



Knowledge grows

Yara International ASA

Yves Bonte, EVP Industrial

SEB Nordic Seminar 2018

Copenhagen, 9 January 2018



Our planet faces massive challenges – Yara is part of the solution

9.7 billion
people



+ 50 %

Increased food production



-40 to -70%

Reduced greenhouse gas
emissions*



Our Mission

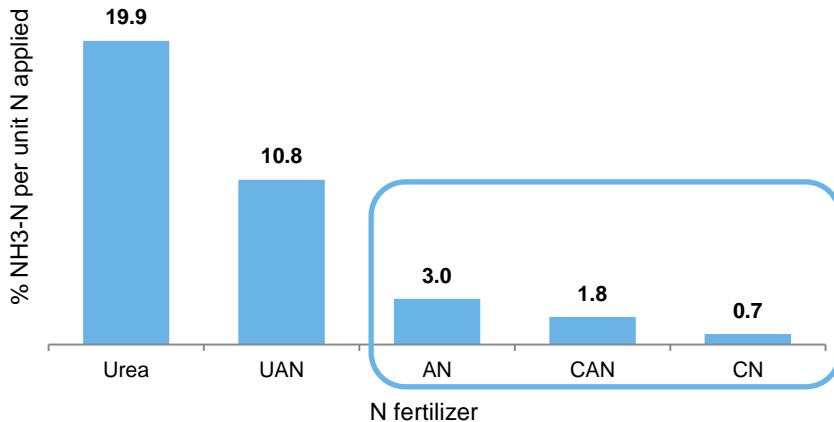
Responsibly feed the world and protect the planet.

Our Values

Ambition, Curiosity, Collaboration and Accountability

Yara drives sustainable agriculture with the right nitrogen fertilizer products and precision farming tools

Lower volatilization losses* with Yara's premium fertilizers



Precision farming tools promote sustainable agriculture



- Precision farming promotes best agricultural practices
- Yara's N-sensor, N-tester and water sensor help optimize application rates and water use
- Yara's solutions help farmers comply with environmental legislation while supporting their competitiveness

Agriculture is responsible for about a quarter of global greenhouse gas emissions. Yara contributes to lower emissions through promoting premium fertilizers and sustainable farming

Yara delivers environmental products and solutions to reduce emissions from vehicles, ships and industrial plants

Challenge

- Global population growth is increasing demand for energy and transportation which is still heavily relying on fossil fuels
- Current emission levels are not sustainable
- 1.3 million people die globally every year from urban air pollution

Our approach

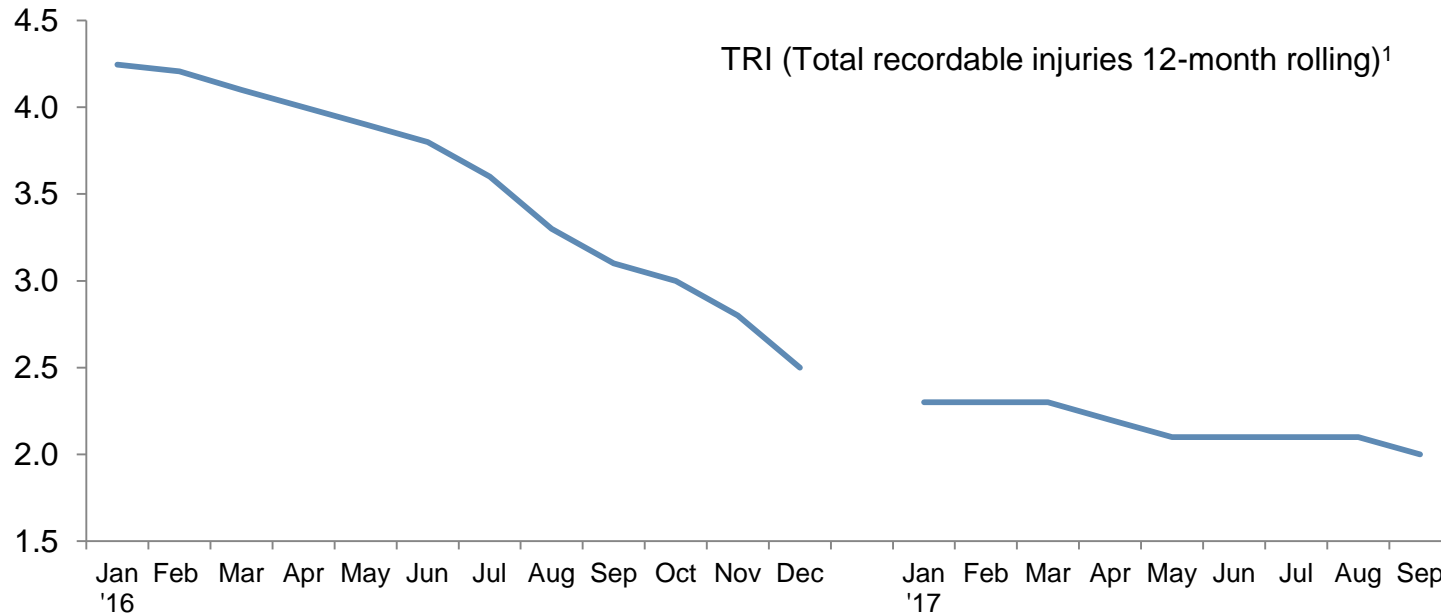
- Technological solutions that reduce harmful exhaust gas emissions, thereby helping to fight air pollution
- We offer complete solutions to clean NOx emissions from vehicles, ships and industrial plants along with a highly efficient SOx scrubber solution for seagoing vessels

Results

- In 2015 we helped our customers cleanse a total of 1.4 million tonnes NOx emissions. Or around the total annual emissions in France or Germany.

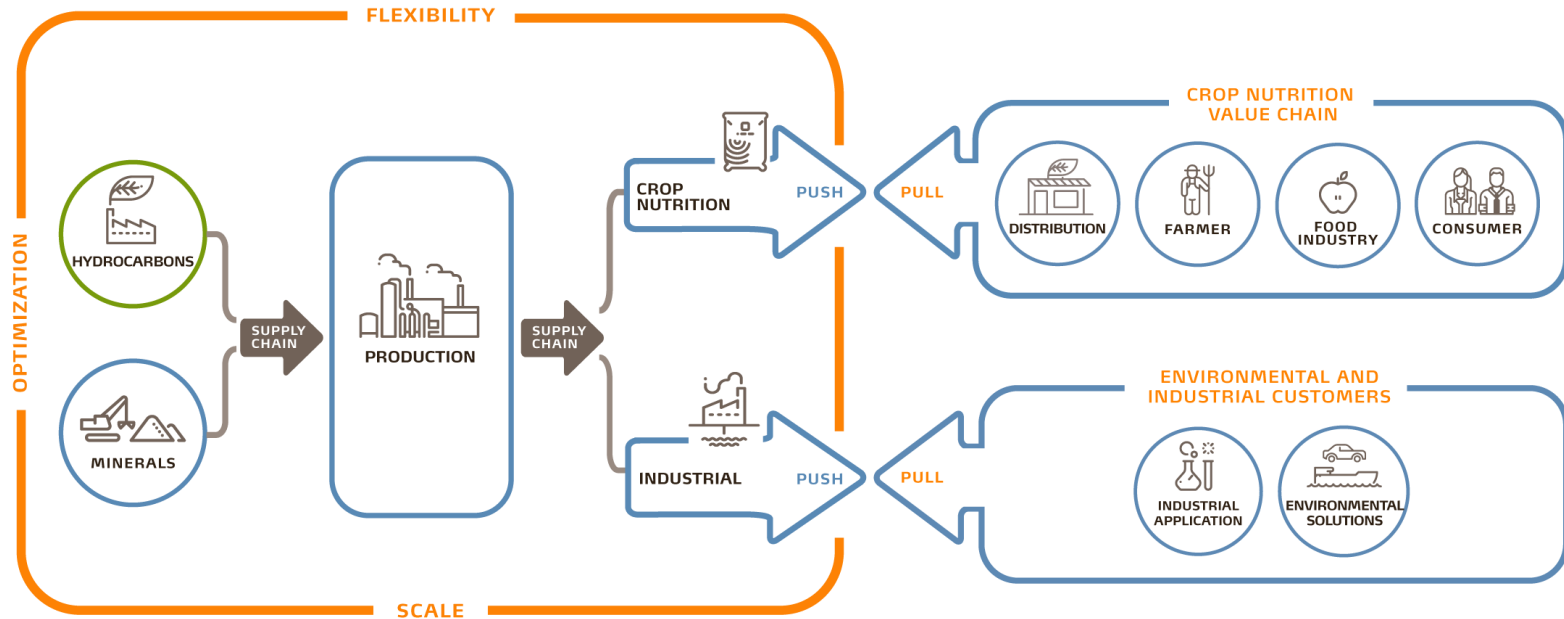


Safe operations is our first priority









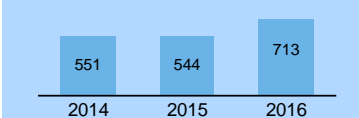
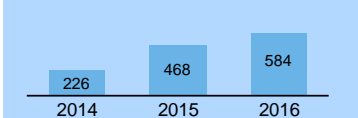
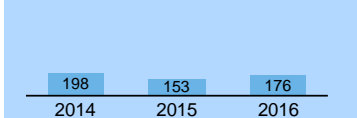
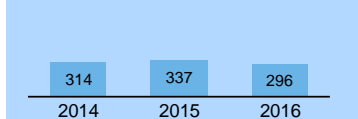


1) TRI: Total recordable injuries, lost time (absence from work), restricted work and medical treatment cases per one million work hours.

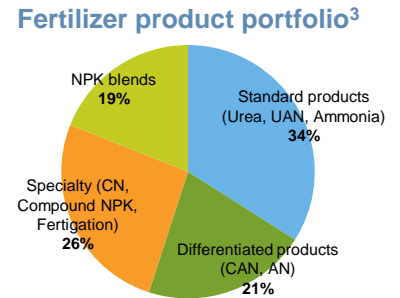
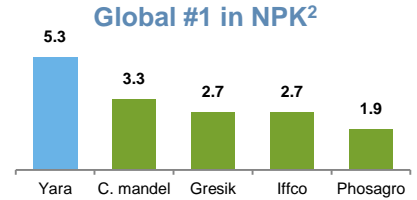
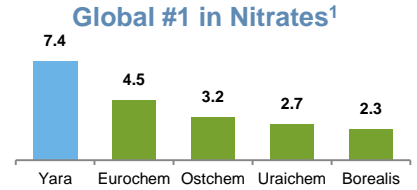
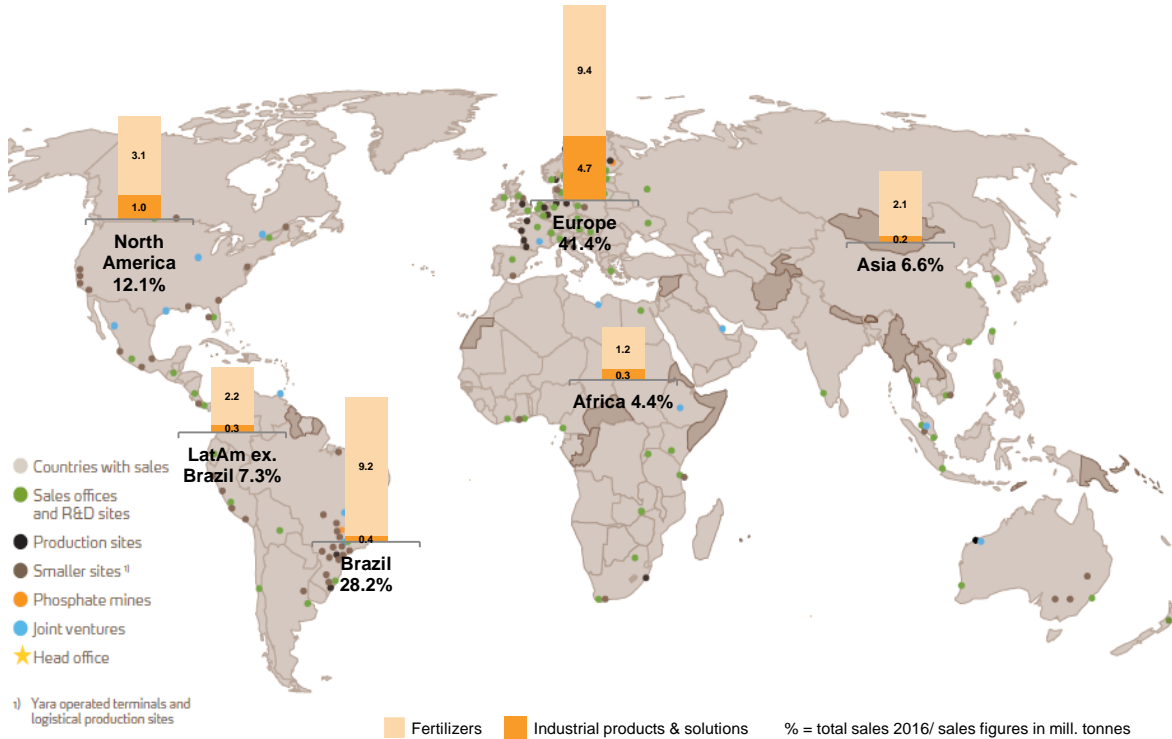
Integrated business model creates value through scale, flexibility and value chain presence



Industrial segment delivers growth and offsets fertilizer cyclicality and seasonality

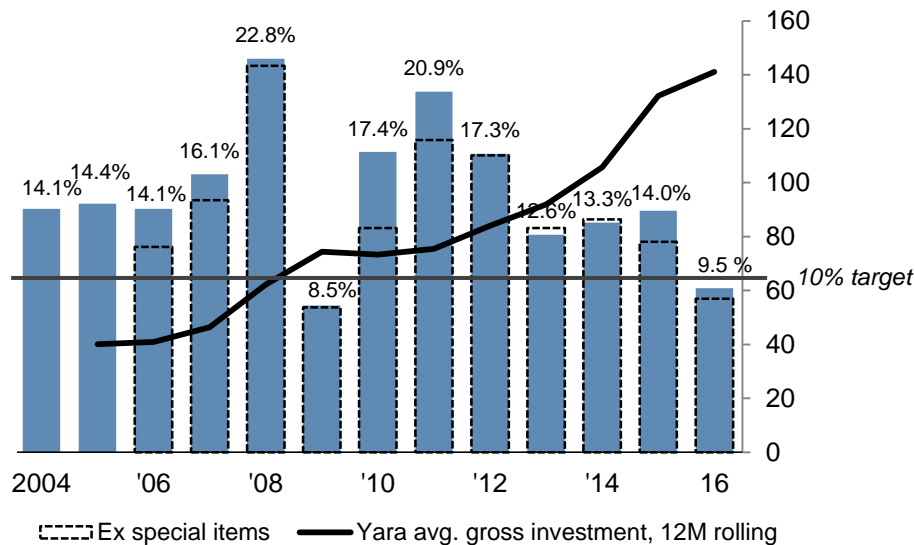
	Base Chemicals	Environmental Solutions	Mining Applications	Industrial Applications ¹
Key product and service offering	 Chemical applications for food, automotive, space, pharmaceutical and construction industries	 NO _x and SO _x abatement of emissions from heavy duty vehicles and industry	 Technical nitrates and solutions for mining and construction industries	 CN and associated solutions for industrial applications Feed urea and phosphates for Animal nutrition
Strategic fit	Optimization of Upstream assets	Utilize logistics advantage and infrastructure footprint	Utilize technology, logistics and infrastructure advantage	Monetize products into higher value markets
Geographical market	 Europe	 Global	 Global	 Global
Market drivers	GDP growth	Legislations, GDP growth	GDP growth, mining industry	GDP growth, standard of living
EBITDA 2014-2016 (MNOK)	 2014: 551, 2015: 544, 2016: 713	 2014: 226, 2015: 468, 2016: 584	 2014: 198, 2015: 153, 2016: 176	 2014: 314, 2015: 337, 2016: 296

Yara's leading global position and differentiated product portfolio represent key sources of competitive edge



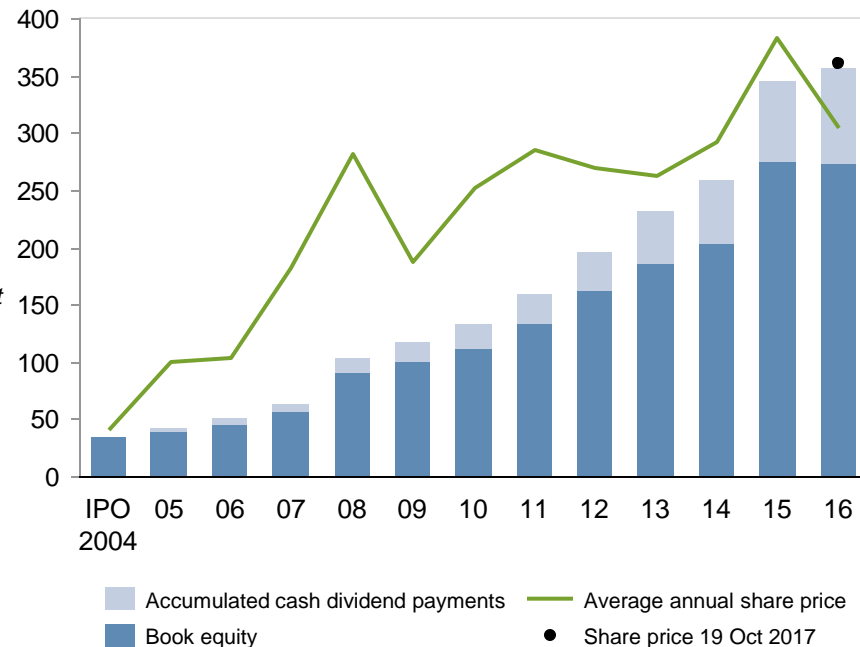
Strong growth and profitability through the cycle

