



Knowledge grows

Yara International ASA Capital Markets Day and 4Q 2017 results

Thursday 8 February 2018



Presenters



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President and CEO



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Head of Market
Intelligence



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VP, Innovation



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EVP, Production



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Head of YPS and
TPO Productivity



Tove Andersen
EVP, Supply Chain



Terje Knutsen
EVP, Crop Nutrition

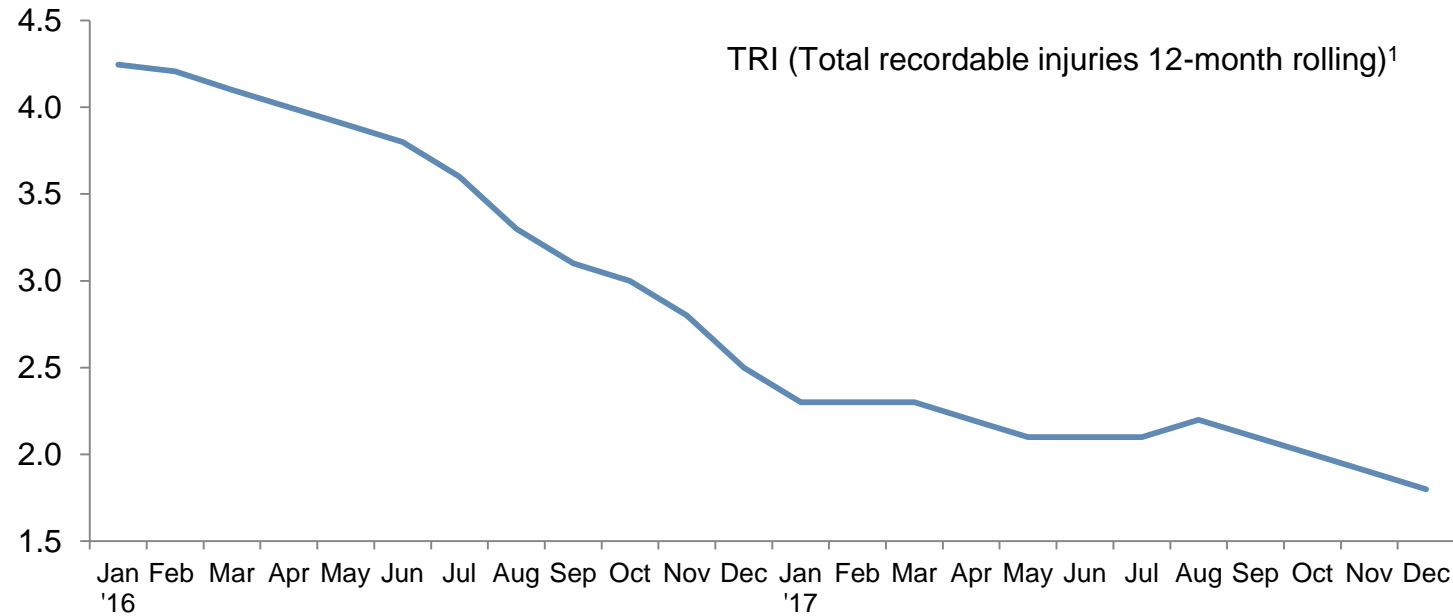


Stefan Fürnsinn
SVP, Digital Farming



Torgeir Kvidal
EVP, Chief Financial Officer

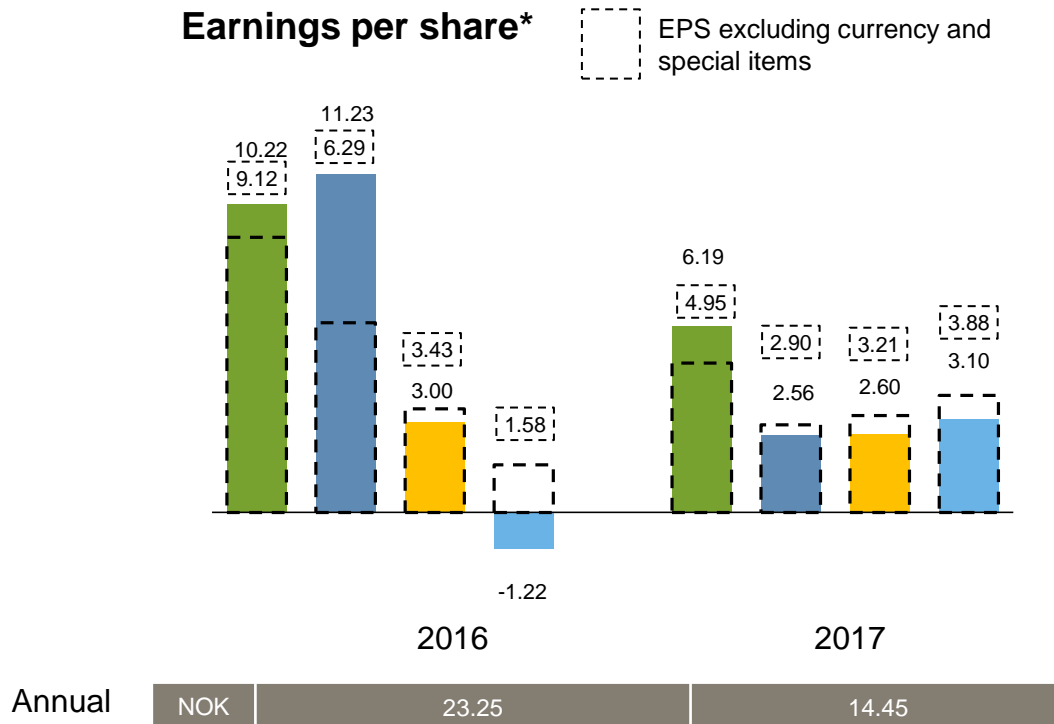
Safety is our first priority



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

Summary fourth quarter

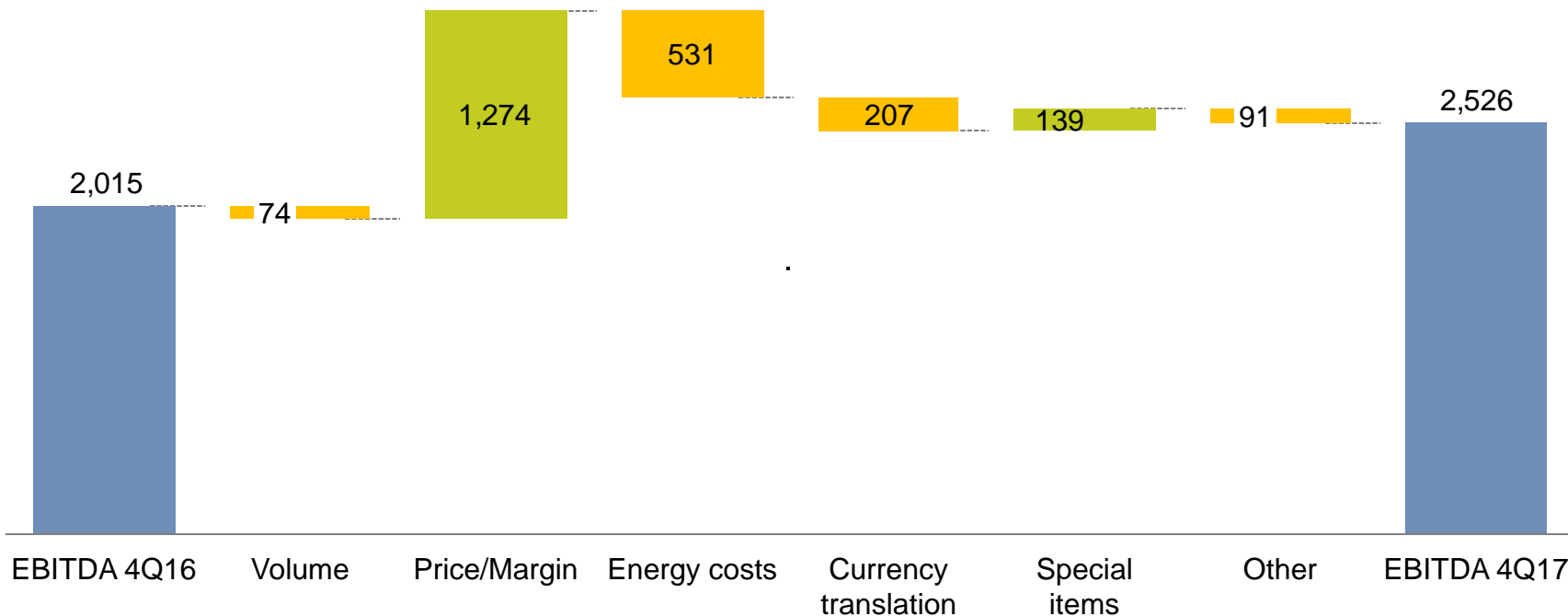
- Improvement program ahead of schedule
- Improved results reflecting higher margins
- Strong full-year Industrial performance
- Proposed dividend NOK 6.50 per share, 45% of net income



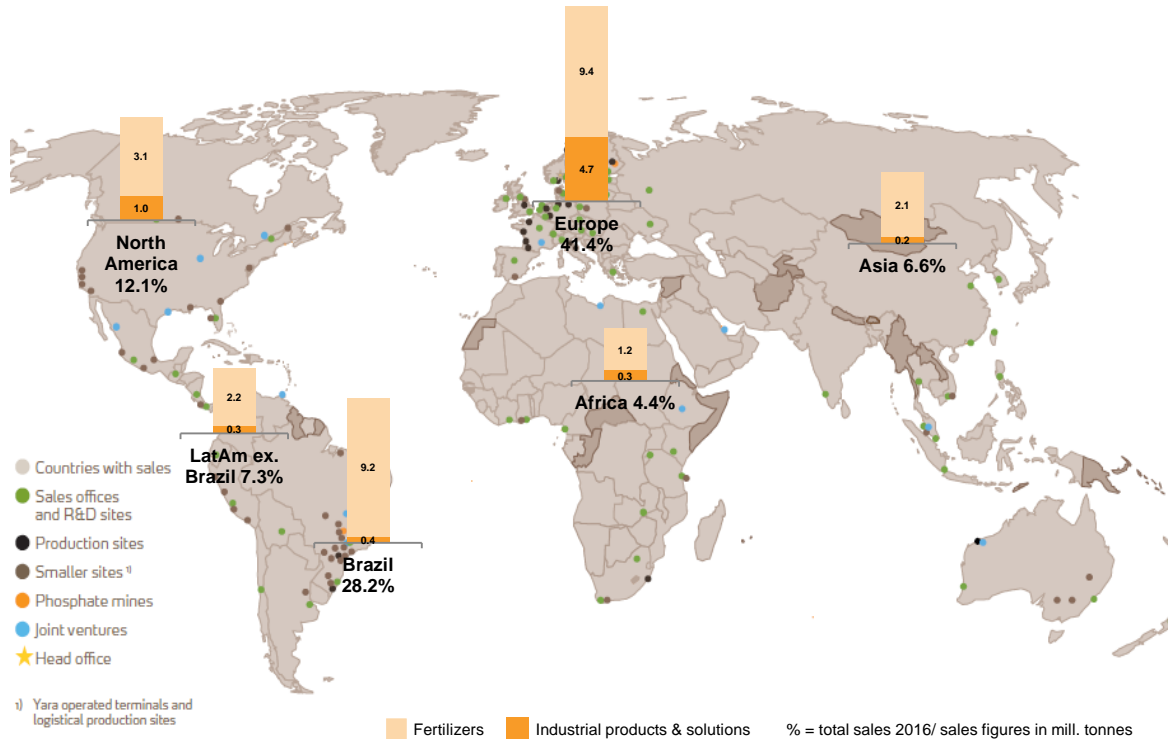
*Average number of shares for 4Q 2017: 273.2 million (4Q 2016: 273.2 million).

