



NUTRIEN LTD.
MANAGEMENT'S DISCUSSION AND ANALYSIS
AS AT AND FOR THE THREE AND NINE MONTHS ENDED
SEPTEMBER 30, 2022

Management's Discussion and Analysis

The following management's discussion and analysis ("MD&A") is the responsibility of management and is dated as of November 2, 2022. The Board of Directors ("Board") of Nutrien carries out its responsibility for review of this disclosure principally through its audit committee, comprised exclusively of independent directors. The audit committee reviews and, prior to its publication, approves this disclosure pursuant to the authority delegated to it by the Board. 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. Additional information relating to Nutrien (which, except as otherwise noted, is not incorporated by reference herein), including our annual report dated February 17, 2022 ("2021 Annual Report"), which includes our annual audited consolidated financial statements and MD&A, and our annual information form dated February 17, 2022 ("2021 Annual Information Form"), each for the year ended December 31, 2021, can be found on SEDAR at www.sedar.com and on EDGAR at www.sec.gov. No update is provided to the disclosure in our 2021 annual MD&A except for material information since the date of our annual MD&A. The Company is a foreign private issuer under the rules and regulations of the US Securities and Exchange Commission (the "SEC").

This MD&A is based on and should be read in conjunction with the Company's unaudited interim condensed consolidated financial statements as at and for the three and nine months ended September 30, 2022 ("interim financial statements") based on International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board and prepared in accordance with International Accounting Standard 34 "Interim Financial Reporting", unless otherwise noted. This MD&A contains certain non-IFRS financial measures and ratios and forward-looking statements, which are described in the "Non-IFRS Financial Measures" and the "Forward-Looking Statements" sections, respectively.

Market Outlook and Guidance

Agriculture and Retail

- Global grain stocks-to-use ratio, excluding China, is projected to decline to the lowest level in more than a quarter century, driven by reduced corn and wheat production expectations in the US and Europe. As a result of historically tight supply and demand balances, spot prices of corn, soybeans and wheat are up 25 to 50 percent compared to the 10-year average and we expect strong futures prices will provide an incentive for growers to boost production in 2023.
- The re-opening of the Black Sea to Ukrainian grain exports positively impacted exports from the region but there is uncertainty over the continuation of the United Nations brokered agreement with Russia. The US Department of Agriculture (USDA) projects that Ukrainian grain exports will decline by 44 percent year-over-year in 2023, in large part driven by reduced production levels.
- Weather has been favorable in North America and we anticipate that the rapid pace of harvest will support strong fall ammonia demand and normal application rates of potash, phosphate and crop protection products.
- South American spring crop planting is proceeding with a mix of planting conditions. Argentina continues to be impacted by La Nina-related drought, while planting conditions in much of Brazil have generally been favorable. We expect that Brazilian soybean acreage will increase by 3 to 4 percent, which is also expected to support a proportional increase in safrinha corn acreage.

Crop Nutrient Markets

- Potash shipments from Belarus are projected to be down 50 to 60 percent and Russia down 20 to 25 percent in 2022 compared to the prior year, in line with our previous expectations. We have lowered our global potash shipment forecast to between 60 and 62 million tonnes in 2022, largely due to the impact of higher-than-expected inventory and cautious buying in North America and Brazil during the second half of 2022.
- We expect robust agricultural fundamentals will support increased potash consumption in 2023 and believe pent-up demand will emerge as inventories are drawn down and prices stabilize. We expect potash supply from Eastern Europe will continue to be constrained in 2023, with shipments from Belarus projected to be down 40 to 60 percent and Russia down 15 to 30 percent compared to 2021 levels. Global potash shipments are forecast between 64 to 67 million tonnes in 2023, with projected Nutrien potash sales volumes of approximately 15 million tonnes.
- Nitrogen prices continue to be supported by historically high European natural gas prices that have led to significant curtailments of ammonia and downstream nitrogen products. Shifts in global nitrogen trade flows have led to higher US exports and lower import volumes, which we expect will result in a tight North American supply and demand balance entering 2023.
- Chinese urea and phosphate export restrictions have limited exports in 2022 and are expected to persist into 2023. The restrictions have led to low Chinese phosphate operating rates, maintaining relatively tight global phosphate supplies, while contributing to lower global sulfur prices and supporting phosphate production margins.

Financial Guidance

- Nutrien revised its full-year 2022 adjusted EBITDA guidance and full-year 2022 adjusted net earnings per share guidance primarily due to lower expected Potash earnings as a result of lower potash sales volumes and realized prices, which more than offset stronger expected Retail earnings. Adjusted net earnings per share guidance includes our plan to allocate approximately \$4 billion to share repurchases in 2022.
- Nutrien lowered potash sales volume guidance primarily to reflect the impact of the compressed spring application season in North America that resulted in higher inventory carry-over and cautious purchasing.
- Nutrien lowered nitrogen sales volume guidance to reflect the impact of Trinidad gas curtailments during the second half of 2022.

All guidance numbers, including those noted above are outlined in the table below. Refer to page 53 of Nutrien's 2021 Annual Report for related assumptions and sensitivities.

(billions of US dollars, except as otherwise noted)	Guidance Ranges ¹ as of			
	Nov 2, 2022		Aug 3, 2022	
	Low	High	Low	High
Adjusted net earnings per share ²	13.25	14.50	15.80	17.80
Adjusted EBITDA ²	12.2	13.2	14.0	15.5
Retail adjusted EBITDA	2.15	2.25	2.10	2.20
Potash adjusted EBITDA	5.8	6.2	7.6	8.2
Nitrogen adjusted EBITDA	4.1	4.4	4.0	4.7
Phosphate adjusted EBITDA (in millions of US dollars)	700	800	750	850
Potash sales tonnes (millions) ³	12.5	12.9	14.3	14.9
Nitrogen sales tonnes (millions) ³	10.4	10.5	10.6	11.0
Depreciation and amortization	2.0	2.1	2.0	2.1
Effective tax rate on adjusted earnings (%)	25.0	26.0	25.5	26.5
Sustaining capital expenditures ⁴	1.3	1.4	1.3	1.4

1 See the "Forward-Looking Statements" section.

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

3 Manufactured product only. Nitrogen sales tonnes excludes ESN® products.

4 This is a supplementary financial measure. See the "Other Financial Measures" section.

Consolidated Results

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30			Nine Months Ended September 30		
	2022	2021	% Change	2022	2021	% Change
Sales	8,188	6,024	36	30,351	20,445	48
Freight, transportation and distribution	204	220	(7)	628	653	(4)
Cost of goods sold	4,722	3,639	30	17,205	13,589	27
Gross margin	3,262	2,165	51	12,518	6,203	102
Expenses	1,056	1,108	(5)	3,368	3,249	4
Net earnings	1,583	726	118	6,569	1,972	233
Adjusted EBITDA ¹	2,467	1,642	50	10,075	4,663	116
Diluted net earnings per share	2.94	1.25	135	11.96	3.41	251
Adjusted net earnings per share ¹	2.51	1.38	82	11.10	3.75	196
Cash provided by (used in) operating activities	878	(1,565)	n/m	3,374	249	n/m
Free cash flow ¹	1,543	862	79	6,770	2,751	146
Free cash flow including changes in non-cash operating working capital ¹	450	(1,890)	n/m	2,496	(544)	n/m

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

Net earnings and adjusted EBITDA increased in the third quarter and first nine months of 2022 compared to the same periods in 2021. This was due to higher net realized selling prices from global supply uncertainties across our nutrient businesses and strong Retail performance. In the third quarter of 2022, we recorded a non-cash impairment reversal of \$330 million related to our Phosphate operations, which impacted net earnings and brings the total impairment reversal to \$780 million for the first nine months of 2022. Cash provided by operating activities increased in the third quarter and first nine months of 2022 compared to the same periods in 2021 due primarily to higher net earnings.

