

# The Market Outlook



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# Safe Harbor

This document 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 Wa'ad Al Shamal Phosphate Company (also known as the Ma'aden joint venture), the acquisition and assumption of certain related liabilities of the Florida phosphate assets of CF Industries, Inc. ("CF") and Mosaic's ammonia supply agreements with CF; repurchases of stock; other proposed or pending future transactions or strategic plans and other statements about future financial and operating results. 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 risks and uncertainties arising from the ability of the Ma'aden joint venture to obtain additional planned funding in acceptable amounts and upon acceptable terms, the future success of current plans for the Ma'aden joint venture and any future changes in those plans; difficulties with realization of the benefits of the transactions with CF, including the risk that the cost or capital savings from the transactions may not be fully realized or may take longer to realize than expected, or the price of natural gas or ammonia changes to a level at which the natural gas based pricing under one of the long term ammonia supply agreements with CF becomes disadvantageous to Mosaic; customer defaults; the effects of Mosaic's decisions to exit business operations or locations; 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; 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 risk that protests against natural resource companies in Peru extend to or impact the Miski Mayo mine; changes in government policy; changes in environmental and other governmental regulation, including 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 or Canada, 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, the liabilities Mosaic assumed in the Florida phosphate assets acquisition, or the costs of the Ma'aden joint venture, 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 share repurchases, 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 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.



# Objectives

- Explain Why We Like The Phosphate Business
- Explain Why We Are Not As Worried As Some Of You About Potash





## Methodology

- Present our long term P&K outlook
- Benchmark our views with third-party forecasts
- Address head-on your market questions and concerns



# Why We Like the Phosphate Business





## Why We Like the Phosphate Business

1. A positive long term demand outlook
2. Constructive supply developments
3. China has stopped building phosphate plants
4. Few projects in the pipeline behind Ma'aden and OCP
5. Current industry structure
6. Our cost position and innovation lead
7. Tighter supply/demand balances and rising global operating rates



# 1. A Positive Long-term Demand Outlook

## ■ Recent developments

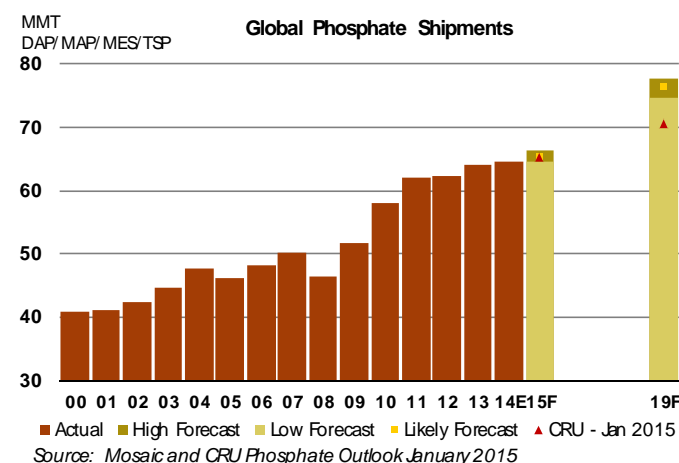
- Global shipments have increased 6.5 mmt since 2010
  - Led by China and Brazil but help from other regions
  - But India a major demand drag since 2011

## ■ 2015 forecast

- MOS: 64.5-66.5 range and 65.4 mmt point estimate
  - Banking on the beginning of a rebound in India
  - Further growth in China
  - Steady to slightly lower shipments in the Americas
- CRU: 65.2 mmt point estimate

## ■ 2019 forecasts

- MOS significantly greater than CRU due to:
  - Further growth in China (3.6 vs. 0.0 mmt increase)
  - A stronger rebound in India (4.7 vs. 3.3 mmt increase)
  - Faster growth in Brazil (0.9 vs. 0.6 mmt increase)



**Global Phosphate Shipments**

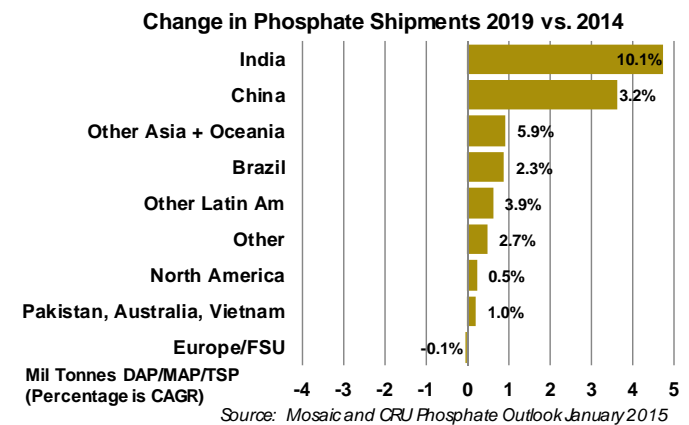
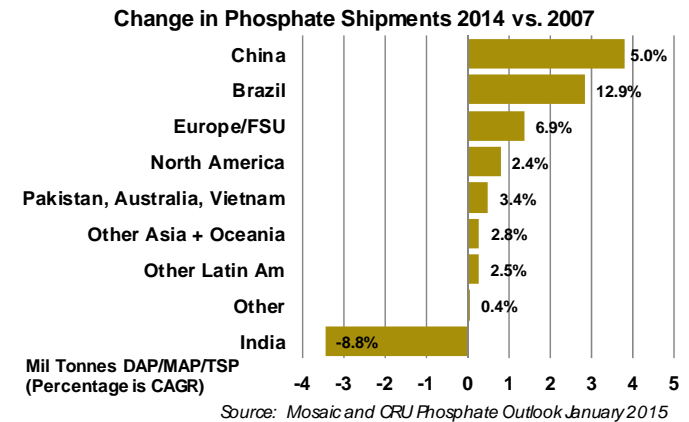
Million Tonnes DAP/ MAP/ TSP	Mosaic Scenario			CRU Jan 15
	Low	Likely	High	
2014 Shipments	64.6			64.6
2019 Forecast	74.8	76.3	77.8	70.5
Change 2014-19	10.2	11.7	13.3	5.9
CAGR 2014-19	3.0%	3.4%	3.8%	1.8%

