Investor Information

August 2019

Laura Gagnon
Vice President Investor Relations
Tel 813-619-4396
Cell 612-201-7550
laura.gagnon@mosaicco.com

Lucy Terrill
Sr. Manager Investor Relations
Tel 813-500-6833
Cell 813-417-5100
Lucy.terrill@mosaicco.com

Forward Looking Statements & Non-GAAP Financial Measures

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements about the anticipated benefits and synergies of our acquisition of the the global phosphate and potash operations of Vale S.A. conducted through Vale Fertilizantes S.A. (now known as Mosaic Fertilizantes P&K Ltda) (the "Transaction"), other proposed or pending future transactions or strategic plans and other statements about future financial and operating results, fall fertilizer estimates, charges related to the closing of Plant City, temporary idling of Colonsay, and timing of the completion of dam repairs. Such statements are based upon the current beliefs and expectations of The Mosaic Company's management and are subject to significant risks and uncertainties. These risks and uncertainties include, but are not limited to: difficulties with realization of the benefits and synergies of the Transaction, including the risks that the acquired business may not be integrated successfully or that the anticipated synergies or cost or capital expenditure savings from the Transaction may not be fully realized or may take longer to realize than expected, including because of political and economic instability in Brazil or changes in government policy in Brazil such as higher costs associated with the new freight tables and new mining regulations; the predictability and volatility of, and customer expectations about, agriculture, fertilizer, raw material, energy and transportation markets that are subject to competitive and other pressures and economic and credit market conditions; the level of inventories in the distribution channels for crop nutrients; the effect of future product innovations or development of new technologies on demand for our products; changes in foreign currency and exchange rates; international trade risks and other risks associated with Mosaic's international operations and those of joint ventures in which Mosaic participates, including the performance of the Ma'aden Wa'ad Al Shamal Phosphate Company (also known as MWSPC), the ability of MWSPC to obtain additional planned funding in acceptable amounts and upon acceptable terms, the timely development and commencement of operations of production facilities in the Kingdom of Saudi Arabia, and the future success of current plans for MWSPC and any future changes in those plans; the risk that protests against natural resource companies in Peru extend to or impact the Miski Mayo mine, which is operated by an entity in which we are the majority owner; difficulties with realization of the benefits of our long term natural gas based pricing ammonia supply agreement with CF Industries, Inc., including the risk that the cost savings initially anticipated from the agreement may not be fully realized over its term or that the price of natural gas or ammonia during the term are at levels at which the pricing is disadvantageous to Mosaic; customer defaults; the effects of Mosaic's decisions to exit business operations or locations; changes in government policy; changes in environmental and other governmental regulation, including expansion of the types and extent of water resources regulated under federal law, carbon taxes or other greenhouse gas regulation, implementation of numeric water quality standards for the discharge of nutrients into Florida waterways or efforts to reduce the flow of excess nutrients into the Mississippi River basin, the Gulf of Mexico or elsewhere; further developments in judicial or administrative proceedings, or complaints that Mosaic's operations are adversely impacting nearby farms, business operations or properties; difficulties or delays in receiving, increased costs of or challenges to necessary governmental permits or approvals or increased financial assurance requirements; resolution of global tax audit activity; the effectiveness of Mosaic's processes for managing its strategic priorities; adverse weather conditions affecting operations in Central Florida, the Mississippi River basin, the Gulf Coast of the United States, Canada or Brazil, and including potential hurricanes, excess heat, cold, snow, rainfall or drought; actual costs of various items differing from management's current estimates, including, among others, asset retirement, environmental remediation, reclamation or other environmental regulation, Canadian resources taxes and royalties, or the costs of the MWSPC, its existing or future funding and Mosaic's commitments in support of such funding; reduction of Mosaic's available cash and liquidity, and increased leverage, due to its use of cash and/or available debt capacity to fund financial assurance requirements and strategic investments; brine inflows at Mosaic's Esterhazy, Saskatchewan, potash mine or other potash shaft mines; other accidents and disruptions involving Mosaic's operations, including potential mine fires, floods, explosions, seismic events, sinkholes or releases of hazardous or volatile chemicals; and risks associated with cyber security, including reputational loss; as well as other risks and uncertainties reported from time to time in The Mosaic Company's reports filed with the Securities and Exchange Commission. Actual results may differ from those set forth in the forward-looking statements.

This presentation includes certain non-GAAP financial measures, including adjusted EBITDA, adjusted gross margins, adjusted earnings per share. For important information regarding the non-GAAP measures we present, see "Non-GAAP Financial Measures" in our August 6, 2019 earnings release and the performance data for the second quarter of 2019 that is available on our website at www.mosaicco.com in the "Financial Information – Quarterly Earnings" section under the "Investors" tab.

The earnings release and performance data are also furnished as exhibits to our Current Report on Form 8-K dated August 6, 2019. We are not providing forward looking guidance for U.S. GAAP reported diluted net earnings per share or a quantitative reconciliation of forward-looking non-GAAP EPS, adjusted Gross Margins and adjusted EBITDA. Please see "Non-GAAP Financial Measures" in our August 6, 2019 earnings release for additional information.

The Mosaic Company Overview

Investment Thesis

Long-term demand growth driven by global population and income growth.

Mosaic has long lived, high quality, low cost assets to support our mission: helping the world grow the food it needs.

The company continues to execute well, increasing leverage to improving market conditions.

Attractive outlook for agriculture industry into 2020 and beyond.

Largest Global Finished Phosphate & Potash Producer

High quality, diversified asset portfolio

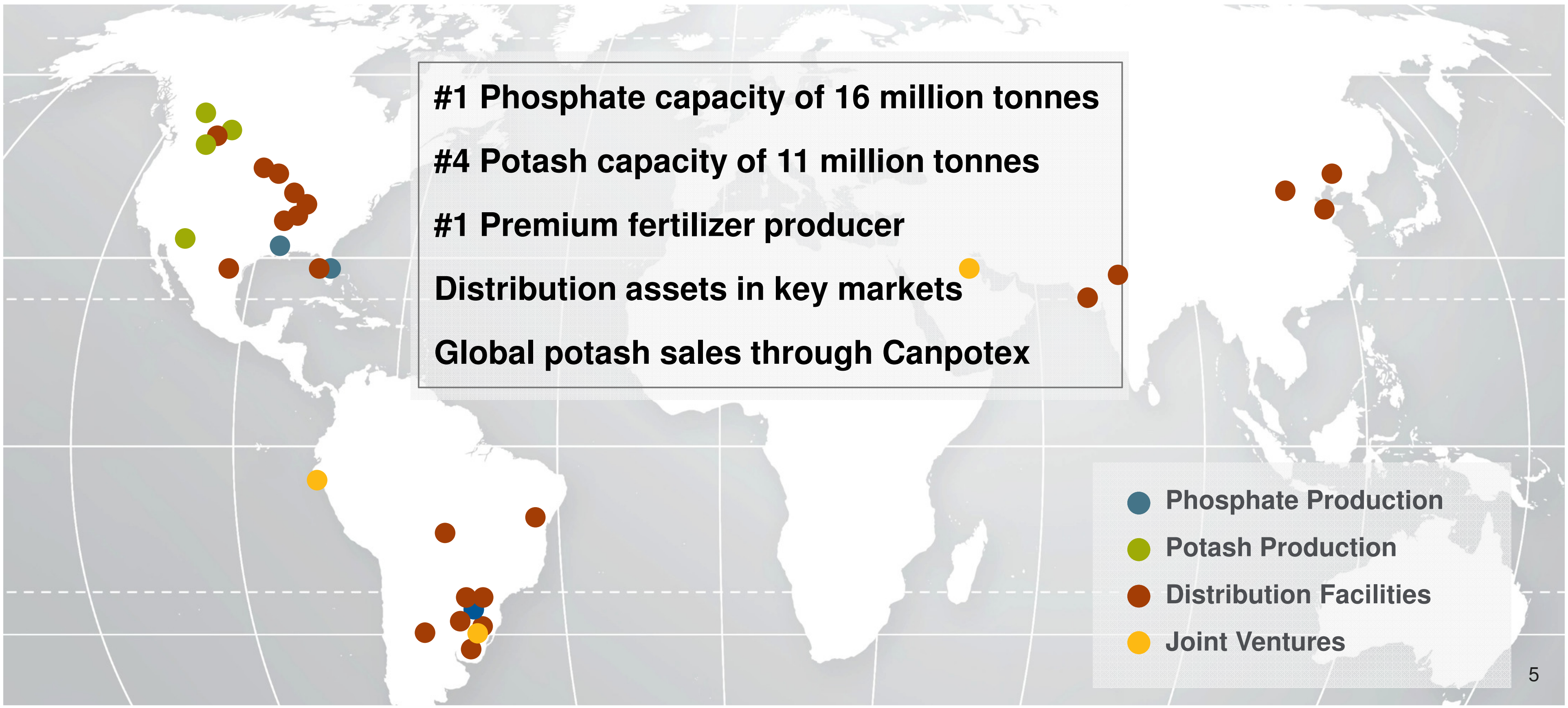
#1 Phosphate capacity of 16 million tonnes