Segment Results

Our discussion of segment results set out on the following pages is a comparison of the results for the three and nine months ended September 30, 2022 to the results for the three and nine months ended September 30, 2021, unless otherwise noted.

Nutrien Ag Solutions (“Retail”)

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30							
	Dollars			Gross Margin			Gross Margin (%)	
	2022	2021	% Change	2022	2021	% Change	2022	2021
Sales								
Crop nutrients	1,605	1,194	34	214	246	(13)	13	21
Crop protection products	1,716	1,469	17	436	374	17	25	25
Seed	134	140	(4)	33	56	(41)	25	40
Merchandise	241	265	(9)	41	44	(7)	17	17
Nutrien Financial	65	54	20	65	54	20	100	100
Services and other ¹	244	252	(3)	153	170	(10)	63	67
Nutrien Financial elimination ^{1,2}	(25)	(27)	(7)	(25)	(27)	(7)	100	100
	3,980	3,347	19	917	917	-	23	27
Cost of goods sold	3,063	2,430	26					
Gross margin	917	917	-					
Expenses ³	890	808	10					
Earnings before finance costs and taxes (“EBIT”)	27	109	(75)					
Depreciation and amortization	206	182	13					
EBITDA	233	291	(20)					
Adjustments ⁴	2	-	n/m					
Adjusted EBITDA	235	291	(19)					

1 Certain immaterial figures have been reclassified for the three months ended September 30, 2021.

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

3 Includes selling expenses of \$821 million (2021 – \$746 million).

4 See Note 2 to the interim financial statements.

(millions of US dollars, except as otherwise noted)	Nine Months Ended September 30							
	Dollars			Gross Margin			Gross Margin (%)	
	2022	2021	% Change	2022	2021	% Change	2022	2021
Sales								
Crop nutrients	7,740	5,255	47	1,417	1,169	21	18	22
Crop protection products	6,086	5,220	17	1,523	1,137	34	25	22
Seed	1,861	1,819	2	382	362	6	21	20
Merchandise	755	763	(1)	133	127	5	18	17
Nutrien Financial	205	138	49	205	138	49	100	100
Services and other ¹	729	737	(1)	555	570	(3)	76	77
Nutrien Financial elimination ¹	(113)	(76)	49	(113)	(76)	49	100	100
	17,263	13,856	25	4,102	3,427	20	24	25
Cost of goods sold	13,161	10,429	26					
Gross margin	4,102	3,427	20					
Expenses ²	2,733	2,467	11					
EBIT	1,369	960	43					
Depreciation and amortization	550	528	4					
EBITDA	1,919	1,488	29					
Adjustments ³	(17)	9	n/m					
Adjusted EBITDA	1,902	1,497	27					

1 Certain immaterial figures have been reclassified for the nine months ended September 30, 2021.

2 Includes selling expenses of \$2,556 million (2021 – \$2,276 million).

3 See Note 2 to the interim financial statements.

- **Adjusted EBITDA** in the first nine months of 2022 increased 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 sales. Adjusted EBITDA decreased in the third quarter of 2022 compared to the prior year’s record results as strong crop protection product margins were offset by lower margins in other product categories as well as inflation on certain expense items in 2022. Retail cash operating coverage ratio¹ improved as at September 30, 2022 to 55 percent from 59 percent in the same period in 2021 due to significantly higher gross margin.

1. These (and any related guidance, if applicable) are non-IFRS financial measures. See the “Non-IFRS Financial Measures” section for further information.

- **Crop nutrients** sales increased in the third quarter and first nine months of 2022 due to higher selling prices. Gross margin and gross margin per tonne increased in the first nine months of 2022 compared to the same period last year due to strategic procurement and the timing of inventory purchasing in the first half of 2022, with a decrease in the third quarter of 2022 due to higher cost inventory. Sales volumes decreased in the first nine months of 2022 due to reduced application resulting from a delayed planting season in North America and earlier engagement in the prior year in a rising price environment.
- **Crop protection products** sales and gross margin increased in the third quarter and first nine months of 2022, particularly in North America, due to higher prices along with increased sales and gross margin in proprietary products. Gross margin as a percentage of sales increased in the first nine months of 2022, supported by the reliability of our supply chain and strategic procurement in a rising price environment.
- **Seed** sales and gross margin increased in the first nine months of 2022 due to higher pricing and an increase in proprietary seed margins, with a decrease in the third quarter of 2022 as a result of timing and mix of seed sales compared to the same period in 2021.
- **Merchandise** gross margin for the first nine months of 2022 increased due to strong margin performance in Australia animal health products from increased flock and herd sizes, with a decrease in the third quarter of 2022 due to an unfavorable foreign exchange rate impact on Australian dollars.
- **Nutrien Financial** sales increased in the third quarter and first nine months of 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** decreased in the third quarter and first nine months of 2022 mainly due to lower livestock volumes as wet conditions in Australia impeded movement, along with an unfavorable foreign exchange rate impact on Australian dollars.

Potash

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30								
	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
Manufactured product									
Net sales									
North America	436	483	(10)	619	1,515	(59)	703	319	120
Offshore	1,568	705	122	2,548	2,276	12	616	310	99
	2,004	1,188	69	3,167	3,791	(16)	633	313	102
Cost of goods sold	386	372	4				122	98	24
Gross margin - total	1,618	816	98				511	215	138
Expenses ¹	352	146	141	Depreciation and amortization			35	35	2
EBIT	1,266	670	89	Gross margin excluding depreciation and amortization - manufactured ³			546	250	119
Depreciation and amortization	112	131	(15)						
EBITDA	1,378	801	72	Potash controllable cash cost of product manufactured ³			70	55	27
Adjustments ²	-	7	(100)						
Adjusted EBITDA	1,378	808	71						

¹ Includes provincial mining taxes of \$348 million (2021 – \$128 million).

² See Note 2 to the interim financial statements.