Source: Mosaic and CRU Phosphate Outlook January 2015



# 1. A Positive Demand Outlook

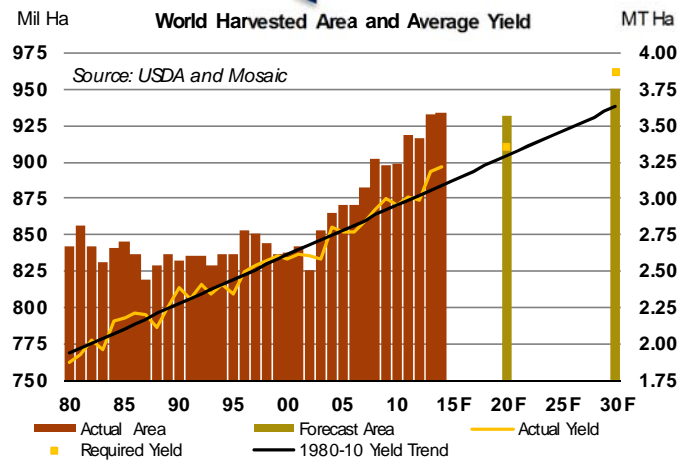
- Forecasts by region
  - India: worst to first
    - Slower overall phosphate demand growth . . .
    - but further substitution of high- for low-analysis products
  - China: more growth
  - Brazil: more growth but a less blistering pace
  - Elsewhere: moderate but steady growth





# 1. A Positive Demand Outlook

- Underpinned by the food story
  - Not in vogue today but still solidly intact
  - The trend is our friend
  - The challenge remains

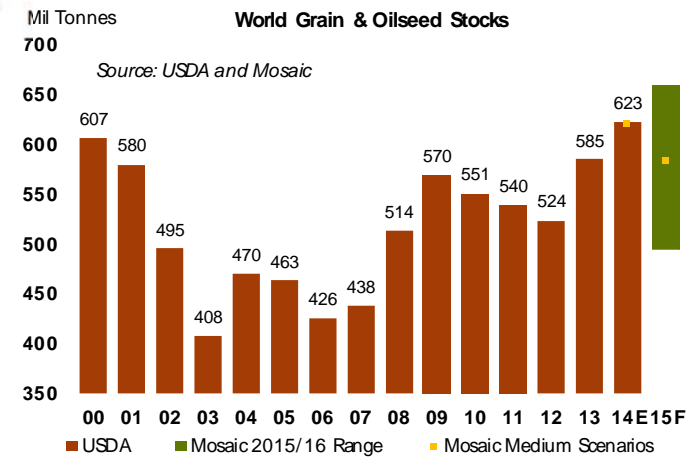


**2015/16 Grain and Oilseed Scenario Assumptions**

	Low	Medium	High
Harvested Area Change	-0.25%	0.00%	0.25%
Yield Deviation from Trend *	Largest Negative	At Trend	Largest Positive
Demand Growth	1.75%	2.00%	2.25%

\* Trend yield for 2000/01 to 2013/14 crop years.

Source: Mosaic.



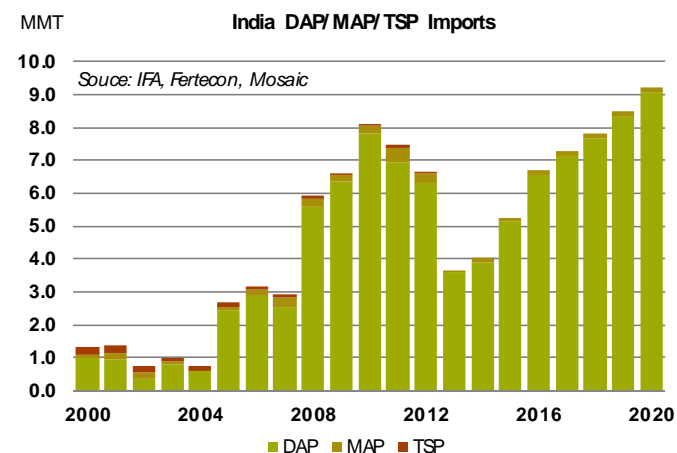
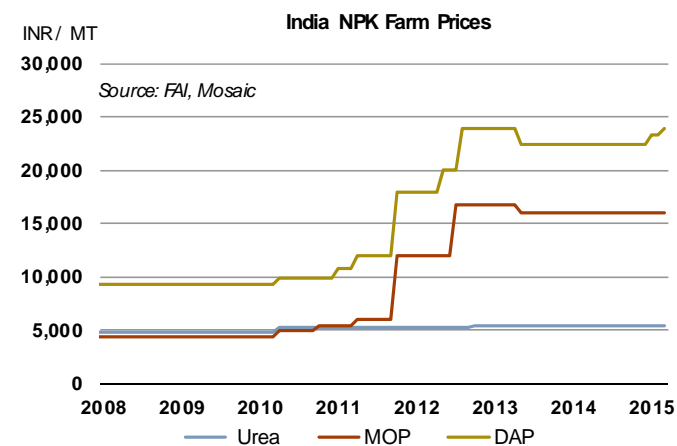
# 1. A Positive Demand Outlook

- Banking on India
  - Gross nutrient use imbalance and unsustainable practices following 2010/11 subsidy changes
  - Wide recognition of problem but political constraints
  - Need to boost P&K use rather than slash N use
  - Take-off expected in response to more moderate prices

India Nutrient Use Ratios

Year	N:P Ratio	N:K Ratio
FAI Objective	4.0:2.0	4.0:1.0
2009/10	4.3:2.0	4.3:1.0
2013/14	5.9:2.0	8.0:1.0

Source: FAI



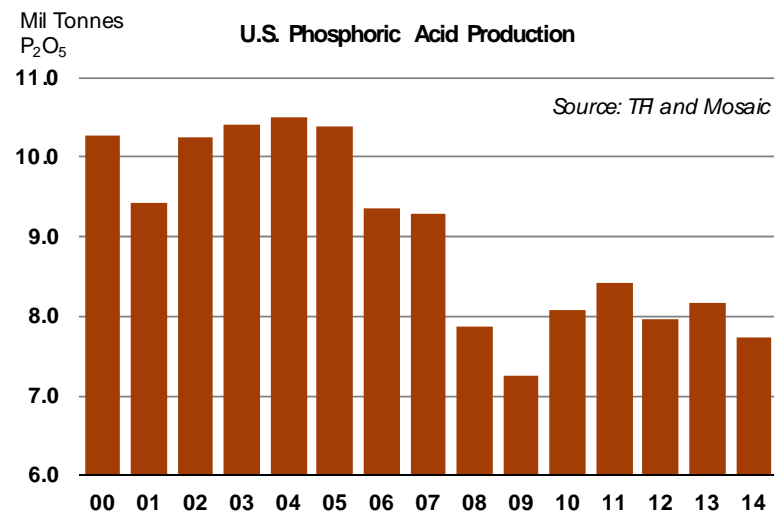
## 2. Constructive Supply Developments

- Significant supply reductions during the last few years
  - Permanent closures
    - Mainly non-integrated operations (outside India)
    - Rock/acid suppliers upgrading raw materials into finished product
    - Others on the brink?
  - Several temporary shut-downs or reduced operating rates