#4 Potash capacity of 11 million tonnes

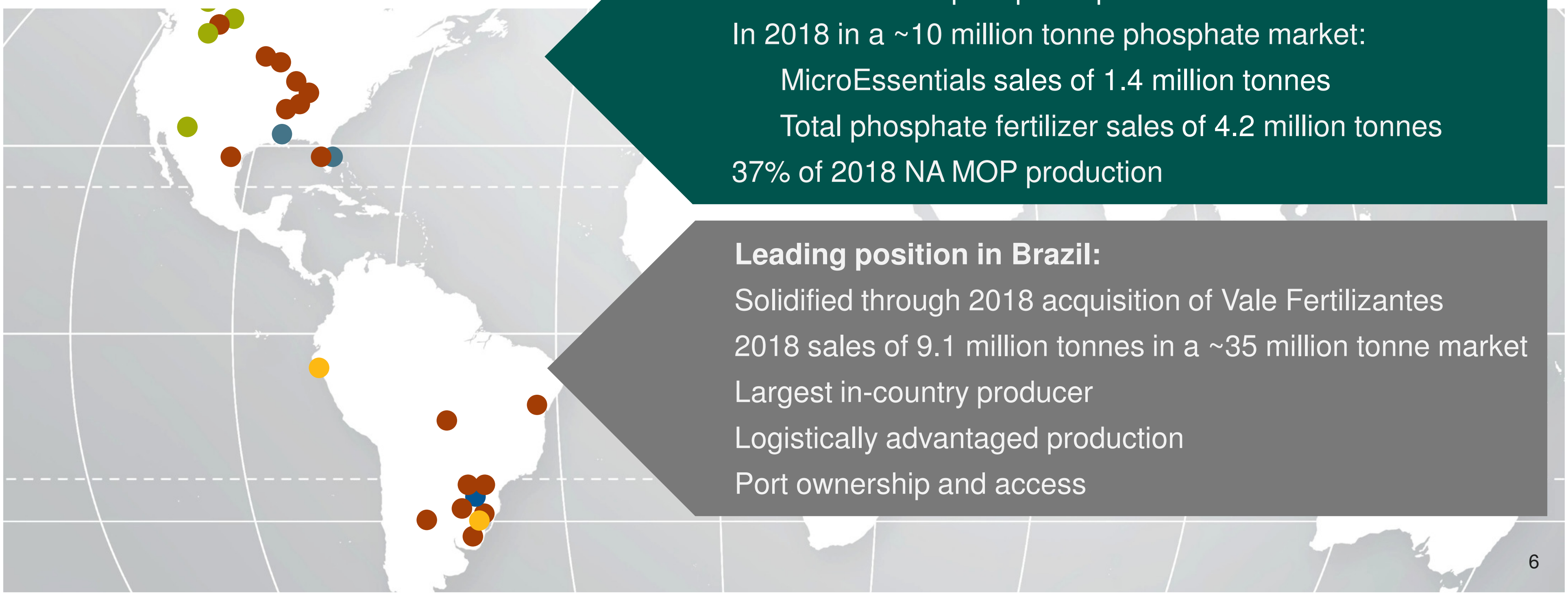
#1 Premium fertilizer producer

Distribution assets in key markets

Global potash sales through Canpotex



Focused on The Americas



Home base in North America:

73% of 2018 NA phosphate production

In 2018 in a ~10 million tonne phosphate market:

- MicroEssentials sales of 1.4 million tonnes
- Total phosphate fertilizer sales of 4.2 million tonnes

37% of 2018 NA MOP production

Leading position in Brazil:

Solidified through 2018 acquisition of Vale Fertilizantes

2018 sales of 9.1 million tonnes in a ~35 million tonne market

Largest in-country producer

Logistically advantaged production

Port ownership and access

Executing Our Strategy

By transforming business operations, lowering costs and increasing leverage to improving markets, Mosaic is well positioned to generate strong shareholder returns.

We Help the World Grow the Food it Needs.

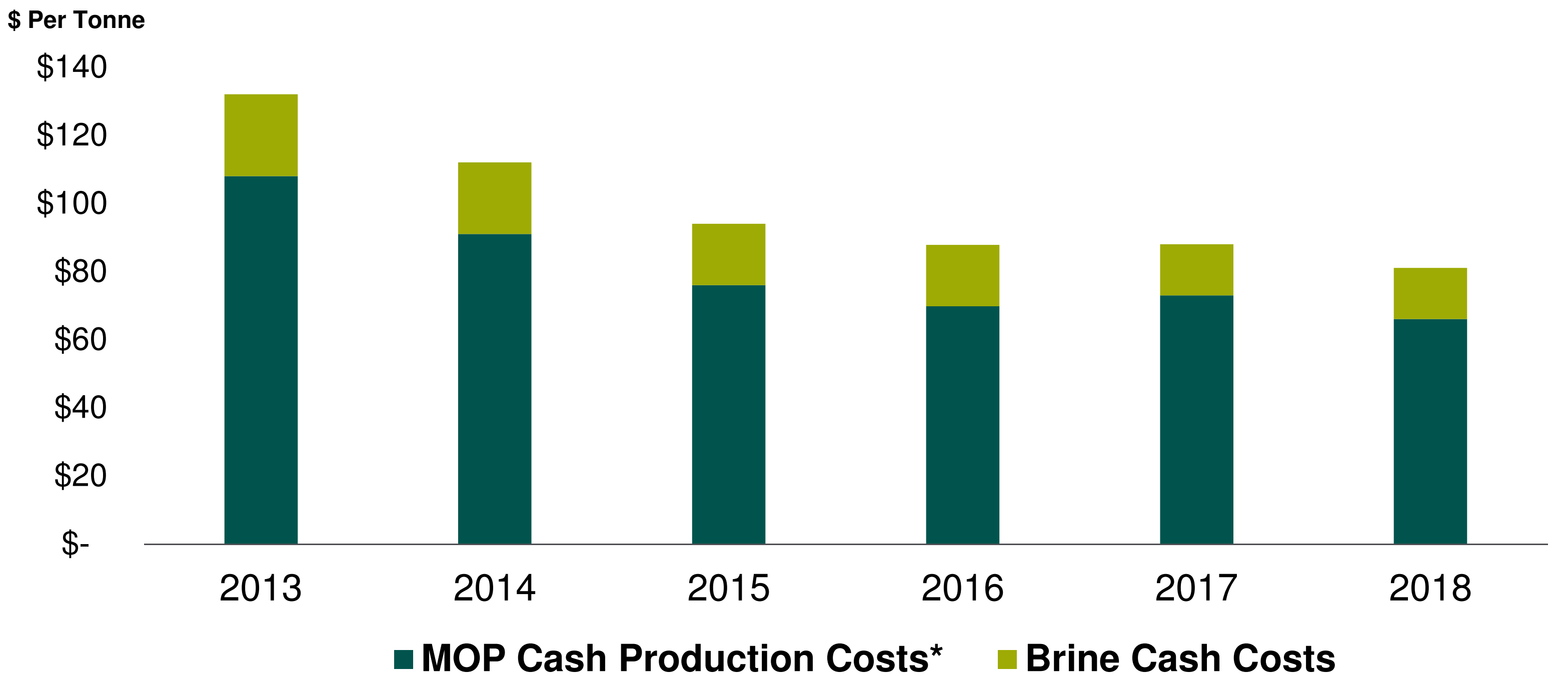
Increasing Our Competitiveness To Win

- Optimized our assets, driving permanent structural improvements
- Accelerated plan to complete K3, a path to de-risking our business and improving margins and costs
- Lowered SG&A / tonne to increase our operating leverage
- Lowered financial leverage to improve risk profile and create the capacity to capture opportunities

Growing Organically and Inorganically

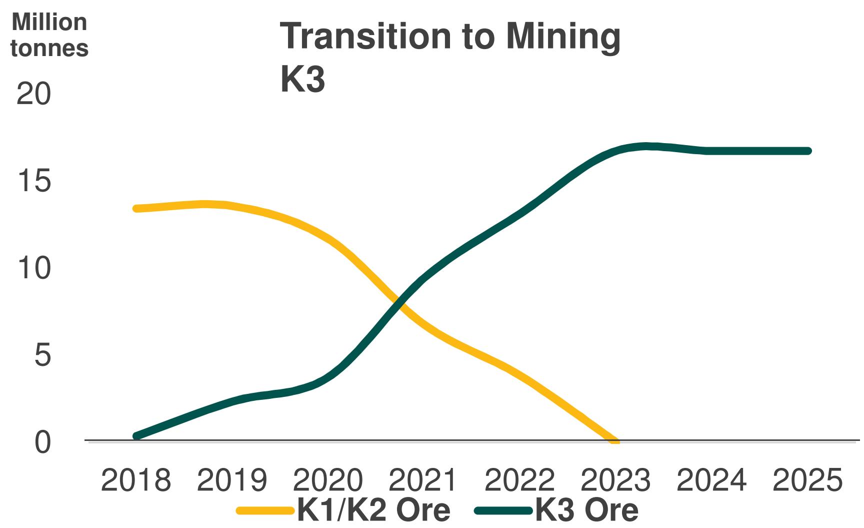
- Delivered record volumes of premium margin products
- Acquired Mosaic Fertilizantes assets at the trough and are a full year ahead of our integration and synergy targets

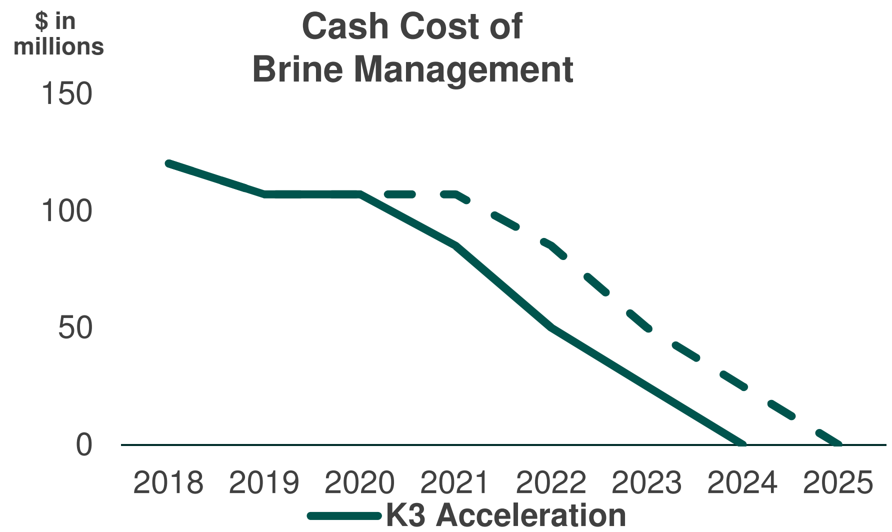
Potash: Increasing Our Competitiveness



*MOP cash production costs are reflective of actual costs during the quarter, excluding CRT and realized mark-to-market gains and losses and including turnarounds. Turnaround costs are captured as period costs while the rest are capitalized into inventory. As such, the costs presented are not necessarily reflective of costs included in costs of goods sold for the period.

