carbon pricing mechanisms and carbon taxes, enhanced reporting obligations, risks associated with investments in new technologies, costs to transition to lower emissions technologies, stranded assets, diminished access to capital and financing, water restrictions, land use restrictions or incentives, changing consumer behavior and preferences, and market demand and supply shifts. There are also reputational risks associated with climate change including our stakeholders' perception of our role, strategies and capital allocation decisions relating to the transition to a lower-carbon economy.

There can be no assurance that our efforts to anticipate the costs associated with mitigating the physical risks of climate change and working with governments and industry on potential regulatory requirements associated with climate change will be effective or that climate change or related governmental policy action in response to climate change will not have an adverse impact on our business and negatively impact our strategy, financial condition, results of operations, and/or cash flows, and our reputation and stakeholders' support.

See the discussions under "Significant changes and trends in agriculture could adversely impact our business", "Our business may be adversely affected by changing regulations" and "We may fail to meet our GHG emissions and/or other sustainability and climate targets" for further consideration of the potential impacts of climate-related events on demand for our products, on our operations and on the regulatory environment we operate within.

Our business may be adversely affected by changing regulations

We are subject to numerous federal, state, provincial and local environmental, health and safety laws and regulations, including laws and regulations relating to land, water and raw material use and management; the emission of contaminants to the air or water including GHG emissions; land reclamation; the generation, treatment, storage, transportation, disposal and handling of hazardous substances and wastes; the clean-up of hazardous substance releases; royalties and taxes (including income taxes); and the demolition of existing plant sites upon permanent closure. Specifically, our mining and manufacturing processes release CO_2 and other GHGs and consume energy generated by processes that result in GHG emissions.

We incur significant costs and associated liabilities in connection with our compliance with these laws and regulations, and violations of environmental, health and safety laws can result in substantial penalties, court orders, civil and criminal sanctions, permit revocations, investigations, and facility shutdowns. There are substantial uncertainties as to the nature and timing of any future regulations with many of the laws and regulations continuing to become increasingly stringent, and the cost of compliance can be expected to increase over time. New or revised laws or regulations may result from pressure on lawmakers and regulators to address climate change, product stewardship or product use concerns, transition to a low-carbon economy, or to address concerns related to fertilizer and food prices, accidents, terrorism or transportation of potentially hazardous substances. Increased or more stringent laws or regulations, including protectionist policies in certain jurisdictions or for the benefit of favored industries or sectors, if enacted, or re-interpretation of current laws and regulations, could impact our ability to produce, sell, apply, use or transport certain products, increase our raw material, energy, transportation, and compliance costs, reduce our efficiency, require us to make capital improvements to our facilities, and have a negative effect on our customer satisfaction, reputation and financial performance. Our costs to comply with, or any liabilities under such laws and regulations could have a material adverse effect on our business, financial condition, results of operations and cash flows. To the extent that such regulations, including GHG emissions restrictions, are not imposed in the countries where our competitors operate or are less stringent than regulations that may be imposed in the US, Canada or the other jurisdictions in which we operate, our competitors may have cost or other competitive advantages over us.

We hold numerous environmental, mining and other governmental permits and approvals authorizing operations at each of our facilities. Continuation and/or expansion of our operations is dependent upon renewing or securing the necessary environmental or other permits or approvals. A decision by a government agency to deny or delay issuing a new or renewed material permit or approval, or to revoke or substantially modify an existing permit or approval, could materially adversely affect our ability to continue operations at the affected facility.

Various stakeholders, including legislators and regulators, shareholders, and non-governmental organizations, as well as companies in many business sectors, including Nutrien, are continuing to examine ways to reduce GHG emissions. New or current regulation of GHG emissions could result in additional costs to Nutrien in the form of taxes or emission allowances, facilities improvements, energy costs, compliance costs or otherwise, which, in turn, could increase Nutrien's operational costs. In addition, the regulation of GHG emissions may cause increased input costs and compliance-related costs for agricultural customers, which could result in lower demand for our products and reduced revenues. Because the impact of any future GHG-related legislative or regulatory requirements on Nutrien's business and products is dependent on the timing and design of such requirements, in different jurisdictions, Nutrien is unable to predict with any certainty the potential impact on it at this time.

We are subject to antitrust laws in various countries throughout the world. A significant portion of our business activities are conducted in countries under existing trade agreements and regulations. Changes in antitrust laws, trade agreements or regulations may limit our operations or the operations of Canpotex and could negatively impact opportunities for future acquisitions or organic growth.

We are also subject to taxes in jurisdictions where we are organized or conduct business. Tax rates in the various jurisdictions in which we operate may be subject to significant change. Taxation matters, including changes in tax laws or rates, adverse determinations by taxing authorities, and imposition of new taxes could adversely affect our strategy, financial condition, results of operations and cash flows.

Our information technology systems, infrastructure and data may become the target of cybersecurity attacks

Information technology systems and operational control systems are embedded in our business and as we advance our digital platform and capabilities, financial lending programs and process automation systems, we may become more exposed to cyberattacks, which continue to become increasingly sophisticated. Further, increased reliance on third-party service providers, cloud-based platforms, and remote working arrangements have required adjusted tactics to respond to a changing threat landscape and may result in increased cybersecurity risk exposure. Cybersecurity risks include attacks on information technology and infrastructure by hackers, damage or loss of information due to viruses, ransomware events, the unintended disclosure of confidential information and/or personally identifiable information, the misuse or loss of control over computer control systems, business and/or supply chain disruptions, and related breaches (intentional or otherwise).

Targeted attacks on our systems (or on systems of third parties that we rely on), failure or non-availability of key information or operations technology systems (whether our own systems or systems of third parties that we rely on), or a breach in security measures designed to protect our technology systems could result in property damage, theft, misuse, modification and destruction of information, including trade secrets and confidential business information and/or personally identifiable information, and cause business disruptions, reputational damage, extensive personal injury, and third-party claims, which could negatively impact our operations and our financial performance.

Nutrien collects certain personally identifiable information and other data integral to parts of its business processes and activities. This information and other data is subject to a variety of US, Canadian, and foreign laws and regulations, including oversight by various regulatory or other governmental bodies, and laws and regulations concerning the collection and use of such information and other data obtained from their residents or by businesses operating within their jurisdictions. Any inability, or perceived inability, to adequately address privacy and data protection concerns, even if unfounded, or to comply with applicable laws, regulations, policies, industry standards, contractual obligations or other legal obligations (including at newly acquired companies) could result in additional cost and liability to Nutrien or its officials, damage our reputation, inhibit sales, and otherwise adversely affect our business.

Our operations may be affected by political, economic and social instability

We are a global business with significant operations in Canada and the US as well as operations outside of North America, including Australia, South America, European countries and Trinidad, with an expanding presence in Brazil. We also hold equity investments primarily in China and Argentina.

We are subject to numerous risks and uncertainties relating to international sales and operations, including: difficulties and costs associated with complying with a wide variety of complex laws, treaties and regulations; abrupt or unexpected changes in regulatory environments; conflicting cultural practices and business practices; increased government regulation of the economy and/or state ownership of enterprises; changes in tax or royalty laws and regulations; forced divestitures or changes to or nullification of existing agreements, mining permits or leases; political and economic instability in areas in which we operate or elsewhere, including the possibility for civil unrest, inflation (including volatile and/or high inflation levels), supply chain disruptions and adverse economic conditions resulting from governmental attempts to reduce inflation, such as imposition of higher interest rates and wage and price controls; nationalization of properties or assets by foreign governments; the imposition of tariffs, limitations on the repatriation of earnings and exchange controls (including, but not limited to those in Argentina), international trade sanctions, embargoes, barriers or other restrictions; restrictions on monetary distributions; public health crises, including the ongoing COVID-19 pandemic, and actions taken and measures imposed by government or regulatory bodies in connection therewith; and currency exchange rate fluctuations between the US dollar and foreign currencies.

The occurrence of any of the above risks and uncertainties in the countries in which we operate or elsewhere could jeopardize or limit our ability to transact business and could adversely affect our revenue and operating results and the value of our assets located in such countries.

Our governance and compliance processes, which include the review of internal control over financial reporting and specific internal controls in relation to offers of things of value to government officials and representatives of state-owned enterprises, may not prevent

potential violations of law including anti-corruption or anti-bribery laws, accounting, or governance practice. Our Code, together with our mandatory policies, such as our anti-corruption and anti-fraud policies, may not prevent instances of fraudulent behavior and dishonesty nor guarantee compliance with legal or regulatory requirements. This may lead to regulatory fines, disgorgement of profits, litigation, loss of operating licenses or reputational damage.

We may fail to attract and retain talent and/or develop the right organizational culture and resources

Our ability to attract and retain qualified top talent and provide the necessary organizational structure, programs, and culture to engage and develop our employees, including providing a respectful, inclusive and diverse workplace, is crucial to our growth and achieving our business results.

Although we strive to be an employer of choice, competition for skilled employees in certain geographical areas can be significant and we may not be successful in attracting, developing or retaining such skilled employees. We could experience increases in our recruiting and training costs, and decreases in our operating efficiency, productivity, and financial performance if we are not able to attract, hire and retain a sufficient number of skilled employees to support our operations. Our success also depends in part on certain skilled employees and the loss of their services could have a material adverse effect on our business, financial condition, and results of operations.

In addition, we invest significant time and expense in training our employees, which increases their value to competitors who may seek to recruit them. Failure to develop the right organizational structure or culture or promote and foster a respectful, diverse, and inclusive workplace could result in decreased productivity, reliability, efficiency and safety performance, higher costs, or reputational harm. It could also negatively impact our ability to attract and retain employees, take on new projects or acquisitions and sustain operations, or meet diversity and inclusion goals, which might negatively affect our operations or our ability to grow.

We may fail to maintain the support of our stakeholders for our business plans

The nature of our business makes it crucial to maintain a strong reputation and positive relationships with key stakeholders, including shareholders, customers, our employees, suppliers, landowners, local and Indigenous communities, and governments, among others. Damage to our reputation can occur from our actual or perceived actions or inactions and a range of events and circumstances, including through our supply chain, many of which are out of our control. This includes with the media and in social media, which has made it easier for individuals and groups to share their opinions of us and our activities, whether accurate or not.

Our reputation as a company doing business with integrity is essential to building and maintaining trusting relationships with stakeholders, as well as reducing our legal and financial risk. Damage to our reputation could result in, among other things, a decrease in the value of our common shares and debt securities, decreased investor confidence, challenges in attracting and retaining talent, challenges in maintaining positive relations with the communities in which we operate and other important stakeholders, and increased risks in developing our resources, any of which could have a material adverse effect on our operations, projects and financial position.

Our stakeholders may place an increasing importance on the structure of our business, our ability to execute on our strategy, the customers, growers, and suppliers we do business with, and our core sustainability, social, biodiversity, and product stewardship responsibilities. Underperformance due to weak market fundamentals or business issues, inadequate communication, engagement and/or collaboration with our stakeholders, inadequate management of climate change, biodiversity, or other environmental or social issues, inadequate management of our products or supply chain, or dissatisfaction with our practices or strategic direction, including our capital allocation priorities and those directed to address ESG matters, may lead to a lack of support for our business plans. Loss of stakeholder confidence impairs our ability to execute on our business plans, negatively impacts our ability to produce and/or sell our products, and may also lead to reputational and financial losses, and negatively impact our access to or cost of capital or shareholder action.

We may be unable to access sufficient, cost-effective or timely transportation, distribution, and storage of our products or our supply chains may be disrupted

We rely on dependable and efficient transportation services, the disruption of which could result in difficulties supplying materials to our facilities and/or impair our ability to deliver products to customers in a timely manner. We rely on railroad, trucking, pipeline, access to navigable rivers and waterways, and other transportation service providers to transport raw materials to our manufacturing facilities, to coordinate and deliver finished products to our storage and distribution system and our Retail centers, and to ship finished products to our customers.

Our ability (or the ability of the third parties upon which we rely) to provide sufficient, cost-effective or timely transportation and storage of product may be challenged due to a number of factors, including labor disputes, system failures, accidents (such as spills or derailments), delays, supply chain interruptions, adverse weather or other environmental events, including high or low river water conditions and others related to climate change, adverse operating conditions (including aging transportation infrastructure, railroad capacity constraints, or changes to rail or ocean freight systems), swings in demand for our products, increased shipping demand for other products, adverse economic conditions, a change in our export, sales or marketing company relationships, or otherwise. This could result in delays and increased costs, lost revenue, and reputational damage with our customers.

If certain key raw materials, parts and/or supplies used in our processing operations are not available, our business could be disrupted. Certain factors which may impact the availability of raw materials and supplies are out of our control including, but not limited to, disruptions resulting from weather, economic conditions, geopolitical factors, manufacturing delays or disruptions at suppliers' facilities or supplier operations, shortage of materials, interruption of energy supply, and unavailable or poor supplier credit conditions.

In addition, there remains uncertainty relating to the potential impact that theCOVID-19 pandemic could ultimately have on our supply chain. The COVID-19 pandemic could create significant supply chain challenges and disruptions, and/or limit our ability to timely sell or distribute our products in the future, which could negatively impact our business.

We may fail to effectively redeploy capital to achieve sustained growth

Challenges may arise in the capital allocation process due to changing market conditions, including the unavailability, due to geopolitical, market or other reasons, of appropriate capital deployment opportunities, and our ability to anticipate and incorporate such changes in our decision-making process. Inefficiencies in the capital allocation process or decisions that are not consistent with strategic priorities or that do not properly assess risk may also lead to inefficient deployment of capital. Failure to allocate capital in an effective manner may lead to reduced returns on capital invested, operational inefficiencies, damage to our reputation or limitations on our access to capital.

When we undertake any strategic initiatives, our ability to achieve the expected returns and other benefits will be affected by our degree of preparedness and ability to execute.

- We have undertaken and continue to undertake various projects including capital and business process improvement and transformation projects, including those intended to lower our GHG emissions intensity. These projects involve risks, including (but not limited to) changing market conditions, difficult environmental conditions, poor project prioritization and capital allocation, factors negatively impacting costs (such as escalating costs of labor and materials, unavailability and underperformance of skilled personnel, suppliers of materials or technology and other third parties we retain, design flaws or operational issues, or poor project management oversight) or poor transition through project stages. Any of the foregoing risks could impair our ability to realize the benefits we had anticipated from the projects and negatively impact our financial performance.

- With respect to any completed and future acquisitions, we are dependent upon our ability to successfully consolidate functions and integrate operations, technology, systems, procedures, and personnel of acquired businesses in a timely and efficient manner. The integration of assets and operations requires the dedication of management effort, time and resources, which may divert management's focus and resources from other strategic opportunities or operational matters during the process. The integration process with respect to any completed or future acquisitions may result in the disruption of our existing business and customer relationships, which may adversely affect our ability to achieve the anticipated synergies and other benefits and may, in turn, negatively affect our financial performance.

- We also continue to evaluate the potential disposition of assets and operations that may no longer help us meet our objectives. When we decide to sell assets or operations, we may encounter difficulty in finding buyers or executing alternative exit strategies on acceptable terms or in a timely manner, which could delay the accomplishment of our strategic objectives.

We may fail to maintain high levels of safety and health or to protect the environment

Our operations are subject to hazardous safety, health and environmental risks inherent in mining, manufacturing, transportation, storage and distribution of chemical fertilizers, including ammonia, which is highly toxic and corrosive. These risks include: incidents relating to operation of equipment and exposure by personnel to thermal, electrical, mechanical, chemical, gravitational, pneumatic and hydraulic operations, maintenance activities and road transportation/travel; underground water inflows at our potash mines; explosions; fires; severe weather and natural disasters; train derailments, collisions, vessel groundings and other transportation and maritime incidents; leaks and ruptures involving storage tanks, pipelines and railcars; spills, discharges, and releases of toxic or hazardous substances or gases; uncontrolled tailings, gypsum stack or other containment breaches; significant subsidence from mining activities; and deliberate sabotage and terrorist incidents. Additionally, other hazards specific to our Nitrogen and Phosphate operations include but are not limited to: engulfment; hydrogen sulfide ("H_2S") exposures; contact with electrical conductors; hazards associated with reclamation activities inclusive of work around bodies of water; and work at height hazards/fall protection exposure

prevention. We also have personnel who work or travel in higher-risk countries and are subject to increased safety and security risks as a result.

The potash mining process is complex and subject to certain geological conditions and hazards, including the presence of certain gases, such as those containing H_2S, and the presence of water-bearing strata above and below many underground mines, which pose the risk of water inflows. It is not uncommon for water inflows of varying degrees to occur in potash mines. While it is difficult to predict if, when or to what degree such inflows could occur, we are able to better predict and prepare for mine-threatening inflows with the use of 3D seismic and accompanying mining guidance standards. At our Saskatchewan potash mines we experienced water inflows that are being monitored and managed, as appropriate. An increase to the frequency and/or significance of inflows at our potash mines could result in increased operational costs, increased risk of personal injury, production delays or stoppages, the abandonment and closure of a mine, and/or damage to our reputation. The risk of underground water inflows, as with most other underground risks, is currently not insured.

Failure to identify, proactively mitigate or appropriately respond to a safety, health or security incident could result in injuries or fatalities among our employees, contractors or residents in communities near our operations. Such incidents may lead to liabilities arising out of personal injuries or death, operational interruptions, regulatory intervention, such as stop work orders, citation, restrictions or other enforcement actions, and shutdown or abandonment of affected facilities. Preventing or responding to incidents could require us to expend significant managerial time and effort, and financial resources to remediate safety issues, compensate injured parties or repair damaged facilities. Any of the foregoing could have an adverse impact on our ability to produce or distribute product, our financial results, and our reputation. Failure to prevent an environmental incident could impact the biodiversity, water resources, and related ecosystems near our operations, cause personal injury and significant environmental damage, and result in significant fines or penalties. Such incidents could also adversely impact our operations, financial performance or reputation.

We may fail to meet our GHG emissions and/or other sustainability and climate targets

We set a target to reduce our GHG emissions in nitrogen production by one million tonnes CO_2e by the end of 2023 and also set a target to reduce our Scope 1 and Scope 2 GHG emissions intensity of our operations by at least 30 percent by 2030 (based on a 2018 baseline year). Our ability to lower GHG emissions on both an absolute basis and in respect of our 2030 emissions intensity reduction target is subject to numerous risks and uncertainties, and our actions taken in implementing these objectives may also expose us to certain additional and/or heightened financial and operational risks.

A reduction in GHG emissions is dependent on, among other things, our ability to deploy sufficient capital to fund the expenditures to implement the necessary operational changes required to achieve our target; 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 our GHG emissions reduction target, and the availability of requisite technological advances; the commercial viability and scalability of GHG emissions reduction strategies and related technology and products; and the development and execution of implementing strategies to meet our GHG emissions reduction target.

With respect to our other climate and sustainability targets, our ability to achieve those targets is also subject to numerous risks and uncertainties and our actions taken in implementing our objectives may also expose us to certain additional and/or heightened financial and operational risks. Our ability to achieve our various ESG performance goals and climate and sustainability targets relies on, among other things, our ability to deploy sufficient capital to fund the expenditures to implement the necessary operational changes to achieve these 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; the commercial viability and scalability of required technology and products; development and growth of end market demand for sustainable products and solutions; the performance of third parties; and the development and execution of implementing strategies to meet such targets.

In the event that we are unable to implement our GHG emissions reduction and/or other climate and sustainability strategies and technologies as planned or in the event that such strategies or technologies do not perform as expected, we may be unable to meet our GHG emissions reduction targets or goals or other ESG, climate and sustainability targets on the current timelines, or at all. In addition, the cost associated with achieving our GHG emissions reductions targets and other climate and sustainability targets could be significant, and could require significant capital expenditures and resources, potentially including the acquisition of technology, with the potential that the costs required to achieve our targets could differ from our original estimates and expectations, which differences may be material. The overall cost of investing in and implementing an emissions reduction strategy and technologies in furtherance of such strategies, and the resultant change in the deployment of our resources and focus, could have a material adverse effect on our business, financial condition, and results of operations. There is also a risk that some or all of the expected benefits and opportunities of achieving the various GHG emissions reduction, climate and other sustainability goals, including as a result of a transition project or technology acquisition, may fail to materialize within the anticipated time periods or at all.

Failure to achieve our emissions, climate or sustainability targets could have a negative impact on our reputation, business, cash flows, results of operations, and on our access to, and cost of, capital.

An inability to successfully manage the implementation of our new enterprise resource planning system

As part of our digital transformation, we are implementing a new enterprise resource planning ("ERP") system. This system will replace many of our existing operating and financial systems. Such an implementation is a major undertaking, both financially and from a management and personnel perspective. Any disruptions, delays or deficiencies in the design and implementation of our new ERP system could adversely affect our ability to process orders, ship products, provide services and support, send invoices and track payments, fulfill contractual obligations, or otherwise operate our business and affect our internal controls over financial reporting.

Our business and operations are subject to other general and ongoing risks, most of which are outside our control

Adverse weather conditions may decrease demand for our products or delay grower purchases

Our business and our customers are impacted by weather patterns and conditions including storms, floods, heat waves, droughts and other events. Adverse conditions, including as a result of climate change, that can delay or intermittently disrupt fieldwork during the planting and growing seasons may cause agricultural customers to use different forms of crop nutrients and crop protection products, which may adversely affect demand for the forms of products that we sell, or may impede growers from applying our crop nutrients and crop protection products until the following growing season or in some cases not at all, resulting in lower demand for our products and reduced revenues.

In addition, we face the significant risk and cost of continuing to carry inventory should our customers' activities be curtailed during their normal application seasons. We must manufacture and distribute product throughout the year in order to meet peak season demand, as well as react quickly to unexpected changes in weather patterns that affect demand. Weather can also have an adverse effect on crop yields, which could lower the income of growers and impair their ability to purchase our crop nutrients, crop protection, and seed products and services. As a result, our quarterly financial results may vary significantly from one year to the next due to weather-related shifts in planting schedules and purchasing patterns, and losses due to adverse weather conditions in one quarter may not be recovered in the following season.

We may be subject to labor disruptions or disputes

A significant portion of our workforce is unionized or otherwise governed by collective bargaining or similar agreements. Two of our 13 collective bargaining agreements are subject to renegotiation in 2023. As of December 31, 2022, we have three collective bargaining agreements that remain under renegotiation, including a new expiry date. We are therefore subject to the possibility of organized labor disruptions. Adverse labor relations or contract negotiations that do not result in an agreement could result in strikes or slowdowns or impose additional costs to resolve these disputes. These disruptions may negatively impact our ability to produce or sell our products and/or cost of production. These disruptions may also impact our ability to recruit and retain personnel and could negatively affect our financial performance.

Canpotex may be dissolved or its ability to operate impaired

Canpotex is the offshore marketing, transportation and distribution company we rely on to deliver our potash to customers outside Canada and the US. Unexpected changes in laws or regulations, market or economic conditions, our (or our venture partner's) business, or other unexpected developments could threaten the existence or effectiveness of Canpotex. In any of those circumstances, a trusted potash brand could be lost and our access to key offshore markets negatively impacted resulting in a less efficient logistics system, decreased sales, higher costs or lower net earnings from offshore sales.

We are exposed to various market risks that may impact our operating results

We are exposed to various market factors that may impact our operating results, including: changes in the price of, or ability to source, raw materials and energy, which could, among other things, impact our gross margins and profitability; commodity price volatility, including the possibility of asset impairment as a result thereof; currency volatility and devaluation risk, including as a result of the translation of foreign subsidiaries' financial statements to US dollars for consolidation at the Nutrien level; and fluctuations in interest rates, which could negatively impact our financial results given our use of floating rate debt, floating rate credit facilities and commercial paper, as well as the refinancing of long-term debt and anticipated future financing needs. We seek to manage a portion of the risks relating to changes in commodity prices and foreign currency exchange rates by using derivative instruments; however, such instruments may be ineffective in fully mitigating such risks.

Changes in the price of raw materials and energy required to produce our products, including natural gas, which is the principal raw material used to manufacture our nitrogen products and a significant energy source in the potash milling and mining process, could have a material impact on our business. The price of raw materials and energy can fluctuate widely for a variety of reasons, including changes in availability because of additional capacity or limited availability due to curtailments, regulatory changes, including changes related to production of certain raw materials or energy sources, or other operating problems. Other external factors beyond our

control can also cause volatility in raw materials prices, including, without limitation, general economic conditions, the level of business activity in the industries that use our products, weather conditions and forecasts, competitors' actions, trade sanctions, international events, such as the current war between Ukraine and Russia, the ongoing COVID-19 pandemic and related circumstances, and governmental regulation in the US and abroad. Because most of our products are commodities or derived from commodities, there can be no assurance that we will be able to recover increases in the price of such raw materials through an increase in the selling price of our related crop nutrient products. Conversely, when the market prices for these raw materials rapidly decrease, the selling prices for related crop nutrients can fall more rapidly than we are able to consume our raw material inventory that we purchased or committed to purchase at higher prices. As a result, our costs may not fall as rapidly as the selling prices of our products. Until we are able to consume the higher-priced raw materials, our gross margins and profitability may be adversely affected.

We generally benefit from relatively low North American natural gas prices which can vary significantly compared to the price for natural gas in Europe and Asia. Significantly lower natural gas prices in Europe and/or Asia may give our competitors in those regions an advantage, which could, in turn, decrease international and domestic product prices and reduce our margins. In addition, higher natural gas prices, particularly in North America, during a period of low crop input selling prices could adversely affect our results of operations.

There is also a risk to production at our various facilities due to concerns over the availability of natural gas supplies. Nitrogen facilities in Argentina and Trinidad have all experienced supply strains or curtailments. Continued or increased natural gas shortages may result in reduced production available for sale and higher production costs per tonne.

We may be unable to access capital on a cost-effective or timely basis

We rely on access to debt capital markets to finance our day-to-day and long-term operations. Access to and cost of capital may be affected by factors not specific to Nutrien, such as adverse conditions in the credit markets, general and industry-specific market and economic conditions and interest rate fluctuations. Our access to and cost of capital will also be dependent on our short- and long-term credit ratings, which are determined by, among other things, the level and quality of our earnings and our ability to meet financial obligations. A credit rating downgrade could potentially limit our access to private and public credit markets and increase the costs of borrowing under our existing credit facilities. A downgrade could also limit our access to short-term debt markets and increase the cost of borrowing in the short-term and long-term debt markets. Inability to access capital on a cost-effective or timely basis may result in a loss of liquidity, an increase in the cost of capital or inability to execute on value-added transactions requiring significant capital. Our reputation and financial performance may be impacted from being associated with carbon intensive activities and/or concerns regarding the contribution of our operations to climate change, which could include a reduction in investor confidence and constraints on our ability to access capital markets.

Our operations are exposed to counterparty risk

We are exposed to the risks associated with counterparty performance, including credit risk and performance risk. We extend trade credit and guarantee the financing for some of our growers and customers to purchase our products (and, in some cases, for extended periods of time). We may experience material financial losses in the event of customer payment default for our products or services (including Nutrien Financial) and/or financial derivative transactions. Increases in the prices of crop nutrients may exacerbate this risk.

We may incur non-cash charges affecting our consolidated financial statements if our assets or goodwill become impaired

We have significant investments in long-lived assets to be held and used and goodwill, and continually review the carrying amount of these assets for recoverability, considering changes in market conditions and if other events or circumstances indicate that their carrying amount may not be recoverable. If our long-lived assets or goodwill are determined to be impaired in the future, we may be required to record non-cash charges in our consolidated statement of earnings during the period in which the impairment is determined, which could be significant and have an adverse effect on our results of operations.

We also carry our inventories at the lower of cost and net realizable value. A decrease in forecasted prices of key production inputs could result in a writedown of our inventory, when the carrying amount exceeds net realizable value. Periods of a prolonged elevated commodity price environment increases the potential that prices could subsequently decrease rapidly. Other factors that could impact our estimates of net realizable value include inventory levels, global nutrient capacities, crop price trends, climate change initiatives and changes in regulations and standards employed. Any such writedown could have an adverse effect on our results of operations and the value of our assets.

We are subject to legal proceedings, the outcome of which may affect our business

We are, and may in the future be, involved in legal and regulatory proceedings, including matters arising from our activities or activities of predecessor companies, including climate-related activities. The outcome of these matters may be difficult to assess or quantify, and such matters may not be resolved in our favor. Such matters could result in unfavorable outcomes, including fines, sanctions, assessments of additional taxes (including interest and penalties), and other monetary damages against us or our directors, officers or employees. The defense of such matters may also be costly and time consuming and could divert the attention of management and key personnel from our operations. We may also be subject to adverse publicity associated with such matters, regardless of whether such allegations are valid or whether we are ultimately found liable.

Epidemics, pandemics or other such crises or public health concerns in regions of the world where we have operations or source material or sell products could impact or disrupt our business

The COVID-19 pandemic has caused and may continue to cause disruption, volatility and uncertainty in economies and markets around the world, even with vaccines being readily available. There is still uncertainty as to the level of adoption and the duration of efficacy and effectiveness of the vaccine against variants or mutations.

The ongoing COVID-19 pandemic, and the actions that have been or may be taken by governments in response thereto, has resulted, and may continue to result in, among other things, increased volatility in financial markets, commodity prices, and foreign exchange and inflation rates; significant disruptions to global supply chains; labor shortages; challenges in bringing employees back to pre-pandemic work arrangements or otherwise retaining and continuing to train and develop employees; travel bans, restrictions and quarantines; temporary operational restrictions and extended shutdowns of certain businesses; and political and economic instability and civil unrest.

These factors or any governmental or other regulatory responses or developments or health concerns in countries in which we operate could result in further or prolonged operational restrictions, supply chain disruptions, social and economic instability, or labor shortages and disruptions. Depending on the extent, duration, and severity of the COVID-19 pandemic, it may have the effect of heightening many of the other risks Nutrien is subject to and which are described herein.

Our insurance coverage may not adequately cover our losses

Nutrien maintains various insurance policies, including property, business interruption and liability insurance policies, but we are not fully insured against all potential hazards, perils and/or risks pertaining to our business. As a result, we may incur significant liability for which our insurance may not fully compensate. Insurance policies are generally renewed on an annual basis and are subject to various exclusions and conditions that could limit the nature of indemnification available to us. Insurance market conditions can change our premiums, limits, self-retentions and/or deductibles for certain insurance policies, and in some instances, the availability of some insurance coverage may be reduced or become unavailable entirely. Many factors are taken into consideration that could lead us to decide to increase our self-retentions or reduce, or possibly eliminate, coverage for certain hazards and risks.

Our reported mineral reserves and mineral resources are only estimates

Our mineral reserves have been estimated in accordance with National Instrument43-101 – *Standards of Disclosure for Mineral Projects*(“NI 43-101”) as required by Canadian securities regulatory authorities, and the Canadian Institute of Mining, Metallurgy and Petroleum Classification System and our mineral reserve disclosure is not required to adhere to US requirements. The estimated mineral reserves and mineral resources may not be recovered or may not be recovered at the rates estimated. There are varying levels of certainty of the mineral reserves and mineral resources estimates, depending on sampling and geophysical imaging and, consequently, may not be representative of actual resources. Mineral reserves and mineral resources estimates may require revision (either up or down) based on new data. Further, market fluctuations in the price of potash, as well as increased production costs or reduced recovery rates (including due to policy, legal, technological, market and societal responses to climate change), may render certain mineral reserves and mineral resources uneconomic and may ultimately result in a restatement of estimated resources and/or reserves.

5.12 Mineral Projects

See “Schedule B – Mineral Projects” for information regarding our Allan, Cory, Lanigan, Rocanville and Vanscoy Potash operations.

6 – Dividends

The declaration, amount and payment date of any dividend by Nutrien is at the discretion of the Board and will depend on numerous factors, including compliance with applicable laws and the financial performance, debt obligations, working capital requirements and future capital requirements of Nutrien and its subsidiaries. See "5 – Description of the Business – 5.11 Risk Factors." Other than pursuant to applicable corporate law, there is currently no restriction that could prevent Nutrien from paying dividends on the common shares.

Dividends declared by Nutrien for the years ended December 31 were as follows:

2022		2021		2020	
Date Declared	**Per Common Share**	**Date Declared**	**Per Common Share**	**Date Declared**	**Per Common Share**
February 16, 2022	0.48	February 17, 2021	0.46	February 19, 2020	0.45
May 18, 2022	0.48	May 17, 2021	0.46	May 6, 2020	0.45
August 4, 2022	0.48	August 9, 2021	0.46	August 10, 2020	0.45
November 3, 2022	0.48	November 1, 2021	0.46	December 10, 2020	0.45
Total	**1.92**	**Total**	**1.84**	**Total**	**1.80**

7 – Description of Capital Structure

7.1 General Description of Capital Structure

Authorized Capital

The authorized share capital of Nutrien consists of an unlimited number of common shares and an unlimited number of preferred shares issuable in series.

As of the date hereof, 499,243,897 common shares were issued and outstanding and no preferred shares were issued or outstanding. The following is a general description of the material rights, privileges, restrictions and conditions attached to the common shares and the preferred shares.

Common Shares

Each Common Share entitles the holder to: (i) vote at all meetings of holders of common shares (except meetings at which only holders of a specified class or series of shares of Nutrien are entitled to vote as provided in the CBCA) and to one vote for each Common Share held on all polls taken at such meetings; (ii) receive, subject to the rights of the holders of another class of shares of Nutrien, any dividend declared by the Board from time to time, in their absolute discretion, in accordance with applicable law; and (iii) receive, subject to the rights of holders of another class or series of shares of Nutrien, the remaining property of Nutrien on the liquidation, dissolution or winding up of Nutrien or any other distribution of the assets of Nutrien for the purposes of winding up its affairs, whether voluntary or involuntary. There are no pre-emptive or conversion rights attaching to the common shares and the common shares are not subject to redemption. All common shares currently outstanding and to be outstanding upon exercise of outstanding options and other securities, as applicable, are, or will be, fully paid and non-assessable.

Our by-laws provide for certain rights of holders of our common shares in accordance with the provisions of the CBCA. Such by-laws may be amended either by a majority vote of the holders of common shares or by a majority vote of the Board. Any amendment of the by-laws by action of the Board must be submitted to the next meeting of our shareholders whereupon the by-law amendment must be confirmed, confirmed as amended or rejected by a majority vote of the shareholders voting on such matter.

Preferred Shares

The preferred shares may at any time and from time to time be issued in one or more series with the designation, rights, privileges, restrictions and conditions attaching to each series of the preferred shares to be determined by the Board.

The preferred shares of each series rank on a parity with the preferred shares of every other series, and are entitled to preference over the common shares and any other shares of the Company ranking junior to the preferred shares, with respect to (i) the payment of dividends; (ii) the distribution of property in the event of the liquidation, dissolution or winding up of Nutrien; and (iii) such other preferences as may be determined by the Board.

Except as specifically provided in the rights, privileges, restrictions and conditions attaching to any series of preferred shares and except as provided by the CBCA, the holders of preferred shares are not entitled to receive notice of or attend any meeting of the shareholders of the Company or to vote at any such meeting for any purpose.

The provisions attaching to the preferred shares as a class may be added to, changed or removed, and the Board may create shares ranking prior to the preferred shares, only with the approval of the holders of the preferred shares as a class, any such approval to be given by the holders of not less than 66 $^{2}/_{3}$ percent of the preferred shares in writing by the registered holders of the preferred shares or by resolution at a meeting of such holders.

7.2 Constraints

There are no constraints imposed on the ownership of Nutrien's securities to ensure that the Company has a required level of Canadian ownership.

7.3 Debt Ratings

The following information relating to Nutrien's credit ratings is provided as it relates to Nutrien's financing costs, liquidity and operations and to satisfy disclosure requirements under applicable Canadian securities rules. Our ability to access reasonably priced debt in the capital markets is dependent, 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 future borrowings.

Commercial paper markets are normally a source of same-day cash for the Company. 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.

Credit ratings are intended to provide investors with an independent measure of credit quality of an issue of securities. A credit rating is not a recommendation to buy, sell or hold securities and does not address the market price or suitability of a specific security for a particular investor. 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.

The following table sets out ratings the Company has received in respect of its outstanding debt securities from the ratings agencies as at the date of this AIF. The Company has paid each of S&P Global Ratings ("S&P") and Moody's Investors Service ("Moody's") their customary fees in connection with the provision of the following ratings. The Company has not made any payments to S&P or Moody's in the past two years for services unrelated to the provision of such ratings.

	S&P Rating	**Moody's Rating**
Nutrien Notes	BBB	Baa2
US$ Commercial Paper	A-2	P-2
Ratings Outlook	Positive	Stable

S&P [1]

The BBB rating assigned by S&P is the fourth highest rating of S&P's 10 rating categories for long-term debt, which range from AAA to D. Issues of debt securities rated BBB are judged by S&P to exhibit adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation. The ratings from AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

The A-2 rating assigned by S&P is the second highest rating of S&P's six rating categories for short-term debt, which range from A-1 to D. A short-term obligation rated A-2 is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor's capacity to meet its financial commitment relative to other obligors on the obligation is satisfactory.

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).

1 S&P Global Ratings Definition – November 10, 2021

Moody's [1]

The Baa2 rating assigned by Moody's is the fourth highest rating of Moody's nine rating categories for long-term debt, which range from Aaa to C. Moody's appends numerical modifiers from one to three on its long-term debt ratings from Aa to Caa to indicate where the obligation ranks within a particular ranking category, with the two modifier indicating a mid-range ranking. A modifier of one indicates that the obligation ranks on the higher end of its generic rating category and a modifier of three indicates that the obligation ranks on the lower end of its generic rating category. Obligations rated Baa are defined by Moody's as being subject to moderate credit risk. They are considered medium-grade and as such may possess speculative characteristics. Nutrien's issuer rating assigned by Moody's is Baa2.

The P-2 rating assigned by Moody's is the second highest rating of Moody's four rating categories for short-term debt, which range fromP-1 to NP. Issuers rated P-2 are defined by Moody's as having a strong ability to repay short-term debt obligations.

Moody's stable outlook on Nutrien's credit ratings indicates a low likelihood of a rating change over the medium term.

8 – Market for Securities

8.1 Trading Price and Volume

During 2022, Nutrien's common shares traded on the TSX and the New York Stock Exchange ("NYSE") under the symbol "NTR."

The following table sets out the trading price range and volume of our common shares traded on the TSX and the NYSE for 2022 on a monthly basis:

	TSX			NYSE		
Month (2022)	**High Price (CAD$)**	**Low Price (CAD$)**	**Volume**	**High Price (US$)**	**Low Price (US$)**	**Volume**
January	97.50	85.28	30,842,718	76.72	67.23	64,555,859
February	109.20	89.31	27,957,224	86.12	70.42	65,259,429
March	136.25	107.10	60,317,208	108.84	84.14	125,531,548
April	147.93	122.70	30,038,967	117.25	96.01	69,412,818
May	138.13	118.75	35,420,180	107.82	92.44	72,960,629
June	124.53	101.81	42,509,537	98.72	78.62	82,267,257
July	109.98	93.43	28,842,996	85.89	70.99	51,507,710
August	132.75	102.90	28,773,964	102.73	79.86	57,269,190
September	124.22	111.46	35,581,138	95.72	81.65	48,300,865
October	120.72	107.90	25,304,955	89.13	77.78	41,269,379
November	117.07	95.49	33,702,830	86.32	69.16	53,169,268
December	109.68	98.14	32,208,007	81.63	71.77	37,197,527

8.2 Prior Sales

During the year ended December 31, 2022, Nutrien issued 3,066,148 common shares pursuant to the exercise and settlement of outstanding share-based compensation award plans. During 2022, Nutrien also granted 375,483 stock options under its stock option plan. See Note 5 and Note 23 of the 2022 Consolidated Financial Statements for additional information.

9 – Escrowed Securities and Securities Subject to Contractual Restriction on Transfer

To the knowledge of the Company, none of the securities of the Company are subject to escrow or contractual restriction on transfer.

1 Moody's Rating Symbols and Definitions – December 20, 2022

10 – Directors and Officers

10.1 Name, Occupation and Security Holding

Information is given below with respect to each of the directors and executive officers of Nutrien as at February 16, 2023, including names, municipality and country of residence, all current positions held with the Company, present principal occupation, and principal occupations held during the last five years. The current directors will hold office until the earlier of their resignation, our next annual meeting of shareholders at which directors are elected or until such directors cease to hold office pursuant to the provisions of the CBCA.

