

**Knowledge grows** 

# Yara International ASA London roadshow

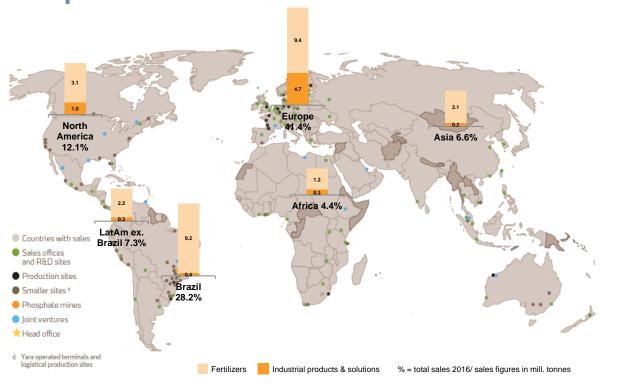
28 February – 1 March 2018

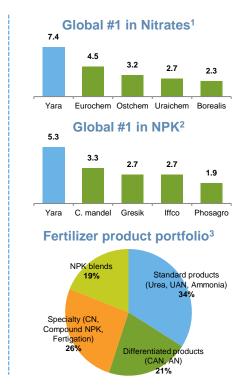
Torgeir Kvidal, CFO
Thor Giæver, SVP Investor Relations





Our leading global footprint and differentiated product portfolio set us apart





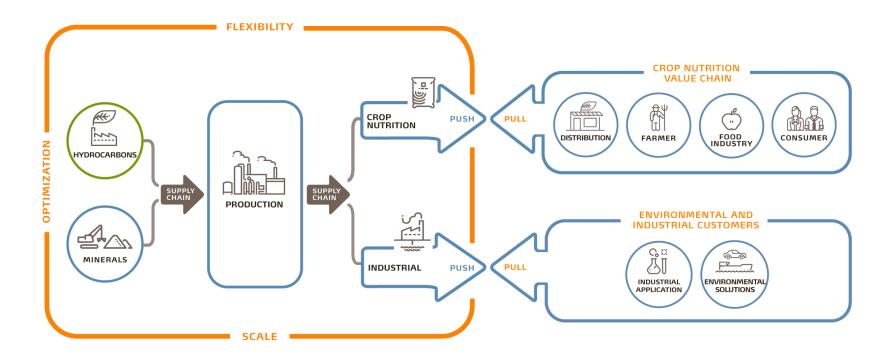


Including TAN and CN – Including companies' share of JVs 2016YE

Compound NPK, excluding blends

<sup>3) 2016/2017</sup> season volume

# Yara's integrated business model is unique within the fertilizer industry





# 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 cyclicality and seasonality		
2017 Revenues <sup>1</sup>	7.3 BNOK (0.9 BUSD) 8%	71.3 BNOK (8.7 BUSD) 76%	15.2 BNOK (1.8 BUSD) 16%		
2017 EBITDA <sup>2</sup>	6.0 BNOK (0.7 BUSD) 54%	4.0 BNOK (0.5 BUSD) 36%	1.3 BNOK (0.2 BUSD) 12%		
Supply Chain	· Sour	al function responsible for optimization of energy, raw cing and trade of 3,864 kilotons of ammonia and purcons of potassium and 969 kilotons of phosphate rock			



External revenues and other income

<sup>2)</sup> Excluding other and eliminations
USD translations use USD/NOK exchange rate of 8.12

# 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** 

**Our Values** 

Responsibly feed the world and protect the planet.

Ambition, Curiosity, Collaboration and Accountability

Source: OECD and FAO \*To stay within the 2°C goal by 2050



# Improving agricultural productivity is fundamental to achieve the SDGs: Yara is uniquely positioned to contribute



- Agriculture accounts for ~25% of the world's greenhouse gas emissions
- More than half of this results from land use change
- Improving productivity of land is among the most efficient levers to achieve the SDGs
- Yara is uniquely positioned to deliver solutions to meet this challenge

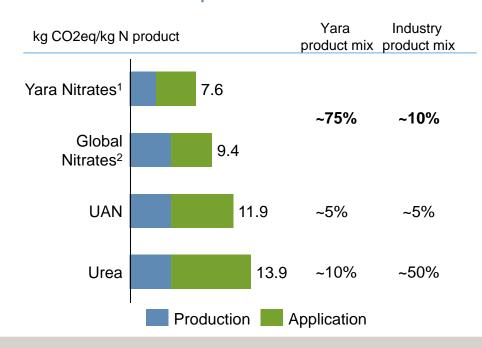
# Yara's solutions improves food production per hectare, delivered through products with lower emissions per ton

Yara crop nutrition practices enables farmers to optimize application – and thus lower emissions



- 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

Yara's product mix has significant less emissions than most of our competitors'



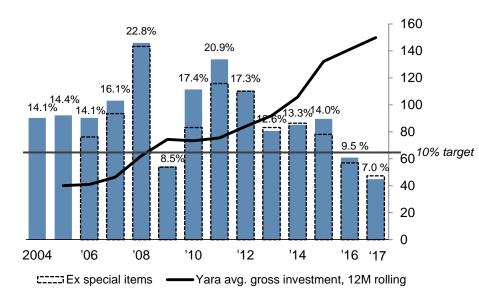


<sup>1.</sup> Assumed 15% lower application rates for nitrates, due to lower volatilization

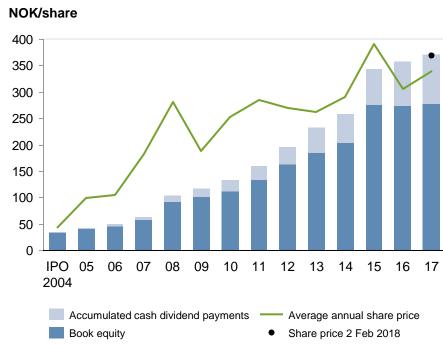
<sup>2.</sup> Average emissions from production higher, partly driven by plants running without N2O catalysts

### 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 20%<sup>1</sup>



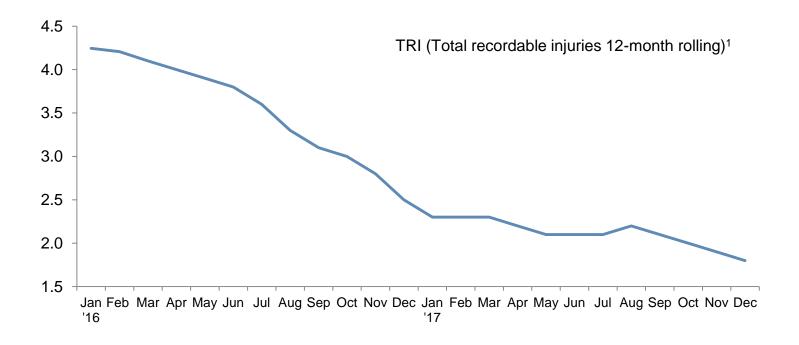
1) Share price appreciation (end 2017) plus dividend payments



# Yara International ASA Fourth-quarter 2017 results



# Safety is our first priority



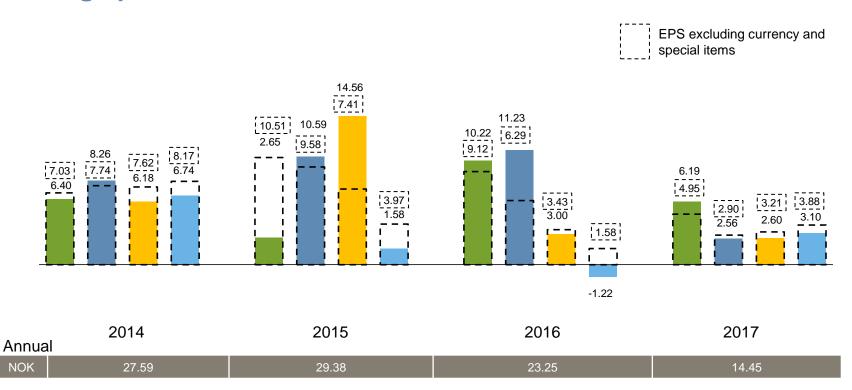
1) TRI: Total recordable injuries, lost time (absence from work), restricted work and medical treatment cases per one million work hours.