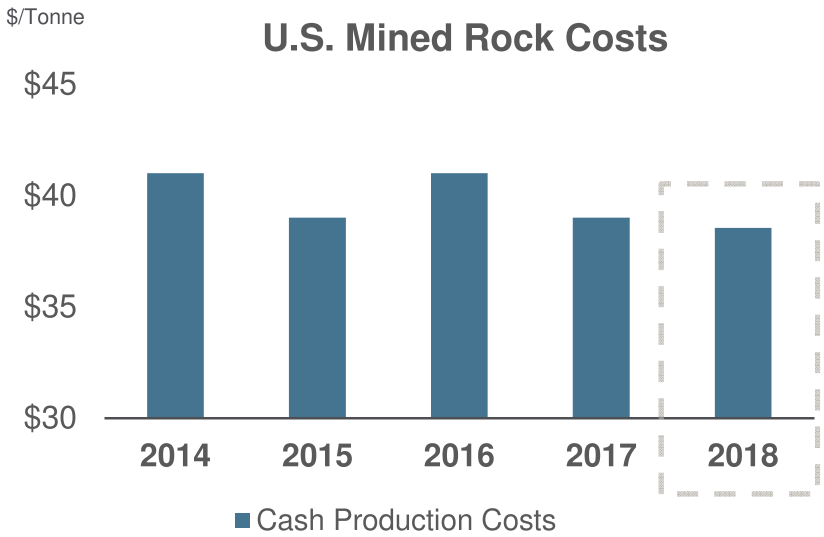
Potash: K3 Acceleration driving significant incremental cash flow post completion

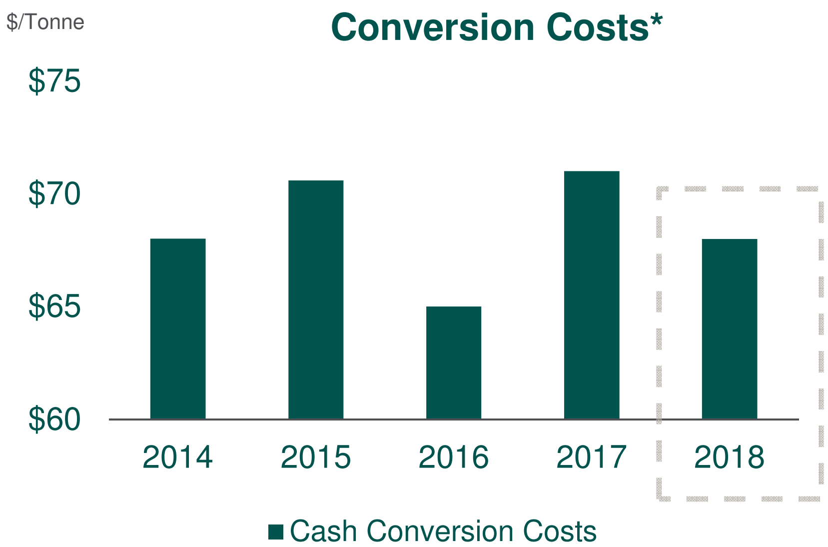




- K3 is being accelerated and is now expected to fully replace K1 and K2 mining by the end of 2023
- Acceleration of K3 completion by 12 months will result in **$110 million reduction** in total brine spending

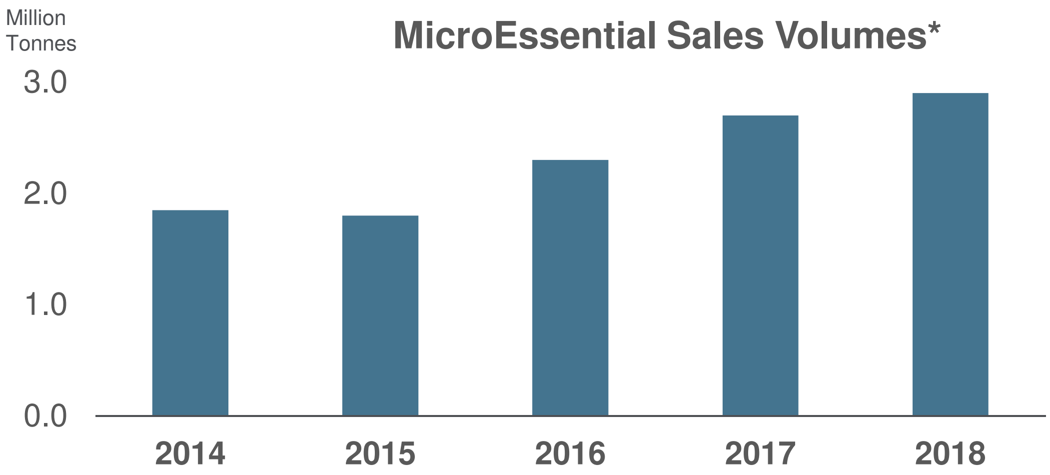
Phosphates: Increasing our Competitiveness





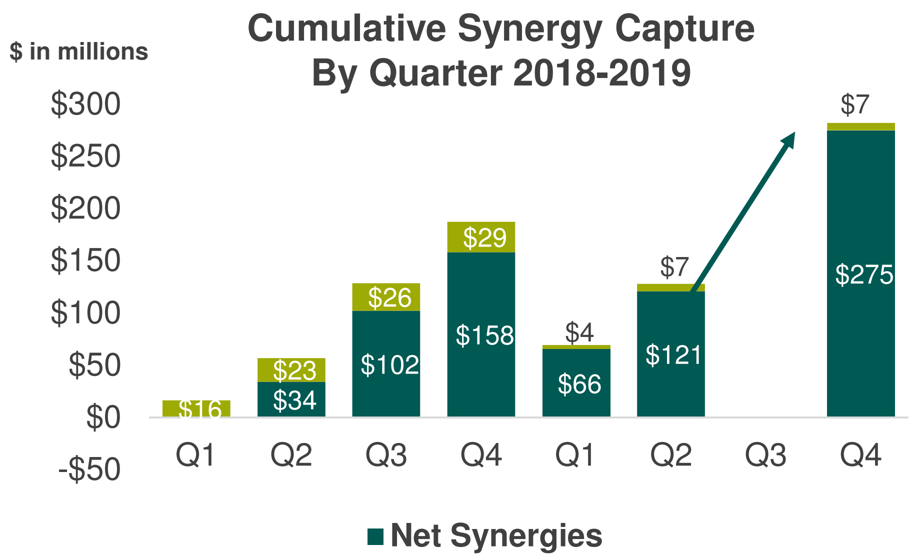
* Phosphate cash conversion costs, as shown, are reflective of actual costs, excluding realized mark-to-market gains and losses and including the cost of turnarounds. Turnaround costs are captured as period costs while the rest are capitalized into inventory. As such, the costs presented are not necessarily reflective of cost of goods sold for the period.

Phosphates:
Growing Margin by Growing Premium Products with limited new capital investment



* Includes intercompany sales

Strong Execution: Mosaic Fertilizantes



- Despite dam regulatory driven challenges, still expect to realize target of $275 million of net annual synergies in 2019, a full year ahead of schedule.
- Quarterly realization of synergies is seasonal, and driven by sales patterns.

(1)See Non-GAAP Financial Measures for additional information

Tailings Dam Remediation

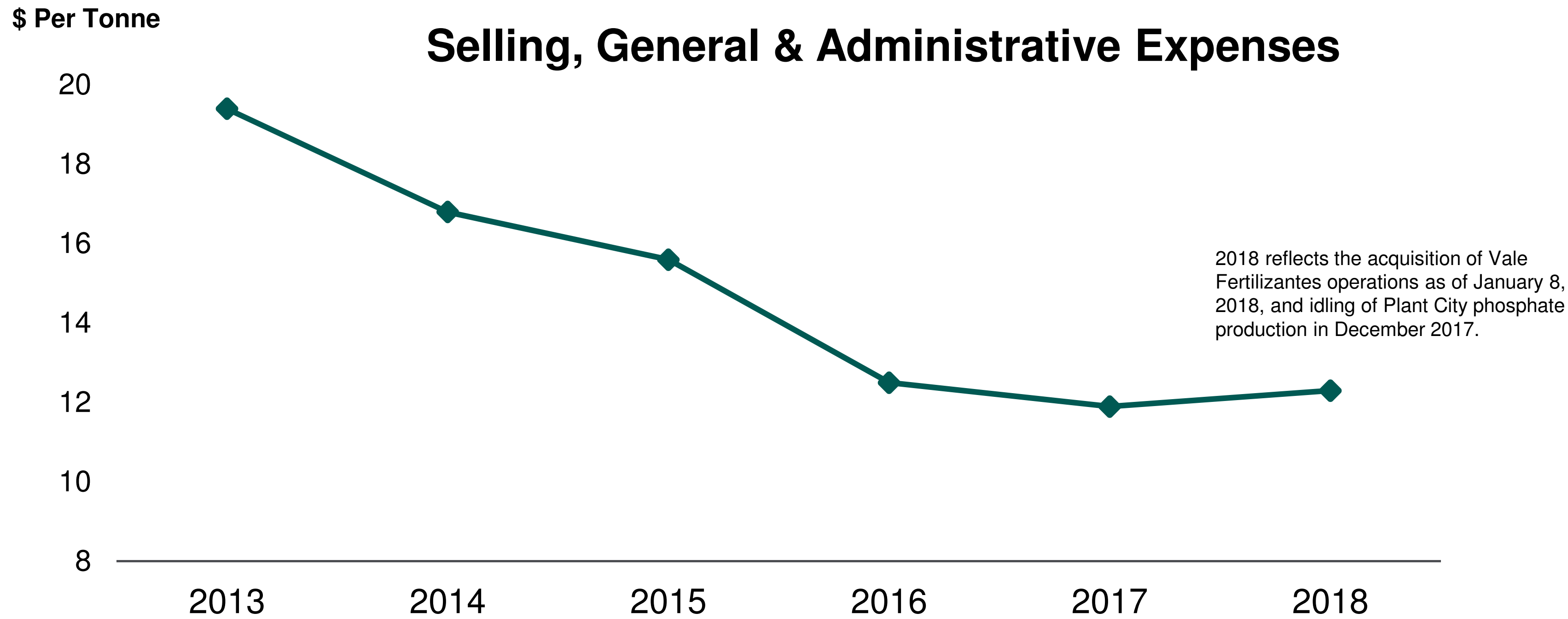
Catalao
- Remediation complete
- Full production resumed in May