Average cash return on gross investment (CROGI) well above the Yara CROGI target of 10%



Average annual shareholder return of 23%¹

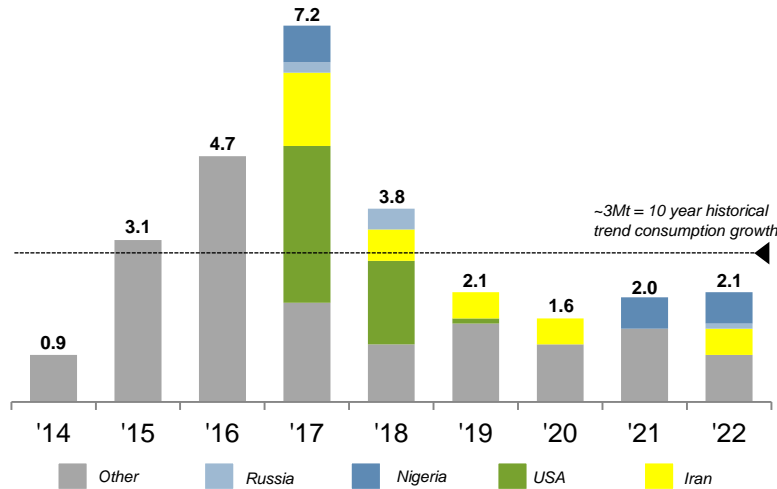
NOK/share



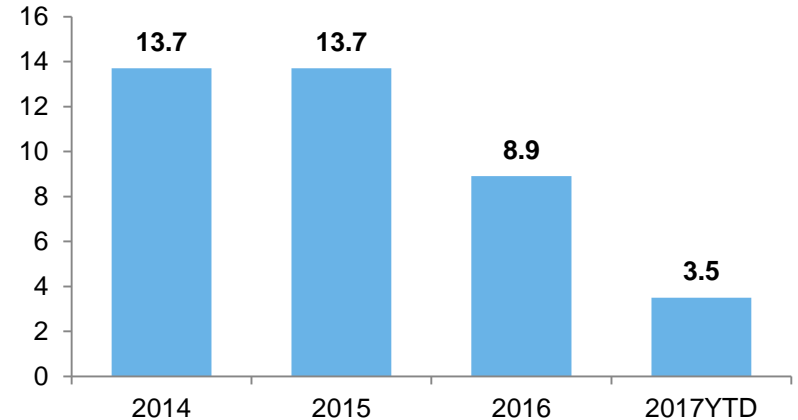
1) Share price appreciation (end 2016) plus dividend payments

Urea oversupply outside China is offset by lower Chinese exports

Capacity additions, excluding China (Mt urea)



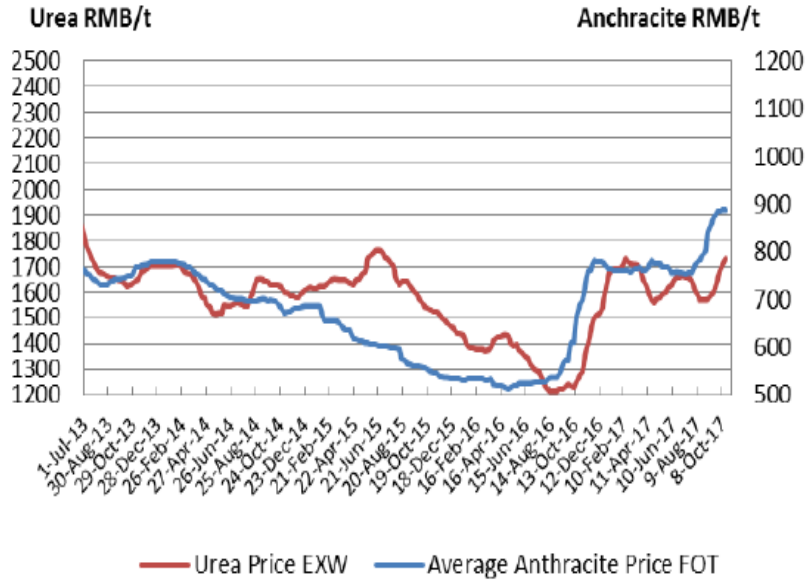
Urea exports from China (Mt urea)



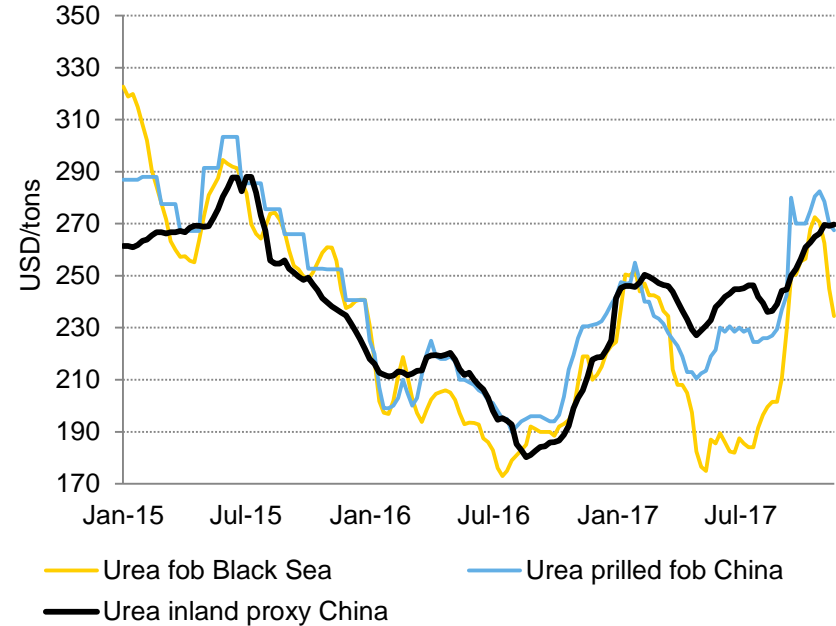
- Market is currently dominated by oversupply outside China, however lower China exports balance the urea market
- Urea market price is set by Chinese swing producers

Increased coal prices in China have driven nitrogen prices higher

China anthracite and urea prices (RMB/mt)¹

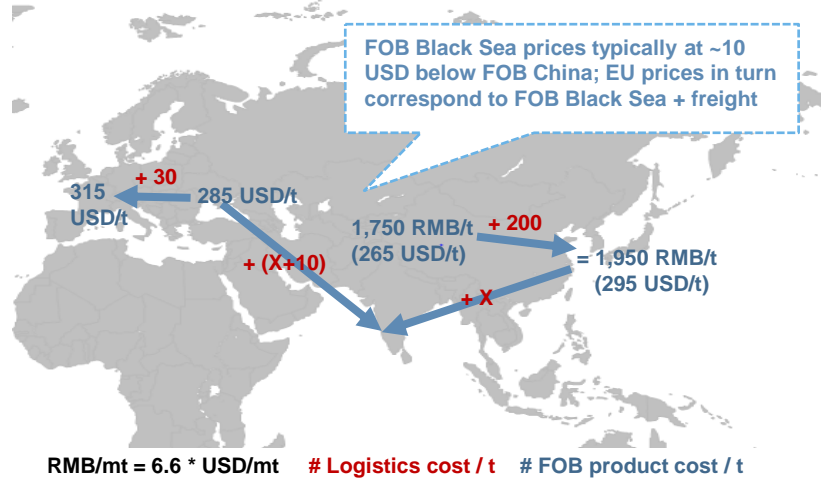


Increasing urea prices



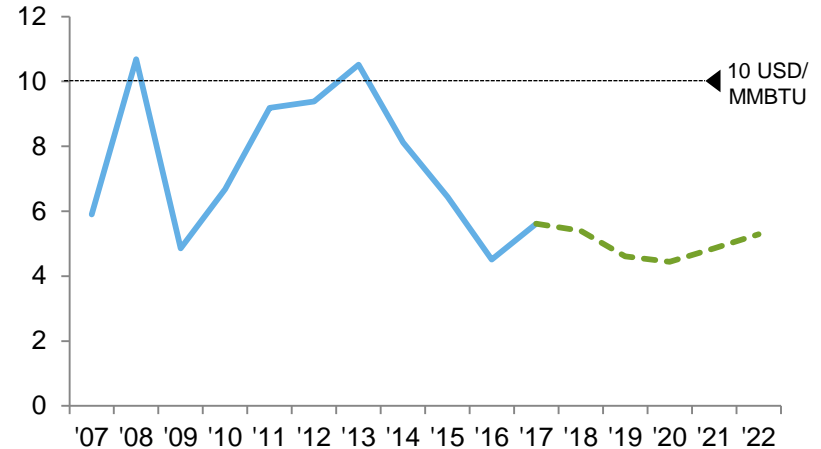
Western Europe producers have clear cost advantage over China

Urea pricing derived from a Chinese export price



- China as the swing producer defines the Urea market prices for Western Europe

European gas cost²



- Production based on European natural gas has a cost advantage over China up to a gas price of 10 USD /MMBTU¹

Yara has expected commodity nitrogen oversupply, and has focused its growth pipeline on premium & industrial products

Growth focused on premium & industrial

Expand premium products sales and supply

- Uusikaupunki NPK (3Q 2016)
- Porsgrunn/Glomfjord CN/NPK (4Q 2017)
- Sluiskil urea+S (4Q 2017)
- Rio Grande NPK/NPK blends (2H 2020)

Expand commodity scale based on attractive full-cost growth opportunities

- Freeport ammonia JV (1Q 2018)
- Babralla urea acquisition (4Q 2017)

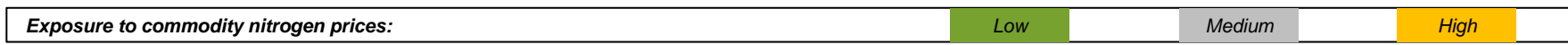
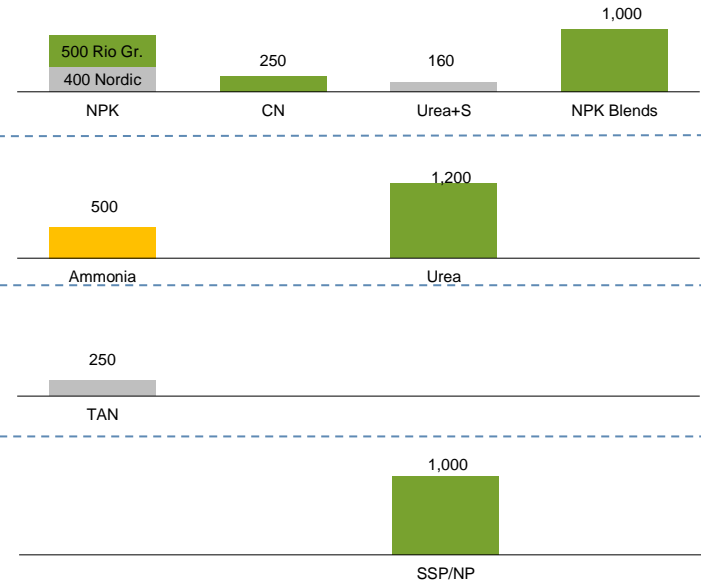
Act on attractive opportunities to grow industrial sales and supply

- Pilbara – TAN (1H 2017)
- Köping – TAN (2Q 2018)

Structurally secure P and K supply

- Galvani / Salitre (mining: 1Q18, chemical 1H19)

Pipeline tonnes by product (kt)¹



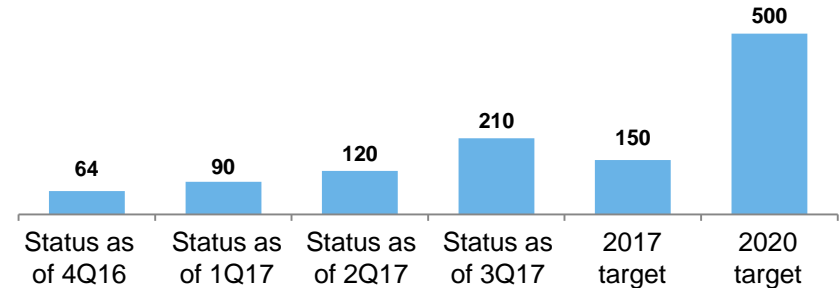
¹ Including Yara's share of volume in non-consolidated investees. Fully consolidated entities presented at 100% basis

Yara Improvement Program targets minimum USD 500 million sustained annual EBITDA improvement by 2020

USD 500m Improvement Program Progress



Annualized EBITDA improvement, USDm¹



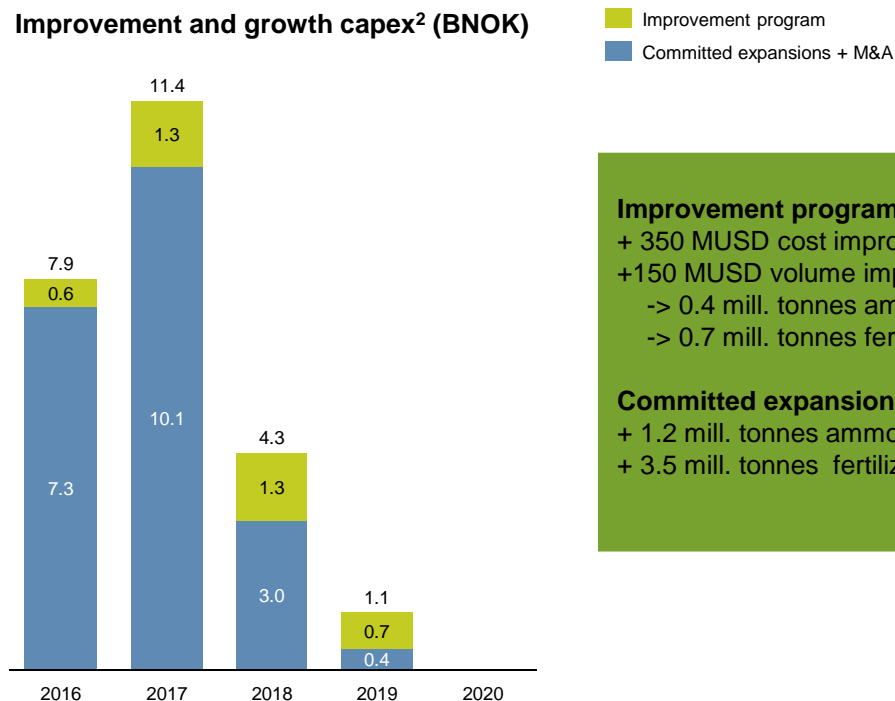
Improvement categories:

- **Volume:** increasing production in existing plants by improving reliability
- **Consumption factor:** reducing spend, primarily on energy, through better reliability and new technology
- **Variable unit cost:** leverage global scale, advanced category management and collaborative procurement approaches
- **Fixed cost:** improve support function standardization and realize scale benefits

1) Versus 2015 baseline, at 2015 prices

Major improvement and growth investments in 2017; main earnings improvement from 2018 onwards¹

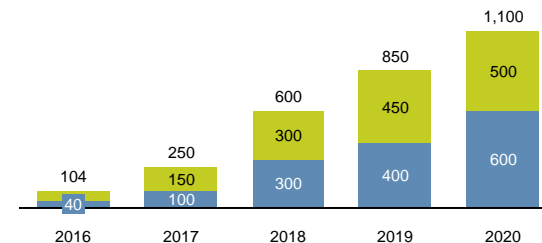
Improvement and growth capex² (BNOK)



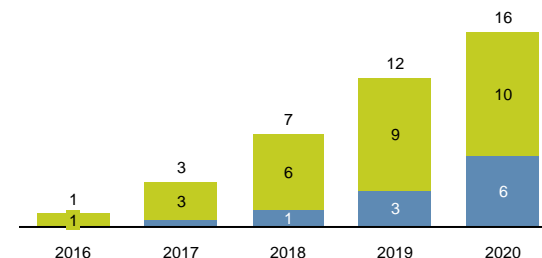
Improvement program:
 + 350 MUSD cost improvement
 +150 MUSD volume improvement:
 -> 0.4 mill. tonnes ammonia
 -> 0.7 mill. tonnes fertilizer

Committed expansions + M&A:
 + 1.2 mill. tonnes ammonia
 + 3.5 mill. tonnes fertilizer

EBITDA improvement³ (MUSD)



Earnings improvement³ (NOK per share)



¹ Currency assumptions for 2017 onwards: USD/NOK 7.90, EUR/NOK: 9.32, USD/BRL: 3.15

² Excluding maintenance capex on existing assets – see page 21. Yara's share of capex. Fully consolidated entities presented at 100% basis

³ Measured at 2015 conditions. Main average market prices: Ammonia fob Yuzhny 390 USD/t, Urea fob Yuzhny 275 USD/t, DAP fob Morocco 495 USD/t