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

(millions of US dollars, except as otherwise noted)	Nine Months Ended September 30								
	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
Manufactured product									
Net sales									
North America	1,949	1,141	71	2,770	4,157	(33)	703	275	156
Offshore	4,573	1,475	210	7,149	6,412	11	640	230	178
	6,522	2,616	149	9,919	10,569	(6)	658	248	165
Cost of goods sold	1,090	980	11				110	93	18
Gross margin - total	5,432	1,636	232				548	155	254
Expenses ¹	975	333	193	Depreciation and amortization			36	35	2
EBIT	4,457	1,303	242	Gross margin excluding depreciation and amortization - manufactured			584	190	207
Depreciation and amortization	354	371	(5)						
EBITDA	4,811	1,674	187	Potash controllable cash cost of product manufactured			56	51	10
Adjustments ²	-	9	(100)						
Adjusted EBITDA	4,811	1,683	186						

1 Includes provincial mining taxes of \$959 million (2021 – \$293 million).

2 See Note 2 to the interim financial statements.

- **Adjusted EBITDA** increased in the third quarter and first nine months of 2022 due to higher net realized selling prices and strong offshore sales volumes, which more than offset lower North American sales volumes, higher royalties and provincial mining taxes.
- **Sales volumes** decreased in the third quarter and first nine months of 2022 due to a compressed North American spring application season that resulted in high inventory carry-over along with cautious purchasing. Offshore sales volumes were the highest of any first nine-month period on record due to strong demand and reduced supply from Eastern Europe.
- **Net realized selling price** increased in the third quarter and first nine months of 2022 due to the impact of supply constraints, in particular related to uncertainty on future supply from Russia and Belarus. Net realized prices decreased from the second quarter of 2022 due to a decline in benchmark pricing, particularly in Brazil and North America.
- **Cost of goods sold per tonne** in the first nine months of 2022 increased primarily due to higher royalties resulting from increased net realized selling prices. Potash controllable cash cost of product manufactured increased in the third quarter due to lower production volumes and a pull forward of maintenance activities.

Canpotex Sales by Market

(percentage of sales volumes, except as otherwise noted)	Three Months Ended September 30			Nine Months Ended September 30		
	2022	2021	Change	2022	2021	Change
Latin America	35	48	(13)	36	38	(2)
Other Asian markets ¹	32	28	4	34	35	(1)
China	15	7	8	14	11	3
Other markets	10	8	2	9	10	(1)
India	8	9	(1)	7	6	1
	100	100		100	100	

1 All Asian markets except China and India.

Nitrogen

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30								
	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
Manufactured product									
Net sales									
Ammonia	649	368	76	701	721	(3)	927	509	82
Urea	393	316	24	651	659	(1)	603	480	26
Solutions, nitrates and sulfates	465	289	61	1,274	1,141	12	365	253	44
	1,507	973	55	2,626	2,521	4	574	386	49
Cost of goods sold	872	591	48				333	234	42
Gross margin - manufactured	635	382	66				241	152	59
Gross margin - other ¹	29	24	21	Depreciation and amortization			54	50	8
Gross margin - total (Income) expenses	664	406	64	Gross margin excluding depreciation and amortization - manufactured ²			295	202	46
	(50)	(1)	n/m						
EBIT	714	407	75	Ammonia controllable cash cost of product manufactured ²			62	53	17
Depreciation and amortization	141	125	13						
EBITDA/ Adjusted EBITDA	855	532	61						

¹ Includes other nitrogen (including ESN[®]) and purchased products and comprises net sales of \$264 million (2021 – \$128 million) less cost of goods sold of \$235 million (2021 – \$104 million).

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

(millions of US dollars, except as otherwise noted)	Nine Months Ended September 30								
	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
Manufactured product									
Net sales									
Ammonia	1,952	874	123	1,939	2,129	(9)	1,007	411	145
Urea	1,457	911	60	2,052	2,235	(8)	710	407	74
Solutions, nitrates and sulfates	1,440	743	94	3,495	3,526	(1)	412	211	95
	4,849	2,528	92	7,486	7,890	(5)	648	320	103
Cost of goods sold	2,351	1,628	44				314	206	52
Gross margin - manufactured	2,498	900	178				334	114	193
Gross margin - other ¹	84	72	17	Depreciation and amortization			54	52	4
Gross margin - total (Income) expenses	2,582	972	166	Gross margin excluding depreciation and amortization - manufactured			388	166	134
	(105)	(1)	n/m						
EBIT	2,687	973	176	Ammonia controllable cash cost of product manufactured			59	52	13
Depreciation and amortization	403	409	(1)						
EBITDA	3,090	1,382	124						
Adjustments ²	-	5	(100)						
Adjusted EBITDA	3,090	1,387	123						

¹ Includes other nitrogen (including ESN[®]) and purchased products and comprises net sales of \$892 million (2021 – \$512 million) less cost of goods sold of \$808 million (2021 – \$440 million).

² See Note 2 to the interim financial statements.

- **Adjusted EBITDA** increased in the third quarter and first nine months of 2022 primarily due to higher net realized selling prices and higher earnings from equity-accounted investees, which more than offset higher natural gas costs and lower ammonia and urea volumes.
- **Sales volumes** increased in the third quarter of 2022 due to strong demand and higher offshore urea ammonium nitrate (UAN) sales that more than offset the impact of gas curtailments in Trinidad. Sales volumes in the first nine months of 2022 decreased due to unplanned plant outages and a compressed North American spring application season.
- **Net realized selling price** in the third quarter and first nine months of 2022 were higher due to strong benchmark prices resulting from tight global supply and higher energy prices in key nitrogen producing regions. Net realized selling prices decreased from the second quarter of 2022 due to a seasonal reset in benchmark prices that resulted in lower Nitrogen summer fill pricing.
- **Cost of goods sold per tonne** in the third quarter and first nine months of 2022 increased primarily due to higher natural gas, raw material and other input costs. Ammonia controllable cash cost of product manufactured increased in the third quarter and first nine months due to higher input costs, mainly electricity costs.

Natural Gas Prices in Cost of Production

(US dollars per MMBtu, except as otherwise noted)	Three Months Ended September 30			Nine Months Ended September 30		
	2022	2021	% Change	2022	2021	% Change
Overall gas cost excluding realized derivative impact	8.33	4.77	75	7.92	3.92	102
Realized derivative impact	(0.09)	0.01	n/m	(0.06)	0.02	n/m
Overall gas cost	8.24	4.78	72	7.86	3.94	99
Average NYMEX	8.20	4.01	104	6.77	3.18	113
Average AECO	4.46	2.83	58	4.34	2.48	75

- **Natural gas prices in our cost of production** increased in the third quarter and first nine months of 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.