## **Summary fourth quarter**

- Improvement program ahead of schedule
- Improved results reflecting higher margins
- Strong full-year Industrial performance
- Proposed dividend NOK 6.50 per share, 45% of net income

# Earnings per share\*

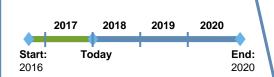


<sup>\*</sup>Average number of shares for 4Q 2017: 273.2 million (4Q 2016: 273.2 million).



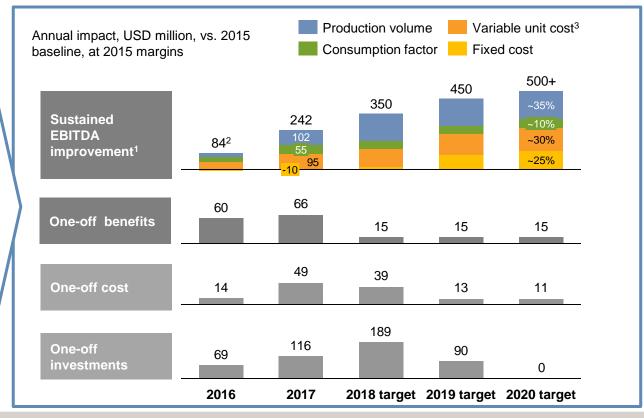
### **Yara Improvement Program – 2017 status**

#### **Program progress**



- 2017 EBITDA benefits ahead of target (in 2015 terms):
  - Production volume improvement according to plan
  - Energy consumption improvement ahead of plan
  - Variable cost improvement ahead of plan
  - Fixed cost improvement behind plan
  - One-off program costs higher than original estimate

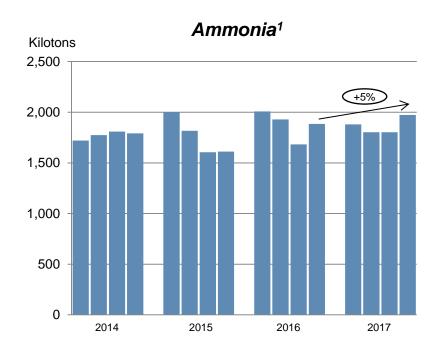
#### **Financial benefits**

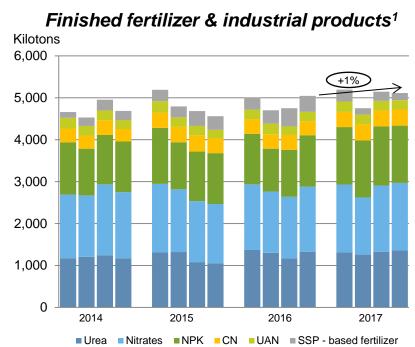




- 1. R Additional details in the backup section;
- 2. Adjusted for corrected full-year procurement savings (e.g., full-year bonuses)
- 3. Includes improvements to direct and indirect categories, as well as value of additional steam and reduced cost of emissions

### Higher finished fertilizer and ammonia production

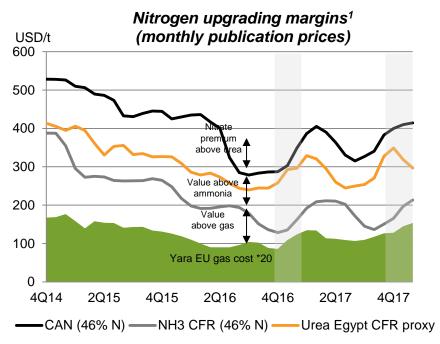




1) Including share of equity-accounted investees

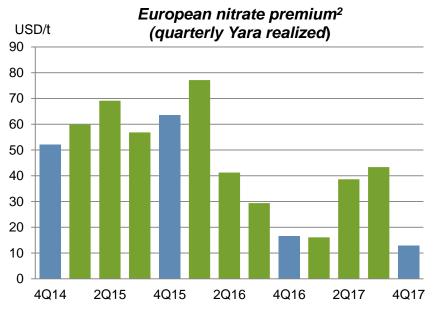


### Lower realized European nitrate premiums



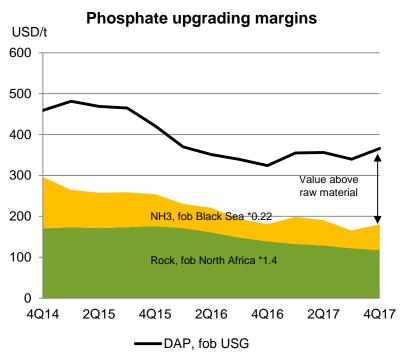
1) All prices in urea equivalents

Source: Fertilizer Market Publications

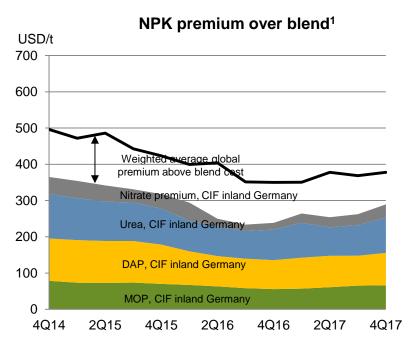


2) Yara European realized nitrate prices (excl. sulphur grades)compared with urea publication prices (Egypt CFR proxy) with1 month time lag. All numbers in USD per tonne of CAN equivalents.

### Solid commodity phosphate margins and compound NPK premiums



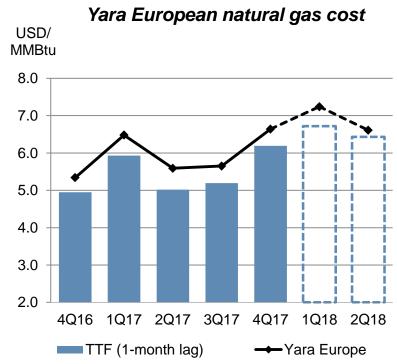




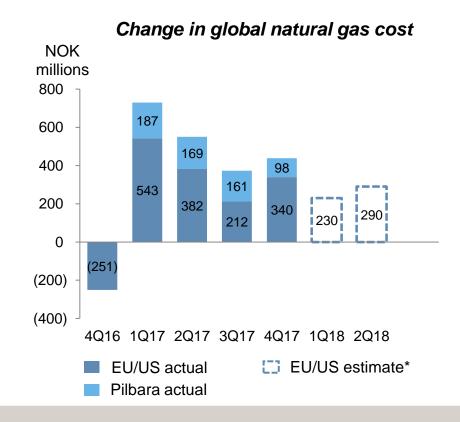
1) Export NPK plants, average grade 19-10-13, net of transport and handling cost.