EBITDA development: improved margins offset higher energy cost and weaker US dollar

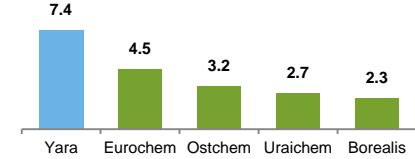
NOK millions



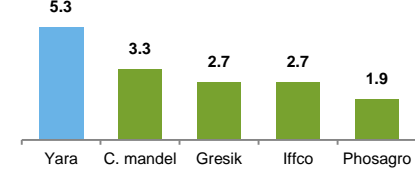
Our leading global footprint and differentiated product portfolio set us apart



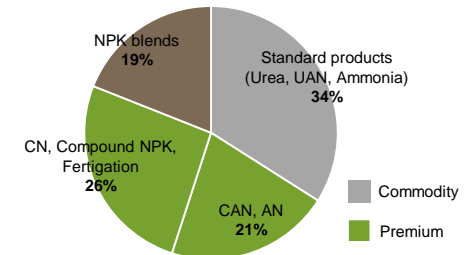
Global #1 in Nitrates¹



Global #1 in NPK²

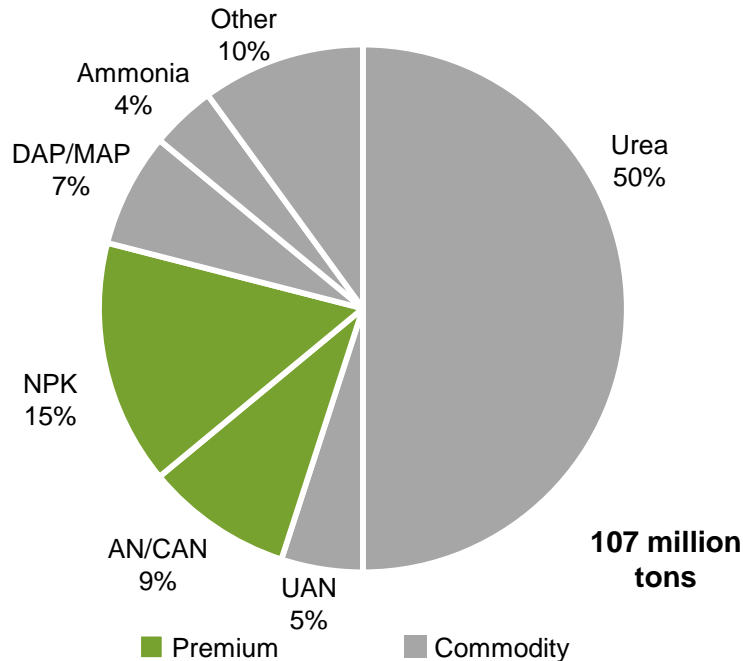


Fertilizer product portfolio³



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

Urea is the key commodity N-product¹

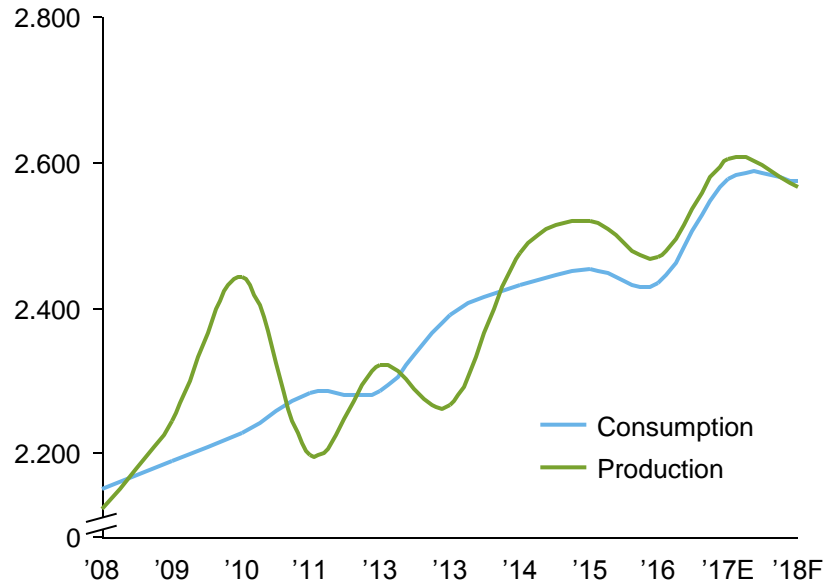


Both crop and fertilizer markets are key for Yara

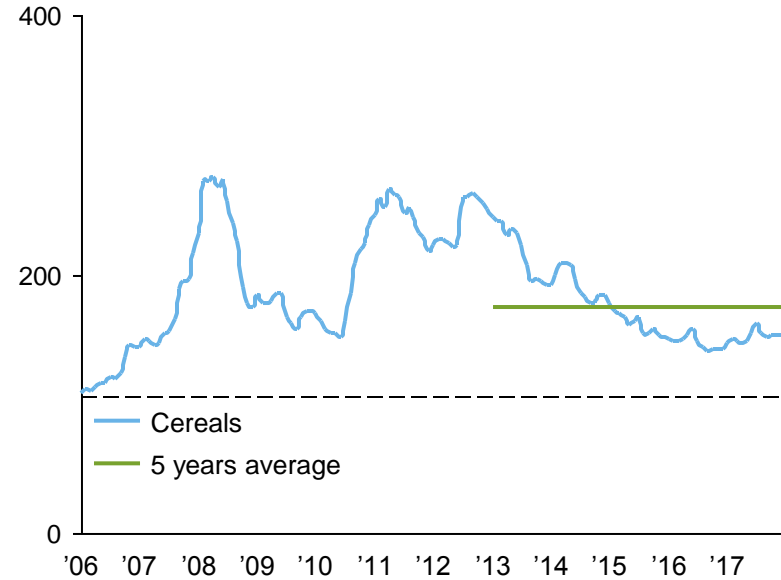
- The majority of Yara's business is related to nitrogen
- Standardized commodity products like urea make up almost $\frac{3}{4}$ of the global nitrogen industry
- The supply / demand situation for both commodity and premium fertilizer is important for pricing
- In addition, the supply / demand situation for crops also influences demand and pricing for fertilizer

Steady growth in grain consumption, but grain prices are below the 5-year average

Grain production and consumption reaching record levels
(Million tons)



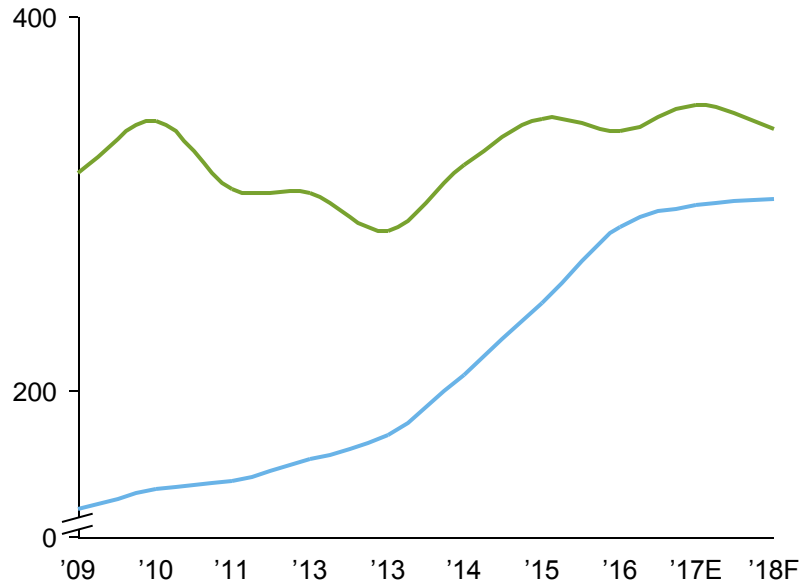
Prices are however not supporting, below 5-years average
(Index)



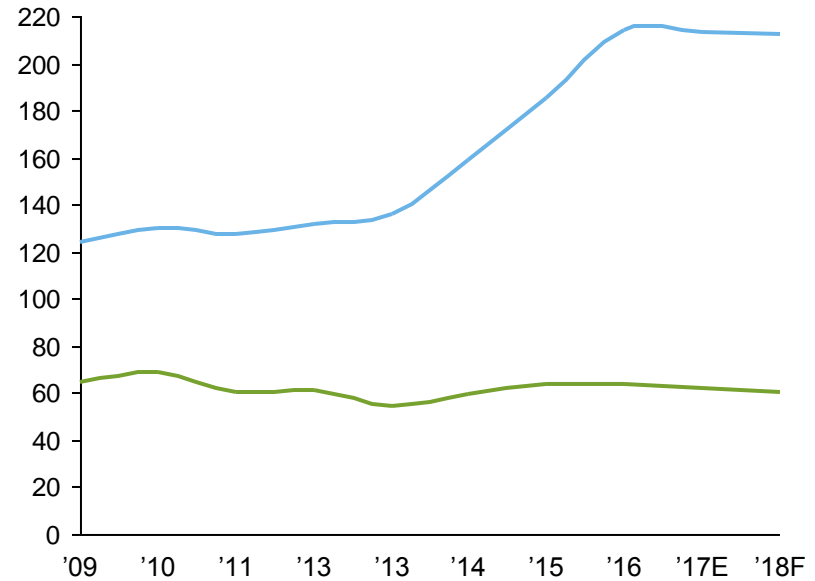
Source: FAO, USDA

Global grain stocks are stable, leaving weather as a key driver of grain price development

Chinese grain stocks have grown significantly since 2009
(Grain stocks, Million tons)



This has led to large stocks in China, stable in RoW
(Days of grain consumptions in stock)

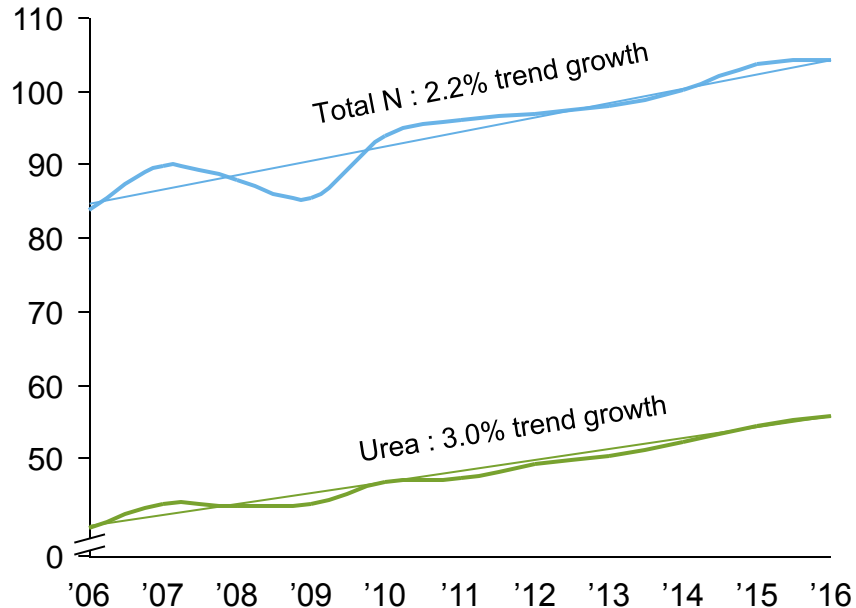


Source: USDA January 2018

— China — Rest of world ex china

Urea gaining market share in the nitrogen product mix, as almost all new nitrogen capacity is in the form of urea

Urea growth faster than other nitrogen products
(Global consumption ex China, Million tons)

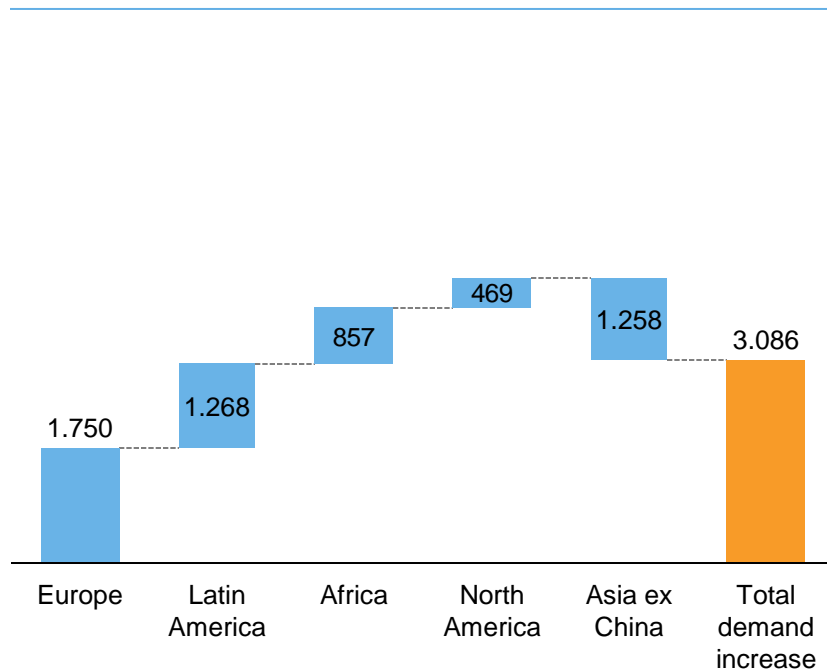


Source: IFA

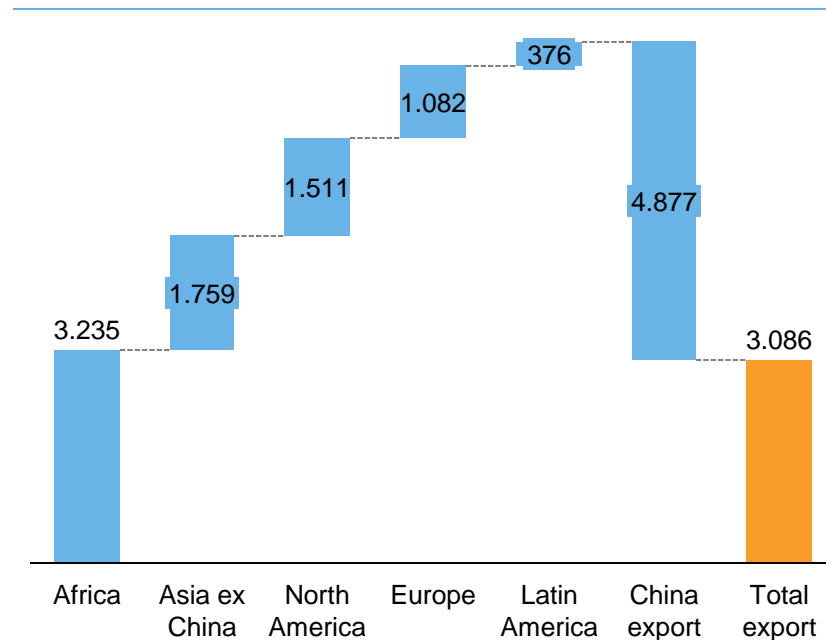
- 2016 was a slow year for nitrogen consumption, with a growth of 0.7% comparing to 10-years historic trend of 2.2%
- Apparent urea consumption outside China grew 2.6%, only modestly lower than the 10-years historic trend of 3.0%
- For Yara's premium business, the implication is two-fold
 - This underlines that there is limited new products competing against Yara's premium products
 - Urea reference is the starting point for most nitrogen fertilizer products

Apparent consumption outside China increased by 2.6% in 2016, Global supply grew more, compensated by lower Chinese export

Change in apparent consumption 2016
(Urea, Million tons)