Tapira
- Remediation of first dam complete; production at 60% capacity resumed mid-July
- Expect second dam to be complete and resume full operations in August

Araxa
- B6 operating license received
- Expect full operations to resume in August

Lowering 2019 expected dam related costs to $80 million

Visible Cost Controls



**Tonnes exclude the intra-segment volume eliminations, which negatively impacts SG&A/Tonne metric starting in 2018 as a result of the Vale Fertilizantes acquisition.*

Highly levered to improving market conditions

Impacts to PL: ($ in millions)	Adjusted EBITDA Δ[1]	Adjusted EPS Δ[1]
Average MOP Price --> $10/mt	$89	$0.13
Average DAP Stripping Margin --> $10/mt	$86	$0.17
Potash Sales Volume --> 100k mt	$16	$0.02
Phosphates Sales Volume --> 100k mt	$6	$0.01
Canadian Dollar Change -->$0.01	$14	$0.03
Brazilian Real Change (unhedged) --> $0.10	$21	$0.04

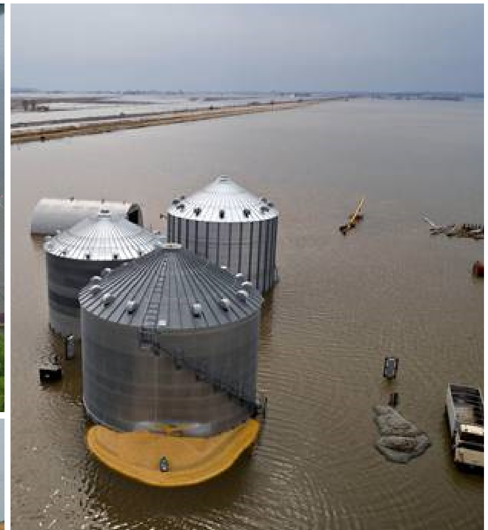
[1]See Non-GAAP Financial Measures for additional information

Capital Allocation Philosophy:
Cyclical upswing would drive substantial excess capital to deploy.

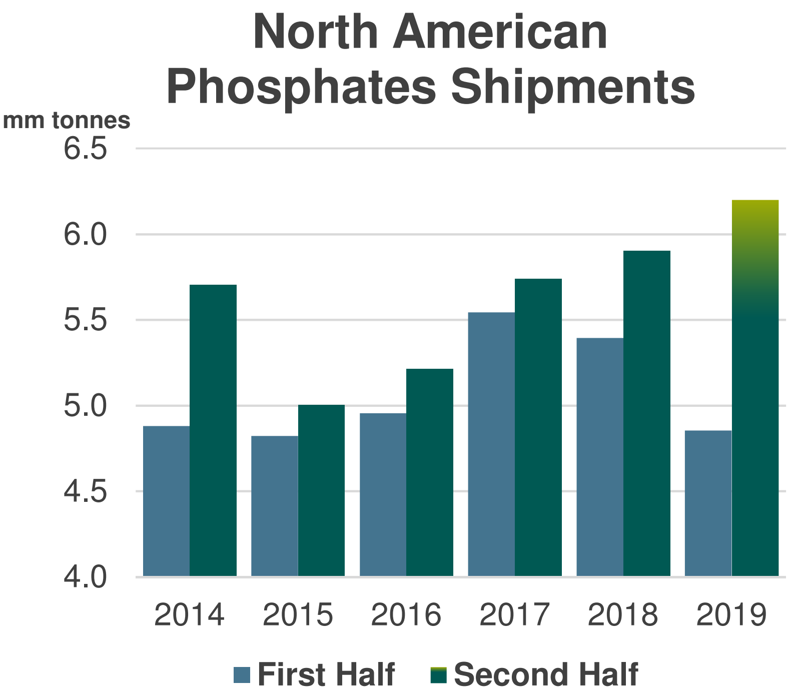
Excess capital allocation is expected to be balanced across 1) continued strengthening of the balance sheet as our bonds mature in 2021 and 2022; 2) increased returns to shareholders through measured dividend increases and share repurchases; 3) strategic investments that exceed the benefits of share repurchases.

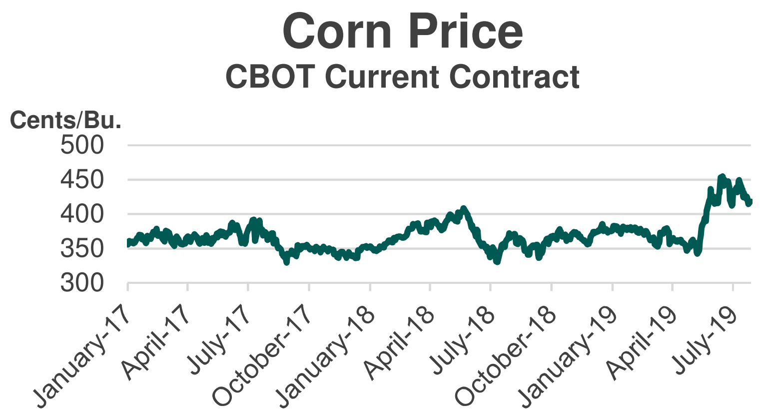
Results Summary
June 30, 2019

North America Weather is “The Story” for Q2



Strong Market Demand





- Year-to-date corn prices are up 11.5% as a result of low yield expectations in North America.
- These prices incent growers to plant more acres and to maximize yield, assure adequate soil nutrient content.
- Two challenging application seasons in a row mean large North American volumes are required to achieve adequate nutrient levels before the next planting.

Second Quarter 2019 Overview

- Potash and Mosaic Fertilizantes performed well, Phosphate markets disappointed
- Challenging spring season expected to drive strong fall
- Mosaic is executing well and optimizing assets
  - Accelerated K3 development allows temporary idling of Colonsay mine
  - Tapira mine currently operating at 60 percent, expected to resume full operations by mid-August
  - Araxa mine operating permit granted, expected be fully operational by end of August
  - Permanent closure of Plant City phosphate plant
- Quarters results and current pricing outlook lead to adjusting guidance ranges

Operating Driver Targets

		2018 actual	2Q 19 4Qtr Ave	2021 target
Phosphates	Cash cost of U.S. mined rock ($/tonne)	$38	$42	$39
	Cash costs of conversion ($/tonne)	$63	$64	$56
	Sales of MicroEssentials (mm tonnes)	2.9	2.9	3.7
	Average MicroEssentials margin, premium to MAP ($/tonne)[1]	$43	$49	$40 - $50
Potash	Cash costs of production (excluding brine) – MOP ($/tonne)	$66	$66	$62
	Cash brine management costs ($ in millions)	$123	$116	$85
Mosaic Fertilizantes	Cash costs of rock (R$/tonne)	R$346	R$349	R$320
	Cash costs of conversion - Phosphates (R$/tonne)	R$265	R$300	R$275
	Total Selling, General & Administrative Expenses ($ in millions)	$341	$340	$340

[1] Includes margins earned locally on sales by Mosaic Fertilizantes and Mosaic China.

Financial Guidance (as of August 6, 2019)

Consolidated Full-Year Estimates			2019
Adjusted EBITDA[1]			$1.8 to $2.0 billion
Less:	Cash Interest Expense		~$170 million
	Cash Taxes		~$50 million
	Sustaining Capital		~$640 million
Available			**$0.94 to $1.14 billion**
2019 Committed Capital			
Common Stock Dividend		$0.20 / share up from $0.10 / share	~$80 million
Esterhazy K3		Accelerating timeline by 1 year	~$300 million
Florida Mine Life Extension		Extending mine lives	~$130 million
2019 Allocated Capital			
Purchase of Pine Bend		Upper Mississippi warehouse capacity	$55 million
Opportunity Investments		Portfolio IRR* > 20%; 70% of projects < 2 year payback	~$55 million
Remaining		Weighted towards back half of 2019	**$300 to $500 million**

[1]See Non-GAAP Financial Measures for additional information
* Unlevered, after tax

Second Quarter Results

$ in million, except per share	2Q 2019	2Q 2018
Diluted Earnings Per Share (EPS)	$(0.60)	$0.18
Adjusted diluted EPS[1]	$0.12	$0.40
Net Income	$(233)	$68
Adjusted EBITDA[1]	$349	$480

Potash		
($ in mm)	2Q 2019	2Q 2018
Operating Earnings	$174	$121
Gross Margin	$181	$132
Adj. EBITDA[1]	$254	$199

Mosaic Fertilizantes		
($ in mm)	2Q 2019	2Q 2018
Operating Earnings	$2	$17
Gross Margin	$35	$53
Adj. EBITDA[1]	$38	$60

Phosphates		
($ in mm)	2Q 2019	2Q 2018
Operating Earnings	$(393)	$142
GM Adj. GM[1]	$(12) $(7)	$154 $160
Adj. EBITDA[1]	$74	$251

[1]See Non-GAAP Financial Measures for additional information

Potash

(in millions except per tonne)	2018	2017	1H 2019	1H 2018
Sales Volumes (tonnes)	8.8*	8.6	4.02	4.05
Operating Earnings	$511	$344	$350	$213
Adjusted EBITDA[(1)]	$866	$648	$510	$373
Gross Margin $ / Tonne	$68	$45	$92	$58
Adjusted Gross Margin $ / Tonne[(1)]	$69	$47	$92	$61

- Gross Margin per tonne improved over the prior year as a result of both higher realized prices and lower costs of goods sold.
- Year-to-date the company has produced over 400,000 tonnes of ore from it's Esterhazy K3 shafts, and the project continues to remain on track after accelerating the project by a full year.
- The company announced a temporary curtailment of its Colonsay potash mine, which is expected to save $40 to $50 million in cash in 2019, and lower overall costs of production. The company plans to maintain its market share by drawing down inventory and leveraging the new low cost production at Esterhazy.