Directors (Name and Municipality of Residence)	**Director Since**	**Present Principal Occupation or Employment**	**Prior Principal Occupation or Employment Within the Preceding Five Years**
Russell K. Girling Calgary, Alberta, Canada	2018 (Agrium from 2006 – 2017)	Corporate Director; Board Chair of Nutrien	President, Chief Executive Officer and Director of TC Energy Corporation, a diversified energy and pipeline company
Christopher M. Burley[1, 3] Calgary, Alberta, Canada	2018 (PotashCorp from 2009 – 2017)	Corporate Director	Corporate Director
Maura J. Clark[1, 2] New York, New York, US	2018 (Agrium from 2016 – 2017)	Corporate Director	Corporate Director
Miranda C. Hubbs[3, 4] Toronto, Ontario, Canada	2018 (Agrium from 2016 – 2017)	Corporate Director	Corporate Director
Raj S. Kushwaha[3, 4] Gig Harbor, Washington, US	2021	Managing Director and Chief Digital Officer of Warburg Pincus LLC, a private equity firm specializing in consumer, energy, financial services, health care, industrial and business services, real estate, and technology	Same as present
Alice D. Laberge[1, 3] Vancouver, British Columbia, Canada	2018 (PotashCorp from 2003 – 2017)	Corporate Director	Corporate Director
Consuelo E. Madere[3, 4] Destin, Florida, US	2018 (PotashCorp from 2014 – 2017)	President and Founder of Proven Leader Advisory, LLC, a management consulting and executive coaching firm	Same as present
Keith G. Martell[5] Eagle Ridge, Saskatchewan, Canada	2018 (PotashCorp from 2007 – 2017)	President & Chief Executive Officer and Director of First Nations Bank of Canada, a Canadian chartered bank providing financial services with a focus on the Indigenous marketplace	Same as present
Aaron W. Regent[1, 2] Toronto, Ontario, Canada	2018 (PotashCorp from 2015 – 2017)	Corporate Director; Founder, Chairman and Chief Executive Officer of Magris Performance Materials Inc., a leading North American based industrial mineral company	Same as present

Directors (Name and Municipality of Residence)	Director Since	Present Principal Occupation or Employment	Prior Principal Occupation or Employment Within the Preceding Five Years
Nelson L.C. Silva [2, 4] Rio de Janeiro, Brazil	2020	Corporate Director; Advisor to Appian Capital Advisory LLP, investment advisor in the mining sector and HSB Solomon Associates LLC, strategic advisor in the energy sector	Executive Director of Petróleo Brasileiro S.A., an oil and gas exploration and production company; Chief Executive Officer of BG Group, a multinational oil and gas company in South America
Ken A. Seitz [6] Saskatoon, Saskatchewan, Canada	2022	President and Chief Executive Officer of Nutrien	Interim President and Chief Executive Officer, Nutrien; Executive Vice President and Chief Executive Officer of Potash, Nutrien; President and Chief Executive Officer, Canpotex Limited, a potash exporter
Michael J. Hennigan [3, 4, 7] West Chester, Pennsylvania, US	2022	President and Chief Executive Officer of Marathon Petroleum Corporation, a petroleum refining, natural gas processing and midstream logistics company Chairman, President and Chief Executive Officer of MPLX LP, a natural gas processing and midstream logistics company	Same as present

1 Member of the Audit Committee of the Board.
2 Member of the Human Resources & Compensation Committee of the Board.
3 Member of the Corporate Governance & Nominating Committee of the Board.
4 Member of the Safety & Sustainability Committee of the Board.
5 Keith Martell was a member of the Audit Committee of the Board and the Human Resources & Compensation Committee of the Board until January 1, 2023.
6 Ken Seitz was appointed to the Board on August 8, 2022.
7 Michael Hennigan was elected to the Board on May 17, 2022.

Executive Officers (Name and Municipality of Residence)	Present Position with the Company and Principal Occupation	Prior Principal Occupation or Employment Within the Preceding Five Years
Ken A. Seitz Saskatoon, Saskatchewan, Canada	President and Chief Executive Officer of Nutrien	Interim President and Chief Executive Officer, Nutrien; Executive Vice President and Chief Executive Officer of Potash, Nutrien; President and Chief Executive Officer, Canpotex Limited, a potash exporter
Noralee M. Bradley Saskatoon, Saskatchewan, Canada	Executive Vice President, External Affairs and Chief Sustainability and Legal Officer of Nutrien	Executive Vice President and Chief Legal Officer, Nutrien; Partner at Blake, Cassels & Graydon LLP
Pedro Farah Calgary, Alberta, Canada	Executive Vice President and Chief Financial Officer of Nutrien	Executive Vice President and Treasurer, Walmart, a multinational retail company; Executive Vice President and Chief Financial Officer, Walmex (Walmart Mexico)

Executive Officers (Name and Municipality of Residence)	Present Position with the Company and Principal Occupation	Prior Principal Occupation or Employment Within the Preceding Five Years
Andy J. Kelemen Calgary, Alberta, Canada	Executive Vice President and Chief Corporate Development & Strategy Officer of Nutrien	Senior Vice President, Corporate Development, Nutrien; Vice President, Corporate Development, Nutrien
Candace J. Laing Saskatoon, Saskatchewan, Canada	Senior Vice President, Chief Human Resources Officer of Nutrien	Vice President of Sustainability and Stakeholder Relations, Nutrien
Brent D. Poohkay Canmore, Alberta, Canada	Executive Vice President and Chief Technology Officer of Nutrien	Executive Vice President and Chief Information Officer, Nutrien; Senior Vice President, Information Technology, PotashCorp
Chris P. Reynolds Wilmette, Illinois, US	Executive Vice President & President, Potash of Nutrien	Senior Vice President, Sales, Nutrien
Jeff M. Tarsi Collierville, Tennessee, US	Executive Vice President and President of Global Retail of Nutrien	Interim President of Global Retail, Nutrien; Senior Vice President of North American Operations, Nutrien
Mark Thompson Calgary, Alberta, Canada	Executive Vice President & Chief Commercial Officer of Nutrien	Executive Vice President, Chief Strategy and Sustainability Officer, Vice President of Business Development, Vice President of Strategy, Special Assistant to CEO, Nutrien and Agrium

As at February 16, 2023, the directors and executive officers of the Company as a group beneficially own, or control or direct, directly or indirectly, 147,474 common shares, representing less than 1 percent of the outstanding common shares.

10.2 Cease Trade Orders, Bankruptcies, Penalties or Sanctions

Except as set out below, no director or executive officer of the Company was, as at the date hereof, or has been within the 10 years prior to the date hereof, a director, chief executive officer or chief financial officer of any company (including the Company), that:

- was subject to an order that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or
- was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

For the purposes of the above, “order” means any of the following that was in effect for a period of more than 30 consecutive days:

- a cease trade order;
- an order similar to a cease trade order; or
- an order that denied the relevant company access to an exemption under securities legislation.

Except as set out below, no director or executive officer of the Company, or, to the knowledge of the Company, a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

- was, as at the date hereof, or has been within the 10 years prior to the date hereof, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or was subject to or instituted any proceedings, arrangement, or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold its assets; or

- has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement, or compromise with creditors, or had a receiver, receiver manager, or trustee appointed to hold the assets of the director, executive officer, or shareholder.

Mr. Burley was a director of Parallel Energy Inc., administrator of Parallel Energy Trust ("Parallel Energy"). On or about November 9, 2015, Parallel Energy and its affiliates filed applications for protection under the *Companies' Creditors Arrangement Act* (Canada) and voluntary petitions for relief under Chapter 11 of Title 12 of the *United States Bankruptcy Code*. Mr. Burley resigned from the board of directors of Parallel Energy Inc. on March 1, 2016. The Canadian entities of Parallel Energy each filed an assignment in bankruptcy under the *Bankruptcy and Insolvency Act* (Canada) on March 3, 2016. In 2015, securities regulators for the Provinces of Alberta, British Columbia, Manitoba, Ontario, Quebec, Saskatchewan and New Brunswick issued cease trade orders in relation to the securities of Parallel Energy for the failure by Parallel Energy to timely file financial statements as well as related continuous disclosure documents. Such cease trade orders continue to be in effect. The TSX delisted the trust units and debentures of Parallel Energy at the close of business on December 11, 2015.

Ms. Clark served as a director of Garrett Motion Inc. ("Garrett Motion") from October 2018 until April 2021. In September 2020, Garrett Motion and certain affiliated companies filed voluntary petitions under Chapter 11 of Title 11 of the *United States Bankruptcy Code*. On April 30, 2021, Garrett Motion announced that it emerged from its Chapter 11 proceedings, successfully completing the restructuring process and implementing the plan of reorganization that was confirmed by the United States Bankruptcy Court for the Southern District of New York on April 23, 2021.

10.3 Conflicts of Interest

To the knowledge of the Company, no director or officer of the Company has an existing or potential material conflict of interest with the Company or any of its subsidiaries, joint ventures or partnerships.

11 – Promoters

During the two most recently completed financial years, no person or company has been a promoter of the Company.

12 – Legal Proceedings and Regulatory Actions

The information under "Environmental Remediation, Legal and Other Matters" of Note 29 of the 2022 Consolidated Financial Statements is incorporated by reference herein. For further discussion of certain environmental proceedings in which we are involved, see "Environmental Matters" above.

In the normal course of business, we are also, and expect to continue to be, subject to various other legal proceedings being brought against us. While it is not possible to determine the ultimate outcome of such actions at this time, and inherent uncertainties exist in predicting such outcomes, it is the Company's belief that the ultimate resolution of any such known actions is not reasonably likely to have a material adverse effect on its consolidated financial statements.

13 – Interest of Management and Others in Material Transactions

To the knowledge of the Company, as of the date hereof, there were no directors or executive officers of the Company or any associate or affiliate of a director or executive officer of the Company with any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect the Company.

14 – Transfer Agent, Registrar and Trustees

The registrar and transfer agent for the common shares is Computershare Trust Company of Canada, at its principal offices in Calgary, Alberta and Toronto, Ontario.

The trustee for the Nutrien notes is the Bank of New York Mellon at its principal offices in New York, New York.

15 – Material Contracts

To the knowledge of the Company, no material contracts require disclosure under this section.

16 – Interests of Experts

KPMG LLP are the auditors of the Company and have confirmed with respect to the Company that they are independent within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations and also that they are independent accountants with respect to the Company under all relevant US professional and regulatory standards.

Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., an employee of the Company, supervised the preparation of and approved the Allan Technical Report, the Cory Technical Report, the Lanigan Technical Report, the Rocanville Technical Report and the Vanscoy Technical Report (each, as defined in Schedule B hereto). Mr. Funk is a qualified person under NI 43-101 and has reviewed and approved the scientific and technical information in this AIF relating to the Company's Allan, Cory, Lanigan, Rocanville and Vanscoy Potash operations. Mr. Funk holds beneficially, directly or indirectly, less than 1 percent of any class of the securities of the Company or of any of the Company's associates or affiliates.

17 – Audit Committee

17.1 Audit Committee Charter

Attached, as Schedule A, is the charter for the Company's Audit Committee.

17.2 Composition of the Audit Committee

Members of the Audit Committee are Maura J. Clark, Christopher M. Burley, Alice D. Laberge and Aaron W. Regent as of February 16, 2023. Keith G. Martell was a member of the Audit Committee until January 1, 2023. Each member of the Audit Committee is (and, in the case of Mr. Martell, was, during the time of service on the Audit Committee) independent and financially literate (as such terms are defined in National Instrument 52-110 – *Audit Committees ("NI 52-110")*).

17.3 Relevant Education and Experience of Members of the Audit Committee

Name **(Director Since)**	**Principal Occupation and Full Biography**
Ms. Maura J. Clark (2018) (Audit Committee Chair) B.A. (Economics), CPA New York, New York, US Other Public Directorships Newmont Corporation, a gold mining company (TSX, NYSE) Fortis Inc., a North American electric and gas utility holding company (TSX)	Ms. Clark is a Corporate Director and the former President of Direct Energy Business, a former subsidiary of Centrica plc, a North American energy and energy-related services provider from 2007 to 2014. Previously, Ms. Clark was Executive Vice President of North American Strategy and Mergers and Acquisitions for Direct Energy. She also served as a managing director at Goldman Sachs & Co., an investment banking firm, and as Executive Vice President, Corporate Development and Chief Financial Officer of Premcor, Inc. (formerly known as Clark Refining & Marketing, Inc.), a petroleum refiner and marketer. She is a director of Fortis Inc., Newmont Corporation and Sanctuary for Families. Ms. Clark holds a Bachelor of Arts degree from Queen's University and a Chartered Professional Accountant designation.
Mr. Christopher Burley (2018) B.Sc., M.B.A. Calgary, Alberta, Canada Other Public Directorships None	Mr. Burley is a Corporate Director and former Managing Director and Vice Chairman of Energy for Merrill Lynch Canada Inc., an investment banking firm. He has over two decades of experience in the investment banking industry. He is the Chairman and a director of WestJet Airlines Ltd., an Onex Corporation portfolio company. Mr. Burley is a graduate of the Institute of Corporate Directors' Education Program and holds the ICD.D designation. Mr. Burley is a Member of the Institute of Corporate Directors Climate Strategy Advisory Board for the Canadian Chapter Zero of the WEF Climate Governance Initiative. Mr. Burley holds a Bachelor of Science with a Certificate of Honours Standing (Geophysics) and a Master of Business Administration from Western University.

Name (Director Since)	Principal Occupation and Full Biography
Ms. Alice D. Laberge (2018) B.Sc., M.B.A. Vancouver, British Columbia, Canada Other Public Directorships Mercer International Inc., producer of pulp and wood products and producer of bioelectricity (NASDAQ) Russel Metals Inc., a North American metal distribution company (TSX)	Ms. Laberge is a Corporate Director and the former President and Chief Executive Officer of Fincentric Corporation, a global provider of software solutions to financial institutions. She was previously Senior Vice President and Chief Financial Officer of MacMillan Bloedel Ltd. She is a director of Mercer International Inc., Russel Metals Inc., and the Canadian Public Accountability Board and has served as a director of the Royal Bank of Canada and the B.C. Cancer Foundation. She was recognized as a Fellow of the Institute of Corporate Directors in 2015. Ms. Laberge holds a Bachelor of Science (Speech Pathology & Audiology) from the University of Alberta and a Master of Business Administration from the University of British Columbia.
Mr. Keith G. Martell (2018) [1] B. Comm., CPA, CA Eagle Ridge, Saskatchewan, Canada Other Public Directorships None	Mr. Martell is President & Chief Executive Officer and Director of First Nations Bank of Canada, a Canadian chartered bank providing financial services with a focus on the Indigenous marketplace. He serves as a director of River Cree Enterprises Ltd., as a trustee of the National Indian Brotherhood Trust and a governor of the University of Saskatchewan. He previously served as a director of the Canadian Chamber of Commerce, Public Sector Pension Investment Board of Canada and The North West Company Inc. Mr. Martell is a designated Chartered Professional Accountant and holds a Bachelor of Commerce and an Honorary Doctorate of Laws from the University of Saskatchewan.
Mr. Aaron W. Regent (2018) B.A., FCPA, FCA Toronto, Ontario, Canada Other Public Directorships The Bank of Nova Scotia, a global financial services provider (TSX, NYSE)	Mr. Regent is Corporate Director and the Founder, Chairman and Chief Executive Officer of Magris Performance Materials Inc., a leading North American based materials company. Mr. Regent serves as the Chair of the Board of The Bank of Nova Scotia. Mr. Regent has acquired significant financial experience during his time as President and Chief Executive Officer of Barrick Gold Corporation, Senior Managing Partner of Brookfield Asset Management and Co-Chief Executive Officer of the Brookfield Infrastructure Group, and as President and Chief Executive Officer of Falconbridge Limited. Mr. Regent is a member of the Chartered Professional Accountants of Ontario and holds a Bachelor of Arts (History) from the University of Western Ontario.

[1] Member of the Audit Committee until January 1, 2023.

17.4 Pre-approval Policies and Procedures

Subject to applicable law, the Audit Committee is directly responsible for the compensation and oversight of the work of the independent auditors. The Audit Committee has implemented a Pre-Approval Policy for Audit and Non-Audit Services for the pre-approval of services performed by our auditors. The objective of this policy is to specify the scope of services permitted to be performed by our auditors and to ensure that the independence of our auditors is not compromised through engaging them for other services. Subject to the Pre-Approval Policy for Audit and Non-Audit Services, our Audit Committee pre-approves all audit services and all permitted non-audit services provided by our external auditors and reviews on a quarterly basis whether these services affect our external auditors' independence. During 2022, the Company relied on the *de minimis* non-audit services exemption set forth in section 2.4 of NI 52-110 with respect to the pre-approval of certain non-audit services provided to the Company by KPMG LLP.

17.5 External Auditor Service Fees (by Category)

The following table sets out the fees billed to us by KPMG LLP and its affiliates for professional services rendered during the years ended December 31, 2022 and 2021. During these years, KPMG LLP was the Company's only external auditor.

Category	Years Ended December 31 (US$)	
	2022	**2021**
Audit Fees [1]	8,777,700	8,284,800
Audit-Related Fees [2]	63,000	-
Tax Fees [3]	168,100	191,100
All Other Fees [4]	302,400	149,900
Total	**9,311,200**	**8,625,800**

1 For professional services rendered by KPMG LLP for the integrated audit of the Company's annual financial statements; interim review of the Company's interim financial statements; audits of statutory financial statements of controlled subsidiaries; attestation reporting in accordance with US environmental agency requirements and consent orders; attestation reports over various Nutrien subsidiaries for the purpose of compliance with local laws and regulations; and work in connection with the renewal of the Company's base shelf prospectus in 2022 and the Company's prospectus supplement relating to the offering of notes in 2022.

2 For professional services rendered by KPMG LLP for translation of the Company's annual and quarterly reports. Amounts previously reported in 2021 as audit-related fees have been reclassified as audit fees and all other fees to align with the current year's presentation.

3 For professional services rendered by KPMG LLP for assistance with preparation and review of tax filings and related tax compliance, assistance in responding to tax authorities, including reassessments and tax audits, routine tax planning and advice. These amounts include fees paid to KPMG LLP specifically for tax compliance and preparation services rendered in 2022 and 2021 in the amounts of $168,100 and $181,000, respectively.

4 For professional services rendered by KPMG LLP for the preparation of subsidiary statutory financial statements; an assessment of the Company's cyber security maturity level against a globally recognized framework and a readiness assessment for assurance over the Company's report on cyber security key performance indicators; and limited assurance over Nutrien Scope 1 and Scope 2 GHG emissions.

18 – Additional Information

Additional financial information is provided in the 2022 Consolidated Financial Statements and the 2022 MD&A. Further, additional information, including historical information concerning directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, and securities authorized for issuance under equity compensation plans is contained in the Company's management proxy circular dated March 28, 2022 for the annual meeting of the Company's shareholders that took place on
May 17, 2022.

Additional information related to Nutrien may be found on the Company's website at www.nutrien.com, on the Canadian Securities Administrators' website at www.sedar.com and on the EDGAR section of the US SEC's website at www.sec.gov.

Schedule A

AUDIT COMMITTEE CHARTER

Introduction

The Audit Committee (the "**Committee**") is established to assist the Board of Directors (the "**Board**") of Nutrien Ltd. (the "**Corporation**") in fulfilling its oversight responsibilities with respect to the accounting and financial reporting processes and the reviews and audits of the financial statements of the Corporation by monitoring: (i) the quality and integrity of the Corporation's financial statements and related disclosures; (ii) the Corporation's internal control systems, including internal control over financial reporting; (iii) specific elements of risk management (including all financial risk management) delegated to the Committee by the Board; (iv) the qualifications and independence of the external auditors of the Corporation and the recommendation of the Board to shareholders for the appointment thereof; (v) the performance of the Corporation's Internal Audit function and external auditors; and (vi) the Corporation's compliance with legal and regulatory requirements with respect to matters within the Committee's mandate and the Code of Conduct. Such oversight is all with a view to supporting the long-term viability of the Corporation, including its consideration of stakeholders relevant to the creation and preservation of long-term value.

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Management is responsible for preparing the consolidated financial statements of the Corporation and the external auditors are responsible for auditing those financial statements. Nothing in this Charter is intended, or may be construed, to impose on any member of the Committee a standard of care or diligence that is in any way more onerous or extensive than the standard to which all directors are subject under applicable laws or regulatory requirements.

In this Charter, "**Committee Chair**" means the Chair of the Committee; "**Chair**" means the Board Chair; and "**CEO**" means the Chief Executive Officer of the Corporation.

Composition

The members of the Committee shall be appointed by the Board, on the recommendation of the Corporate Governance & Nominating Committee. Any member of the Committee may be removed or replaced at any time by the Board and shall cease to be a member of the Committee on ceasing to be a director. Subject to the above, each member of the Committee shall serve as a member of the Committee until the next annual meeting of shareholders after his or her appointment.

The Committee shall consist of not less than three and not more than eight members. Each Committee member shall be independent according to the independence standards set out in the Corporate Governance Framework, including applicable independence requirements of stock exchanges on which the Corporation is listed and securities laws, rules and regulations.

Each member of the Committee shall be "financially literate", and at least one member of the Committee shall be designated as the "audit committee financial expert" and shall have "accounting or related financial management expertise", in each case, as such qualification is interpreted by the Board in its business judgment and as defined by applicable requirements of stock exchanges on which the Corporation is listed and securities laws, rules and regulations.

No member of the Committee shall serve on the audit committees of more than two other publicly listed companies, unless the Board determines that such simultaneous service would not impair the ability of such member to effectively serve on the Committee and discloses such determination in the Corporation's annual management proxy circular.

The Board may fill vacancies on the Committee from among its members, on the recommendation of the Corporate Governance & Nominating Committee. If and whenever a vacancy shall exist on the Committee, the remaining members may exercise all its powers so long as a quorum remains in place.

The members of the Committee shall be entitled to receive such remuneration for acting as members of the Committee as the Board may from time to time determine.

The Corporate Secretary or such other person acceptable to the members shall act as Secretary to the Committee.

Committee Chair

The Board, upon recommendation of the Corporate Governance & Nominating Committee, shall appoint a Committee Chair. The Committee Chair may be removed and replaced by the Board.

If the Committee Chair is not present at any meeting of the Committee, one of the other members of the Committee present at the meeting shall be chosen by the Committee to chair the meeting.

The Committee Chair shall have the duties and responsibilities set forth in **Annex 1** which is incorporated by reference herein.

Quorum

Fifty percent of the members of the Committee shall constitute a quorum. All determinations of the Committee shall be made by a majority of its members present at a meeting duly called and held.

Meetings

All Committee members are expected to attend, in person or via teleconference, video conference, or other electronic communications facilities that permits all participants to communicate adequately, all meetings of the Committee, to come prepared for the meeting, and to remain in attendance for the duration of the meeting. The powers of the Committee may be exercised by resolution in writing signed by all members of the Committee who would have been entitled to vote on that resolution at a meeting of the Committee.

The Committee may invite such directors, officers, employees and external advisors of the Corporation as it may see fit from time to time to attend meetings of the Committee and assist in the discussion and consideration of the duties of the Committee.

The time at which and place where the meetings of the Committee shall be held, and the calling of meetings and the procedure at such meetings, shall be determined by the Committee in accordance with the Corporation's articles, by-laws, and applicable laws.

The Committee shall meet at each Committee meeting alone without Management present, and shall meet separately with applicable senior Management, the external auditors, and the Chief Audit Executive.

Responsibilities

The Committee, to the extent required by applicable laws or rules, or otherwise considered by the Committee to be necessary or appropriate, is responsible for the oversight in respect of the Corporation's financial disclosure and accounting practices, internal control systems (including internal control over financial reporting), specific elements of risk management (including all financial risk management) delegated to the Committee by the Board, the external auditors, the Internal Audit function, and legal and regulatory compliance with respect to matters within the Committee's mandate and the Code of Conduct.

To fulfill its duties and responsibilities, the Committee shall:

Financial Disclosure and Accounting

- meet with Management and the external auditors to review and discuss, and to recommend to the Board for approval prior to public disclosure, the annual audited financial statements and the specific disclosures in "Management's Discussion and Analysis of Financial Condition and Results of Operations" ("**MD&A**");

- meet with Management and the external auditors to review and discuss, and to approve prior to public disclosure, the unaudited quarterly financial statements, including the specific disclosures in the MD&A and quarterly interim reports (including annual guidance);

- review and discuss with Management and the external auditors prior to public disclosure each press release that contains significant financial information respecting the Corporation or contains estimates or information regarding the Corporation's future financial performance or prospects; and the type and presentation of information to be included in such press releases (in particular, the use of "pro forma" or "adjusted" information that is not in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("**IFRS**"));

- review and discuss with Management and the external auditors, and recommend to the Board for approval prior to public disclosure:

    - the portions of the Annual Information Form containing significant information within the Committee's mandate;

- the portions of the Corporation's annual management proxy circular containing significant information within the Committee's mandate;
- all financial statements included in prospectuses or other offering documents;
- all prospectuses and all documents which may be incorporated by reference in a prospectus, other than any pricing supplement issued pursuant to a shelf prospectus; and
- significant financial information, including "pro forma" or "adjusted"non-IFRS information respecting the Corporation contained in a publicly disclosed document (other than routine investor relations or similar communications);

- review and discuss with Management and the external auditors (including those of the following that are contained in any report of the external auditors): (1) any analyses prepared by Management and/or the external auditors setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analyses of the effects of alternative accounting principles in accordance with IFRS; (2) all critical accounting policies and practices to be used by the Corporation in preparing its financial statements; (3) all material alternative treatments of financial information within IFRS that have been discussed with Management, ramifications of the use of these alternative treatments, and the treatment preferred by the external auditors; and (4) other material communications between the external auditors and Management, such as any Management Representation Letter or Schedule of Unadjusted Differences;
- review and discuss with Management and the external auditors significant accounting and reporting issues and understand their impact on the financial statements, including complex or unusual transactions and areas involving significant assumptions; major issues regarding accounting principles and financial statement presentation, including any significant changes in the Corporation's selection or application of accounting principles, and the effect of regulatory and accounting initiatives, as well as off balance sheet structures, on the financial statements of the Corporation, any significant issues as to the adequacy of the Corporation's internal controls and any special audit steps adopted in light of significant control deficiencies;
- review and discuss with Management and the external auditors non-IFRS financial measures, as well as financial information and earnings guidance provided externally, including to analysts and rating agencies;
- review with Management and the external auditors the results of the annual audit, including any restrictions on the scope of the external auditors' activities or on access to requested information, and the resolution of any significant disagreements with Management;
- review Management's Internal Control Report and the related attestation by the external auditors of the Corporation's internal controls over financial reporting; and
- review with Management and the external auditors and, if necessary, legal counsel, any litigation, claim or contingency, including tax assessments, or material reports or inquiries from regulators or governmental agencies, that could have a material effect upon the financial position of the Corporation, and the manner in which these matters have been disclosed in the financial statements.

Internal Controls

- assess the effectiveness of the Corporation's internal control systems, including internal control over financial reporting and information technology strategy, risks and, in consultation with the Safety & Security Committee, cyber security controls and related matters;
- understand the scope of Internal Audit's and the external auditors' review of internal controls over financial reporting, and obtain reports on significant findings and recommendations, together with Management's responses;
- annually review the Corporation's disclosure controls and procedures, including any significant deficiencies in or materialnon-compliance with such controls and procedures;
- receive and review reports from the Corporation's Disclosure Committee and periodically review the Corporation's Disclosure Policy;
- review and discuss with the CEO and Chief Financial Officer their disclosures made during their annual and quarterly certification processes about significant deficiencies or material weaknesses in the design or operation of internal controls or any fraud that involves Management or other employees who have a significant role in the Corporation's internal controls;

- discuss with Management the Corporation's material financial risk exposures and the steps Management has taken to monitor and control such exposures; and

- review executive officers' expenses and aircraft usage reports and periodically report to the Corporate Governance & Nominating Committee thereon, as appropriate.

Risk Management

- regularly review with Management the Corporation's material risks within the Committee's scope (i.e., the principal financial risks facing the Corporation and any other risks specifically delegated to the Committee by the Board), the assessment of those risks, and how they are being managed or mitigated, including, reviewing the mid-year update report from the Corporation's Enterprise Risk Management team; and

- monitor and review at least annually Management processes and controls designed to identify, assess, monitor and manage the risks referred to above.

Internal Audit

- review with Management, the external auditors, and Internal Audit (and if appropriate, approve) the Charter, plans, activities, and organizational structure of the Internal Audit function;

- review the significant findings prepared by Internal Audit and recommendations issued by any external party relating to Internal Audit issues, together with Management's response thereto;

- take reasonable steps to ensure there are no unjustified or inappropriate restrictions or limitations on the functioning of the Internal Audit function, or on access to requested information;

- review the adequacy of the resources of Internal Audit to satisfy itself as to the effectiveness, objectivity and independence of the Internal Audit function;

- review and concur on the appointment, replacement, or dismissal of the Chief Audit Executive (or such individual in a similar capacity or position who performs a substantially similar function); and

- review the performance and effectiveness of the Internal Audit function.

External Audit

- meet with the external auditors prior to the annual audit to review (and if appropriate, approve) the proposed audit scope, approach and staffing (including coordination of audit efforts with Internal Audit) and budget;

- monitor the progress of the annual audit;

- obtain feedback about the conduct of the external audit from key employees engaged in the process;

- when applicable, review the annual post-audit letter from the external auditors and Management's response thereto andfollow-up in respect of any identified weakness;

- at least annually, obtain and review a report by the external auditors describing: (i) the external auditors' internal quality control procedures, and (ii) any material issues raised by the most recent internal quality control review, or peer review, of the external auditors, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the external auditors, and any steps taken to deal with any such issues;

- annually receive from the external auditors, and review, a report on items required to be communicated to the Committee by applicable rules and regulations;

- annually review the independence of the external auditors, including their formal written statement of independence delineating all relationships between the external auditors and the Corporation, review all such relationships, and consider applicable auditor independence standards and take any decisions and actions that are necessary and appropriate where the Committee becomes aware of the potential for a conflict (or the reasonable perception of a conflict) between the interests of the external auditors and the interests of the Corporation;

- annually evaluate the performance of the external auditors, including the lead audit partner, and report to the Board on its conclusions regarding the external auditors and recommendation to shareholders for appointment of the external auditors;

- investigate and consider whether any action is required if the external auditors resign;

- ensure the rotation of the lead audit partner having primary responsibility for the audit as required by applicable law; and

- set clear hiring policies for partners, employees and former partners and employees of the present and former external auditors.

Oversight in Respect of Audit and Non-Audit Services

- subject to confirmation by the external auditors of their compliance with Canadian and U.S. regulatory requirements, be directly responsible (subject to Board confirmation) for the appointment of the external auditors for the purpose of preparing or issuing any audit report or performing other audit, review or attest services for the Corporation, such appointment to be confirmed by the Corporation's shareholders at each annual meeting;

- be directly responsible (subject to Board confirmation) for the approval of fees to be paid to the external auditors for audit services, and shall pre-approve the retention of the external auditors for any permitted non-audit service to the Corporation;

- be directly responsible for the retention and oversight of the services of the external auditors (including resolution of disagreements between Management and the external auditors regarding financial reporting) for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Corporation (with the external auditors reporting directly to, and being accountable to, the Committee);

- have the sole authority to pre-approve all audit services and all permitted non-audit services to the Corporation, provided that the Committee need not approve in advance non-audit services where:

    - the aggregate amount of all such non-audit services provided to the Corporation constitutes not more than 5% of the total amount of fees paid by the Corporation to the external auditors during the fiscal year in which the non-audit services are provided; and

    - such services were not recognized by the Corporation at the time of the engagement to be non-audit services; and

    - such services are promptly brought to the attention of the Committee and approved prior to the completion of the audit by the Committee or by one or more members of the Committee to whom authority to grant such approvals has been delegated by the Committee.

- have the sole authority to delegate to one or more designated members of the Committee the authority to grant pre-approvals required by this section, provided that the decision of any member to whom authority is delegated to pre-approve a service shall be presented to the Committee at its next scheduled meeting. If the Committee approves an audit service within the scope of the engagement of the external auditors, such audit service shall be deemed to have been pre-approved for purposes of this section.

Compliance

- establish procedures for: (i) the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters; and (ii) the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters, and institute and oversee any special investigations as needed;

- provide the Chief Integrity Officer the authority to communicate directly to the Committee about actual and alleged violations of the Code of Conduct, its associated polices, or the law, including any matters involving criminal or potential criminal conduct;

- review with the Chief Integrity Officer or Chief Legal Officer (or such individual in a similar capacity or position who performs a substantially similar function) the Corporation's significant compliance policies and any legal matters or reports or inquiries received from regulators or governmental agencies that could have a material effect upon the financial position of the Corporation and that are not subject to the oversight of another committee of the Board;

- review the effectiveness of the system for monitoring compliance with laws and regulations (including those with respect to anti-fraud and anti-bribery) and the results of Management's investigations and follow-up of any instances of non-compliance

that could have a material effect upon the financial position of the Corporation and that are not subject to the oversight of another committee of the Board;

- review the process for communicating the Corporation's Code of Conduct to the Corporation's personnel and monitoring compliance therewith; and
- report annually to shareholders describing the Committee's composition, responsibilities and how they were discharged, and any other information required by applicable legislation or regulation, including approval of non-audit services.

The Committee may perform such other functions as the Committee deems necessary or appropriate for the performance of its responsibilities and duties.

Delegation

The Committee may from time to time delegate any of its responsibilities to a subcommittee comprised of one or more members of the Committee and shall also carry out such other duties that may be delegated to it by the Board from time to time.

Other Matters

At the Corporation's expense, the Committee may retain, when it considers it necessary or desirable, outside consultants and advisors to advise the Committee independently on any matter. The Committee shall have the sole authority to retain and terminate any such consultants or advisors, including sole authority to establish or review a consultant's or advisor's fees and other retention terms, and to direct the payment thereof.

The Corporation will provide appropriate funding, as determined by the Committee, for payment of ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

Authority to make minor technical amendments to this Charter is hereby delegated to the Corporate Secretary, who will report any amendments to the Committee at its next meeting.

The Committee's performance and effectiveness shall be evaluated annually, in accordance with a process developed by the Corporate Governance & Nominating Committee and approved by the Board. The results of that evaluation, including progress on adopted recommendations, shall be reported to the Corporate Governance & Nominating Committee and to the Board.

On an annual basis, this Committee Charter shall be reviewed and assessed, and any proposed changes shall be submitted to the Corporate Governance & Nominating Committee for review and recommendation, and then to the Board for approval.

Date of Last Revision: **November 3, 2022**

ANNEX 1

AUDIT COMMITTEE CHAIR
POSITION DESCRIPTION

The Committee Chair shall provide overall leadership to enhance the effectiveness of the Committee and be responsible to:

- set the "tone" for the Committee and its members to foster ethical and responsible decision making, appropriate oversight of Management and appropriate corporate governance practices;
- encourage free and open discussion at meetings of the Committee;
- schedule and set the agenda for Committee meetings with input from other Committee members, the Chair and Management as appropriate;
- facilitate the timely, accurate and proper flow of information to and from the Committee, and arrange sufficient time during Committee meetings to fully discuss agenda items;
- report to the Board following each meeting of the Committee on the activities, findings and any recommendations of the Committee;
- provide advice and counsel to the senior members of Management in the areas covered by the Committee's mandate;
- proactively encourage training and education of the Committee and its members in areas falling within the Committee's mandate;
- take reasonable steps to ensure that Committee members understand the boundaries between the Committee and Management responsibilities;
- organize the Committee to function independently of Management and take reasonable steps to ensure that the Committee has an opportunity at each of its meetings to meet in separate closed sessions without Management present, and with or without internal personnel or external advisors as needed or appropriate;
- lead the Committee in monitoring and evaluating, in consultation with the Corporate Governance & Nominating Committee, the performance and effectiveness of the Committee as a whole and the contributions to the Committee of individual directors; and
- take all other reasonable steps to ensure that the responsibilities and duties of the Committee, as outlined in its Charter, are well understood by the Committee members and executed as effectively as possible.

SCHEDULE B
MINERAL PROJECTS

For the purposes of NI 43-101, our Allan, Cory, Lanigan, Rocanville and Vanscoy potash operations are the properties material to Nutrien.

a) Material Potash Operations

Certain scientific and technical information regarding our:

a) Allan potash operations is based on the technical report titled "National Instrument 43-101 Technical Report on Allan Potash Deposit (KL 112R B), Saskatchewan, Canada" dated effective December 31, 2021 ("Allan Technical Report"),
b) Cory potash operations is based on the technical report titled "National Instrument 43-101 Technical Report on Cory Potash Deposit (KL 103C), Saskatchewan, Canada" dated effective December 31, 2020 ("Cory Technical Report"),
c) Lanigan potash operations is based on the technical report titled "National Instrument 43-101 Technical Report on Lanigan Potash Deposit (KLSA 001 C), Saskatchewan, Canada" dated effective December 31, 2021 ("Lanigan Technical Report"),
d) Rocanville potash operations is based on the technical report titled "National Instrument 43-101 Technical Report on Rocanville Potash Deposit (KL 305), Saskatchewan, Canada" dated effective December 31, 2021 (the "Rocanville Technical Report"), and
e) Vanscoy potash operations is based on the technical report titled "National Instrument 43-101 Technical Report on Vanscoy Potash Deposit (KL 114C) Saskatchewan, Canada" dated effective December 31, 2020 ("Vanscoy Technical Report").

Collectively, these reports comprise the "Technical Reports" for the Nutrien mines. They were prepared under the supervision of Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., who is a "qualified person" as defined in NI 43-101. The Technical Reports have been filed with the securities regulatory authorities in each of the provinces of Canada and furnished to the SEC. Portions of the following information are based on assumptions, qualifications and procedures that are not fully described herein. References should be made to the full text of the Technical Reports, as applicable.

i) Mineral Rights

Mineral rights at all mines in Saskatchewan are mined pursuant to mining leases with the Province of Saskatchewan, Canada ("Crown"), and with non-Crown ("Freehold") mineral rights owners. Crown mineral rights are governed by *The Subsurface Mineral Tenure Regulations, 2015* (Saskatchewan), and Crown leases are approved and issued by the Saskatchewan Ministry of Energy and Resources ("MER").

ii) History

Ten potash mines were brought into production in Saskatchewan between 1962 to 1970. With over 50 years of production history, most potash mines have contracted or expanded production in response to the demand for potash. No new mines had been commissioned until 2017. Most of the operating mines are conventional underground mines, while three operate using solution mining methods.

Exploration drilling for potash at each of the mines was carried out in the 1950s and 1960s. Potash production began at Allan, Cory and Lanigan in 1968, at Vanscoy in 1969, and at Rocanville in 1970. With the exception of the 1970 inflow which halted Vanscoy production for two years, each of the mines have run on a continuous basis other than short-term shutdowns taken for inventory management purposes, occasional plant maintenance and construction work, or other outages that are typical for operations of this nature.

The mines were built by numerous companies in the 1960's (a) the Allan mine was built by a consortium of companies (U. S. Borax, Homestake Potash Company, and Swift Canadian Company), (b) the Cory mine was built by a company called Duval Sulphur and Potash Company, (c) the Lanigan mine was built by a company named Alwinsal Potash of Canada Ltd., a consortium of German and French mining and fertilizer companies, (d) the Rocanville mine was built by a company called Sylvite of Canada Ltd. (a division of Hudson's Bay Mining and Smelting Ltd.), and (e) the Vanscoy mine was built by Cominco Ltd. (formerly the Consolidated Mining and Smelting Company of Canada Limited).

PotashCorp acquired (a) a 60% ownership of the Allan mine in 1978 (through purchase of the U.S. Borax and Swift Canadian interests), became the operator of the mine in 1981, and in 1990, PotashCorp purchased the remaining 40% interest, (b) the Cory

mine in 1976, (c) the Lanigan mine in 1976; and (d) the Rocanville mine in 1977. With respect to the Vanscoy mine, in 1993, Cominco Fertilizers Ltd. was formed as a separate entity from Cominco Ltd. In 1995 all Cominco Ltd., involvement in Cominco Fertilizers Ltd., who built the Vanscoy mine, ceased and shares were transferred to the new entity, Agrium.

Major refurbishments and expansions of the Allan, Cory and Rocanville mines were completed in 2013, and of the Vanscoy mine in 2015 increasing nameplate capacity to (a) 4.0 million tonnes for the Allan mine, (b) 3.0 million tonnes for the Cory mine, (c) 6.5 million tonnes for the Rocanville mine, and (d) 3.0 million tonnes for the Vanscoy mine, of finished potash products per year. Mill rehabilitation, mine expansion and hoist improvement projects were completed at Lanigan mine between 2005 and 2010. As of December 31, 2022, the annual nameplate capacity at Lanigan is 3.8 million tonnes. The expansion construction at each of these mines was carried out without significant disruption to existing potash production from the site.

At Allan, Cory and Lanigan, potash ore has been mined and concentrated to produce saleable quantities of high- grade finished potash products since 1968, at Vanscoy since 1969 and at Rocanville since 1970.

iii) Geological Setting, Mineralization and Deposit Types

Geological Setting and Mineralization

Much of southern Saskatchewan is underlain by the Prairie Evaporite Formation, a layered sequence of salts and anhydrite which contains the world's largest deposits of potash. The potash extracted from the predominantly sylvinite ore has its main use as a fertilizer.