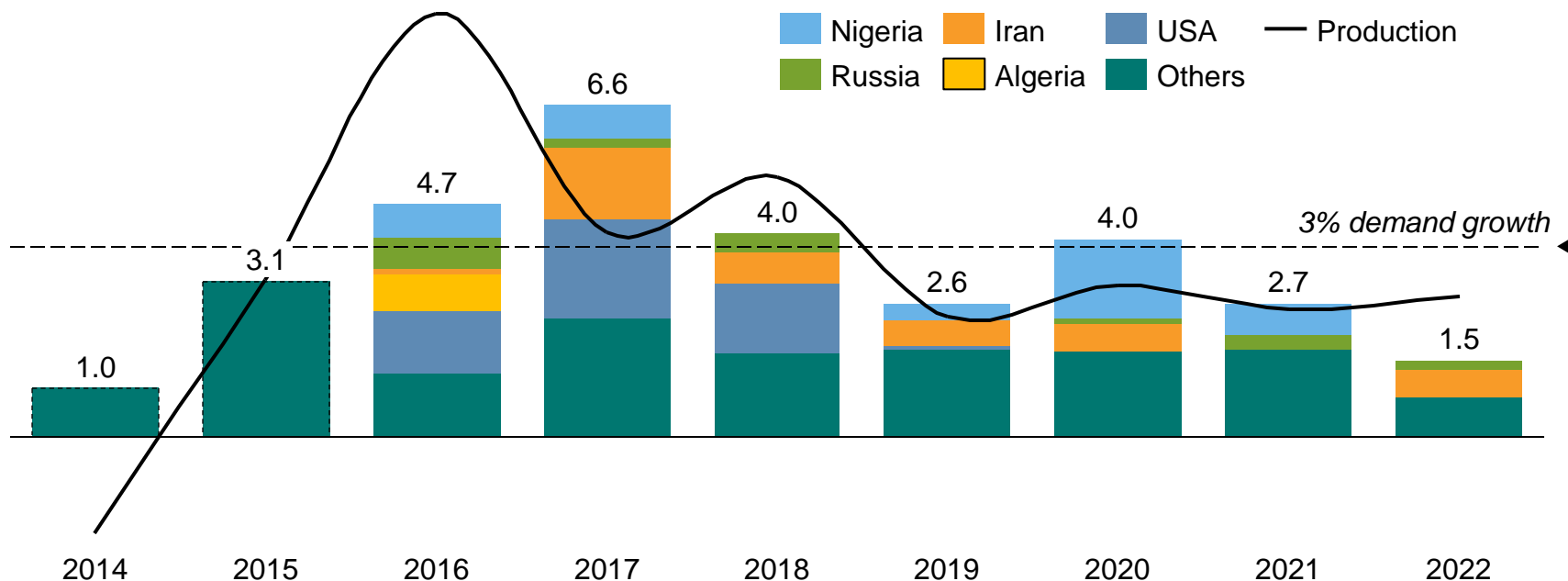
Change in production 2016
(Urea, Million tons)



Source: IFA Annual statistics

The surge of new capacity is past its peak

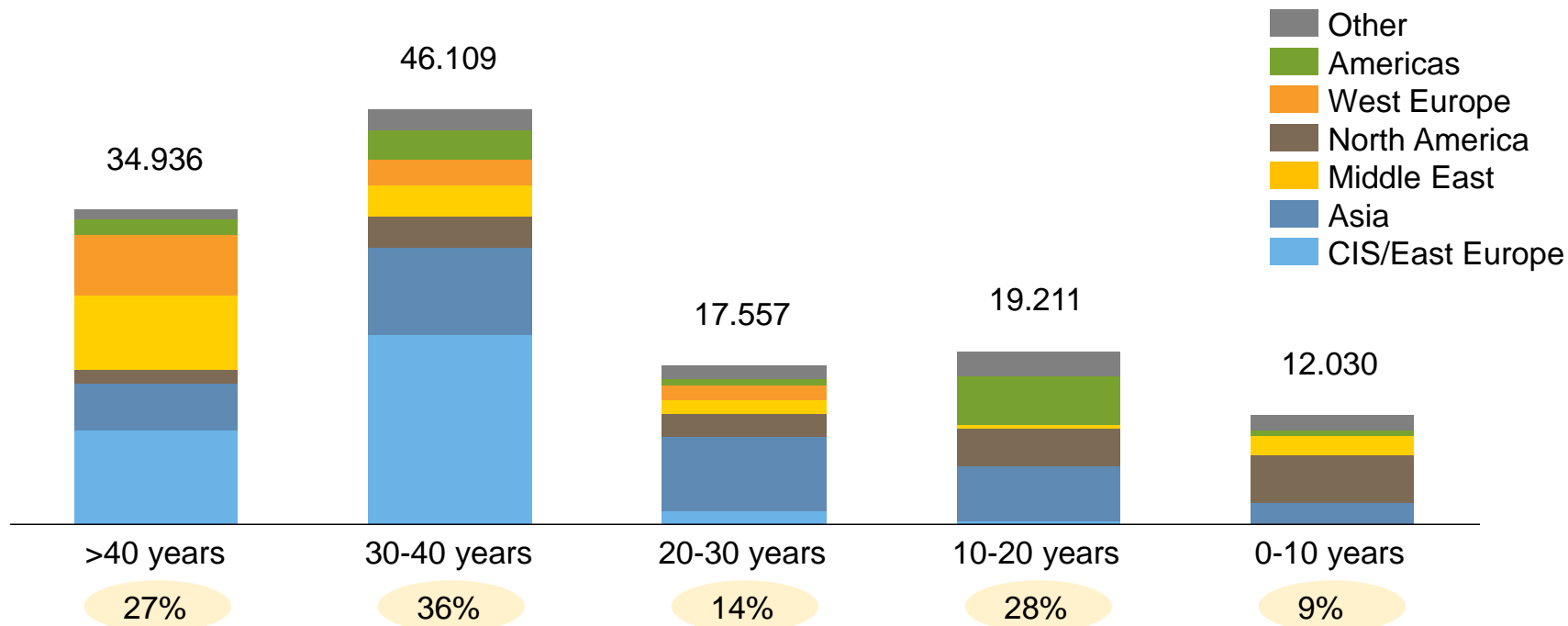
Global capacity additions ex China (Urea, Million tons)



Source: CRU December 2017

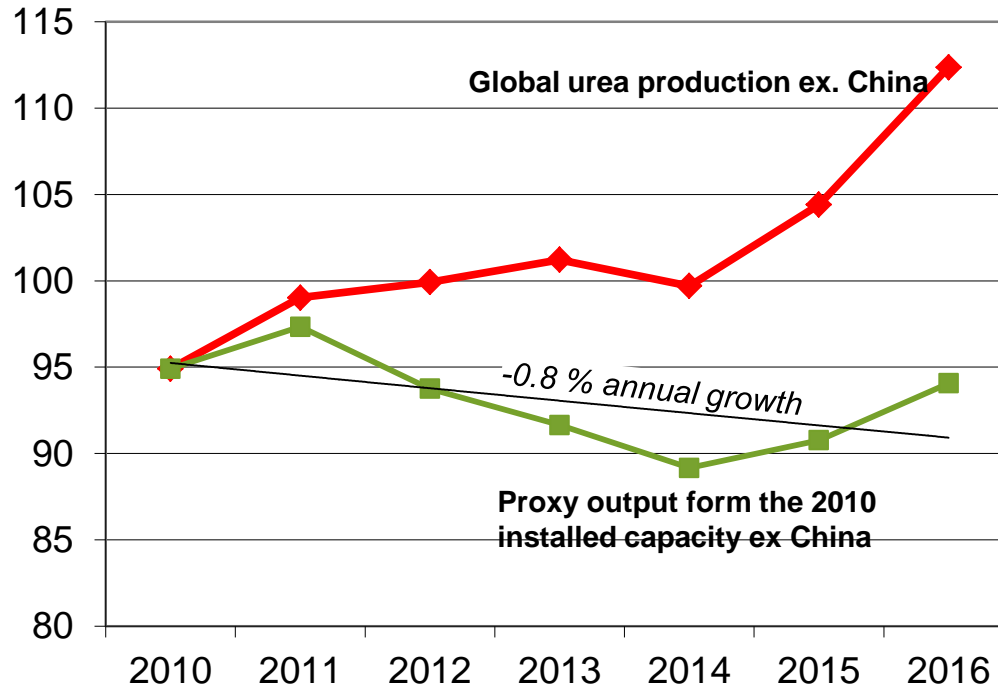
~2/3 of the world's ammonia capacity is more than 30 years old; older capacity may struggle to maintain utilization rates

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



Growth in global urea production driven by new plants – output from existing plants has fallen

Global urea production (million tons)



Source: IFA

Comments

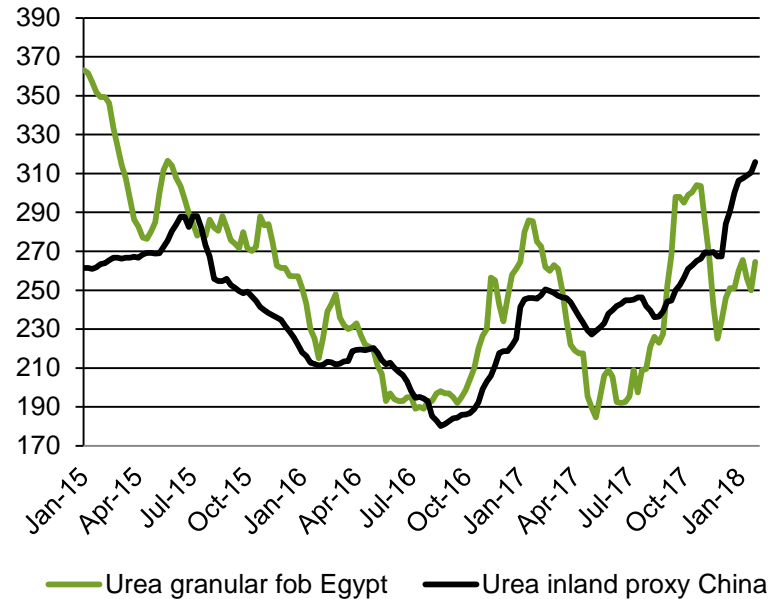
Under the assumption that new capacity runs at 100% capacity utilization, the output from the capacity already installed in 2010 has trended lower, by 0.8% p.a.

In reality, several new plants are not operating 100%, and there may be different reasons for lower utilization of existing plants (turn-arounds, gas curtailments, etc.)

In conclusion, it seems appropriate to consider a “replacement factor” taking into account reduced production from existing plants

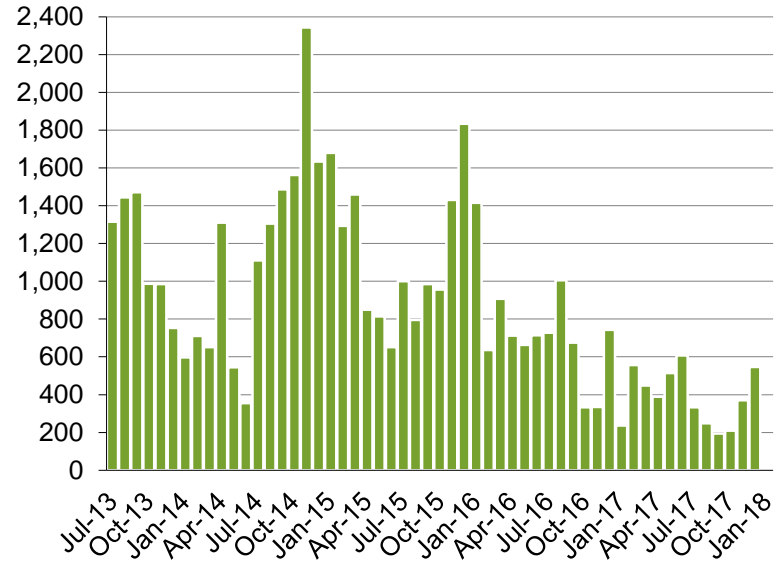
...but higher domestic price and lower exports from China are offsetting oversupply elsewhere

Increasing urea pricing (USD/ton)



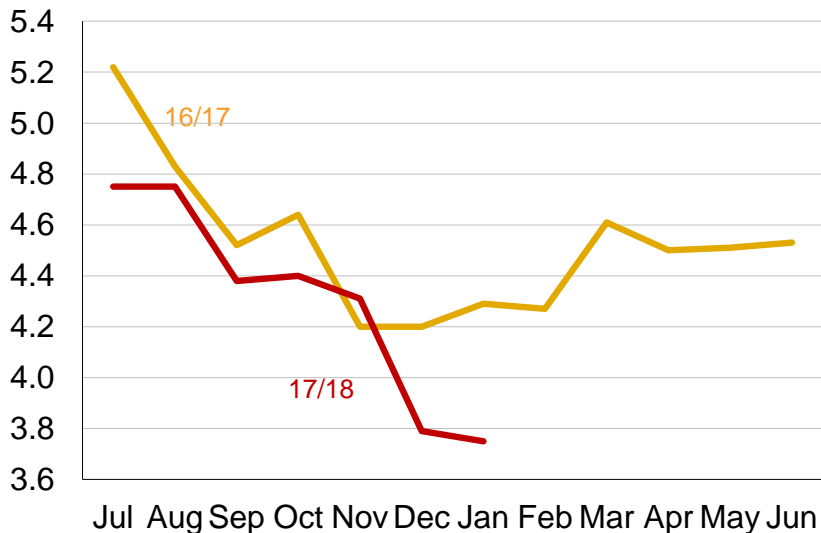
Source: BOABC, CFMW

Chinese export is falling (1000 tons)