Phosphate

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30								
	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
Manufactured product									
Net sales									
Fertilizer	375	269	39	479	428	12	782	628	25
Industrial and feed	192	132	45	161	192	(16)	1,198	689	74
	567	401	41	640	620	3	886	648	37
Cost of goods sold	445	300	48				695	484	44
Gross margin - manufactured	122	101	21				191	164	16
Gross margin - other ¹	(8)	7	n/m	Depreciation and amortization			75	63	19
Gross margin - total	114	108	6	Gross margin excluding depreciation and amortization - manufactured ³			266	227	17
(Income) expenses	(311)	12	n/m						
EBIT	425	96	343						
Depreciation and amortization	48	39	23						
EBITDA	473	135	250						
Adjustments ²	(330)	-	n/m						
Adjusted EBITDA	143	135	6						

¹ Includes other phosphate and purchased products and comprises net sales of \$84 million (2021 – \$47 million) less cost of goods sold of \$92 million (2021 – \$40 million).

² See Notes 2 and 3 to the interim financial statements. Includes impairment reversal of assets of \$330 million (2021 – nil).

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

(millions of US dollars, except as otherwise noted)	Nine Months Ended September 30								
	Dollars			Tonnes (thousands)			Average per Tonne		
	2022	2021	% Change	2022	2021	% Change	2022	2021	% Change
Manufactured product									
Net sales									
Fertilizer	1,093	731	50	1,305	1,331	(2)	837	549	52
Industrial and feed	551	365	51	542	577	(6)	1,017	633	61
	1,644	1,096	50	1,847	1,908	(3)	890	575	55
Cost of goods sold	1,157	853	36				626	448	40
Gross margin - manufactured	487	243	100				264	127	108
Gross margin - other ¹	(10)	15	n/m	Depreciation and amortization			70	59	20
Gross margin - total	477	258	85	Gross margin excluding depreciation and amortization - manufactured			334	186	80
(Income) expenses	(739)	26	n/m						
EBIT	1,216	232	424						
Depreciation and amortization	130	112	16						
EBITDA	1,346	344	291						
Adjustments ²	(780)	-	n/m						
Adjusted EBITDA	566	344	65						

¹ Includes other phosphate and purchased products and comprises net sales of \$232 million (2021 – \$140 million) less cost of goods sold of \$242 million (2021 – \$125 million).

² See Notes 2 and 3 to the interim financial statements. Includes impairment reversal of assets of \$780 million (2021 – nil).

- **Adjusted EBITDA** increased in the third quarter and first nine months of 2022 mainly due to higher net realized selling prices, which more than offset higher raw material costs. Included with expenses in the third quarter of 2022, we recognized a \$330 million non-cash impairment of assets reversal, which is deducted from adjusted EBITDA. This brings the total impairment reversal to \$780 million for the first nine months of 2022 and is due to a more favorable outlook for phosphate margins.
- **Sales volumes** increased in the third quarter of 2022 due to strong offshore fertilizer sales, offsetting lower industrial sales that were impacted by an unplanned plant outage. Sales volumes in the first nine months of 2022 decreased due to a condensed North American spring application season and lower production volumes.
- **Net realized selling price** increased in the third quarter and first nine months of 2022 aligned with the increase in global benchmark prices. Industrial and feed net realized selling prices increased to a greater extent than fertilizer prices in the third quarter of 2022, which reflects the typical lag in industrial and feed price realizations relative to spot fertilizer prices.
- **Cost of goods sold per tonne** increased in the third quarter and first nine months of 2022 primarily due to significantly higher sulfur and ammonia input costs.

Corporate and Others

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30			Nine Months Ended September 30		
	2022	2021	% Change	2022	2021	% Change
Selling expenses	(2)	(9)	(78)	(6)	(24)	(75)
General and administrative expenses	80	58	38	227	182	25
Share-based compensation expense	39	64	(39)	122	125	(2)
Other expenses	59	30	97	160	141	13
EBIT	(176)	(143)	23	(503)	(424)	19
Depreciation and amortization	19	12	58	55	34	62
EBITDA	(157)	(131)	20	(448)	(390)	15
Adjustments ¹	63	89	(29)	230	232	(1)
Adjusted EBITDA	(94)	(42)	124	(218)	(158)	38

¹ See Note 2 to the interim financial statements.

- **General and administrative expenses** were higher in the third quarter and first nine months of 2022 compared to the same periods in 2021 mainly due to increased depreciation expense, higher donations and higher information technology-related expenses.
- **Other expenses** were higher in the third quarter and first nine months of 2022 compared to the same periods in 2021 mainly due to higher foreign exchange losses related to our US dollar denominated liabilities in our South American operations and higher information technology project-related costs. This was partially offset by the absence of cloud computing related expenses from our change in accounting policy and lower COVID-19 related expenses.

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

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30			Nine Months Ended September 30		
	2022	2021	% Change	2022	2021	% Change
Finance costs	136	122	11	375	367	2
Income tax expense	487	209	133	2,206	615	259
Other comprehensive (loss) income	(230)	(79)	191	(296)	6	n/m

- **Finance costs** were higher in the third quarter and first nine months of 2022 compared to the same periods in 2021 mainly due to higher interest rates and a higher short-term debt balance, mostly offset by a lower long-term debt balance resulting from the early extinguishment of a portion of our long-term debt in the fourth quarter of 2021.
- **Income tax expense** was higher as a result of higher earnings in the third quarter and first nine months of 2022 compared to the same periods in 2021.
- **Other comprehensive (loss) income** is primarily driven by changes in the currency translation of our foreign operations and our investment in Sinofert Holdings Ltd. (“Sinofert”). In the third quarter and first nine months of 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 the same periods of 2021. In the third quarter and first nine months of 2022, we had higher losses on foreign currency translation of our Retail operations, mainly in Australia and Canada compared to the same periods in 2021. These currencies depreciated relative to the US dollar as at September 30, 2022 compared to June 30, 2022 and December 31, 2021 levels, which led to losses in the third quarter and the first nine months of 2022. This was partially offset by a net actuarial gain on our defined benefit pension plans in the third quarter of 2022.

Liquidity and Capital Resources

Sources and Uses of Liquidity

We continued to manage our capital in accordance with our capital allocation strategy. 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. Refer to the “Capital Structure and Management” section for details on our existing long-term debt and credit facilities.