### Higher natural gas cost expected for the next two quarters



\*Dotted lines denote forward prices as of 30 January 2018 Source: Yara, World Bank, Argus/ICIS Heren





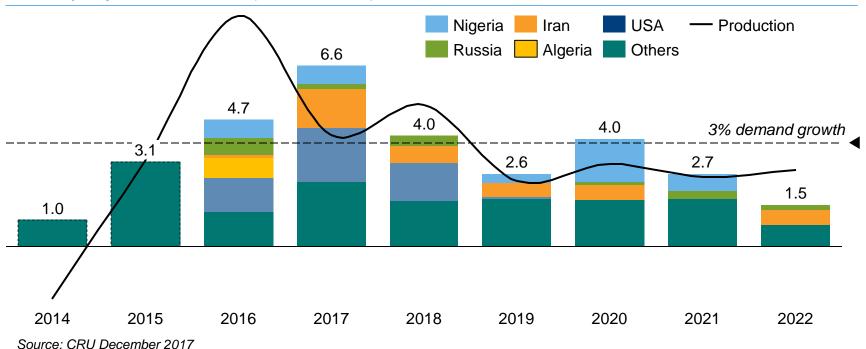
# EBITDA: Stronger margins offsets higher energy cost and weaker US dollar

**NOK** millions 531 2,526 1,274 207 139 2,015 74 EBITDA 4Q16 Volume Price/Margin Energy costs Special Other EBITDA 4Q17 Currency translation items



# The surge of new capacity is past its peak

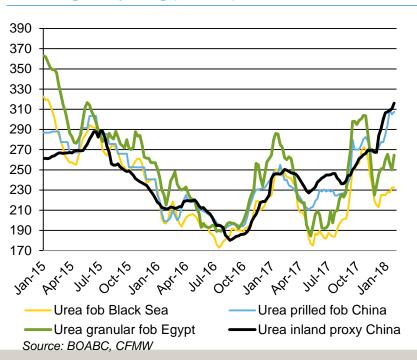
#### Global capacity additions ex China (Urea, Million tons)



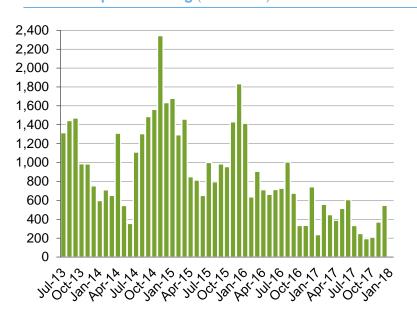


# ....but higher domestic price and lower exports from China are offsetting oversupply elsewhere

#### **Increasing urea pricing (USD/ton)**

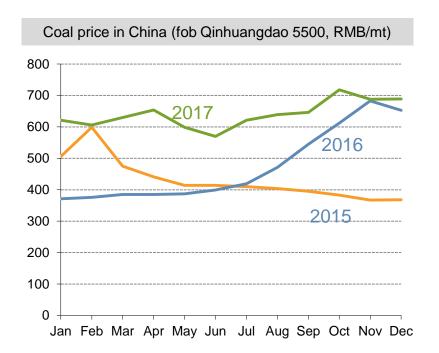


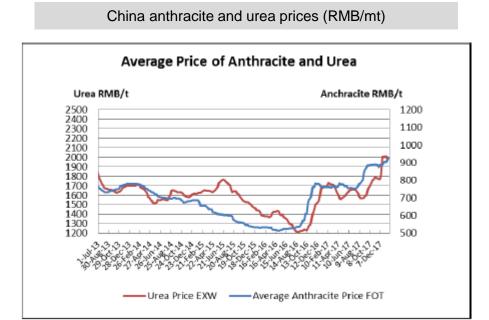
#### Chinese export is falling (1000 tons)





### Increased coal prices drove nitrogen prices higher

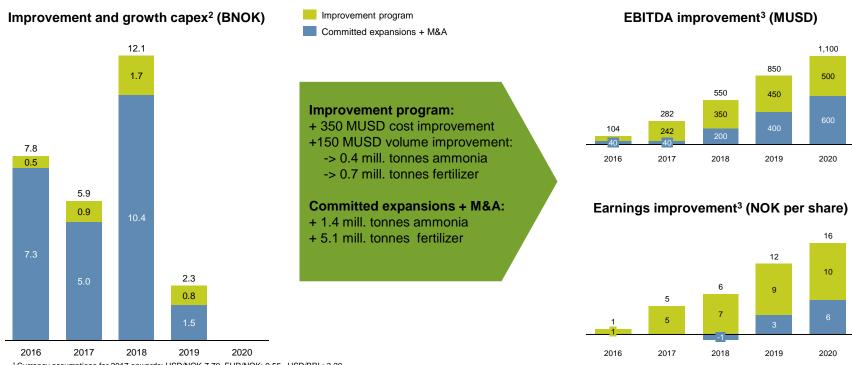




Source: IHS, CFMW



# Major improvement and growth investments in 2018; main earnings improvement from 2019 onwards<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Currency assumptions for 2017 onwards: USD/NOK 7.70, EUR/NOK: 9.55 , USD/BRL: 3.20

<sup>&</sup>lt;sup>3</sup> 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



<sup>&</sup>lt;sup>2</sup> Excluding maintenance capex on existing assets. Yara's share of capex. Fully consolidated entities presented at 100% basis

# **Additional information**



### 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 / 2017:

- Operating revenues: 11.6 BUSD / 11.4 BUSD
- EBITDA: 1.9 BUSD / 1.3 BUSD
- CROGI: 9.5% / 7.0%
- Total deliveries (in million tonnes):
  - Fertilizers: 27.3 / 27.2
  - Industrial products: 6.9 / 7.1
  - Ammonia trade: 2.0 / 2.0

#### **Stable ownership structure:**

- Norwegian State 36.2%
- Norwegian National Insurance Scheme Fund 5.2%
- Other Norway 15%
- Outside Norway 44%

#### 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 end 2017:
  - Debt/equity: 0.25
  - Net debt/L12M EBITDA: 1.76x



### Yara has four different priority areas for growth

- 1 Expand premium fertilizer sales and supply
  - Demand can be created at healthy premiums
  - Premiums above commodities and competitors enable profitable investments in new production capacity
- 2 Expand commodity scale based on attractive full-cost growth opportunities
  - Resilience in attractive cost curve position and diversified gas footprint
  - Operational excellence
  - Key enabler for all segments
- 3 Act on attractive opportunities to grow Industrial sales and supply
  - Strong fundamental growth drivers
  - Attractive opportunities within four business lines
- 4 Structurally secure P and K exposure
  - Sourcing security (premium rock, SOP)
  - High value creation in early stage development, upstream value and market integration



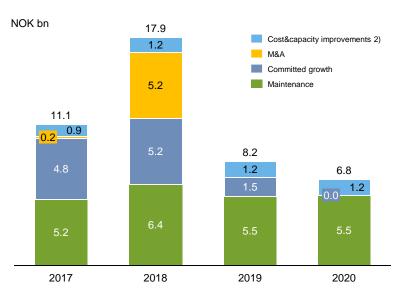
# Yara is deliberately building premium positions in the world's most important agriculture markets

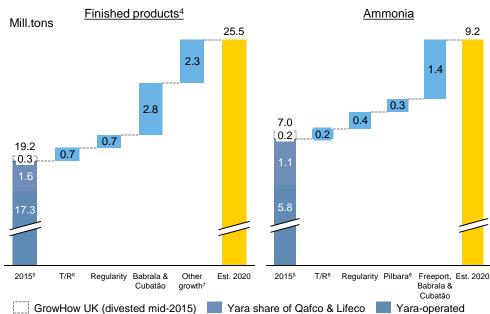
#### Yara has four different priority areas for growth **Brazil and Latin America** Expand premium fertilizer sales and supply Demand can be created at health; premiur Brazil and Latin America represents some of the most important and growing agriculture markets in the world The markets are export oriented, and steadily growing within the important cash-crop segments, i.e. fruits and vegetables which is well suited for Yara premium products and solutions Net fertilizer import secures demand for Yara products, and underlines strategic importance of logistical footprint India One of the world's largest fertilizer consumers, and the world's largest importer of nitrogen fertilizer Yara is very well positioned to develop our premium business, and create value both for Yara and the Indian farmer Large and growing middle class creates strong demand growth for more Inefficient agriculture sector with huge improvement potential from right crop nutrition practices

### High on-going Yara growth investment activity

#### Capex plan<sup>1</sup>

#### Production growth 2015 - 2020<sup>3</sup>





- 1) Yara's share of capex. Fully consolidated entities presented at 100% basis.
- 2) Includes Yara Improvement program Capex and other improvements
- 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
- Committed projects only. TAN Pilbara: 160 kt, Porsgrunn: 250kt, 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 NH<sub>3</sub> plant