### Some of the Recent Changes

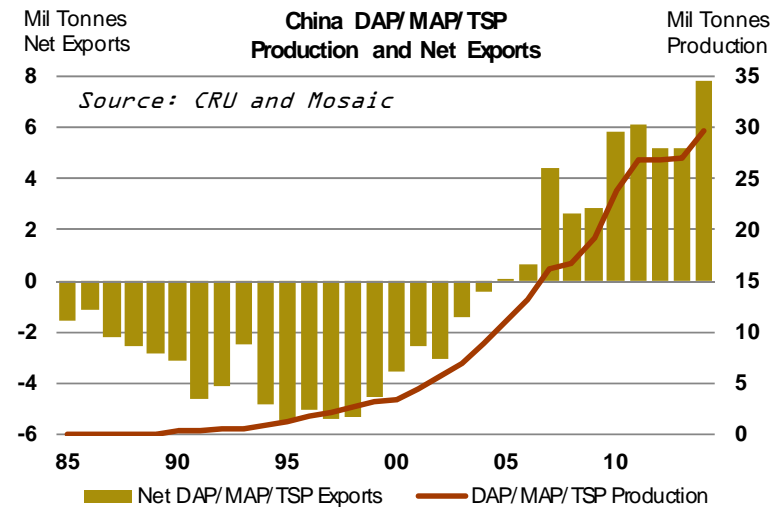
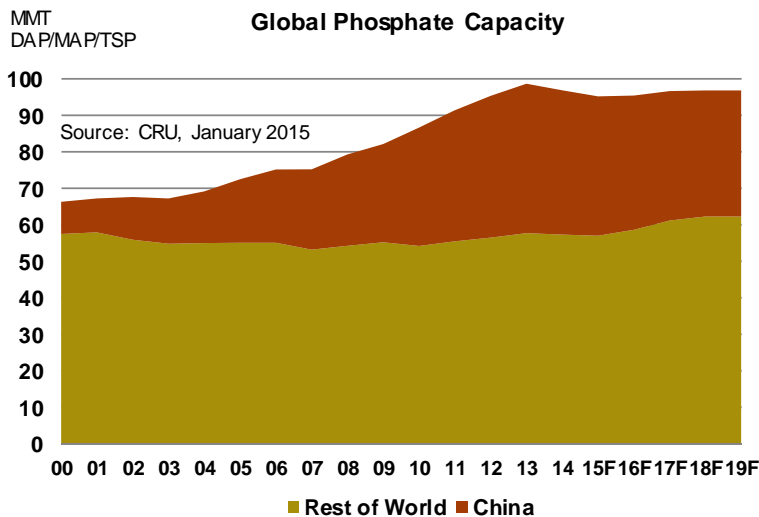
Country	Company	Facility	Year Closed	Capacity
<b><u>Permanent Closures</u></b>				
Spain	Fertiberia	Huelva	2010	740
USA	Agrifos	Pasadena	2011	740
USA	PotashCorp	Suwannee River	2014	470
USA	MissPhos	Pascagoula	2014	840
Subtotal				2,790
<b><u>Temporary Shut-Downs or Reduced Operating Rates</u></b>				
Tunisia	GCT	Gabes	Ongoing	1,000
Russia	UralChem	Voskresensk	Ongoing	650
Philippines	Philphos	Leyte	Ongoing	860
Subtotal				2,510
Total				5,300

Source: CRU, January 2015. Capacity is expressed in 1000 tonnes DAP equivalent.



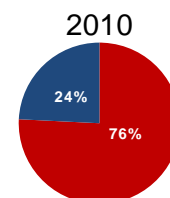
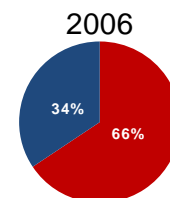
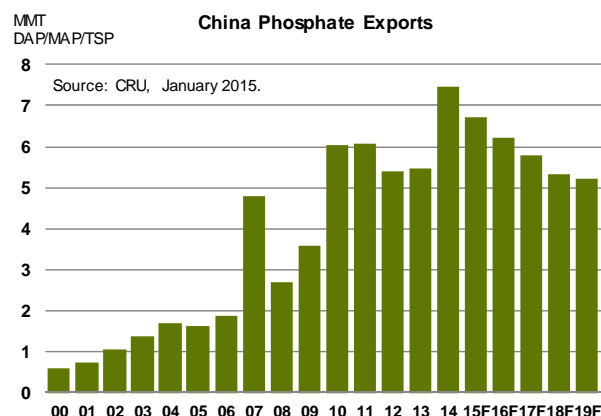
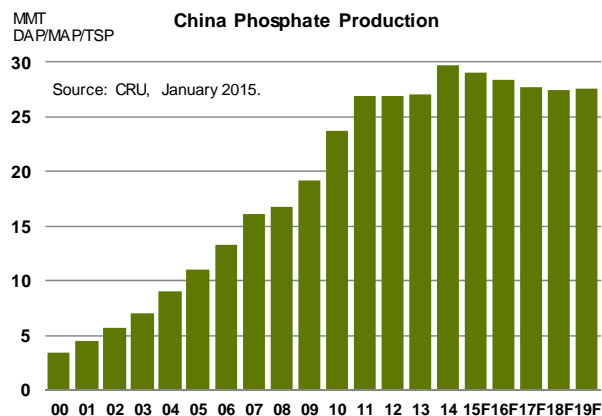
### 3. China Has Stopped Building Phosphate Plants

- The massive 8-3-6 based expansion program has come to an end
- China has accounted for all of the net increase in global phosphate capacity this century
- China has transitioned from the largest phosphate importer to the largest exporter

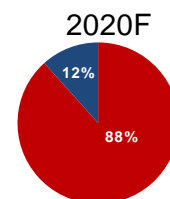
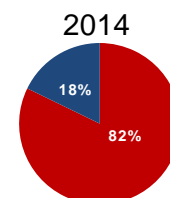


### 3. China Has Stopped Building Phosphate Plants

- Further re-structuring of the Chinese phosphate industry is expected
  - New high analysis supplies to:
    - Meet further growth in overall phosphate demand
    - Continue to substitute for low analysis products (e.g. FMP, SSP, pan-granulated NPKs)
  - Closure of small-scale, higher-cost and less-environmentally-safe plants
- But Chinese production and exports remain a wild card
  - CRU expects a quick re-structuring and declines in production and exports