Knowledge grows

Additional information

IR - January 2018

Global leadership by growing knowledge for 112 years

About the company:

- Headquarters in Norway
- President and CEO: Svein Tore Holsether
- Present in more than 60 countries, sales to ~160 countries
- Close to 15,000 employees
- Established as Norsk Hydro in 1905, demerged and listed on Oslo Børs as Yara International ASA in 2004

Key metrics 2016 / YTD 2017:

- Operating revenues: 95.2 BNOK / 69.8 BNOK
- EBITDA: 15.6 BNOK / 8.6 BNOK
- CROGI: 9.5% / 6.5%
- Total deliveries (in million tonnes):
 - Fertilizers: 27.2 / 20.8
 - Industrial products: 6.9 / 5.3
 - Ammonia trade: 2.0 / 1.5





Stable ownership structure:

- Norwegian State 36.2%
- Norwegian National Insurance Scheme Fund 5.3%
- Other Norway 14%
- Outside Norway 44.5%

Strong and stable credit position:

- S&P: BBB (stable), BBB+ between 2005 and 2007
- Moody's: Baa2 (stable), unchanged since 2004
- Clear commitment to BBB/Baa2 rating
- Financial ratios as of 3Q 2017:
 - Debt/equity: 0.22
 - Net debt/L12M EBITDA: 1.55x

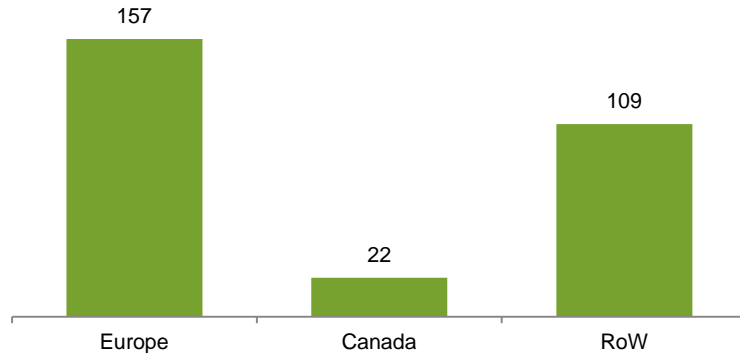
Three operating segments supported by a global supply chain function cover the value chain

	Production	Crop Nutrition	Industrial
			
Description	Runs large-scale production of nitrogen-based products, the starting point for our crop nutrition and industrial solutions	Provides worldwide sales, marketing and distribution of a range of crop nutrition products and programs	Develops and markets environmental solutions and products for industrial applications
Credit highlight	Production has plants and mines globally, providing scale and flexibility	Crop Nutrition creates resilience in earnings with distribution and agronomic competence	Industrial segment reduces cyclicity and seasonality
2016 Revenues¹	8.5 BNOK (1.0 BUSD) 9%	72.7 BNOK (8.9 BUSD) 75%	16.0 BNOK (2.0 BUSD) 16%
2016 EBITDA²	6.7 BNOK (0.8 BUSD) 44%	5.5 BNOK (0.7 BUSD) 36%	2.9 BNOK (0.4 BUSD) 19%
Supply Chain	 <ul style="list-style-type: none"> • Global function responsible for optimization of energy, raw materials and third party sourcing • Sourcing and trade of 3,864 kilotons of ammonia and purchases of 293mm MMBtu of energy, 3,408 kilotons of potassium and 969 kilotons of phosphate rock 		

Supply Chain delivers industry-leading economies of scale

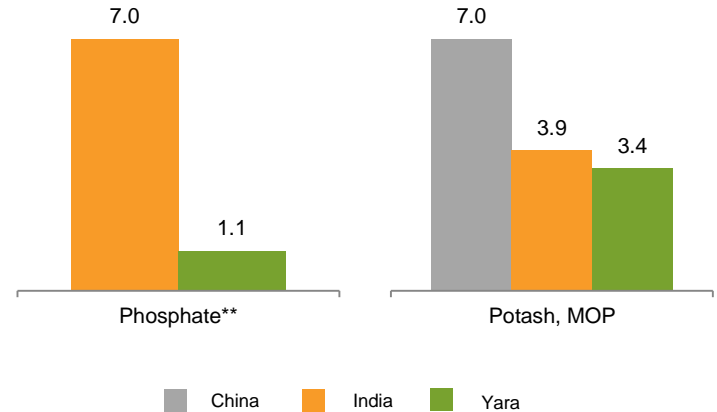
Biggest industrial buyer of natural gas in Europe

2016 gas consumption, Million MMBtu*



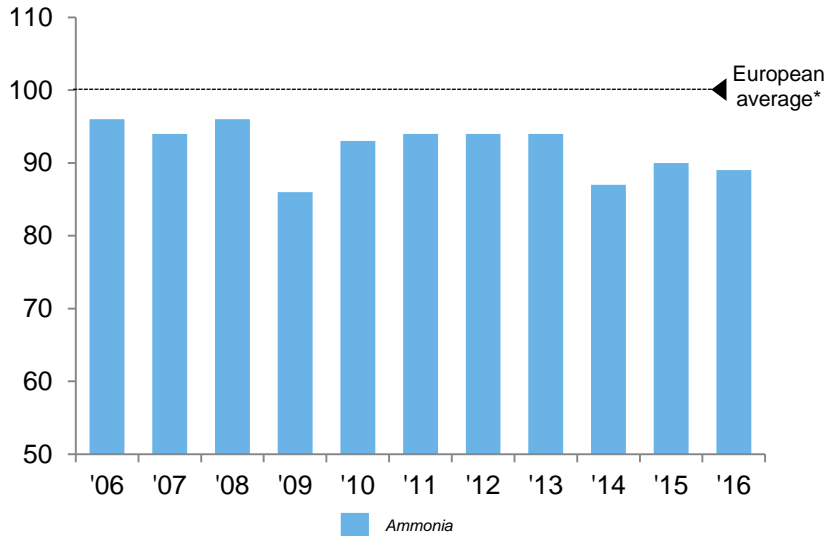
Third single biggest buyer of P&K globally

2016 P&K purchases (mt)



Yara has strong cost and market positions globally

Leading cost position in Europe



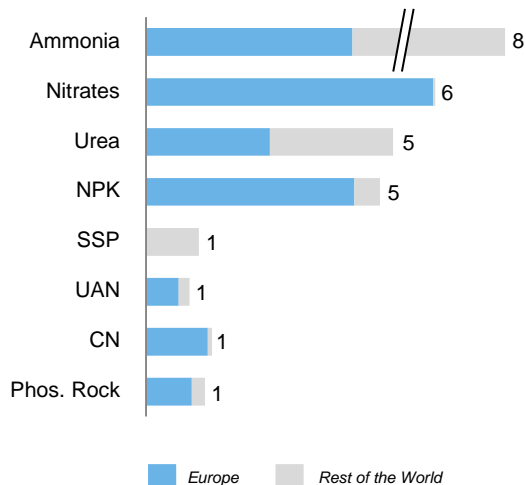
Strong competitive-positions outside Europe

- **North America:** World class low-cost production assets in core agriculture market
- **Brazil:** Unrivalled distribution network with 28 sites in 11 states. Limited commodity margin exposure due to (1) strong premium product positions and (2) third-party sourcing for blend business
- **Asia:** Export market for Yara premium products for more than 100 years. Strong knowledge margin and brand awareness.

Production scale advantage and variable cost flexibility due to asset set-up and product mix

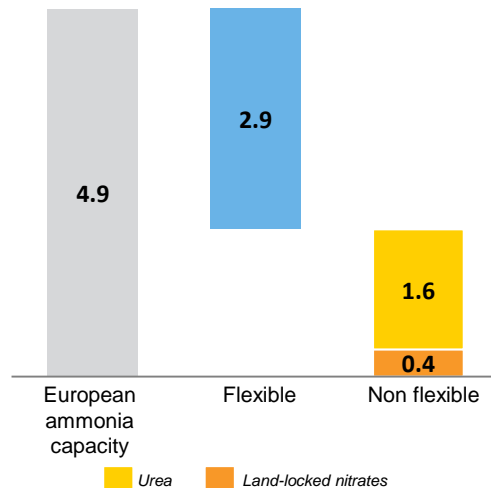
Diversified product portfolio¹

Mill tons 2016FY



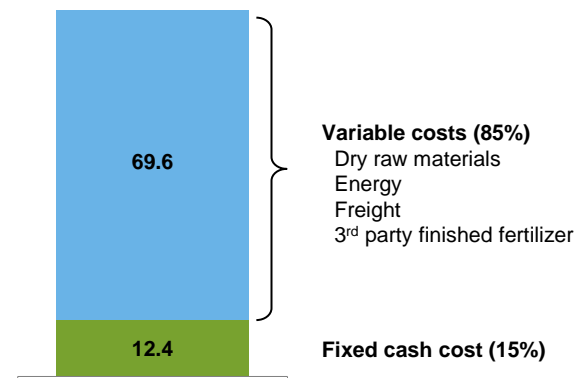
High ammonia flexibility

Mill tons 2016FY



Yara's operating cash costs are mainly variable

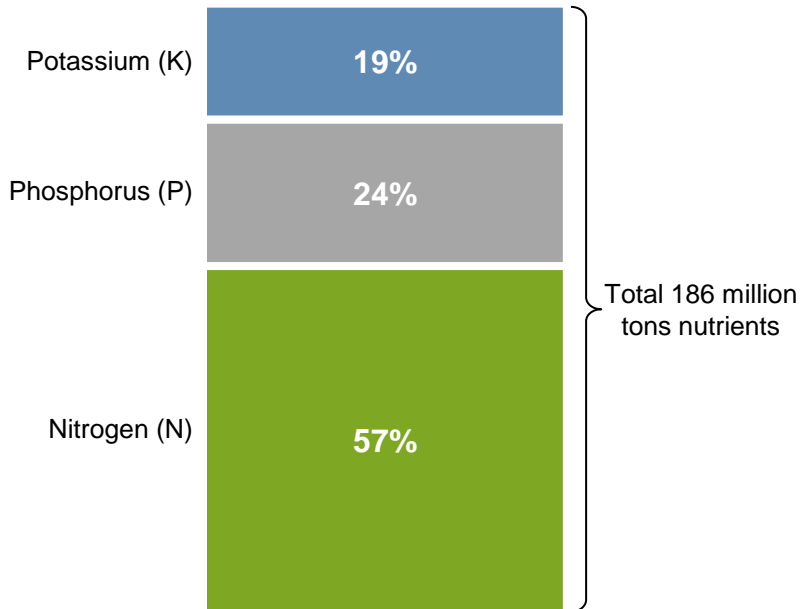
NOK billions, 2016FY



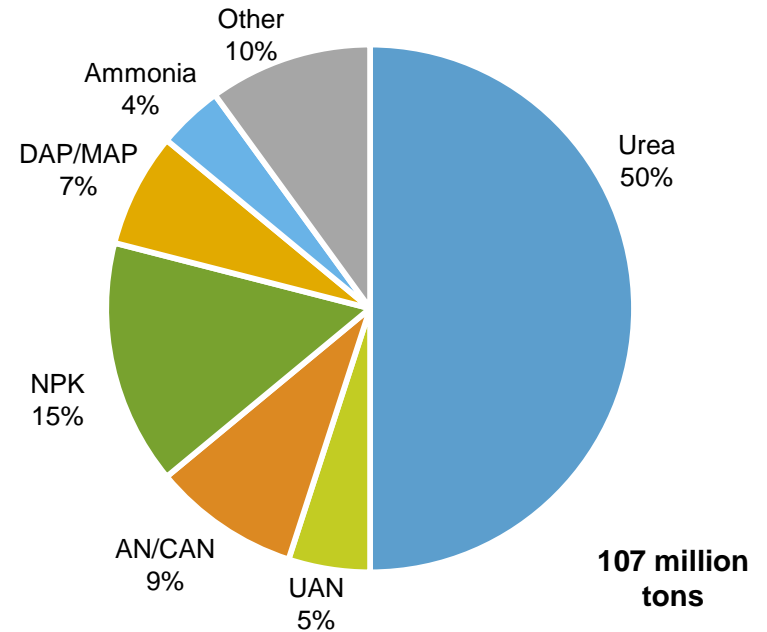
~90% of nitrate and NPK production can operate independently of ammonia production

Yara has a strong position in value-added fertilizer, while urea is the main reference product for nitrogen pricing

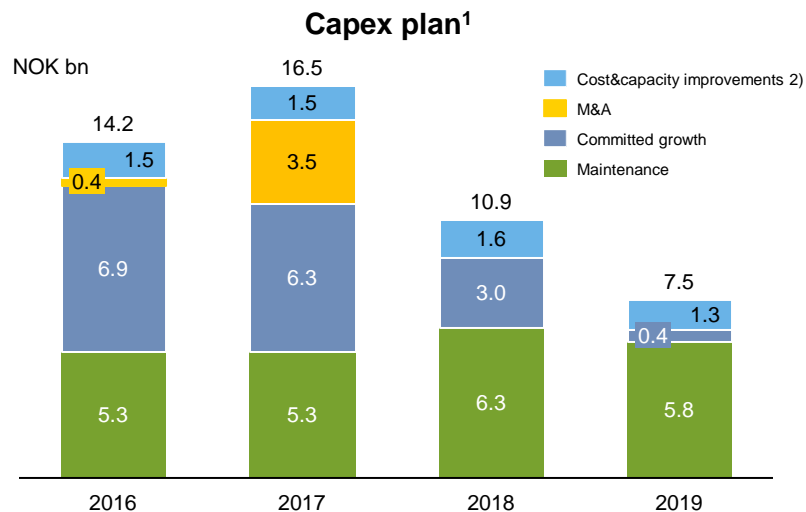
Nitrogen – The most important nutrient¹



Urea is the key commodity N-product²

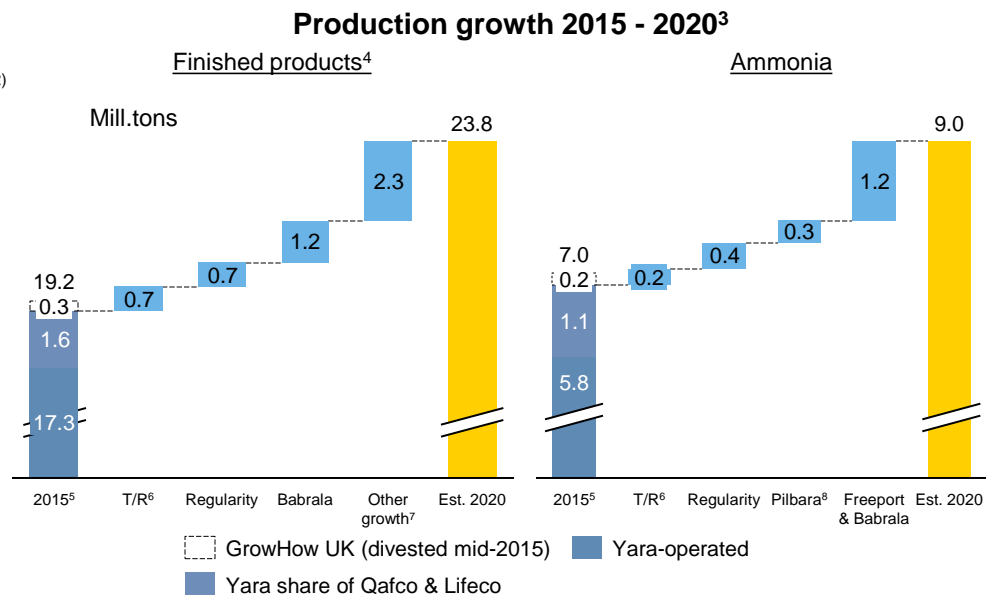


Growth and capex pipeline



Committed growth (NOK bn):

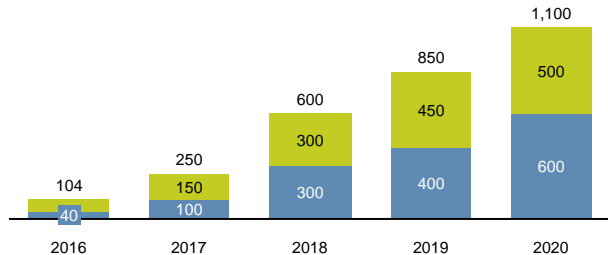
	2016	2017	2018	2019
Porsgrunn	1.2	0.7	-	
Köping	0.4	0.5	0.1	
Sluiskil	0.7	0.7	0.0	
BASF JV	1.6	0.9	0.5	
Rio Grande	0.1	1.2	0.7	0.4
Salitre	0.8	2.0	1.6	
Other projects	2.1	0.3	0.1	
Total	6.9	6.3	3.0	0.4