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

Growth focused on	premium & industrial	Expected start up	Pipeline EBITDA (2015 prices, USDm)				
Expand premium products sales and supply	Uusikaupunki NPK Porsgrunn/Glomfjord CN/NPK Sluiskil urea+S	3Q 2016 1Q 2018 2Q 2018	70	170	180	190	
	Rio Grande NPK/NPK blends	2H 2020	2018	2019	2020	2021	
Expand commodity scale based on attractive full-cost	Freeport ammonia JV	1Q 2018	110	140	140	150	
growth opportunities	Babrala urea acquisition	1Q 2018	2018	2019	2020	2021	
Act on attractive	Pilbara – TAN	2Q 2017 <sup>2</sup>			80	00	
opportunities to grow	Köping – TAN	3Q 2018	10	60	80	80	
industrial sales and supply			2018	2019	2020	2021	
					170	170	
Structurally secure P and K	Galvani / Salitre	mining 2Q18, chemical 1H19	0	30			
supply			2018	2019	2020	2021	
			Sum 190	400	570	590	

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

<sup>&</sup>lt;sup>2)</sup> Plant started up in 2Q 2017, but has been down for technical reasons since 3Q 2017. Expected re-start 2Q 2018.



# EBITDA target

# --!:- effec

# Yara Improvement Program - Delivering value across the company

# pany

#### Program status 4Q 2017

Yara Productivity System Site diagnostics concluded, with increase in base potential vs original; Rollout completed at eight sites, seven sites currently ongoing

IT optimization, and support function efficiency and quality Ongoing implementation of new IT services contracts; New IT operating model decided, for implementation during 2018; Support function efficiency and quality projects according to plan

More for less

Procurement Excellence

Wave 1 and 2 savings delivery under implementation; New indirect operating model being rolled out

Working Capital

Ongoing work to improve inventory and credit position in Latin America and Africa

One-off effects

Added value

Sales & Marketing professionalization<sup>2</sup>

Detailed and ambitious Crop Roadmap targets established in Crop Nutrition; Sales Excellence initiatives being integrated in Industrial segment's way of working

# The Yara Productivity System (YPS) is a structured way of working applied across operations and knowledge work

#### The Productivity System covers all of Production







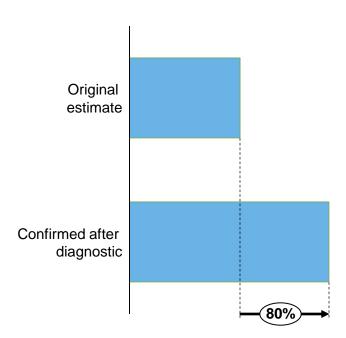








#### Identified potential higher than expected

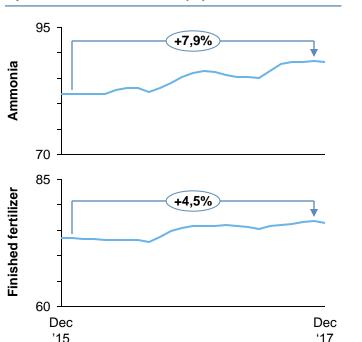


Note: Improvement potential identified at the 27 sites covered by deep-dive diagnostic. Does not include potentials identified by YPS for capital projects and YPS for R&D

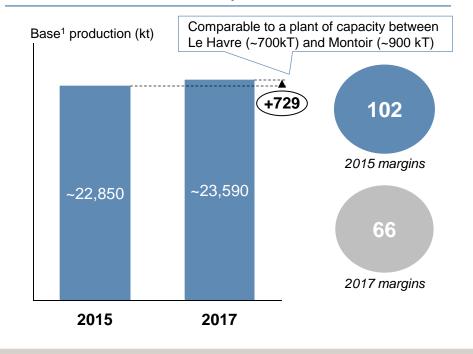


# A major effect of YPS is sustainable long term improvements to reliability

#### **Uptime has increased for (%)**

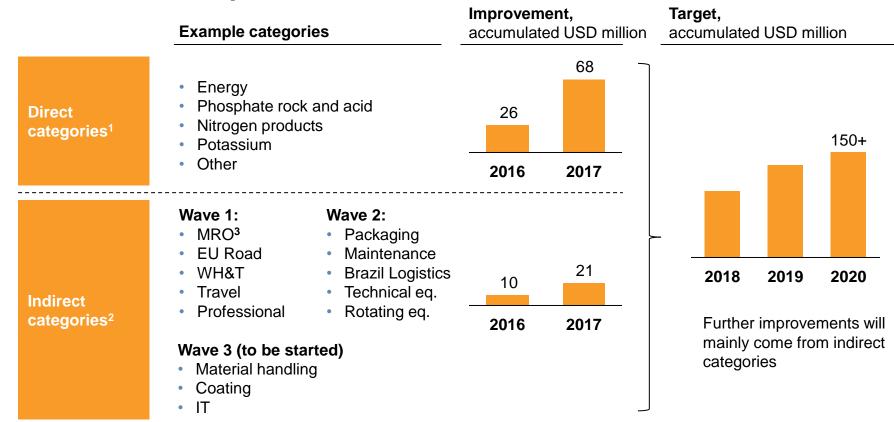


# Production volume improvements contributed over 100 USD million EBITDA impact in 2015 terms



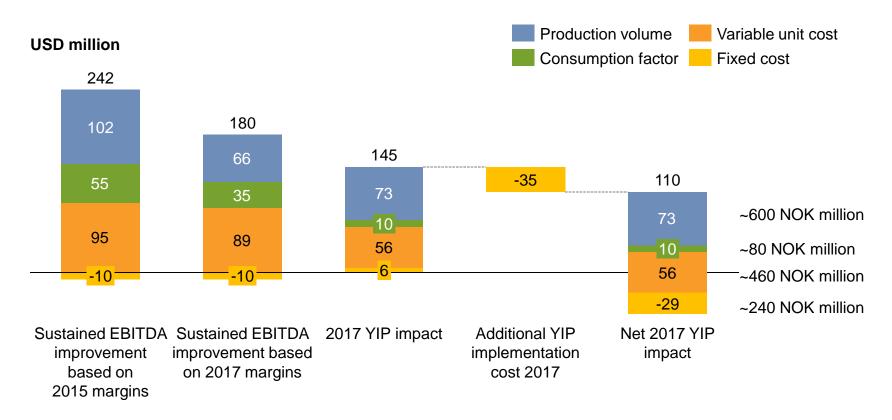


### Variable cost improvements have contributed ~90 USD million





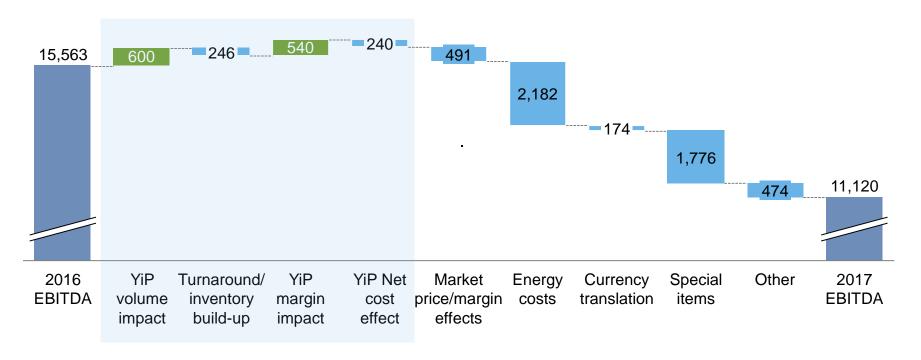
### **Yara Improvement Program effects**