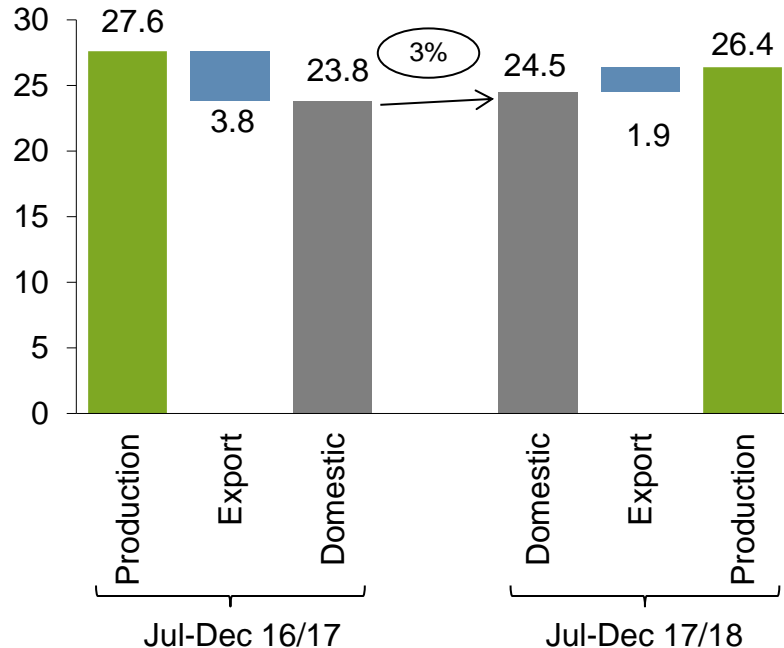
Unclear if supply is sufficient to cover Chinese urea demand this season

Chinese urea production down vs last year (million tons)



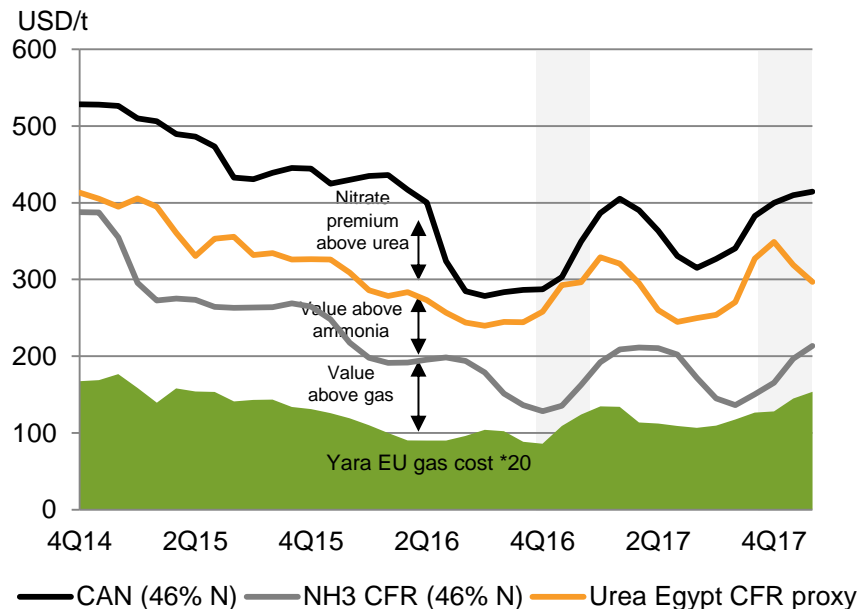
Source: CFMW, covering close to 100% of production

Export reduction so far kept supply stable (million tons)



Premium product margins typically contain both commodity and premium elements

Nitrogen upgrading margins¹



Yara value drivers

- Premium products are key in Yara's portfolio and business model
- Premium product margins typically contain both commodity and premium elements
- The size of the premium is typically linked to crop prices for fertilizer products, and economic activity for Industrial products

Market backdrop: summary

- Supply-driven global grain situation, but inventories outside China are not high
- Urea has gained market share globally, but new-build activity has peaked
- The main new development in the urea market is significantly higher urea prices in China, caused by higher coal prices and increased focus on environmental impact, including limitations to natural gas available to the fertilizer industry
- Higher urea prices in China means larger upside risks also for global pricing, but the reduced demand for Chinese exports also introduce higher volatility
- Yara's integrated business model and differentiation strategy gives Yara robustness and flexibility to manage and potentially take advantage of the more volatile market conditions

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

Sustainability represents a huge business opportunity



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Former Deputy Secretary-General, United Nations (Chair)

Amer Al-Dabbagh,
Chairman & CEO, The Al-Dabbagh Group

Laura Alfaro,
Professor, Harvard Business School

Peter Bakker,
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CEO, Sunbird

Susmy Verghese,
CEO, Ocum International

Gavin Wilson,
CEO, IFC Asset Management Company LLC

Mark Wilson,
CEO, Jivva plc

"Business leaders need to strike out in new directions to embrace more sustainable and inclusive economic models"

"Achieving the Global Goals creates at least US\$12 trillion in opportunities"

“Society is demanding that companies, both public and private, serve a social purpose. To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society.

Without a sense of purpose, no company, either public or private, can achieve its full potential, (...) and ultimately, that company will provide subpar returns to the investors ”

*Larry Fink, Chairman and CEO Blackrock, annual letter to CEOs
January 2018*

Sustainability has long been integrated in Yara's way of working

Sustainability has long had strong focus in Yara

- **Defining a crop nutrition strategy** focused on delivering value to farmers while achieving better agricultural and environmental outcomes
- **Driving 'on the ground' activities** such as implementing further energy efficiency improvements
- **Investing in and driving innovations** such as N2O catalysts, AdBlue, and digital agriculture technologies such as the N-sensor
- **Driving programs** such as the Farm to Market Alliance and Cool Farm Alliance

Yara is actively engaging in multi-stakeholder platforms



BUSINESS &
SUSTAINABLE
DEVELOPMENT
COMMISSION

AFRICAN
GREEN
REVOLUTION
FORUM



The
Food and Land Use
Coalition

WORLD
ECONOMIC
FORUM



NEW VISION FOR
AGRICULTURE



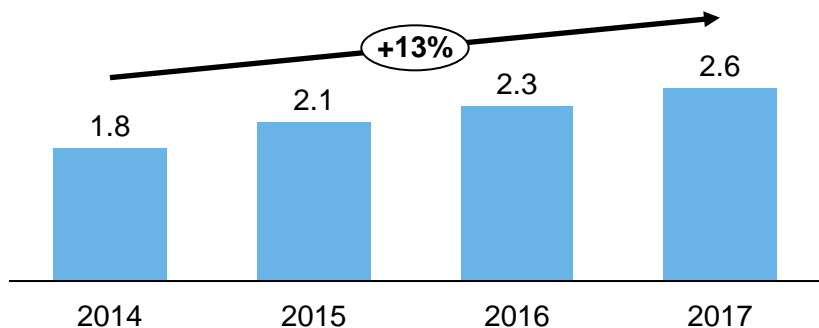
World Business Council for
Sustainable Development

Source: Yara GRI reporting

Yara is investing in solutions for NOx abatement in transportation

Yara deliveries of reagent for NOx abatement

Million tonnes



- Urea and Ammonia are used as reagent for NOx abatement in road transport (AdBlue), maritime transport and land based industry
- It can remove up to 96% of the NOx emissions and the growing demand has been driven by legislation
- The customers require high product quality, 24/7 deliveries and strong reliability of supply

Yara is investing in further growth



- Yara produces AdBlue at 5 plants and is the world's largest producer of Adblue for NOx abatement
- Yara recently expanded our Brunsbüttel plant, making it the largest AdBlue producing plant in the world with 1.1 million tonnes capacity
- The NOK 250 million expansion project was delivered with no safety incidents, on time and within budget

Our strategy and targets are guided by our mission and vision

Our Mission

*Responsibly feed
the world and
protect the planet.*

Our Vision

*A collaborative society;
a world without hunger;
a planet respected.*

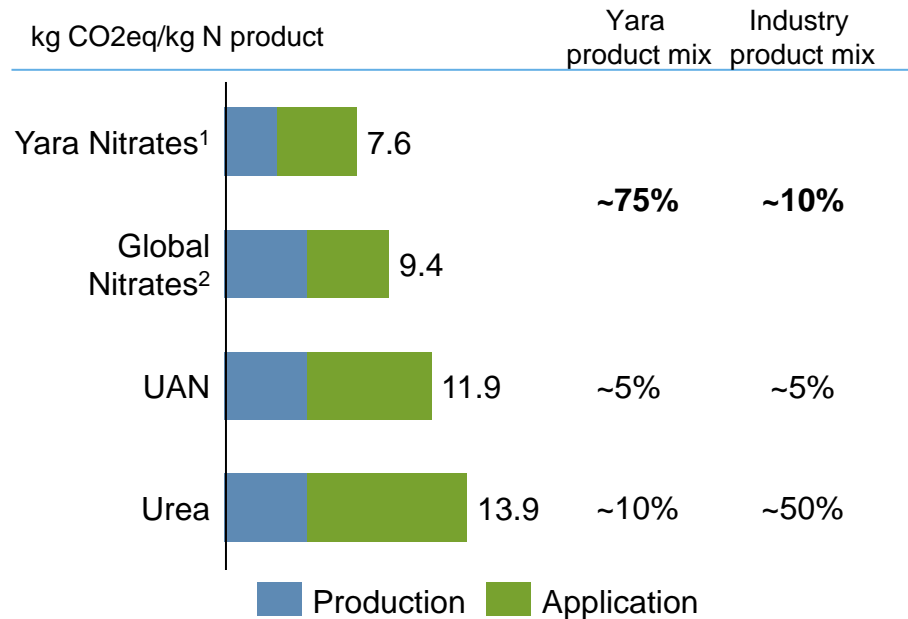
Yara's solutions improves food production per hectare, delivered through products with lower emissions per ton

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

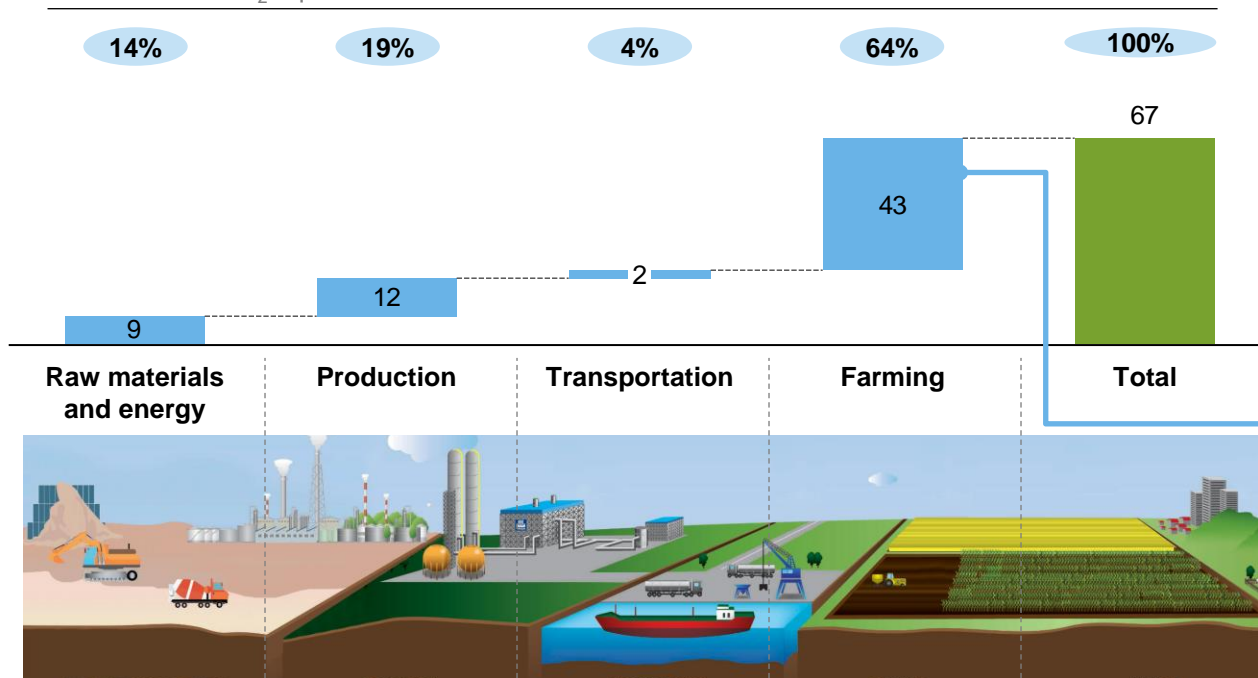
Yara's product mix has significant less emissions than most of our competitors'