[(1)]See Non-GAAP Financial Measures for additional information
* Year-over-year comparison negatively impacted by a change in the Canpotex revenue recognition policy.

Phosphates

(in millions except per tonne)	2018	2017	1H 2019	1H 2018
Sales Volumes (tonnes)	8.4*	9.5	3.97	4.25
Operating Earnings	$473	$256	$(349)	$220
Adjusted EBITDA[1]	$966	$640	$242	$449
Gross Margin $ / Tonne	$69	$35	$12	$58
Adjusted Gross Margin $ / Tonne[1]	$72	$35	$15	$63

- The company announced a curtailment in Q1 2019, that impacted operating rates, conversion costs and costs of goods sold in the first half of 2019. In addition, the company experienced a mix shift from higher margin North American sales to international sales in the first half of 2019.
- Realized finished phosphates prices remained pressured through the first half of 2019 due to the extremely wet weather in North America, and resultant slow sales, combined with imports unable to navigate up the Mississippi River.
- The company expects strong fall application in North America to draw down inventories, resulting in strengthening markets going into 2020.

[1]See Non-GAAP Financial Measures for additional information
*Year-over-year comparison reflects the impact of the idling of Plant City

Mosaic Fertilizantes

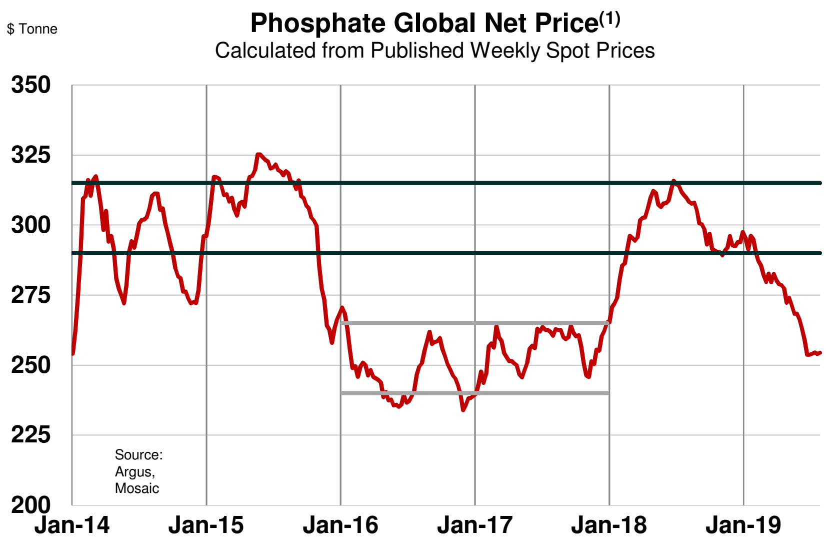
(in millions except per tonne)	2018	2017*	1H 2019	1H 2018
Sales Volumes (tonnes)	9.13	9.35	3.63	3.43
Operating Earnings	$238	$(35)	$29	$30
Adjusted EBITDA[1]	$429	$81	$100	$128
Gross Margin $ / Tonne	$41	$8	$25	$33
Adjusted Gross Margin $ / Tonne[1]	$41	$8	$25	$33

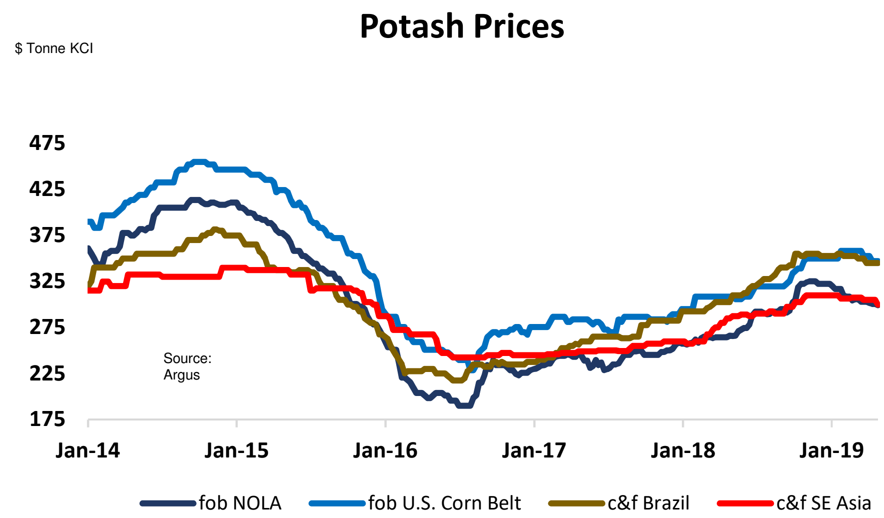
- During the second quarter of 2019, the Company incurred $36 million in incremental expense related to the impact of the new tailings dam regulations in Brazil.
- Tapira resumed operating at 60%, and is expected to resume full operations by mid August. The Company has receive its operating permit for the Araxa B6 dam, and expects Araxa to resume full operations in August. All mines are expected to be fully operational a full month before original estimates. The 2019 costs association with working through the remediation is expected to be $80 million, down from the original estimate of $100 million.
- The Company continues to expect to achieve $275 million in net synergies in 2019.

[1]See Non-GAAP Financial Measures for additional information
* Pro forma segment results

Markets

Long-term market outlook for both Phosphate and Potash is positive



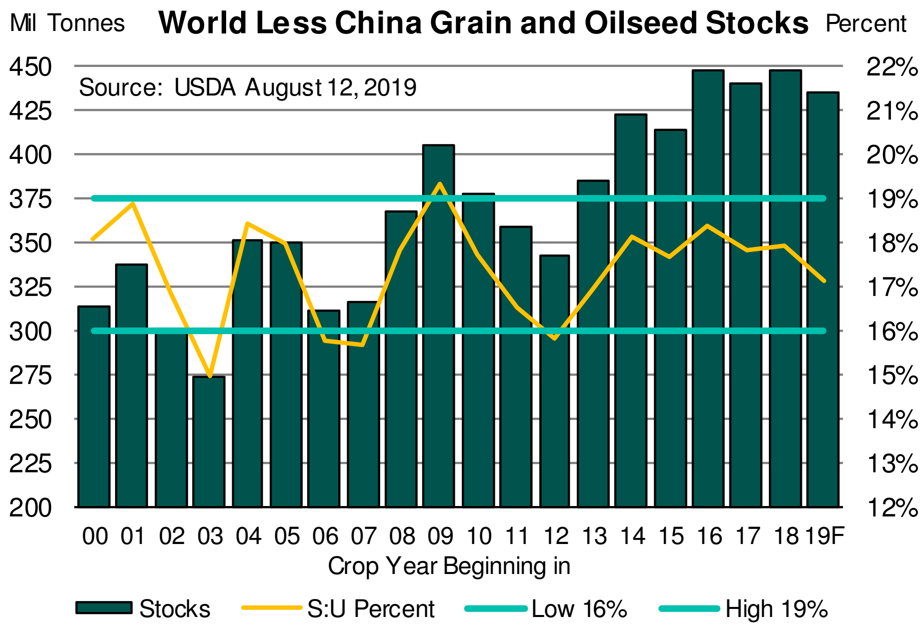


Phosphate markets move into better balance in H2 before tightening as we move to 2020 and beyond, with limited new supply in the pipeline and expectations for moderate demand growth.

Potash markets are expected to remain generally balanced throughout the forecast period, as demand recovers amidst a continuation of slow, steady supply growth.

(1) Global net price averages several global price benchmarks for finished phosphates and raw materials. It does not include any handling, storage, transportation or conversion costs.

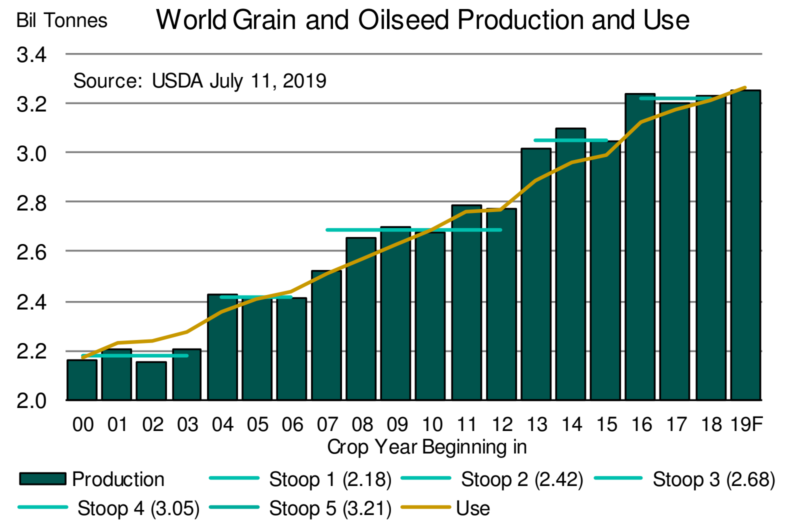
Agricultural Fundamentals to Tighten as Demand Overtakes Supply