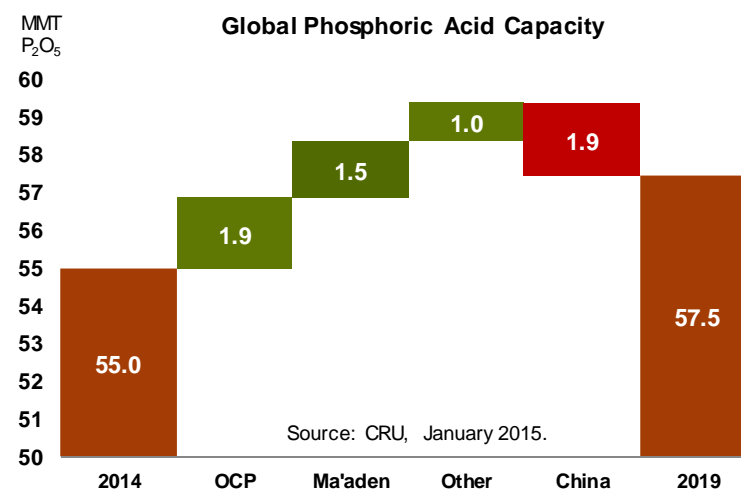
■ DAP/MAP ■ Other



Source: Mosaic China

## 4. Few Projects Behind OCP And Ma'aden

- Few viable projects in the pipeline behind the large OCP and Ma'aden projects
- Key CRU assumptions
  - Includes project categories “firm” and “probable”
  - Four Jorf Phosphate Hubs (JPH) by 2019
  - Ma'aden II start-up mid-2016
  - Net increase of 1.0 mmt elsewhere
  - Net closures of 1.9 mmt  $P_2O_5$  in China

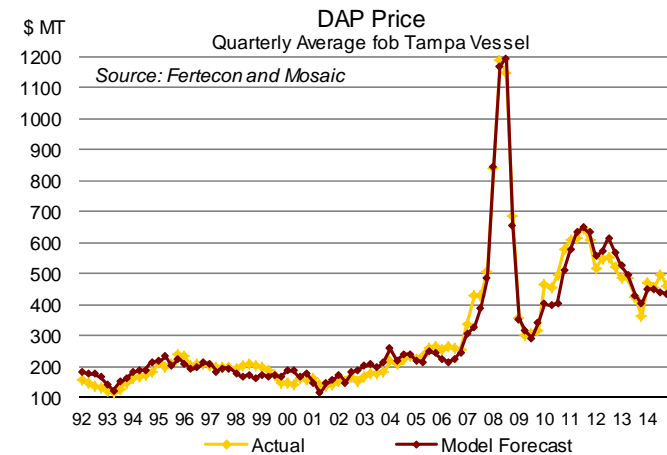
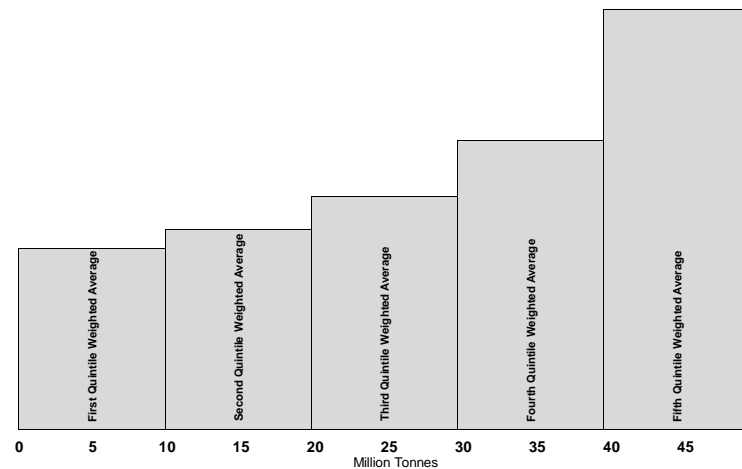


## 5. Current Industry Structure

- Steep cost curve mainly due to non-integrated production (no phosphate rock production)
  - Why non-integrated production?
    - Economic: access to extremely low-cost other raw materials (i.e. sulphur or ammonia)
    - Strategic: diversify sources of phosphate imports (e.g. India)
  - Rock and phosphoric acid prices determine high-cost production and ultimately the DAP price
    - Morocco largest exporter and India is the largest importer of rock and phosphoric acid
    - Statistical models work (or capture this dynamic)