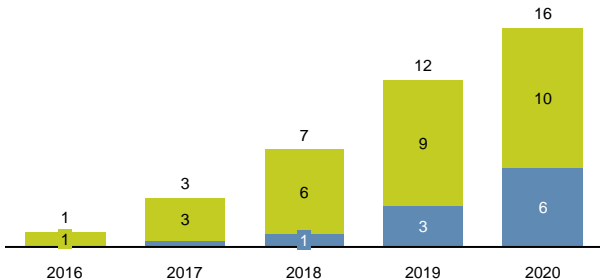
- 1) Yara's share of capex. Fully consolidated entities presented at 100% basis.
- 2) Includes Yara Improvement program Capex and other improvements
- 3) Rio Grande expansion also adds 1 million tonnes NPK blends by 2020
- 4) Finished fertilizer and industrial products, excl. bulk blends
- 5) Including Yara share of production in non-consolidated investees
- 6) Adjustment to normalized / 2016 turnaround level
- 7) Committed projects only. TAN Pilbara: 160 kt, Porsgrunn: 235kt, Glomfjord: 105kt, Uusikapunki: 250kt, Köping: 90kt, Sluiskil: net 160kt, Galvani (Salitre ~ 0.8 mill.tonnes, reaching 1.1 mill.tonnes in 2022), Rio Grande: 500kt
- 8) Including 100% ownership in Pilbara NH₃ plant

Improvement and growth investments; earnings and sensitivities¹

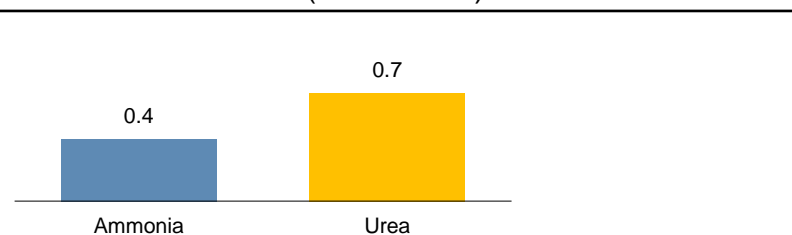
EBITDA improvement² (MUSD)



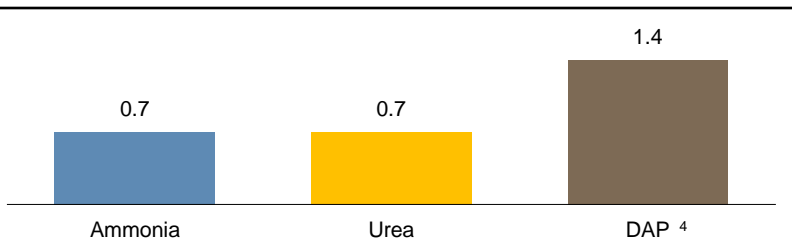
Earnings improvement² (NOK per share)



Improvement program: Impact³ of +100 USD/t price change (NOK/share)



Growth: Impact³ of +100 USD/t price change (NOK/share)



¹ Currencies for all amounts from 2017: USD/NOK 7.90, EUR/NOK: 9.32, USD/BRL: 3.15

² Measured at 2015 conditions. Main average market prices: Ammonia fob Yuzhny 390 USD/t, Urea fob Yuzhny 275 USD/t, DAP fob Morocco 495 USD/t.

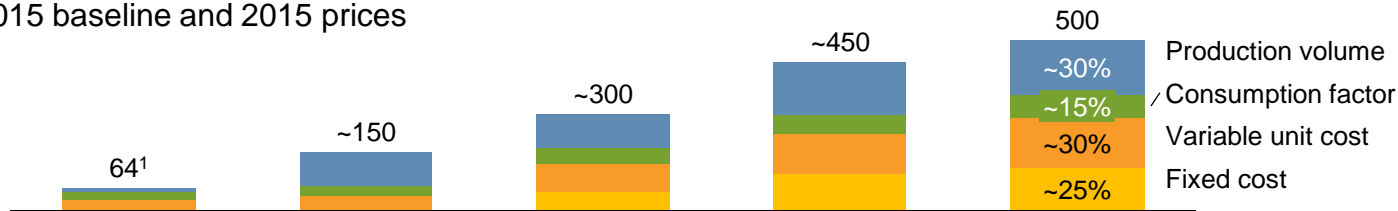
³ Improvement: 2020 numbers. Growth: At full capacity (2019 for urea and ammonia, 2020 for DAP).

⁴ Phosphate-driven price change, equivalent to 138 USD/t phosphate rock (72 bpl)

Yara Improvement Program targets sustained improvement of minimum \$500MM EBITDA, plus cash benefits

USD\$MM, vs. 2015 baseline and 2015 prices

Sustained EBITDA improvement



Sustained capex improvement

Sustained capex improvement: Target under development

One-off working capital release



One-off cost



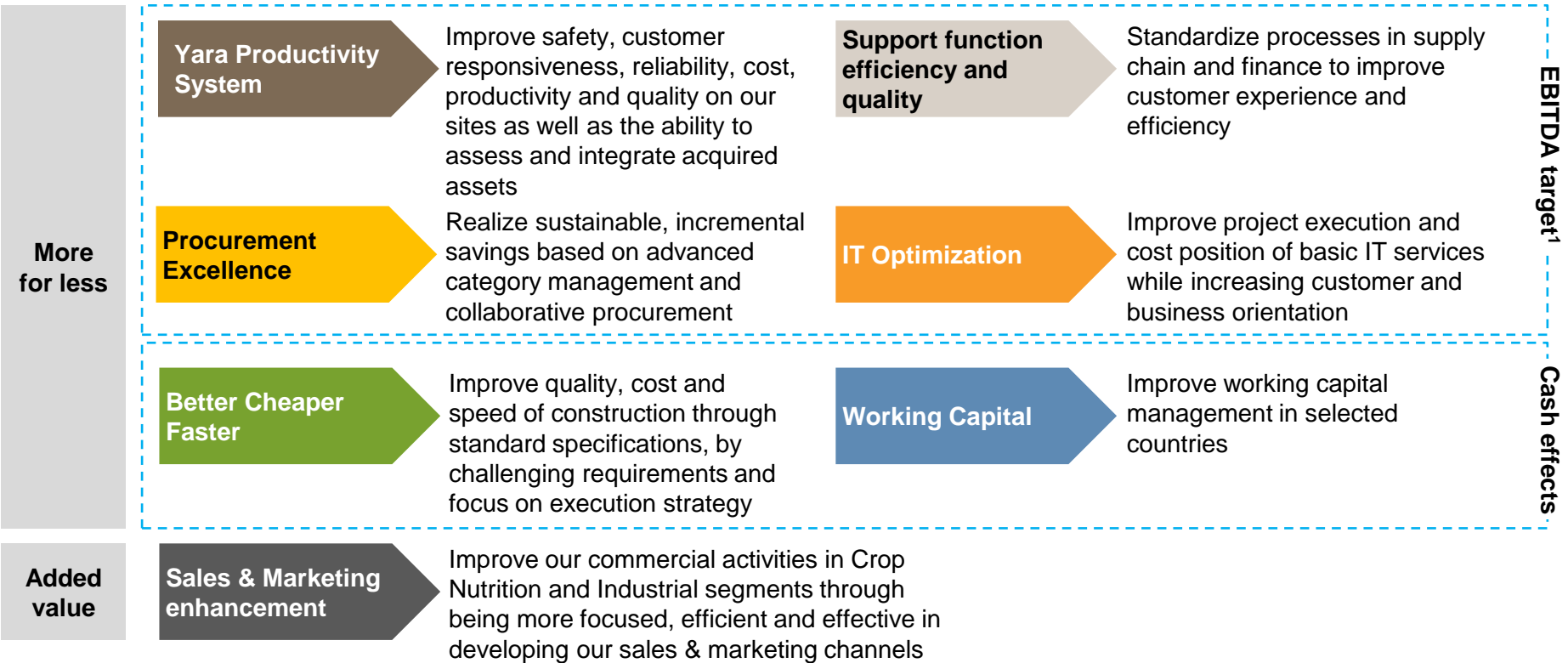
One-off capex



2016 **2017** **2018** **2019** **2020**



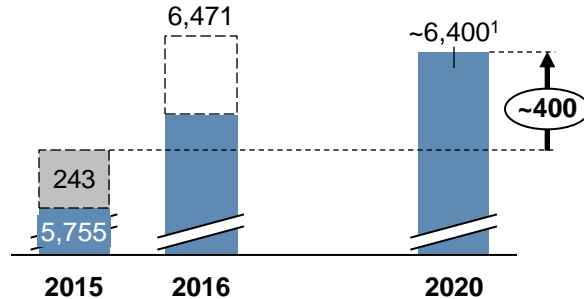
The improvement program is organized into concrete projects across the company



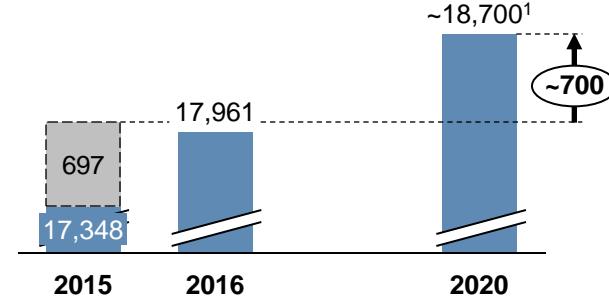
Volume and energy consumption improvement targets

Production volume

Ammonia production, thousand tonnes

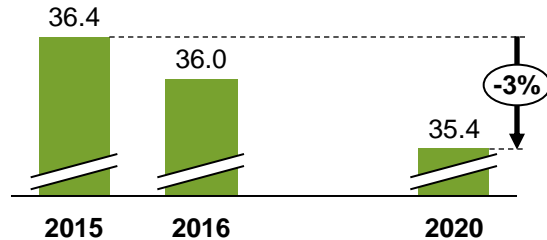


Finished fertilizers production, thousand tonnes



Consumption factor

Energy consumption, Mmbtu (HHV²) per tonne Ammonia (weighted average)



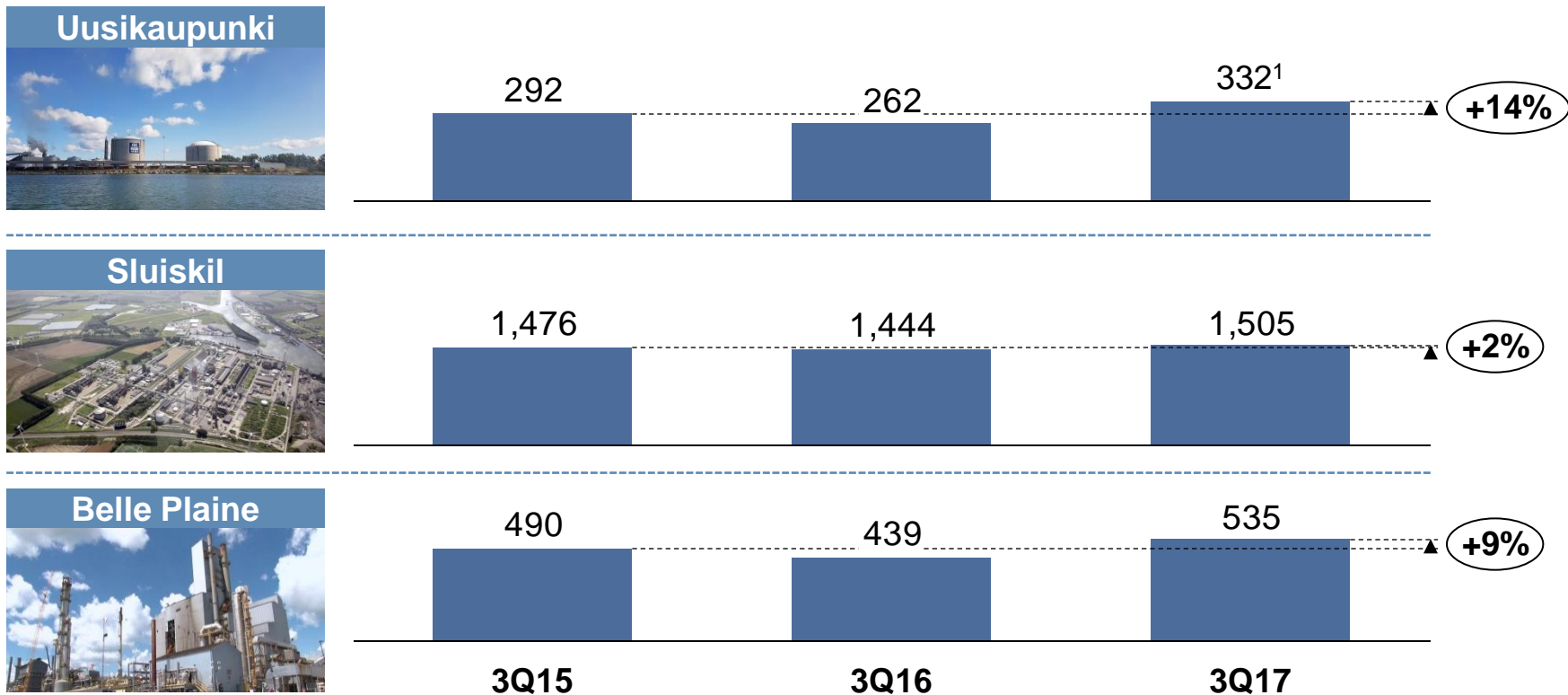
- Ammonia production (excl. pipeline growth)
- Finished fertilizers production
- Adjustment to normalized / 2016 turnaround level
- Pilbara acquisition effect (last 49%)
- Improvement program target

Note: Volume and energy targets are not final; they are subject to change as additional plant assessment deep-dives are completed

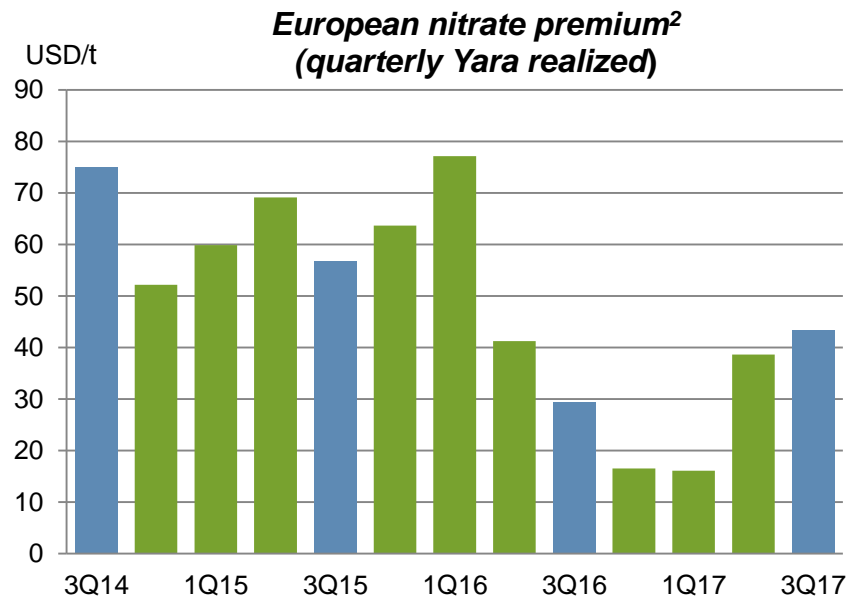
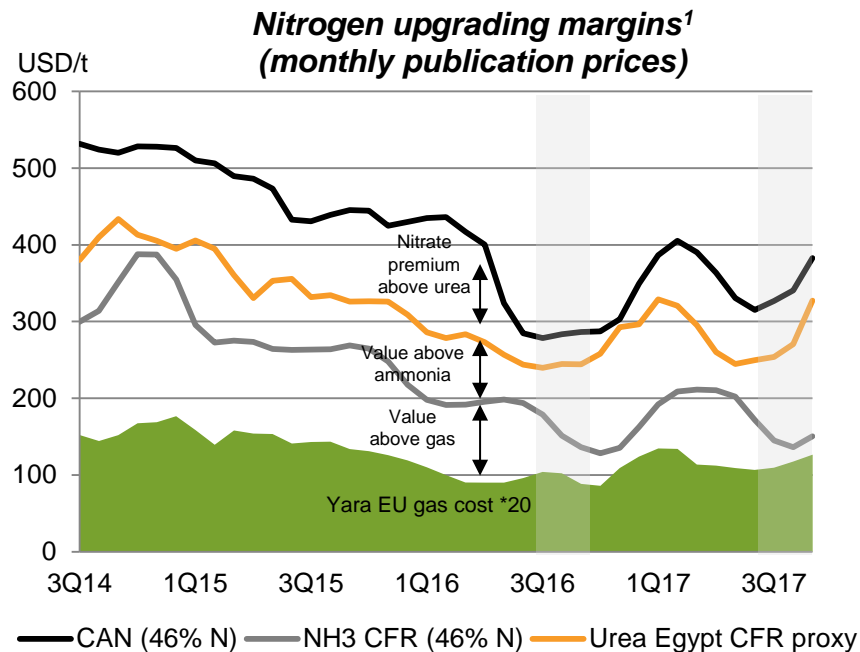
Yara Productivity System in practice

■ Base production (excluding effect of planned maintenance stops)