# Significant positive impact of the Improvement Program in 2017

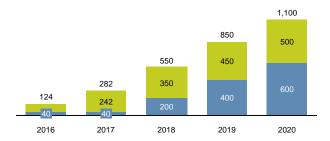
**NOK** millions





### Improvement and growth investments; earnings and sensitivities<sup>1</sup>

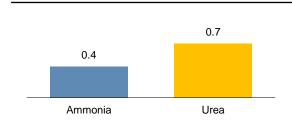
#### EBITDA improvement<sup>2</sup> (MUSD)



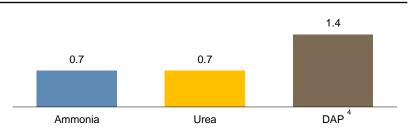
#### Earnings improvement<sup>2</sup> (NOK per share)



# Improvement program: Impact<sup>3</sup> of +100 USD/t price change (NOK/share)



Growth: Impact<sup>3</sup> of +100 USD/t price change (NOK/share)



<sup>&</sup>lt;sup>1</sup> Currencies for all amounts from 2017: USD/NOK 7.70, EUR/NOK: 9.55, USD/BRL: 3.2



IR - February 2018

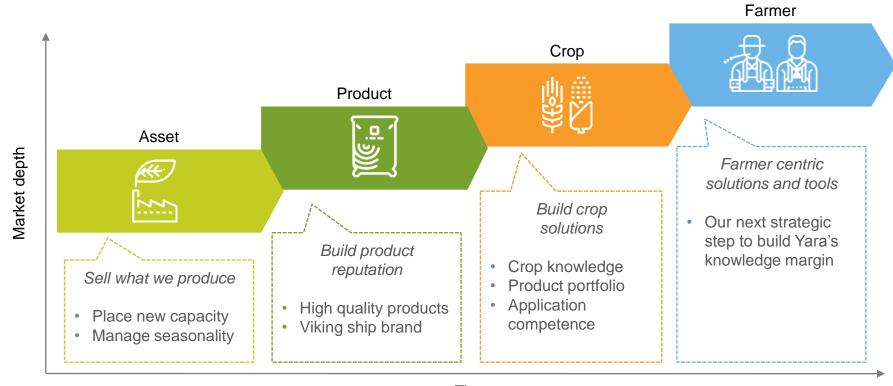
<sup>&</sup>lt;sup>2</sup> Measured at 2015 conditions. Main average market prices: Ammonia fob Yuzhny 390 USD/t, Urea fob Yuzhny 275 USD/t, DAP fob Morocco 495 USD/t.

<sup>&</sup>lt;sup>3</sup> Improvement: 2020 numbers. Growth: At full capacity (2019 for urea and ammonia, 2020 for DAP).

<sup>&</sup>lt;sup>4</sup> Phosphate-driven price change, equivalent to 138 USD/t phosphate rock (72 bpl)

# Strategy recap - continuing the journey closer to the farmer









## Deciding where to focus and how to win is key to profitable growth



Distributor



Food Industry

Consumer

#### Yara capabilities

Knowledge, people, assets, products, services, etc.



#### **Market segmentation**

Crop, channel, farmer pains, gains and behaviors.

#### Focus and investment



Crop nutrition solutions

#### Market needs

Quality, quantity, trends (eco friendly, CO2, etc.)



Sustainable value creation

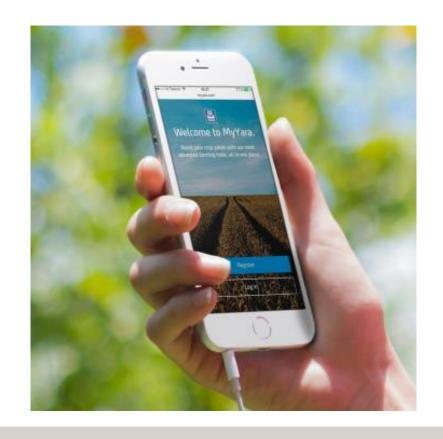
## Ramp-up of digital solutions

- We are quickly building a strong pipeline of digital solutions
- Every 3 months launch of 1-2 digital solution teams
- Commercial pilots in coming season
- Examples

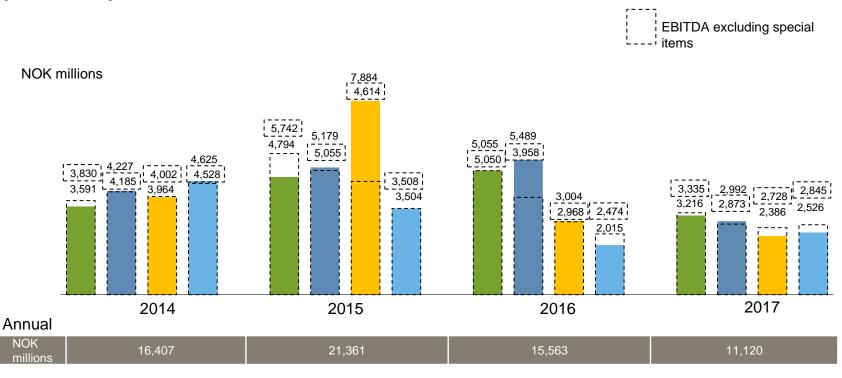
Sensor-aided N-application

Nutrient optimization tailored to specific fields

Crop advisory platforms

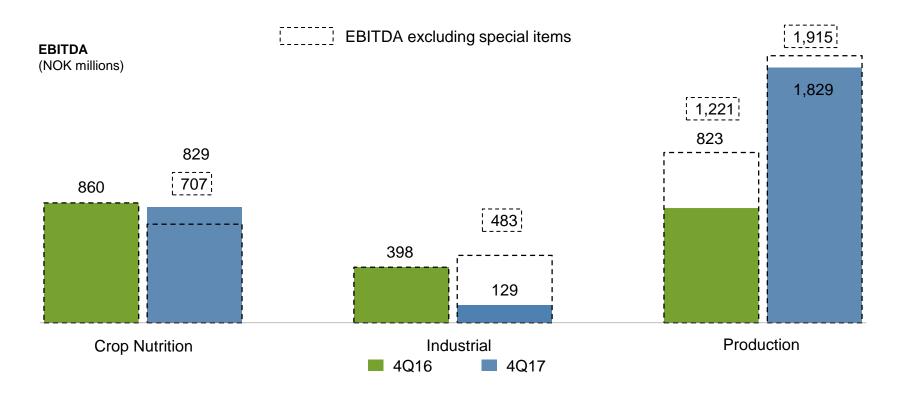


# Earnings before interest, tax, depreciation and amortization (EBITDA)



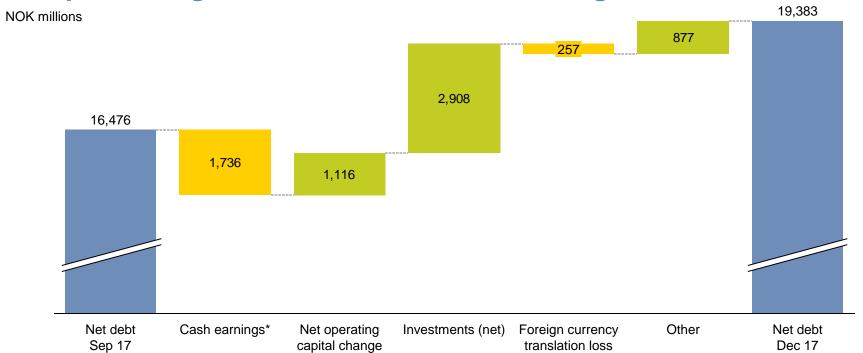


## **Higher margins in Production segment**





# Higher net interest-bearing debt as investments and net operating capital change more than offset cash earnings

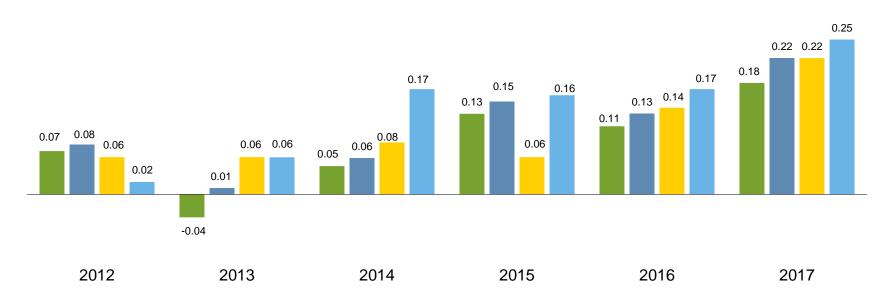


<sup>\*</sup> Operating income plus depreciation and amortization, minus tax paid, net gain/(loss) on disposals, net interest expense and bank charges