The 100 m to 200 m thick Prairie Evaporite Formation is overlain by approximately 400 m of Devonian carbonates followed by 100 m of Cretaceous sandstone, 400 m of Cretaceous shales, and 100m of recent Pleistocene glacial tills to surface. The Prairie Evaporite Formation is underlain by Devonian carbonates. The Phanerozoic stratigraphy of Saskatchewan is remarkable in that units are flat- lying and relatively undisturbed over very large areas.

Potash mineralization in this region of Saskatchewan is predominantly sylvinite, which is comprised mainly of the minerals sylvite ("KCl") and halite or rock salt ("NaCl"), with trace carnallite ("$KMgCl_3$ $6H_2O$") and minor water insolubles. Potash fertilizer is concentrated, nearly pure KCl (i.e., greater than 95% pure KCl), but ore grade is traditionally reported on a % K_2O equivalent basis. The "% K_2O equivalent" gives a standard measurement of the nutrient value of different potassium-bearing rocks and minerals. To convert from % K_2O equivalent tonnes to actual KCl tonnes, multiply by 1.58. Ore grade for the mines are summarized as follows.

Summary of Ore Grade Measurements:

Mine	Average Ore Grade from Drilling [1]		Average Ore Grade from Mill Feed [2]	Average Ore Grade from In-mine Samples [3]	
	%K_2O Equivalent	Number of Drillholes	%K_2O Equivalent	%K_2O Equivalent	Number of Samples
Allan (A Zone)	26.7%	18	25.11%	24.7%	7,584
Cory (A Zone)	25.5%	11	23.11%	21.9%	5,762
Lanigan (A Zone)	25.4%	20	24.09%	24.3%	3,692
(B Zone)	23.2%			20.2%	21,479
Rocanville	22.3%	32	21.92%	23.1%	49,580
Vanscoy (A Zone)	24.9%	36	25.67%	24.2%	3,173

Deposit Type

There are three mineable potash members within the Prairie Evaporite Formation of Saskatchewan. Stratigraphically highest to lowest, these members are: Patience Lake, Belle Plaine and Esterhazy. Potash mineralization at each mine is flat-lying and continuous and the mines operate as conventional underground potash mines.

Potash mined at Allan, Cory, Lanigan, and Vanscoy mines lies within the Patience Lake Member of Prairie Evaporite Formation.

[1] Average ore grade from drillholes within respective Crown Subsurface Mineral Leases per the Technical Reports, as applicable.
[2] The listed potash ore grade from the mill feed was the average measured over the last three years (2020, 2021, 2022).
[3] Average ore grade from in-mine samples per the Technical Reports, as applicable.

There are two potash seams named A Zone and B Zone within this member. At present, only the A Zone is being mined in the Allan, Cory, and Vanscoy areas; some test mining has been carried out in the B Zone, but no mining is done in this layer at present. Both the zones are being mined at Lanigan. Neither the Esterhazy nor the White Bear Potash Members are present in the Allan, Cory, and Vanscoy area; the Belle Plaine Potash Member is not well-developed, and therefore is not mined. The Belle Plaine potash member is present at Lanigan but is not economically mineable, while the Esterhazy Member is poorly developed and not economically mineable.

Potash mined at the Rocanville mine lies within the Esterhazy Member of the Prairie Evaporite Formation. The Patience Lake Member potash beds are not present in the Rocanville Area. The Belle Plaine and White Bear Members are present, but not conventionally mineable in the Rocanville area. The potash zone at Rocanville is approximately 2.4 meters thick and occurs near the top of the Prairie Evaporite Formation. Salt cover from the ore zone to overlying units is approximately 30 meters.

Potash mineralization at Allan, Cory Lanigan, and Vanscoy occurs at about 1,000 meters depth below surface. The A Zone is approximately 3.35 meters thick and occurs near the top of the Prairie Evaporite Formation salts. Salt cover from the ore zone to overlying units is approximately 12 meters in the Allan, Cory, and Vanscoy areas. Salt cover from the top of the A Zone mining horizon at Lanigan is approximately 7 meters thick, while the salt cover from the top of the B Zone mining horizon to overlying units is approximately 14 meters thick.

iv) Exploration

Before the mines were established, all exploration consisted of drilling from surface and analysis of core from these drillholes. Since mining began, exploration drilling has been infrequent at the mines. In most of southern Saskatchewan, potash mineralization is in place wherever Prairie Evaporite Formation salts exist, are flat-lying and are undisturbed. Since the surface seismic exploration method is an excellent tool for mapping the top and bottom of Prairie Evaporite salts, this has become the main potash exploration tool in any existing Saskatchewan Subsurface (potash) Mineral Lease. Historically, 2D seismic, and now the more accurate and full coverage 3D seismic methods are used to map continuity and extent of potash beds in flat-lying potash deposits. Seismic data are relied upon to identify collapse structures that must be avoided in the process of mine development since these structures can act as conduits for water ingress to the mine. Isolation pillars or mining buffer zones are left around these anomalous features. This practice reduces the overall mining extraction ratio, but the risk of inflow to mine workings is effectively mitigated. Localized and relatively small ore zone anomalies do occur and typically are not discernable (or imaged) by the seismic method and so are not mapped. When such anomalies are encountered they are dealt with in the normal course of mining and extraction through these anomalous areas is typically minimized. Where there is uncertainty in seismic interpretations, drilling is often used to confirm or refine the seismic interpretation.

Seismic coverage is outlined in the Technical Reports.

Experience has shown that the potash mining zone is continuous when seismic data are undisturbed and flat-lying. Surface seismic data are generally collected years in advance of mining. Any area recognized as seismically unusual is identified early and mine plans are adjusted to avoid these regions.

v) Drilling

The primary objective of the original potash test holes drilled in the 1950s and 1960s at each of the operations was to sample the potash horizons and establish basic mining parameters. The seismic method was still novel and crude at that time and as such, 2D seismic surveys were done sparingly, so the drillhole information was relied upon heavily to evaluate potash deposits. Test holes would penetrate the evaporite section with a hydrocarbon-based drilling mud (oil-based or diesel fuel) to protect the potash mineralization from dissolution. Basic geophysical well-logs were acquired, and in many cases, drill stem tests were run on the Dawson Bay Formation to help assess water-make mine inflow potential of the caprock. Core samples from the targeted potash intersections were split or quartered, crushed, and analysed to establish potash ore grades.

Due to the remarkably consistent mineralogy and continuity of the resource as experienced through decades of mine production, very little potash exploration drilling has been done at our operations since the 1960s. Since each drillhole is a potential conduit for subsurface groundwater from overlying (or underlying) water-bearing formations into future mine workings, it is also important to minimize the amount of cross-formational drilling. Every potash test drillhole from surface sterilizes potash mineralization as a safety pillar is required around every surface drillhole once underground mining commences.

All new drilling efforts have targeted areas of geological uncertainty. Although normal ore zone conditions may occur in the tested areas, they are not targeted specifically. For this reason, and because ore grade is known to be locally variable, assays from drilling are not relied upon for ore grade estimation. Instead, grade determined from routinely collected in-mine ore zone samples are found to be most reliable. The long-term average from in-mine tends to best represent the larger ore zone as it normalizes local variability.

vi) Sampling Preparation, Analyses and Security

Basic Approach

Drillhole sampling methods have remained essentially the same over the years. Short segments of core usually about 0.3 meters (1 foot) in length are labeled based on visible changes in mineralization, and sometimes based on fixed intervals. Each segment of core is then split using some type of rock or masonry saw. The split portion of core is then bagged and labeled and sent to a laboratory for chemical analysis. Historical potash samples remain stored at the Subsurface Geological Laboratory (Regina, Saskatchewan) of the Saskatchewan Ministry of Energy & Resources.

All in-mine samples from our operations were analysed in the mill laboratories using analysis techniques that were up to date for the era in which the sample was collected.

Regarding quality assurance for analytical results ofin-mine samples, the Company participates in the Canpotex Producer Sample Exchange Program using methods developed by the Saskatchewan Potash Producers Association ("SPPA"). The Sample Exchange Program monitors the accuracy of analytical procedures used in its labs. In the early 1970s, the SPPA initiated a round- robin Sample Exchange Program, the purpose of which was to assist the potash laboratories in developing a high level of confidence in analytical results. This program, now named the *Canpotex Producer Sample Exchange Program using SPPA Methods* (CPSEP) has continued up to the present. Current participants include all Canpotex member potash mine site labs, the Nutrien Pilot Plant Lab, and independent third-party surveyor labs. The CPSEP provides participants with three unknown potash samples for analysis quarterly. Results for the unknown sample analysis are correlated by an independent agency that distributes statistical analysis and a summary report to all participants. Completed exchange program samples can be used for control standards as required in QA/QC sections of standard analytical procedures.

The Nutrien Pilot Plant is secured in the same way as modern office buildings are secured. Authorized personnel have access and visitors are accompanied by staff. No special security measures are taken beyond that. Currently, no external laboratory certification is held by the Nutrien Pilot Plant. On occasion, product quality check samples are sent to the Saskatchewan Research Council, a fully certified analytical facility.

In the opinion of the authors of the Technical Reports, the sample preparation, security, and analytical procedures are acceptable, are consistent with industry- standard practices, and are adequate for Mineral Resource and Reserve estimation purposes.

Assay Data Verification

The original 1950s, 1960s, and 1970s drillhole assays were studied by independent consultants chosen by the well licensee or potash operator at the time. Original assay results for core samples from historical drillholes were taken as accurate in these studies as there is no way to reliably reanalyze these samples. Most of the remaining core in storage have long since deteriorated to the point where they are not usable. More recent drillhole assay results have been analyzed by Company staff.

Ore grades of in-mine samples are measured in-house at the Allan, Cory, Lanigan, Rocanville and Vanscoy mines laboratory by Company staff using modern, standard chemical analysis tools and procedures; an independent agency does not verify these results. However, check sampling through the CPSEP does occur.

It should be noted that assay results from historical drillholes matchin-mine sample results reasonably well – within 1% – even though drillhole sample spacing is much greater. This correlation is further validation of the in-mine sampling methodology. Mean mineral grade determined from in-mine samples taken over decades of mining at Allan, Cory, Lanigan, Rocanville and Vanscoy is thought to provide the most accurate measurement of potash grade for these mines, also providing a good basis for estimating ore grade in areas of future mining.

Exploration Data Verification

The purpose of any mineral exploration program is to determine extent, continuity, and grade of mineralization to a certain level of confidence and accuracy. Assay of physical samples (drillhole cores and/or in-mine samples) is the only way to gain information about mineral grade, but extent and continuity of mineralization are correctly determined using data collected from seismic surveys correlated with historic drilling information. To date surface seismic data collected at our mines have been analysed and verified by Company staff, at times in cooperation with an independent consultant.

Data for the mineral resource and reserve estimates for Allan, Cory, Lanigan, Rocanville and Vanscoy mines were verified by Company staff as follows:

- Review of potash assay sample information (drillholes andin-mine grade samples);
- Review of surface geophysical exploration results (3D and 2D seismic data);

- Crosscheck of mined tonnages reported by mine site technical staff with tonnages estimated from mine survey information; and
- Crosscheck of mineral resource and reserve calculations carried out by corporate technical staff.

In the opinion of the authors of the Technical Reports, this approach to data verification of potash mineral grade and surface seismic information is in accordance with generally accepted industry practice for areas adjacent and contiguous to an existing operating potash mine.

Potash Ore Density from In-Mine Mineral Grade Measurements

An estimate of in-situ rock density is used to calculate potash mineralization volumes in Mineral Resource and Reserve assessments. A common approach, and the one used by Nutrien, is to determine in-place Mineral Resource and Reserve volumes (m^3), then multiply this number by in-situ bulk-rock density (tonnes / m^3) to give in-place Mineral Resource and Reserve tonnes.

Well-log data from drillholes can be used to calculate bulk density if accurate and calibrated well-logs are acquired during exploration drilling. In practical terms, modern well-logs tend to meet these criteria, but historic well-logs (collected before the 1990s) do not. In Saskatchewan, almost all potash exploration drilling took place in the 1950s and 1960s, well before density logs were accurate and reliable.

Another approach, and the one used by Nutrien, is to look up density values for the minerals which constitute potash rock – values determined in a laboratory to a high degree of accuracy and published in reliable scientific journals / textbooks – then apply these densities to the bulk rock. Given that the density of each pure mineral is quantified and known, the only variable is what proportion of each mineral makes up the bulk rock. An obvious benefit of this approach is that a mean value computed on in-mine samples has a much greater confidence interval than a mean value computed from just a few drillhole assays.

The four main mineralogical components of the ore zones of Saskatchewan's Prairie Evaporite Formation with their respective mineral densities are:

Mineral	Density (kg / m^3)	Components
Halite	2,170	NaCl
Sylvite	1,990	KCl
Carnallite	1,600	$KMgCl_3 \cdot 6(H_2O)$
Insolubles	2,510 – 2,870	Anhydrite, dolomite, quartz, muscovite, and other minor mineral components (*Nutrien Pilot Plant, 2018*)

All Nutrien potash mines measure and record the in-mine % K_2O grade and insoluble content of the mined rock. Magnesium content is only measured at Lanigan and Rocanville since carnallite is sometimes a component of the ore at these two mines. From this set of measurements, density of the ore can be calculated.

The value for insoluble density is based on known densities of the constituent parts of the insoluble components of the mineralization and the average occurrence of these insoluble components, which is known from over 50 years of mining experience at each of our operations. Assuming the lowest plausible density of insolubles known for Saskatchewan potash deposits of this nature, the effect upon overall bulk-rock ore density and Mineral Resource and Reserve calculations would be negligible.

From thousands of in-mine samples taken at Allan, bulk density for the Allan A Zone has been determined to be:

= (halite density * % halite) + (sylvite density * % sylvite) + (insolubles density * % insolubles)
= (2,170 kg / m^3 * 58.1%) + (1,990 kg / m^3 * 39.3%) + (2,510 kg / m^3 * 2.7%)
= 2,116 kg / m^3

$RHO_{bulk\text{-}rock}$ (Allan A Zone) = 2,116 kg / m^3 = 2.11 tonnes / m^3

From thousands of in-mine samples taken at Vanscoy, bulk density for the Vanscoy A Zone has been determined to be:

= (halite density * % halite) + (sylvite density * % sylvite) + (insolubles density * % insolubles)
= (2,170 kg / m^3 * 57.3%) + (1,990 kg / m^3 * 38.3%) + (2,510 kg / m^3 * 4.4%)
= 2,110 kg / m^3

$RHO_{bulk\text{-}rock}$ (Vanscoy A Zone) = 2,110 kg / m^3 = 2.12 tonnes / m^3

Historical Cory in-mine mineral grade analyses did not include measurements of the insoluble content, so potash bulk-rock density is calculated using thousands of in-mine samples from the adjacent Vanscoy A Zone.

$RHO_{bulk\text{-}rock}$ (Cory A Zone) = $RHO_{bulk\text{-}rock}$ (Vanscoy A Zone) = 2,116 kg / m^3 = 2.12 tonnes / m^3

From thousands of in-mine samples taken at Lanigan, bulk density for the Lanigan A Zone has been determined to be:

= (halite density * % halite) + (sylvite density * % sylvite) + (insolubles density * % insolubles) + (carnallite density * % carnallite)
= (2,170 kg / m^3 * 54.64%) + (1,990 kg / m^3 * 38.21%) + (2,510 kg / m^3 * 6.12%) + (1,600 kg / m^3 * 1.03%)
= 2,138 kg / m^3

$RHO_{bulk\text{-}rock}$ (Lanigan A Zone) = 2,138 kg / m^3 = 2.14 tonnes / m^3

From thousands of in-mine samples taken at Lanigan, bulk density for the Lanigan B Zone has been determined to be:

= (halite density * % halite) + (sylvite density * % sylvite) + (insolubles density * % insolubles)
= (2,170 kg / m^3 * 59.45%) + (1,990 kg / m^3 * 30.77%) + (2,870 kg / m^3 * 4.84%) + (1,600 kg / m^3 * 4.94%)
= 2,120 kg / m^3

$RHO_{bulk\text{-}rock}$ (Lanigan B Zone) = 2,120 kg / m^3 = 2.12 tonnes / m^3

To date, not enough B Zone mining has been carried out at Allan, Cory and Vanscoy to permit a bulk density calculation based on in-mine grade samples. If further test mining of the B Zone at these mines are conducted in future, there may be enough samples with all constituent minerals measured to warrant a change from what is reported. It is expected that any such change would have only a minimal effect on bulk-rock density used in tonnage calculations. Instead, we use the potash bulk-rock density calculated using thousands of in-mine grade samples from Lanigan B Zone:

$RHO_{bulk\text{-}rock}$ (Allan, Cory, Vanscoy B Zone) = $RHO_{bulk\text{-}rock}$ (Lanigan B Zone) = 2,120 kg / m^3 = 2.12 tonnes / m^3

This estimate is considered acceptable since the B Zone at Allan, Cory and Vanscoy are the same potash seam as the Lanigan B Zone.

From thousands of in-mine samples taken at Rocanville, bulk density has been determined to be:

= (halite density * % halite) + (sylvite density * % sylvite) + (insolubles density * % insolubles) + (carnallite density * % carnallite)
= (2,170 kg / m^3 * 57.5%) + (1,990 kg / m^3 * 35.4%) + (2,790 kg / m^3 * 1.0%) + (1,600 kg / m^3 * 6.1%)
= 2,078 kg / m^3

$RHO_{bulk\text{-}rock}$ (Rocanville) = 2,078 kg / m^3 = 2.08 tonnes / m^3

This method is as accurate as the ore grade measurements and mineral density estimates.

vii) Mineral Resource and Mineral Reserve Estimates

Definitions of Mineral Resource

The Canadian Institute of Mining and Metallurgy and Petroleum ("CIM") has defined mineral resource in *The CIM Definition Standards for Mineral Resources and Reserves* (2014) as:

1. **Inferred Mineral Resource**: that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

2. **Indicated Mineral Resource**: that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade quality continuity between points of observation.

3. **Measured Mineral Resource**: that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

CIM defines Modifying Factors as "considerations used to convert mineral resources into mineral reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors."

In south-central Saskatchewan, where geological correlations are straightforward, and within a (potash) subsurface mineral lease at an operating potash mine, mineral resource categories are generally characterized by the Company as follows:

1. **Inferred Mineral Resource**: areas of limited exploration, such as areas that have been investigated through regional geological studies, or areas with 2D regional surface seismic coverage, little or no drilling, at some distance from underground workings, and within the applicable Crown lease.

2. **Indicated Mineral Resource**: areas of adequate exploration, such as areas with 3D surface seismic coverage, little or no drilling, at some distance from underground workings, and within the applicable Crown lease.

3. **Measured Mineral Resource**: areas of detailed, physical exploration through actual drilling or mine sampling, near existing underground workings, and within the applicable Crown lease.

Exploration information used to calculate reported Mineral Resource tonnages at each of our operations consist of both physical sampling (drillhole and in-mine) and surface seismic (2D and 3D) Based on the definitions and guidelines above, all mineral rights leased or owned by the Company, and within respective Crown Lease, are assigned to one of the three mineral resource categories. Mineral resources are reported as mineralization in-place and are exclusive of Mineral reserves.

The tonnage reported in the A Zone Measured Resource (Allan, Cory, Lanigan, and Vanscoy) is comprised of the potash that is within 1.6 km (1 mile) of a physically sampled location (i.e., drillholes or mine workings). Likewise, the tonnage reported in the Lanigan B Zone and Rocanville Measured Resource is comprised of the potash that is within 1.6 km (1 mile) of a physically sampled location (i.e., drillholes or mine workings). Also included as Measured Resource is the potash in the pillars of mined-out areas as there is the possibility of retrieving ore from the remnant mining pillars at some point in the future. An example of this is the Patience Lake mine which was successfully converted from a conventional mine to a solution mine after being lost to flooding in 1989. Since mining of remnant mining pillars is not anticipated in the near future at the Nutrien mines, in-place pillar mineralization remains as a Mineral Resource rather than a Mineral Reserve at this time.

Mineral Resource for each mine is updated when the correspondingNI43-101 Technical Report is issued. In between Technical Reports, it remains unchanged. Mineral resources are reported as mineralization in-place and are exclusive of mineral reserves.In-place tonnes were calculated for each of the Nutrien mine mineral resource categories using the following parameters.

Parameters used for Computing Resource and Reserve

Mine		Mining Height	Ore Density (tonnes / meter^3)
Allan	A Zone	3.35 meters (11 feet)	2.11
	B Zone	3.35 meters (11 feet)	2.12
Cory	A Zone	3.35 meters (11 feet)	2.12
	B Zone	3.35 meters (11 feet)	2.12
Lanigan	A Zone	3.66 meters (12 feet)	2.14
	B Zone	4.88 meters (16 feet)	2.12
Rocanville		2.51 meters (8.25 feet)	2.08
Vanscoy	A Zone	3.35 meters (11 feet)	2.12
	B Zone	3.35 meters (11 feet)	2.12

The mineral resource per the corresponding Technical Reports are as follows.

Inferred, Indicated and Measured Mineral Resource

Mine		Inferred Mineral Resource (millions of tonnes)		Indicated Mineral Resource (millions of tonnes)		Measured Mineral Resource (millions of tonnes)		Total Mineral Resource (millions of tonnes)
Allan	A Zone	1,164	**2,333**	2,533	**5,078**	1,183	**2,890**	**10,301**
	B Zone	1,169		2,545		1,707		
Cory	A Zone	1,284	**2,570**	612	**1,225**	1,056	**2,452**	**6,247**
	B Zone	1,286		613		1,396		
Lanigan	A Zone	348	**808**	1,458	**3,384**	2,299	**5,211**	**9,403**
	B Zone	460		1,926		2,912		
Rocanville		**902**		**1,575**		**2,017**		**4,494**
Vanscoy	A Zone	932	**1,865**	1,850	**3,703**	1,975	**4,644**	**10,212**
	B Zone	933		1,853		2,669		

Definitions of Mineral Reserve

CIM defined mineral reserve in The CIM Definition Standards for Mineral Resources and Reserves (2014) as:

1. **Probable Mineral Reserve**: the economically mineable part of an indicated, and in some circumstance, a measured, mineral resource. The confidence in the modifying factors applying to a probable mineral reserve is lower than that applying to a proven mineral reserve.

2. **Proven Mineral Reserve**: the economically mineable part of a measured mineral resource. A proven mineral reserve implies a high degree of confidence in the modifying factors.

CIM defines Modifying Factors as “considerations used to convert Mineral Resources into Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.”

For Saskatchewan, in regions adjacent and contiguous to an operating potash mine and within a (potash) subsurface mineral lease, mineral reserve categories are characterized by the Company as follows:

1. **Probable Mineral Reserve**: identified recoverable potash mineralization classified as a measured resource, within a 1.6 km (1 mile) radius of a sampled mine entry or exploration drillhole contiguous to mine workings, and within the applicable Crown lease.

2. **Proven Mineral Reserve**: identified recoverable potash mineralization classified as a measured resource, delineated on at least three sides by sampled mined entries or exploration drillholes to a maximum of 3.2 km (2 miles) apart, and within the applicable Crown lease.

Using the definitions outlined above, a portion of the Allan, Cory, Lanigan, and Vanscoy A Zone Measured Resource has been converted to Mineral Reserve. Likewise, a portion of the Lanigan B Zone Measured Resource and a portion of the Rocanville Measured Resource has been converted to Mineral Reserve. The assigned Mineral Reserve category is dependent on proximity to sampled mined entries also described above. An overall extraction ratio for each of the mines has been applied to the qualifying areas outlined as Measured Resource.

Currently at Allan, Cory, Lanigan, and Vanscoy where there are two potash ore zones, in any specific mining block, only one of the two ore zones is mined (i.e., bi-level mining is not in practice). As such, Mineral Reserve is assigned only to the ore zone that will be mined in the future so that A Zone Mineral Reserve and B Zone Mineral Reserve do not overlap. At Allan, Cory, and Vanscoy, and certain portions of Lanigan, the B Zone potash mineralization directly underlying the defined A Zone Mineral Reserve is classified as B Zone Measured Resource. In the same way, because mining occurs in both zones at Lanigan, certain portions of the A Zone potash mineralization directly underlying the defined B Zone Mineral Reserve is classified as A Zone Measured Resource.

Since an extraction ratio has been applied to each of these Mineral Reserve categories, Mineral Reserves are considered recoverable ore, and are reported as such. Note that only drillholes whose 1.6 km radii are contiguous to mine workings or the 1.6 km radius placed around mine workings are used to compute probable mineral reserve. The remaining non-contiguous drillholes remain in the measured resource category.

Mineral Reserve for each mine is updated when the corresponding NI43-101 Technical Report is issued. In between Technical Reports, annual production tonnages are subtracted from the Proven Mineral Reserve. The mineral reserves as of December 31, 2022 are as follows.

Probable and Proven Mineral Reserve

Mine		Probable Mineral Reserve (millions of tonnes)		Proven Mineral Reserve (millions of tonnes)		Total Mineral Reserve (millions of tonnes)
Allan	A Zone B Zone	244 Nil	**244**	100 Nil	**100**	**344**
Cory	A Zone B Zone	141 Nil	**141**	61 Nil	**61**	**202**
Lanigan	A Zone B Zone	194 238	**432**	45 81	**126**	**559**
Rocanville		**293**		**173**		**466**
Vanscoy	A Zone B Zone	326 Nil	**326**	177 Nil	**177**	**503**

viii) Capital and Operating Costs

The Allan, Cory and Lanigan mines have been in operation since 1968, the Vanscoy mine has been in operation since 1969, and the Rocanville mine has been in operation since 1970. Since then, capital expenditures were made on a regular and ongoing basis to sustain production and to expand production from time to time. All construction was carried out without significant disruption to existing potash production from the sites.

Major Refurbishment and Expansion

Mine	Year of Major Refurbishment and Expansion	Increase in Nameplate Capacity of Finished Potash Products Per Year	Description of Work Completed
Allan	2013	4.0 million tonnes	Enhancement of hoists and shaft conveyances, major expansions of both mine and mill, improvements to loadout facilities and some infrastructure improvements.
Cory	2013	3.0 million tonnes	Increased hoist capacity, infrastructure improvements, major expansions of mine and mill, and improvements to loadout facilities.
Lanigan	2005 - 2010	3.8 million tonnes	Mill rehabilitation, mine expansion and hoist improvement projects
Rocanville	2013 - 2017	6.5 million tonnes	Construction of a third shaft, enhancement of hoists and shaft conveyances, major expansions of both mine and mill, improvements to loadout facilities and some infrastructure improvements.
Vanscoy	2015	3.0 million tonnes	Increased hoist capacity, infrastructure improvements, major expansions of mine, mill, and TMA.

ix) Exploration, Development and Production

Potash production in any given year at our potash mines is a function of many variables, so actual production in any given year can vary dramatically from tonnages produced in previous years. The mineral reserve tonnage and historic average production are used to estimate remaining mine life. The table below summarizes mine life for each Nutrien site from December 31, 2022, assuming the average mining rate seen over the past three years (potash ore mined and hoisted per year) is sustained, and that the mineral reserves remain unchanged.

Mine Life Summary from December 31st, 2022

Mine	Average Yearly Mining Rate	Mineral Reserve (Total)	Mine Life
Allan	7.515 million tonnes	344	46 years
Cory	5.478 million tonnes	202	37 years
Lanigan	8.018 million tonnes	559	A Zone: 30 years B Zone: 40 years
Rocanville	16.667 million tonnes	466	28 years
Vanscoy	2.513 million tonnes	503	200 years

x) Mining Operations

All conventional potash mines in Saskatchewan operate at 900 m to 1,200 m below surface within 9 m to 30 m of the top of the Prairie Evaporite Formation. Over the scale of any typical Saskatchewan potash mine, potash beds are tabular and regionally flat-lying, with only moderate local variations in dip. Potash ore is mined using conventional mining methods, whereby:

- Shafts are sunk to the potash ore body;
- Continuous mining machines cut out the ore, which is hoisted to surface through the production shaft;
- Raw potash is processed and concentrated in a mill on surface; and
- Concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

At Allan, Cory, Lanigan and Vanscoy (the Saskatoon area mines), sinking of the two original shafts (production and ventilation shafts) from surface to the potash zone was completed in early 1968, and the first potash ore was hoisted that year. The two original Rocanville shafts were completed in 1970. The mines have run on a continuous basis other than short-term shutdowns taken for inventory management purposes, occasional plant maintenance and construction work, or other outages that are typical for operations of this nature. The exception to this was Vanscoy where a major inflow in 1970 halted production for two years (described in technical report).

At Allan, Cory, Lanigan and Vanscoy, the A Zone of the Patience Lake Member is mined. Additionally, at Lanigan both the A Zone and the B Zone are mined. The seams are separated by approximately 4 m to 6 m of tabular salt. Currently, in any specific mining block at Lanigan, only one zone is mined (i.e., bi-level mining is not in practice). Per the Technical Reports, mine elevations in the A Zone range from 940 m to 1,120 m at the Saskatoon area mines. These depths to A Zone potash mineralization are anticipated over most of the lease area for these mines. Mine workings are protected from aquifers in overlying formations by approximately 12 m of overlying salt and potash beds at Allan, Cory and Vanscoy, and by approximately 7 m (A Zone) to 14 m (B Zone) at Lanigan. Furthermore, the salt plugged porosity in the Dawson Bay Formation, a carbonate layer lying immediately above potash hosting salt beds at these mines provides further protection from overlying aquifers.

Virtually all Rocanville underground mining rooms are in the Esterhazy Member the Prairie Evaporite Formation. Per the Rocanville Technical Report, mine elevations range from approximately 895 m to 1,040 m. Within the Rocanville Crown Lease, depths to the top of the ore zone can reach up 1,250 m (the deepest potash exploration drillhole) but are expected to be shallower than 1,200 m over most of the lease area. Mine workings are protected from aquifers in overlying formations by approximately 30 m of overlying salt and potash beds, along with salt plugged porosity in the Lower Dawson Bay Formation, a carbonate layer lying immediately above potash hosting salt beds.

The highest mineral grade section at the Saskatoon area mines A Zone potash seam is approximately 3.35 m (11 feet) thick, with gradations to lower grade salts immediately above and below the mining horizon. The actual mining thickness at these mines are dictated by the height of continuous boring machines used to cut the ore which is typically either 3.35 m (11 feet) or 3.66 m (12 feet) (as described in the Technical Reports). The thickness of the B Zone mining horizon at Lanigan varies somewhat and there is some flexibility in the thickness of the potash ore that is extracted there. Production mining machines have a fixed mining height of 2.74 m (9 feet). In a normal production room ore is extracted in two lifts resulting in a mining height of approximately 4.88 m (16 feet).

Carnallite sometimes occurs in minor amounts in the basal part of the B Zone. Carnallite is an undesirable mill feed material. It is common at Lanigan to find carnallite in pod-like deposits and the larger pods can be mapped with seismic and avoided. If more than minor amounts of carnallite are detected in the floor, through physical sampling or with Ground Penetrating Radar, after the first lift of a production room in the B Zone, it is left in the floor (i.e., a second lift is not cut). In these instances, the B Zone mining height is just 2.74 m (9'). Carnallite is found in trace amounts in the A Zone; however, due to its low occurrence, mining practices remain unchanged when it is encountered.

The highest mineral grade section of the Rocanville potash seam is approximately 2.3 m (7.5 feet) thick, with gradations to lower grade sylvinite salts immediately above and below the mining horizon. The actual mining thickness at Rocanville is also dependent on the boring machine heights there, being either 2.44 m (8 feet) or 2.51 m (8.25 feet). Mining machines at Rocanville use potassium sensing technology to ensure that rooms are always cut in the best available potash ore.

All mines in the Saskatoon area, cuts to a marker (clay) seam that is slightly above the high-grade mineralized zone to establish a safe and stable mine roof. The top marker seam is slightly overcut by 10 to 20 cm. Clay seams are often planes of weakness, and if they are undercut, material immediately below the clay seam becomes a hazard as it may separate and fall. Since the hazard must be remediated prior to proceeding, thus slowing production, the moderately diluted mineral grade that results from the overcutting is preferable from a safety point of view.

Conservative local extraction ratios (never exceeding 45% in any mining block) are employed at all Saskatchewan mines in order to minimize potential detrimental effects of mining on overlying strata; this is common practice in flat-lying, tabular ore bodies overlain by water-bearing layers.

From the shaft-bottom, potash ore is hoisted approximately 1,000 m from the potash level through the vertical shafts to a surface mill. In addition to hoisting potash ore to surface, the production shaft also provides fresh air ventilation to the mine and serves as a secondary egress. The service shaft is used for service access, and exhaust ventilation from the mine.

xi) *Environmental Studies, Permitting and Social or Community Impact*

The tailings management strategy at all Nutrien potash mines in Saskatchewan, is one of sequestering solid mine tailings in an engineered and provincially licensed Tailing Management Area (TMA) near the surface plant site. Emissions to air consisting primarily of particulate matter are kept below regulatory limits through various modern air pollution abatement systems (e.g. dust collection systems built into mill processes) that are provincially licensed. This same procedure is followed at all of our mines in Saskatchewan.

In Saskatchewan, all potash tailings management activities are carried out under an “Approval to Operate” granted by the Saskatchewan Ministry of Environment (MOE), the provincial regulator. Staff at the mines actively monitor and inspect operations and routinely report the observations and measurements to the Environmental Protection Branch of MOE. The current Approval to Operate for our mines has been granted to July 1, 2028, the renewal date.

In terms of long-term decommissioning, environmental regulations of the Province of Saskatchewan require that all operating potash mines in Saskatchewan create a long-term decommissioning and reclamation plan that will ensure all surface facilities are removed, and the site is left in a chemically and physically stable condition once mine operations are complete. The Company has conducted numerous studies of this topic, and the most recent decommissioning and reclamation plan was approved by MOE technical staff in October 2016. Because the current expected mine life for the sites is many decades into the future, it is not meaningful to come up with detailed engineering designs for decommissioning annually. Instead, decommissioning plans are reviewed every five years, and updated to accommodate new concepts, technological change, incorporation of new data, and adjustments of production forecasts and cost estimates. Any updated decommissioning and reclamation reports generated by this process are submitted to provincial regulatory agencies. A revised decommissioning and reclamation plan was submitted for MOE review in July 2021.

In addition to the long-term decommissioning plan, provincial regulations require that every potash producing company in Saskatchewan set up an Environmental Financial Assurance Fund, which is to be held in trust for the decommissioning, restoration and rehabilitation of the plant site after mining is complete. This fund is for all mines we operate in the Province of Saskatchewan (i.e., Allan, Cory, Lanigan, Patience Lake, Rocanville, and Vanscoy).

xii) *Taxes Relating to Potash Operations*

Royalties are paid to the Province of Saskatchewan in connection with the Company’s Potash operations, which holds most of the mineral rights in the lease areas, and royalties from Freehold lands are paid to various freeholders of mineral rights in the area. The Crown royalty rate is 3 percent and is governed by *The Subsurface Mineral Royalty Regulations, 2017*. The actual amount paid is dependent on selling price and production tonnes.

Municipal taxes are paid based on site property values to the applicable municipality in Saskatchewan. Saskatchewan potash production is taxed at the provincial level under *The Mineral Taxation Act, 1983*. This tax, governed by *The Potash Production Tax Regulations*, consists of a base payment and a profit tax, collectively known as the potash production tax. As a resource corporation in the Province of Saskatchewan, the Company is also subject to a resource surcharge equal to a percentage of the value of its resource sales (as defined in *The Corporation Capital Tax Act of Saskatchewan*). In addition to this, the Company pays federal and provincial income taxes based on corporate profits from all of its operations in Canada.

b) Allan Potash Operations

i) Project Description, Location and Access

General

The Allan mine is located in central Saskatchewan, approximately 45 kilometers east of the city of Saskatoon, Saskatchewan. The Legal Land Description (Saskatchewan Township/Range) of the Allan surface plant is Section 22 Township 34 Range 01 West of 3rd Meridian. More precisely, the Allan Shaft #2 collar is located at:

- Latitude: 51 degrees 55 minutes 55.56 seconds North
- Longitude: 106 degrees 04 minutes 18.84 seconds West
- Elevation: 524.26 meters above mean Sea Level (SL)
- Easting: 426,303.225 m
- Northing: 5,754,028.978 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

Per the Allan Technical Report, the Company owns approximately 3,404 hectares (8,411 acres) of surface rights required for current Allan mine operations, including all areas covered by the existing surface plant and TMA, and all surface lands required for anticipated future Allan mine and expanded milling operations.

Besides the proximity to Saskatoon, the Allan mine is served by a number of villages within 50 kilometers of the mine site. Allan is situated near the northern extent of the Great Plains of North America. Topography is relatively flat, with gently rolling hills and occasional valleys. There are no rivers or other major watercourse channels near the Allan mine site.

Mineral Rights

The original Allan Crown Subsurface Mineral Lease, numbered KL 112, was entered into in September 1962. In the following years, minor amendments were made to the Lease, resulting in Crown Subsurface Mineral Lease KL 112R. In October 2017, a large area of land was added to the Lease resulting in Crown Subsurface Mineral Lease KL 112R A. In January 2020, an additional area of land was added to KL 112R A, resulting in Crown Subsurface Mineral Lease KL 112R B (the “Allan Crown Lease”) which covers an area of approximately 80,950 hectares (200,032 acres).

Per the Allan Technical report, the Company has leased potash mineral rights for 50,688 hectares (125,253 acres) of Crown Land and owns or has leased approximately 26,298 hectares (64,984 acres) of Freehold Land within the lease boundary. The Allan Crown Lease term is for a period of 21 years from September 2004, with renewals (at the Company’s option) for 21-year periods. Freehold Lands also remain under lease providing, generally, that production is continuing and that there is a continuation of the Crown Lease.

Within the Allan Crown Lease area, 19,183 hectares (47,403 acres) are mined pursuant to unitization agreements with mineral rights holders (Crown and Freehold) within two unitized areas.

ii) Sampling Preparation, Analyses and Security

Mean Potash Mineral Grade From In-Mine Samples

At Allan, in-mine grade samples are taken by collecting fine “muck” from the floor of the mine approximately once per week per active mining face. This is roughly equivalent to a sample taken every 68 m to 74 m in production panels, and a sample taken every 85 m to 128 m in development panels. Per the Allan Technical Report, in-mine potash mineral grade samples collected from the Allan A Zone were analysed in the Allan mill laboratory using analysis techniques that were up to date for the era in which the sample was collected.

The median ore grade for this family of in-mine samples is 25.4% K_2O equivalent and the mean ore grade is 24.7%.

Per the Allan Technical Report, the B Zone mineral grade at Allan is reported to be 20.2% K_2O equivalent, the grade observed from the in-mine samples at the Lanigan mine where the B Zone has been extensively mined. Even though Allan mine is some distance from Lanigan, this is considered to be the best estimate of expected mineral grade for this potash layer because the

deposit is known to be regionally continuous from west of Vanscoy to east of Lanigan. Although it is possible that once mining proceeds into the B Zone the reported grade could change from what is reported, it is expected that any such change would be minimal.

iii) Mineral Processing and Metallurgical Testing

Since opening in 1968, 178.940 million tonnes of potash ore have been mined and hoisted at Allan to produce 63.201 million tonnes of finished potash products. Given this level of sustained production for over several decades, basic mineralogical processing and prospective metallurgical testing of Allan potash is not considered relevant.

iv) Mining Operations

In recent years, the Allan mine underwent a major expansion which brought the nameplate capacity up to 4.0 million tonnes of finished potash products per year. In 2022, operational capability at the Allan facility was 3.0 million tonnes per year. Operational capability may vary during the year and year-to-year including as between our potash operations.

The life of mine concentration ratio (raw-ore/finished potash products) is 2.83 and the overall extraction ratio over this period is 33%.

v) Processing and Recovery Operations

At Allan, potash ore has been mined and concentrated to produce saleable quantities of high grade finished potash products since 1968. Raw potash ore is processed on surface and concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

Over the past three years, production of finished potash products at Allan was:

- 2020: 2.792 million tonnes finished potash products at 61.20% K_2O (average grade)
- 2021: 2.781 million tonnes finished potash products at 61.17% K_2O (average grade)
- 2022: 2.501 million tonnes finished potash products at 61.18% K_2O (average grade)

Over the past decade actual mill recovery rates have been between 85.2% and 88.0%, averaging 86.4%. Given the long-term experience with potash geology and actual mill recovery at Allan, no fundamental potash milling problems are anticipated in the foreseeable future.

Quality control testing and monitoring geared towards fine-tuning and optimizing potash milling and concentrating processes are conducted on a continual basis at all our mine sites and research facilities. At Allan, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

vi) Infrastructure, Permitting and Compliance Activities

Project Infrastructure

Infrastructure is in place to meet current and projected requirements for transportation, energy (electricity and natural gas), water and process materials at Allan.