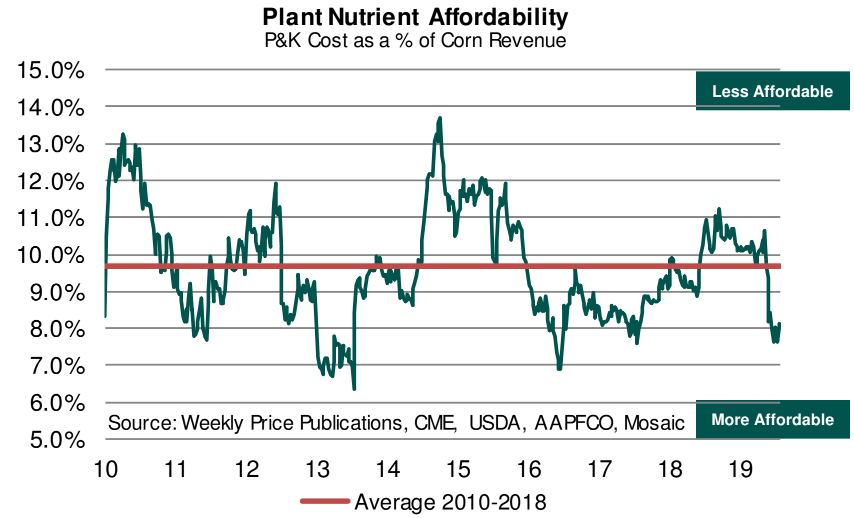
- A big step-up in global production since 2012/13
- But continued strong and steady demand growth
- Stocks as a percentage of use projected to drop to the bottom half of the 16%-19% range by the end of 2019/20
- The Food Story is still intact

Globally: Positive Agronomic & Economic Drivers

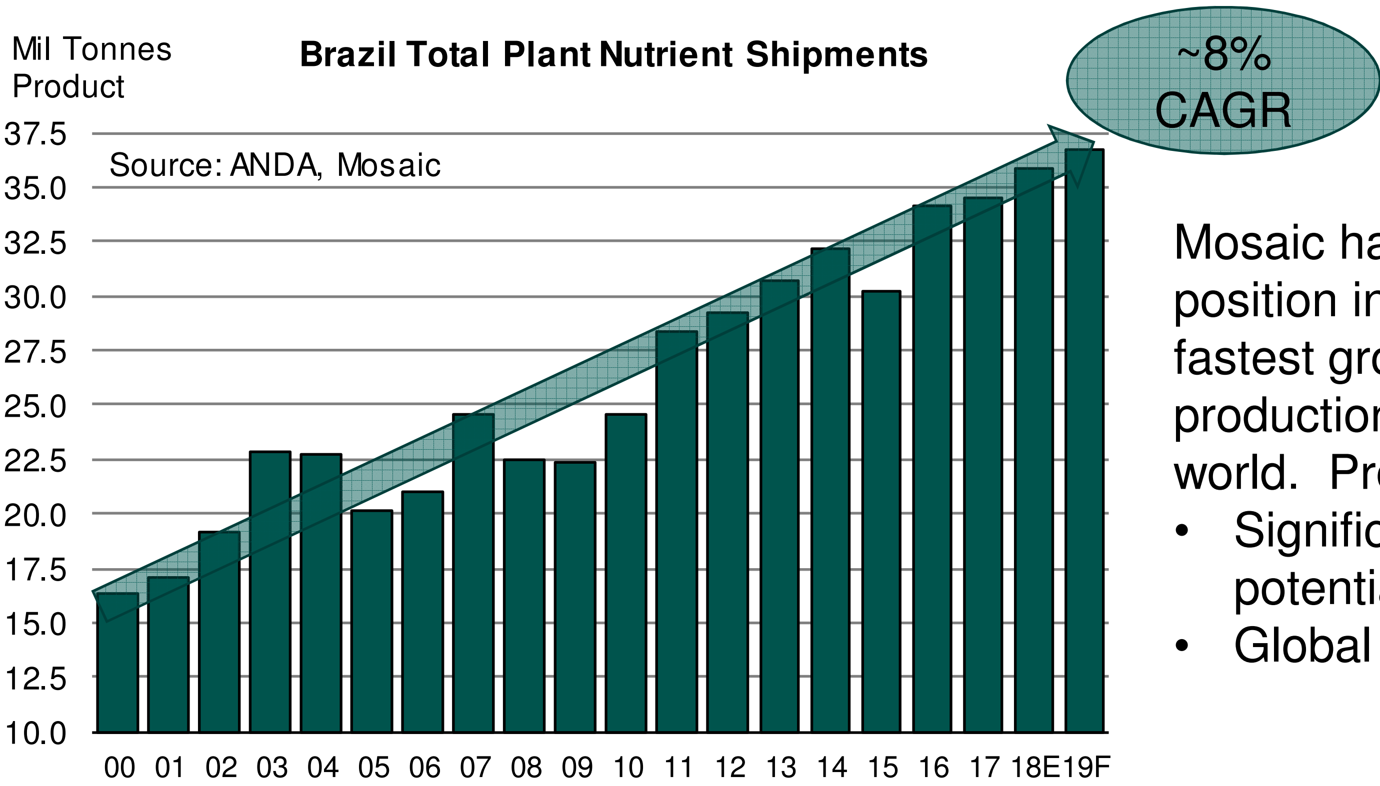
Record Harvests Remove Record Amounts of P&K



Plant Nutrients Still Affordable



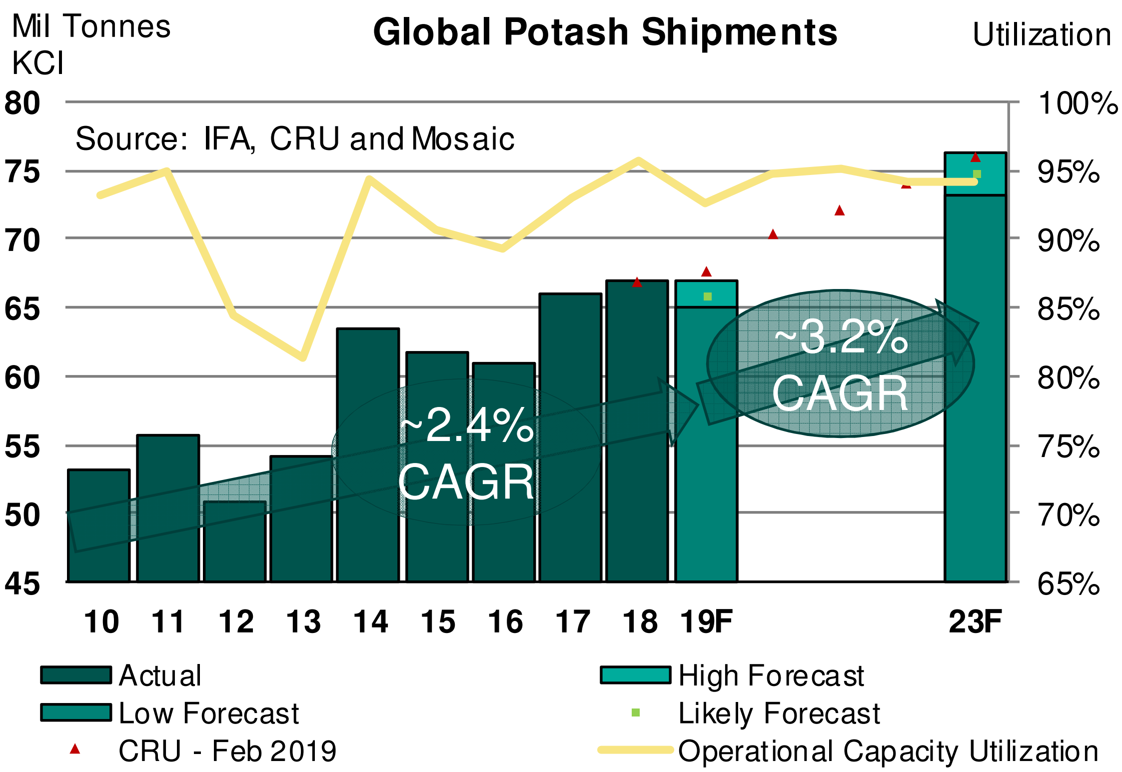
Brazil: A Plant Nutrient Powerhouse



Mosaic has a leading position in one of the largest, fastest growing agricultural production regions in the world. Provides:

- Significant growth potential
- Global diversification

Potash Outlook:
Strong, Broad-Based, Less Volatile Demand Growth



Our base case demand forecast (a more conservative view on demand than CRU) shows a 3.2% CAGR from 2019 to 2023

We also project a modest uptick in the industry's capacity utilization rate over the next couple of years

Global Potash Shipment Forecasts by Region (August 2019)

Source: IFA, CRU and Mosaic
(Numbers may not sum to total due to rounding)