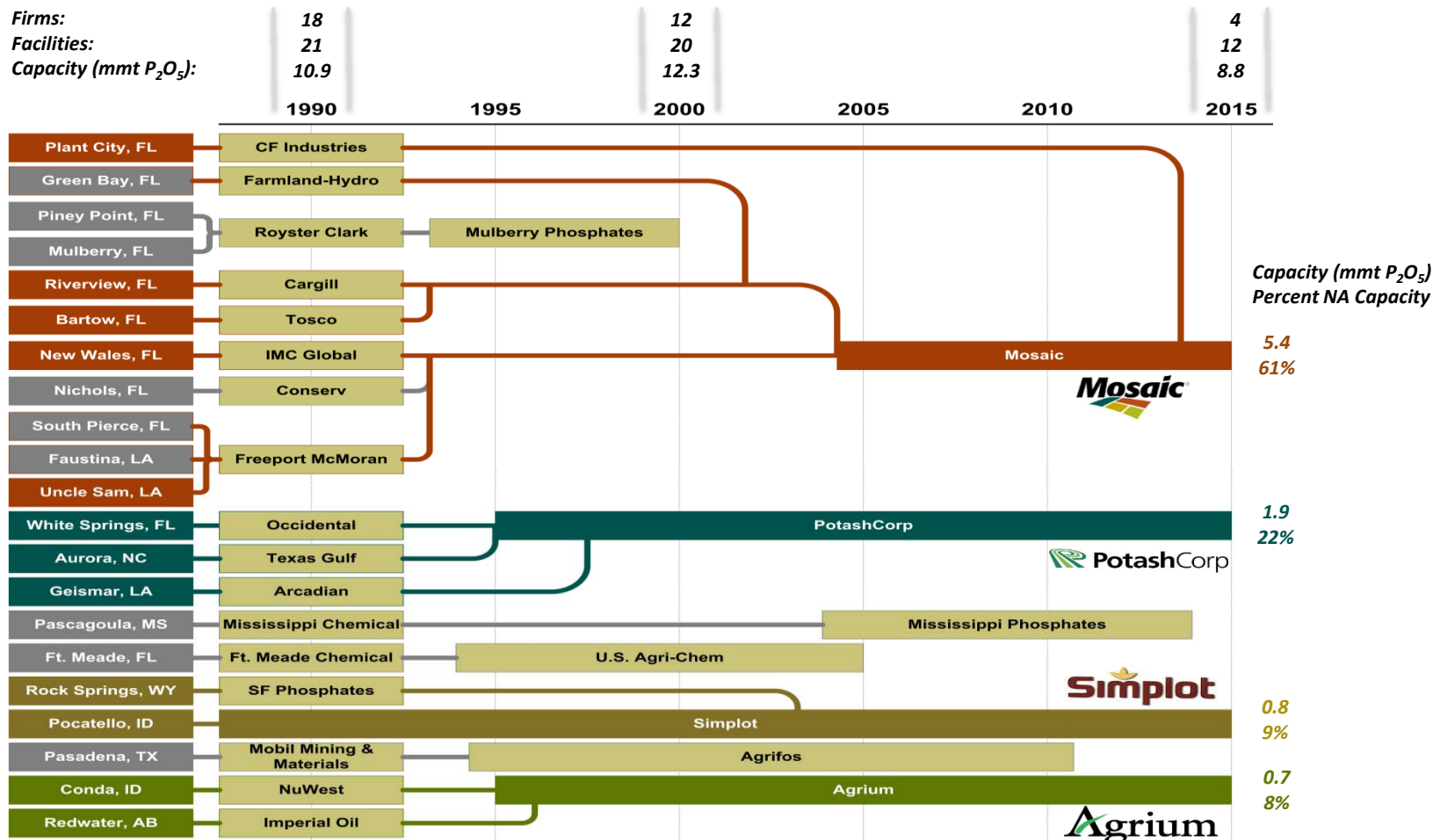
US\$ Tonne  
fob Plant/Port

Industry DAP Cost Curve Estimate  
Source: CRU



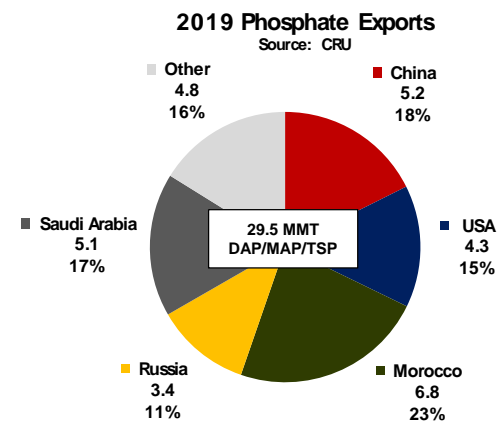
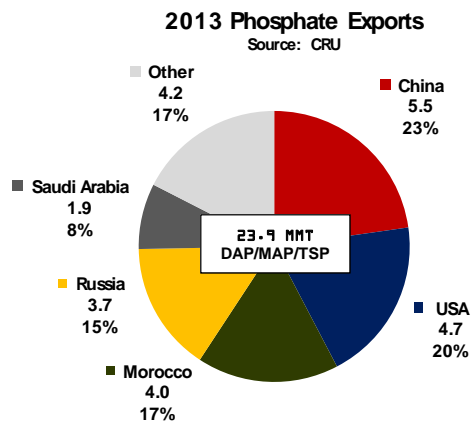


## 5. Current Industry Structure (NA phosphoric acid industry)



## 5. Current Industry Structure

- Top five countries/companies account for more than 80% of total exports today
- Smaller share but still large and stable U.S. exports going forward
  - Mainly serving more freight-competitive destinations in the Americas
  - Increasingly supplying larger percentage of premium products
- Larger exports from Morocco and Saudi Arabia to meet growing demand during this period
- CRU expects Chinese exports to stabilize during the forecast period

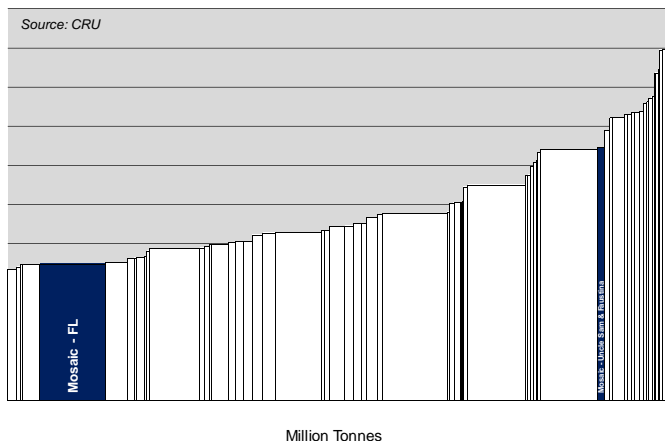


## 6. Our Cost Position and Innovation Lead

- More details from Jim, Joc, Rick and Rich tomorrow
- Our sustainable competitive advantage
  - Natural as well as human resources
  - Scale, efficiency, scope and location

### Low Cost Position

US\$/Tonne 2014 PACID Industry Cost Curve fob facility at Production

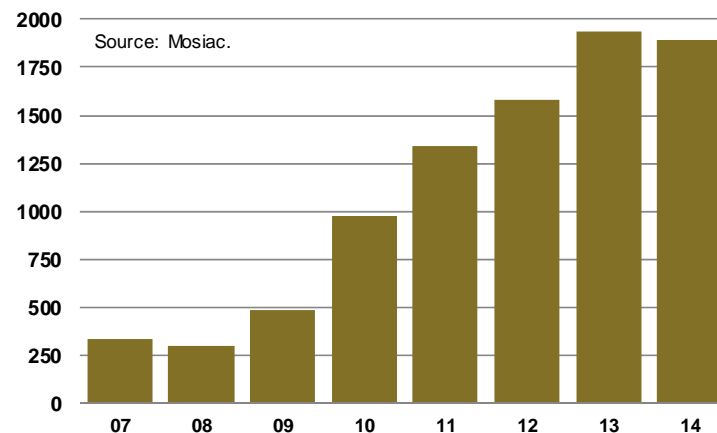


### Lower Absolute and Relative Raw Materials Costs

Based on the recent Fertecon 2017 Tampa ammonia price forecast and the NYMEX Henry Hub 2017 natural gas forward curve on March 13, 2015, cost savings from our CF ammonia supply contract would total \$50 million in 2017.