Yara takes a holistic view of the climate impact of its operations

2016 GHG emissions from fertilisers produced by Yara

Million tonnes CO₂ equivalents



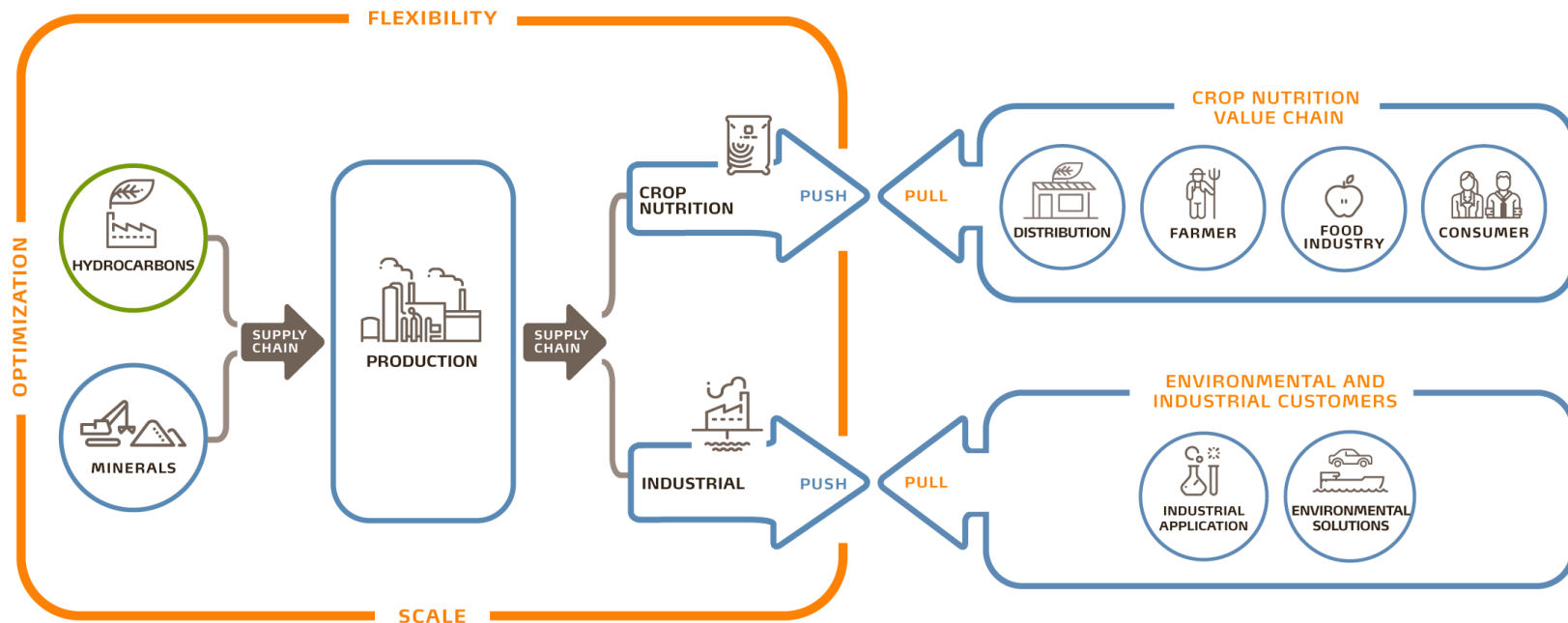
Source: Yara

Fertiliser use is 60% of Yara's assessed footprint

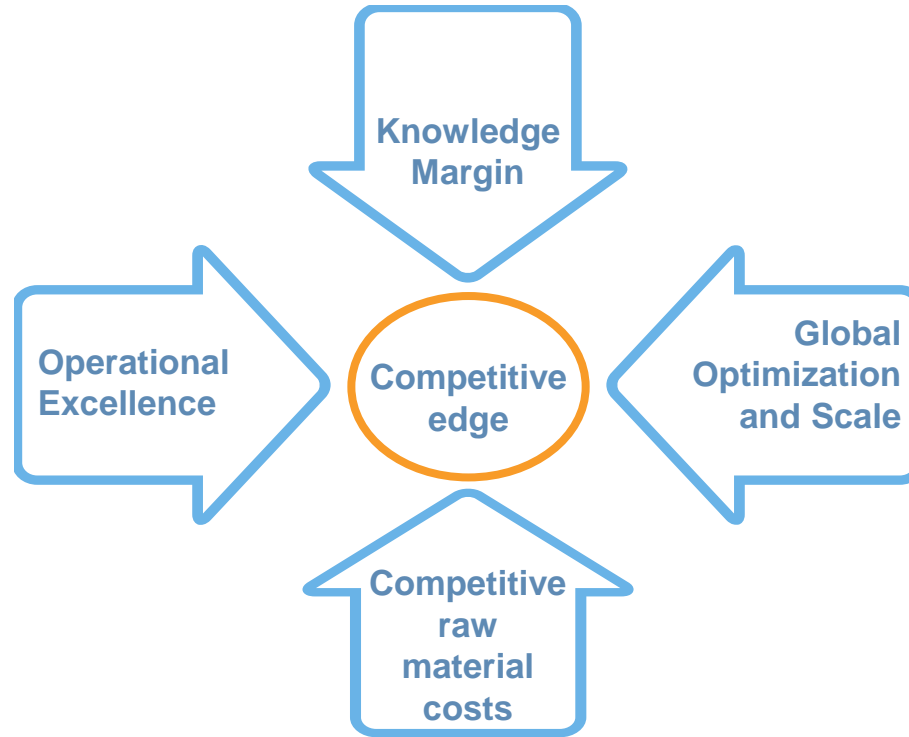
Emissions related to volatilization of nitrogen after application. In addition the emissions, this also represents losses for the farmer, as the volatilized nitrogen is not contributing to the yield

Yara's strive to improve farmer productivity and economics through better and more precise application of fertilizer reduces the losses – and as such also the emissions

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

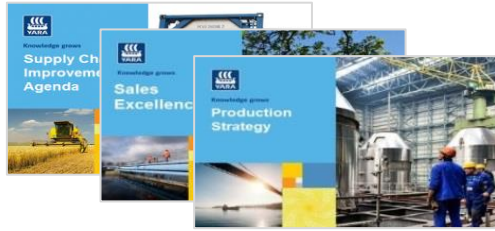


Strategy execution is focused on strengthening competitive edge



Two main responses to strengthen our competitive edge

Improving returns



Yara improvement program

Profitable growth

1. **Organic market development**
2. **Step growth – M&A and new-builds**



TATA CHEMICALS LIMITED

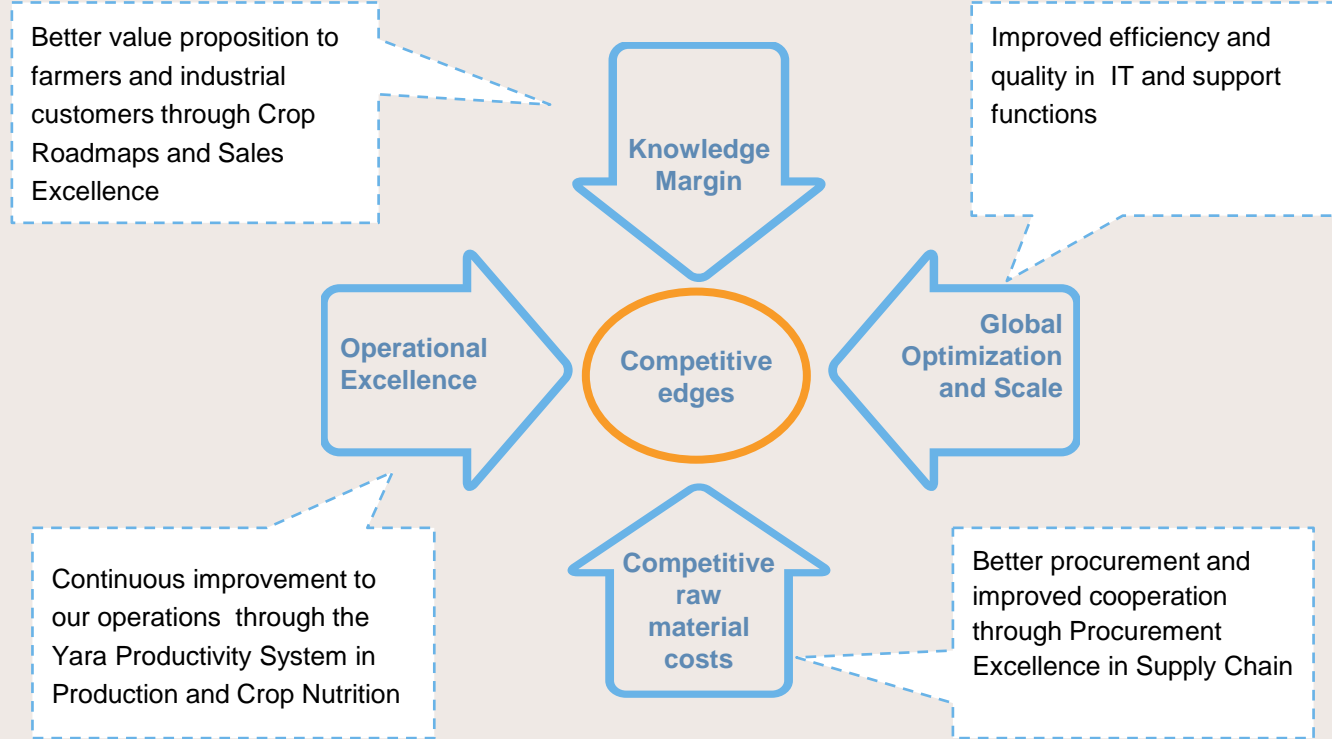
Sustainable business

Sustainability is integrated in Yara's strategy, and is reflected across our strategic responses

Strengthening competitive edge through improving returns

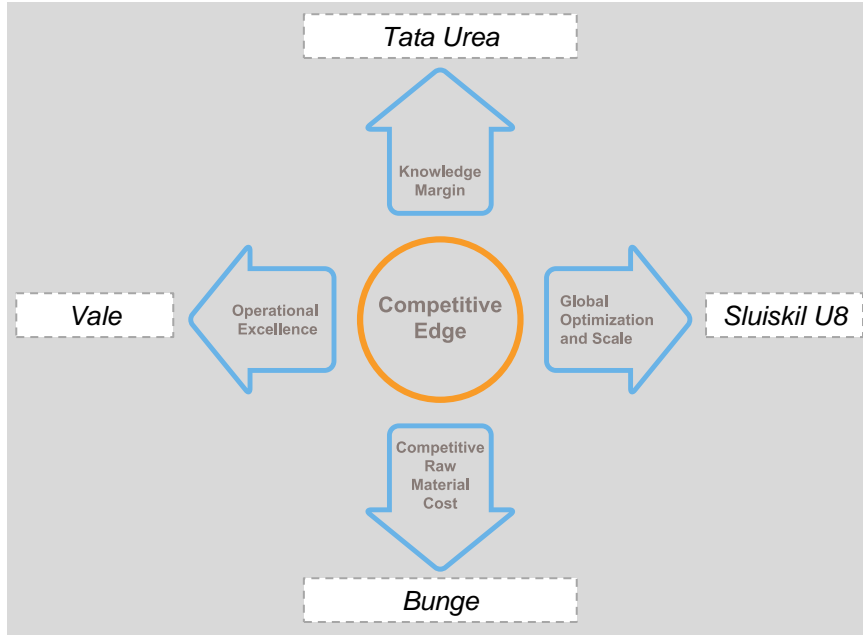
Yara Improvement Program

“Making Yara fit for the future”

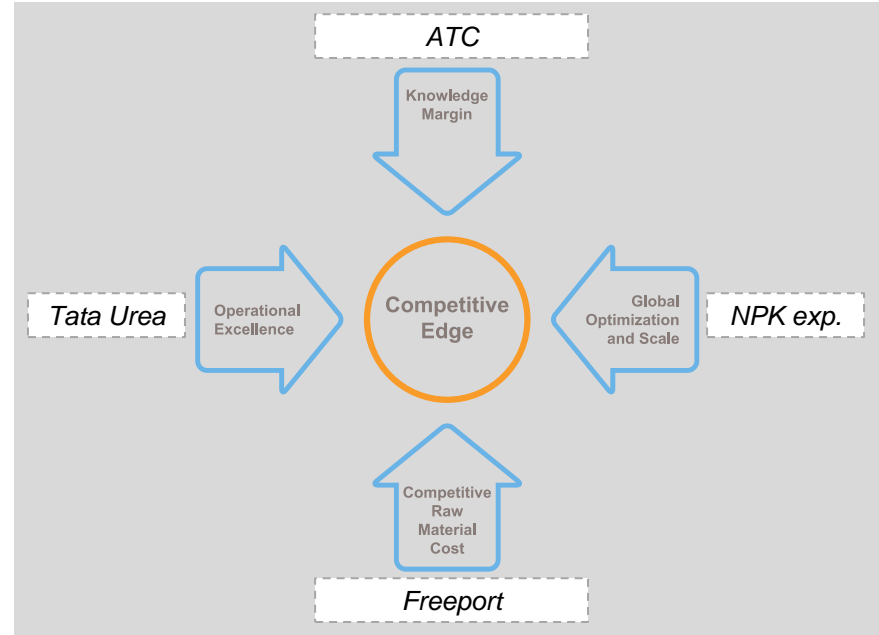


Strengthening our competitive edge through profitable growth

Yara can use our competitive edge to extract value from growth...



... and growth can help to strengthen Yara's competitive edge



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

Brazil and Latin America

- 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

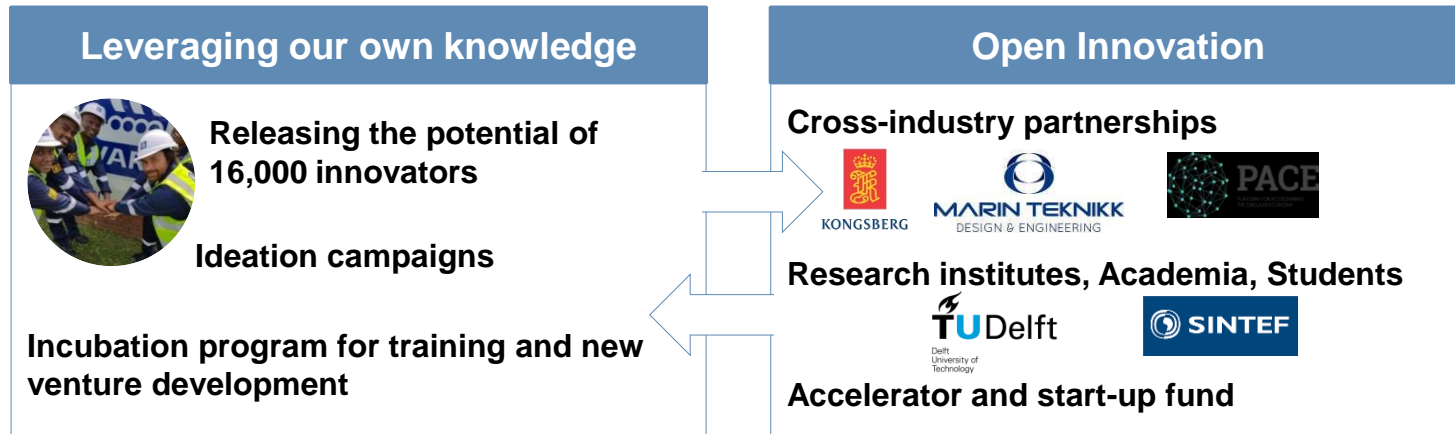
Yara has four different priority areas for growth