Surface facilities are accessed by existing paved roads and highways that are part of the Saskatchewan Provincial Highway System. All finished potash products are shipped by rail over existing track.

As per the Allan Technical Report, high-voltage power capacity at Allan is 44 MVA. The ten-year projection of power utilization indicates that the utility can meet all foreseeable future demand.

The Allan operation requires a sustained fresh water supply for the milling process which is provided from a local reservoir called the Bradwell Reservoir operated by SaskWater (approximately 6 km distant). This water supply provides a sustainable source of process water for Allan milling operations with no known impact on other users of water in the area.

Environmental Studies, Permitting and Social or Community Impact

The Allan TMA currently covers an area of approximately 600 hectares (1,483 acres) of land owned by the Company. Solid potash mine tailings typically consist of 85% to 95% rock salt (NaCl) and 5% to 15% insoluble (carbonate mud = CaCO3, anhydrite mud = CaSO4, and clays like chlorite, illite and so on). An engineered slurry-wall (in some portions, a compacted earth trench barrier) has been constructed where required around approximately half of the Allan TMA. In future years this wall can be expanded if required for operational needs. The slurry- wall provides secondary containment for any saline mine waters, minimizing brine impacts from the TMA to surrounding surface water bodies and near-surface aquifers. Areas surrounding the TMA are closely monitored: this includes everything from daily visual perimeter inspections to annual investigations and inspections of surrounding groundwater and aquifers.

Allan currently operates two brine disposal wells near the surface plant of the Allan mine where clear salt brine (i.e., no silt, clay slimes, or other waste) is borehole injected into the Winnipeg / Deadwood Formations, deep subsurface aquifers approximately 1,500 m to 1,700 m below the surface. The disposal wells are provincially licensed and formation water in these extensive deep aquifers is naturally saline.

c) Cory Potash Operations

i) Project Description, Location and Access

General

The Cory mine is located in central Saskatchewan, approximately 7 kilometers west of the city of Saskatoon, Saskatchewan. The Legal Land Description (Saskatchewan Township/Range) of the Cory surface operation is Section 18 Township 36 Range 06 West of 3rd Meridian. More precisely, the Cory service shaft collar is located at:

- Latitude: 52 degrees 05 minutes 30.15 seconds North
- Longitude: 106 degrees 51 minutes 16.32 seconds West
- Elevation: 503 meters above mean SL
- Easting: 372,951 m
- Northing: 5,772,861 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

Per the Cory Technical Report, the Company owns approximately 2,109 hectares (5,212 acres) of surface rights required for current Cory mine operations, including all areas covered by the existing surface plant and TMA, and all surface lands required for anticipated future Cory mine and expanded milling operations.

Besides the proximity to Saskatoon, the Cory mine is served by a number of villages within 50 kilometers of the mine site. Cory is situated near the northern extent of the Great Plains of North America. Topography is relatively flat, with gently rolling hills and occasional valleys. The Cory surface plant lies approximately 10 km northwest of the South Saskatchewan River, a major continental drainage channel.

Mineral Rights

The original Cory Crown Subsurface Mineral Lease, numbered KL 103, was signed and executed in September 1962. In the following years, minor amendments were made to the Lease, resulting in Crown Subsurface Mineral Lease KL 103B. In December 2020, inaccessible land in the northern part of Nutrien's adjacent Vanscoy Crown Lease were transferred into the Cory Crown Subsurface Mineral Lease KL 103C (the "Cory Crown Lease") where they could be developed, KL 103C covers an area of approximately 51,438 hectares (127,107 acres).

Per the Cory Technical Report, the Company has leased potash mineral rights for 28,507 hectares (70,412 acres) of Crown Land and owns or has leased approximately 18,351 hectares (45,346 acres) of Freehold Land within the lease boundary. The Cory Crown Lease term is for a period of 21 years from September 15, 2004, with renewals (at the Company's option) for 21-year periods. Freehold Lands also remain under lease providing, generally, that production is continuing and that there is a continuation of the Crown Lease.

Within the Cory Crown Lease area, 29,772 hectares (73,569 acres) are mined pursuant to a unitization agreement with mineral rights holders (Crown and Freehold) within one unitized area.

ii) Sampling Preparation, Analyses and Security

Mean Potash Mineral Grade From In-Mine Samples

It has been the practice at Cory for the past several years to acquire twoin-mine grade samples at the start of every cutting sequence and is done by collecting fine “muck” from the floor of the mine. The sampling frequency is equivalent to two samples taken approximately every 25 m in production panels, and two samples taken approximately every 50 m in development panels. In-mine grade sampling practices at Cory have varied over the years resulting in an irregular sample set. It is the belief of the authors that the average grade reported from these in-mine samples will become increasingly representative of Cory A Zone potash mineralization as standardized sampling continues. It will also lead to a normalized data distribution. At Cory, mill feed grade data collected over the years suggests a higher average grade than is found in the in-mine sample set.

Per the Cory Technical Report, in-mine potash mineral grade samples collected from the Cory A Zone were analysed in the Cory mill laboratory using analysis techniques that were up to date for the era in which the sample was collected.

The median ore grade for this family ofin-mine samples is 23.0% K_2O equivalent and the mean ore grade is 21.9%.

Per the Cory Technical Report, the B Zone mineral grade at Cory is reported to be 20.3% K_2O equivalent, which is the grade observed from 20,030 in-mine samples at the Lanigan mine where the B Zone has been extensively mined. Even though Cory mine is some distance from Lanigan, this is considered to be the best estimate of expected mineral grade for this potash layer because the deposit is known to be regionally continuous from west of Vanscoy to east of Lanigan. Although it is possible that once mining proceeds into the B Zone the reported grade could change from what is reported, it is expected that any such change would be minimal.

iii) Mineral Processing and Metallurgical Testing

Since opening in 1968, 135.347 million tonnes of potash ore have been mined and hoisted to produce 42.329 million tonnes of finished potash products. Given this level of sustained production over several decades, basic mineralogical processing and prospective metallurgical testing of Cory potash is not considered relevant.

iv) Mining Operations

In recent years, the Cory mine underwent a major expansion which brought the nameplate capacity up to 3.0 million tonnes of finished potash products per year. In 2022, operational capability at the Cory facility was 2.0 million tonnes per year. Operational capability may vary during the year and year-to-year including as between our potash operations.

The life-of-mine concentration ratio (raw ore / finished potash products) is 3.20 and the overall extraction ratio over this period is 27%.

v) Processing and Recovery Operations

At Cory, potash ore has been mined and concentrated to produce saleable quantities of high grade finished potash products since 1968. Raw potash ore is processed on surface and concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

Over the past three years, production of finished potash products at Cory was:

- 2020: 1.403 million tonnes finished potash products at 61.58% K2O (average grade)
- 2021: 1.768 million tonnes finished potash products at 61.48% K2O (average grade)
- 2022: 1.888 million tonnes finished potash products at 61.58% K2O (average grade)

Over the past decade, actual mill recovery rates have been between 71.1% and 83.0%, averaging 76.15%. Historically, mill recoveries at Cory were lower than at other Nutrien plants because a larger portion, and at one point all, of Cory’s total production was made through the crystallization process. Given the long-term experience with potash geology and actual mill recovery at Cory, no fundamental potash milling problems are anticipated in the foreseeable future.

Quality control testing and monitoring geared towards fine-tuning and optimizing potash milling and concentrating processes are conducted on a continual basis at all our mine sites and research facilities. At Cory, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

vi) Infrastructure, Permitting and Compliance Activities

Project Infrastructure

Infrastructure is in place to meet current and projected requirements for transportation, energy (electricity and natural gas), water and process materials at Cory.

Surface facilities are accessed by an existing paved road that is part of the Saskatchewan Provincial Highway System. Most finished potash products are shipped by rail over existing track, with some product shipped by truck over the North American highway system.

As per the Cory Technical Report, high-voltage power capacity at Cory is 52 MVA. Theten-year projection of power utilization indicates that the utility can meet all foreseeable future demand.

The Cory operation requires a sustained fresh water supply for the milling process which is provided by a waterline from the South Saskatchewan River (approximately 10 km distant). This water supply is provincially licensed and provides a sustainable source of process water for Cory milling operations with no known impact on other users of water in the area.

Environmental Studies, Permitting and Social or Community Impact

The Cory TMA currently covers an area of approximately 416 hectares (1,027 acres) of land owned by the Company. Solid potash mine tailings typically consist of 85% to 95% rock salt (NaCl) and 5% to 15% insolubles (carbonate mud = $CaCO_3$, anhydrite mud = $CaSO_4$, and clays like chlorite, illite, and so on). An engineered slurry-wall has been constructed on the north, west, and south sides of the Cory TMA in the areas where near-surface aquifers could be impacted by mine waters. Near-surface geology to the east of the TMA limits the possibility of brine migration into these areas. The slurry-wall provides secondary containment of any saline mine waters, stopping these brines from reaching surrounding near-surface aquifers. Areas surrounding the TMA are closely monitored: this includes everything from daily visual perimeter inspections to annual investigations and inspections of surrounding groundwater and aquifers.

Cory currently operates four brine disposal wells near the surface plant of the Cory mine where clear salt brine (i.e., no silt, clay slimes, or other waste) is borehole-injected into the Winnipeg / Deadwood Formations, deep subsurface aquifers approximately 1,500 m to 1,700 m below the surface. The disposal wells are provincially licensed and formation waters in these extensive deep aquifers is naturally saline.

d) Lanigan Potash Operations

i) Project Description, Location and Access

General

The Lanigan mine is located in central Saskatchewan, approximately 100 kilometers east of the city of Saskatoon, Saskatchewan. The Legal Land Description (Saskatchewan Township/Range) of the Lanigan surface operation is Section 28 Township 33 Range 23 West of 2nd Meridian. More precisely, the Lanigan Shaft #2 collar is located at:

- Latitude: 51 degrees 51 minutes 20.48 seconds North
- Longitude: 105 degrees 12 minutes 34.79 seconds West
- Elevation: 535.34 meters above mean SL
- Easting: 485,560.306 m
- Northing: 5,745,008.726 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

Per the Lanigan Technical Repot, the Company owns approximately 3,980 hectares (9,836 acres) of surface rights required for current Lanigan mine operations, including all areas covered by the existing surface plant and TMA, and all surface lands required for anticipated future Lanigan mine and expanded milling operations.

Lanigan is situated near the northern extent of the Great Plains of North America. Topography is relatively flat, with gently rolling hills and occasional valleys. There are no rivers or other major watercourse channels near the Lanigan minesite.

Mineral Rights

The original Lanigan Crown Subsurface Mineral Lease, numbered KL 100, was entered into in March 1964. A minor amendment to this lease in September 1989 resulted in KL 100R. In November 2009, a large area of land was added to the lease resulting in KLSA 001. Shortly after that, in June 2011, a minor amendment to the lease resulted in KLSA 001 A. KLSA 001 B was issued in September 2014 when portions of the adjacent exploration permits, granted in September 2011, were added to the lease. Finally, in November 2015, a minor change to the lease resulted in KLSA 001 C (the "Lanigan Crown Lease"). The Lanigan Crown Lease covers an area of approximately 56,328 hectares (139,190 acres),

Per the Lanigan Technical Report, the Company has leased potash mineral rights for 38,188 hectares (94,365 acres) of Crown land and owns or has leased approximately 17,913 hectares (44,265 acres) of Freehold land within the lease boundary. It should be noted that there was an increase to the Crown lease in 2022. The Lanigan Crown lease term is for a period of 21 years from March 2006, with renewals (at the Company's option) for 21-year periods. Freehold lands also remain under lease providing, generally, that production is continuing and that there is a continuation of the Crown lease.

Within the Lanigan Crown Lease area, 55,950 hectares (138,256 acres) are mined pursuant to unitization agreements with mineral rights holders (Crown and Freehold) within two unitized areas.

ii) Sampling Preparation, Analyses and Security

Mean Potash Mineral Grade From In-Mine Samples

In the Lanigan A Zone, in-mine grade samples are taken by collecting fine "muck" from the floor of the mine at the start of every cutting sequence. This is equivalent to a sample taken every approximately 23 m (76 feet) in production panels, and a sample taken every approximately 47 m (155 feet) in development panels. Per the Lanigan Technical Report, in-mine potash mineral grade samples collected from the Lanigan A Zone were analysed in the Lanigan mill laboratory using up-to-date analysis techniques.

The median ore grade for this family ofin-mine samples is 25.2% K_2O equivalent and the mean ore grade is 24.3%.

In the Lanigan B Zone, in-mine grade samples are taken from the floor every 60 m (200 feet) in newly mined rooms. Per the Lanigan Technical Report, in-mine potash mineral grade samples collected from the Lanigan B Zone were analysed in the Lanigan mill laboratory using analysis techniques that were up to date for the era in which the sample was collected.

The median ore grade for this family ofin-mine samples is 20.8% K_2O equivalent and the mean ore grade is 20.2%.

In 2013, Lanigan modified its cutting practices in the B Zone to improve mine roof stability. This modification involved cutting in a slightly higher, but more stable horizon. The goal of improved mine roof stability was achieved; however, less potash and more salt is now being mined resulting in a slightly lower reported ore grade for B Zone.

iii) Mineral Processing and Metallurgical Testing

Since opening in 1968, 237.651 million tonnes of potash ore have been mined and hoisted to produce 69.723 million tonnes of finished potash products. Given this level of sustained production over several decades, basic mineralogical processing, and prospective metallurgical testing of Lanigan potash is not considered relevant.

iv) Mining Operations

In recent years, the Lanigan mine underwent a major expansion which brought the nameplate capacity to 3.8 million tonnes per year. In 2022, operational capability at the Lanigan facility was 2.7 million tonnes per year. Operational capability may vary during the year and year-to-year including as between our potash operations.

The life of mine concentration ratio (raw ore/finished potash products) is 3.42 and the overall extraction ratio over this period is 26%.

v) Processing and Recovery Operations

At Lanigan, potash ore has been mined and concentrated to produce saleable quantities of high-grade finished potash products since 1968. Raw potash ore is processed on surface and concentrated red potash products are sold and shipped to markets in North America and offshore.

Over the past three years, production of finished potash products at Lanigan was:

- 2020: 2.330 million tonnes finished potash products at 60.97% K_2O (average grade)
- 2021: 2.912 million tonnes finished potash products at 61.00% K_2O (average grade)
- 2022: 2.457 million tonnes finished potash products at 60.99% K_2O (average grade)

Over the past decade, actual mill recovery rates have been between 80.1% and 85.9%, averaging 83.1%.

Given the long-term experience with potash geology and actual mill recovery at Lanigan, no fundamental potash milling problems are anticipated in the foreseeable future.

Quality control testing and monitoring geared towards fine-tuning and optimizing potash milling and concentrating processes are conducted on a continual basis at all our mine sites and research facilities. At Lanigan, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

vi) Infrastructure, Permitting and Compliance Activities

Project Infrastructure

Infrastructure is in place to meet current and projected requirements for transportation, energy (electricity and natural gas), water and process materials at Lanigan.

Surface facilities are accessed by existing paved roads and highways that are part of the Saskatchewan Provincial Highway System. All finished potash products are shipped by rail over existing track.

As per the Lanigan Technical Report, high voltage power capacity at Lanigan is 52 MVA. The ten-year projection of power utilization indicates that the utility can meet all foreseeable future demand.

The Lanigan operation requires a sustained fresh water supply for the milling process which is provided by a waterline from the Dellwood Reservoir (approximately 10 km distant) and from a regional aquifer called the Hatfield Valley Aquifer. This water supply is provincially licensed and provides a sustainable source of process water for Lanigan milling operations with no known impact on other users of water in the area.

Environmental Studies, Permitting and Social or Community Impact

The Lanigan TMA currently covers an area of approximately 708 hectares (1,750 acres) of land owned by the Company. Solid potash mine tailings typically consist of 85% to 95% rock salt (NaCl) and 5% to 15% insolubles (carbonate mud = $CaCO_3$, anhydrite mud = $CaSO_4$, and clays like chlorite, illite, and so on). An engineered slurry-wall has been constructed on the south and south-west sides of the Lanigan TMA in the areas where near-surface aquifers could be impacted by mine waters. Near-surface geology on all other sides of the TMA limits the possibility of brine migration into these areas. The slurry-wall provides secondary containment of any saline mine waters, stopping these brines from reaching surrounding near-surface aquifers. Areas surrounding the TMA are closely monitored; this includes everything from daily visual perimeter inspections to annual investigations and inspections of surrounding groundwater and aquifers.

Lanigan currently operates three brine disposal wells near the surface plant of the Lanigan mine where clear salt brine (i.e., no silt, clay-slimes, or other waste) is borehole-injected into the Winnipeg / Deadwood Formations, deep subsurface aquifers approximately 1,500 m to 1,700 m below surface. The disposal wells are provincially licensed and formation water in these extensive deep aquifers is naturally saline.

e) Rocanville Potash Operations

i) Project Description, Location and Access

General

The Rocanville mine is located in southeastern Saskatchewan near the Saskatchewan-Manitoba Provincial Boundary, approximately 15 kilometers northeast of the town of Rocanville, Saskatchewan. The Legal Land Description (Saskatchewan Township/Range) of the Rocanville surface plant is Section 22 Township 17 Range 30 West of the 1st Meridian. More precisely, the Rocanville #2 Shaft collar is located at:

- Latitude: 50 degrees 28 minutes 19.54 seconds North
- Longitude: 101 degrees 32 minutes 42.58 seconds West

- Elevation: 480.36 meters above mean SL
- Easting: 745,137.307 m
- Northing: 5,596,826.122 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

The legal description (Saskatchewan Township / Range) of the Rocanville Scissors Creek Shaft is Section 13 Township 17 Range 32 West of the 1st Meridian and is approximately 12 kilometers north-west of the town of Rocanville, Saskatchewan. More precisely, the Shaft collar is located at:

- Latitude: 50 degrees 27 minutes 7.0632 seconds North
- Longitude: 101 degrees 46 minutes 13.58 seconds West
- Elevation: 525.35 metres above mean SL
- Easting: 729,253.35 m
- Northing: 5,593,868.30 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

As per the Rocanville Technical Report, the Company owns approximately 3,244 hectares (8,016 acres) of surface rights required for current Rocanville mine operations, including all areas covered by the existing surface plant and TMA, and all surface lands required for anticipated future Rocanville mine and expanded milling operations.

The Rocanville mine is served by a number of towns and villages within 50 kilometers of the mine site. The nearest towns are Rocanville (15 km distant), Moosomin and Esterhazy (both 50 km distant). The nearest city is Yorkton (100 km distant). Rocanville is situated near the north extent of the Great Plains of North America. Topography is relatively flat, with gently rolling hills and occasional valleys.

Mineral Rights

The original Rocanville Crown Subsurface Mineral Lease KL 111 was entered into in June 1966. In the following years various minor amendments were made to this Crown lease, resulting in Crown Subsurface Mineral Lease KL 111R. A new Crown Subsurface Mineral Lease numbered KLSA 002 was issued in February 2010 incorporating all Crown mineral rights within the existing Crown Lease KL 111R and approximately two-thirds of Crown mineral rights covered in KP 338A. The portion of the lands that were not part of the Lease amalgamation remained as Crown Exploration Permit KP 338B until December 2016 when they were converted to a Crown Subsurface Mineral Lease numbered KL 249. In October 2017, KL 305 was formed by the amalgamation of Crown Subsurface Leases KLSA 002 (KLSA 002B, following minor amendments) and KL 249. KL 305 covers an area of approximately 113,975 hectares (281,639 acres). In May 2020, a Crown Subsurface Mineral Lease numbered KL 279, was acquired from North Atlantic Potash. KL 279 covers an area of approximately 56,540 hectares (139,712 acres).

Per the Rocanville Technical Report, the Company has leased potash mineral rights for 54,184 hectares (133,892 acres) of Crown Land and owns or has leased approximately 45,612 hectares (112,710 acres) of Freehold Land within KL 305. The Rocanville Crown Lease terms are for a period of 21 years from October 2017 and May 2017, with renewals at the Company's option for 21-year periods. Freehold Lands also remain under lease providing, generally, that production is continuing and that there is a continuation of the Crown Lease.

Within the current Rocanville Crown Lease area, 80,181 hectares (198,132 acres) are mined pursuant to unitization agreements with mineral rights holders (Crown and Freehold) within two unitized areas.

ii) Sampling Preparation, Analyses and Security

Mean Potash Mineral Grade From In-Mine Samples

In-mine grade samples are taken by collecting fine "muck" from the floor of the mine at 60 m intervals in every underground mine room at Rocanville. Per the Rocanville Technical Report, in-mine ore grade samples were collected and analysed in the Rocanville mill laboratory using analysis techniques that were up to date for the era in which the sample was collected.

The mean ore grade for this family of in-mine samples is 23.1% K_2O equivalent, while the median ore grade for this family of in-mine samples is 23.3% K_2O.

iii) Mineral Processing and Metallurgical Testing

Since opening in 1970, 314.152 million tonnes of potash ore have been mined and hoisted at to produce 101.283 million tonnes of finished potash product. Given this level of sustained production over several decades, basic mineralogical processing and prospective metallurgical testing of Rocanville potash is not considered relevant.

iv) Mining Operations

In recent years the Rocanville mine has undergone a major expansion which brought the nameplate capacity to 6.5 million tonnes of finished potash products per year. In 2022, operational capability at the Rocanville facility was 5.2 million tonnes per year. Operational capability may vary during the year and year-to-year including as between our potash operations.

The life-of-mine average concentration ratio (raw ore/finished potash products) is 3.10 and the overall extraction ratio over this period is 31%.

v) Processing and Recovery Operations

At Rocanville, potash ore has been mined and concentrated to produce saleable quantities of high-grade finished potash products since 1970. Raw potash ore is processed on surface and concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

Over the past three years, production of finished potash products at Rocanville was:

- 2020: 5.285 million tonnes finished potash products at 60.60% K_2O (average grade)
- 2021: 5.001 million tonnes finished potash products at 60.52% K_2O (average grade)
- 2022: 4.886 million tonnes finished potash products at 60.51% K_2O (average grade)

Over the past decade actual mill recovery rates have been between 81.5% and 84.4%, averaging 83.2%. Given the long-term experience with potash geology and actual mill recovery at Rocanville no fundamental potash milling problems are anticipated in the foreseeable future.

Quality control testing and monitoring geared towards fine-tuning and optimizing potash milling and concentrating processes are conducted on a continual basis at all our mine sites and research facilities. At Rocanville, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

vi) Infrastructure, Permitting and Compliance Activities

Project Infrastructure

Infrastructure is in place to meet current and projected requirements for transportation, energy (electricity and natural gas), water and process materials at Rocanville.

Surface facilities are accessed by an existing paved road that is part of the Saskatchewan Provincial Highway System. Most finished potash products are shipped by rail over existing track, with some product shipped by truck over the North American highway system.

As per the Rocanville Technical Report, high voltage power utilization at the Rocanville mine is 84 MVA (i.e., 72 MVA to the Rocanville Plant site plus 12 MVA to the Scissors Creek site). The ten-year projection of power utilization indicates that the utility can meet foreseeable future demand.

The Rocanville operation requires a sustained fresh water supply for the milling process which is sourced from two subsurface reservoirs called the Welby Plains Surficial Aquifer and the Welby Plains Middle Aquifer. These aquifers provide a sustainable source of process water for Rocanville milling operations, with no known impact on other users of water drawn from these aquifers.

Environmental Studies, Permitting and Social or Community Impact

The Rocanville TMA currently covers an area of approximately 567 hectares (1,400 acres) of land owned by the Company. Solid potash mine tailings typically consist of 85% to 95% rock salt (NaCl) and 5% to 15% insolubles (carbonate mud = $CaCO_3$, anhydrite mud = $CaSO_4$, and clays like chlorite, illite, and so on). An engineered slurry-wall has been constructed around the entire Rocanville TMA. The slurry-wall provides secondary containment for any saline mine waters, minimizing brine impacts from the TMA to

surrounding surface water bodies and near-surface aquifers. Areas surrounding the TMA are closely monitored: this includes everything from daily visual perimeter inspections to annual investigations and inspections of surrounding subsurface aquifers.

Rocanville currently operates two brine disposal wells near the surface plant of the Rocanville mine where clear salt brine (i.e., no silt, clay slimes or other waste) is drillhole-injected into the Interlake Carbonates, at a depth of approximately 1,200 m to 1,400 m below surface. The disposal wells are provincially licensed and formation water in these extensive deep aquifers is naturally saline.

f) Vanscoy Potash Operations

i) Project Description, Location and Access

General

The Vanscoy mine is located in central Saskatchewan, approximately 26 kilometers west of the city of Saskatoon, Saskatchewan. The Legal Land Description (Saskatchewan Township / Range) of the Vanscoy surface plant is Section 16 Township 35 Range 08 West of 3rd Meridian. More precisely, the Vanscoy service shaft collar is located at:

- Latitude: 52 degrees 00 minutes 28.74 seconds North
- Longitude: 107 degrees 05 minutes 25.18 seconds West
- Elevation: 505 meters above mean SL
- Easting: 356,531 m
- Northing: 5,763,989 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

Per the Vanscoy Technical Report, the Company owns approximately 2,740 hectares (6,771 acres) of surface rights required for current Vanscoy mine operations, including all areas covered by the existing surface plant and TMA, and all surface lands required for anticipated near-future Vanscoy mine and expanded milling operations.

The Vanscoy mine is served by a number of villages within 50 kilometers of the mine site. The nearest city is Saskatoon (26 km distant). Vanscoy is situated near the northern extent of the Great Plains of North America. Topography is relatively flat, with gently rolling hills and occasional valleys. The Vanscoy surface plant lies approximately 20 km north-west of the South Saskatchewan River, a major continental drainage channel.

Mineral Rights

The original Vanscoy Crown Subsurface Mineral Lease, numbered KL 114, was entered into in January 1969. In the following years, minor amendments were made to the Lease, resulting in Crown Subsurface Mineral Lease KL 114B. In March 2008, the SMER approved the conversion of Agrium's Potash Exploration Permit KP 313 to a new Crown Subsurface Mineral Lease numbered KL 204. In December 2020, after additional geological studies were completed, Vanscoy Crown Subsurface Mineral Lease KL 114C (the "Vanscoy Crown Lease") was executed incorporating most of the lands held previously under KL 204.

Per the Vanscoy Technical Report, KL 114C covers an area of approximately 82,115 hectares (202,910 acres). At Vanscoy, the Company has leased potash mineral rights for 63,973 hectares (158,081 acres) of Crown land and owns or has leased from freeholders approximately 13,669 hectares (33,777 acres) within the lease boundary. The Vanscoy Crown Lease term is for a period of 21 years from July 1, 2012, with renewals (at the Company's option) for 21-year periods. Freehold lands also remain under lease providing, generally, that production is continuing and that there is a continuation of the Crown Lease.

Within the Vanscoy Crown Lease area 12,671.59 hectares (31,312.17 acres) are mined pursuant to a unitization agreement with mineral rights holders (Crown and Freehold) within one unitized area.

ii) Sampling Preparation, Analyses and Security

Mean Potash Mineral-Grade From In-Mine Samples

At Vanscoy, in-mine grade samples have been acquired by 1) sampling ore from the beltline, 2) channel samples from the sidewall, or 3) collecting fine "muck" from the floor of the mine. At present, fine muck sampling from the floor is most common, and each mining room is sampled at a frequency of approximately 95 m to 125 m. Since start-up in 1969 through to the end of December 2020, a total of 3,173 useablein-mine potash mineral grade samples were collected from the A Zone. All samples were analysed in the Vanscoy mill laboratory using analysis techniques that were up to date for the era in which the sample was collected.

The median ore grade for this family ofin-mine samples is 25.5% K_2O equivalent and the mean ore grade is 24.2%.

Per the Vanscoy Technical Report, the B Zone at Vanscoy, mineral grade is reported to be 20.3% K_2O equivalent, the grade observed from 20,230 in-mine samples at the Lanigan mine where the B Zone has been extensively mined. Even though Vanscoy mine is some distance from Lanigan, this is considered the best estimate of expected mineral grade for this potash layer because the deposit is known to be regionally continuous from west of Vanscoy to east of Lanigan. Although it is possible that if mining proceeds into the B Zone, the reported grade could change from what is reported. It is expected that any such change would be minimal.

iii) Mineral Processing and Metallurgical Testing

Since opening in 1969, 186.115 million tonnes of potash ore have been mined and hoisted to produce 62.941 million tonnes of finished potash product. Given this level of sustained production for over several decades, basic mineralogical processing and prospective metallurgical testing of Vanscoy potash is not considered relevant.

iv) Mining Operations

In recent years, the Vanscoy mine underwent a major expansion which brought the nameplate capacity up to 3.0 million tonnes of finished potash products per year. In 2022, operational capability at the Vanscoy facility was 1.1 million tonnes per year. Operational capability may vary during the year and year-to-year including as between our potash operations.

The life-of-mine average concentration ratio (raw ore / finished potash products) is 2.96 and the overall extraction ratio over this period is 28%.

v) Processing and Recovery Operations

At Vanscoy, potash ore has been mined and concentrated to produce saleable quantities of high grade finished potash products since 1969. Raw potash ore is processed on surface and concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

Over the past three years, production of finished potash products at Vanscoy was:

- 2020: 0.513 million tonnes finished potash products at 60.76% K2O (average grade)
- 2021: 1.047 million tonnes finished potash products at 60.07% K2O (average grade)
- 2022: 1.010 million tonnes finished potash products at 59.98% K2O (average grade)

Over the past decade, actual mill recovery rates have been between 76.0% and 83.2%, averaging 80.3%. Given the long-term experience with potash geology and actual mill recovery at Vanscoy, no fundamental potash milling problems are anticipated in the foreseeable future.

Quality control testing and monitoring geared towards fine-tuning and optimizing potash milling and concentrating processes are conducted on a continual basis at our mine sites and research facilities. At Vanscoy, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

vi) Infrastructure, Permitting and Compliance Activities

Project Infrastructure

Infrastructure is in place to meet current and projected requirements for transportation, energy (electricity and natural gas), water and process materials at Vanscoy.

Surface facilities are accessed by an existing paved road that is part of the Saskatchewan Provincial Highway System. Most finished potash products are shipped by rail over existing track, with some product shipped by truck over the North American highway system.

As per the Vanscoy Technical Report, high voltage power capacity at Vanscoy is 57 MVA. The ten-year projection of power utilization indicates that the utility can meet all foreseeable future demand.

The Vanscoy operation requires a sustained fresh water supply for the milling process which is provided by a waterline from the Saskatchewan River (approximately 20 km distant). This water supply is provincially licensed and provides a sustainable source of process water for Vanscoy milling operations with no known impact on other users of water in the area.

Environmental Studies, Permitting and Social or Community Impact

The Vanscoy TMA currently covers an area of approximately 610 hectares (1,507 acres) of land owned by the Company. Solid potash mine tailings typically consist of 85% to 95% rock salt (NaCl) and 5% to 15% insolubles (carbonate mud = $CaCO_3$, anhydrite mud = $CaSO_4$, and clays like chlorite, illite, and so on). An engineered slurry-wall (bentonite cut-off wall) has been constructed around the Vanscoy TMA. In future years this wall can be expanded if required for operational needs. The slurry-wall provides secondary containment for any saline mine waters, minimizing brine impacts from the TMA to surrounding surface water bodies and near-surface aquifers. Areas surrounding the TMA are closely monitored: this includes everything from daily visual perimeter inspections to annual investigations and inspections of surrounding groundwater and aquifers.

Vanscoy currently operates two brine disposal wells near the surface plant of the Vanscoy mine where clear salt brine (i.e., no silt, clay slimes, or other waste) is borehole-injected into the Winnipeg / Deadwood Formations, deep subsurface aquifers approximately 1,500 m to 1,700 m below the surface. The disposal wells are provincially licensed, and groundwater in these extensive deep aquifers is naturally saline.

Exhibit 99.2



2022/Management's Discussion & Analysis



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 and on EDGAR at 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

Global Profile page 11

How We Create Value page 12

Our Operating Segments page 14

Our Operating Environment

Defines factors and trends that influence the environment we operate in

Megatrends page 17

Market Fundamentals and Competitive Landscape page 19

Our Strategy

Describes our corporate strategy and how each of our segments are supporting that strategy

Nutrien's Strategy page 23

Operating Segment Strategic Focus page 24

Capital Allocation Framework page 28

Our Governance

Describes our key corporate governance principles and risk identification process

Corporate Governance page 31

Our Board and Executive Leadership page 32

Risk Governance page 33

Risk Management Process page 34

Our Key Enterprise Risks

Outlines the key risks that affect our performance and our future operations

Key Enterprise Risks page 36

Our Results and Outlook

Highlights our financial results for the year 2022 and outlook for 2023

Operating Segment Results page 41

Performance Against 2023 Targets page 53

2023 Outlook and Guidance page 54

Financial Highlights Page 57

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

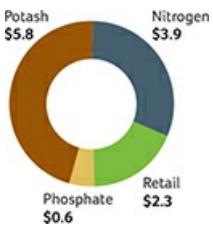
Global Profile

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.



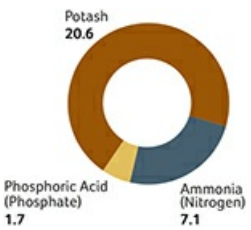
WHERE OUR EARNINGS COME FROM
Adjusted EBITDA by operation segment in 2022 ($ billions)



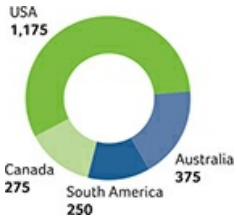
WHERE OUR EMPLOYEES WORK



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	GLOBAL SUPPLY CHAIN	LEADING AG RETAIL NETWORK
25Mmt NPK Manufactured Sales Volumes in 2022	**~440** Wholesale fertilizer distribution points	**>2,000** Retail selling locations across North America, South America and Australia
~2,000 Proprietary products	**>1,000** Crop input suppliers	**>4,000** Crop consultants

CASH GENERATION	GROWTH CAPITAL ALLOCATION	SHAREHOLDER RETURNS
>$21B in cash provided by operating activities since 2018		

INNOVATIVE PRODUCTS & SERVICES	CARBON PROGRAM	LOW-CARBON AMMONIA
Leading provider of **INNOVATIVE** products and services (Agrible, Waypoint, Echelon)	**~10** suppliers and downstream partners in carbon pilot program	**1Mmt** of 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®.

7.1 Mmt
Nameplate Ammonia Capacity

~5,500
Leased Railcars

190
Distribution Points

1 Mmt
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.

1.7 Mmt
Nameplate P_2O_5 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

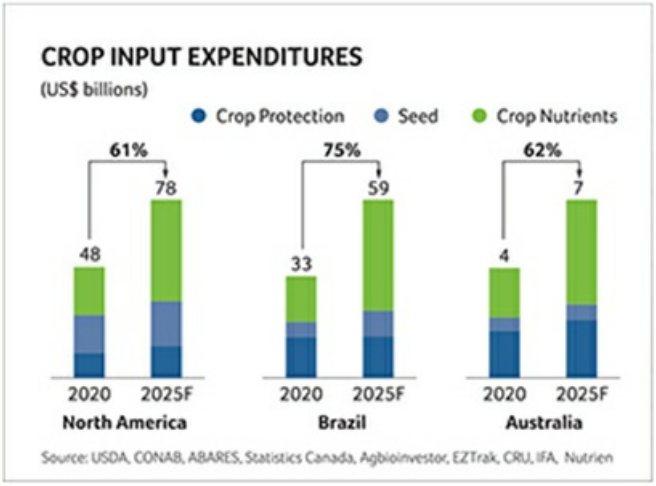
We carefully monitor market fundamentals and our competitive landscape to better position our company for long-term success.

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[1]	20-year Consumption CAGR[2] (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

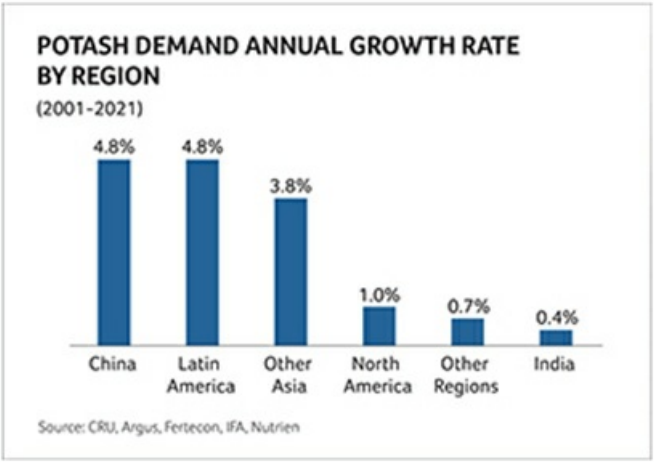
High quality potash reserves in significant quantities are limited to a small number of countries globally. Canada has the largest known global potash reserves, accounting for approximately 40 percent of the total. More than 75 percent of the world's potash capacity is held by the six largest producers. 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 [1]	20-year Consumption CAGR [2] (2001–2021)	Largest Importers [3]	Largest Exporters [3]
~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 worlds consumption.

In developed regions of the world, nitrogen producers are focused on reducing CO_2 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 [1]	20-year Consumption CAGR [2] (2001–2021)	Largest Importers [3]	Largest Exporters [3]
~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.

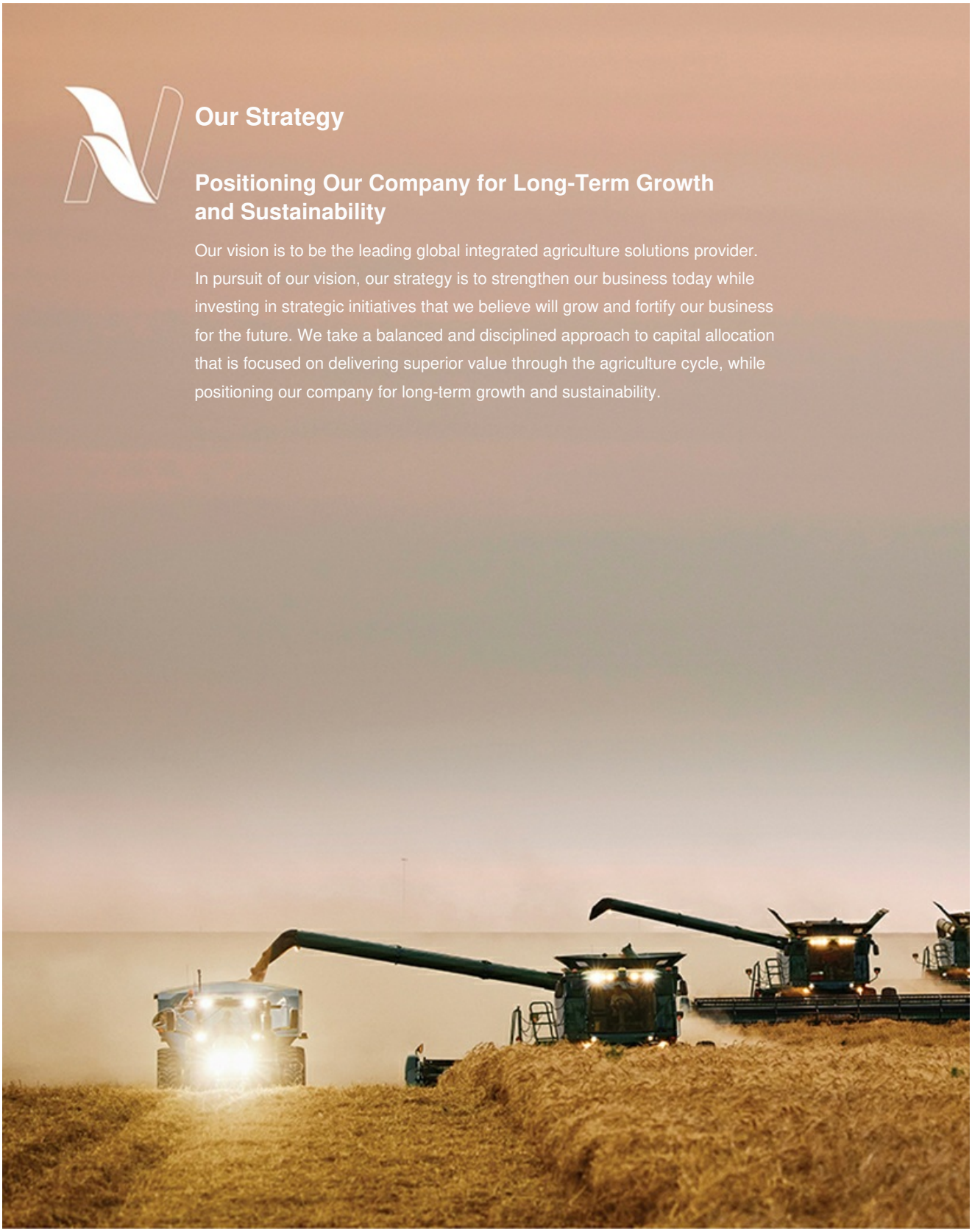
We compete with producers primarily from China, Morocco, Russia, Saudi Arabia and the US. The majority of new capacity added over the past decade was from producers in China, Morocco, Russia and Saudi Arabia. As a result, total US phosphate production declined by approximately 30 percent over this period.