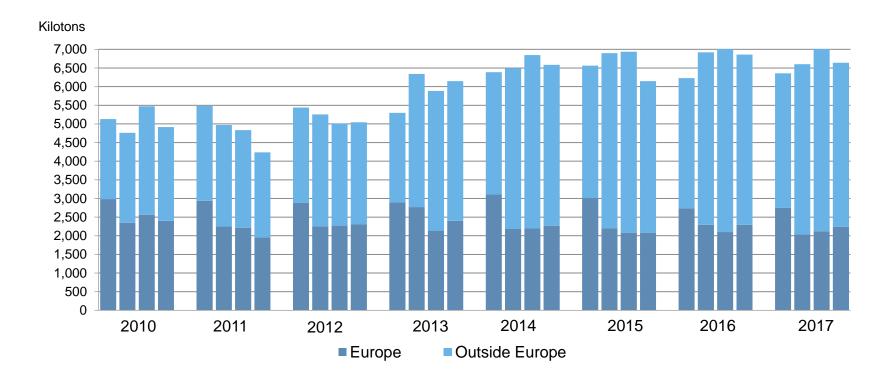
## **Debt/equity ratio**

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





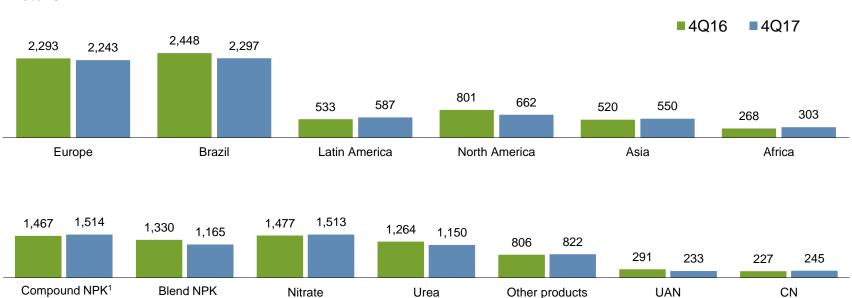
### Fertilizer deliveries





### Yara 4Q fertilizer deliveries by market and product

#### **Kilotons**

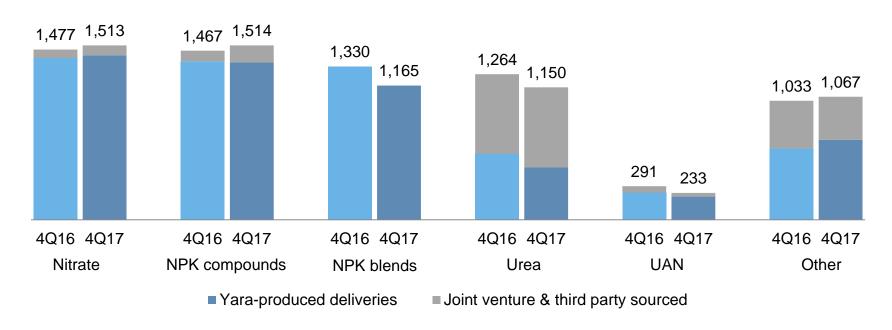


<sup>1)</sup> Yara-produced compound NPK and third party sourced (Total NPK minus blend NPK)



### Fertilizer deliveries by product and source

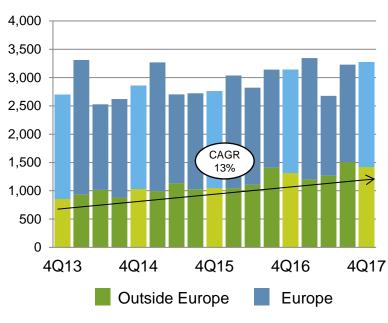
#### **Kilotons**





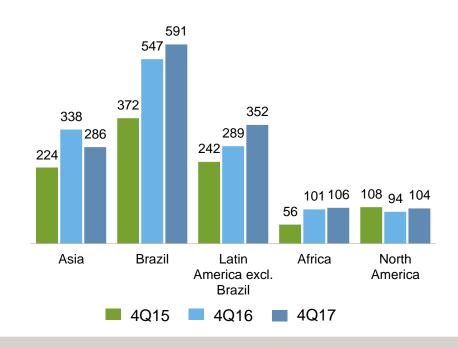
## **Strong premium product deliveries**

#### Value-added fertilizer deliveries<sup>1</sup>



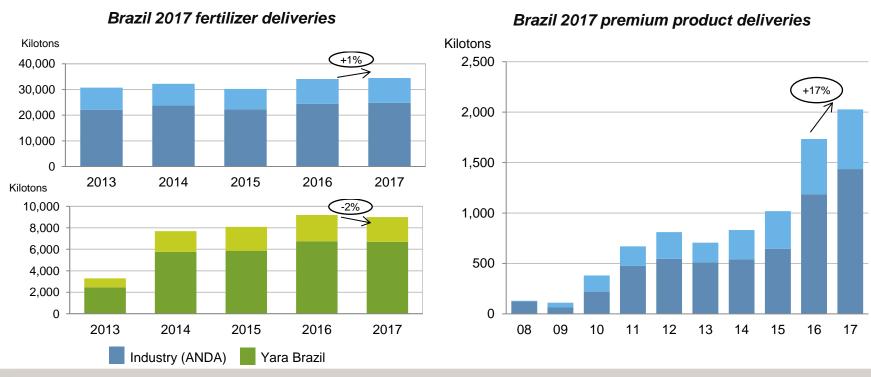
1) YaraBela, YaraMila and YaraLiva deliveries

#### Value-added fertilizer deliveries<sup>1</sup>





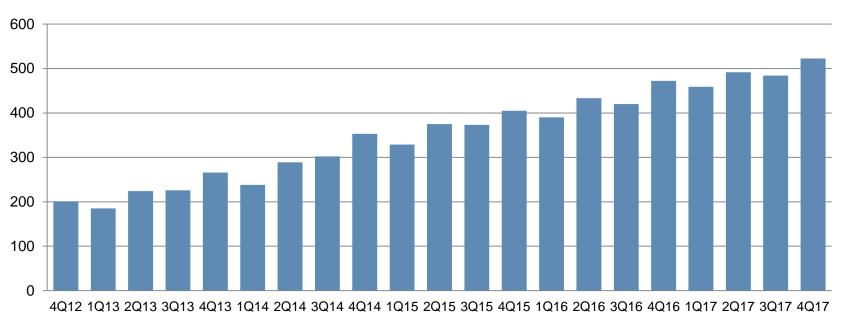
## Brazil: focus on premium products and solutions drives growth