Total production at site, thousand tonnes

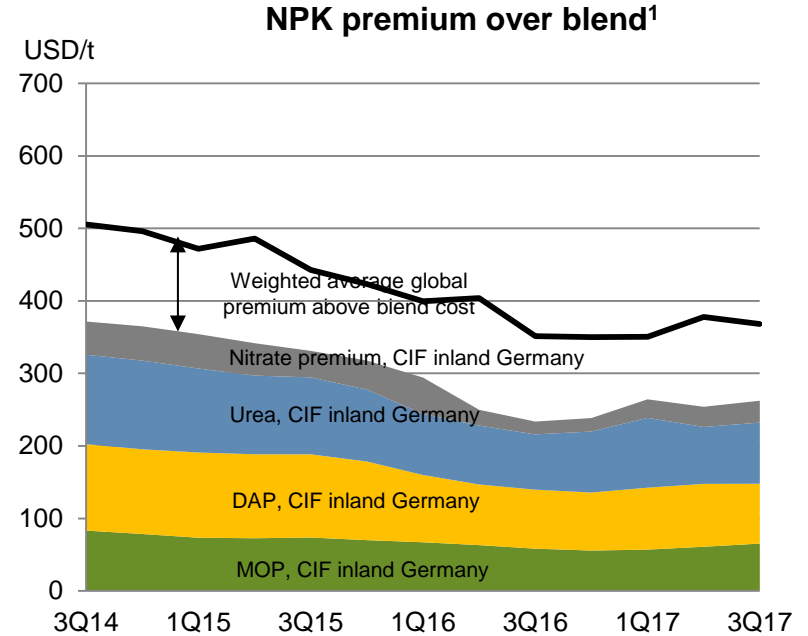
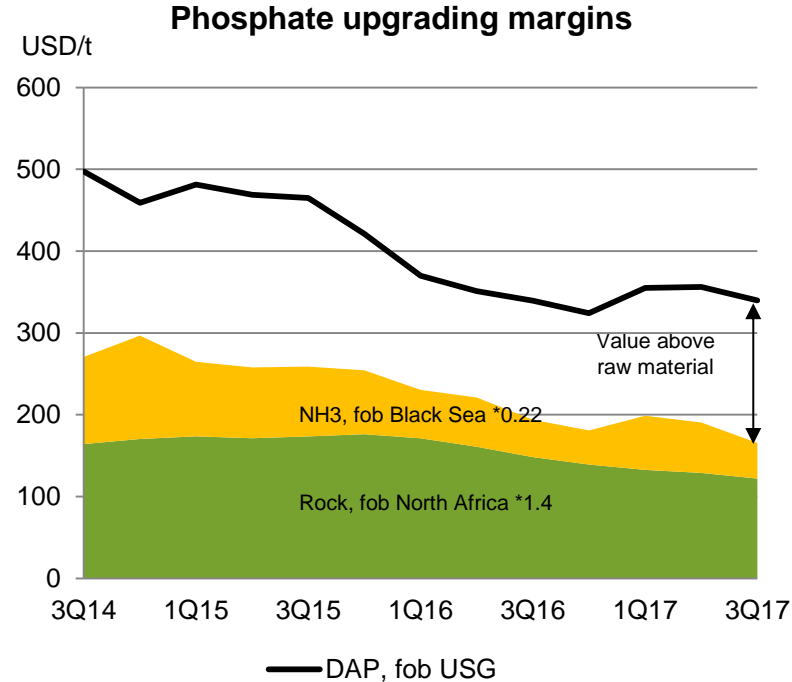


Higher European nitrate premiums



2) Yara European realized nitrate prices (excl. sulphur grades) compared with urea publication prices (Egypt CFR proxy) with 1 month time lag. All numbers in USD per tonne of CAN equivalents.

Solid commodity phosphate margins and compound NPK premiums

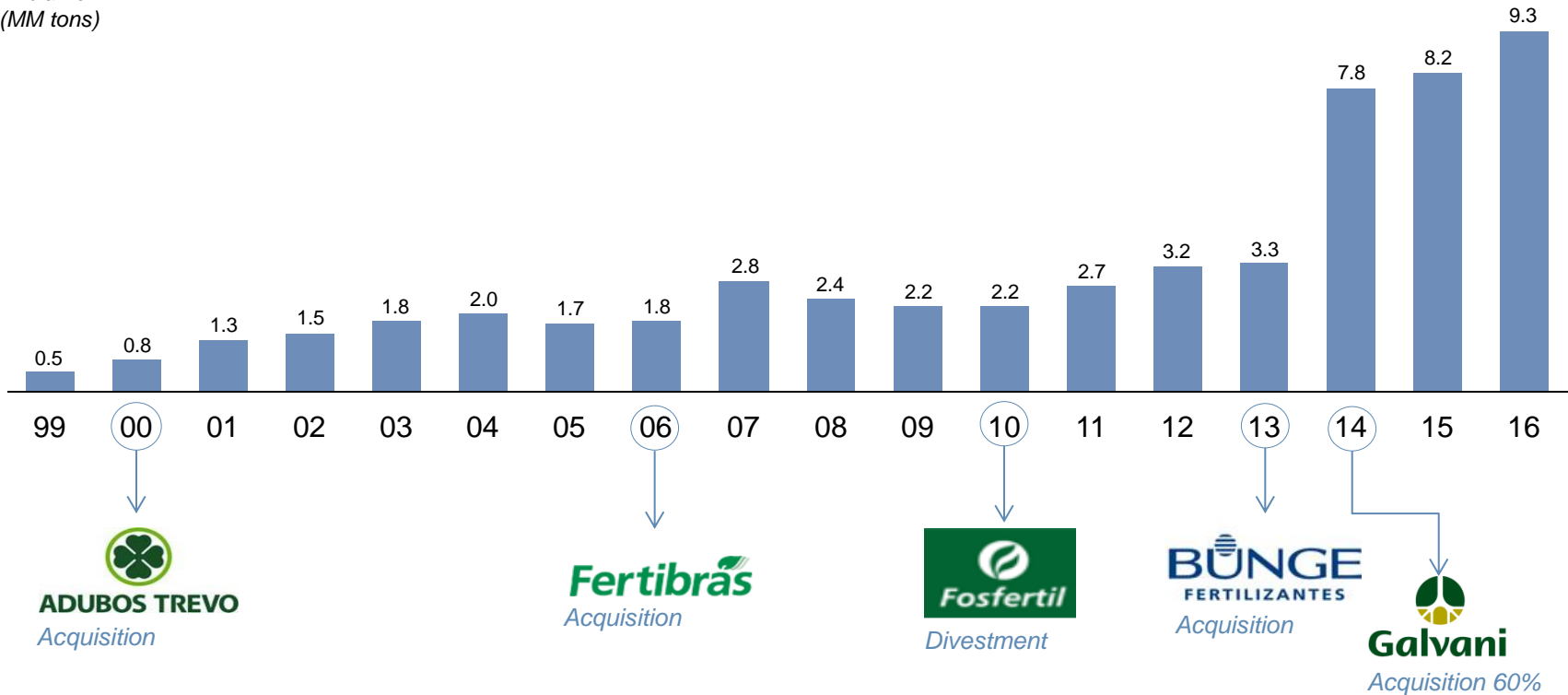


1) Export NPK plants, average grade 19-10-13, net of transport and handling cost.

Source: Fertilizer Market Publications

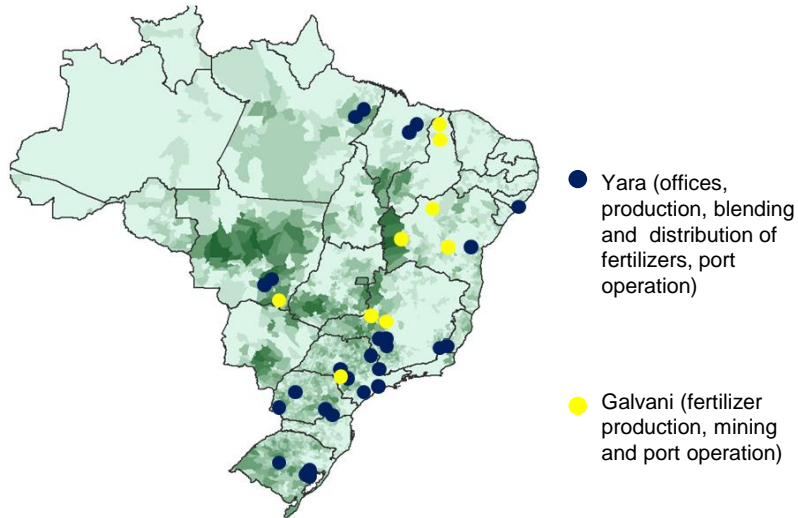
Yara has invested for the long term in Brazil; Bunge acquisition brought critical mass in distribution

Volume
(MM tons)



Yara Brazil today: unrivalled market presence and farmer-centric strategy

Unrivalled presence: 28 sites in 11 states



Farmer-centric strategy drives growth

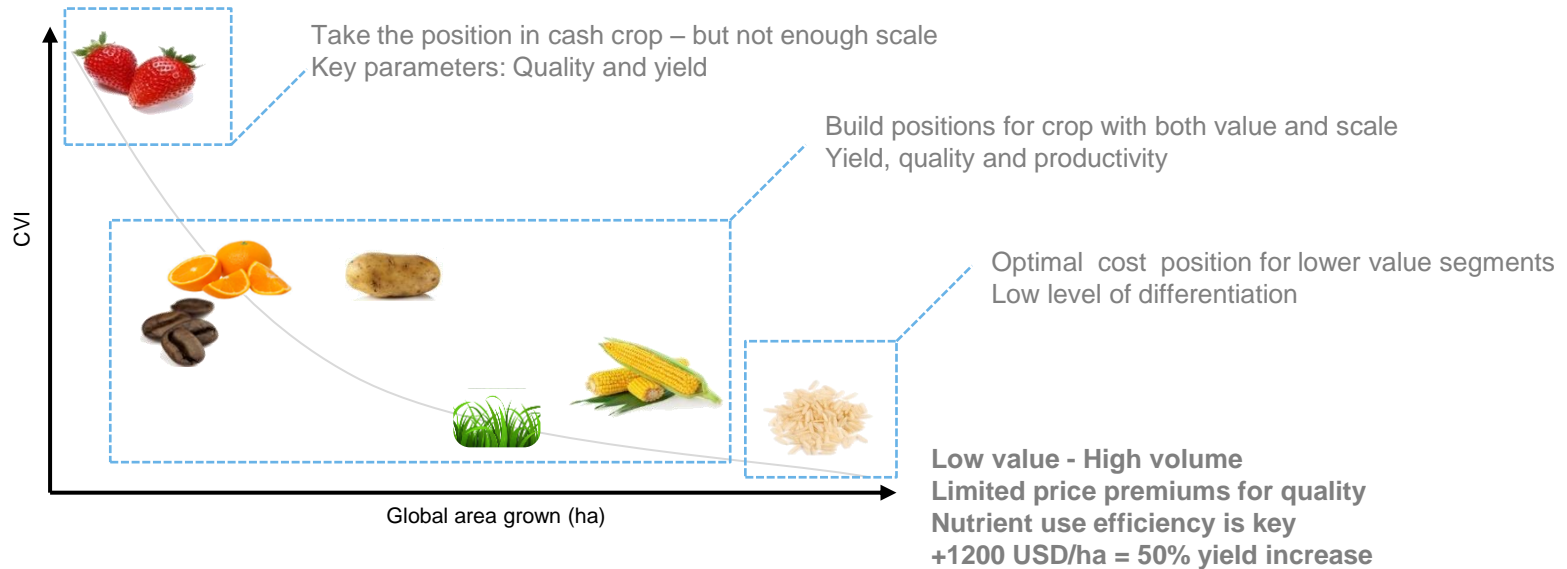
- > 20,000 growers using Yara solutions
- > 200 Yara agronomists and 600 sales representatives
- > 55% of Yara deliveries are direct to farmer
- > 55,000 interactions with growers p.a.

Crop Value Index – a key guide to our approach

What is CVI:

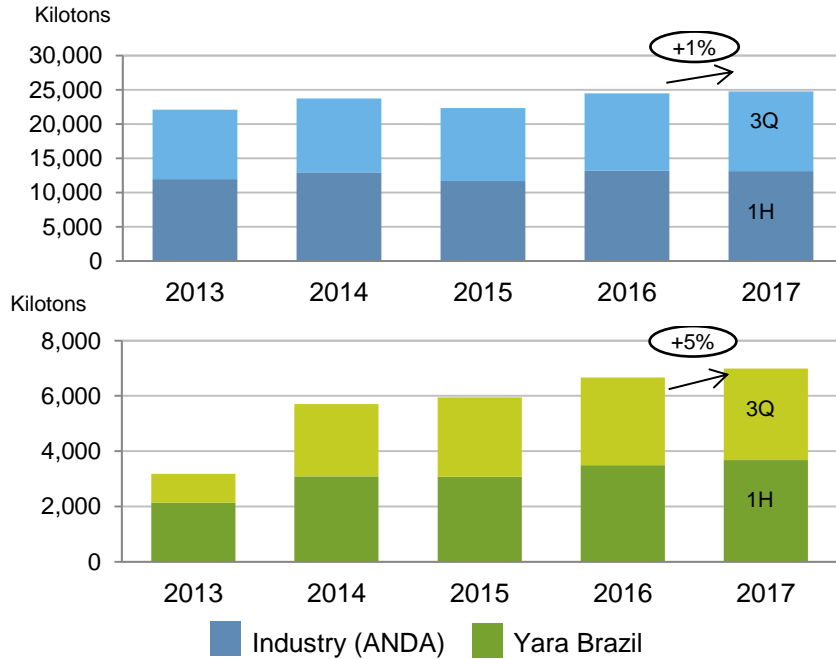
$\frac{\text{Crop revenue}}{\text{Fertilizer costs}}$

High value, Low volume
Double price premium for high quality
2% yield increase = +1200 USD/ha

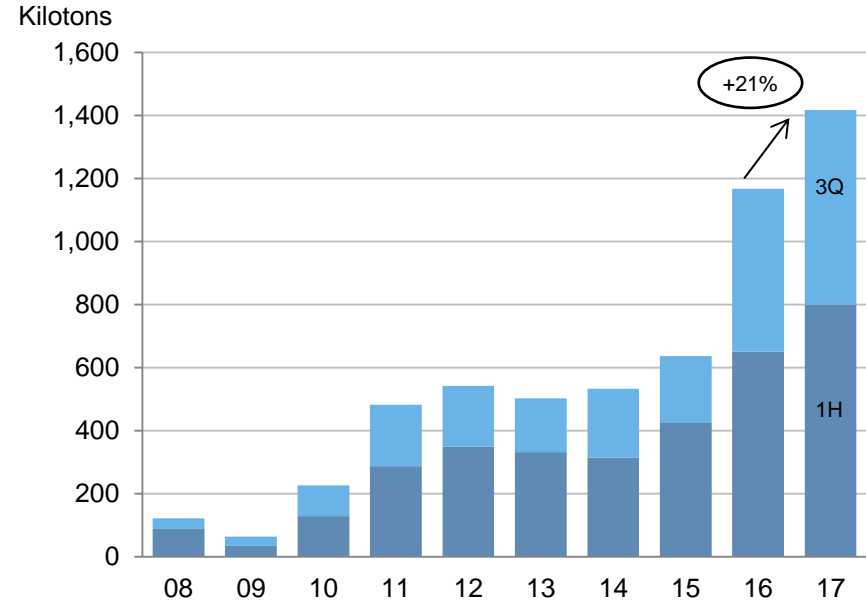


Brazil: focus on premium products and solutions drives growth

Brazil season-to-date fertilizer deliveries



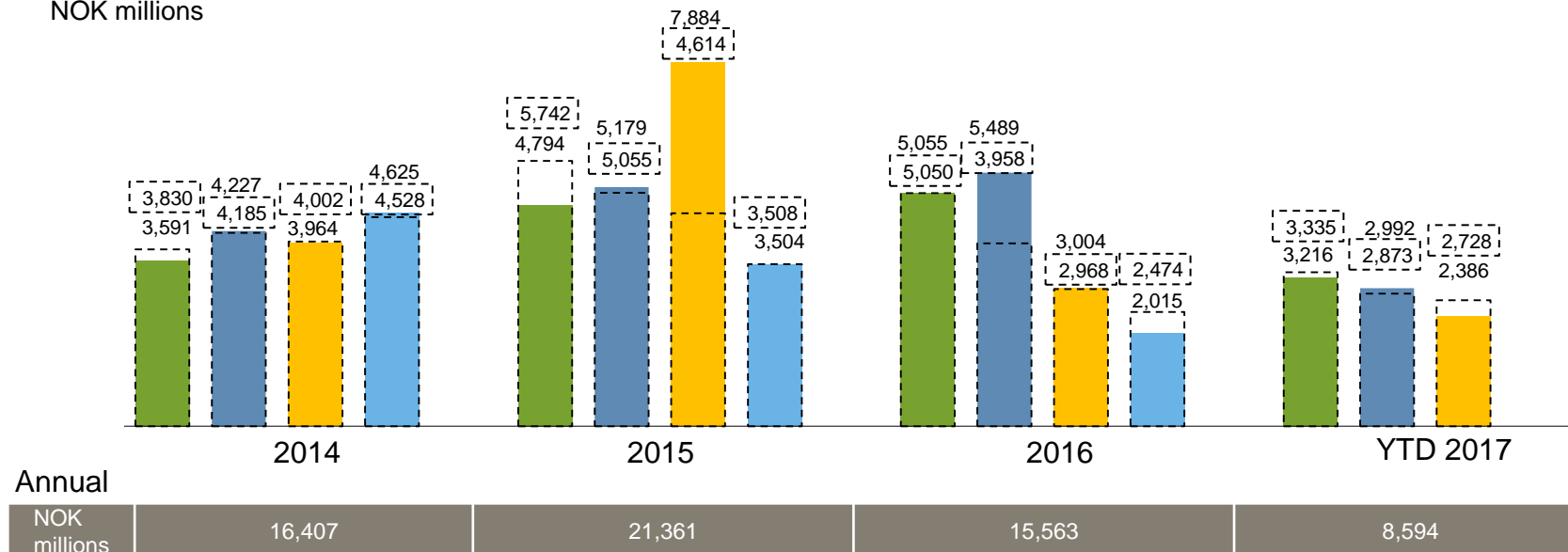
Brazil season-to-date premium product deliveries