1. Expand premium fertilizer sales and supply
 - Premium can be created at many dimensions
 - Premium alone commodities and competitors ensure 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. Add 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
 - Securing security premium risk, S&P
 - High-value creation in early stage development, upstream value and market integration

Innovation is crucial to protecting Yara's current position and developing its long-term competitiveness

Yara innovates to protect and disrupt – a balancing act

Yara's **innovation pipeline** is measured both in financial terms (**Sales & EBIT** contribution) and climate impact (**CO₂ equivalent** reductions)



Yara is innovating with a purpose in all parts of our value chain

Production & Process Technology

- **Green Tech development** focused on carbon neutral ammonia production and greening of supply chain
- **Small scale, decentralized** production set-up for remote locations
- **New markets** enabler



Circular Economy Biocycle

- **From waste back to nutrients**, enabling organo-mineral fertilizer
- **Nutrients back in Fertilizer factory**, mixing our primary production with secondary input
- **Decentralized and territories focused**, Urban short nutrient cycle



Digital Solutions

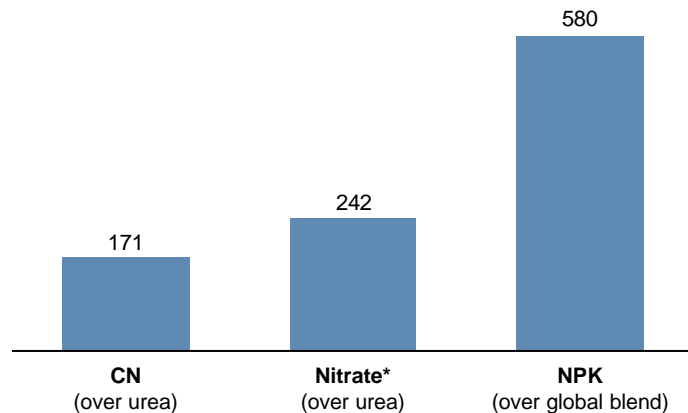
- **Agriculture Technology** innovation focused on enabling efficient sustainable farming
- **Food value chain integration** for nutrition and environmental impact traceability and improvement
- **Industry 4.0** for increased safety, reliability and productivity at our production sites



Yara's integrated business model and innovation approach drives premiums above commodities

2017 total realized premium for key premium products, USD Million

Crop Nutrition



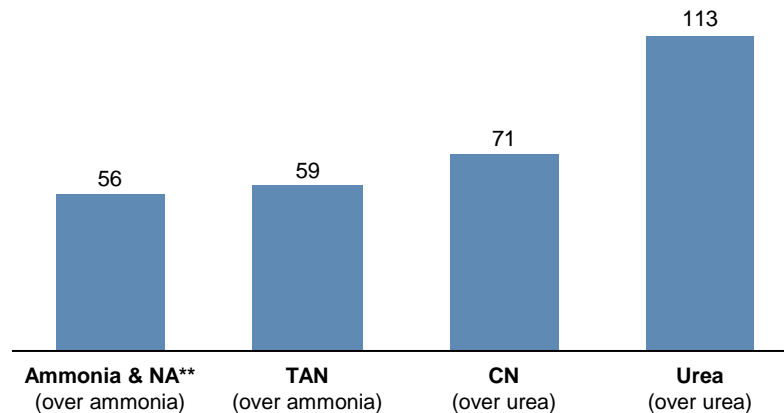
Premium over commodity

233%

28%

51%

Industrial



24 %

71 %

321 %

28 %

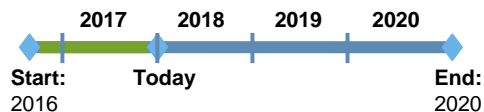
Yara Improvement Program

Fit for
the
future



Yara Improvement Program – 2017 status

Program progress

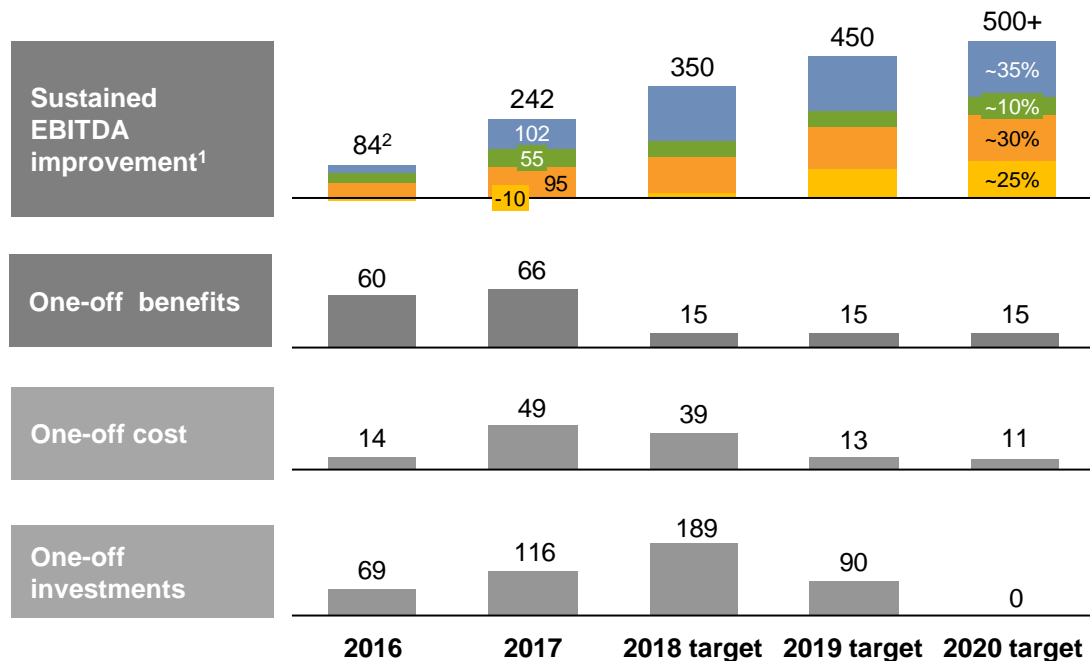


- 2017 EBITDA benefits ahead of target (in 2015 terms):
 - Production volume improvement according to plan
 - Energy consumption improvement ahead of plan
 - Variable cost improvement ahead of plan
 - Fixed cost improvement behind plan
 - One-off program costs higher than original estimate

Financial benefits

Annual impact, USD million, vs. 2015 baseline, at 2015 margins

■ Production volume
 ■ Variable unit cost³
■ Consumption factor
 ■ Fixed cost



Yara Improvement Program - Delivering value across the company



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

Procurement Excellence

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

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

Working Capital

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

Sales & Marketing professionalization²

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

More for less

Added value

EBITDA target¹

One-off effects

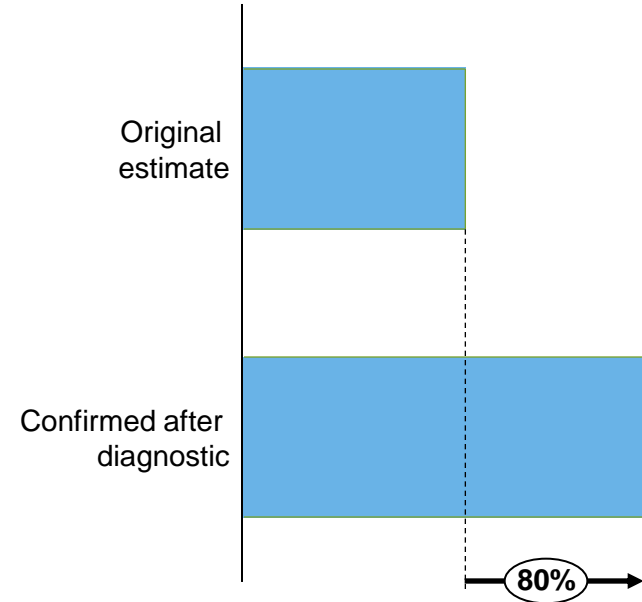


The Yara Productivity System (YPS) is a structured way of working applied across operations and knowledge work

The Productivity System covers all of Production



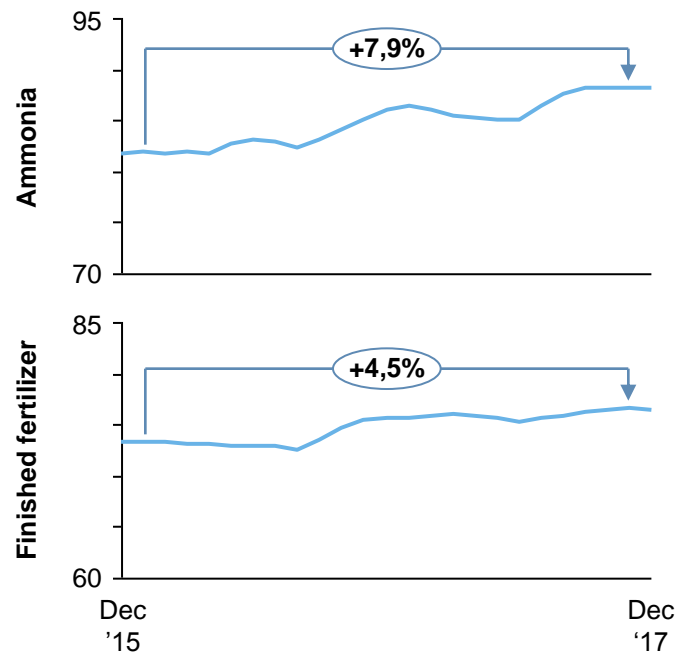
Identified potential higher than expected



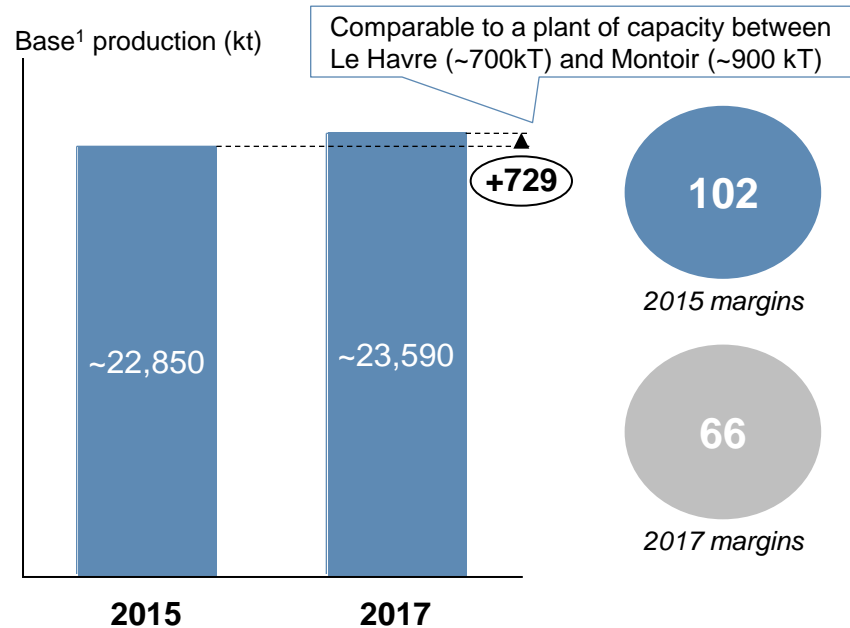
Note: Improvement potential identified at the 27 sites covered by deep-dive diagnostic. Does not include potentials identified by YPS for capital projects and YPS for R&D

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



We can see the impact of YPS across the segment: Selected 2017 achievements

**>150 MUSD
improvement
delivered**

**>50 MUSD
one-off improvements**

Fixed costs rising 1% - **less
than inflation & volume
increase**

**Yearly production
records**

at Belle Plaine, Glomfjord, Köping,
Uusikaupunki, Siilinjärvi plant, Siilinjärvi
mine, Rostock, Brunsbüttel, Sluiskil,
Ravenna

12M rolling **finished
products production
record**

**TRI rate of 2.0
60% lower** than 2 years
ago

All time TRI records in
Paulinia, Rio Grande, Ponta
Grossa, CILEM

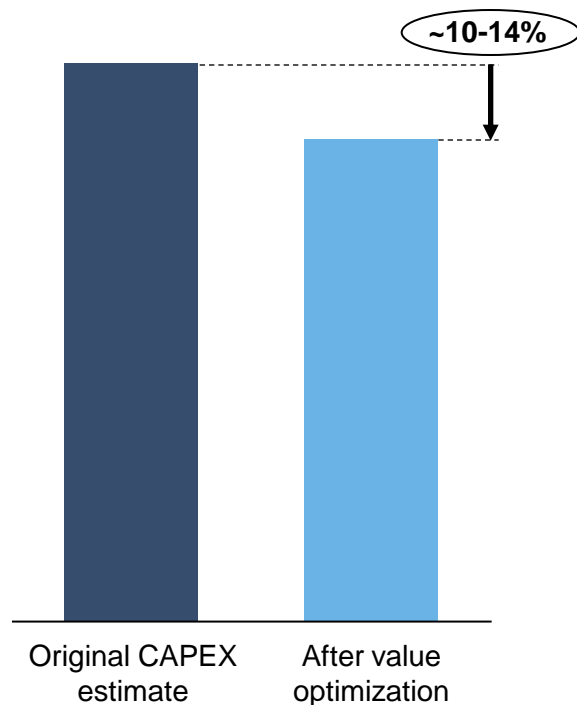
**15 sites with YPS
rollout** completed / ongoing
at **end of 2017**

Led by our project office, YPS for capital projects is in progress and showing results