Muriate of Potash Million Tonnes (KCl)	2017	2018	Low 2019F	High 2019F	Comments
China	14.6	14.8	15.3	15.5	We maintain our 2019 forecast on expectations of a good fall season and depleted inland inventories. Imports through June of 5.5mmt are up 1mmt y-o-y. Shipments are also getting a boost from greater volumes of NPK and SOP exports, which are up ~375,000 tonnes (414%) and ~200,000 tonnes (from near zero) y-o-y. Potential delays to the settlement of a new contract are a yellow flag.
India	4.8	4.5	4.0	4.3	We have left our 2019 shipment forecast of a moderate decline unchanged despite first-half imports of 2.4mmt trailing last year's 2.5mmt only modestly. A delayed monsoon and uneven rainfall through July, coupled with higher year-over-year retail prices, have tempered farmer appetite for potash (Jan-Jul sales are tracking about 10% lower y-o-y). Offsetting this more conservative view, however, are relatively stable potash prices, recent improvements regarding the monsoon, supportive government policies to include an unchanged subsidy and a relatively range-bound rupee around 69 INR/$, which could cause India to outperform our current forecast.
Indonesia+Malaysia	5.4	5.3	4.5	4.8	We have reduced our 2019 shipment forecast by ~500,000 tonnes, a function of the weakness and volatility that has characterized palm oil markets year-to-date and resulted in slower potash buying. This is despite the fact that the threat of El Niño has dissipated.
Other Asia	4.9	5.2	4.8	5.1	We have pared back our 2019 forecast by about 300,000 tonnes across the region to reflect a modest slowdown in the pace of imports year-to-date as channel inventories are drawn down. Farm economics remain OK in the region, though an economic slowdown and the spread of African swine fever out of China is weighing on the ag sector in some countries.
W. Europe	4.9	5.0	4.8	4.9	We continue to project flat-to-lower European shipments in 2019 after a disappointing spring season despite better weather outlook versus last year's severe drought. The likelihood of rising ag commodity prices in the region should provide a lift for fall applications.
E. Europe+FSU	5.3	5.3	5.5	5.7	Improved weather and export economics set the stage for a resumption of shipment growth in 2019, aided by continued local currency weakness as well as an expected boost to potash consumption from NPK manufacturing. Our forecast is unchanged.
Brazil	9.7	10.2	10.5	10.7	Our shipment estimate for 2019 is unchanged. Upwardly revised harvest estimates, favorable farm economics benefitting from the U.S.: China trade dispute and record animal protein exports to China in the face of the latter's African swine fever outbreak set the stage for a strong second half that results in another record potash shipment year (~0.5mmt production, plus ~10.0mmt imports). Year-to-date imports through June are running about 600,000 tonnes higher y-o-y at ~4.3mmt.
Other L. America	2.9	2.9	2.9	3.1	We project shipments in the rest of Latin America to be flat to higher due to generally favorable farm economics.
N. America	10.6	10.6	9.5	9.8	After a relatively poor spring application season that followed on the heels of a similarly poor fall last year, we have revised lower our expectations for 2019 by ~500,000 tonnes. Channel inventories at the start of the summer fill season, however, did not appear onerous (as evidenced by strong fill-buying interest), and with decent fall weather we believe that we will see strong shipments in the second half. We expect on-farm demand to be strong with increased intentions for corn acreage in 2020, while imports remain broadly flat.
Other	2.9	3.3	3.2	3.4	We maintain our expectation that shipments elsewhere in the world will hold broadly flat this year.
Total	**66.0**	**67.0**	**65.0**	**67.3**	Record shipments in 2018 of 67.0mmt set a high bar for this year: Our 2019 point estimate is revised lower, from 67.5mmt in May to 66.0mmt, due primarily to the reduced expectations for North America and SE Asia. The 1mmt decline in shipments y-o-y represents a -1.5% y-o-y reduction. We have also lowered our full year global shipment forecast range by 2mmt on both ends to 65-67 million tonnes.

Fundamentals Math: 2019-20

Potential Potash Supply and Demand Changes
(Excluding Canpotex Members)

Mil Tonnes KCl	2019	2020
Projected Shipment Changes	**-0.98**	**2.79**
Percent Change	*-1.5%*	*4.2%*
Potential Supply Changes	**-0.50**	**1.13**
Producer Inventory Draw (+) or Build (-)	0.00	
ICL Boulby Closure 6/30/18	-0.23	
SQM Maximizing Lithium Production	-0.31	
K+S Werra Mine Idlings Due to Low River Levels	0.15	0.00
K+S Sigmundshall Closure 12/31/18	-0.45	
K+S Bethune Ramp-Up	0.20	0.30
Uralkali S-2 Inflow Net Impact	-0.50	-0.10
Eurochem Usolskiy+Volgakaliy Ramp-Up	0.60	0.90
Usolskiy Ramp-Up	*0.60*	*0.65*
Volgakaliy Ramp-Up	*0.00*	*0.25*
Garlyk Ramp-Up	0.00	0.01
Miscellaneous Changes	0.03	0.03
S/D Surplus (+)/Deficit (-)	***0.48***	***-1.66***

Source: Mosaic

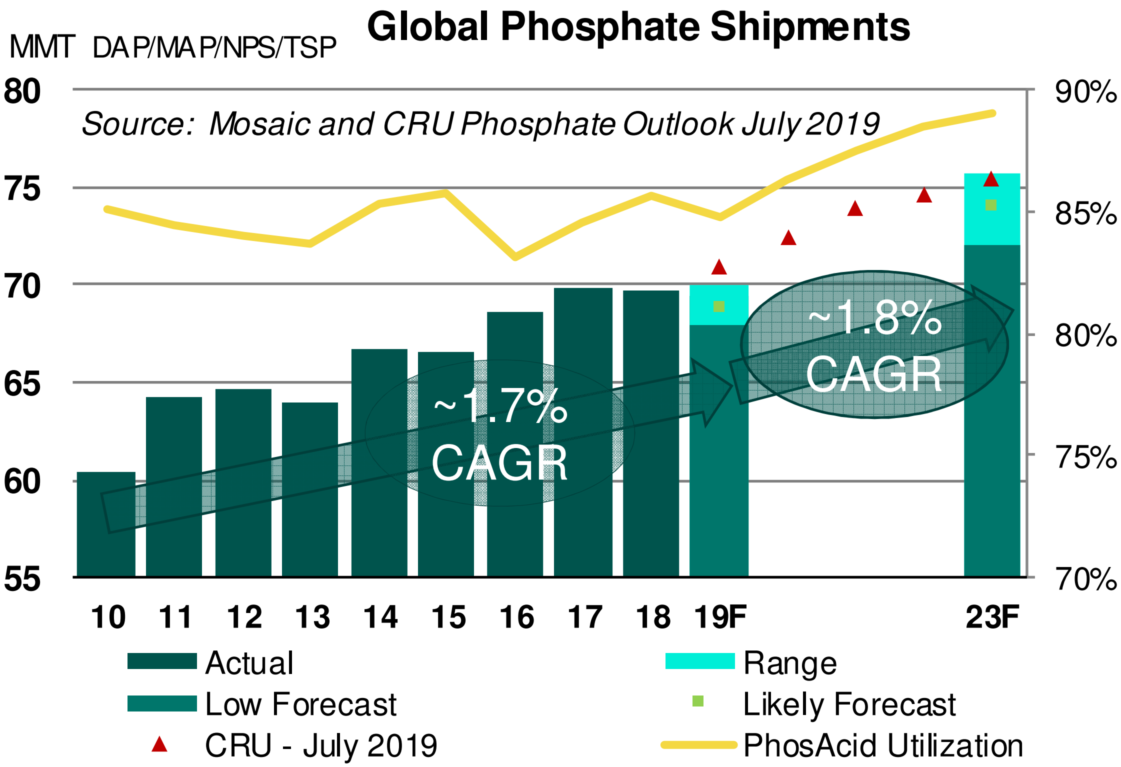
← *2019: Contraction in shipments due to weather-impacted North American spring, persistent weakness in palm oil prices and an anticipated drawdown of channel inventories.*

← *There are several puts and takes on the supply side in 2019:*

- *ICL ended KCl production at its UK Boulby mine mid-year 2018.*
- *SQM continues to maximize lithium production rather than KCl.*
- *K+S closed its Sigmundshall mine at the end of 2018. and K+S lost production at their Werra complex due to low river levels in 2018 while volumes should recover in 2019. Their ramp at Bethune remains slow.*
- *Uralkali faced increased water inflow issues at their S2 mine in 2018, which are expected to persist in 2019.*
- *The above are partly offset by output from the ramp up Eurochem's new mines, though the company announced earlier this year that the Volgakaliy mine will not commence commercial production in 2019.*

← *Based on the above assumptions, the global market looks to be in a slight surplus in 2019 after running a similarly-sized deficit in 2018. Looking to 2020, we anticipate that a rebound of demand growth will push the market back into deficit.*

Phosphate Outlook:
Continued Stable Strong Demand Growth



Our base case demand forecast (a more conservative view on demand than CRU) shows a 1.8% CAGR from 2019 to 2023

We also project a steady uptick in the industry's capacity utilization rate over the next couple of years

Global Phosphate Shipment Forecasts by Region (August 2019)

DAP / MAP / NPS* / TSP (Million Tonnes)	2017	2018	Low 2019F	High 2019F	Comments (Source: IFA, CRU and Mosaic; Numbers may not sum to total due to rounding)
China	17.9	16.5	15.5	15.9	Our 2019 estimate is revised lower by ~400,000 tonnes on the disappointing spring season and slow start to summer fill. We continue to believe that Chinese domestic phosphate fertilizer demand will stabilize in the near term, driven by a desire to return their grain and oilseed production to positive growth (USDA estimates show it flattening out for the past few years and trending slightly lower this year). Lower production combined with seasonal domestic demand are expected to divert tonnes away from the export market in the second half. Exports through June were ahead of last year's pace by about 670,000 tonnes DAP/MAP/TSP at nearly 4.6mmt, but that represents a sharp slowdown in the export run-rate after being 1.1mmt higher y-o-y through May.
India	9.0	9.4	9.2	9.5	We have left our India forecast unchanged with flat y-o-y shipments: Favorable importer economics have persisted year-to-date and with the recently-confirmed rollover of the subsidy, we expect this to continue. Jan-Aug DAP imports are on track to hit ~3.8 million tonnes, only 5% lower y-o-y despite the inventory build seen in late-2018 and an increase in domestic production. We still anticipate over 5 million tonnes of total imports for the year. Our expectation is that on-farm demand will tick slightly higher in 2019 on a lower MRP, a near-normal monsoon (that continues to catch up after a slow start), a stable rupee and supportive government policies.
Other Asia/Oceania	10.1	10.4	9.7	9.9	We have revised lower our 2019 volume forecast for the region by ~300,000 tonnes on weaker farm economics across a number of countries, primarily as a result of weak palm oil prices. Demand is expected to contract in several major consuming countries including Malaysia and Indonesia, as well as Pakistan.
Europe and FSU	5.9	6.2	6.3	6.5	We have revised modestly lower our 2019 forecast range due to the disappointing spring season in Western Europe, though this was offset by strong demand in Russia and parts of Eastern Europe, and our outlook for fall demand remains bullish.
Brazil	8.3	8.5	8.8	9.0	Our shipment estimate for 2019 is unchanged. Upwardly revised harvest estimates, favorable farm economics benefitting from the U.S.: China trade dispute and record animal protein exports to China in the face of the latter's African swine fever outbreak set the stage for a strong second half that results in another record shipment year of over 36 million tonnes across all products. Lower domestic high-analysis phosphate production this year of ~300,000 tonnes is expected to be offset by higher imports as well as an inventory drawdown.
Other Latin America	4.0	4.0	4.0	4.2	Our 2019 forecast range is unchanged, with solid farm economics expected to result in flat to slightly higher demand.
North America	10.2	10.2	9.5	9.8	The poor fall application season in 2018 led to a buildup of channel inventories, which due to the poor spring season was unable to be cleared in the first half of 2019 and necessitated a pullback in shipments. We have revised lower our forecast for the calendar year by ~300,000 tonnes, but with decent fall weather we believe that we should see a clearing out of channel inventories and a return to stronger shipments in the second half. Excessive levels of imports were a key driver to the build-up of channel stocks in 2018 and this pattern has continued this year (up y-o-y by over 250,000 tonnes through July to ~1.8mmt).
Other	4.4	4.6	5.2	5.4	Our 2019 estimate was revised slightly lower on a reassessment of our estimates in both Africa and the Middle East.
Total	**69.8**	**69.7**	**68.2**	**70.2**	Our point estimate for 2019 is revised 1.1mmt lower to 68.9mmt, with the biggest revisions coming from China and Other Asia / Oceania (accounting for ~700,000 tonnes of the 1.1mmt). Year-over-year, we now project global shipments will decline by ~800,000 tonnes (-0.8%), but excluding China, global shipment growth is forecast to hold steady.