Earnings before interest, tax, depreciation and amortization (EBITDA)

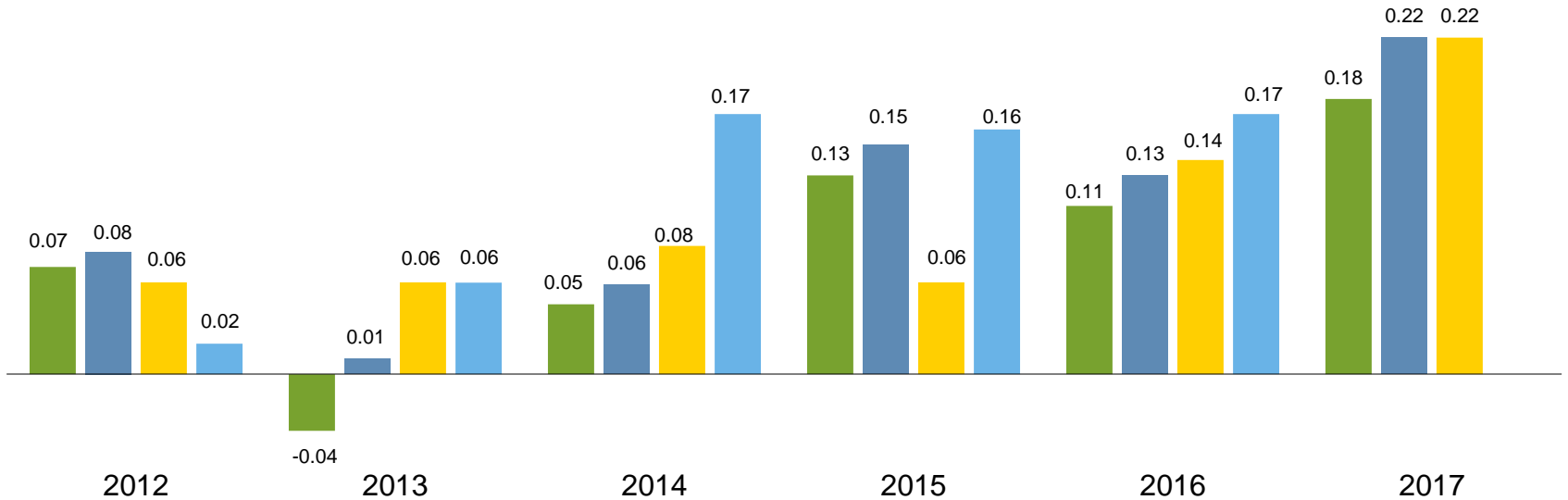
EBITDA excluding special items

NOK millions



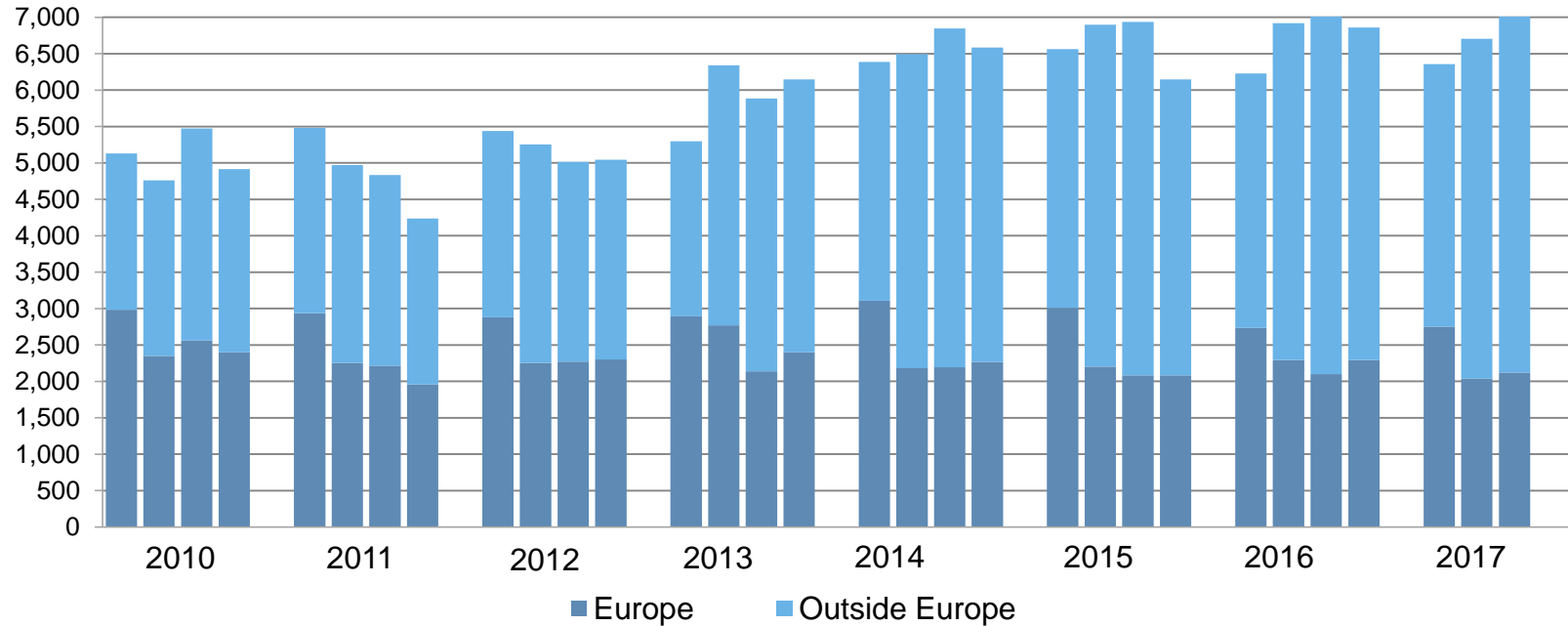
Debt/equity ratio

Net interest-bearing debt / equity ratio (end of period)



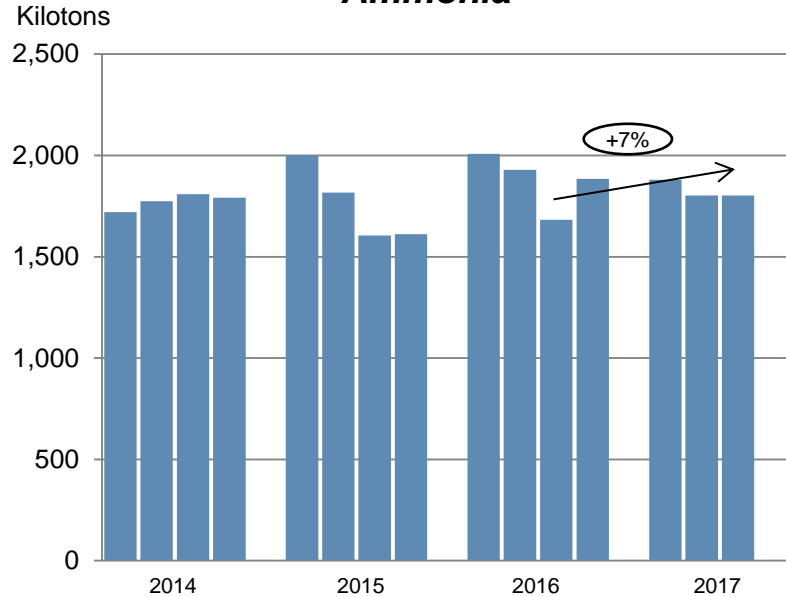
Fertilizer deliveries

Kilotons

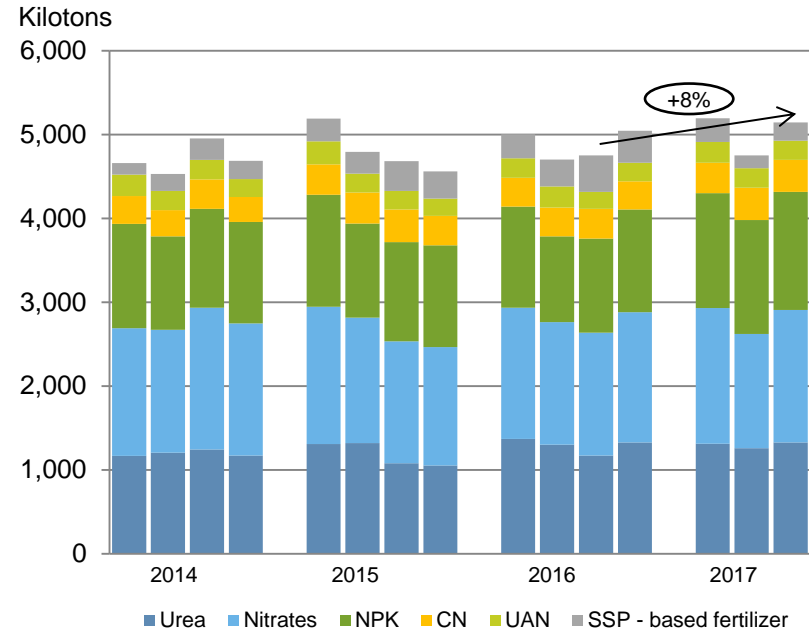


Higher finished fertilizer and ammonia production

Ammonia¹



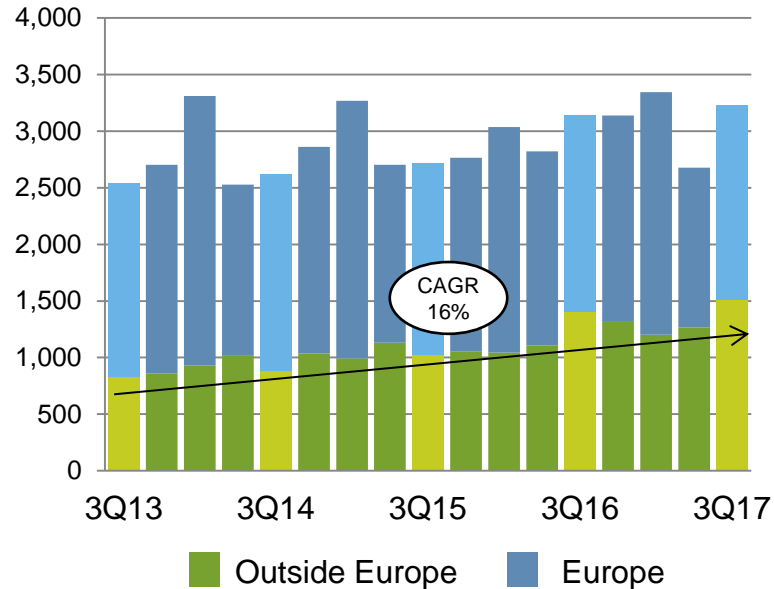
Finished fertilizer & industrial products¹



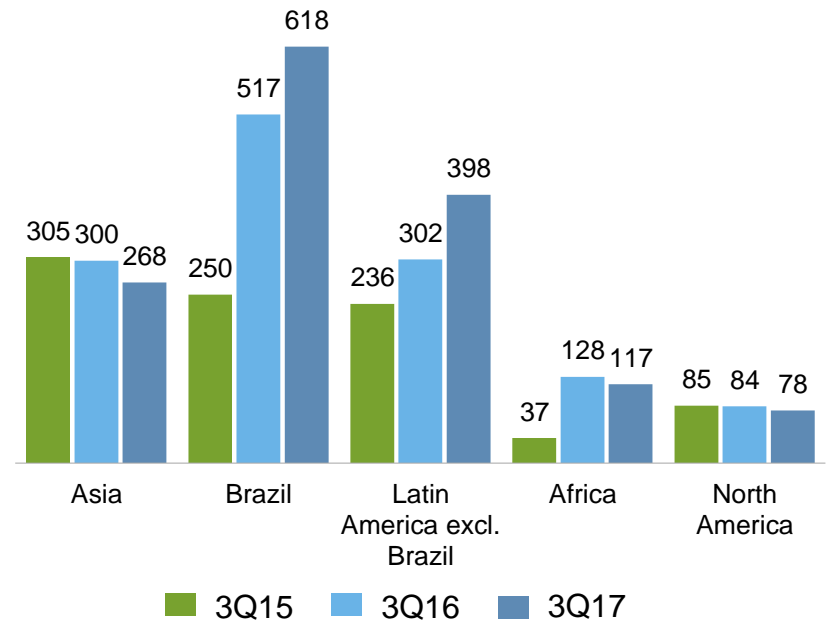
1) Including share of equity-accounted investees

Strong premium product deliveries

Value-added fertilizer deliveries¹

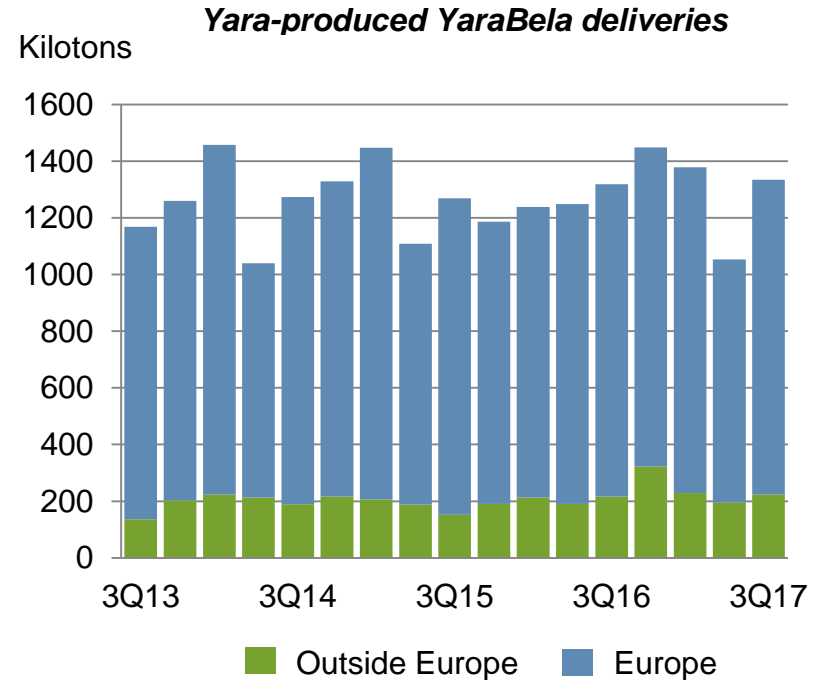
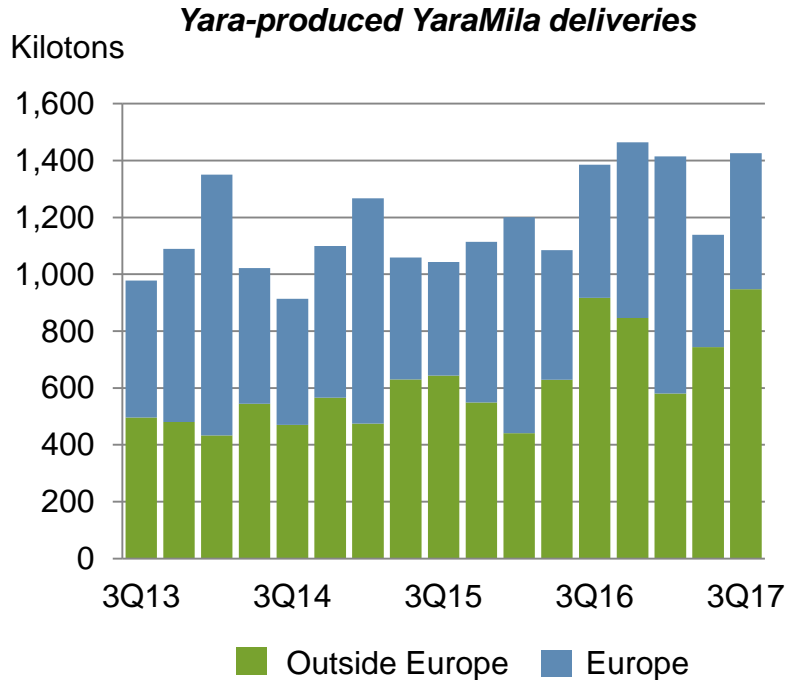