19 transformation levers

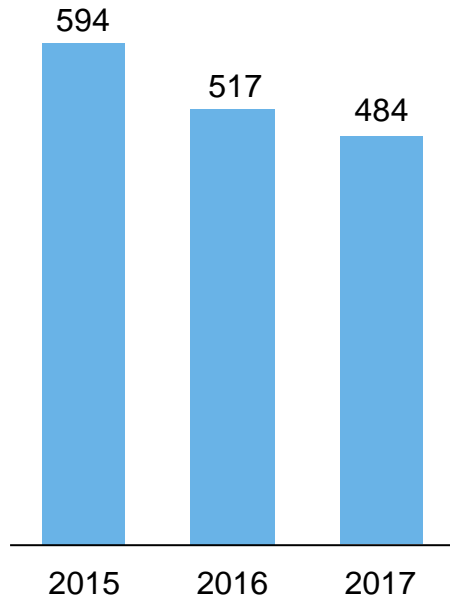
Lever	Description	Lever	Description
L1	Value optimization	L11	Systems for engineering
L2	Project performance management	L12	Hard-skill capabilities
L3	Capital Value Process	L13	Contracting strategy
L4	Target setting	L14	Mobility and commuting culture
L5	YPO positioning	L15	Resource deployment
L6	Portfolio management	L16	Organizational structure
L7	Leadership and communication skills	L17	PAP/PAR cycle & HESQ audit
L8	Talent management	L18	ISO 9001 qualification
L9	Value assurance in execution	L19	Effective use of Lessons Learned
L10	Improving YPO tools		

CAPEX reduction potential identified



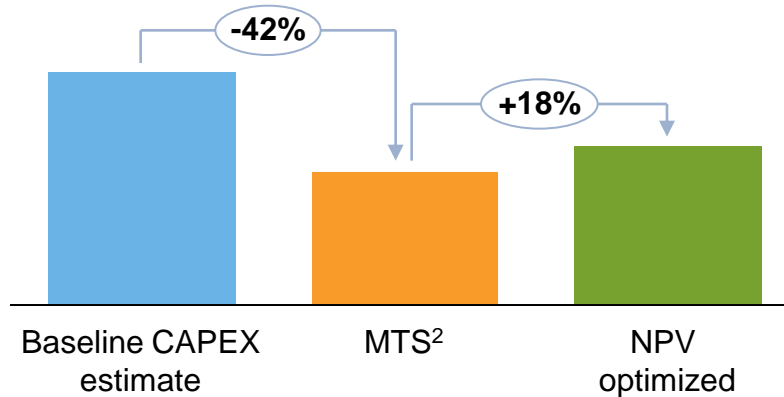
A key part of YPS for projects is to conduct value optimization for our portfolio of smaller on-site projects

Yara OCOSHE¹ spend



Identifying and capturing value

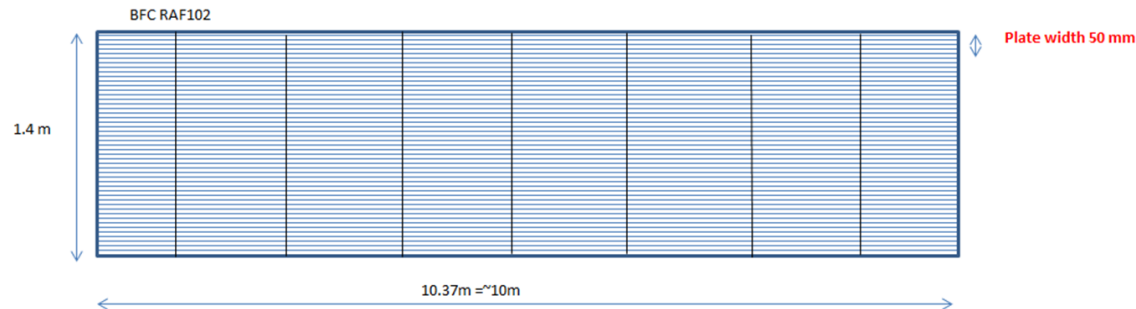
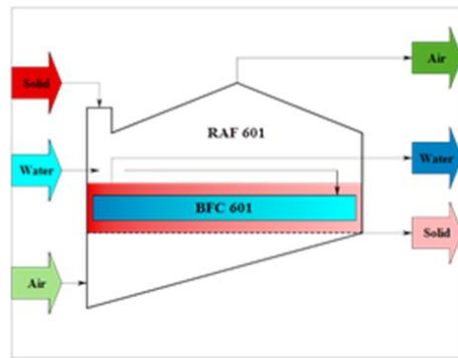
Example: Siilinjärvi Washing Bay Project



YPS makes R&D more productive, both shortening time to impact and allowing more focus on improving our plants

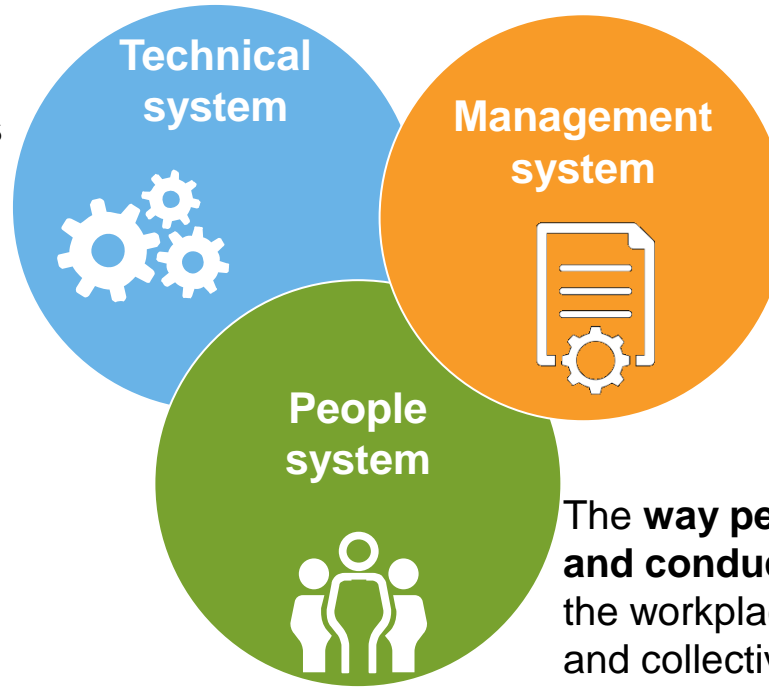
Improvement example:

Debottlenecking cooling capacity at Sluiskil with estimated 0.9 mEUR/year OPEX impact



YPS is our framework for continuous improvement – Developed across three dimensions

The way **physical assets and resources** are **configured and optimized** to create value and minimize losses



The **formal structures, processes, and Systems** through which the operating Systems are managed to deliver the business objectives

The **way people think, feel, and conduct themselves** in the workplace, both individually and collectively

Improvement example: Reduction in weekly cleaning time of blending machine to bring increase of 6.2 kt / year in Rio Grande

50%
reduction in weekly
cleaning time











Improvement example: Root Cause Problem Solving to improve reliability for plant start-up in Belle Plaine

Identifying the root cause of failure



Yara applies several Industry 4.0 technologies with more to come

Area		Example initiative	Area		Example initiative
	Additive Manufacturing	3D printing use cases		Advanced Analytics	Advanced analytics for granulation
	Augmented Operator	Augmented Reality proof of concept		Predictive Maintenance	GE Smart Signal for heavy rotating equipment
	Autonomous Operations	Advanced Process Control		Internet of Things	Connected plant
	Big Data	Central Plant Information Management System (PIMS)		Simulation & Digital Twins	Operators Training Simulator

Procurement Excellence 2018 – in a nut shell



PX2018 Overview

Spend

USD **10.2** Billion¹
Total

USD **6.5** Billion
Direct

USD **3.7** Billion
Indirect

Wave 1

~**100** cross-functional
team members

5 categories

Improvement

> **200**

Initiatives identified

Target

> USD **150** Million
savings by 2020

World-class procurement function

Cross-functional
operating model

Wave 2

~**50** permanent
category team members
across

8 categories

Savings

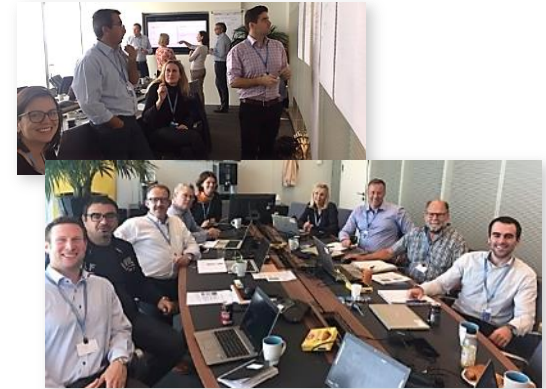
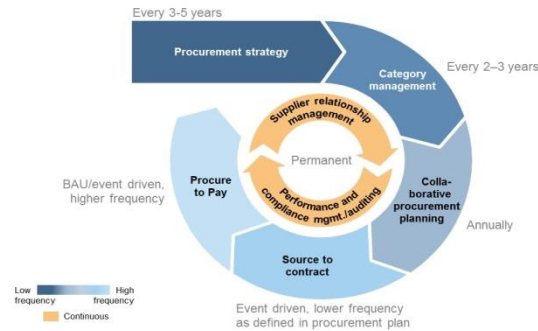
USD **90** Million
realized