Sources and Uses of Cash

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30			Nine Months Ended September 30		
	2022	2021	% Change	2022	2021	% Change
Cash provided by (used in) operating activities	878	(1,565)	n/m	3,374	249	n/m
Cash used in investing activities	(705)	(523)	35	(1,679)	(1,342)	25
Cash (used in) provided by financing activities	(29)	757	n/m	(1,319)	117	n/m
Effect of exchange rate changes on cash and cash equivalents	(32)	(20)	60	(52)	(35)	49
Increase (decrease) in cash and cash equivalents	112	(1,351)	n/m	324	(1,011)	n/m

Cash provided by (used in) operating activities	<ul style="list-style-type: none"> Cash provided by operating activities was higher in the third quarter and first nine months of 2022 compared to the same periods in 2021 due to higher net earnings driven by higher selling prices from global supply uncertainties, offset by working capital requirements.
Cash used in investing activities	<ul style="list-style-type: none"> Cash used in investing activities in the third quarter and first nine months of 2022 was higher compared to the same periods in 2021 mainly due to higher spending to maintain the safety and reliability of our assets and to increase our potash production capabilities.
Cash (used in) provided by financing activities	<ul style="list-style-type: none"> Cash used in financing activities in the third quarter and first nine months of 2022 was higher compared to the same periods in 2021 due to increased share repurchases, partially offset with increased commercial paper and credit facility drawdowns to temporarily finance working capital requirements.

Financial Condition Review

The following balance sheet categories contain variances that are considered material:

(millions of US dollars, except as otherwise noted)	As at		\$ Change	% Change
	September 30, 2022	December 31, 2021		
Assets				
Cash and cash equivalents	823	499	324	65
Receivables	8,591	5,366	3,225	60
Inventories	6,545	6,328	217	3
Prepaid expenses and other current assets	737	1,653	(916)	(55)
Property, plant and equipment	21,022	20,016	1,006	5
Liabilities and Equity				
Short-term debt	4,454	1,560	2,894	186
Current portion of long-term debt	1,016	545	471	86
Payables and accrued charges	8,760	10,052	(1,292)	(13)
Long-term debt	7,020	7,521	(501)	(7)
Deferred income tax liabilities	3,489	3,165	324	10
Asset retirement obligations and accrued environmental costs	1,320	1,566	(246)	(16)
Share capital	14,588	15,457	(869)	(6)
Accumulated other comprehensive loss	(498)	(146)	(352)	241
Retained earnings	11,787	8,192	3,595	44

- Explanations for changes in **Cash and cash equivalents** are in the “Sources and Uses of Cash” section.
- **Receivables** increased due to higher sales across all of our segments as a result of higher crop nutrient net realized selling prices consistent with higher benchmark pricing, as well as higher Retail vendor rebates receivables.
- **Inventories** increased primarily due to higher cost to produce and/or purchase inventory across all our segments. We held higher than average levels of finished products inventory in our Nitrogen and Phosphate segments, resulting from timing of sales, turnarounds at our Nitrogen facilities at year-end and higher input costs. This was partially offset by a decrease in inventory in our Retail segment driven by seasonality. Generally, we carry higher inventory levels at year-end and during the early part of the year in preparation for the upcoming planting and application seasons. Throughout the year, inventory levels decrease as we sell to our customers.
- **Prepaid expenses and other current assets** decreased due to the drawdown of prepaid inventory where Retail typically prepays for products at year-end and takes possession of inventory throughout the year.
- **Property, plant and equipment** increased due to impairment reversals in the Phosphate segment.
- **Short-term debt** increased due to additional commercial paper issuances and borrowings under our credit facilities for our seasonal working capital requirements and for share repurchases.
- **Payables and accrued charges** decreased due to the seasonality of our Retail segment. Throughout the year, we settle our vendor obligations and customer prepayments decrease as drawdowns occur. As at September 30, 2022, we had higher payables balances compared to the same period in 2021 due to higher input costs from inflation and tight global supply.
- **Long-term debt** decreased due to a reclassification to the current portion of long-term debt of our \$500 million notes maturing May 2023.
- **Deferred income tax liabilities** increased primarily in the NPK businesses in the US and Canada, partially offset by US Retail recoveries. The reversal of the Phosphate impairment also resulted in an increase in the deferred tax liability of \$161 million.
- **Asset retirement obligations and accrued environment costs** decreased due to changes in discount rates, reclassification to the current portion of asset retirement obligations and increased spending on remediation to restore our sites.
- **Share capital** decreased from shares repurchased under our normal course issuer bids partially offset by exercise of stock options.
- **Accumulated other comprehensive loss** increased due to a loss on currency translation of our foreign operations.
- **Retained earnings** increased as net earnings in the first nine months of 2022 exceeded dividends declared and share repurchases.

Capital Structure and Management

Principal Debt Instruments

As part of the normal course of business, we closely monitor our liquidity position. We use a combination of cash generated from operations and short-term and long-term debt to finance our operations. We were in compliance with our debt covenants and did not have any changes to our credit ratings in the nine months ended September 30, 2022.

As at September 30, 2022

(millions of US dollars)	Rate of Interest (%)	Total Facility Limit	Outstanding and Committed	
			Short-Term Debt	Long-Term Debt
Credit facilities				
Unsecured revolving term credit facility	n/a	4,500	-	-
Unsecured revolving term credit facility	4.1	2,000	1,000	-
Uncommitted revolving demand facility	4.0	1,000	500	-
Other credit facilities		760		
South American	1.5 - 21.7		194	108
Australian	3.6		97	-
Other	3.3 - 4.0		8	3
Commercial paper	2.9 - 4.0		2,530	-
Other short-term debt	n/a		125	7
Total			4,454	118

The amount available under the commercial paper program is limited to the availability of backup funds under the \$4,500 million unsecured revolving term credit facility and excess cash invested in highly liquid securities. During the third quarter of 2022, we extended the maturity date of the \$4,500 million unsecured revolving term credit facility from June 4, 2026 to September 14, 2027. There was no change to the total facility limit or the significant agreement terms from those we disclosed in our 2021 Annual Report.

During the third quarter of 2022, we entered into a new \$2,000 million revolving term credit facility, with the same principal covenants and events of default as our existing \$4,500 million unsecured revolving term credit facility. The \$2,000 million non-revolving term credit facilities we entered into in July 2022 to help temporarily manage normal seasonal working capital swings were closed prior to September 30, 2022.

Our long-term debt consists primarily of notes. See the “Capital Structure and Management” section of our 2021 Annual Report for information on balances, rates and maturities for our notes. Subsequent to the third quarter of 2022, we repaid the \$500 million 3.15 percent notes that matured October 1, 2022.

Outstanding Share Data

	As at November 1, 2022
Common shares	520,183,851
Options to purchase common shares	3,920,176

We repurchased approximately 40 million shares year-to-date as of November 1, 2022, under our share repurchase programs, for a total of approximately \$3.5 billion and plan to allocate a total of approximately \$4 billion to share repurchases in 2022. While some of the previously expected approximately \$5 billion in repurchases may now extend into the first quarter of 2023 due to lower forecasted operating cash flow in 2022, we still intend on completing our existing 10 percent share repurchase program prior to its expiry in February 2023.

For more information on our capital structure and management, see Note 24 to our 2021 annual financial statements.