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

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 [1] 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 andtuck-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.

1 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 monitions 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 additionallow-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_2O") 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_2 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

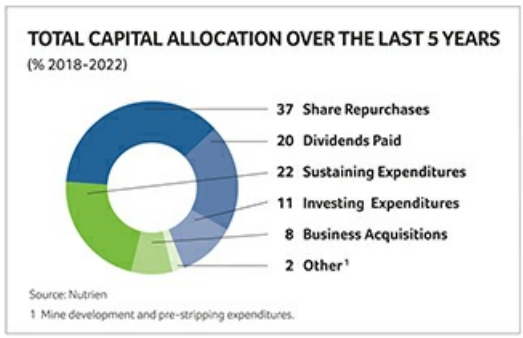
Capital Allocation Framework

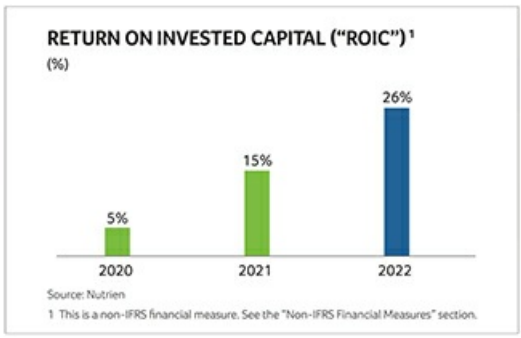
Creating long-term value through balanced and disciplined capital allocation

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

1 These are supplementary financial measures. See the "Other Financial Measures" section.
2 This is a capital management financial measure that includes a non-IFRS component. See the "Non-IFRS Financial Measures" and "Other Financial Measures" sections.
3 Net of cash acquired.





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

Focused on **strategic initiatives** that enhance ROIC

• 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

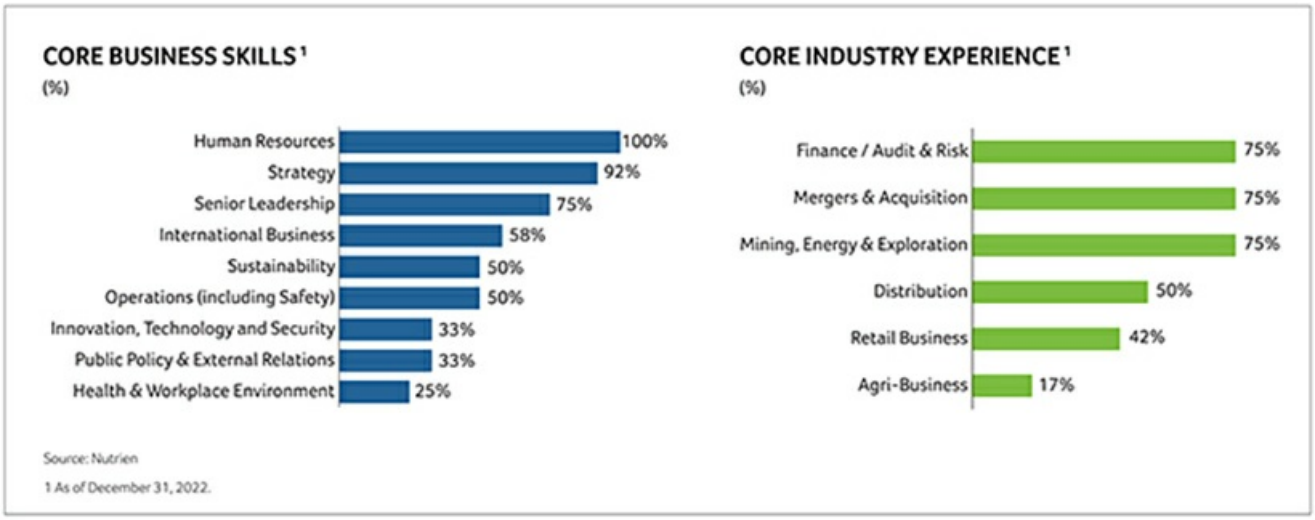
Nutrien's compensation framework is based on a pay-for-performance philosophy, with the majority of executive compensation being at risk. Since 2020, a component of executive compensation has been tied to demonstrated ESG performance, including the addition of progress on GHG emission projects and diversity-related 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.**

Board/ Board Committee	Oversight includes the following business topics or risk areas	
Board of Directors	• Corporate strategy • Oversight of safety, health, environmental and security matters	• Risk management • Human resources and compensation • Governance and compliance
Audit Committee	• Accounting and financial reporting • Internal controls	• Compliance • Financial risk management
Corporate Governance & Nominating Committee	• Corporate governance • Board diversity	• Director orientation and continuing education • Board evaluation
Human Resources & Compensation Committee	• Executive compensation • Succession planning	• Equity, diversity and inclusion • Learning and development
Safety & Sustainability ("S&S") Committee	• Sustainability targets and goals • Risks, strengths and opportunities related to safety and sustainability including climate-related impacts	• Safety and sustainability performance & strategy • Cybersecurity and data privacy • Status of remediation projects and environmental provisions

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.



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.**

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**.

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** 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

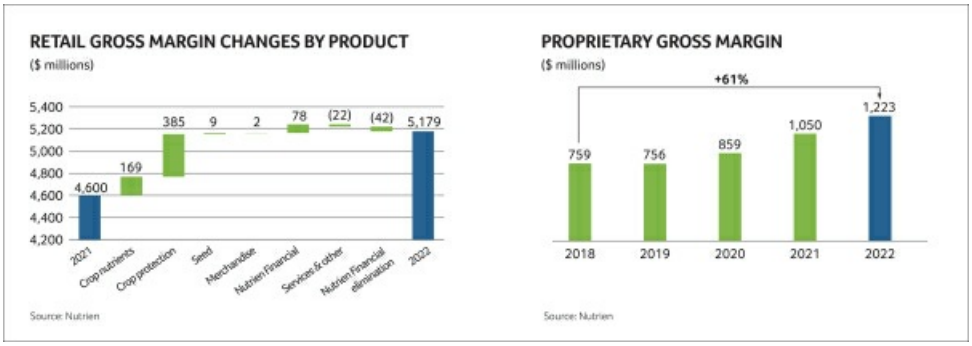
Our Retail business delivered record adjusted EBITDA of $2.3 billion driven by higher sales and gross margins across nearly all product categories and regions where we operate. This was supported by strong agriculture fundamentals, higher selling prices and growth in proprietary product margins. We improved our cash operating coverage ratio[1] 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[2] increased to $2.8 billion, representing 18 percent of Retail digital platform sales to total sales[2] 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.

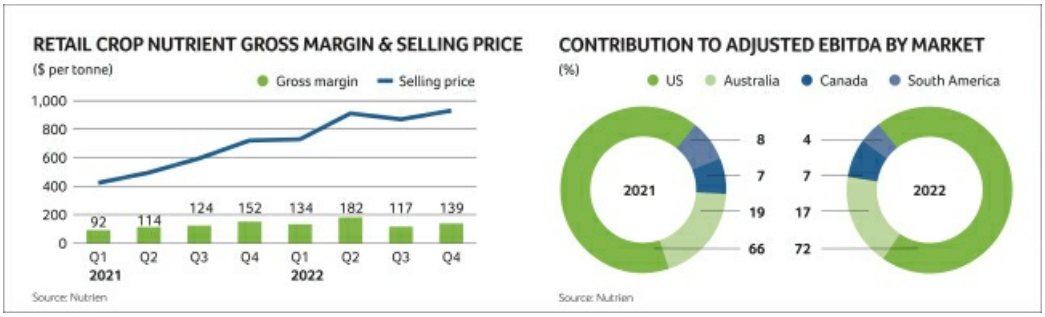
	Dollars			Gross Margin			Gross Margin (%)	
(millions of US dollars, except as otherwise noted)	**2022**	2021	% Change	**2022**	2021	% Change	**2022**	2021
Sales								
Crop nutrients	10,060	7,290	38	1,766	1,597	11	18	22
Crop protection products	7,067	6,333	12	1,936	1,551	25	27	24
Seed	2,112	2,008	5	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 [1]	966	980	(1)	749	771	(3)	78	79
Nutrien Financial elimination [1, 2]	(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					
Gross margin	5,179	4,600	13					
Expenses [3]	3,621	3,378	7					
Earnings before finance costs and taxes ("EBIT")	1,558	1,222	27					
Depreciation and amortization	752	706	7					
EBITDA	2,310	1,928	20					
Adjustments [4]	(17)	11	n/m					
Adjusted EBITDA	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
Proprietary products gross margin (millions of US dollars)		
Crop nutrients	370	328
Crop protection products	675	527
Seed	166	183
Merchandise	12	12
All products	1,223	1,050
Proprietary products margin as a percentage of product line margin (%)		
Crop nutrients	21	21
Crop protection products	35	34
Seed	39	44
Merchandise	7	7
All products	24	23

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

Financial performance measures	2023 Target	2022 Actuals	2021 Actuals
Retail adjusted EBITDA margin (%) [1]	11	11	11
Retail adjusted EBITDA per US selling location (thousands of US dollars) [1,2]	1,100	1,923	1,481
Retail adjusted average working capital to sales (%) [3]	17	17	13
Retail adjusted average working capital to sales excluding Nutrien Financial (%) [3]	n/a	2	–
Nutrien Financial adjusted net interest margin (%) [3]	n/a	6.8	6.6
Retail cash operating coverage ratio (%) [3]	60	55	58
Retail normalized comparable store sales (%) [3]	n/a	(4)	7
Retail digital platform sales to total sales (%) [1,4]	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 alow-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,	
(millions of US dollars)	Current	<31 Days Past Due	31–90 Days Past Due	>90 Days Past Due	Gross Receivables	Allowance [1]	2022 Net Receivables	2021 Net 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 [2]	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.

	Dollars			Tonnes (thousands)			Average per Tonne		
(millions of US dollars, except as otherwise noted)	**2022**	2021	% Change	**2022**	2021	% Change	**2022**	2021	% Change
Manufactured product									
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
	7,899	4,036	96	12,537	13,625	(8)	630	296	113
Cost of goods sold	1,400	1,285	9				112	94	19
Gross margin – total	6,499	2,751	136				518	202	156
Expenses [1]	1,173	512	129	**Depreciation and amortization**			35	36	(1)
EBIT	5,326	2,239	138	**Gross margin excluding depreciation**					
Depreciation and amortization	443	488	(9)	**and amortization – manufactured** [3]			553	238	133
EBITDA	5,769	2,727	112	**Potash controllable cash cost**					
Adjustments [2]	–	9	(100)	**of product manufactured** [3]			58	52	12
Adjusted EBITDA	5,769	2,736	111						

1 Includes provincial mining taxes of $1,149 million (2021 – $466 million).
2 See Note 3 to the consolidated financial statements.
3 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:

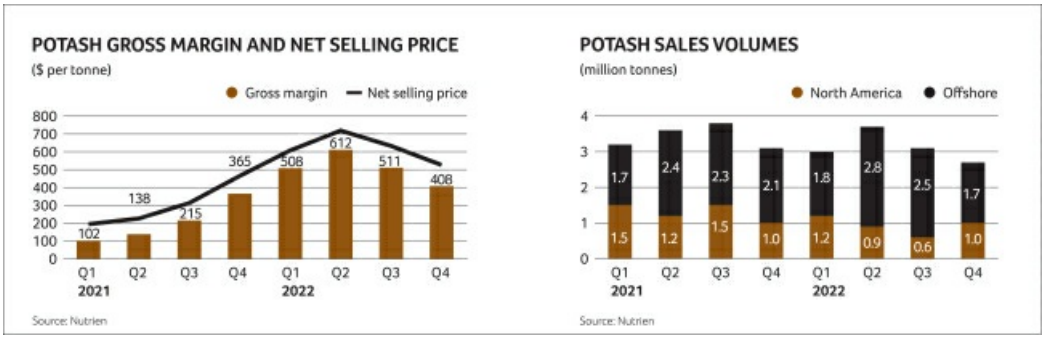
	2022 vs 2021
Sales volumes	North America sales volumes decreased in 2022 due to a compressed spring application season that resulted in high inventory carryover along with cautious purchasing in key markets caused by a declining price environment during the second half of the year. Offshore sales volumes 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)

Latin America	34	38	(4)
Other Asian markets [1]	34	35	(1)
China	14	11	3
Other markets	10	10	–
India	8	6	2

1 All Asian markets except China and India.



Potash Production

		Operational Capability [2]		Production	
(million tonnes KCl)	Nameplate Capacity [1]	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
Total	20.6	15.2	14.6	13.01	13.79
Shutdown weeks [3]				18	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.

	Dollars			Tonnes (thousands)			Average per Tonne		
(millions of US dollars, except as otherwise noted)	**2022**	2021	% Change	**2022**	2021	% Change	**2022**	2021	% Change
Manufactured product									
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
Gross margin – other [1]	88	95	(7)	**Depreciation and amortization**			56	52	7
Gross margin – total	3,281	1,726	90	**Gross margin excluding depreciation and amortization – manufactured** [4]			375	204	84
(Income) expenses [2]	(92)	(3)	n/m						
EBIT	3,373	1,729	95	**Ammonia controllable cash cost of product manufactured** [4]			59	50	18
Depreciation and amortization	558	557	–						
EBITDA	3,931	2,286	72						
Adjustments [3]	–	22	(100)						
Adjusted EBITDA	3,931	2,308	70						

1 Includes other nitrogen (including ESN® 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.

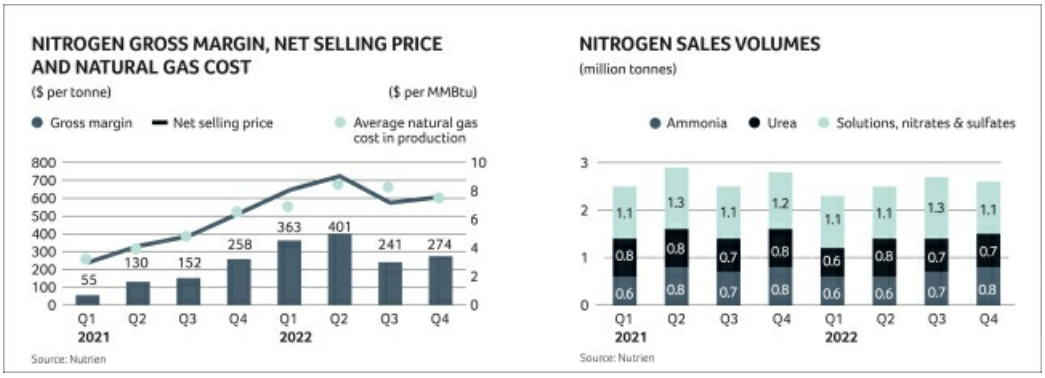
Natural Gas Prices in Cost of Production

(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.

Selected Nitrogen Measures

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



Nitrogen Production

(million tonnes product, except as otherwise noted)	Ammonia [1] Annual Capacity [3]	Ammonia [1] Production 2022	Ammonia [1] Production 2021	Urea [2] Annual Capacity [3]	Urea [2] Production 2022	Urea [2] Production 2021
Trinidad Nitrogen [4]	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	–	–	–
Total	7.1	5.76	6.00	4.7	3.67	4.07
Adjusted total [5]		3.93	3.94			
Ammonia operating rate [5] (%)		90	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

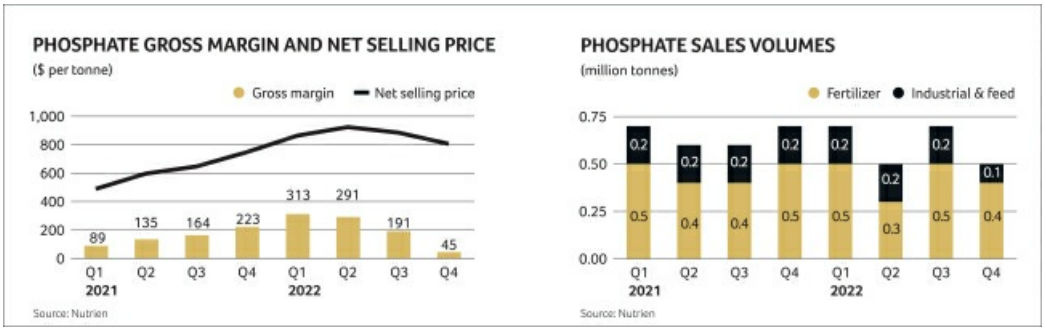
We generated record Phosphate adjusted EBITDA of $594 million as higher net realized selling prices more than offset higher raw material costs and lower sales volume. Global phosphate prices increased in the first half of 2022 due to global supply constraints, including export restrictions by China and 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.

	Dollars			Tonnes (thousands)			Average per Tonne		
(millions of US dollars, except as otherwise noted)	**2022**	2021	% Change	**2022**	2021	% Change	**2022**	2021	% Change
Manufactured product									
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
Gross margin – other [1]	(18)	20	n/m	**Depreciation and amortization**			79	58	37
Gross margin – total	493	421	17	**Gross margin excluding depreciation**					
(Income) expenses	(693)	36	n/m	**and amortization – manufactured** [2]			294	211	40
EBIT	1,186	385	208						
Depreciation and amortization	188	151	25						
EBITDA	1,374	536	156						
Adjustments [3]	(780)	4	n/m						
Adjusted EBITDA	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 Production

(million tonnes, except as otherwise noted)	Phosphate Rock			Phosphoric Acid (P_2O_5)			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[1]	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[2]	0.39	0.44	0.8	0.30	0.40
Total	7.40	4.85	5.39	1.70	1.35	1.52	3.40	2.26	2.56	1.60	0.98	1.20
P_2O_5 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 [1]	146	348	(58)
Adjusted EBITDA	(398)	(308)	29

1 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 lowerCOVID-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

Finance costs

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.

Weighted Average Debt Balances and Rates

(millions of US dollars, except as otherwise noted)	2022	2021
Short-term balance [1]	3,975	648
Short-term rate (%) [1]	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

1 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).

Income tax expense

Income tax expense increased mainly due to higher earnings in 2022.

Effective Tax Rates and Discrete Items

(millions of US dollars, except as otherwise noted)	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)

Other comprehensive (loss) income

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.

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
Nutrien Ag Solutions ("Retail")			
Total Retail adjusted EBITDA margin [1]	>10.5%	10.7%	10.9%
US Retail adjusted EBITDA margin [1,2]	–	12.2%	11.6%
Retail adjusted average working capital to sales [3]	17%	17%	13%
Retail cash operating coverage ratio [3]	60%	55%	58%
Retail adjusted EBITDA per US selling location (thousand dollars) [1,4]	>$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 [1,5]	>50%	18%	17%
Retail digital platform sales (million dollars) [1,2,5]	–	$2,837	$2,148
Potash and Nitrogen			
Potash sales volumes (million tonnes)	14.0-16.0	12.5	13.6
Potash controllable cash cost of product manufactured per tonne [2,3]	–	$58	$52
Nitrogen sales volumes (million tonnes) [6]	10.8-11.4	10.0	10.7
Ammonia operating rate [7]	96%	90%	90%
Ammonia controllable cash cost of product manufactured per tonne [3]	~$42	$59	$50
IFRS Comparable Information			
Potash cost of goods sold ("COGS") (million dollars) [2]	–	$1,400	$1,285
Nitrogen manufactured cost of goods sold ("COGS") (million dollars) [2]	–	$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

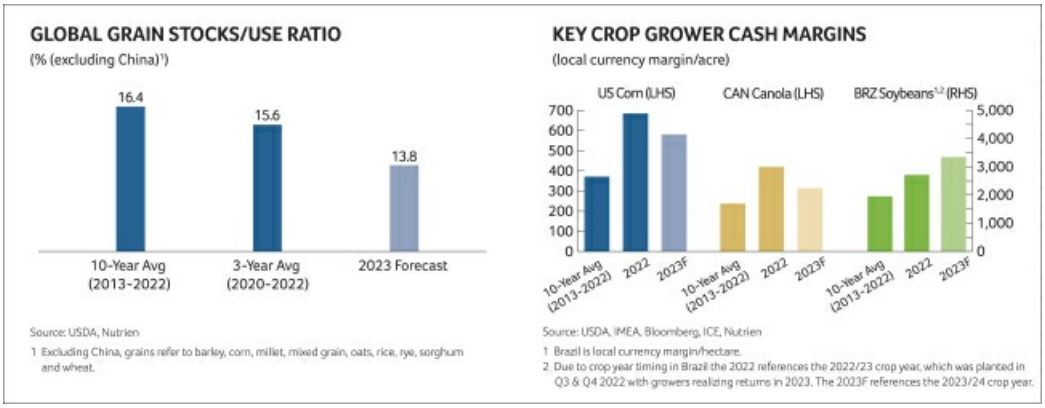
Agriculture and Retail

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.

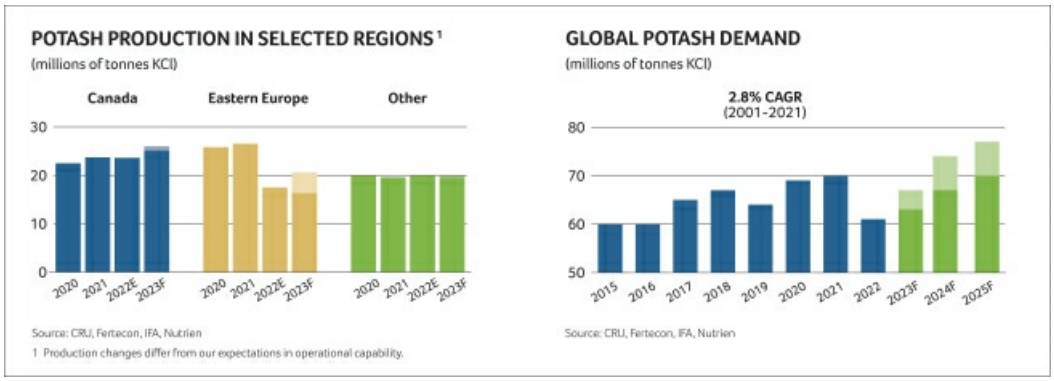


Potash

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.



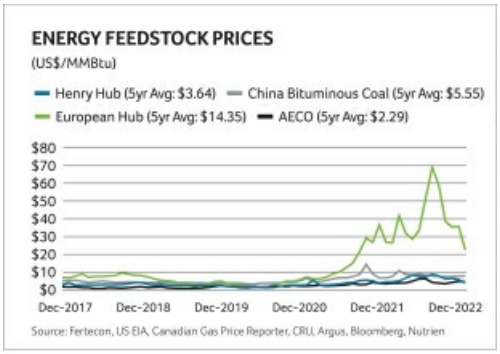
Nitrogen

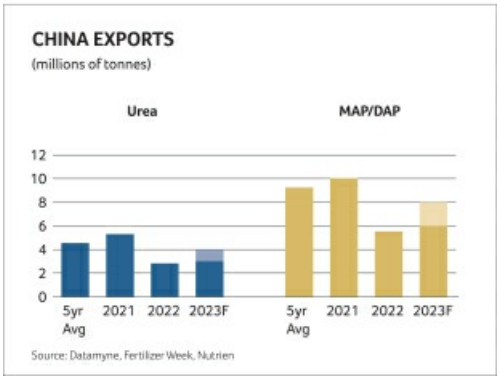
Global nitrogen prices have declined during the first two months of 2023 due to lower European natural gas prices and buyer deferrals. We expect European natural gas prices to be volatile throughout the year with around 30 percent of the regions' nitrogen capacity offline at the beginning of 2023. North 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 [1] Low	High
Adjusted net earnings per share in US dollars ("Adjusted EPS") [2, 3]	8.45	10.65
Adjusted EBITDA [2]	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) [4]	13.8	14.6
Nitrogen sales tonnes (millions) [4]	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 ® 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% [1]		± 0.15	± 100
	Crop protection changes by 1% [1]		± 0.12	± 80
	Seed changes by 1% [1]		± 0.03	± 20

1 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
Sales	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.
Net earnings and earnings per share	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.
Assets and non-current financial liabilities	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.
Dividends declared per share	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.

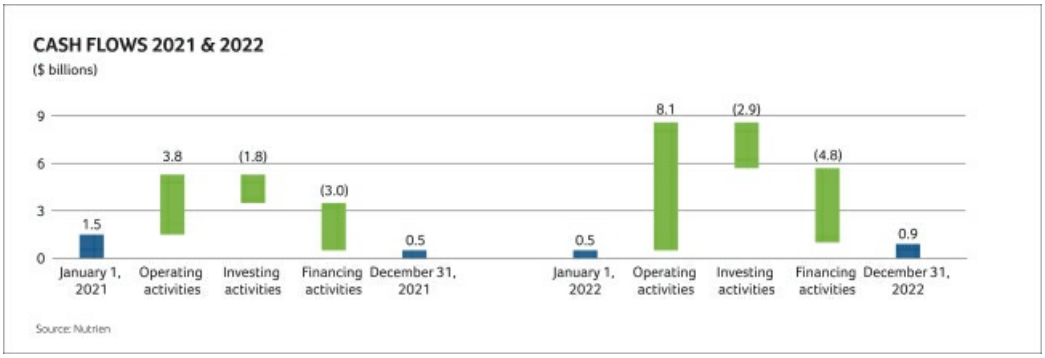
We do not hold material cash and cash equivalents in currencies other than the US dollar and Canadian dollar. We held approximately $315 million US dollar equivalent in other jurisdictions outside the US and Canada. We do not depend on repatriation of cash from our foreign subsidiaries to meet our liquidity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

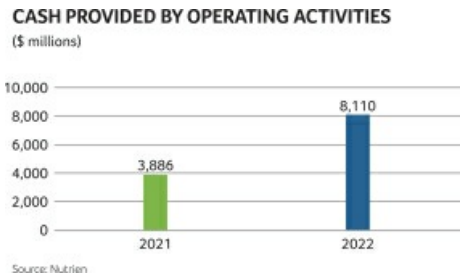
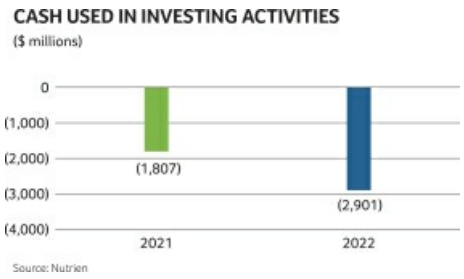
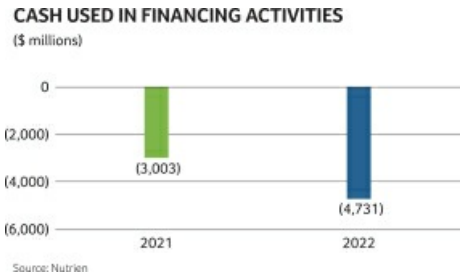
Primary Uses of Liquidity	Primary Sources of Liquidity
• inventory purchases and production • operational expenses • seasonal working capital requirements • investing to sustain and grow our safe, reliable andcost-efficient operations through sustaining and investing capital • business acquisitions • returning cash to our shareholders throughdividends and share repurchases (see Note 23 to the consolidated financial statements) • principal payments of debt securities (see Note 18 to the consolidated financial statements)	• cash from operations (including customer prepayments) • commercial paper issuances • increase of credit facility limits and drawdowns • debt capital markets



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		• 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		• 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		• 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 [1]	Note 22	4,023	213	184	114	3,512
Total		21,263	3,397	3,158	1,660	13,048

1 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.

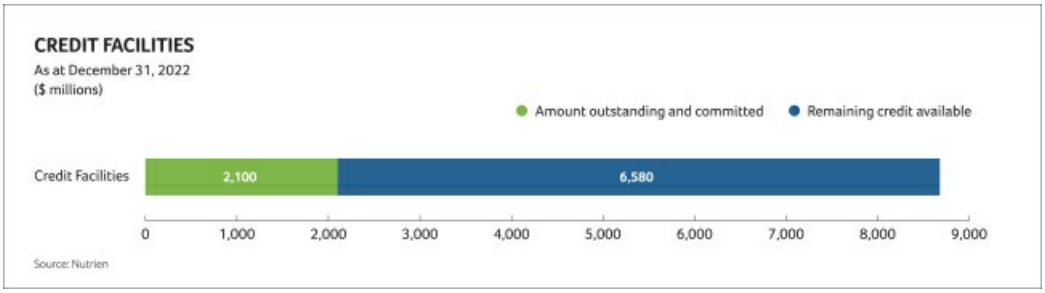
On February 15, 2023, our Board approved a share repurchase program of up to a maximum of 24,962,194 representing 5 percent of Nutrien's outstanding common shares. Subject to acceptance by the TSX, the 2023 share repurchase program will commence on March 1, 2023, and will expire on the earlier of February 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:

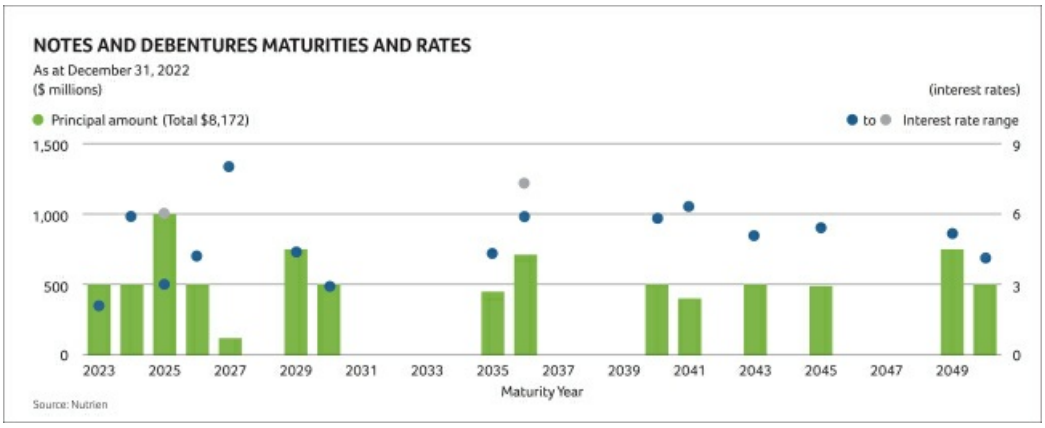


(millions of US dollars, except as otherwise noted)	Rate of Interest (%)	Total Facility Limit	Outstanding and Committed – Short-Term: **As at December 31, 2022**	Short-Term: As at December 31, 2021	Long-Term: **As at December 31, 2022**	Long-Term: As at December 31, 2021
Credit facilities						
Unsecured revolving term credit facility [1]	n/a	4,500	–	–	–	–
Unsecured revolving term credit facility [2]	5.3	2,000	500	–	–	–
Uncommitted revolving demand facility [3]	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	–
Total			2,142	1,560	172	141

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 [1]	0.65 : 1.00	0.32 : 1.00

1 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.

	Long-Term Debt Rating (Outlook)		Short-Term Debt Rating	
As at December 31,	**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
Note 14 and Note 30	**Goodwill impairment indicators** 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. 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. 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.

Financial Statement Reference	Critical Accounting Estimate Description
Note 8, Note 29 and Note 30	**Income taxes – measurement** 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.
Note 22 and Note 30	**Asset retirement obligations ("AROs") and accrued environmental costs ("ERLs") – measurement** 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. 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.

Quarterly Results

(millions of US dollars, except as otherwise noted)	2022 Q4	2022 Q3	2022 Q2	2022 Q1	2021 Q4	2021 Q3	2021 Q2	2021 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 millionnon-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)	Sales			Gross Margin		
Three months ended December 31	**2022**	2021	% Change	**2022**	2021	% Change
Retail						
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 [1]	237	243	(2)	194	201	(3)
Nutrien Financial elimination [1,2]	(28)	(23)	22	(28)	(23)	22
Total	4,087	3,878	5	1,077	1,173	(8)

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)	Manufactured Product Sales Tonnes (thousands)			Manufactured Product Average per Tonne		
Three months ended December 31	**2022**	2021	% Change	**2022**	2021	% Change
Potash						
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
Nitrogen						
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
Phosphate						
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	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. 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. 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.

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_2O”) 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 certainnon-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 [1]	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 [2]	8	45
Gain on disposal of investment	(19)	–
Cloud computing transition adjustment [3]	–	36
Adjusted EBITDA	12,170	7,126

1 EBITDA is calculated as net earnings (loss) before finance costs, income taxes, and depreciation and amortization.
2 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.
3 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 asnet 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 ourday-to-day operations and is used as a component of employee remuneration calculations.

	2022			2021		
(millions of US dollars, except as otherwise noted)	**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-lookingnon-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 [1]	12	(64)
Net changes in non-cash working capital[1]	44	(101)
Growth capital	(1,199)	(598)

1 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 [1]	(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

1 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 [1]	(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 [2] – thousands)	2,754	2,769
Ammonia controllable cash COPM per tonne	59	50

1 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.
2 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
Adjusted average working capital to sales (%)	17	13
Adjusted average working capital to sales excluding Nutrien Financial (%)	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[1]	(41)	(36)
Net interest	226	153
Average Nutrien Financial receivables	3,311	2,316
Nutrien Financial adjusted net interest margin (%)	6.8	6.6

1 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 [1]	(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

1 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 [1]	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

1 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 [1]	(10,232)	(10,516)	(10,668)
Average Nutrien Financial receivables	(3,311)	(2,316)	(1,502)
Invested capital	29,245	26,413	26,743

1 Merger fair value adjustments on goodwill, intangible assets, and property, plant and equipment.

Return on invested capital (%)	26	15	5

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 arenon-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
Total debt	11,928	10,846
Cash and cash equivalents	(901)	(499)
Unamortized fair value adjustments	(310)	(325)
Adjusted net debt	10,717	10,022

Terms & Definitions

Terms

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

Scientific Terms

Potash	KCl	potassium chloride, 60–63.2% K_2O (solid)
Nitrogen	CO_2e	carbon dioxide equivalent
	DEF	diesel exhaust fluid
	ESN®	environmentally smart nitrogen, 44% nitrogen
	NH_3	ammonia (anhydrous), 82.2% N (liquid)
	N_2O	nitrous oxide
	UAN	nitrogen solutions, 28–32% N (liquid)
Phosphate	AS	ammonium sulfate (solid)
	DAP	diammonium phosphate, 46% P_2O_5 (solid)
	MAP	monoammonium phosphate, 52% P_2O_5 (solid)
	MGA	merchant grade acid, 54% P_2O_5 (liquid)
	MST	micronized sulfur technology, P + S
	P_2O_5	phosphorus pentoxide
	SPA	superphosphoric acid, 70% P_2O_5 (liquid)

Product Measures

K_2O tonne	Measures the potassium content of products having different chemical analyses
N tonne	Measures the nitrogen content of products having different chemical analyses
P_2O_5 tonne	Measures the phosphorus content of products having different chemical analyses
Product tonne	Standard measure of the weights of all types of potash, nitrogen and phosphate products

Definitions

Low-carbon ammonia	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.
Brownfield	New project expanding or developing an existing facility or operation.
Community investment	Represents cash disbursements, matching of employee gifts andin-kind contributions of equipment, goods and services, and employee volunteerism (on corporate time).
Clean ammonia	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.
Cumulative annual growth rate (“CAGR”)	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.
COVID-19	COVID-19 coronavirus pandemic.
Environmental incidents	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 anynon- 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.
Greenfield	New project on a previously undeveloped site.
Greenhouse gas (“GHG”)	Gas that contributes to the greenhouse effect by absorbing infrared radiation.
Latin America	South America, Central America, Caribbean and Mexico.
Lost-time injury frequency	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.
Merger	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.
Mmt	Million metric tonnes.
North America	Canada and the US.
Offshore	All markets except Canada and the US.
Serious injury and fatality	A work-related fatality or life-altering injury/illness experienced by an employee or directly supervised contractor conducting work on behalf of Nutrien.
Scope 1	Direct greenhouse gas emissions produced by Nutrien owned or controlled facilities.
Scope 2	Greenhouse gas emissions resulting from the generation of purchased or acquired electricity, heating, cooling and steam consumed by Nutrien owned or controlled facilities.
Scope 3	Indirect greenhouse gas emissions not included in Scope 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.
Total employee turnover rate	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.
Total recordable injury frequency	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.
Total shareholder return	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.
Voluntary employee turnover	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.

Exhibit 99.3

FINANCIAL STATEMENTS & NOTES

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MANAGEMENT'S RESPONSIBILITY

Management's Responsibility for Financial Reporting

Management's Report on the Consolidated Financial Statements

The accompanying consolidated financial statements and related financial information are the responsibility of the management of Nutrien Ltd. (the "Company"). They have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board and include amounts based on estimates and judgments. Financial information included elsewhere in this report is consistent with the consolidated financial statements.

The consolidated financial statements are approved by the Board of Directors on the recommendation of the Audit Committee. The Audit Committee, appointed by the Board of Directors, is composed entirely of independent directors. The Audit Committee discusses and analyzes the Company's condensed consolidated financial statements and Management's Discussion and Analysis ("MD&A") with management before such information is approved by the committee and submitted to securities commissions or other regulatory authorities. The Audit Committee and management also analyze the annual consolidated financial statements and MD&A prior to their approval by the Board of Directors.

The Audit Committee's duties also include reviewing critical accounting policies and significant estimates and judgments underlying the consolidated financial statements as presented by management and approving the fees of our independent registered public accounting firm.

Our independent registered public accounting firm, KPMG LLP, performs an audit of the consolidated financial statements, the results of which are reflected in their Report of Independent Registered Public Accounting Firm for 2022. KPMG LLP has full and independent access to the Audit Committee to discuss their audit and related matters.

Management's Annual Report on 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) of the Securities Exchange Act of 1934, as amended, and National Instrument 52-109 – *Certification of Disclosure in Issuers' Annual and Interim Filings.* Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes in accordance with IFRS.

Under our supervision and with the participation of management, the Company 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, management concluded that, as of December 31, 2022, the Company did maintain effective internal control over financial reporting.

The effectiveness of the Company's internal control over financial reporting as at December 31, 2022 has been audited by KPMG LLP, as reflected in their Report of Independent Registered Public Accounting Firm for 2022.

/s/ Ken Seitz

Ken Seitz
President and Chief Executive Officer
February 16, 2023

/s/ Pedro Farah

Pedro Farah
Executive Vice President and Chief Financial Officer
February 16, 2023

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Nutrien Ltd.

Opinion on Internal Control Over Financial Reporting

We have audited Nutrien Ltd. and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2022 and 2021, the related consolidated statements of earnings, comprehensive income, cash flows, and changes in shareholders' equity for the years then ended, and the related notes (collectively, the "consolidated financial statements"), and our report dated February 16, 2023 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.



Chartered Professional Accountants

Calgary, Canada
February 16, 2023

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Nutrien Ltd.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Nutrien Ltd. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of earnings, comprehensive income, cash flows, and changes in shareholders' equity for the years then ended, and the related notes (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and its financial performance and its cash flows for the years then ended, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 16, 2023 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the Audit Committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Goodwill Impairment Assessment of the Retail North America Group of Cash-Generating Units

As discussed in Note 14 to the consolidated financial statements, the carrying amount of goodwill as of December 31, 2022 was $12,368 million, of which $6,898 million of goodwill has been allocated to the Retail North America group of cash-generating units ("Retail North America CGU"). The Retail North America CGU is tested for impairment annually, and whenever events or changes in circumstances may indicate the carrying amount, including goodwill, exceeds its estimated recoverable amount. An indicator of impairment was identified as of June 30, 2022 and September 30, 2022 due to an increase in benchmark borrowing rates, which is a component of the discount rate. The calculation of the recoverable amount of the Retail North America CGU involved estimates including forecasted earnings before tax, interest, depreciation and amortization ("EBITDA"), terminal growth rate and the discount rate.

We identified the calculation of the recoverable amount of goodwill for the Retail North America CGU as of September 30, 2022 as a critical audit matter. A high degree of auditor judgment was required to evaluate the Company's forecasted EBITDA, terminal growth rate and discount rate used to calculate the recoverable amount of the Retail North America CGU. Minor changes to these assumptions could have had a significant effect on the Company's calculation of the recoverable amount of the Retail North America CGU. Additionally, the audit effort associated with this estimate required specialized skills and knowledge.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the calculation of the recoverable amount of goodwill for the Retail North America CGU. This included controls related to the determination of forecasted EBITDA, terminal growth rate and the discount rate. We evaluated the Company's forecasted EBITDA for the Retail North America CGU by comparing to historical results and forecasted planted acreage in the United States. We evaluated the terminal growth rate by comparing to the historical growth of the Retail North America CGU and to market information, including forecasted inflation and forecasted gross domestic product in the United States. We evaluated the Company's historical forecasts of EBITDA by comparing to actual results to assess the Company's ability to accurately forecast. In addition, we involved valuation professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's determination of the discount rate by comparing the inputs to the discount rate to publicly available market data for comparable entities and assessing the resulting discount rate, and
- evaluating the Company's estimate of the recoverable amount of the Retail North America CGU by comparing the results of the Company's estimate to publicly available market data and valuation metrics for comparable entities.