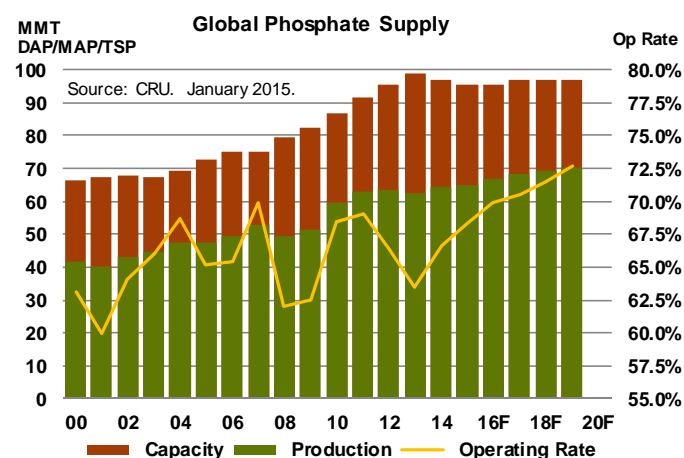
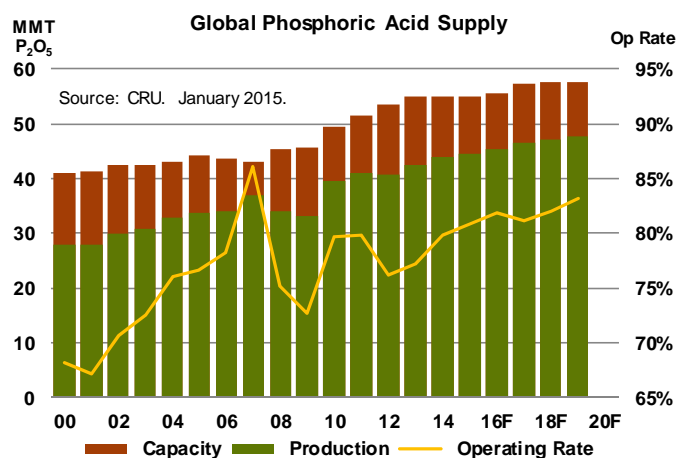
### Our Innovation Lead

MMT Product  
Mosaic MicroEssentials Production



## 7. Tighter S/D Balances and Rising Operating Rates

- CRU forecasts
  - Relatively small capacity increases during the next five years
  - Moderate demand growth
  - Rising operating rates during the forecast period
- Mosaic forecast differences
  - More rapid demand growth
  - China production and exports still a wild card



# What To Watch

- Agricultural commodity prices and impact on phosphate demand
- Indian demand growth
- OCP and Ma'aden – timing of new capacity start-ups
- China – always a wild card
  - Phosphate demand growth
  - Production and exports
  - Export policies
  - Pace of phosphate sector re-structuring



# Why We Are Not as Worried As Some of You About Potash





## Our Perspective

1. Positive demand prospects
2. Less current operational capacity than most estimates
3. Overly optimistic capacity forecasts and ramp-up timelines
4. Optimization mode by leading producers – Mosaic example
5. Overblown concerns about North America
6. Stable supply/demand balance and global operating rates





# 1. Positive Demand Prospects

## ■ Recent developments

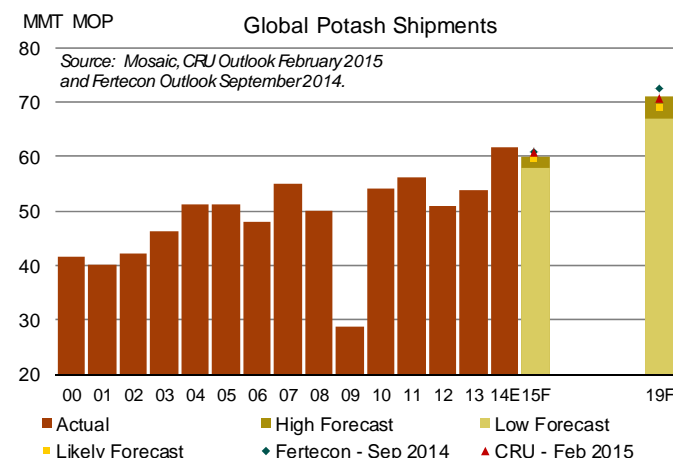
- Global shipments have increased 7.6 mmt since 2010
  - But all of the growth in 2014
  - Led by China and Brazil but help from other regions
  - India a major demand drag since 2011

## ■ 2015 forecasts

- MOS: 58-60 mmt range and 59.5 point estimate
  - Gains in India not enough to offset declines elsewhere
  - But 2015 forecast still 3.3 mmt greater than pre-2014 peak
  - Production not de-stocking required to meet demand in 2015
- CRU: 60.6 mmt; Fertecon: 60.8 mmt

## ■ 2019 forecasts

- MOS: shipments projected to increase 2.2% per year or 7.3 mmt to 68.9 mmt in 2019
- CRU and Fertecon: higher forecasts mainly due to larger projections for the Americas



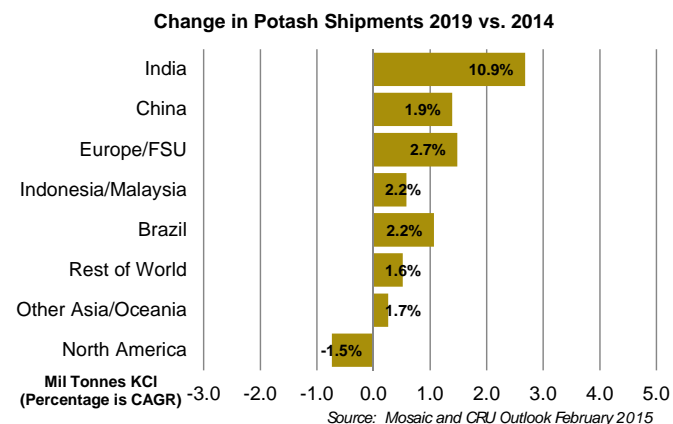
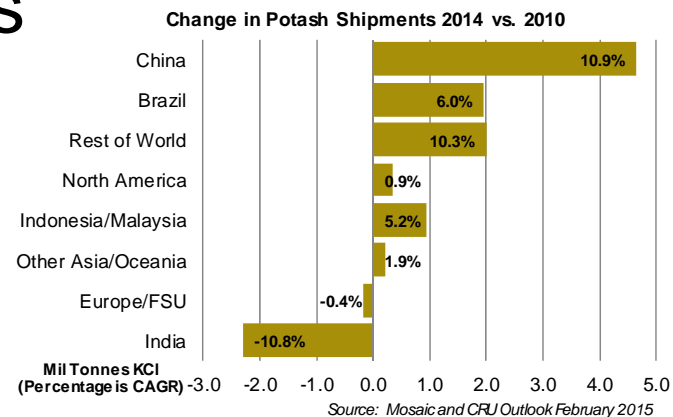
Global Potash Shipments

Mil Tonnes MOP	Mosaic Scenario			Fertecon Sep 14	CRU Feb 15
	Low	Likely	High		
2010 Shipments	na	54.0	na	54.9	53.7
2014 Shipments	na	61.7	na	57.3	62.3
Change 2010-14	na	7.6	na	2.5	8.6
CAGR 2010-14	na	3.4%	na	1.1%	3.8%
2019 Forecast	67.0	68.9	71.0	72.3	70.7
Change 2014-19	5.3	7.3	9.3	15.0	8.4
CAGR 2014-19	1.7%	2.2%	2.9%	4.7%	2.6%
2025 Forecast	74.6	79.0	82.6	80.3	na
Change 2019-25	7.6	10.1	11.6	8.0	na
CAGR 2019-25	1.8%	2.3%	2.6%	1.8%	na

Source: Mosaic, CRU Outlook February 2015 and Fertecon Outlook September 2014.