** NPS products included in this analysis are those with a combined N and P_2O_5 nutrient content of 45 units or greater.*

Fundamentals Math: 2019-20

Potential Phosphate Supply and Demand Changes
(Excluding Mosaic)

Mil Tonnes DAP/MAP/NPS/TSP	2019	2020
Projected Shipment Changes	**-0.80**	**1.33**
Potential Supply Changes Excluding China	**0.54**	**2.25**
Producer Inventory Draw	*0.00*	*0.00*
OCP Curtailments	*-0.30*	*0.00*
OCP Ramp-Up and Debottlenecking	*0.75*	*0.80*
MWSPC Ramp-Up	*0.70*	*0.60*
Nutrien Redwater Closure (May)	*-0.25*	*-0.15*
Nutrien Geismar Closure	*-0.17*	*0.00*
Other Ramp-Ups / Closures	*0.30*	*0.75*
Miscellaneous Changes (Tunisia/Mexico/Australia/South Africa)	*-0.50*	*0.25*
S/D Surplus (+)/Deficit (-) Excluding Chinese Export Changes	***1.34***	***0.92***
Chinese Export Changes		
Less Than Expected	0.00	0.00
Expected	-0.43	-1.19
Greater Than Expected	-0.86	-2.00
S/D Surplus (+) / Deficit (-)		
Less-than-Expected Decline in Chinese Exports	**1.34**	**0.92**
Expected Decline in Chinese Exports	**0.91**	**-0.27**
Greater-than-Expected Decline in Chinese Exports	**0.48**	**-1.08**

Source: Mosaic

← *We are forecasting a moderate pullback of demand in 2019, and a conservative recovery in 2020.*

← *A producer inventory build is one outlet for the theoretical surplus in 2019.*

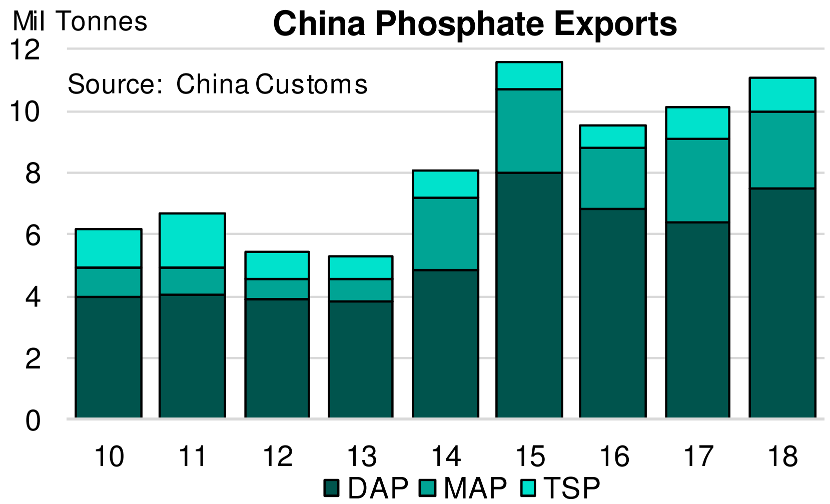
← *OCP ramp ups were the largest addition to global supply in 2018, but 2019 expected to see just incremental tonnes from JPH 4 and debottlenecking, partly offset by Q1 announced curtailment.*

← *MWSPC expected to show a slightly smaller production improvement in 2019 as they did a year ago, with the incremental improvement weighted towards the back half of the year.*

← *Nutrien closures will reduce P_2O_5 production, and invariably impact ammonium phosphate fertilizer output (either directly or indirectly – for example, by reducing merchant phosphoric acid sales to India that would have been used to produce phosphate fertilizers).*

← *Expected changes in supply and demand will likely result in a moderate surplus in 2019, likely necessitating different operating strategies or an inventory build this year. Turning to 2020, a modest recovery of demand and changes to Chinese export volumes (driven by environmental compliance as well as economics related to the lower margin levels that have recently prevailed), we would anticipate a tightening of the market.*

China Phosphate Exports Slow in June, but Remain Higher Year Over Year



China Phosphate Exports							
	January-June					2019 vs. 2018	
1000 Tonnes	2015	2016	2017	2018	2019	Change	Pct Chg
DAP	2,823	2,088	2,266	2,490	2,748	259	10.4%
MAP	1,392	825	1,357	1,016	1,320	303	29.8%
TSP	461	300	413	475	567	91	19.2%
Total	**4,677**	**3,213**	**4,035**	**3,982**	**4,635**	**653**	**16.4%**

Appendix

Adjusted EBITDA to Adjusted EPS

Estimated reconciling items	$ in millions
Adjusted EBITDA	$1,800 to $2,000
Depreciation, Depletion & Amortization	$910
Interest Expense	$210
Non-Notable Adjustments	$80
Estimated Pretax Earnings	~$600 to ~$800
Tax Expense	$170 to $225
Estimated Net Earnings	~$430 to ~$575
Adjusted EPS (using 387 mm shares)	~1.10 to ~$1.50

Reconciliation of non GAAP measures

Consolidated Earnings (*in millions*)	**2Q 2019**	**2Q 2018**
Consolidated net (loss) earnings attributable to Mosaic	$(233)	$68
Less: Consolidated interest expense, net	$(46)	$(45)
Plus: Consolidated depreciation, depletion and amortization	$221	$217
Plus: Accretion expense	$13	$12
Plus: Share-based compensation expense	$7	$7
Plus: Consolidated provision for (benefit from) income taxes	$(52)	$4
Plus: Notable items	$347	$128
Adjusted EBITDA	$349	$480
Diluted (loss) earnings per share	$(0.60)	$0.18
Notable items impact on earnings per share	$0.72	$0.22
Adjusted diluted earnings per share	$0.12	$0.40

Reconciliation of non GAAP measures

Phosphates Earnings (*in millions*)	**2018**	**2017**	**1H 2019**	**1H 2018**
Operating earnings (loss)	$473	$256	$(349)	$220
Plus: Depreciation, depletion and amortization	$403	$338	$208	$201
Plus: Accretion expense	$37	$21	$22	$19
Plus: Foreign exchange gain (loss)	$11	$(11)	$0	$5
Plus: Other income (expense)	$(15)	$(1)	$1	$(8)
Plus: Equity in net earnings (loss) from nonconsolidated companies	$(6)	$16	$(12)	$(3)
Less: Earnings (loss) from consolidated noncontrolling interests	$1	$2	$6	$0
Plus: Notable items	$64	$23	$378	$15
Adjusted EBITDA	$966	$640	$242	$449
Gross Margin / tonne	$69	$35	$12	$58
Notable items in gross margin / tonne	$3	$0	$3	$5
Adjusted gross margin / tonne	$72	$35	$15	$63

Reconciliation of non GAAP measures

Phosphates Earnings (*in millions*)	2Q 2019	2Q 2018
Gross Margin	$(12)	$154
Notable items in gross margin	$5	$6
Adjusted gross margin	$(7)	$160

Reconciliation of non GAAP measures

Potash Earnings (*in millions*)	**2018**	**2017**	**1H 2019**	**1H 2018**
Operating earnings	$511	$344	$350	$213
Plus: Depreciation, depletion and amortization	$302	$287	$157	$149
Plus: Accretion expense	$4	$4	$2	$2
Plus: Foreign exchange gain (loss)	$(117)	$80	$63	$(53)
Plus: Other income (expense)	$1	$0	$1	$0
Plus: Notable items	$165	$(67)	$(63)	$62
Adjusted EBITDA	$866	$648	$510	$373
Gross Margin / tonne	$68	$45	$92	$58
Notable items in gross margin / tonne	$1	$2	$0	$3
Adjusted gross margin / tonne	$69	$47	$92	$61

Reconciliation of non GAAP measures

Mosaic Fertilizantes Earnings (*in millions*)	**2018**	**2017***	**1H 2019**	**1H 2018**
Operating earnings (loss)	$238	$(35)	$29	$30
Plus: Depreciation, depletion and amortization	$159	$137	$64	$74
Plus: Accretion expense	$7	$0	$4	$3
Plus: Foreign exchange gain (loss)	$(85)	$(27)	$(12)	$(62)
Plus: Other income (expense)	$(1)	$(16)	$(4)	$(1)
Less: Earnings (loss) from consolidated noncontrolling interests	$3	$5	$0	$0
Plus: Notable items	$114	$27	$19	$84
Adjusted EBITDA	$429	$81	$100	$128
Gross Margin / tonne	$41	$8	$25	$33
Notable items in gross margin / tonne	$0	$0	$0	$0
Adjusted gross margin / tonne	$41	$8	$25	$33

*Pro Forma information