(signed) KPMG LLP

Chartered Professional Accountants

We have served as the Company's auditor since 2018.

Calgary, Canada
February 16, 2023

In millions of US dollars unless otherwise noted

CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENTS OF EARNINGS

For the years ended December 31	Note	2022	2021
SALES	3	**37,884**	27,712
Freight, transportation and distribution	4	**872**	851
Cost of goods sold	4, 12	**21,588**	17,452
GROSS MARGIN		**15,424**	9,409
Selling expenses	4	**3,414**	3,142
General and administrative expenses	4	**565**	477
Provincial mining taxes	4	**1,149**	466
Share-based compensation expense	5	**63**	198
(Reversal of) impairment of assets	13	**(780)**	33
Other expenses	6	**204**	312
EARNINGS BEFORE FINANCE COSTS AND INCOME TAXES		**10,809**	4,781
Finance costs	7	**563**	613
EARNINGS BEFORE INCOME TAXES		**10,246**	4,168
Income tax expense	8	**2,559**	989
NET EARNINGS		**7,687**	3,179
Attributable to			
Equity holders of Nutrien		**7,660**	3,153
Non-controlling interest		**27**	26
NET EARNINGS		**7,687**	3,179
NET EARNINGS PER SHARE ATTRIBUTABLE TO EQUITY HOLDERS OF NUTRIEN ("EPS")	9		
Basic		**14.22**	5.53
Diluted		**14.18**	5.52
Weighted average shares outstanding for basic EPS	9	**538,475,000**	569,664,000
Weighted average shares outstanding for diluted EPS	9	**540,010,000**	571,289,000

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the years ended December 31 (net of related income taxes)	Note	2022	2021
NET EARNINGS		**7,687**	3,179
Other comprehensive (loss) income			
Items that will not be reclassified to net earnings:			
Net actuarial gain on defined benefit plans	21	**83**	95
Net fair value (loss) gain on investments	15	**(44)**	81
Items that have been or may be subsequently reclassified to net earnings:			
Loss on currency translation of foreign operations		**(199)**	(115)
Other		**(17)**	17
OTHER COMPREHENSIVE (LOSS) INCOME		**(177)**	78
COMPREHENSIVE INCOME		**7,510**	3,257
Attributable to			
Equity holders of Nutrien		**7,484**	3,232
Non-controlling interest		**26**	25
COMPREHENSIVE INCOME		**7,510**	3,257

(See Notes to the Consolidated Financial Statements)

In millions of US dollars unless otherwise noted

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31	Note	2022	2021
			Note 2
OPERATING ACTIVITIES			
Net earnings		**7,687**	3,179
Adjustments for:			
Depreciation and amortization		**2,012**	1,951
Share-based compensation expense	5	**63**	198
(Reversal of) impairment of assets	13	**(780)**	33
Gain on disposal of investment		**(19)**	-
Cloud computing transition adjustment	6	**-**	36
Loss on early extinguishment of debt		**-**	142
Provision for (recovery of) deferred income tax		**182**	(31)
Long-term income tax receivables	16	**273**	-
Net undistributed earnings of equity-accounted investees		**(181)**	(44)
Other long-term assets, liabilities and miscellaneous		**21**	83
Cash from operations before working capital changes		**9,258**	5,547
Changes in non-cash operating working capital:			
Receivables		**(919)**	(1,669)
Inventories		**(1,281)**	(1,459)
Prepaid expenses and other current assets		**114**	(227)
Payables and accrued charges		**938**	1,694
CASH PROVIDED BY OPERATING ACTIVITIES		**8,110**	3,886
INVESTING ACTIVITIES			
Capital expenditures [1]	13, 14	**(2,438)**	(1,884)
Business acquisitions, net of cash acquired	25	**(407)**	(88)
Other		**(12)**	64
Net changes in non-cash working capital		**(44)**	101
CASH USED IN INVESTING ACTIVITIES		**(2,901)**	(1,807)
FINANCING ACTIVITIES			
Transaction costs related to debt		**(9)**	(7)
Proceeds from short-term debt, net	17, 18	**529**	1,344
Proceeds from long-term debt	18	**1,045**	86
Repayment of long-term debt	18	**(561)**	(2,212)
Repayment of principal portion of lease liabilities	18, 19	**(341)**	(320)
Dividends paid to Nutrien's shareholders	23	**(1,031)**	(1,045)
Repurchase of common shares	23	**(4,520)**	(1,035)
Issuance of common shares	23	**168**	200
Other		**(11)**	(14)
CASH USED IN FINANCING ACTIVITIES		**(4,731)**	(3,003)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS		**(76)**	(31)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		**402**	(955)
CASH AND CASH EQUIVALENTS – BEGINNING OF YEAR		**499**	1,454
CASH AND CASH EQUIVALENTS – END OF YEAR		**901**	499
Cash and cash equivalents is composed of:			
Cash		**775**	428
Short-term investments		**126**	71
		901	499
SUPPLEMENTAL CASH FLOWS INFORMATION			
Interest paid		**482**	491
Income taxes paid		**1,882**	435
Total cash outflow for leases		**459**	393

1 Includes additions to property, plant and equipment, and intangible assets of $ 2,227 and $ 211 (2021 – $ 1,777 and $ 107), respectively.

(See Notes to the Consolidated Financial Statements)

In millions of US dollars unless otherwise noted

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

				Accumulated Other Comprehensive (Loss) Income ("AOCI")					
	Number of Common Shares	Share Capital	Contributed Surplus	Loss on Currency Translation of Foreign Operations	Other	Total AOCI	Retained Earnings	Equity Holders of Nutrien	Non-Controlling Interest	Total Equity
BALANCE – DECEMBER 31, 2020	569,260,406	15,673	205	(62)	(57)	(119)	6,606	22,365	38	22,403
Net earnings	-	-	-	-	-	-	3,153	3,153	26	3,179
Other comprehensive (loss) income	-	-	-	(114)	193	79	-	79	(1)	78
Shares repurchased (Note 23)	(15,982,154)	(442)	(47)	-	-	-	(616)	(1,105)	-	(1,105)
Dividends declared (Note 23)	-	-	-	-	-	-	(1,046)	(1,046)	-	(1,046)
Non-controlling interest transactions	-	-	-	-	-	-	-	-	(16)	(16)
Effect of share-based compensation including issuance of common shares	4,424,437	226	(9)	-	-	-	-	217	-	217
Transfer of net gain on cash flow hedges	-	-	-	-	(11)	(11)	-	(11)	-	(11)
Transfer of net actuarial gain on defined benefit plans	-	-	-	-	(95)	(95)	95	-	-	-
Share cancellation	(210,173)	-	-	-	-	-	-	-	-	-
BALANCE – DECEMBER 31, 2021	557,492,516	15,457	149	(176)	30	(146)	8,192	23,652	47	23,699
Net earnings	**-**	**-**	**-**	**-**	**-**	**-**	**7,660**	**7,660**	**27**	**7,687**

Other comprehensive (loss) income	-	-	-	(198)	22	(176)	-	(176)	(1)	(177)
Shares repurchased (Note 23)	(53,312,559)	(1,487)	(22)	-	-	-	(2,987)	(4,496)	-	(4,496)
Dividends declared (Note 23)	-	-	-	-	-	-	(1,019)	(1,019)	-	(1,019)
Non-controlling interest transactions	-	-	-	-	-	-	(1)	(1)	(28)	(29)
Effect of share-based compensation including issuance of common shares	3,066,148	202	(18)	-	-	-	-	184	-	184
Transfer of net loss on cash flow hedges	-	-	-	-	14	14	-	14	-	14
Transfer of net actuarial gain on defined benefit plans	-	-	-	-	(83)	(83)	83	-	-	-
BALANCE – DECEMBER 31, 2022	**507,246,105**	**14,172**	**109**	**(374)**	**(17)**	**(391)**	**11,928**	**25,818**	**45**	**25,863**

(See Notes to the Consolidated Financial Statements)

In millions of US dollars unless otherwise noted

CONSOLIDATED BALANCE SHEETS

As at December 31	Note	2022	2021
ASSETS			
Current assets			
Cash and cash equivalents		**901**	499
Receivables	11	**6,194**	5,366
Inventories	12	**7,632**	6,328
Prepaid expenses and other current assets		**1,615**	1,653
		16,342	13,846
Non-current assets			
Property, plant and equipment	13	**21,767**	20,016
Goodwill	14	**12,368**	12,220
Intangible assets	14	**2,297**	2,340
Investments	15	**843**	703
Other assets	16	**969**	829
TOTAL ASSETS		**54,586**	49,954
LIABILITIES			
Current liabilities			
Short-term debt	17	**2,142**	1,560
Current portion of long-term debt	18	**542**	545
Current portion of lease liabilities	19	**305**	286
Payables and accrued charges	20	**11,291**	10,052
		14,280	12,443
Non-current liabilities			
Long-term debt	18	**8,040**	7,521
Lease liabilities	19	**899**	934
Deferred income tax liabilities	8	**3,547**	3,165
Pension and other post-retirement benefit liabilities	21	**319**	419
Asset retirement obligations and accrued environmental costs	22	**1,403**	1,566
Other non-current liabilities		**235**	207
TOTAL LIABILITIES		**28,723**	26,255
SHAREHOLDERS' EQUITY			
Share capital	23	**14,172**	15,457
Contributed surplus		**109**	149
Accumulated other comprehensive loss		**(391)**	(146)
Retained earnings		**11,928**	8,192
Equity holders of Nutrien		**25,818**	23,652
Non-controlling interest		**45**	47
TOTAL SHAREHOLDERS' EQUITY		**25,863**	23,699
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**54,586**	49,954

(See Notes to the Consolidated Financial Statements)

Approved by the Board of Directors,

/s/ Maura Clark — Director

/s/ Christopher Burley — Director

In millions of US dollars unless otherwise noted

NOTE 1 DESCRIPTION OF BUSINESS

Nutrien Ltd. (collectively with its subsidiaries, "Nutrien", "we", "us", "our" or "the Company") is the world's largest provider of crop inputs and services. Nutrien plays a critical role in helping growers around the globe increase food production in a sustainable manner.

The Company is a corporation organized under the laws of Canada with its registered head office located at Suite 1700, 211 19th Street East, Saskatoon, Saskatchewan, Canada, S7K 5R6. As at December 31, 2022, the Company had assets as follows:

Segment	Description
Nutrien Ag Solutions ("Retail")	• various retail facilities across the US, Canada, Australia and South America • private label and proprietary crop protection products and nutritionals • an innovative integrated digital platform for growers and crop consultants • a financing solutions provider in support of Nutrien's agricultural product and service sales
Potash	• 6 operations in the province of Saskatchewan

Nitrogen	• 8 production facilities in North America: 4 in Alberta, 1 in Georgia, 1 in Louisiana, 1 in Ohio and 1 in Texas • 1 large-scale operation in Trinidad • 5 upgrade facilities in North America: 3 in Alberta, 1 in Missouri and 1 in Washington • 50 percent investment in Profertil S.A. ("Profertil"), a nitrogen producer based in Argentina
Phosphate	• 2 mines and processing plants: 1 in Florida and 1 in North Carolina • phosphate feed plants in Illinois, Missouri and Nebraska • 1 industrial phosphoric acid plant in Ohio
Corporate and Others	• investment in Canpotex Limited ("Canpotex"), a Canadian potash export, sales and marketing company owned in equal shares by Nutrien and another potash producer • 22 percent investment in Sinofert Holdings Limited ("Sinofert"), a fertilizer supplier and distributor in China

NOTE 2 BASIS OF PRESENTATION

We prepared these consolidated financial statements in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). We have consistently applied the same accounting policies throughout all periods presented, as if these policies had always been in effect, with the exception of the accounting standards adopted effective January 1, 2022, as disclosed in Note 30.

Certain immaterial 2021 figures have been reclassified in the consolidated statements of cash flows and segment information note.

These consolidated financial statements were authorized for issue by the Board of Directors on February 16, 2023.

Sensitivity analyses included throughout the notes should be used with caution as the changes are hypothetical and not reflective of future performance. The sensitivities have been calculated independently of changes in other key variables. Changes in one factor may result in changes in another, which could increase or reduce certain sensitivities. We prepared these consolidated financial statements under the historical cost basis, except for items that IFRS requires to be measured at fair value. Details of our accounting policies are primarily disclosed in Note 30. Reference to n/a indicates information is not applicable.

NOTE 3 SEGMENT INFORMATION

The Company 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 it provides services directly to growers through a network of farm centers 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.

The Executive Leadership Team ("ELT"), composed of officers at the Executive Vice President level and above, is the Chief Operating Decision Maker ("CODM"). The CODM uses adjusted net earnings (loss) before finance costs, income taxes, and depreciation and amortization ("adjusted EBITDA") to measure performance and allocate resources to the operating segments. The CODM considers adjusted EBITDA to be a meaningful measure because it is not impacted by long-term investment and financing decisions, but rather focuses on the performance of our day-to-day operations. In addition, it excludes the impact of impairments and other costs that are centrally managed by our corporate function.

We determine the composition of the reportable segments based on factors including risks and returns, internal organization, and internal reports reviewed by the CODM. We allocate certain expenses across segments based on reasonable considerations such as production capacities or historical trends.

2022	Retail	Potash	Nitrogen	Phosphate	Corporate and Others	Eliminations	Consolidated
Sales – third party	**21,266**	**7,600**	**6,755**	**2,263**	**-**	**-**	**37,884**
– intersegment	**84**	**599**	**1,293**	**357**	**-**	**(2,333)**	**-**
Sales – total	**21,350**	**8,199**	**8,048**	**2,620**	**-**	**(2,333)**	**37,884**
Freight, transportation and distribution	**-**	**300**	**515**	**243**	**-**	**(186)**	**872**
Net sales	**21,350**	**7,899**	**7,533**	**2,377**	**-**	**(2,147)**	**37,012**
Cost of goods sold	**16,171**	**1,400**	**4,252**	**1,884**	**-**	**(2,119)**	**21,588**
Gross margin	**5,179**	**6,499**	**3,281**	**493**	**-**	**(28)**	**15,424**
Selling expenses	**3,392**	**10**	**28**	**7**	**(1)**	**(22)**	**3,414**
General and administrative expenses	**200**	**9**	**17**	**13**	**326**	**-**	**565**
Provincial mining taxes	**-**	**1,149**	**-**	**-**	**-**	**-**	**1,149**
Share-based compensation expense	**-**	**-**	**-**	**-**	**63**	**-**	**63**
Reversal of impairment of assets (Note 13)	**-**	**-**	**-**	**(780)**	**-**	**-**	**(780)**
Other expenses (income)	**29**	**5**	**(137)**	**67**	**227**	**13**	**204**
Earnings (loss) before finance costs and income taxes	**1,558**	**5,326**	**3,373**	**1,186**	**(615)**	**(19)**	**10,809**
Depreciation and amortization	**752**	**443**	**558**	**188**	**71**	**-**	**2,012**
EBITDA [1]	**2,310**	**5,769**	**3,931**	**1,374**	**(544)**	**(19)**	**12,821**
Integration and restructuring related costs	**2**	**-**	**-**	**-**	**44**	**-**	**46**
Share-based compensation expense	**-**	**-**	**-**	**-**	**63**	**-**	**63**
Reversal of impairment of assets (Note 13)	**-**	**-**	**-**	**(780)**	**-**	**-**	**(780)**
COVID-19 coronavirus pandemic ("COVID-19") related expenses	**-**	**-**	**-**	**-**	**8**	**-**	**8**
Foreign exchange loss, net of related derivatives	**-**	**-**	**-**	**-**	**31**	**-**	**31**
Gain on disposal of investment	**(19)**	**-**	**-**	**-**	**-**	**-**	**(19)**
Adjusted EBITDA	**2,293**	**5,769**	**3,931**	**594**	**(398)**	**(19)**	**12,170**
Assets	**24,451**	**13,921**	**11,807**	**2,661**	**2,622**	**(876)**	**54,586**

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

2021	Retail	Potash	Nitrogen	Phosphate	Corporate and Others	Eliminations	Consolidated
Sales – third party	17,665	4,021	4,216	1,810	-	-	27,712
– intersegment	69	386	921	236	-	(1,612)	-
Sales – total	17,734	4,407	5,137	2,046	-	(1,612)	27,712
Freight, transportation and distribution	-	371	448	217	-	(185)	851
Net sales	17,734	4,036	4,689	1,829	-	(1,427)	26,861
Cost of goods sold	13,134	1,285	2,963	1,408	-	(1,338)	17,452

Gross margin	4,600	2,751	1,726	421	-	(89)	9,409
Selling expenses	3,124	9	24	6	(21)	-	3,142
General and administrative expenses	168	8	15	11	275	-	477
Provincial mining taxes	-	466	-	-	-	-	466
Share-based compensation expense	-	-	-	-	198	-	198
Impairment of assets (Note 13)	-	7	22	4	-	-	33
Other expenses (income)	86	22	(64)	15	253	-	312
and income taxes							
Earnings (loss) before finance costs	1,222	2,239	1,729	385	(705)	(89)	4,781
Depreciation and amortization	706	488	557	151	49	-	1,951
EBITDA	1,928	2,727	2,286	536	(656)	(89)	6,732
Integration and restructuring related costs	10	-	-	-	33	-	43
Share-based compensation expense	-	-	-	-	198	-	198
Impairment of assets (Note 13)	-	7	22	4	-	-	33
COVID-19 related expenses related derivatives	-	-	-	-	45	-	45
Foreign exchange loss, net of adjustment (Note 6)	-	-	-	-	39	-	39
Cloud computing transition	1	2	-	-	33	-	36
Adjusted EBITDA	1,939	2,736	2,308	540	(308)	(89)	7,126
Assets	22,387	13,148	11,093	1,699	2,266	(639)	49,954

Retail Segment Products	Sales
Crop nutrients	Dry and liquid macronutrient products including potash, nitrogen and phosphate, proprietary liquid micronutrient products, and nutrient application services.
Crop protection products	Various third-party supplier and proprietary products designed to maintain crop quality and manage plant diseases, weeds and other pests.
Seed	Various third-party supplier seed brands and proprietary seed product lines.
Merchandise	Fencing, feed supplements, livestock-related animal health products, storage and irrigation equipment, and other products.
Nutrien Financial	Financing solutions provided to Retail branches and customers in support of Nutrien's agricultural product and service sales.
Services and other revenues	Product application, soil and leaf testing, crop scouting and precision agriculture services, and water services.

In millions of US dollars unless otherwise noted

	Products	Sales Prices Impacted By
Potash	• North American – primarily granular • Offshore (international) – primarily granular and standard	• North American prices referenced at delivered prices (including transportation and distribution costs) • International prices pursuant to term and spot contract prices (excluding transportation and distribution costs)
Nitrogen	• Ammonia, urea, urea ammonium nitrate, industrial grade ammonium nitrate and ammonium sulfate	• Global energy costs and supply
Phosphate	• Solid fertilizer, liquid fertilizer, industrial products and feed products	• Global prices and supplies of ammonia and sulfur

	2022	2021
Retail sales by product line		
Crop nutrients	**10,060**	7,290
Crop protection products	**7,067**	6,333
Seed	**2,112**	2,008
Merchandise	**1,019**	1,033
Nutrien Financial	**267**	189
Services and other [1]	**966**	980
Nutrien Financial elimination [1,2]	**(141)**	(99)
	21,350	17,734
Potash sales by geography		
Manufactured product		
North America	**2,785**	2,009
Offshore [3]	**5,414**	2,398
	8,199	4,407
Nitrogen sales by product line		
Manufactured product		
Ammonia	**2,834**	1,556
Urea	**2,037**	1,568
Solutions, nitrates and sulfates	**1,996**	1,274
Other nitrogen and purchased products	**1,181**	739
	8,048	5,137
Phosphate sales by product line		
Manufactured product		
Fertilizer	**1,520**	1,250
Industrial and feed	**763**	574
Other phosphate and purchased products	**337**	222
	2,620	2,046

1 Certain immaterial 2021 figures have been reclassified.
2 Represents elimination for the interest and service fees charged by Nutrien Financial to Retail branches.
3 Relates to Canpotex (Note 28) and includes other revenue representing provisional pricing adjustments of $ (105) (2021 – $ 282).

In millions of US dollars unless otherwise noted

	Sales – Third Party [1]		**Non-Current Assets [2]**	
	2022	2021	**2022**	2021
United States	**20,089**	16,009	**15,971**	15,095

Canada	**3,783**	3,094	**18,303**	17,766
Australia	**3,877**	3,591	**1,105**	1,202
Canpotex (Note 28)	**5,414**	2,398	**-**	-
Trinidad	**15**	258	**688**	638
Brazil	**1,136**	567	**851**	391
Other	**3,570** [3]	1,795 [3]	**521**	340
	37,884	27,712	**37,439**	35,432

1 Sales by location of customers.
2 Excludes financial instruments (other than equity-accounted investees), deferred tax assets and post-employment benefit assets.
3 Other third-party sales primarily relate to Argentina of $ 666 (2021 – $ 526), Europe of $ 856 (2021 – $ 236) and Others of $ 2,048 (2021 – $ 1,033).

Canpotex sales by market (%)	**2022**	2021
Latin America	**34**	38
Other Asian markets [1]	**34**	35
China	**14**	11
Other markets	**10**	10
India	**8**	6

1 All Asian markets except China and India.

NOTE 4 NATURE OF EXPENSES

	2022	2021
Purchased and produced raw materials and product for resale [1]	**18,747**	14,711
Depreciation and amortization	**2,012**	1,951
Employee costs [2]	**2,968**	3,007
Freight	**1,094**	1,023
(Reversal of) impairment of assets (Note 13)	**(780)**	33
Provincial mining taxes [3]	**1,149**	466
Integration and restructuring related costs	**46**	43
Contract services	**745**	590
Lease expense [4]	**93**	81
Fleet fuel, repairs and maintenance	**359**	302
Gain on disposal of investment	**(19)**	-
COVID-19 related expenses	**8**	45
Cloud computing transition adjustment	**-**	36
Other	**653**	643
Total cost of goods sold and expenses	**27,075**	22,931

1 Significant expenses include supplies, energy, fuel, purchases of raw material (natural gas – feedstock, sulfur, ammonia and reagents) and product for resale (crop nutrients and protection products, and seed).
2 Includes salaries and wages, employee benefits, and share-based compensation.
3 Includes Saskatchewan potash production tax, and Saskatchewan resource surcharge of $ 909 and $ 240 (2021 – $ 341 and $ 125), respectively, as required under Saskatchewan provincial legislation.
4 Includes lease expense relating to short-term leases, leases of low value and variable lease payments.

In millions of US dollars unless otherwise noted

NOTE 5 SHARE-BASED COMPENSATION

Plans	**Eligibility**	**Granted**	**Vesting Period**	**Maximum Term**	**Settlement**
Stock Options	Officers and eligible employees	Annually	25 percent per year over four years	10 years	Shares [1]
Performance Share Units ("PSUs")	Officers and eligible employees	Annually	On third anniversary of grant date based on total shareholder return over a three-year performance cycle, compared to average total shareholder return of a peer group of companies over the same period	Not applicable	Cash
Restricted Share Units ("RSUs")	Officers and eligible employees	Annually	On third anniversary of grant date and not subject to performance conditions	Not applicable	Cash
Deferred Share Units ("DSUs")	Non-executive directors	At the discretion of the Board of Directors	Fully vest upon grant	Not applicable	Cash [2]
Stock Appreciation Rights ("SARs") / Tandem Stock Appreciation Rights ("TSARs") [3]	Awards no longer granted; legacy awards only	Awards no longer granted; legacy awards only	25 percent per year over four years	10 years	Cash

1 Stock options may also be settled by cash settlement or, if approved by the Company, by a broker-assisted "cashless exercise" arrangement or a "net exercise" arrangement.
2 Directors can redeem their DSUs for cash only when they leave the Board of Directors for an amount equal to the market value of the common shares at the time of redemption or as mandated by the Nutrien DSU Plan.
3 Holders of TSARs have the ability to choose between (a) receiving in cash the price of our shares on the date of exercise in excess of the exercise price of the right or (b) receiving common shares by paying the exercise price of the right. Our past experience and future expectation is that substantially all TSAR holders will elect to choose the f irst option.

The weighted average fair value of stock options granted was estimated as of the date of the grant using the Black-Scholes-Merton option-pricing model. The weighted average grant date fair value of stock options per unit granted in 2022 was $ 20.49 (2021 – $ 11.77). The weighted average assumptions by year of grant that impacted current year results are as follows:

		Year of Grant	
Assumptions	**Based On**	**2022**	2021
Exercise price per option	Quoted market closing price of common shares on the last trading day immediately preceding the date of the grant	**77.50**	56.64
Expected annual dividend yield (%)	Annualized dividend rate as of the date of the grant	**2.45**	3.22
Expected volatility (%)	Historical volatility of Nutrien's shares over a period commensurate with the expected life of the grant	**30**	29
Risk-free interest rate (%)	Zero-coupon government issues implied yield available on equivalent remaining term at the time of the grant	**2.00**	1.11
Average expected life of options (years)	Historical experience	**8.5**	8.5

In millions of US dollars unless otherwise noted

	Number of Shares Subject to Option		Weighted Average Exercise Price	
	2022	2021	**2022**	2021
Outstanding – beginning of year	**6,744,720**	10,997,892	**54.87**	53.59
Granted	**375,483**	1,518,490	**77.50**	56.62
Exercised	**(3,066,148)**	(4,336,682)	**54.37**	45.24
Forfeited or cancelled	**(66,219)**	(375,005)	**65.92**	50.34
Expired	**(102,358)**	(1,059,975)	**99.53**	85.66
Outstanding – end of year	**3,885,478**	6,744,720	**55.48**	54.87

The aggregate grant date fair value of all stock options granted in 2022 was $8 . The average share price in 2022 was $86.22 per share.

The following table summarizes information about our stock options outstanding as at December 31, 2022, with expiry dates ranging from May 2023 to February 2032:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	**Number**	**Weighted Average Remaining Life in Years**	**Weighted Average Exercise Price**	**Number**	**Weighted Average Exercise Price**
$37.84 to $41.31	154,255	3	39.08	154,255	39.08
$41.32 to $43.36	1,084,241	5	42.23	194,063	42.23
$43.37 to $52.75	473,441	4	46.15	473,441	46.15
$52.76 to $55.08	487,590	4	53.54	234,175	53.54
$55.09 to $64.43	964,532	7	56.62	82,592	56.62
$64.44 to $109.45	721,419	5	84.78	375,420	91.49
	3,885,478	**5**	**55.48**	**1,513,946**	**57.89**

	Units Granted in 2022	**Units Outstanding as at December 31, 2022**	Compensation Expense	
			2022	2021
Stock options	**375,483**	**3,885,478**	**11**	14
PSUs	**508,528**	**2,011,838**	**13**	104
RSUs	**497,766**	**1,483,868**	**33**	47
DSUs	**23,721**	**392,550**	**2**	12
SARs/TSARs	**-**	**228,172**	**4**	21
			63	198

In millions of US dollars unless otherwise noted

NOTE 6 OTHER EXPENSES (INCOME)

	2022	2021
Integration and restructuring related costs	**46**	43
Foreign exchange loss, net of related derivatives	**31**	42
Earnings of equity-accounted investees	**(247)**	(89)
Bad debt expense	**12**	26
COVID-19 related expenses	**8**	45
Gain on disposal of investment	**(19)**	-
Project feasibility costs	**79**	50
Customer prepayment costs	**42**	45
Legal expenses	**21**	6
Consulting expenses	**29**	4
Employee special recognition award	**61**	**-**
Cloud computing transition adjustment	**-**	36
Other expenses	**141**	104
	204	312

In 2021, the IFRS Interpretations Committee published a final agenda decision that clarified how to recognize certain configuration and customization expenditures related to cloud computing with retrospective application. Costs that do not meet the capitalization criteria should be expensed as incurred. In 2021, we changed our accounting policy to align with the interpretation and previously capitalized costs that no longer qualified for capitalization were expensed as a transition adjustment since they were not material.

NOTE 7 FINANCE COSTS

	2022	2021
Interest expense		
Short-term debt	**153**	44
Long-term debt	**333**	415
Lease liabilities	**35**	33
Total interest expense	**521**	492
Loss on early extinguishment of debt	**-**	142
Unwinding of discount on asset retirement obligations (Note 22)	**29**	(9)
Interest on net defined benefit pension and other post-retirement plan obligations (Note 21)	**8**	9
Borrowing costs capitalized to property, plant and equipment	**(37)**	(29)
Interest income	**(25)**	(8)
Other finance costs	**67**	16
	563	613

Borrowing costs capitalized to property, plant and equipment in 2022 were calculated by applying an average capitalization rate of 4.1 percent (2021 – 4.1 percent) to expenditures on qualifying assets.

In millions of US dollars unless otherwise noted

NOTE 8 INCOME TAXES

	2022	2021
Current income tax		
Tax expense for current year	**2,314**	1,033
Adjustments in respect of prior years	**63**	(13)
Total current income tax expense	**2,377**	1,020
Deferred income tax		
Origination and reversal of temporary differences	**215**	(30)
Adjustments in respect of prior years	**(41)**	6
Change in recognition of tax losses and deductible temporary differences	**8**	(6)
Impact of tax rate changes	**-**	(1)
Total deferred income tax expense (recovery)	**182**	(31)
Income tax expense included in net earnings	**2,559**	989

We operate in a specialized industry and in several tax jurisdictions; as a result, our earnings are subject to various rates of taxation.

The provision for income taxes differs from the amount that would have resulted from applying the Canadian statutory income tax rates to earnings before income taxes as follows:

	2022	2021
Earnings before income taxes		
Canada	**5,707**	1,884
United States	**3,447**	1,319
Trinidad	**487**	256
Australia	**263**	204
Other	**342**	505
	10,246	4,168
Canadian federal and provincial statutory income tax rate (%)	**27**	27
Income tax at statutory rates	**2,766**	1,125
Adjusted for the effect of:		
Impact of foreign tax rates	**(132)**	(98)
Non-taxable income	**(98)**	(18)
Production-related deductions	**(51)**	(24)
Withholding taxes	**18**	3
Non-deductible expenses	**17**	12
Other	**39**	(11)
Income tax expense included in net earnings	**2,559**	989

In millions of US dollars unless otherwise noted

Deferred Income Taxes

	Deferred Income Tax (Assets) Liabilities		Deferred Income Tax (Recovery) Expense Recognized in Net Earnings	
	2022	2021	**2022**	2021
Deferred income tax assets				
Tax loss and other carryforwards	**(396)**	(297)	**(93)**	75
Asset retirement obligations and accrued environmental costs	**(319)**	(354)	**35**	21
Lease liabilities	**(298)**	(151)	**(151)**	47
Inventories	**(155)**	(126)	**(30)**	(90)
Pension and other post-retirement benefit liabilities	**(151)**	(178)	**(1)**	(45)
Long-term debt	**(117)**	(140)	**21**	(39)
Payables and accrued charges	**(98)**	(14)	**(84)**	(14)
Receivables	**(48)**	(44)	**(4)**	6
Other assets	**(1)**	(1)	**-**	11
Deferred income tax liabilities				
Property, plant and equipment	**4,305**	3,765	**545**	132
Goodwill and intangible assets	**347**	404	**(53)**	(64)
Payables and accrued charges	**-**	-	**-**	(72)
Other liabilities	**30**	39	**(3)**	1
	3,099	2,903	**182**	(31)

Reconciliation of net deferred income tax liabilities:

	2022	2021
Balance – beginning of year	**2,903**	2,907
Income tax expense (recovery) recognized in net earnings	**182**	(31)
Income tax charge recognized in other comprehensive income ("OCI")	**7**	30
Other	**7**	(3)
Balance – end of year	**3,099**	2,903

Amounts and expiry dates of unused tax losses and unused tax credits as at December 31, 2022, were:

	Amount	Expiry Date
Unused federal operating losses	1,508	2026 – Indefinite
Unused federal capital losses	562	Indefinite

The unused tax losses and credits with no expiry dates can be carried forward indefinitely.

As at December 31, 2022, we had $778 of federal tax losses for which we did not recognize deferred tax assets.

We have determined that it is probable that all recognized deferred tax assets will be realized through a combination of future reversals of temporary differences and taxable income.

We did not recognize deferred tax liabilities related to temporary differences associated with investments in subsidiaries and equity-accounted investees amounting to $13,060 as at December 31, 2022 (2021 – $ 10,241).

In millions of US dollars unless otherwise noted

NOTE 9 NET EARNINGS PER SHARE

	2022	2021
Weighted average number of common shares	**538,475,000**	569,664,000
Dilutive effect of stock options	**1,535,000**	1,625,000
Weighted average number of diluted common shares	**540,010,000**	571,289,000

Options excluded from the calculation of diluted net earnings per share due to the option exercise prices being greater than the average market price of common shares were as follows:

	2022	2021
Number of options excluded	**567,409**	2,393,822
Performance option plan years fully excluded [1]	**2012 – 2014**	2012 – 2015
Stock option plan years fully excluded	**2022**	2021

1 Previously granted under a legacy long-term incentive plan.

NOTE 10 FINANCIAL INSTRUMENTS AND RELATED RISK MANAGEMENT

Our ELT, along with the Board of Directors (including Board of Directors committees), is responsible for monitoring our risk exposures and managing our policies to address these risks. Our strategic and risk management processes are integrated to ensure we understand the benefit from the relationship between strategy, risk and value creation. Outlined below are our risk management strategies we have developed to mitigate the financial market risks that we are exposed to.

Credit Risks	**Risk Management Strategies**

Receivables from customers	• establish credit approval policies and procedures for new and existing customers
	• extend credit to qualified customers through
	  • review of credit agency reports, financial statements and/or credit references, as available
	  • review of existing customer accounts every 12 to 24 months based on the credit limit amounts
	  • evaluation of customer and country risk for international customers
	• establish credit period:
	  • 15 and 30 days for wholesale fertilizer customers
	  • 30 days for industrial and feed customers
	  • 30 to 360 days for Retail customers, including Nutrien Financial
	  • up to 180 days for select export sales customers, including Canpotex
	• transact on a cash basis with certain customers who may not meet specified benchmark creditworthiness or cannot provide other evidence of ability to pay
	• execute agency arrangements with financial institutions or other partners with which we have only a limited recourse involvement
	• sell receivables to financial institutions which substantially transfer the risks and rewards
	• set eligibility requirements for Nutrien Financial to limit the risk of the receivables
	• may require security over certain crop or livestock inventories
	• set up provision using the lifetime expected credit loss method considering all possible default events over the expected life of a financial instrument. Receivables are grouped based on days past due and/or customer credit risk profile. Estimated losses on receivables are based on known troubled accounts and historical experience of losses incurred. Receivables are considered to be in default and are written off against the allowance when it is probable that all remaining contractual payments due will not be collected in accordance with the terms of the agreement.

Cash and cash equivalents and other receivables	• require acceptable minimum counterparty credit ratings • limit counterparty or credit exposure • select counterparties with investment-grade quality

In millions of US dollars unless otherwise noted

Aging of receivables (%) as at December 31:

	2022			2021		
	Retail (Nutrien Financial)	**Retail (Excluding Nutrien Financial)**	**Potash, Nitrogen and Phosphate**	Retail (Nutrien Financial)[1]	Retail (Excluding Nutrien Financial)	Potash, Nitrogen and Phosphate
Current	**83**	**84**	**97**	82	82	96
30 days or less past due	**10**	**9**	**3**	10	12	4
31 – 90 days past due	**3**	**4**	**-**	4	3	-
Greater than 90 days past due	**4**	**3**	**-**	4	3	-
	100	**100**	**100**	100	100	100

1 Certain immaterial 2021 figures have been reclassified.

Maximum exposure to credit risk as at December 31:

	2022	2021
Cash and cash equivalents	**901**	499
Receivables (excluding income tax receivable)	**6,050**	5,143
	6,951	5,642

Liquidity Risk	**Risk Management Strategies**

Access to cash	• establish an external borrowing policy to maintain sufficient liquid financial resources to fund our operations and meet our commitments and obligations in a cost-effective manner • maintain an optimal capital structure • maintain investment-grade credit ratings that provide ease of access to the debt capital and commercial paper markets • maintain sufficient short-term credit availability • uphold long-term relationships with a sufficient number of high-quality and diverse lenders Refer to Note 17 for our available credit facilities.

The following maturity analysis of our financial liabilities and gross settled derivative contracts (for which the cash flows are settled simultaneously) is based on the expected undiscounted contractual cash flows from the date of the consolidated balance sheets to the contractual maturity date.

2022	Carrying Amount of Liability as at December 31	Contractual Cash Flows	Within 1 Year	1 to 3 Years	3 to 5 Years	Over 5 Years
Short-term debt [1]	2,142	2,142	2,142	-	-	-
Payables and accrued charges [2]	9,683	9,683	9,683	-	-	-
Long-term debt, including current portion [1]	8,582	13,420	932	2,292	1,249	8,947
Lease liabilities, including current portion [1]	1,204	1,374	337	427	199	411
Derivatives	35	35	35	-	-	-
	21,646	**26,654**	**13,129**	**2,719**	**1,448**	**9,358**

1 Contractual cash flows include contractual interest payments related to debt obligations and lease liabilities. Interest rates on debt with variable rates are based on the prevailing rates as at December 31, 2022.
2 Excludes non-financial liabilities and includes payables of approximately $ 1.9 billion related to our prepaid inventory to secure product discounts. We consider these payables to be part of our working capital. For these payables, we participated in arrangements where the vendors sold their right to receive payment to financial institutions without extending the original payment terms. These payables were paid in January 2023.

Foreign Exchange Risk	Risk Management Strategy
Foreign currency denominated accounts	• execute foreign currency derivative contracts within certain prescribed limits for both forecast operating and capital expenditures to manage the earnings impact, including those related to our equity-accounted investees, that could occur from a reasonably possible strengthening or weakening of the US dollar

The fair value of our net foreign exchange currency derivative (liabilities) assets at December 31, 2022 was $(18) (2021 – $ 1). The following table presents the significant foreign currency derivatives that existed at December 31:

	2022			2021		
Sell/buy	**Notional**	**Maturities**	**Average contract rate**	Notional	Maturities	Average contract rate
Derivatives not designated as hedges						
Forwards						
USD/Canadian dollars ("CAD")	**473**	**2023**	**1.3584**	522	2022	1.2799
USD/Australian dollars ("AUD")	**13**	**2023**	**1.5929**	19	2022	1.3841
AUD/USD	**133**	**2023**	**1.5010**	113	2022	1.3860
Brazilian real/USD	**374**	**2023**	**5.6892**	135	2022	5.4519
Options						
USD/CAD – buy USD puts	**-**	**-**	**-**	20	2022	1.2500
USD/CAD – sell USD calls	**-**	**-**	**-**	20	2022	1.2600
AUD/USD – buy USD calls	**-**	**-**	**-**	71	2022	1.4060
AUD/USD – sell USD puts	**-**	**-**	**-**	72	2022	1.3797
Derivatives designated as hedges						
Forwards						
USD/CAD	**487**	**2023**	**1.3255**	343	2022	1.2547

Market Risks	Type	Risk Management Strategies	
Interest rate	Short-term and long-term debt	• use a portfolio of fixed and floating rate instruments • align current and long-term assets with demand and fixed-term debt • monitor the effects of market changes in interest rates • use interest rate swaps, if desired	We do not believe we have material exposure to interest or price risk on our financial instruments as at December 31, 2022 and 2021.
Price	Natural gas derivative instruments	• diversify our forecast gas volume requirements, including a portion of annual requirements purchased at spot market prices, a portion at fixed prices (up to 10 years) and a portion indexed to the market price of ammonia • acquire a reliable supply of natural gas feedstock and fuel on a location-adjusted, cost-competitive basis	
Price	Investment at fair value	• ensure the security of principal amounts invested • provide for an adequate degree of liquidity • achieve a satisfactory return	

Fair Value

Financial instruments included in the consolidated balance sheets are measured either at fair value or amortized cost. The following tables explain the valuation methods used to determine the fair value of each financial instrument and its associated level in the fair value hierarchy.