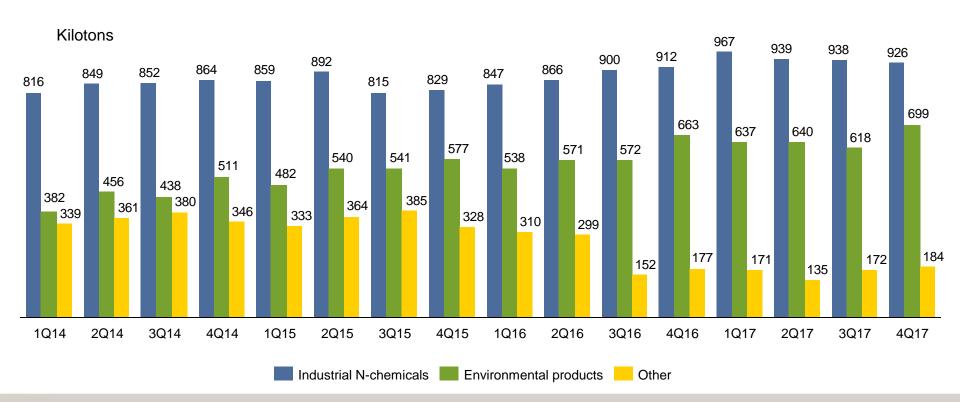
### **AdBlue deliveries**

#### **Kilotons**





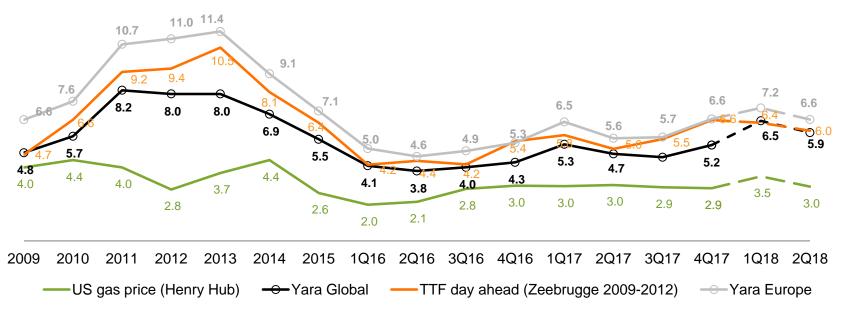
### **Industrial volume development**





### **Energy cost**

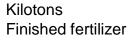
Yearly averages 2009 – 2015, quarterly averages for 2016-18 with forward prices\* for 1Q18 and 2Q18.



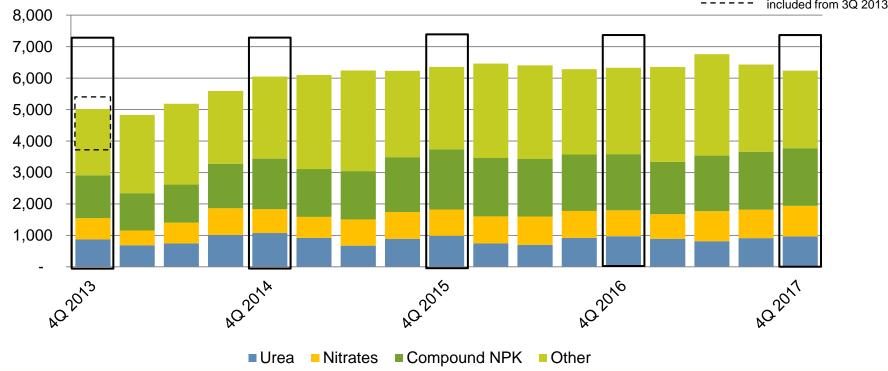
\*Dotted lines denote forward prices as of 30 January 2018 Source: Yara, World Bank, Argus/ICIS Heren



#### Yara stocks



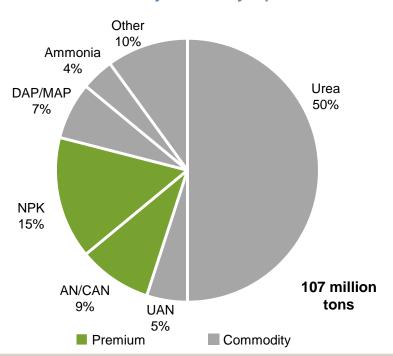






# Yara's margins are influenced by the supply / demand situations for crops, commodity fertilizer and premium fertilizer

#### Urea is the key commodity N-product<sup>1</sup>



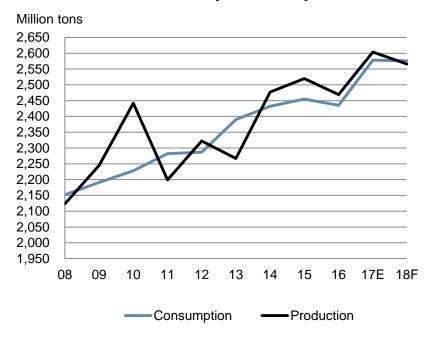
#### Both crop and fertilizer markets are key for Yara

- The majority of Yara's business is related to nitrogen
- Standardized commodity products like urea make up almost ¾ of the global nitrogen industry
- The supply / demand situation for both commodity and premium fertilizer is important for pricing
- In addtion, the supply / demand situation for crops also influences demand and pricing for fertilizer

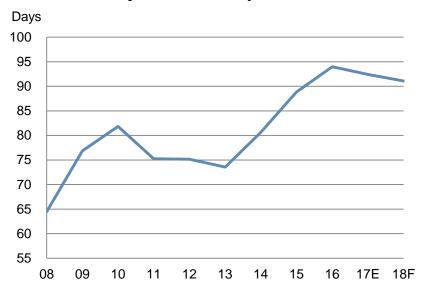


## Steady growth in grain consumption, while production growth is more volatile due to weather variations

#### Grain consumption and production



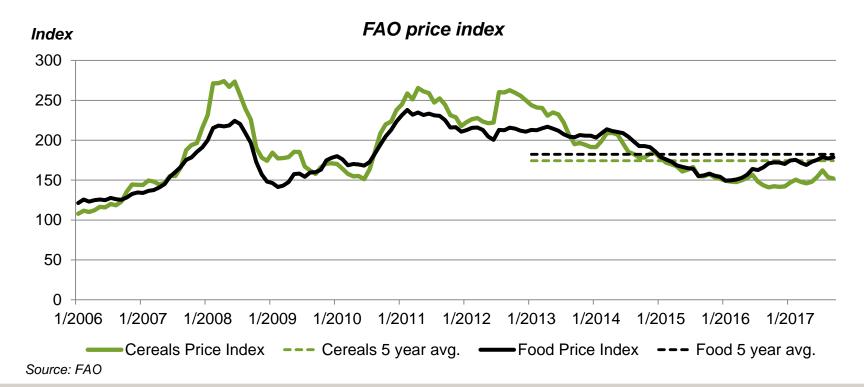
#### Days of consumption in stocks



Source: USDA January 2018

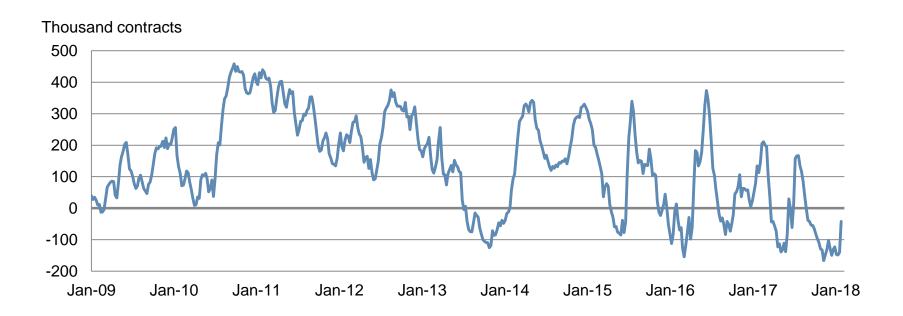


## Relatively weak grain economics





## Non-commercials' net long position in corn

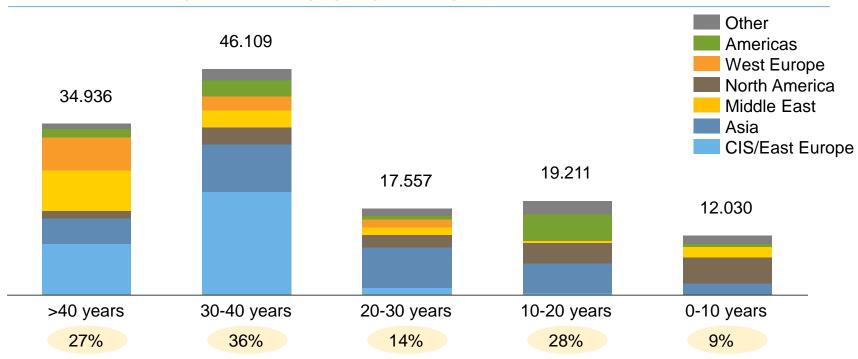


Source: US Commodity Futures Trading Commission



# ~2/3 of the world's ammonia capacity is more than 30 years old; older capacity may struggle to maintain utilization rates