Value-added fertilizer deliveries¹



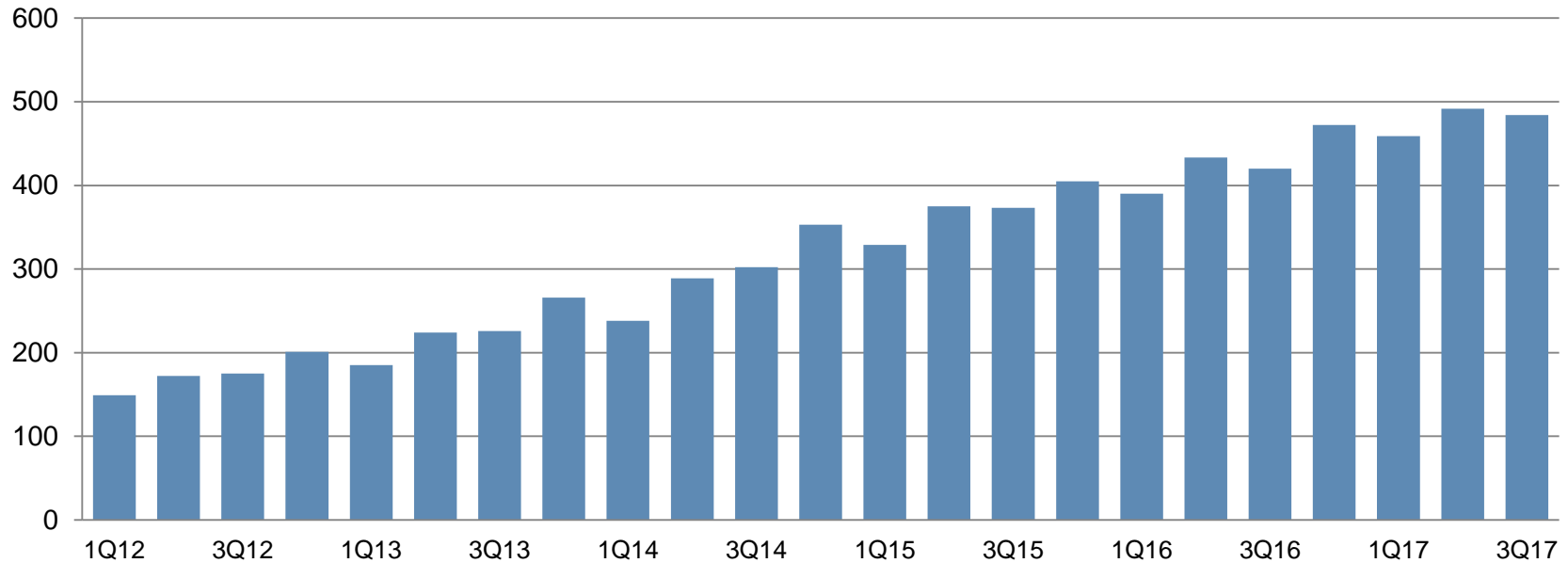
1) YaraBela, YaraMila and YaraLiva deliveries

YaraMila (compound NPK) and YaraBela (nitrate) deliveries



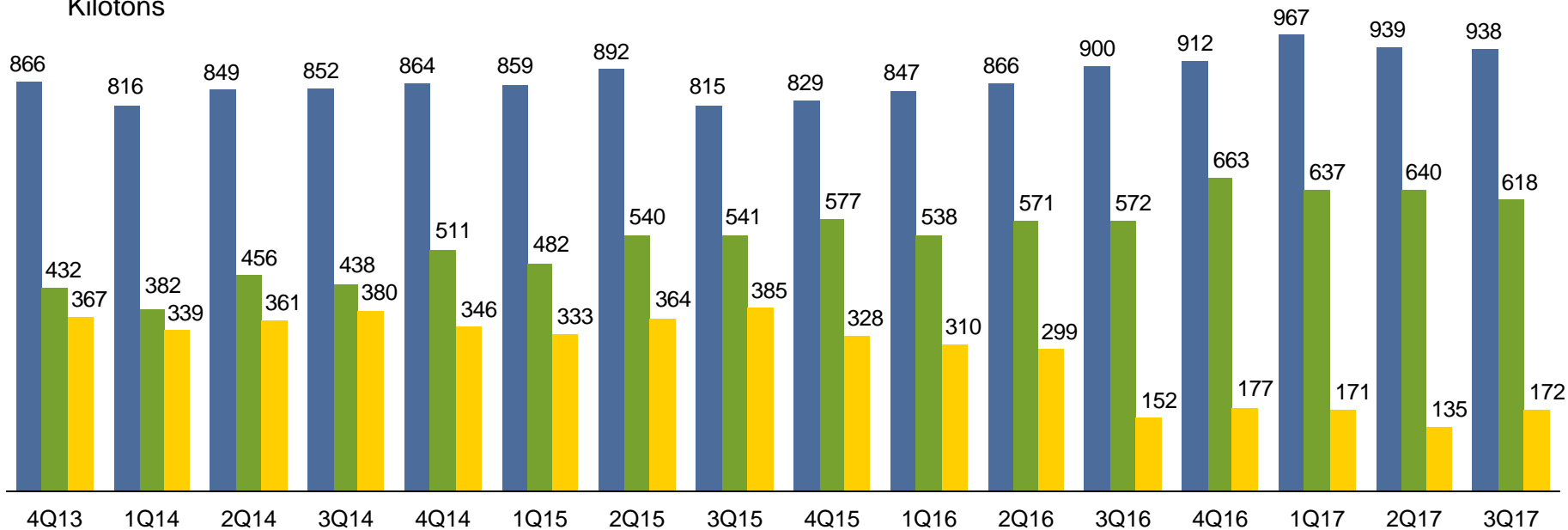
AdBlue deliveries

Kilotons



Industrial volume development

Kilotons



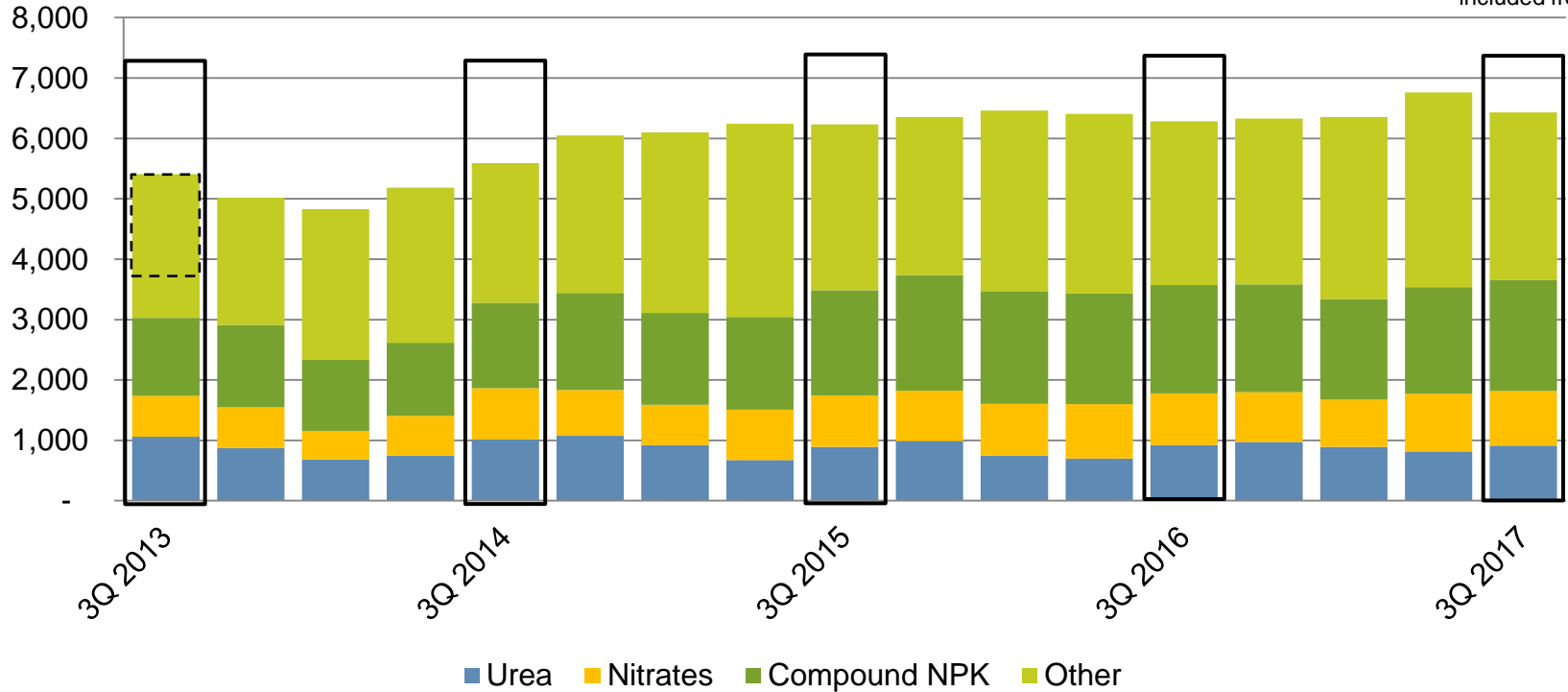
■ Industrial N-chemicals ■ Environmental products ■ Other¹

¹ European CO2 business divested 1 June 2016

Yara stocks

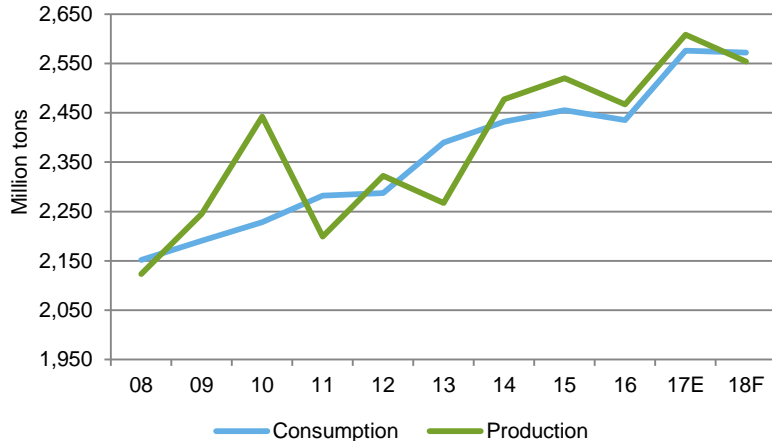
Kilotons
Finished fertilizer

 Bunge Fertilizer included from 3Q 2013

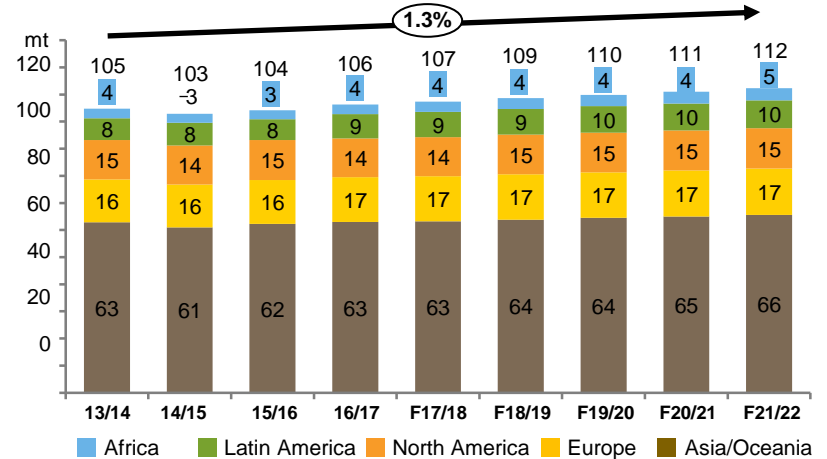


Food demand drives fertilizer consumption – Grain is the key driver for nitrogen consumption growth

Grain consumption and production¹



Global nitrogen consumption growth²

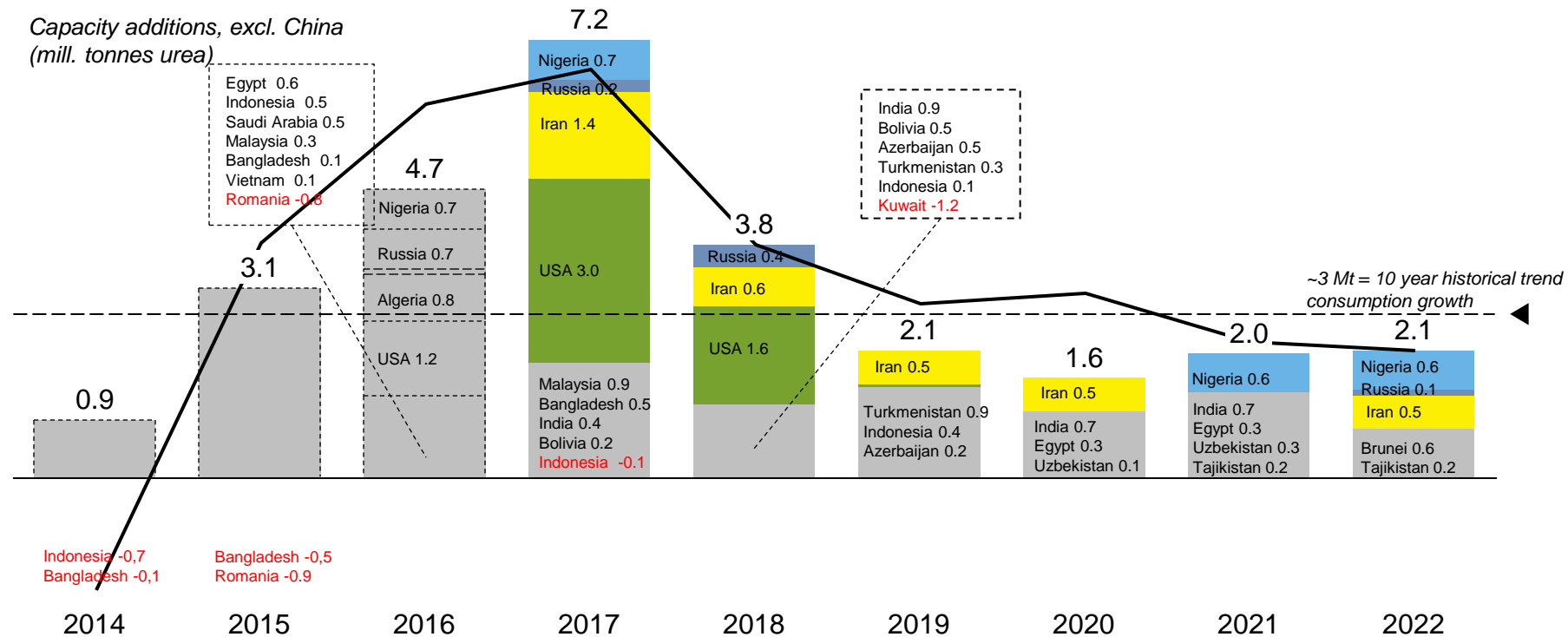


Food demand drives fertilizer consumption

- Population growth of about 80 million each year
- Economic growth also changes diets

Strong urea oversupply outside China

Capacity additions, excl. China
(mill. tonnes urea)

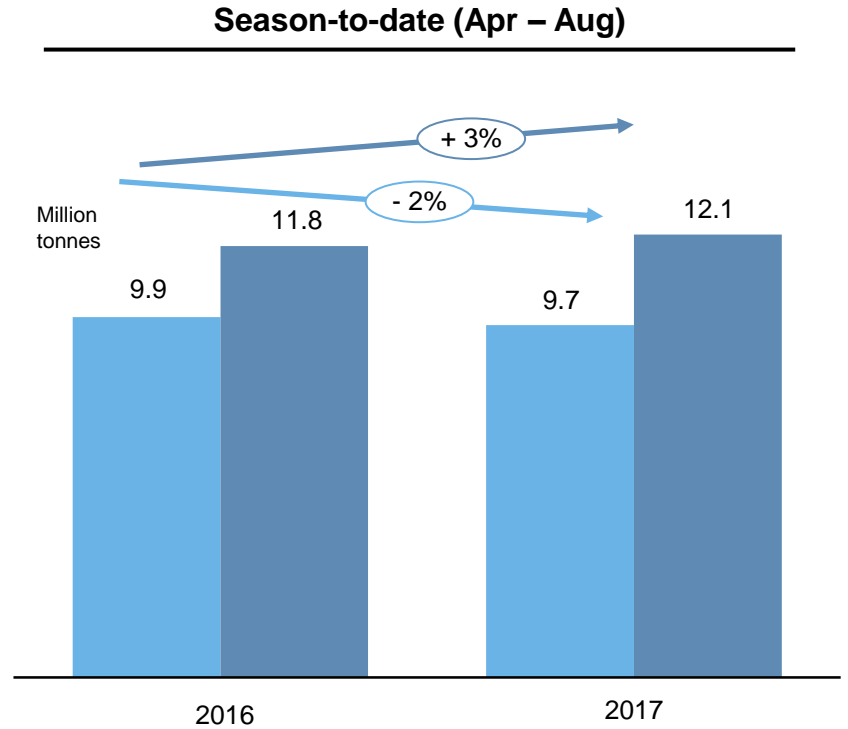
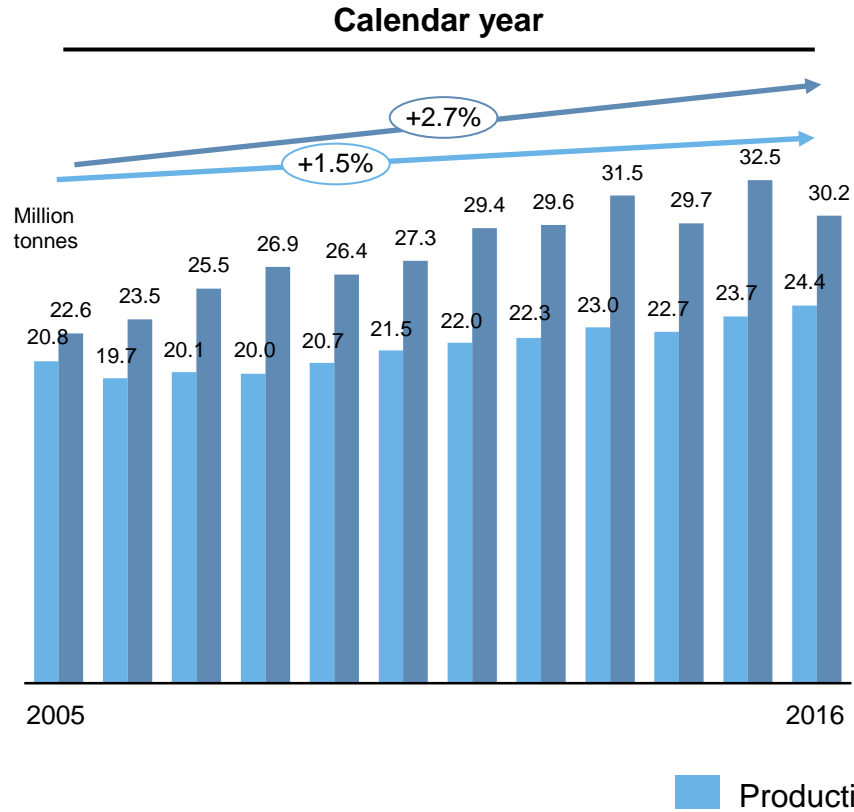


Source: CRU, September 2017. Numbers include both additions and closures of capacity.