Quarterly Results

(millions of US dollars, except as otherwise noted)	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021	Q4 2020
Sales	8,188	14,506	7,657	7,267	6,024	9,763	4,658	4,052
Net earnings	1,583	3,601	1,385	1,207	726	1,113	133	316
Net earnings attributable to equity holders of Nutrien	1,577	3,593	1,378	1,201	717	1,108	127	316
Net earnings per share attributable to equity holders of Nutrien								
Basic	2.95	6.53	2.49	2.11	1.26	1.94	0.22	0.55
Diluted	2.94	6.51	2.49	2.11	1.25	1.94	0.22	0.55

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 input 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 suppliers 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 third and second quarters of 2022, earnings were impacted by \$330 million and \$450 million non-cash impairment reversals at White Springs and Aurora, 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. In the fourth quarter of 2020, earnings were impacted by a \$250 million net gain on disposal of our investment in Misr Fertilizers Production Company S.A.E..

Critical Accounting Estimates

Our significant accounting policies are disclosed in our 2021 Annual Report. 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. Our critical accounting estimates are discussed on page 49 of our 2021 Annual Report. Other than the critical accounting estimates discussed below, there were no material changes in the three or nine months ended September 30, 2022 to our critical accounting estimates.

Impairment of Assets

Long-Lived Asset Impairment and Reversals

In the three months ended September 30, 2022, we continued to revise our near-term pricing forecasts due to continued global export restrictions from major producers and continued our review of our previously impaired Phosphate cash-generating unit ("CGU"), White Springs. In 2017 and 2020, we recorded an impairment of assets at our White Springs CGU relating to property, plant and equipment of \$250 million and \$215 million respectively, as a result of lower long-term forecasted global phosphate prices. Due to increases in our forecast, the recoverable amount of our White Springs CGU is above its carrying amount. As a result, during the three months ended September 30, 2022, we recorded a full impairment reversal, net of depreciation, of \$330 million in the statement of earnings relating to property, plant and equipment. Refer to Note 3 to the interim financial statements.

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.

Goodwill Impairment Indicators

CGUs or groups of CGUs that have goodwill allocated to them must be assessed for impairment when events or circumstances indicate 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. 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.

During the nine months ended September 30, 2022, North American central banks continued to increase their benchmark borrowing rates. Benchmark borrowing rates are used as the risk-free rate which is a component of determining our discount rate for impairment testing. As a result of these increases, we revised our discount rates and increased our Retail – North America group of CGUs discount rate to 8.5 percent (previous impairment analysis – 8.0 percent at June 30, 2022) and this triggered an impairment test to be performed.

The Retail – North America group of CGUs have \$6.9 billion in associated goodwill. 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 was equal to its recoverable amount. A 25 basis point increase in the discount rate will result 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 will also result in impairment in the future. Refer to Note 3 to the interim financial statements.

Risk Factors

Russia and Ukraine Conflict

The current conflict 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 conflict 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 remains 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 in our 2021 Annual Report and 2021 Annual Information Form, including, without limitation, risks relating to market fundamentals and conditions (such as sanctions and trade flows and the impact thereof on crop nutrient supply and demand); cybersecurity threats; energy and commodity prices; inflationary pressures, interest rates and costs of capital; and supply chains and cost-effective and timely transportation.

Controls and Procedures

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 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. Any system of internal control over financial reporting, no matter how well designed, has inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

There has been no change in our internal control over financial reporting during the three months ended September 30, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Forward-Looking Statements

Certain statements and other information included in this document, including within the "Market 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" 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 2022 full-year guidance, including expectations regarding our adjusted net earnings per share and adjusted EBITDA (consolidated and by segment); expectations regarding our growth and capital allocation intentions and strategies; our advancement of strategic growth initiatives; capital spending expectations for 2022; our intention to complete our existing share repurchase program in 2022 and 2023, including the funds allocated thereto; expectations regarding performance of our operating segments in 2022 and 2023 including projected potash sales volumes; our operating segment market outlooks and market conditions and fundamentals for 2022 as well as our expectations for market conditions and fundamentals in 2023 and beyond, 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, grower crop investment, crop mix, production expenses, shipments, consumption, prices and the impact of seasonality, import and export volumes and economic sanctions; Nutrien's ability to develop innovative and sustainable solutions; the negotiation of sales contracts; acquisitions and divestitures and the anticipated benefits thereof; and the potential impairment of goodwill associated with our Retail – North America group of CGUs. 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, this list is 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. The additional key assumptions that have been made 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 to realize the expected synergies; that future business, regulatory and industry conditions will be within the parameters expected by us, including with respect to prices, expenses, margins, demand, supply, product availability, shipments, consumption, supplier agreements, availability and cost of labor and interest, exchange and effective tax rates; assumptions with respect to global economic conditions and the accuracy of our market outlook expectations for 2022 and in the future; assumptions with respect to our intention to complete share repurchases under our share repurchase program, including the funding 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 COVID-19 pandemic on our business, customers, business partners, employees, supply chain, other stakeholders and the overall global economy; our expectations regarding the impacts, direct and indirect, of the conflict between Ukraine and Russia 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 expectations regarding the impact of certain factors on the carrying amount of goodwill associated with our Retail – North America group of CGUs; 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 contracts; and our ability to successfully implement new initiatives and programs.

Events or circumstances that could cause actual results to differ materially from those in the forward-looking statements 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; seasonality; climate change and weather conditions, including impacts from regional flooding and/or drought conditions; crop planted acreage, yield and prices; the supply and demand and price levels for our products; governmental and regulatory requirements and actions by governmental authorities, including changes in government policy (including tariffs, trade restrictions and climate change initiatives), government ownership requirements, 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 COVID-19 pandemic, including variants of the COVID-19 virus and the efficiency and distribution of vaccines, and its resulting effects on economic conditions, restrictions imposed by public health authorities or governments, including government-imposed vaccine mandates, fiscal and monetary responses by governments and financial institutions and disruptions to global supply chains; the conflict 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; our ability to execute on our strategies related to environmental, social and governance matters, and achieve related expectations; the risk that rising interest rates and/or deteriorated business operating results may result in the impairment of goodwill attributed to certain of our cash generating units; and other risk factors detailed from time to time in Nutrien reports filed with the Canadian securities regulators and the SEC in the United States.

The purpose of our adjusted net earnings per share, adjusted EBITDA (consolidated and by segment) and sustaining capital expenditures guidance 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.

Terms and Definitions

For the definitions of certain financial and non-financial terms used in this document, as well as a list of abbreviated company names and sources, see the “Terms & Definitions” section of our 2021 Annual Report. All references to per share amounts pertain to diluted net earnings (loss) per share, “n/m” indicates information that is not meaningful, and all financial amounts are stated in millions of US dollars, unless otherwise noted.