# 1. Positive Demand Prospects

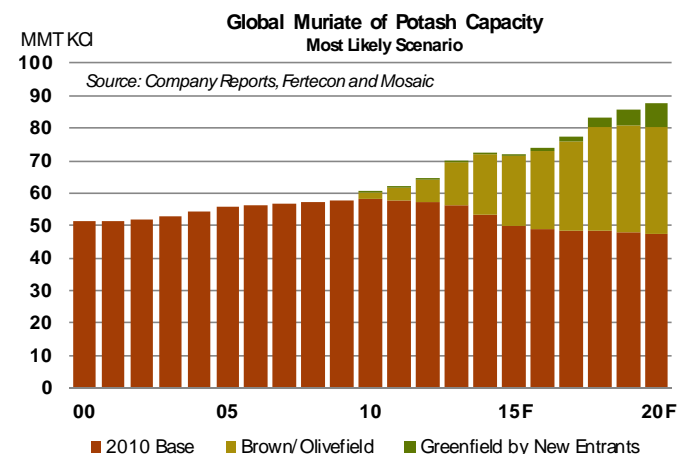
- 2010-14 shipment growth
  - Led by China and Brazil but help from other regions
  - India a major drag
- 2019 forecasts
  - Some growth rates impacted by unusually high 2014 levels (e.g. North America)
  - Banking on a rebound in India
  - But widespread gains expected



## 2. Less Current Operational Capacity (2015)

- Consultants' forecasts of current capacity look way too high to us
  - Main issue - Canadian capacity based on Canpotex proving runs not operational capacity
- Mosaic capacity estimates
  - 2010 base capacity tied to peak production during 2004-08
  - Brownfield/olivefield projects added based on expected start-up dates and ramp-up schedules
  - Greenfield projects added based on economic or strategic rationale

2015 MOP Capacity Mil Tonnes KCl	Mosaic (Mar 2015)	CRU (Feb 2015)	Fertecon (Sep 2014)
World	72.2	81.4	83.9
Canada	24.5	30.0	30.1
Russia	11.0	11.1	13.9
Belarus	11.6	12.7	11.0
China	6.4	8.4	8.3
Laos	0.7	0.8	0.8
Others	18.2	18.5	19.9



### 3. Overly Optimistic Capacity Forecasts (2019)

- Nearly three-quarters of new gross capacity by Canadian and FSU producers

2019 MOP Capacity Mil Tonnes KCl	Mosaic (Mar 2015)	CRU (Feb 2015)	Fertecon (Sep 2014)
World	85.9	96.1	99.6
Canada	31.7	37.6	38.0
Current Producers	29.7	35.5	35.7
New Entrants	2.0	2.2	2.3
Russia	15.9	15.5	17.6
Current Producers	14.1	12.0	14.5
New Entrants	1.8	3.5	3.2
Belarus	11.6	13.0	11.4
China	7.8	9.4	9.6
Laos	0.8	0.8	1.1
Africa	0.0	0.0	1.2
Other	18.1	19.8	20.8

#### MOP Capacity Estimates - Mosaic Most Likely Scenario

##### Mil tonnes KCl

2010 Base Capacity	58.0
2019 Base Capacity	47.8
Loss Due to Mine Closures (Ore Depletion and Flooding)	10.2
2019 Global MOP Capacity	85.9
Net Change from 2010 Base	27.8
<i>Brown/Olivefield Expansions from 2010 to 2019</i>	33.1
Share of <u>new gross</u> capacity	87%
<i>Developed by Canadian and FSU Producers</i>	27.6
Share Developed by Canadian and FSU Producers	83%
<i>Greenfield Projects from 2010 to 2019</i>	4.9
Share of <u>new gross</u> capacity	13%

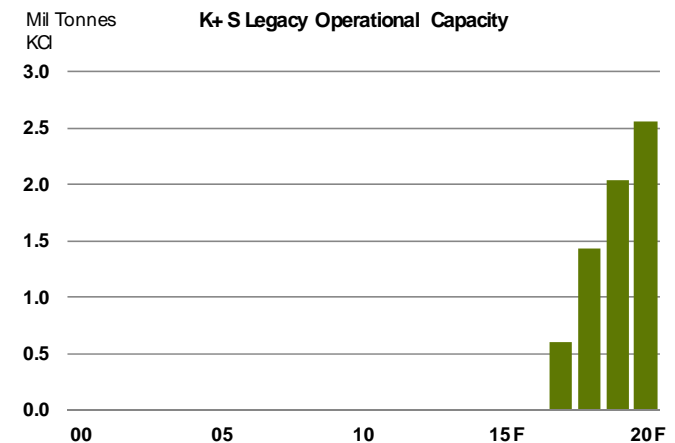
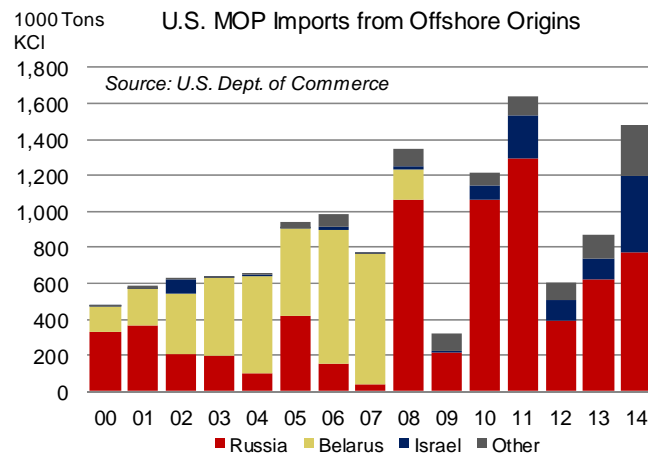


## 4. Optimization Mode By Leading Producers

- New brown/olivefield projects:
  - Come online in big lumpy increments due to scale economics
  - But unique capability to optimize potash operations at production levels required by market
- Mosaic optimization strategy
  - Sold or closed small higher cost U.S. MOP operations
- (~3) – Hersey MI: converted to salt-only operation and sold July 2014
- (<15) – Carlsbad NM: ceased MOP operations Dec 2014, now focused on K-Mag premium product
  - Run large Saskatchewan MOP operations at consistent rates to meet market demand
    - Esterhazy (2025 man-on-the-moon mission: largest and lowest cost mine in the world)
      - » Capture scale economies at this 5.3 mmt operation in the near term
      - » Expand capacity to ~6.2 mmt via the first phase of K3 project
      - » Transition all mining operations to low-cost K3 mine and mitigate brine inflow risk
    - Belle Plaine - Full production of high quality white products for agricultural & industrial uses
    - Colonsay - High quality red products for agricultural uses plus feed and Aspire production