— CRU year-over-year production change



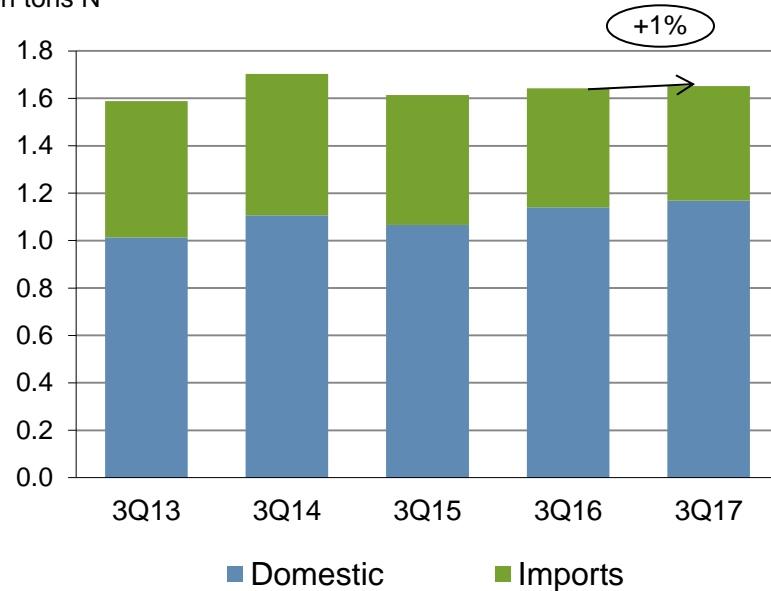
Import catch-up need in India



Normal start to the European fertilizer season, slow in USA like last season

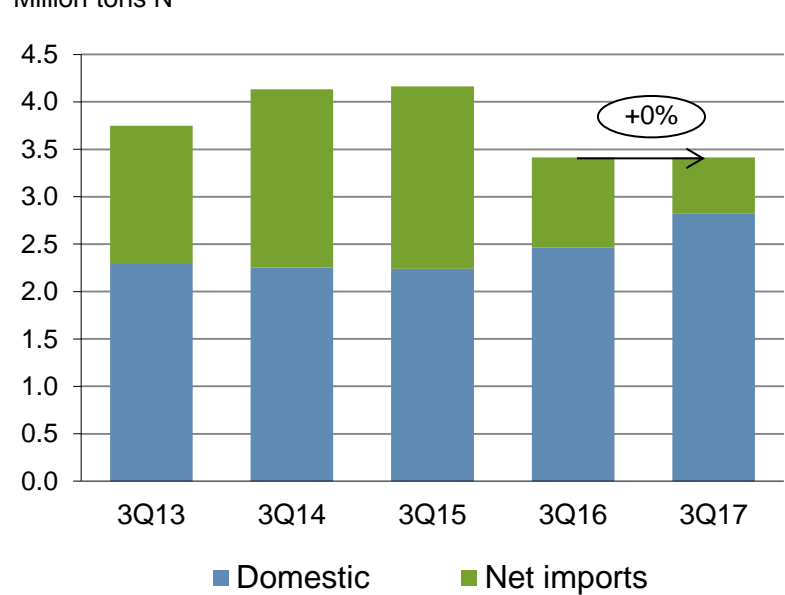
West Europe

Million tons N



USA

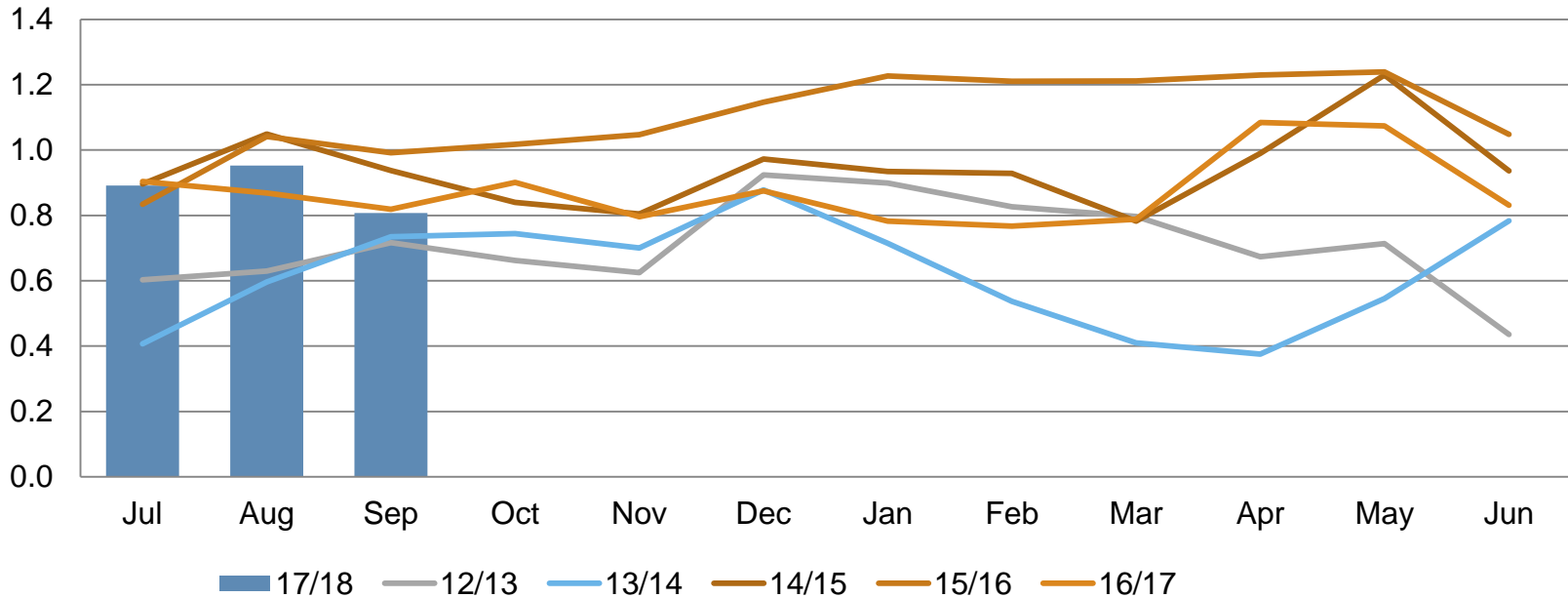
Million tons N



Source: Yara estimate, TFI, US Customs.

European producers' nitrate stocks

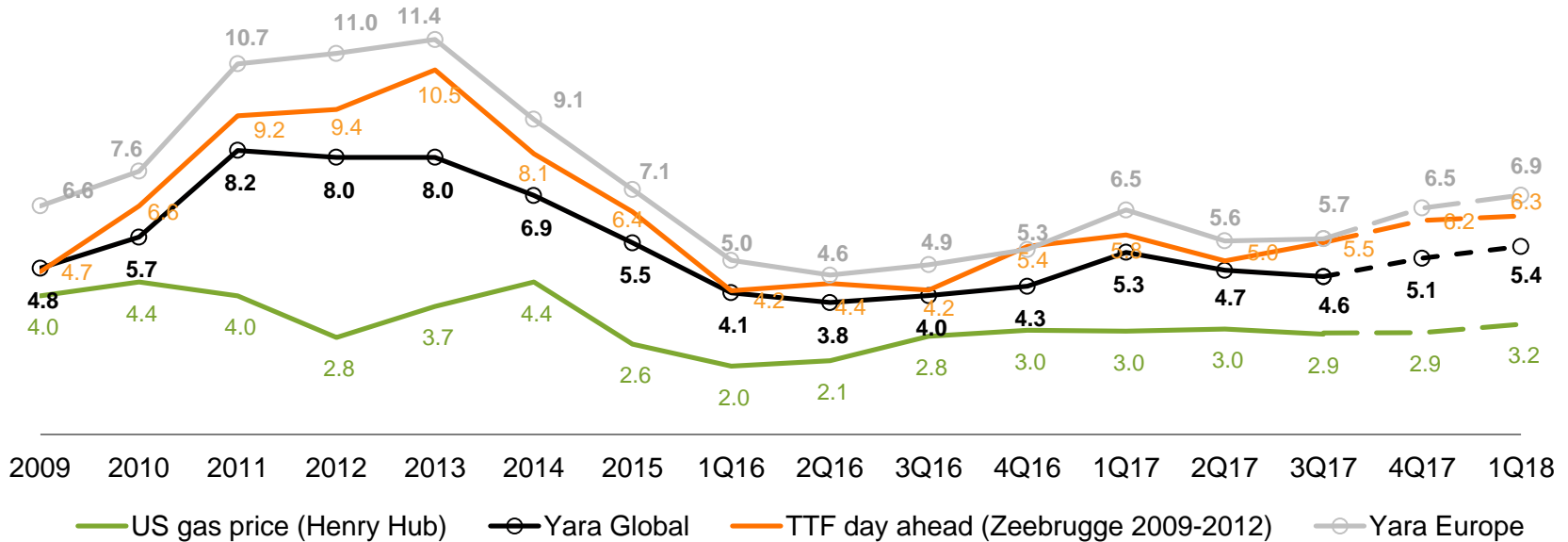
Index
June 2007 = 1



Source: Fertilizers Europe, Yara estimate for September

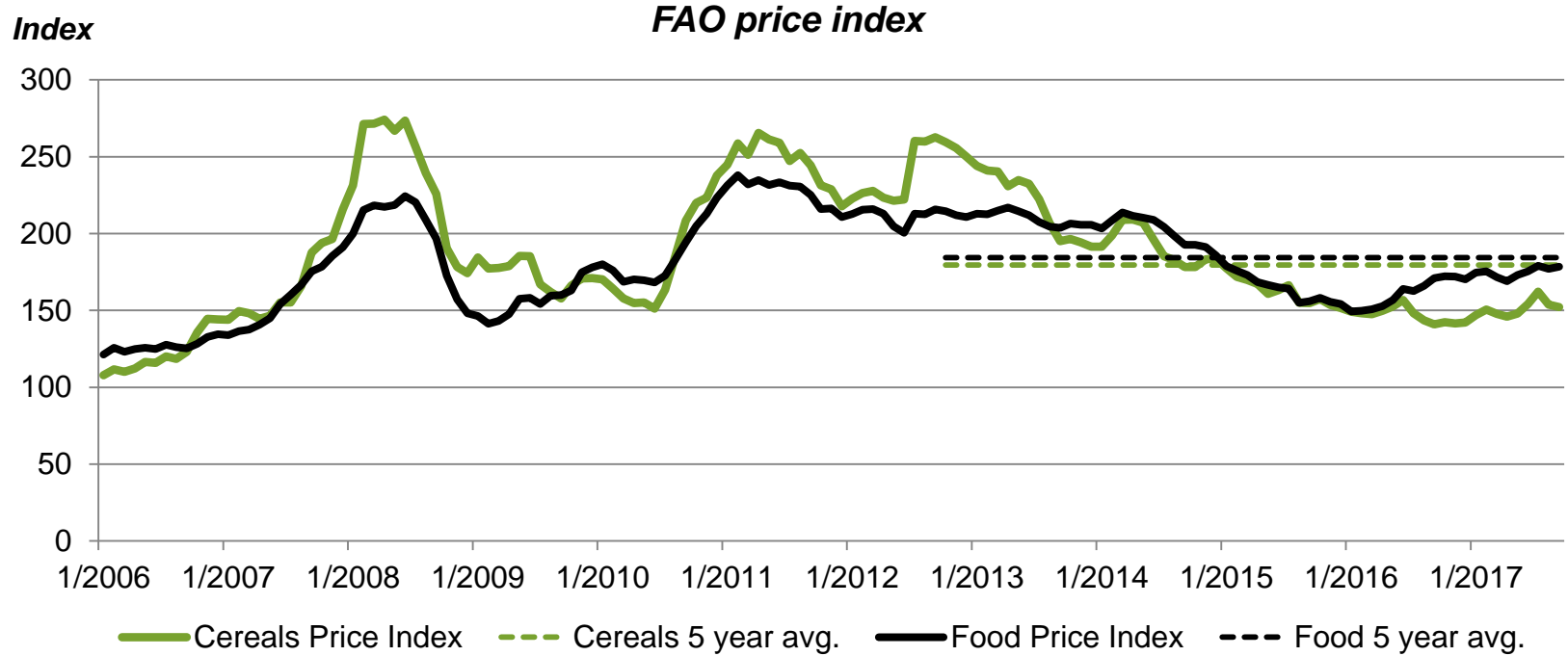
Energy cost

Yearly averages 2009 – 2015, quarterly averages for 2016-18 with forward prices* for 4Q17 and 1Q18.



*Dotted lines denote forward prices as of 10 October 2017
 Source: Yara, World Bank, Argus/ICIS Heren

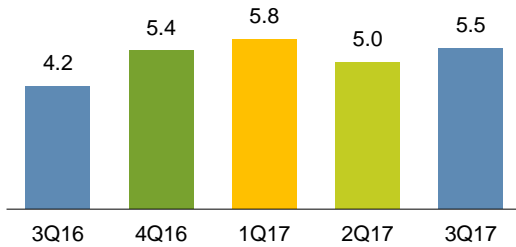
Relatively weak grain economics



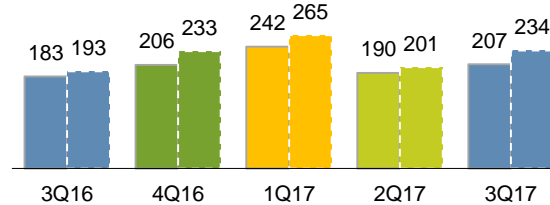
Source: FAO

Key value drivers – quarterly averages

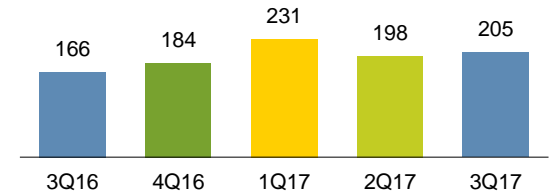
TTF day ahead (USD/MMBtu)



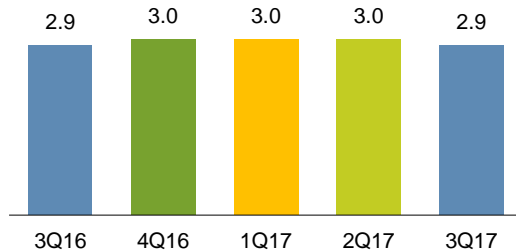
Urea prilled fob Black Sea (USD/t)/Urea granular fob Egypt (dotted line, USD/t)



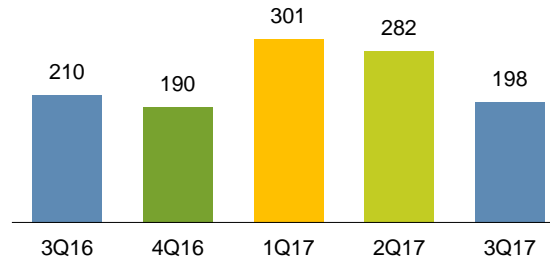
CAN cif Germany (USD/t)



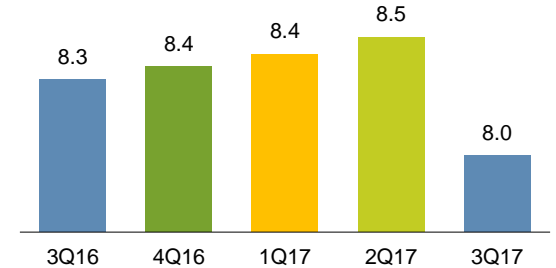
US gas price Henry Hub (USD/MMBtu)



Ammonia fob Black Sea (USD/t)



NOK/USD exchange rate



Source: Fertilizer Market Publications, CERA, World Bank, Norges Bank