Appendix A - Selected Additional Financial Data

Selected Retail Measures

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Proprietary products margin as a percentage of product line margin (%)				
Crop nutrients	35	26	22	24
Crop protection products	41	41	41	41
Seed	62	48	45	45
All products	30	27	27	27
Crop nutrients sales volumes (tonnes – thousands)				
North America	1,066	1,112	6,286	7,729
International	782	898	2,732	2,833
Total	1,848	2,010	9,018	10,562
Crop nutrients selling price per tonne				
North America	836	602	908	510
International	913	585	744	464
Total	869	595	858	498
Crop nutrients gross margin per tonne				
North America	155	147	191	127
International	64	95	80	67
Total	117	124	157	111

Financial performance measures

	2022	2021
Retail adjusted EBITDA margin (%) ^{1,2}	11	11
Retail adjusted EBITDA per US selling location (thousands of US dollars) ^{1,2,3}	1,913	1,362
Retail adjusted average working capital to sales (%) ^{1,4}	16	12
Retail adjusted average working capital to sales excluding Nutrien Financial (%) ^{1,4}	1	(1)
Nutrien Financial adjusted net interest margin (%) ^{1,4}	6.7	6.4
Retail cash operating coverage ratio (%) ^{1,4}	55	59

1 Rolling four quarters ended September 30, 2022 and 2021.

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

3 Excluding acquisitions.

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

Nutrien Financial	As at September 30, 2022					As at Dec 31, 2021		
	Current	<31 days past due	31–90 days past due	>90 days past due	Gross Receivables	Allowance ¹	Net Receivables	Net Receivables
(millions of US dollars)								
North America	3,009	49	138	77	3,273	(34)	3,239	1,488
International	572	8	56	25	661	(2)	659	662
Nutrien Financial receivables	3,581	57	194	102	3,934	(36)	3,898	2,150

¹ Bad debt expense on the above receivables for the nine months ended September 30, 2022 was \$10 million (2021 – \$9 million) in the Retail segment.

Selected Nitrogen Measures

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Sales volumes (tonnes – thousands)				
Fertilizer	1,417	1,320	3,963	4,450
Industrial and feed	1,209	1,201	3,523	3,440
Net sales (millions of US dollars)				
Fertilizer	764	533	2,658	1,503
Industrial and feed	743	440	2,191	1,025
Net selling price per tonne				
Fertilizer	539	404	671	338
Industrial and feed	614	366	622	298

Production Measures

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Potash production (Product tonnes – thousands)	2,742	3,199	10,066	10,149
Potash shutdown weeks ¹	10	10	15	14
Ammonia production – total ²	1,483	1,414	4,359	4,355
Ammonia production – adjusted ^{2, 3}	1,009	856	3,015	2,863
Ammonia operating rate (%) ³	91	77	92	87
P ₂ O ₅ production (P ₂ O ₅ tonnes – thousands)	335	384	1,063	1,109
P ₂ O ₅ operating rate (%)	78	90	84	87

1 Represents weeks of full production shutdown, including inventory adjustments and unplanned events, excluding the impact of any periods of reduced operating rates, planned routine annual maintenance shutdowns and announced workforce reductions.

2 All figures are provided on a gross production basis in thousands of product tonnes.

3 Excludes Trinidad and Joffre.

Appendix B - Non-IFRS Financial Measures

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

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

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

Adjusted EBITDA (Consolidated)

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

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

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

(millions of US dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Net earnings	1,583	726	6,569	1,972
Finance costs	136	122	375	367
Income tax expense	487	209	2,206	615
Depreciation and amortization	526	489	1,492	1,454
EBITDA ¹	2,732	1,546	10,642	4,408
Share-based compensation expense	39	64	122	125
Foreign exchange loss, net of related derivatives	11	1	67	1
Integration and restructuring related costs	15	8	35	47
(Reversal) impairment of assets	(330)	7	(780)	12
COVID-19 related expenses ²	-	16	8	34
Gain on disposal of investment	-	-	(19)	-
Cloud computing transition adjustment ³	-	-	-	36
Adjusted EBITDA	2,467	1,642	10,075	4,663

¹ EBITDA is calculated as net earnings 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 as net earnings (loss) before share-based compensation and certain foreign exchange gain/loss (net of related derivatives), net of tax. We also adjust this measure for the following other income and expenses (net of tax) that are excluded when management evaluates the performance of our day-to-day operations: certain integration and restructuring related costs, impairment or reversal of impairment of assets, COVID-19 related expenses (including those recorded under finance costs), gain or loss on disposal of certain businesses and investments, IFRS adoption transition adjustments, gain/loss on early extinguishment of debt or on settlement of derivatives due to discontinuance of hedge accounting. In 2022, we amended our calculation of adjusted net earnings to adjust for a gain on settlement of a derivative due to discontinued hedge accounting. There was no similar gain or loss in the comparative period. We generally apply the annual forecasted effective tax rate to our adjustments during the year and, at year-end, we apply the actual effective tax rate. If the effective tax rate is significantly different from our forecasted effective tax rate due to adjustments or discrete tax impacts, we apply a tax rate that excludes those items. For material adjustments, we apply a tax rate specific to the adjustment.

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

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30, 2022			Nine Months Ended September 30, 2022		
	Increases (Decreases)	Post-Tax	Per Diluted Share	Increases (Decreases)	Post-Tax	Per Diluted Share
Net earnings attributable to equity holders of Nutrien		1,577	2.94		6,548	11.96
Adjustments:						
Share-based compensation expense	39	30	0.06	122	91	0.17
Foreign exchange loss, net of related derivatives	11	8	0.01	67	50	0.09
Integration and restructuring related costs	15	11	0.02	35	26	0.05
Impairment reversal of assets	(330)	(265)	(0.49)	(780)	(619)	(1.13)
COVID-19 related expenses	-	-	-	8	6	0.01
Gain on disposal of investment	-	-	-	(19)	(14)	(0.03)
Gain on settlement of discontinued hedge accounting derivative	(18)	(14)	(0.03)	(18)	(13)	(0.02)
Adjusted net earnings		1,347	2.51		6,075	11.10

(millions of US dollars, except as otherwise noted)	Three Months Ended September 30, 2021			Nine Months Ended September 30, 2021		
	Increases (Decreases)	Post-Tax	Per Diluted Share	Increases (Decreases)	Post-Tax	Per Diluted Share
Net earnings attributable to equity holders of Nutrien		717	1.25		1,952	3.41
Adjustments:						
Share-based compensation expense	64	48	0.09	125	94	0.16
Foreign exchange loss, net of related derivatives	1	1	-	1	1	-
Integration and restructuring related costs	8	6	0.01	47	35	0.06
Impairment of assets	7	5	0.01	12	9	0.02
COVID-19 related expenses	16	12	0.02	34	26	0.05
Cloud computing transition adjustment	-	-	-	36	27	0.05
Adjusted net earnings		789	1.38		2,144	3.75

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

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

Free Cash Flow and Free Cash Flow Including Changes in Non-Cash Operating Working Capital

Most directly comparable IFRS financial measure: Cash provided by (used in) operating activities.