## 5. Overblown Concerns About North America

- We get analysts' concerns about North America
  - Flat to modest demand growth
  - Near-record imports today and the first BPC imports since 2008
  - New Agrium capacity targeted for its retail system
  - Start-up of K+S Legacy project now on the horizon
  - Disappearance of a North American price “premium”



## 5. Overblown Concerns About North America

### ■ Our assessments

- U.S. imports from offshore origins are vulnerable
  - Global demand growth will change trade flows
    - Relatively flat FSU export supply until late this decade
    - Therefore a stronger pull of FSU product to other destinations
  - Is there a North American price “premium”?
    - Not the difference between domestic and offshore realized prices by North American producers
      - » Blend vs. standard grade fundamentals differ widely
      - » Much different peaking demands
      - » Contract vs. spot sales pricing and rail car vs. vessel quantities
    - Is the difference in realized prices by offshore suppliers of blend-grade product to North America and other countries (e.g. Brazil)
      - » Arbitrage opportunities drive convergence
      - » A premium justified by product and service quality differences
  - Bottom line: U.S. imports expected to trend down from 1.4+ mmt in 2014 to 0.6-0.7 mmt by the end of the decade

**Estimates of Current Blend Grade Potash Netbacks**

\$ MT Unless Noted	Brazil	NOLA
fob Price (\$ ST)	na	\$355
Less Vessel Discharge/Shrink (\$ ST)	na	\$5
c&f Price	\$355	\$386
FSU Mine Netback	\$289	\$315
Export Duty	0.05	0.05
Ocean Freight	\$15	\$18
Rail Freight	\$35	\$35

**U.S. NOLA Barge Prices Adjust to Brazilian c&f Values**

	Brazil	NOLA
fob Price (\$ ST)	na	\$330
Less Vessel Discharge/Shrink (\$ ST)	na	\$5
c&f Price	\$355	\$358
FSU Mine Netback	\$289	\$289
Export Duty	0.05	0.05
Ocean Freight	\$15	\$18
Rail Freight	\$35	\$35

**Brazilian c&f Prices Adjust to U.S. NOLA Barge Values**

	Brazil	NOLA
fob Price (\$ ST)	na	\$355
Less Vessel Discharge/Shrink (\$ ST)	na	\$5
c&f Price	\$383	\$386
FSU Mine Netback	\$315	\$315
Export Duty	0.05	0.05
Ocean Freight	\$15	\$18
Rail Freight	\$35	\$35

Source: various publications and Mosaic



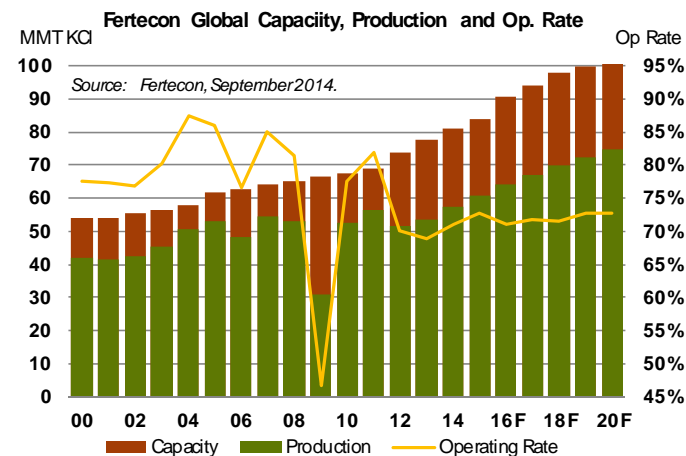
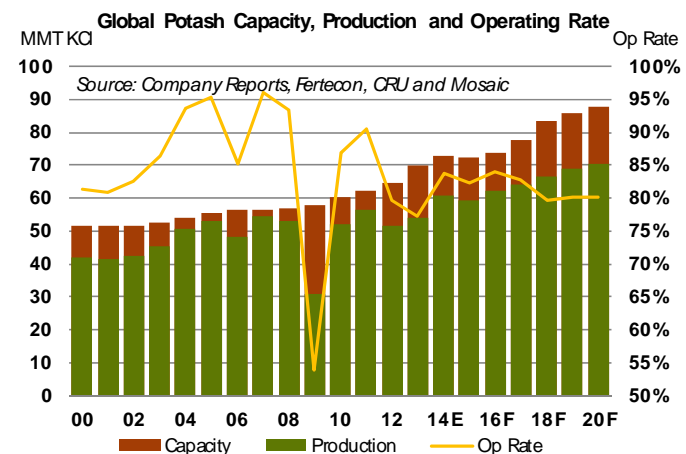
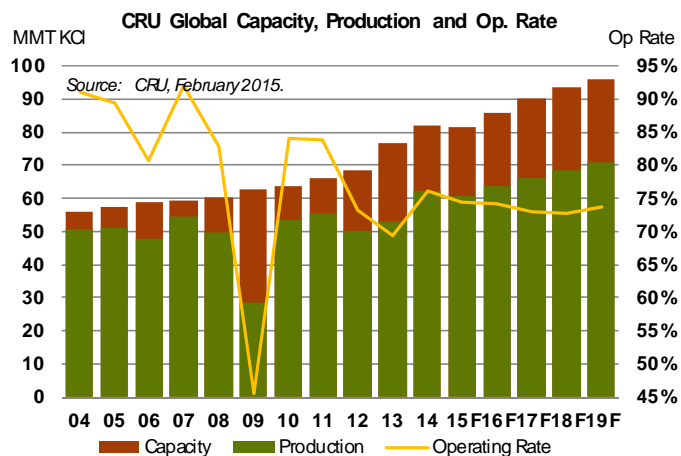


## 5. Overblown Concerns About North America

- Our assessments
  - Larger export pull
    - Agrium Canpotex volume
      - Larger entitlement following proving run
      - Larger Canpotex sales during the next five years
    - K+S domestic vs. offshore mix?
  - Our best guesses
    - Mosaic produced 7.6 mmt KCl at our Saskatchewan operations in 2014
    - Likely will need to produce 8.0 to 9.0 mmt during the next five years

## 6. Relatively Stable Outlook

- Relatively stable global supply/demand balance
  - Positive demand prospects
  - Much different capacity estimates
  - But generally stable operating rate forecasts
    - Significant production increases required
    - No deep or prolonged down-cycle
    - Mosaic estimates of 80%-85% global operating rate



# What To Watch

- Agricultural commodity prices and impact on potash demand
- Indian demand growth
- FSU marketing strategies
- Start-up of new capacity especially by new entrants
- Potential consolidation particularly in the FSU



# Thank You!

## The Market Outlook

Dr. Michael Rahm

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