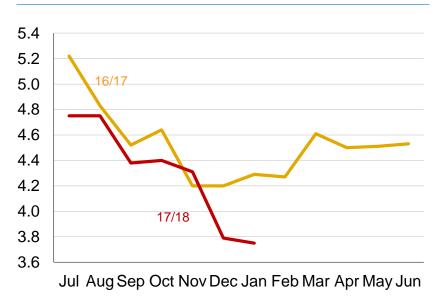
World's ammonia capacity (ex. China) per geography and vintage (kt)





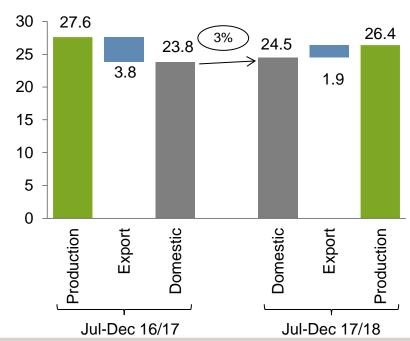
# Unclear if supply is sufficient to cover Chinese urea demand this season

#### Chinese urea production down vs last year (million tons)

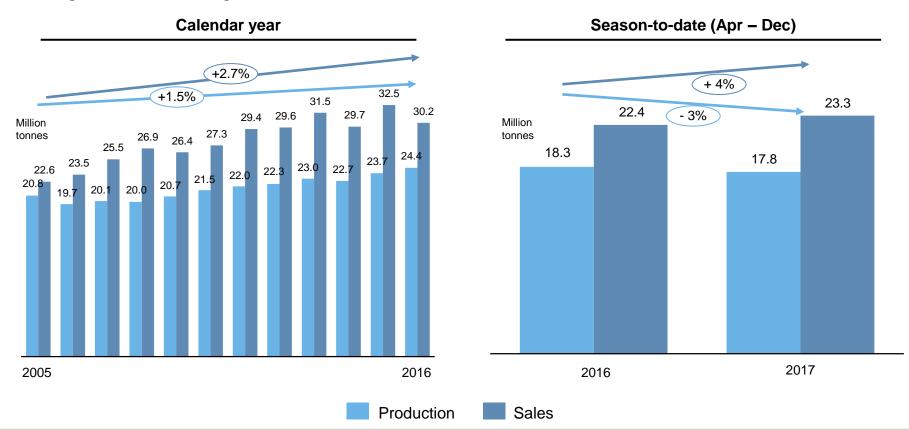


#### Source: CFMW, covering close to 100% of production

#### **Export reduction so far kept supply stable** (million tons)

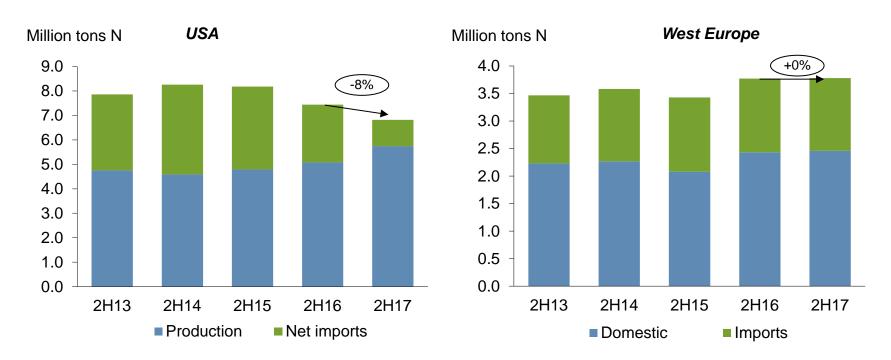


## Import catch-up need in India





## Strong deliveries in Europe, slow in USA

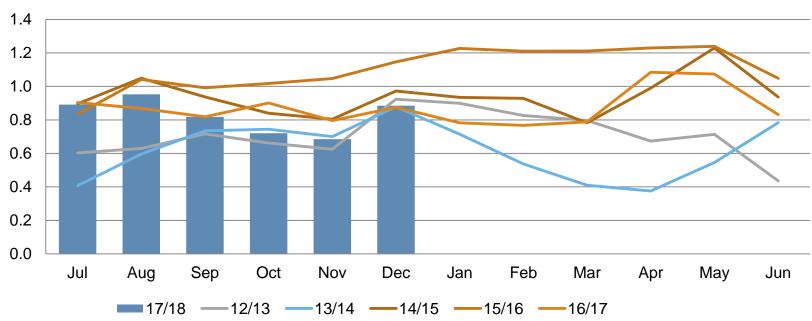


Source: Yara estimate for fertilizer deliveries to selected West European countries. Total nitrogen deliveries based on TFI, US Trade Commission, Blue-Johnson and Yara estimates



## **European producers' nitrate stocks**

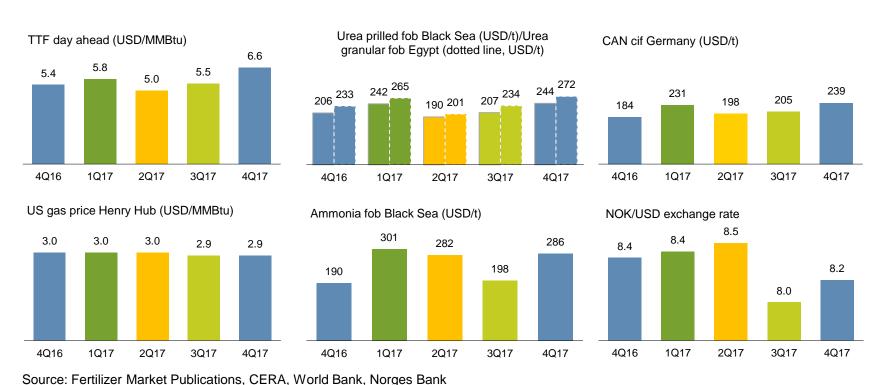




Source: Fertilizers Europe

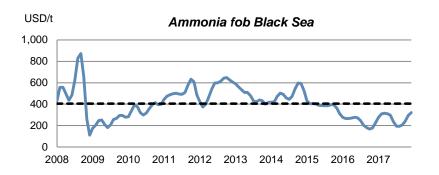


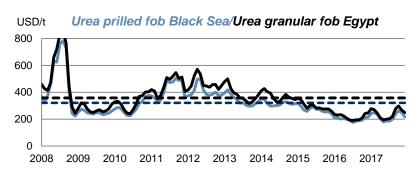
## **Key value drivers – quarterly averages**





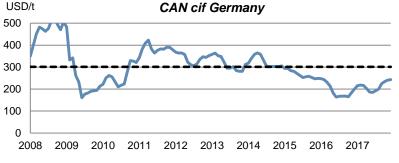
## 10-year fertilizer prices – monthly averages





DAP fob US Gulf/MOP granular fob Vancouver USD/t 1,200 1,000 800 600 400 200 2011 2012

USD/t



Average prices 2008 - 2017