Financial Instruments at Fair Value	Fair Value Method
Cash and cash equivalents	Carrying amount (approximation to fair value assumed due to short-term nature)
Equity securities	Closing bid price of the common shares as at the balance sheet date
Debt securities	Closing bid price of the debt or other instruments with similar terms and credit risk (Level 2) as at the balance sheet date
Foreign currency derivatives not traded in an active market	Quoted forward exchange rates (Level 2) as at the balance sheet date

Financial Instruments at Fair Value	Fair Value Method
Foreign exchange forward contracts, swaps and options, and natural gas swaps not traded in an active market	Based on a discounted cash flow model. Inputs included contractual cash flows based on prices for natural gas futures contracts, fixed prices and notional volumes specified by the swap contracts, the time value of money, liquidity risk, our own credit risk (related to instruments in a liability position) and counterparty credit risk (related to instruments in an asset position). Futures contract prices used as inputs in the model were supported by prices quoted in an active market and therefore categorized in Level 2.

Financial Instruments at Amortized Cost	Fair Value Method
Receivables, short-term debt, and payables and accrued charges	Carrying amount (approximation to fair value assumed due to short-term nature)
Long-term debt	Quoted market prices (Level 1 or 2 depending on the market liquidity of the debt)
Other long-term debt instruments	Carrying amount

The following table presents our fair value hierarchy for financial instruments carried at fair value on a recurring basis or measured at amortized cost and require fair value disclosure:

	2022				2021			
Financial assets (liabilities) measured at	**Carrying Amount**	**Level 1**	**Level 2**	**Level 3**	Carrying Amount	Level 1	Level 2	Level 3
Fair value on a recurring basis [1]								
Cash and cash equivalents	**901**	**-**	**901**	**-**	499	-	499	-
Derivative instrument assets	**7**	**-**	**7**	**-**	19	-	19	-
Other current financial assets – marketable securities [2]	**148**	**19**	**129**	**-**	134	19	115	-
Investments at fair value through other comprehensive income ("FVTOCI") (Note 15)	**200**	**190**	**-**	**10**	244	234	-	10
Derivative instrument liabilities	**(35)**	**-**	**(35)**	**-**	(20)	-	(20)	-
Amortized cost								
Current portion of long-term debt								
Notes and debentures	**(500)**	**(493)**	**-**	**-**	(500)	(506)	-	-
Fixed and floating rate debt	**(42)**	**-**	**(42)**	**-**	(45)	-	(45)	-
Long-term debt								
Notes and debentures	**(7,910)**	**(3,581)**	**(3,656)**	**-**	(7,424)	(4,021)	(4,709)	-
Fixed and floating rate debt	**(130)**	**-**	**(130)**	**-**	(97)	-	(97)	-

1 During 2022 and 2021, there were no transfers between levels for financial instruments measured at fair value on a recurring basis. Our policy is to recognize transfers at the end of the reporting period.
2 Marketable securities consist of equity and fixed income securities.

In millions of US dollars unless otherwise noted

NOTE 11 RECEIVABLES

	Segment	2022	2021
Receivables from customers			
Third parties	Retail (Nutrien Financial) [1]	**2,705**	2,178
	Retail	**1,293**	977
	Potash, Nitrogen, Phosphate	**827**	804
Related party – Canpotex	Potash (Note 28)	**866**	828
Less allowance for expected credit losses of receivables from customers		**(95)**	(82)
		5,596	4,705
Rebates		**172**	222
Income taxes (Note 8)		**144**	223
Other receivables		**282**	216
		6,194	5,366

1 Includes $ 2,260 of very low risk of default and $ 445 of low risk of default (2021 – $ 1,792 of very low risk of default and $ 386 of low risk of default).

Qualifying receivables from customers financed by Nutrien Financial represents high-quality receivables from customers that have been rated very low to low risk of default among Retail's receivables from customers.

Customer credit with a financial institution of $445 at December 31, 2022, related to our agency agreement, is not recognized in our consolidated balance sheets. Through the agency agreement, we only have a limited recourse involvement to the extent of an indemnification of the financial institution to a maximum of 5 percent (2021 – 5 percent) of the qualified customer loans. Historical indemnification losses on this arrangement have been negligible, and the average aging of the customer loans with the financial institution is current.

NOTE 12 INVENTORIES

	2022	2021
Product purchased for resale	**5,885**	4,889
Finished products	**612**	410
Intermediate products	**184**	206
Raw materials	**425**	337
Materials and supplies	**526**	486
	7,632	6,328

By Segment	**2022**	2021
Retail	**6,035**	5,018
Potash	**398**	312
Nitrogen	**706**	553
Phosphate	**493**	445
	7,632	6,328

Inventories expensed to cost of goods sold during the year were $21,371 (2021 – $ 17,243).

NOTE 13 PROPERTY, PLANT AND EQUIPMENT

	Land and Improvements	Buildings and Improvements	Machinery and Equipment	Mine Development Costs	Assets Under Construction	Total
Useful life range (years)	**1 – 85**	**1 – 70**	**1 – 80**	**1 – 60**	**n/a**	
Carrying amount – December 31, 2021	**1,073**	**6,305**	**10,221**	**853**	**1,564**	**20,016**
Acquisitions (Note 25)	**12**	**40**	**23**	**-**	**65**	**140**
Additions	**17**	**9**	**25**	**-**	**2,202**	**2,253**
Additions – Right-of-use ("ROU") assets	**-**	**51**	**230**	**-**	**-**	**281**
Disposals	**(9)**	**(13)**	**(24)**	**-**	**-**	**(46)**
Transfers	**35**	**163**	**1,281**	**170**	**(1,649)**	**-**
Foreign currency translation and other	**5**	**2**	**55**	**30**	**(90)**	**2**
Depreciation	**(35)**	**(185)**	**(1,006)**	**(94)**	**-**	**(1,320)**
Depreciation – ROU assets	**(2)**	**(58)**	**(279)**	**-**	**-**	**(339)**
Reversal of impairment	**105**	**26**	**491**	**149**	**9**	**780**
Carrying amount – December 31, 2022	**1,201**	**6,340**	**11,017**	**1,108**	**2,101**	**21,767**
Balance – December 31, 2022 is composed of:						
Cost	**1,605**	**8,795**	**22,023**	**2,699**	**2,101**	**37,223**
Accumulated depreciation and impairments	**(404)**	**(2,455)**	**(11,006)**	**(1,591)**	**-**	**(15,456)**
Carrying amount – December 31, 2022	**1,201**	**6,340**	**11,017**	**1,108**	**2,101**	**21,767**
Balance – December 31, 2022 is composed of:						
Owned property, plant and equipment	**1,173**	**5,956**	**10,267**	**1,108**	**2,101**	**20,605**
ROU assets	**28**	**384**	**750**	**-**	**-**	**1,162**
Carrying amount – December 31, 2022	**1,201**	**6,340**	**11,017**	**1,108**	**2,101**	**21,767**
Carrying amount – December 31, 2020	1,090	6,305	10,336	723	1,206	19,660
Acquisitions (Note 25)	2	3	5	-	-	10
Additions	7	18	97	-	1,646	1,768
Additions – ROU assets	-	140	238	-	-	378
Disposals	(29)	(21)	(35)	-	(1)	(86)
Transfers	38	142	874	145	(1,199)	-
Foreign currency translation and other	2	(34)	(41)	55	(83)	(101)
Depreciation	(35)	(191)	(991)	(70)	-	(1,287)
Depreciation – ROU assets	(2)	(57)	(248)	-	-	(307)
Impairment	-	-	(14)	-	(5)	(19)
Carrying amount – December 31, 2021	1,073	6,305	10,221	853	1,564	20,016
Balance – December 31, 2021 is composed of:						
Cost	1,547	8,584	20,627	2,496	1,564	34,818
Accumulated depreciation and impairments	(474)	(2,279)	(10,406)	(1,643)	-	(14,802)
Carrying amount – December 31, 2021	1,073	6,305	10,221	853	1,564	20,016
Balance – December 31, 2021 is composed of:						
Owned property, plant and equipment	1,044	5,930	9,517	853	1,564	18,908
ROU assets	29	375	704	-	-	1,108
Carrying amount – December 31, 2021	1,073	6,305	10,221	853	1,564	20,016

Depreciation of property, plant and equipment was included in the following:

	2022	2021
Freight, transportation and distribution	**148**	133
Cost of goods sold	**1,024**	1,052
Selling expenses	**424**	416
General and administrative expenses	**42**	36
Depreciation recorded in earnings	**1,638**	1,637
Depreciation recorded in inventory	**151**	112

Impairment Reversals

In 2022, we revised our pricing forecasts to reflect the current macroeconomic environment, which triggered an impairment review at our Phosphate cash-generating units (“CGUs”), Aurora and White Springs. In 2020, we recorded a total impairment of assets relating to property plant and equipment at Aurora of $ 545 . In 2017 and 2020, we recorded total impairment of assets at White Springs relating to property, plant and equipment of $ 250 and $ 215 , respectively.

Due to increases in our forecasts, the recoverable amounts of both CGUs were above their carrying amountsAs a result, we fully reversed the previously recorded impairments, net of depreciation that would have been incurred had no impairment been recognized, in the statement of earnings relating to property, plant and equipment .

Cash-generating units	**Aurora**	**White Springs**
Segment	Phosphate	
Impairment reversal indicator	Higher forecasted global prices	
Impairment reversal date	June 30, 2022	September 30, 2022
Valuation methodology	Fair value less costs of disposal ("FVLCD"), a Level 3 measurement	Value in use ("VIU")
Valuation technique	Five-year DCF [1]	DCF [2]
Recoverable amount	2,900	770
Carrying amount	1,200	425
Pre-tax impairment reversal (net of depreciation)	450	330

1 Five-year discounted cash flow plus a terminal year to end of mine life.
2 Discounted cash flow to end of mine life.

The recoverable amount estimate is most sensitive to the following key assumptions: our internal sales and input price forecasts, which consider projections from independent third-party data sources, discount rate and expected mine life. We used key assumptions that were based on historical data and estimates of future results from internal sources, external price benchmarks, and mineral reserve technical reports, as well as industry and market trends.

Cash-generating units	Aurora	White Springs
Key assumptions [1]		
End of mine life (proven and probable reserves) (year)	2050	2030
Long-term growth rate (%)	2.0	n/a
Pre-tax discount rate (%)	n/a	15.2 [2]
Post-tax discount rate (%)	10.4	12.0 [2]
Forecasted EBITDA [3]	3,090	980

1 At impairment reversal date.
2 Discount rate used in the previous measurement was 12.0 % (pre-tax – 15.2 %).
3 First five years of the forecast period.

In millions of US dollars unless otherwise noted

NOTE 14 GOODWILL AND INTANGIBLE ASSETS

		Intangible Assets				
	Goodwill	Customer Relationships [2]	Technology	Trade Names	Other	Total
Useful life range (years)	n/a	3 – 15	2 – 20	1 – 20 [3]	1 – 30	
Carrying amount – December 31, 2021	12,220	1,350	595	80	315	2,340
Acquisitions (Note 25)	200	59	-	22	23	104
Additions – internally developed	-	-	216	-	6	222
Foreign currency translation and other	(52)	(13)	14	1	(1)	1
Disposals	-	(1)	(1)	-	-	(2)
Amortization [1]	-	(166)	(122)	(8)	(72)	(368)
Carrying amount – December 31, 2022	12,368	1,229	702	95	271	2,297
Balance – December 31, 2022 is composed of:						
Cost	12,375	2,001	1,028	150	649	3,828
Accumulated amortization and impairment	(7)	(772)	(326)	(55)	(378)	(1,531)
Carrying amount – December 31, 2022	12,368	1,229	702	95	271	2,297
Carrying amount – December 31, 2020	12,198	1,515	437	75	361	2,388
Acquisitions (Note 25)	77	16	-	-	-	16
Additions – internally developed	-	-	118	19	9	146
Foreign currency translation and other	(49)	(15)	143	(3)	13	138
Disposals	(6)	-	-	-	-	-
Cloud computing transition adjustment (Note 6)	-	-	(34)	-	-	(34)
Amortization [1]	-	(166)	(69)	(11)	(68)	(314)
Carrying amount – December 31, 2021	12,220	1,350	595	80	315	2,340
Balance – December 31, 2021 is composed of:						
Cost	12,227	1,961	808	127	619	3,515
Accumulated amortization and impairment	(7)	(611)	(213)	(47)	(304)	(1,175)
Carrying amount – December 31, 2021	12,220	1,350	595	80	315	2,340

1 Amortization of $ 302 was included in selling expenses during the year ended December 31, 2022 (2021 – $ 260).
2 The average remaining amortization period of customer relationships as at December 31, 2022, was approximately 4 years.
3 Certain trade names have indefinite useful lives as there are no regulatory, legal, contractual, cooperative, economic or other factors that limit their useful lives.

Goodwill Impairment Testing

Goodwill by cash-generating unit or group of cash-generating units	2022	2021
Retail – North America	6,898	6,898
Retail – International	927	779
Potash	154	154
Nitrogen	4,389	4,389
	12,368	12,220

We performed our annual impairment test on goodwill and did not identify any impairment.

In 2022, North American central banks increased their benchmark borrowing rates, which 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.

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 . A decrease in forecasted EBITDA and cash flows or a reduction in the terminal growth rate could result in impairment in the future.

In millions of US dollars unless otherwise noted

Retail – North America – Key Assumptions	As at September 30, 2022	As at June 30, 2022
Terminal growth rate (%)	2.5	2.5
Forecasted EBITDA over forecast period (billions)	7.6	7.5
Discount rate (%)	8.5	8.0

In testing for impairment of goodwill, we calculate the recoverable amount for a CGU or groups of CGUs containing goodwill. We used the FVLCD methodology based on after-tax discounted cash flows (five-year projections plus a terminal value) and incorporated assumptions an independent market participant would apply, including considerations related to climate-change initiatives. We adjusted discount rates for each CGU or group of CGUs for the risk associated with achieving our forecasts and for the country risk premium in which we expect to generate cash flows. FVLCD is a Level 3 measurement . We use our market capitalization and comparative market multiples to ensure discounted cash flow results are reasonable.

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.

The remaining CGUs were tested as part of our annual impairment test and the following table indicates the key assumptions used:

	Terminal Growth Rate (%)		Discount Rate (%)	
	2022	2021	**2022**	2021
Retail – International [1]	**2.0 – 6.0**	2.0 – 6.2	**8.9 – 16.0**	8.0 – 15.5
Potash	**2.5**	2.5	**8.3**	7.7
Nitrogen	**2.0**	2.0	**9.3**	7.8

1 The discount rates reflect the country risk premium and size for our international groups of CGUs.

NOTE 15 INVESTMENTS

Name	Principal Activity	Principal Place of Business and Incorporation	Proportion of Ownership Interest and Voting Rights Held (%)		Carrying Amount	
			2022	2021	**2022**	2021
Equity-accounted investees						
Profertil	Nitrogen producer	Argentina	**50**	50	**453**	277
Canpotex	Marketing and logistics of potash	Canada	**50**	50	**-**	-
Other associates and joint ventures					**190**	182
Total equity-accounted investees					**643**	459
Investments at FVTOCI						
Sinofert	Fertilizer supplier and distributor	China/Bermuda	**22**	22	**190**	234
Other					**10**	10
Total investments at FVTOCI					**200**	244
Total investments					**843**	703

We continuously assess our ability to exercise significant influence or joint control over our investments. Our 22 percent ownership in Sinofert does not constitute significant influence as we do not have any representation on the board of directors of Sinofert. We elected to account for our investment in Sinofert as FVTOCI as it is held for strategic purposes.

Future conditions related to Profertil may be affected by political, economic and social instability. We are exposed to foreign exchange risk related to fluctuations in the Argentine peso against the US dollar and currency controls, which may restrict our ability to obtain dividends from Profertil.

In millions of US dollars unless otherwise noted

NOTE 16 OTHER ASSETS

	2022	2021
Deferred income tax assets (Note 8)	**448**	262
Ammonia catalysts – net of accumulated amortization of $94 (2021 – $85)	**104**	88
Long-term income tax receivable (Note 8)	**54**	166
Accrued pension benefit assets (Note 21)	**157**	170
Other	**206**	143
	969	829

NOTE 17 SHORT-TERM DEBT

	Rate of Interest (%)	**2022**	2021
Credit facilities			
Unsecured revolving term credit facility	**5.3**	**500**	-
Other unsecured credit facilities			
South America	**1.3 – 76.0**	**453**	74
Australia	**3.9**	**190**	211
Other	**2.1**	**9**	28
Commercial paper [1]	**4.8 – 5.2**	**783**	1,170
Other short-term debt		**207**	77
		2,142	1,560

1 We use our $ 4,500 commercial paper program for our short-term cash requirements. The amount available under the commercial paper program is limited to the availability of backup funds under the $ 4,500 unsecured revolving term credit facility and excess cash invested in highly liquid securities.

Our credit facilities are renegotiated periodically. Our total credit facility limits as at December 31 were:

Credit facilities	**2022**	2021
Unsecured revolving term facility [1]	**4,500**	4,500
Unsecured revolving term facility [2]	**2,000**	-
Uncommitted revolving demand facility	**1,000**	500
Other credit facilities [3]	**1,180**	720

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 Total facility limit amounts include some facilities with maturities in excess of one year.

Principal covenants and events of default under the unsecured revolving term credit facilities include a debt to capital ratio (refer to Note 24) and other customary events of default and covenant provisions. Non-compliance with such covenants could result in accelerated repayment and/or termination of the credit facility. We were in compliance with all covenants as at December 31, 2022.

In 2022, to help temporarily manage normal seasonal working capital swings, we entered into non-revolving term credit facilities with an aggregate principal amount of $2,000 , which had the same principal covenants and events of default as our existing revolving term credit facilities. The $ 2,000 non-revolving term credit facilities were fully repaid and subsequently terminated after the new $ 2,000 unsecured revolving term credit facility was entered into, as described above.

In millions of US dollars unless otherwise noted

NOTE 18 LONG-TERM DEBT

	Rate of Interest (%)	Maturity	2022	2021
Notes [1]				
	3.150	October 1, 2022	**-**	500
	1.900	May 13, 2023	**500**	500
	5.900	November 7, 2024	**500**	-
	3.000	April 1, 2025	**500**	500
	5.950	November 7, 2025	**500**	-
	4.000	December 15, 2026	**500**	500
	4.200	April 1, 2029	**750**	750
	2.950	May 13, 2030	**500**	500
	4.125	March 15, 2035	**450**	450
	7.125	May 23, 2036	**212**	212
	5.875	December 1, 2036	**500**	500
	5.625	December 1, 2040	**500**	500
	6.125	January 15, 2041	**401**	401
	4.900	June 1, 2043	**500**	500
	5.250	January 15, 2045	**489**	489
	5.000	April 1, 2049	**750**	750
	3.950	May 13, 2050	**500**	500
Debentures [1]	7.800	February 1, 2027	**120**	120
	Various			
Other credit facilities [2]		Various	**165**	141
Other long-term debt	n/a	Various	**7**	-
			8,344	7,813
Add net unamortized fair value adjustments			**310**	325
Less net unamortized debt issue costs			**(72)**	(72)
			8,582	8,066
Less current maturities			**(542)**	(545)
			8,040	7,521

1 Each series of notes and debentures is unsecured and has no sinking fund requirements prior to maturity. Each series is redeemable and has various provisions that allow redemption prior to maturity, at our option, at specified prices.
2 Other credit facilities are unsecured and consist of South America facilities with debt of $ 162 (2021 – $ 137) and interest rates ranging from 1.9 percent to 17.4 percent and other facilities with debt of $ 3 (2021 – $ 4) and an interest rate of 4.0 percent.

We are subject to certain customary covenants including limitation on liens, merger and change of control covenants, and customary events of default. As calculated in Note 24, we were in compliance with these covenants as at December 31, 2022.

The following is a summary of changes in liabilities arising from financing activities:

	Short-Term Debt	Long-Term Debt	Lease Liabilities	Total
Balance – December 31, 2021	**1,560**	**8,066**	**1,220**	**10,846**
Cash flows (cash inflows and outflows presented on a net basis)	**529**	**475**	**(341)**	**663**
Additions and other adjustments to ROU assets	**-**	**-**	**334**	**334**
Foreign currency translation and other non-cash changes	**53**	**41**	**(9)**	**85**
Balance – December 31, 2022	**2,142**	**8,582**	**1,204**	**11,928**
Balance – December 31, 2020	159	10,061	1,140	11,360
Cash flows (cash inflows and outflows presented on a net basis)	1,344	(2,133)	(320)	(1,109)
Loss on early extinguishment of debt	-	142	-	142
Additions and other adjustments to ROU assets	-	-	408	408
Foreign currency translation and other non-cash changes	57	(4)	(8)	45
Balance – December 31, 2021	1,560	8,066	1,220	10,846

NOTE 19 LEASE LIABILITIES

	Average Rate of Interest (%)	2022	2021
Lease liabilities – non-current	**3.3**	**899**	934
Current portion of lease liabilities	**3.0**	**305**	286
Total		**1,204**	1,220

NOTE 20 PAYABLES AND ACCRUED CHARGES

	2022	2021
Trade and other payables	**5,797**	5,179
Customer prepayments	**2,298**	2,083
Dividends	**244**	257
Accrued compensation	**681**	669
Current portion of asset retirement obligations and accrued environmental costs (Note 22)	**234**	170
Accrued interest	**102**	80
Current portion of share-based compensation (Note 5)	**142**	185
Current portion of derivatives	**35**	20
Income taxes (Note 8)	**899**	606
Provincial mining taxes	**114**	53
Other taxes	**59**	50
Current portion of pension and other post-retirement benefits (Note 21)	**15**	16
Other accrued charges and others	**671**	684
	11,291	10,052

NOTE 21 PENSION AND OTHER POST-RETIREMENT BENEFITS

We offer the following pension and other post-retirement benefits to qualified employees: defined benefit pension plans; defined contribution pension plans; and health, dental and life insurance, referred to as other defined benefit plans. Substantially all our employees participate in at least one of these plans.

Description of Defined Benefit Pension Plans

	Plan Type	Contributions
United States	• non-contributory, • guaranteed annual pension payments for life, • benefits generally depend on years of service and compensation level in the final years leading up to age 65, • benefits available starting at age 55 at a reduced rate, and • plans provide for maximum pensionable salary and maximum annual benefit limits.	• made to meet or exceed minimum funding requirements of the Employee Retirement Income Security Act of 1974 and associated Internal Revenue Service regulations and procedures.
Canada		• made to meet or exceed minimum funding requirements based on provincial statutory requirements and associated federal taxation rules.
Supplemental Plans in US and Canada for Senior Management	• non-contributory, • unfunded, and • supplementary pension benefits.	• provided for by charges to earnings sufficient to meet the projected benefit obligations, and • payments to plans are made as plan payments to retirees occur.

Our defined benefit pension plans are funded with separate funds that are legally separated from the Company and administered through an employee benefits or management committee in each country, which is composed of our employees. The employee benefits or management committee is required by law to act in the best interests of the plan participants and, in the US and Canada, is responsible for the governance of the plans, including setting certain policies (e.g., investment and contribution) of the funds. The current investment policy for each country's plans generally does not include any asset/liability matching strategies or currency hedging strategies. Plan assets held in trusts are governed by local regulations and practices in each country, as is the nature of the relationship between the Company and the trustees and their composition.

Description of Other Post-Retirement Plans

We provide health care plans for certain eligible retired employees in the US, Canada and Trinidad. Eligibility for these benefits is generally based on a combination of age and years of service at retirement. Certain terms of the plans include

- coordination with government-provided medical insurance in each country;
- certain unfunded cost-sharing features such as co-insurance, deductibles and co-payments – benefits subject to change;
- for certain plans, maximum lifetime benefits;
- at retirement, the employee's spouse and certain dependent children may be eligible for coverage;
- benefits are self-insured and are administered through third-party providers; and
- generally, retirees contribute towards annual cost of the plans.

We provide non-contributory life insurance plans for certain retired employees who meet specific age and service eligibility requirements.

In millions of US dollars unless otherwise noted

Risks

The defined benefit pension and other post-retirement plans expose us to broadly similar actuarial risks. The most significant risks include investment risk and interest rate risk as discussed below. Other risks include longevity risk and salary risk.

Investment risk	A deficit will be created if plan assets underperform the discount rate used in the defined benefit obligation valuation. To mitigate investment risk, we employ • a total return on investment approach whereby a diversified mix of equities and fixed income investments is used to maximize long-term return for a prudent level of risk; and • risk tolerance established through careful consideration of plan liabilities, plan funded status and corporate financial condition. Other assets such as private equity and hedge funds are not used at this time. Our policy is not to invest in commodities, precious metals, mineral rights, bullions or collectibles. Investment risk is measured and monitored on an ongoing basis through quarterly investment portfolio reviews, annual liability measurements and periodic asset/liability studies.
Interest rate risk	A decrease in bond interest rates will increase the pension liability; however, this is generally expected to be partially offset by an increase in the return on the plan's debt investments.

Financial Information

	2022			2021		
	Obligation	**Plan Assets**	**Net**	Obligation	Plan Assets	Net
Balance – beginning of year	**(1,996)**	**1,731**	**(265)**	(2,066)	1,706	(360)
Components of defined benefit expense recognized in earnings						
Current service cost for benefits earned during the year	**(27)**	**-**	**(27)**	(36)	-	(36)
Interest (expense) income	**(60)**	**52**	**(8)**	(57)	48	(9)
Past service cost, including curtailment gains and settlements	**24**	**(39)**	**(15)**	(2)	-	(2)
Foreign exchange rate changes and other	**28**	**(21)**	**7**	(7)	(1)	(8)
Subtotal of components of defined benefit (recovery) expense recognized in earnings	**(35)**	**(8)**	**(43)**	(102)	47	(55)
Remeasurements of the net defined benefit liability recognized in OCI during the year						
Actuarial gain arising from:						
Changes in financial assumptions	**423**	**-**	**423**	83	-	83
Changes in demographic assumptions	**21**	**-**	**21**	9	-	9
(Loss) gain on plan assets (excluding amounts included in net interest)	**-**	**(337)**	**(337)**	-	33	33
Subtotal of remeasurements [2]	**444**	**(337)**	**107**	92	33	125
Cash flows						
Contributions by plan participants	**(6)**	**6**	**-**	(6)	6	-
Employer contributions	**-**	**24**	**24**	-	25	25
Benefits paid	**86**	**(86)**	**-**	86	(86)	-
Subtotal of cash flows	**80**	**(56)**	**24**	80	(55)	25
Balance – end of year [1]	**(1,507)**	**1,330**	**(177)**	(1,996)	1,731	(265)
Balance is composed of:						
Non-current assets						
Other assets (Note 16)			**157**			170

Current liabilities		
Payables and accrued charges (Note 20)	**(15)**	(16)
Non-current liabilities		
Pension and other post-retirement benefit liabilities	**(319)**	(419)

1 Obligations arising from funded and unfunded pension plans are $ 1,255 and $ 252 (2021 – $ 1,659 and $ 337), respectively. Other post-retirement benefit plans have no plan assets and are unfunded.
2 Certain immaterial figures have been reclassified in 2021.

In millions of US dollars unless otherwise noted

Plan Assets

As at December 31, the fair value of plan assets of our defined benefit pension plans, by asset category, were as follows:

	2022			2021		
	Quoted Prices in Active Markets for Identical Assets	**Other [1]**	**Total**	Quoted Prices in Active Markets for Identical Assets	Other [1]	Total
Cash and cash equivalents	**93**	**4**	**97**	11	7	18
Equity securities and equity funds						
US	**8**	**107**	**115**	22	257	279
International	**-**	**14**	**14**	-	28	28
Debt securities [2]	**-**	**841**	**841**	-	1,020	1,020
Other	**-**	**263**	**263**	-	386	386
Total pension plan assets	**101**	**1,229**	**1,330**	33	1,698	1,731

1 Approximately 100 percent (2021 – 100 percent) of the Other plan assets are held in funds whose fair values are estimated using their net asset value per share. For the majority of these funds, the redemption frequency is immediate. The Plan Committee manages the asset allocation based upon our current liquidity and income needs.
2 Debt securities included US securities of 77 percent (2021 – 71 percent) and International securities of 22 percent (2021 – 28 percent) and Mortgage Backed Securities of 1 percent (2021 – 1 percent).

We use letters of credit or surety bonds to secure certain Canadian unfunded defined benefit plan liabilities as at December 31, 2022.

We expect to contribute approximately $ 128 to all pension and post-retirement plans in 2023. Total contributions recognized as expense under all defined contribution plans for 2022 was $ 128 (2021 – $ 111).

We used the following significant assumptions to determine the benefit obligations and expense for our significant plans as at and for the year ended December 31. These assumptions are determined by management and are reviewed annually by our independent actuaries.

	Pension		**Other**	
	2022	2021	**2022**	2021
Assumptions used to determine the benefit obligations [1] :				
Discount rate (%)	**5.01**	3.09	**4.86**	2.97
Rate of increase in compensation levels (%)	**4.29**	4.27	**n/a**	n/a
Medical cost trend rate – assumed (%) [2]	**n/a**	n/a	**4.50 – 7.00**	4.50 – 6.50
Medical cost trend rate – year reaches ultimate trend rate	**n/a**	n/a	**2033**	2030
Mortality assumptions (years) [3]				
Life expectancy at 65 for a male member currently at age 65	**20.6**	20.7	**20.5**	20.6
Life expectancy at 65 for a female member currently at age 65	**22.9**	22.9	**23.2**	23.2
Average duration of the defined benefit obligations (years) [4]	**12.7**	15.3	**12.8**	14.9

1 The current year's expense is determined using the assumptions that existed at the end of the previous year.
2 We assumed a graded medical cost trend rate starting at 7.00 percent in 2022, moving to 4.50 percent by 2033 (2021– starting at 6.50 percent, moving to 4.50 percent by 2030).
3 Based on actuarial advice in accordance with the latest available published tables, adjusted where appropriate to reflect future longevity improvements for each country.
4 Weighted average length of the underlying cash flows.

Of the most significant assumptions, a change in discount rates has the greatest potential impact on our pension and other post-retirement benefit plans, with sensitivity to change as follows:

		2022		2021	
	Change in Assumption	**Benefit Obligations**	**Expense in Earnings Before Income Taxes**	Benefit Obligations	Expense in Earnings Before Income Taxes
As reported		**1,507**	**43**	1,996	55
Discount rate	1.0 percentage point decrease	**210**	**20**	330	20
	1.0 percentage point increase	**(170)**	**(20)**	(260)	(20)

In millions of US dollars unless otherwise noted

NOTE 22 ASSET RETIREMENT OBLIGATIONS AND ACCRUED ENVIRONMENTAL COSTS

December 31, 2022	**Cash Flow Payments (years) [1]**	**Discounted Cash Flows [2,3]**	**Discount Rate +0.5%**	**-0.5%**
Asset retirement obligations			(60)	80
Retail	1 – 30	21		
Potash	29 – 462	102		
Phosphate	1 – 78	518		
Corporate and others [4,5]	1 – 484	546		
Accrued environmental costs			(5)	5
Retail	1 – 30	75		
Corporate and others	1 – 20	375		
Total		**1,637**		

1 Time frame in which payments are expected to principally occur from December 31, 2022. Adjustments to the years can result from changes to the mine life and/or changes in the rate of tailings volumes.
2 Risk-free discount rates used to discount cash flows reflect current market assessments of the time value of money and the risks specific to the timing and jurisdiction of the obligation. Risk-free rates range from 3.0 percent to 5.5 percent.
3 Total undiscounted cash flows are $ 4.0 billion. For the Potash segment, this represents total undiscounted cash flows in the first year of decommissioning. This excludes subsequent years of tailings dissolution, fine tails capping, tailings management area reclamation, post-reclamation activities and monitoring, and final decommissioning, which are estimated to take an additional 125 to 433 years.
4 For nitrogen sites, we have not recorded any asset retirement obligations 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.
5 Includes certain potash and phosphate sites that are non-operating sites, with the majority of phosphate site payments taking place over the next 17 years.

	Asset Retirement Obligations	**Accrued Environmental Costs**	**Total**

Balance – December 31, 2021	**1,231**	**505**	**1,736**
Disposals	**-**	**(7)**	**(7)**
Change in estimates	**36**	**2**	**38**
Settlements	**(81)**	**(41)**	**(122)**
Accretion	**27**	**2**	**29**
Foreign currency translation and other	**(26)**	**(11)**	**(37)**
Balance – December 31, 2022	**1,187**	**450**	**1,637**
Balance – December 31, 2022 is composed of:			
Current liabilities			
Payables and accrued charges (Note 20)	**165**	**69**	**234**
Non-current liabilities			
Asset retirement obligations and accrued environmental costs	**1,022**	**381**	**1,403**

We are subject to numerous environmental requirements under federal, provincial, state and local laws in the countries in which we operate. We have gypsum stack capping, and closure and post-closure obligations through our subsidiaries, PCS Phosphate Company, Inc. in White Springs, Florida, and PCS Nitrogen Inc. in Geismar, Louisiana, pursuant to the financial assurance regulatory requirements in those states. As at December 31, 2022, we had $ 391 in surety bonds and letters of credit outstanding relating to these financial assurance obligations. The recorded provisions may not necessarily reflect our obligations under these financial assurances.

In millions of US dollars unless otherwise noted

NOTE 23 SHARE CAPITAL

Authorized

We are authorized to issue an unlimited number of common shares without par value and an unlimited number of preferred shares. The common shares are not redeemable or convertible. The preferred shares may be issued in one or more series with rights and conditions to be determined by the Board of Directors.

Issued

	Number of Common Shares	Share Capital
Balance – December 31, 2021	557,492,516	15,457
Issued under option plans and share-settled plans	3,066,148	202
Repurchased	(53,312,559)	(1,487)
Balance – December 31, 2022	**507,246,105**	**14,172**

Share Repurchase Programs

	Commencement Date	Expiry	Maximum Shares for Repurchase	Maximum Shares for Repurchase (%)	Number of Shares Repurchased
2020 Normal Course Issuer Bid	February 27, 2020	February 26, 2021	28,572,458	5	710,100
2021 Normal Course Issuer Bid	March 1, 2021	February 28, 2022	28,468,448	5	22,186,395
2022 Normal Course Issuer Bid [1]	March 1, 2022	February 7, 2023	55,111,110	10	47,108,318
2023 Normal Course Issuer Bid [2]	March 1, 2023	February 29, 2024	24,962,194	5	-

1 The original expiry date was February 28, 2023, but we acquired the maximum aggregate number of common shares allowable on February 7, 2023. As of February 7, 2023, an additional 8,002,792 common shares were repurchased for cancellation at a cost of $ 625 and an average price per share of $ 78.07 .
2 On February 15, 2023, our Board of Directors approved a share repurchase program. The 2023 normal course issuer, which is subject to acceptance by the Toronto Stock Exchange, will expire earlier than the date above if we acquire the maximum number of common shares allowable or otherwise decide not to make any further repurchases.

Purchases under the normal course issuer bids were, or may be, made through open market purchases at market prices as well as by other means permitted by applicable securities regulatory authorities, including private agreements.

Summary of share repurchases	**2022**	2021
Number of common shares repurchased for cancellation	**53,312,559**	15,982,154
Average price per share (US dollars)	**84.34**	69.17
Total cost	**4,496**	1,105

Dividends Declared

	2022		2021
Declared	**Per Share**	Declared	Per Share
February 16, 2022	**0.48**	February 17, 2021	0.46
May 18, 2022	**0.48**	May 17, 2021	0.46
August 4, 2022	**0.48**	August 9, 2021	0.46
November 3, 2022	**0.48**	November 1, 2021	0.46
	1.92		1.84

On February 15, 2023, our Board of Directors declared a quarterly dividend to $0.53 per share payable on April 13, 2023, to shareholders of record on March 31, 2023. The total estimated dividend to be paid is $ 265 .

In millions of US dollars unless otherwise noted

NOTE 24 CAPITAL MANAGEMENT

Our capital allocation policy prioritizes safe and reliable operations, a healthy balance sheet, a sustainable dividend to shareholders, and a strategy to allocate remaining cash flow that maximizes shareholder value.

We include total debt, adjusted total debt, adjusted net debt and adjusted shareholders' equity as components of our capital structure. We monitor our capital structure and, based on changes in economic conditions, may adjust the structure by adjusting the amount of dividends paid to shareholders, repurchasing shares, issuing new shares, issuing new debt or retiring existing debt.

We have access to the capital markets through our base shelf prospectus. We use a combination of short-term and long-term debt to finance our operations. We typically pay floating rates of interest on short-term debt and credit facilities, and fixed rates on notes and debentures.

We monitor the following measures to evaluate our ability to service debt, make strategic investments and ensure we are in compliance with our debt covenants:

	2022	2021
Adjusted net debt to adjusted EBITDA	**0.9**	1.4
Adjusted EBITDA to adjusted finance costs	**21.6**	14.3
Debt to capital (calculated as adjusted total debt to adjusted capital) (Limit: 0.65 : 1.00)	**0.32 : 1.00**	0.32 : 1.00

Adjusted EBITDA is calculated in Note 3, while the calculation of the remaining components included in the above ratios are set out in the following tables:

	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
Total debt	**11,928**	10,846
Letters of credit – financial	**97**	114
Adjusted total debt	**12,025**	10,960

	2022	2021
Total debt	**11,928**	10,846
Cash and cash equivalents	**(901)**	(499)
Unamortized fair value adjustments	**(310)**	(325)
Adjusted net debt	**10,717**	10,022

	2022	2021
Total shareholders' equity	**25,863**	23,699
Adjusted total debt	**12,025**	10,960
Adjusted capital	**37,888**	34,659

	2022	2021
Finance costs	**563**	613
Unwinding of discount on asset retirement obligations	**(29)**	9
Borrowing costs capitalized to property, plant and equipment	**37**	29
Interest on net defined benefit pension and other post-retirement plan obligations	**(8)**	(9)
Loss on early extinguishment of debt	**-**	(142)
Adjusted finance costs	**563**	500

In 2022, we filed a base shelf prospectus in Canada and the US qualifying the issuance of up to $5 billion of common shares, debt securities and other securities during a period of 25 months from March 11, 2022. In 2022, we issued $ 1 billion of notes pursuant to the base shelf prospectus and a prospectus supplement, as discussed in Note 18.

In millions of US dollars unless otherwise noted

NOTE 25 BUSINESS COMBINATIONS

	Casa do Adubo S.A. ("Casa do Adubo")	Other Acquisitions
Acquisition date	October 1, 2022	Various
Purchase price, net of cash and cash equivalents acquired, and amounts held in escrow	On the acquisition date, we acquired 100 % of the issued and outstanding Casa do Adubo stock. $ 231 (preliminary)	$ 176 (preliminary) (2021 – $ 88)
Goodwill and expected benefits of acquisitions	$ 145 (preliminary)	$ 55 (preliminary) (2021 – $ 77)
	• synergies from expected reduction in operating costs • wider distribution channel for selling products of acquired businesses • a larger assembled workforce • potential increase in customer base • enhanced ability to innovate The expected benefits of the acquisitions resulting in goodwill include	
Description	An agriculture retailer in Brazil with 39 retail locations and 10 distribution centers. This acquisition is aligned with our disciplined approach to capital allocation and sustainability commitments, as we continue to expand our presence in Brazil.	2022 – 43 Retail locations related to various agricultural services and one wholesale warehouse location (2021 – 36 Retail locations)

We have engaged independent valuation experts to assist in determining the fair value of certain assets acquired and liabilities assumed and related deferred income tax impacts. As at December 31, 2022, the total consideration and purchase price allocation for Casa do Adubo and certain other acquisitions are not final as we are continuing to obtain and verify information required to determine the fair value of certain assets acquired and liabilities assumed and the amount of deferred income taxes arising on their recognition, as part of the due diligence process. We expect to finalize the amounts recognized as we obtain the information necessary to complete the analysis within one year from the date of acquisition.

We allocated the following values to the acquired assets and assumed liabilities based upon fair values at their respective acquisition date. The information below represents preliminary fair values.

For certain other acquisitions, we finalized the purchase price with no material change to the fair values disclosed in prior periods. Refer to Note 30 for details of our valuation technique and judgments applied.

In millions of US dollars unless otherwise noted

	2022		2021
	Casa do Adubo (Preliminary)	**Other Acquisitions (Preliminary)**	Other Acquisitions
Receivables	**174** [1]	**11**	43
Inventories	**107**	**92**	24
Prepaid expenses and other current assets	**3**	**13**	-
Property, plant and equipment	**24**	**116**	10
Goodwill	**145** [2]	**55**	77
Intangible assets	**95**	**9**	16

Investments	**-**	**2**	-
Other non-current assets	**6**	**4**	4
Total assets	**554**	**302**	174
Short-term debt	**14** [3]	**11**	11
Payables and accrued charges	**159**	**74**	50
Long-term debt, including current portion	**91**	**14**	7
Lease liabilities, including current portion	**10**	**3**	1
Other non-current liabilities	**1**	**14**	17
Total liabilities	**275**	**116**	86
Total consideration	**279**	**186**	88
Amounts held in escrow	**(48)**	**(10)**	-
Total consideration, net of cash and cash equivalents acquired, and amounts held in escrow	**231**	**176**	88

1 Includes receivables from customers with gross contractual amounts of $ 169 , of which $ 3 is considered to be uncollectible.
2 Goodwill was calculated as the excess of the fair value of consideration transferred over the recognized amount of net identifiable assets acquired. The portion of goodwill deductible for income tax purposes will be determined when the purchase allocation is finalized.
3 Outstanding amount on the Casa do Adubo credit facilities assumed as part of the acquisition.