Definition: Free cash flow is calculated as cash provided by (used in) operating activities less sustaining capital expenditures and before changes in non-cash operating working capital. Free cash flow including non-cash operating working capital is calculated as cash provided by operating activities less sustaining capital expenditures.

Why we use the measure and why it is useful to investors: For evaluation of liquidity and financial strength. These are also useful as indicators of our ability to service debt, meet other payment obligations and make strategic investments. These do not represent residual cash flow available for discretionary expenditures.

(millions of US dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Cash provided by (used in) operating activities	878	(1,565)	3,374	249
Sustaining capital expenditures	(428)	(325)	(878)	(793)
Free cash flow including changes in non-cash operating working capital	450	(1,890)	2,496	(544)
Changes in non-cash operating working capital	(1,093)	(2,752)	(4,274)	(3,295)
Free cash flow	1,543	862	6,770	2,751

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 "Segment Results" 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)	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Total COGS – Potash	386	372	1,090	980
Change in inventory	(52)	(58)	20	(42)
Other adjustments ¹	(5)	(1)	(29)	(7)
COPM	329	313	1,081	931
Depreciation and amortization in COPM	(84)	(101)	(317)	(315)
Royalties in COPM	(42)	(24)	(150)	(60)
Natural gas costs and carbon taxes in COPM	(9)	(11)	(45)	(34)
Controllable cash COPM	194	177	569	522
Production tonnes (tonnes – thousands)	2,742	3,199	10,066	10,149
Potash controllable cash COPM per tonne	70	55	56	51

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)	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Total Manufactured COGS – Nitrogen	872	591	2,351	1,628
Total Other COGS – Nitrogen	235	104	808	440
Total COGS – Nitrogen	1,107	695	3,159	2,068
Depreciation and amortization in COGS	(117)	(105)	(334)	(347)
Cash COGS for products other than ammonia	(640)	(380)	(1,912)	(1,221)
Ammonia				
Total cash COGS before other adjustments	350	210	913	500
Other adjustments ¹	(31)	(36)	(145)	(66)
Total cash COPM	319	174	768	434
Natural gas and steam costs	(267)	(137)	(643)	(329)
Controllable cash COPM	52	37	125	105
Production tonnes (net tonnes ² – thousands)	819	706	2,099	2,011
Ammonia controllable cash COPM per tonne	62	53	59	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.

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.

	Rolling four quarters ended September 30, 2022				
(millions of US dollars, except as otherwise noted)	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Average/Total
Current assets	9,924	12,392	12,487	11,262	
Current liabilities	(7,828)	(9,223)	(9,177)	(5,889)	
Working capital	2,096	3,169	3,310	5,373	3,487
Working capital from certain recent acquisitions	-	-	-	-	
Adjusted working capital	2,096	3,169	3,310	5,373	3,487
Nutrien Financial working capital	(2,150)	(2,274)	(4,404)	(3,898)	
Adjusted working capital excluding Nutrien Financial	(54)	895	(1,094)	1,475	306
Sales	3,878	3,861	9,422	3,980	
Sales from certain recent acquisitions	-	-	-	-	
Adjusted sales	3,878	3,861	9,422	3,980	21,141
Nutrien Financial revenue	(51)	(49)	(91)	(65)	
Adjusted sales excluding Nutrien Financial	3,827	3,812	9,331	3,915	20,885
Adjusted average working capital to sales (%)					16
Adjusted average working capital to sales excluding Nutrien Financial (%)					1

	Rolling four quarters ended September 30, 2021				
(millions of US dollars, except as otherwise noted)	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Average/Total
Current assets	8,013	9,160	9,300	8,945	
Current liabilities	(6,856)	(7,530)	(7,952)	(5,062)	
Working capital	1,157	1,630	1,348	3,883	2,005
Working capital from certain recent acquisitions	-	-	-	-	
Adjusted working capital	1,157	1,630	1,348	3,883	2,005
Nutrien Financial working capital	(1,392)	(1,221)	(3,072)	(2,820)	
Adjusted working capital excluding Nutrien Financial	(235)	409	(1,724)	1,063	(122)
Sales	2,618	2,972	7,537	3,347	
Sales from certain recent acquisitions	-	-	-	-	
Adjusted sales	2,618	2,972	7,537	3,347	16,474
Nutrien Financial revenue	(37)	(25)	(59)	(54)	
Adjusted sales excluding Nutrien Financial	2,581	2,947	7,478	3,293	16,299
Adjusted average working capital to sales (%)					12
Adjusted average working capital to sales excluding Nutrien Financial (%)					(1)

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 financial performance of Nutrien Financial.

(millions of US dollars, except as otherwise noted)	Rolling four quarters ended September 30, 2022				
	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Total/Average
Nutrien Financial revenue	51	49	91	65	
Deemed interest expense ¹	(12)	(6)	(12)	(12)	
Net interest	39	43	79	53	214
Average Nutrien Financial receivables	2,150	2,274	4,404	3,898	3,182
Nutrien Financial adjusted net interest margin (%)					6.7

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

(millions of US dollars, except as otherwise noted)	Rolling four quarters ended September 30, 2021				
	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Total/Average
Nutrien Financial revenue	37	25	59	54	
Deemed interest expense ¹	(14)	(6)	(8)	(10)	
Net interest	23	19	51	44	137
Average Nutrien Financial receivables	1,392	1,221	3,072	2,820	2,126
Nutrien Financial adjusted net interest margin (%)					6.4

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.

	Rolling four quarters ended September 30, 2022				
(millions of US dollars, except as otherwise noted)	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Total
Selling expenses	848	722	1,013	821	3,404
General and administrative expenses	43	45	54	50	192
Other expenses (income)	20	(12)	21	19	48
Operating expenses	911	755	1,088	890	3,644
Depreciation and amortization in operating expenses	(173)	(167)	(171)	(204)	(715)
Operating expenses excluding depreciation and amortization	738	588	917	686	2,929
Gross margin	1,173	845	2,340	917	5,275
Depreciation and amortization in cost of goods sold	5	2	4	2	13
Gross margin excluding depreciation and amortization	1,178	847	2,344	919	5,288
Cash operating coverage ratio (%)					55

	Rolling four quarters ended September 30, 2021				
(millions of US dollars, except as otherwise noted)	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Total
Selling expenses	727	667	863	746	3,003
General and administrative expenses	33	39	41	45	158
Other expenses (income)	8	15	34	17	74
Operating expenses	768	721	938	808	3,235
Depreciation and amortization in operating expenses	(177)	(175)	(166)	(180)	(698)
Operating expenses excluding depreciation and amortization	591	546	772	628	2,537
Gross margin	885	652	1,858	917	4,312
Depreciation and amortization in cost of goods sold	3	2	3	2	10
Gross margin excluding depreciation and amortization	888	654	1,861	919	4,322
Cash operating coverage ratio (%)					59

Appendix C – 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.

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

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.