Financial Information Related to the Acquired Operations

2022 Proforma (estimated as if acquisitions occurred at the beginning of the year)	**Casa do Adubo**	**Other Acquisitions**
Sales	440	240
Earnings before finance costs and income taxes[1]	42	13

1 Net earnings is not available.

	2022 Actuals		2021 Actuals
From date of acquisition	**Casa do Adubo**	**Acquisitions Other**	Acquisitions Other
Sales	**130**	**100**	80
Earnings before finance costs and income taxes	**7**	**7**	7

NOTE 26 COMMITMENTS

	Principal Portion and Estimated Interest					
December 31, 2022	**Lease Liabilities**	**Long-Term Debt**	**Purchase Commitments**	**Capital Commitments**	**Other Commitments**	**Total**
Within 1 year	337	932	1,533	178	169	**3,149**
1 to 3 years	427	2,292	72	40	143	**2,974**
3 to 5 years	199	1,249	24	-	74	**1,546**
Over 5 years	411	8,947	120	-	58	**9,536**
Total	**1,374**	**13,420**	**1,749**	**218**	**444**	**17,205**

In millions of US dollars unless otherwise noted

Purchase Commitments

We have a long-term natural gas purchase agreement in Trinidad that expires on December 31, 2023. The contract provides for prices that vary primarily with ammonia market prices and annual escalating floor prices. The commitments included in the foregoing table are based on floor prices and minimum purchase quantities.

Profertil has various gas contracts denominated in US dollars that expire in 2023 and 2025 and accounfor virtually all of Profertil's gas requirements. YPF S.A., our joint venture partner in Profertil, supplies approximately 70 percent of the gas under these contracts.

The Carseland facility has a power cogeneration agreement, expiring onDecember 31, 2026 , which provides 60 megawatt-hours of power per hour. The price for the power is based on a fixed charge adjusted for inflation and a variable charge based on the cost of natural gas provided to the facility for power generation.

Agreements for the purchase of sulfur for use in production of phosphoric acid provide for specified purchase quantities and prices based on market rates at the time of delivery. Commitments included in the foregoing table are based on expected contract prices.

As part of the agreement to sell the Conda Phosphate operations ("Conda"), we entered into long-term strategic supply and offtake agreements that end in 2023. Under the terms of the supply and offtake agreements, we will supply 100 percent of the ammonia requirements of Conda and purchase 100 percent of the monoammonium phosphate ("MAP") product produced at Conda. The MAP production is estimated at 330,000 tonnes per year.

Other Commitments

Other commitments consist principally of pipeline capacity, technology service contracts, managed services contracts, throughput and various rail contracts, the latest of which expires in 2036, and mineral lease commitments, the latest of which expires in 2033.

NOTE 27 GUARANTEES

In the normal course of business, we provide indemnification agreements to counterparties in transactions such as purchase and sale contracts, service agreements, director/officer contracts, and leasing transactions. The terms of these indemnification agreements

- may require us to compensate counterparties for costs incurred as a result of various events, including environmental liabilities and changes in (or in the interpretation of) laws and regulations, or as a result of litigation claims or statutory sanctions that may be suffered by a counterparty as a consequence of the transaction;
- will vary based upon the contract, the nature of which prevents us from making a reasonable estimate of the maximum potential amount that we could be required to pay to counterparties; and
- have not historically resulted in any significant payments by Nutrien and, as at December 31, 2022, no amounts have been accrued in the consolidated financial statements (except for accruals relating to certain underlying liabilities).

We directly guarantee our share of certain commitments of Canpotex (such as railcar leases) under certain agreements with third parties. We would be required to perform on these guarantees in the event of default by the investee. No material loss is anticipated by reason of such agreements and guarantees.

NOTE 28 RELATED PARTY TRANSACTIONS

Sale of Goods

We sell potash outside Canada and the US exclusively through Canpotex. Canpotex sells potash to buyers in export markets pursuant to term and spot contracts at agreed upon prices. Our total revenue is recognized at the amount received from Canpotex representing proceeds from their sale of potash, less net costs of Canpotex. Sales to Canpotex are shown in Note 3. The receivable outstanding from Canpotex is shown in Note 11 and arose from sale transactions described above. It is unsecured and bears no interest. There are no expected credit losses held against this receivable.

Key Management Personnel Compensation and Transactions with Post-Employment Benefit Plans

	2022	2021
Salaries and other short-term benefits	**13**	16
Share-based compensation	**18**	55
Post-employment benefits	**3**	4
Termination benefits	**10**	7
	44	82

Disclosures related to our post-employment benefit plans are shown in Note 21.

NOTE 29 CONTINGENCIES AND OTHER MATTERS

Accounting Estimates and Judgments

The following judgments are required to determine our exposure to possible losses and gains related to environmental matters and other various claims and lawsuits pending:

- prediction of the outcome of uncertain events (i.e., being virtually certain, probable, remote or undeterminable);
- determination of whether recognition or disclosure in the consolidated financial statements is required; and
- estimation of potential financial effects.

Where no amounts are recognized, such amounts are contingent and disclosure may be appropriate. While the amount disclosed in the consolidated financial statements may not be material, the potential for large liabilities exists and, therefore, these estimates could have a material impact on our consolidated financial statements.

Supporting Information

Canpotex

Nutrien is a shareholder in Canpotex, which markets Canadian potash outside of Canada and the US. Should any operating losses or other liabilities be incurred by Canpotex, the shareholders have contractually agreed to reimburse it in proportion to each shareholder's productive capacity. Through December 31, 2022, we are not aware of any operating losses or other liabilities.

Mining Risk

The risk of underground water inflows and other underground risks is insured on a limited basis, subject to insurance market availability. Through December 31, 2022, we are not aware of any material losses or other liabilities that we have not accrued for.

Environmental Remediation, Legal and Other Matters

We are engaged in ongoing site assessment and/or remediation activities at a number of facilities and sites. Anticipated costs associated with these matters are added to accrued environmental costs in the manner described in Note 22.

We have established provisions for environmental site assessment and/or remediation matters to the extent that we consider expenses associated with those matters likely to be incurred. Except for the uncertainties described below, we do not believe that our future obligations with respect to these matters are reasonably likely to have a material adverse effect on our consolidated financial statements.

Legal matters with significant uncertainties include the following:

- The United States Environmental Protection Agency ("US EPA") has an ongoing enforcement initiative directed at the phosphate industry related to the scope of an exemption for mineral processing wastes under the US Resource Conservation and Recovery Act ("RCRA"). This initiative affects the Conda Phosphate plant previously owned by Nu-West Industries, Inc. ("Nu-West"), a wholly owned subsidiary of Nutrien (Canada) Holdings ULC, and the Nutrien phosphoric acid facilities in Aurora, North Carolina; Geismar, Louisiana; and White Springs, Florida. Nutrien facilities received US EPA notices of violation ("NOVs") for alleged violations of the RCRA and various other environmental laws. Notwithstanding the sale of the Conda Phosphate operations in January 2018, Nu-West remains responsible for environmental liabilities attributable to its historic activities and for resolution of the NOVs. The facilities have been and continue to be involved in ongoing discussions with the US EPA, the US Department of Justice and the related state agencies to resolve these matters, with one such settlement being reached in 2022 for the Geismar, Louisiana facility. The Geismar consent decree was entered on October 19, 2022, and resolved the allegations associated with the historic phosphoric acid operations at that facility. Due to the nature of the allegations at the other facilities, we are uncertain as to how the matters will be resolved. Based on settlements with other members of the phosphate industry and the Geismar consent decree, we expect that a resolution could involve any or all of the following: 1) penalties, which we currently believe will not be material; 2) modification of certain operating practices; 3) capital improvement projects; 4) providing financial assurance for the future closure, maintenance and monitoring costs for the phosphogypsum stack system; and 5) addressing findings resulting from the RCRA section 3013 site investigations.

- We operate in countries that are parties to the Paris Agreement adopted in December 2015 pursuant to the United Nations Framework Convention on Climate Change. Each country that is a party to the Paris Agreement submitted an Intended Nationally Determined Contribution ("INDC") towards the control of greenhouse gas emissions. The impacts on our operations of these INDCs and other national and local efforts to limit or tax greenhouse gas emissions cannot be determined with any certainty at this time.

In addition, various other claims and lawsuits are pending against the Company in the ordinary course of business. While it is not possible to determine the ultimate outcome of such actions at this time, and inherent uncertainties exist in predicting such outcomes, we believe that the ultimate resolution of such actions is not reasonably likely to have a material adverse effect on our consolidated financial statements.

The breadth of our operations and the global complexity of tax regulations require assessments of uncertainties and judgments in estimating the taxes we will ultimately pay. The final taxes paid are dependent upon many factors, including negotiations with taxing authorities in various jurisdictions, outcomes of tax litigation, and resolution of disputes arising from federal, provincial, state and local tax audits. The resolution of these uncertainties and the associated final taxes may result in adjustments to our tax assets and tax liabilities.

We own facilities that have been either permanently or indefinitely shut down. We expect to incur nominal annual expenditures for site security and other maintenance costs at some of these facilities. Should the facilities be dismantled, certain other shutdown-related costs may be incurred. Such costs are not expected to have a material adverse effect on our consolidated financial statements and would be recognized and recorded in the period in which they are incurred.

NOTE 30 ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS

The following discusses the significant accounting policies, estimates, judgments and assumptions that we have adopted and applied and how they affect the amounts reported in the consolidated financial statements. Certain of our policies involve accounting estimates and judgments because they require us to make subjective or complex judgments

about matters that are inherently uncertain and because of the likelihood that materially different amounts could be reported under different conditions or using different assumptions.

Basis of Consolidation

These consolidated financial statements include the accounts of the Company and entities we control.

- Subsidiaries are fully consolidated from the date on which control is transferred to the Company until the date on which control ceases. They are deconsolidated from the date that control ceases.
- Intercompany balances and transactions are eliminated on consolidation.

Principal (wholly owned) Operating Subsidiaries	Location	Principal Activity
Potash Corporation of Saskatchewan Inc.	Canada	Mining and/or processing of crop nutrients and corporate functions
Nutrien (Canada) Holdings ULC	Canada	Manufacturer and distributor of crop nutrients and corporate functions
Agrium Canada Partnership	Canada	Manufacturer and distributor of crop nutrients
Agrium Potash Ltd.	Canada	
Nutrien US LLC	US	
Cominco Fertilizer Partnership	US	
Loveland Products Inc.	US	
Nutrien Ag Solutions Argentina S.A	Argentina	Crop input retailer
Nutrien Ag Solutions (Canada) Inc.	Canada	
Nutrien Ag Solutions, Inc.	US	
Nutrien Ag Solutions Limited	Australia	
PCS Nitrogen Fertilizer, LP	US	Production of nitrogen products in the US
PCS Nitrogen Ohio LP	US	Production of nitrogen products in the state of Ohio
PCS Nitrogen Trinidad Limited	Trinidad	Production of nitrogen products in Trinidad
PCS Phosphate Company, Inc.	US	Mining and/or processing of phosphate products
PCS Sales (USA) Inc.	US	Marketing and sales of the Company's products
Phosphate Holding Company, Inc.	US	Mining and/or processing of phosphate products and production of nitrogen products in the US

Climate Change

In 2021, we announced our Environmental, Social and Governance ("ESG") commitment to help address our key climate-related risks related to climate change and reduce our carbon footprint described in our Feeding the Future Plan. During 2022 there has been continued progress by Nutrien to deliver on our action plan and sustained development of the ESG frameworks and regulatory initiatives. We recognize that these developments could further impact our accounting estimates and judgments including, but not limited to, assessment of our asset useful lives, impairment of other long-lived assets, and asset retirement obligations and accrued environmental costs. We have monitored and will continue to monitor these developments as they affect our consolidated financial statements.

Foreign Currency Transactions

The consolidated financial statements are presented in US dollars, which we determined to be the functional currency of the Company and the majority of our subsidiaries. In determining the functional currency of our operations, we primarily considered the currency that determines the pricing of transactions rather than focusing on the currency in which transactions are denominated.

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions, and from the translation at period-end of monetary assets and liabilities denominated in foreign currencies, are recognized and presented in the consolidated statements of earnings within other (income) expenses, as applicable, in the period in which they arise. Non-monetary assets measured at historical cost are translated at the average monthly exchange rate prevailing at the time of the transaction, unless the exchange rate in effect on the date of the transaction is available and it is apparent that such rate is a more suitable measurement.

Assets and liabilities in foreign operations are translated using the period-end rate, while the income and expenses are translated using the average monthly exchange rate. Equity of the foreign operation is translated using the historical rate at the time of the acquisition. Exchange gains and losses resulting from translation are recognized in other comprehensive income and accumulated in a separate reserve within equity. The cumulative amount is reclassified to profit or loss when the foreign operation is disposed of.

Revenue

We recognize revenue when we transfer control over a good or service to a customer.

Transfer of Control for Sale of Goods	Transfer of Control for Sale of Services
At the point in time when the product is • purchased at our Retail farm center, • delivered and accepted by customers at their premises, or • loaded for shipping.	Over time as the promised service is rendered.

Judgment is used to determine whether we are acting as principal or agent by evaluating who

- has the primary responsibility for fulfilling the promised good;
- bears the inventory risk including if the vendor has the right to have its product returned on demand; and
- has discretion for establishing the price.

For transactions in which we act as an agent rather than the principal, revenue is recognized net of any commissions earned. The related commissions are recognized as the sales occur or as unconditional contracts are signed.

We recognize profits on sales to Canpotex when there is a transfer of control, either at the time the product is loaded for shipping or delivered, depending on the terms of the contract. Sales are recognized using a provisional price at the time control is transferred to Canpotex, with the final pricing determined upon Canpotex's final sale to a third party (generally between one and three months from date of sale to Canpotex).

Our sales revenue relating to our Potash, Nitrogen and Phosphate segments is generally recorded and measured based on the "freight on board" mine, plant, warehouse or terminal price specified in the contract (except for certain vessel sales or specific product sales that are shipped and recorded on a delivered basis), which reflects the consideration we expect to be entitled to in exchange for the goods or services, net of any variable consideration (e.g., any trade discounts or estimated volume rebates). Our customer contracts may provide certain product quality specification guarantees but do not generally provide for refunds or returns. Sales prices are based on North American and international benchmark market prices, which are subject to global supply and demand, and other market factors.

For our Retail segment, we do not provide general warranties; however, our customer contracts may provide certain product quality specification guarantees. Returns and incentives are estimated based on historical and forecasted data, contractual terms, and current conditions.

Transportation costs are generally recovered from the customer through sales pricing. Where customer contracts include volume rebates, we estimate revenue at the earlier of when the most likely amount of consideration we expect to receive has been determined or when it is highly probable that a significant reversal will not occur.

Due to the nature of goods and services sold, any single estimate would have only a negligible impact on revenue.

As the expected period between when control over a promised good or service is transferred and when the customer pays for that good or service is generally less than 12 months, we apply the practical expedient as provided in IFRS 15, "Revenue from Contracts with Customers," and do not adjust the promised amount of consideration for the effects of financing.

Intersegment sales are made under terms that approximate market value.

Seasonality in our business results from increased demand for products during 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 typically concentrated in December and January and inventory prepayments paid to our suppliers are typically concentrated in the period from November to January. Feed and industrial sales are more evenly distributed throughout the year.

Share-Based Compensation

For awards with performance conditions that determine the number of options or units to which employees are entitled, measurement of compensation cost is based on our best estimate of the outcome of the performance conditions. Changes to vesting assumptions are reflected in earnings immediately for compensation cost already recognized.

For Plans Settled Through the Issuance of Equity	For Plans Settled Through Cash
• fair value for stock options is determined on grant date using the Black-Scholes-Merton option-pricing model, and	• a liability is recorded based on the fair value of the awards each period.

Estimation involves determining:

- stock option-pricing model assumptions as described in the weighted average assumptions table in Note 5;
- forfeiture rate for options granted based on past experience and future expectations, and adjusted upon actual vesting; and
- projected outcome of performance conditions for PSUs, including our return on invested capital compared to Nutrien's weighted average cost of capital, and including the relative ranking of our total shareholder return, including expected dividends, compared with a specified peer group using a Monte Carlo simulation option-pricing model; and
- the number of dividend equivalent units expected to be earned.

Income Taxes

Taxation on earnings (loss) is composed of current and deferred income tax. Taxation is recognized in the statements of earnings unless it relates to items recognized either in OCI or directly in shareholders' equity.

Current Income Tax	Deferred Income Tax
• is the expected tax payable on the taxable earnings for the year and includes any adjustments to income tax payable or recoverable in respect of previous years • is calculated using rates enacted or substantively enacted at the dates of the consolidated balance sheets in the countries where our subsidiaries and equity-accounted investees operate and generate taxable earnings • is the best estimate expected to be paid to (or recovered from) the taxation authorities	• is recognized using the liability method • is based on temporary differences between carrying amounts of assets and liabilities and their respective income tax bases • is determined using tax rates that have been enacted or substantively enacted by the dates of the consolidated balance sheets and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled
Current and deferred income tax assets and liabilities are offset only if certain criteria are met.	
The realized and unrealized excess tax benefits from share-based compensation arrangements are recognized in contributed surplus as current and deferred tax, respectively.	

The final taxes paid, and potential adjustments to tax assets and liabilities, are dependent upon many factors including

- negotiations with taxation authorities in various jurisdictions;
- outcomes of tax litigation; and
- resolution of disputes arising from federal, provincial, state and local tax audits.

Deferred income tax is not accounted for

- with respect to investments in subsidiaries and equity-accounted investees where we are able to control the reversal of the temporary difference and that difference is not expected to reverse in the foreseeable future; and
- if arising from initial recognition of an asset or liability in a transaction, other than a business combination, that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax assets are

- recognized to the extent it is probable future taxable profit will be available to use deductible temporary differences and could be reduced if projected earnings are not achieved or increased if earnings previously not projected become probable; and
- reviewed at each balance sheet date and amended to the extent that it is no longer probable that the related tax benefit will be realized.

Financial Instruments

Financial assets are measured at fair value (either through OCI or through profit or loss) or amortized cost depending on the objective of the business model for managing the instrument or group of instruments and the contractual terms of the cash flows.

For equity investments not held for trading, we may make an irrevocable election at initial recognition to recognize changes in fair value through OCI rather than profit or loss.

Financial instruments are classified and measured as follows:

Fair Value Classification	Fair Value Through Profit or Loss	FVTOCI	Amortized Cost

Fair Value Classification	Fair Value Through Profit or Loss	FVTOCI	Amortized Cost
Instrument type	Cash and cash equivalents, derivatives, and certain equity investments not held for trading	Certain equity investments not held for trading for which an irrevocable election was made	Receivables, short-term debt, payables and accrued charges, long-term debt, lease liabilities, and other long-term debt instruments
Fair value gains and losses	Profit or loss	OCI	–
Interest and dividends	Profit or loss	Profit or loss	Profit or loss: effective interest rate
Impairment of assets	–	–	Profit or loss
Foreign exchange	Profit or loss	OCI	Profit or loss
Transaction costs	Profit or loss	OCI	Included in cost of instrument

Financial instruments are recognized at trade date when we commit to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flow from the investments have expired or we have transferred the rights to receive cash flow and all the risks and rewards of ownership have also been substantially transferred.

Derivatives are used to lock in exchange rates. For designated and qualified cash flow hedges

- the effective portion of the change in the fair value of the derivative is accumulated in OCI;
- when the hedged forecast transaction occurs, the related gain or loss is removed from AOCI and included in the cost of inventory or property plant and equipment;
- the hedging gain or loss included in the cost of inventory is recognized in earnings when the product containing the hedged item is sold or becomes impaired; and
- the ineffective portions of hedges are recorded in net earnings in the current period.

We assess whether our derivatives hedging transactions are expected to be or were highly effective, both at the hedge's inception and on an ongoing basis, in offsetting changes in fair values of hedged items.

Hedging Transaction	Measurement of Ineffectiveness	Potential Sources of Ineffectiveness
Foreign exchange	Comparison of the cumulative changes in fair value and the cumulative change in the fair value of a hypothetical derivative with terms based on the hedged forecast cash flows	Changes in • timing or amounts of forecasted cash flows • embedded optionality • our credit risk or the credit risk of a counterparty

Financial assets and financial liabilities are offset, and the net amount is presented in the consolidated balance sheets when we

- currently have a legally enforceable right to offset the recognized amounts; and
- intend either to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

Fair Value Measurements

Estimated fair values for financial instruments are designed to approximate amounts for which the instruments could be exchanged in a current arm's-length transaction between knowledgeable, willing parties. The valuation policies and procedures for financial reporting purposes are determined by our finance department.

Fair value measurements are categorized into different levels within a fair value hierarchy based on the degree to which the lowest level inputs are observable and their significance:

Level 1	Level 2	Level 3
Unadjusted quoted prices (in active markets accessible at the measurement date for identical assets or liabilities)	Quoted prices (in markets that are not active or based on inputs that are observable for substantially the full term of the asset or liability)	Prices or valuation techniques that require inputs that are both unobservable and significant to the overall measurement

Fair value estimates

- are at a point in time and may change in subsequent reporting periods due to market conditions or other factors;
- can be determined using multiple methods, which can cause values (or a range of reasonable values) to differ; and
- may require assumptions about costs/prices over time, discount and inflation rates, defaults, and other relevant variables.

Cash and Cash Equivalents

Highly liquid investments with a maturity of three months or less from the date of purchase are considered to be cash equivalents.

Receivables

Receivables from customers are recognized initially at fair value and subsequently measured at amortized cost less allowance for expected credit losses of receivables from customers.

Inventories

Inventories are valued monthly at the lower of cost and net realizable value. Costs are allocated to inventory using the weighted average cost method.

Net realizable value is based on:

Products and Raw Materials	Materials and Supplies
• selling price of the finished product (in ordinary course of business) less the estimated costs of completion and estimated costs to make the sale	• replacement cost

A writedown is recognized if the carrying amount exceeds net realizable value and may be reversed if the circumstances that caused it no longer exist. Various factors impact our estimates of net realizable value, including inventory levels, forecasted prices of key production inputs, global nutrient capacities, crop price trends, and changes in regulations and standards employed.

Vendors may offer various incentives to purchase products for resale. Vendor rebates and prepay discounts are accounted for as a reduction of the prices of the suppliers' products. Rebates based on the amount of materials purchased reduce cost of goods sold as inventory is sold. Rebates earned based on sales volumes of products are offset to cost of goods sold.

Rebates that are probable and can be reasonably estimated are accrued. Rebates that are not probable or estimable are accrued when certain milestones are achieved.

Estimation of rebates can be complex in nature as vendor arrangements are diverse. The amount of the accrual is determined by analyzing and reviewing historical trends to apply negotiated rates to estimated and actual purchase volumes. Estimated amounts accrued throughout the year could also be impacted if actual purchase volumes differ from projected volumes.

Property, Plant and Equipment

	Owned	Right-of-Use (Leased)
Description	• majority of our tangible assets are buildings, machinery and equipment used to produce or distribute our products and render our services	• primarily include railcars, marine vessels, real estate and mobile equipment
Measurement	• cost, which includes capitalized borrowing costs, less accumulated depreciation and any accumulated impairment losses • cost of major inspections and overhauls is capitalized • maintenance and repair expenditures that do not improve or extend productive life are expensed in the period incurred	• cost less accumulated depreciation and any accumulated impairment losses • lease payments are allocated between finance costs and a reduction of the liability, and discounted using the interest rate implicit in the lease, if available, or an incremental borrowing rate, being a rate that we would have to pay to borrow the funds required to obtain a similar asset, adjusted for term, security, asset value and the borrower's economic environment.
Depreciation method	• certain property, plant and equipment directly related to our Potash, Nitrogen and Phosphate segments uses units-of-production based on the shorter of estimates of reserves or service lives • pre-stripping costs uses units-of-production over the ore mined from the mineable acreage stripped • remaining assets uses straight-line	• straight-line over the shorter of the asset's useful life and the lease term
	Estimated useful lives, expected patterns of consumption, depreciation method and residual values are reviewed at least annually.	
Judgment/practical expedients	Judgment is required in determining • costs, including income or expenses derived from an asset under construction, that are eligible for capitalization; • timing to cease cost capitalization, generally when the asset is capable of operating in the manner intended by management, but also considering the circumstances and the industry in which the asset is to be operated, normally predetermined by management with reference to such factors as productive capacity; • the appropriate level of componentization (for individual components for which different depreciation methods or rates are appropriate); • repairs and maintenance that qualify as major inspections and overhauls; and • useful life over which such costs should be depreciated, which may be impacted by changes in our strategy, process or operations as a result of climate-change initiatives.	Judgment is required to determine whether a contract or arrangement includes a lease and if it is reasonably certain that an extension option will be exercised. We seek to maximize operational flexibility in managing our leasing activities by including extension options when negotiating new leases. Extension options are exercisable at our option and not by the lessors. In determining if a renewal period should be included in the lease term, we consider all relevant factors that create an economic incentive for us to exercise a renewal, including • the location of the asset and the availability of suitable alternatives, • the significance of the asset to operations, and • our business strategy. Estimation is used to determine the useful lives of ROU assets, the lease term and the appropriate discount rate applied to the lease payments to calculate the lease liability.

	Owned	Right-of-Use (Leased)
	Uncertainties are inherent in estimating reserve quantities, particularly as they relate to assumptions regarding future prices, the geology of our mines, the mining methods used, and the related costs incurred to develop and mine reserves. Changes in these assumptions could result in material adjustments to reserve estimates, which could result in impairments or changes to depreciation expense in future periods.	We have chosen to • include the use of a single discount rate for a portfolio of leases with reasonably similar characteristics, • not separate non-lease components and instead to account for lease and non-lease components as a single arrangement, and • use exemptions for short-term and low-value leases which allow payments to be expensed as incurred.
Other	Not applicable.	Lease agreements do not contain significant covenants; however, leased assets may be used as security for lease liabilities and other borrowings.

Goodwill and Intangible Assets

Goodwill is carried at cost, is not amortized, and represents the excess of the cost of an acquisition over the fair value of the Company's share of the net identifiable assets of the acquired subsidiary at the date of acquisition. Goodwill is allocated to a CGU or group of CGUs for impairment testing based on the level at which it is monitored by management, and not at a level higher than an operating segment. The allocation is made to the CGU or group of CGUs expected to benefit from the business combination in which the goodwill arose.

Intangible assets are generally measured at cost less accumulated amortization and any accumulated impairment losses. We use judgment to determine which expenditures are eligible for capitalization as intangible assets. Costs incurred internally from researching and developing a product are expensed as incurred until technological feasibility is established, at which time the costs are capitalized until the product is available for its intended use. Judgment is required in determining when technological feasibility of a product is established. Intangible assets with finite lives are amortized on a straight-line basis over their estimated useful lives. At least annually, the useful lives are reviewed and adjusted if appropriate.

Impairment of Long-Lived Assets

To assess impairment, assets are grouped at the smallest levels for which there are separately identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets (this can be at the asset or CGU level).

At the end of each reporting period, we review conditions to determine whether there is any indication that an impairment exists that could potentially impact the carrying amounts of both our long-lived assets to be held and used (including property, plant and equipment, and investments), and our goodwill and intangible assets. When such indicators exist, impairment testing is performed. Additionally, goodwill is tested at least annually on October 1.

We review, at each reporting period, for possible reversal of the impairment for non-financial assets, other than goodwill.

Estimates and judgment involve

- identifying the appropriate asset, group of assets, CGU or groups of CGUs;
- determining the appropriate discount rate for assessing the recoverable amount;
- making assumptions about future sales, market conditions, terminal growth rates and cash flow forecasts over the long-term life of the assets or CGUs; and
- evaluating impacts of climate change to our strategy, processes and operations.

We cannot predict if an event that triggers impairment or a reversal of impairment will occur, when it will occur or how it will affect reported asset amounts. Asset impairment amounts previously recorded could be affected if different assumptions were used or if market and other conditions change. Such changes could result in non-cash charges materially affecting our consolidated financial statements.

Pension and Other Post-Retirement Benefits

Employee retirement and other defined benefit plans costs, including current and past service costs, gains or losses on curtailments and settlements, and remeasurements, are actuarially determined on a regular basis using the projected unit credit method.

When a plan amendment occurs before a settlement, we recognize past service cost before any gain or loss on settlement.

Our discount rate assumptions are impacted by

- the weighted average interest rate at which each pension and other post-retirement plan liability could be effectively settled at the measurement date;
- country specific rates; and
- the use of a yield curve approach based on the respective plans' demographics, expected future pension benefits and medical claims. Payments are measured and discounted to determine the present value of the expected future cash flows. The cash flows are discounted using yields on high-quality AA-rated non-callable bonds with cash flows of similar timing where there is a deep market for such bonds. Where we do not believe there is a deep market for such bonds (such as for terms in excess of 10 years in Canada), the cash flows are discounted using a yield curve derived from yields on provincial bonds rated AA or better to which a spread adjustment is added to reflect the additional risk of corporate bonds.

Net actuarial gains or loss incurred during the period for defined benefit plans are closed out to retained earnings at each period-end.

Asset Retirement Obligations and Accrued Environmental Costs

Asset retirement obligations and accrued environmental costs include

- reclamation and restoration costs at our potash and phosphate mining operations, including management of materials generated by mining and mineral processing, such as various mine tailings and gypsum;
- land reclamation and revegetation programs;
- decommissioning of underground and surface operating facilities;
- general clean-up activities aimed at returning the areas to an environmentally acceptable condition; and
- post-closure care and maintenance.

We consider the following factors as we estimate our provisions:

- environmental laws and regulations and interpretations by regulatory authorities, including updates on climate change, could change or circumstances affecting our operations could change, either of which could result in significant changes to current plans;
- the nature, extent and timing of current and proposed reclamation and closure techniques in view of present environmental laws and regulations;
- appropriate technical resources, including outside consultants, assist us in developing specific site closure and post-closure plans in accordance with the jurisdiction requirements; and
- timing of settlement of the obligations, which is typically correlated with mine life estimates except for certain land reclamation programs.

It is reasonably possible that the ultimate costs could change in the future and that changes to these estimates could have a material effect on our consolidated financial statements. We review our estimates for any changes in assumptions at the end of each reporting period.

We recognized contingent liabilities related to our business combinations or acquisitions, which represent additional environmental costs that are present obligations although cash outflows of resources are not probable. These contingent liabilities are subsequently measured at the higher of the amount initially recognized and the amount that would be recognized if the liability becomes probable.

Share Capital

Common shares are classified as equity. Incremental costs directly attributable to the issuance of common shares are recognized as a deduction from equity, net of any tax effects. When we repurchase our own common shares, share capital is reduced by the average carrying value of the shares repurchased. The excess of the purchase price over the average carrying value is recognized as a deduction from retained earnings. If the average carrying value of the shares repurchased is less than the average carrying value of the shares in share capital, the excess is recognized as an addition to share capital. Shares are cancelled upon repurchase.

Restructuring Charges

Plant shutdowns, sales of business units or other corporate restructurings may trigger restructuring charges. The provision is based on the best estimate of a detailed formal plan, which includes determining the incremental costs for employee termination, contract termination and other exit costs.

Business Combinations

Purchase price allocation involves judgment in identifying assets acquired and liabilities assumed, and estimation of their fair values. Key assumptions include discount rates and revenue growth rates specific to the acquired assets or liabilities assumed. We performed a thorough review of all internal and external sources of information available on circumstances that existed at the acquisition date. We also engaged independent valuation experts on certain acquisitions to assist in determining the fair value of certain assets acquired and liabilities assumed and related deferred income tax impacts. To determine fair values, we generally use the following valuation techniques:

Account	Valuation Technique and Judgments Applied
Property, plant and equipment	Market approach for land and certain types of personal property: sales comparison that measures the value of an asset through an analysis of sales and offerings of comparable assets. Replacement costs for all other depreciable property, plant and equipment: measures the value of an asset by estimating the costs to acquire or construct comparable assets and adjusts for age and condition of the asset.

Intangible assets	Income approach – multi-period excess earnings method: measures the value of an asset based on the present value of the incremental after-tax cash flows attributable to the asset after deducting contributory asset charges ("CACs"). Allocation of CACs is a matter of judgment and based on the nature of the acquired businesses' operations and historical trends. We considered several factors in determining the fair value of customer relationships, such as customers' relationships with the acquired company and its employees, the segmentation of customers, historical customer attrition rates, and revenue growth.
Other provisions and contingent liabilities	Decision-tree approach of future costs and a risk premium to capture the compensation sought by risk-averse market participants for bearing the uncertainty inherent in the cash flows of the liability.

For each business combination, we elect to measure the non-controlling interest in the acquired entity either at fair value or at the proportionate share of the acquiree's identifiable net assets. Foreign exchange hedge gains or losses that we designated a cash flow hedge are included in the consideration. The gain or loss from the cash flow hedge is deferred in OCI and subsequently recorded as an adjustment to goodwill when the business combination occurs.

Transaction costs are recorded in integration and restructuring related costs in other (income) expenses.

Standards, Amendments and Interpretations Effective and Applied

The IASB and IFRS Interpretations Committee ("IFRIC") has issued certain standards and amendments or interpretations to existing standards that were effective, and we have applied.

In 2022, we have adopted the following amendments and annual improvements with no material impact on our consolidated financial statements:

- Reference to the Conceptual Framework (Amendments to IFRS 3)
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16)
- Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37)
- Annual Improvements to IFRS Standards 2018–2020 (IFRS 16, IFRS 9, IFRS 1, IAS 41)

Standards, Amendments and Interpretations Not Yet Effective and Not Applied

The IASB and IFRIC have issued the following standards, amendments or interpretations to existing standards that were not yet effective and not applied as at December 31, 2022.

The following amendments and amended standards will be adopted in 2023 and are not expected to have a material impact on our consolidated financial statements:

- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (IFRS 1, IAS 12)
- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)
- Definition of Accounting Estimates (Amendments to IAS 8)
- IFRS 17 Insurance Contracts
- Amendments to IFRS 17

The following amendments are being reviewed to determine the potential impact on our consolidated financial statements:

- Lease Liability in a Sale and Leaseback (Amendments to IFRS 16)
- Classification of liabilities as current or non-current (Amendments to IAS 1)

Exhibit 99.4



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Consent of Independent Registered Public Accounting Firm

The Board of Directors of Nutrien Ltd.

We consent to the use of:

- our report dated February 16, 2023 on the consolidated financial statements of Nutrien Ltd. (the "Entity") which comprise the consolidated balance sheets as at December 31, 2022 and December 31, 2021, the related consolidated statements of income, comprehensive income, cash flows, and changes in shareholders' equity for each of the years in the three-year period ended December 31, 2022, the and the related notes (collectively the "consolidated financial statements"), and
- our report dated February 16, 2023 on the effectiveness of the Entity's internal control over financial reporting as of December 31, 2022

each of which is included in the Annual Report on Form 40-F of the Entity for the fiscal year ended December 31, 2022.

We also consent to the incorporation by reference of such reports in the registration statements on Form S-8 of the Entity (File Nos. 333-222384, 333-222385 and 333-226295) and Form F-10, as amended by Amendment No. 1 thereto, of the Entity (File No. 333-263275).

/s/ KPMG LLP
Chartered Professional Accountants

Calgary, Canada
February 24, 2023

KPMG LLP, an Ontario limited liability partnership and member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. KPMG Canada provides services to KPMG LLP.

Exhibit 99.5

CERTIFICATION
REQUIRED BY RULE 13a-14(a) OR RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Ken Seitz, certify that:

1. I have reviewed this Annual Report on Form 40-F of Nutrien Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in *Exchange Act* Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in *Exchange Act* Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2023

By: /s/ Ken Seitz
Ken Seitz
President and Chief Executive Officer

Exhibit 99.6

CERTIFICATION
REQUIRED BY RULE 13a-14(a) OR RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Pedro Farah, certify that:

1. I have reviewed this Annual Report on Form 40-F of Nutrien Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in *Exchange Act* Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in *Exchange Act* Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2023

By: /s/ Pedro Farah
Pedro Farah
Executive Vice President
and Chief Financial Officer

Exhibit 99.7

CERTIFICATIONS

Pursuant to Section 906 of the *Sarbanes-Oxley Act of 2002* (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, *United States Code*), each of the undersigned officers of Nutrien Ltd. (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report on Form 40-F for the year ended December 31, 2022 (the "Form 40-F"), of the Company fully complies with the requirements of Section 13(a) or 15(d) of the *Securities Exchange Act of 1934* and information contained in the Form 40-F fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 24, 2023

By: /s/ Ken Seitz
Ken Seitz
President and Chief Executive Officer

Date: February 24, 2023

By: /s/ Pedro Farah
Pedro Farah
Executive Vice President and Chief Financial Officer

Exhibit 99.8

February 24, 2023

Nutrien Ltd.

Ladies and Gentlemen:

Re: Annual Report on Form 40-F

Reference is made to the Annual Report on Form 40-F (the "Annual Report") filed by Nutrien Ltd. under the Securities Exchange Act of 1934, as amended.

I, Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., a qualified person, am responsible for preparing or supervising the preparation of (1) the technical report entitled "National Instrument 43-101 Technical Report on Allan Potash Deposit (KL 112R B), Saskatchewan, Canada" dated effective December 31, 2021 (the "Allan Technical Report"); (2) the technical report entitled "National Instrument 43-101 Technical Report on Cory Potash Deposit (KL 103C), Saskatchewan, Canada" dated effective December 31, 2020 (the "Cory Technical Report"); (3) the technical report entitled "National Instrument 43-101 Technical Report on Lanigan Potash Deposit (KLSA 001 C), Saskatchewan, Canada" dated effective December 31, 2021 (the "Lanigan Technical Report"); (4) the technical report entitled "National Instrument 43-101 Technical Report on Rocanville Potash Deposit (KL 305), Saskatchewan, Canada" dated effective December 31, 2021 (the "Rocanville Technical Report); and (5) the technical report entitled "National Instrument 43-101 Technical Report on Vanscoy Potash Deposit (KL 114C) Saskatchewan, Canada" dated effective December 31, 2020 (together with the Allan Technical Report, the Cory Technical Report, the Lanigan Technical Report and the Rocanville Technical Report, the "Technical Reports").

I hereby consent to the inclusion in the Annual Report of references to and information derived from the Technical Reports and to the use of my name therein. I hereby also consent to the incorporation by reference of such information in the registration statements on Form S-8 (File Nos. 333-222384, 333-222385 and 333-226295) and on Form F-10, as amended by Amendment No. 1 thereto (File No. 333-263275), of Nutrien Ltd.

Yours truly,

/s/ Craig Funk

Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo.
Director, GeoServices & Land – Engineering,
Technology & Capital
Nutrien Ltd.

Exhibit 99.9

Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

The following table reflects citations, orders and notices issued to us by the United States Mine Safety and Health Administration (the "MSHA") for the year ended December 31, 2022 (the "Reporting Period") and contains certain additional information as required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K, including information regarding mining-related fatalities, proposed assessments from the MSHA and legal actions ("Legal Actions") before the United States Federal Mine Safety and Health Review Commission ("FMSHRC"), an independent adjudicative agency that provides administrative trial and appellate review of legal disputes arising under the United States Federal Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006 (the "Act").

Included below is the information required by Section 1503(a) with respect to our facilities at Aurora, North Carolina (MSHA Identification Number 31-00212) ("Aurora") and White Springs, Florida (MSHA Identification Number 08-00798) ("White Springs") for the Reporting Period[(1)]:

		Aurora	White Springs
(a)	the total number of violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a coal or other mine safety or health hazard under Section 104 of the Act for which a citation was received from the MSHA	3	11
(b)	the total number of orders issued under Section 104(b) of the Act	0	0
(c)	the total number of citations and orders for unwarrantable failure of the Company to comply with mandatory health or safety standards under Section 104(d) of the Act	0	0
(d)	the total number of flagrant violations under Section 110(b)(2) of the Act	0	0
(e)	the total number of imminent danger orders issued under Section 107(a) of the Act	0	0
(f)	the total dollar value of proposed assessments from the MSHA under the Act	$4,994	$24,821
(g)	the total number of mining-related fatalities	0	0
(h)	received written notice from the MSHA of a pattern of violations under Section 104(e) of the Act	0	0
(i)	received written notice from the MSHA of potential to have a pattern of violations under Section 104(e) of the Act	0	0
(j)	the total number of Legal Actions pending as of the last day of the Reporting Period	0	0
(k)	Legal Actions instituted during the Reporting Period	0	0
(l)	Legal Actions resolved during the Reporting Period	0	0

(1) The number of violations and orders as well as amounts included in the total dollar value of proposed assessments are as posted on the MSHA data retrieval system as of February 7, 2023.