New cross-functional operating model will provide sustainable impact

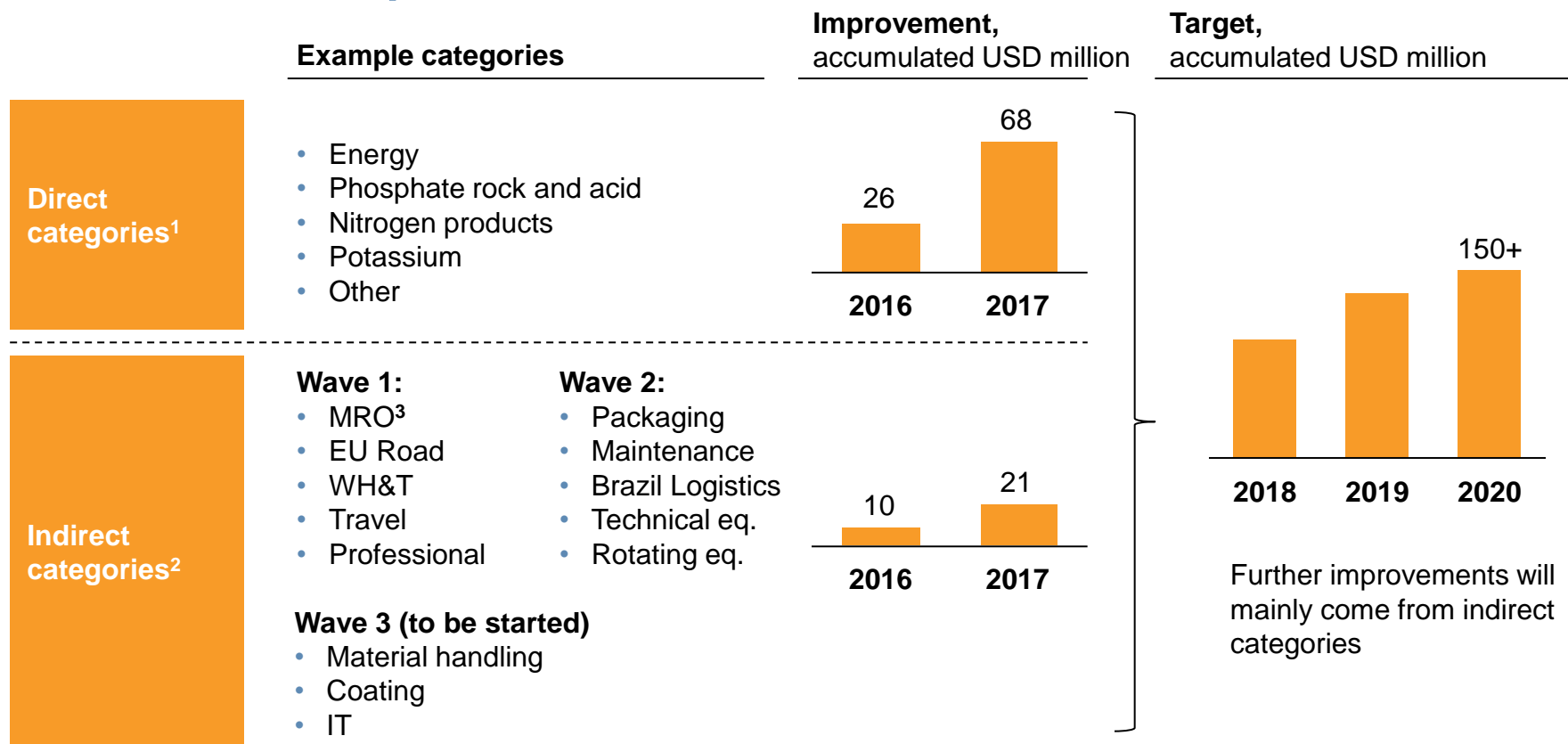
Best practice
processes

Innovative
Tools

Cross functional
Teams



Variable cost improvements have contributed ~90 USD million



Procurement Excellence 2018 – Tangible results around the globe

- Packaging

1

Convertex project



2

Consolidating demand

17 → 11

3

Invite new suppliers for competition

Supplier Power



Procurement Excellence 2018 – Tangible results around the globe

- MRO



Old self retracting
lifeline



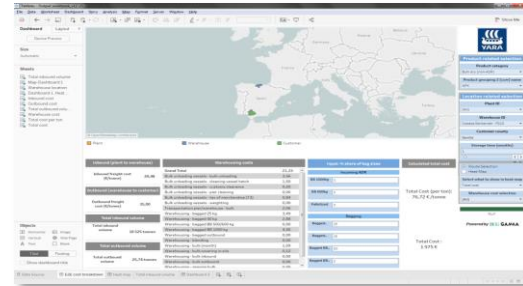
New self retracting
lifeline

Procurement Excellence 2018 – Tangible results around the globe

– Warehouses and terminals



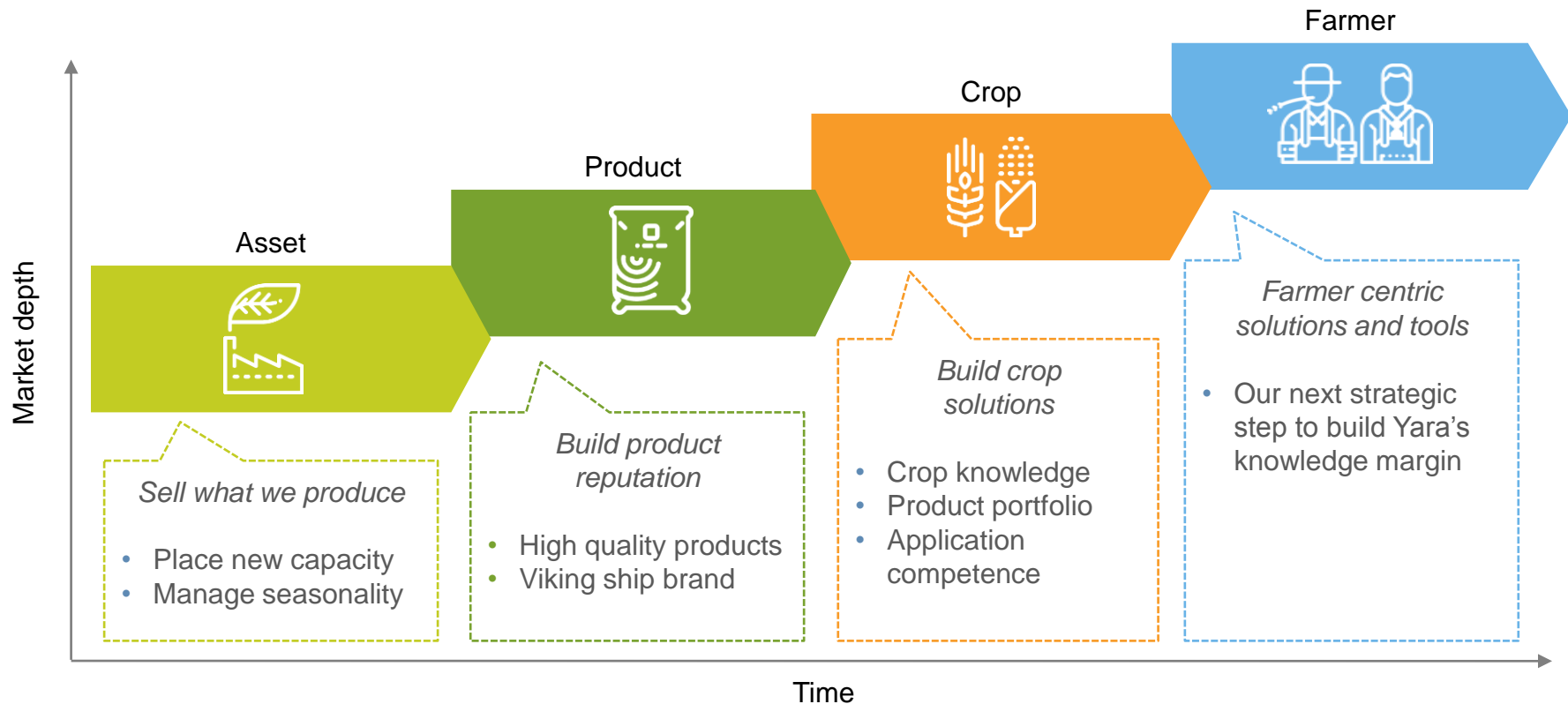
Optimization of storage and transportation costs



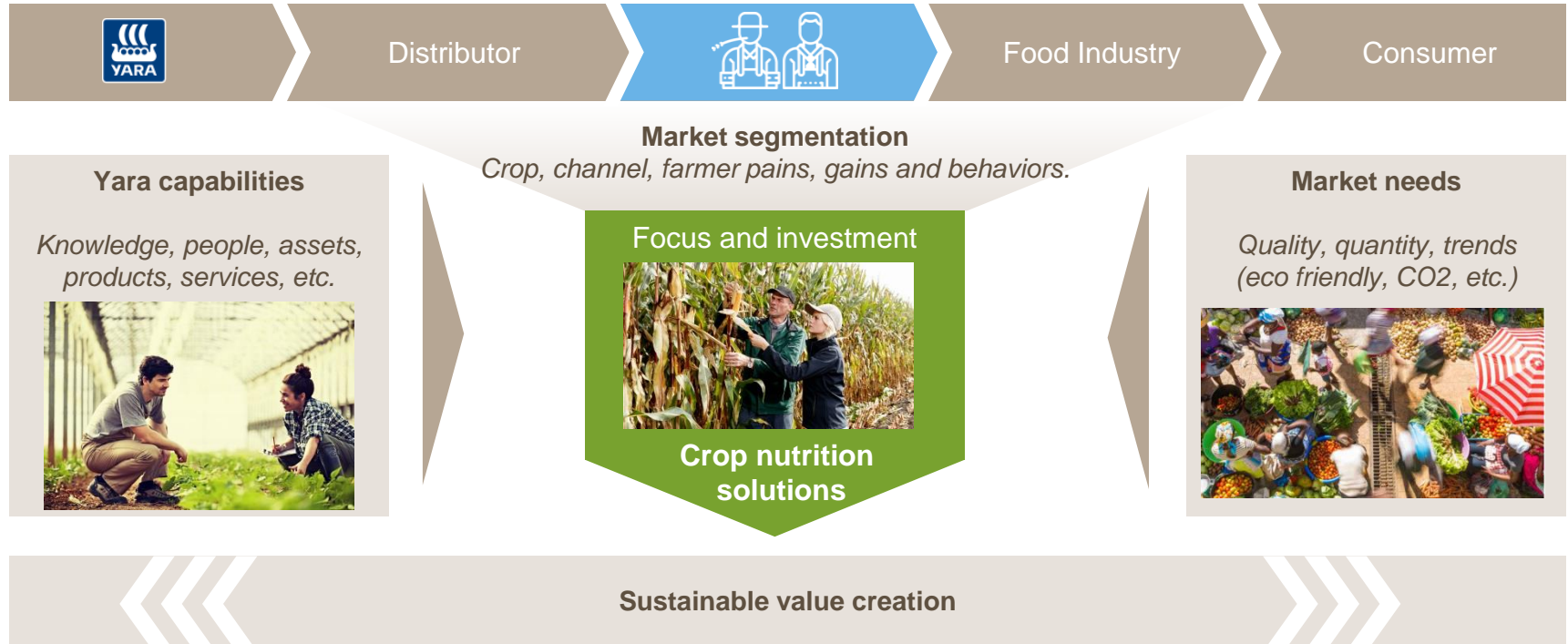
Evaluation of “actual cost per tonne”



Strategy recap - continuing the journey closer to the farmer



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



Our Crop roadmaps move our strategy into action

...systematically breaking down the strategy into action plans per crop

56 Country quantitative roadmaps per key crop
- Long term volume targets per group

206 Key crop/country qualitative roadmaps
- Crop specific strategies, actions and resource plan

11 Functional global roadmaps
- Roadmaps for key products, agronomy, marketing, digital value chain, competence, tools and services and R&D

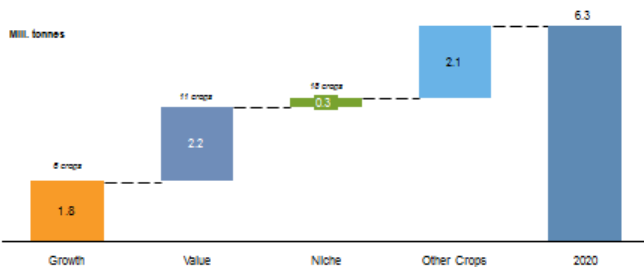
Integrated roadmaps

- Focus and priorities
- Targets
- Alignment
- From strategy to action
- Tactical growth plan for expansion program

IR - 01 March 2016

28

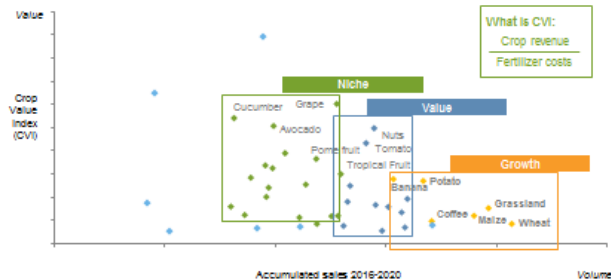
Significant growth planned in all crop categories



IR - 01 March 2016

30

Segmenting crops by volume and value



IR - 01 March 2016

29

Responses and actions consolidated for each growth crop

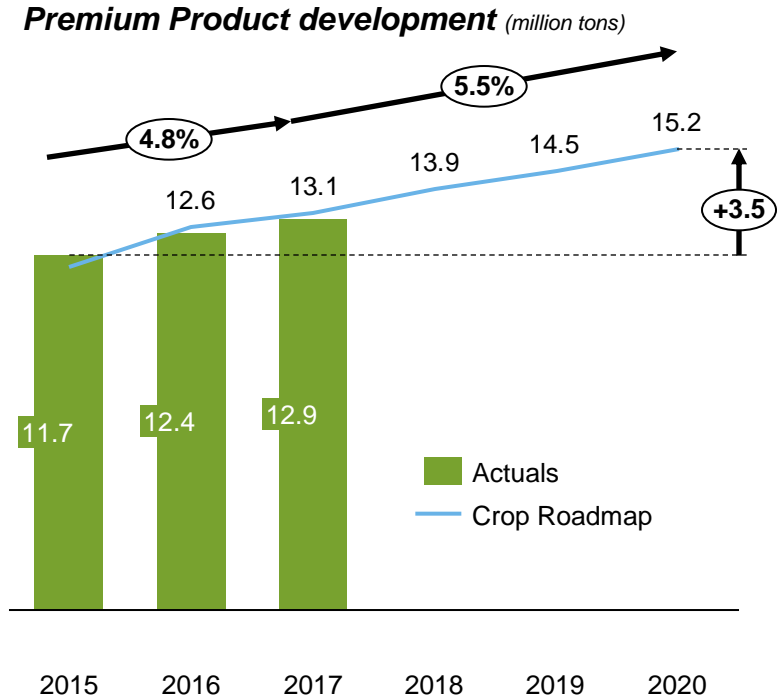


IR - 01 March 2016

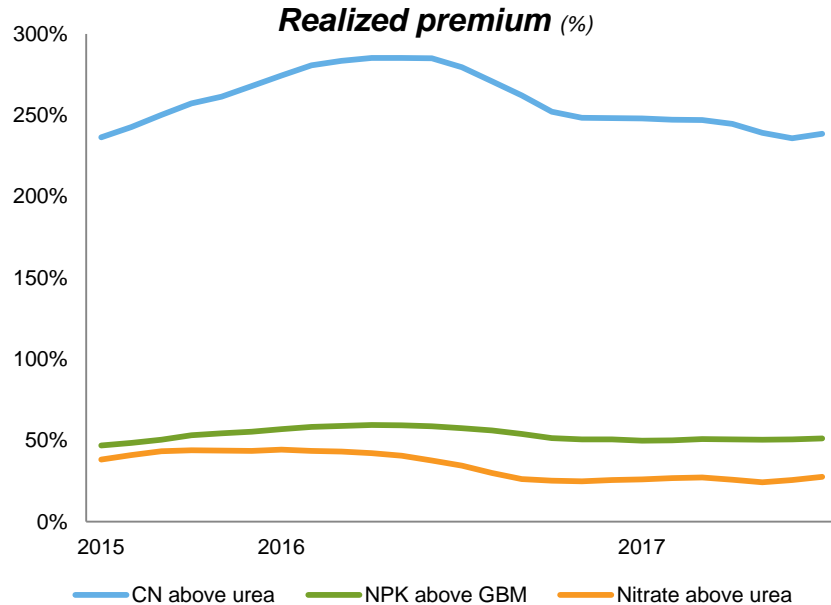
25

Yara has delivered a growth of 5% in Premium Products and aim for continued growth despite challenging markets

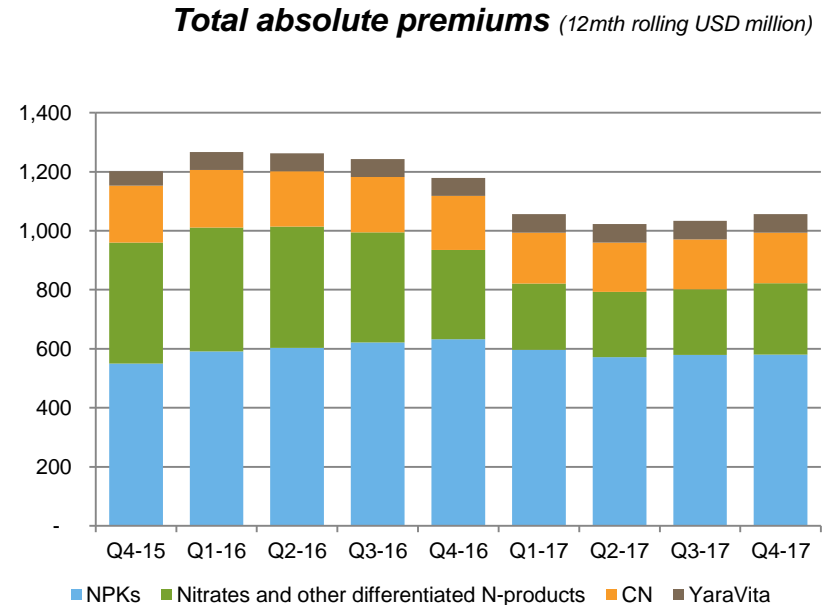
- CAGR of 4.8% between 2015 and 2017
- Annual market growth of 1.8%* for the same period
- Growth rate sustained



We create value above commodities by focusing on the market segments that best match our offering



Realized premium/t above commodities for main categories of own produced Premium Products



Total realized premium for key premium products

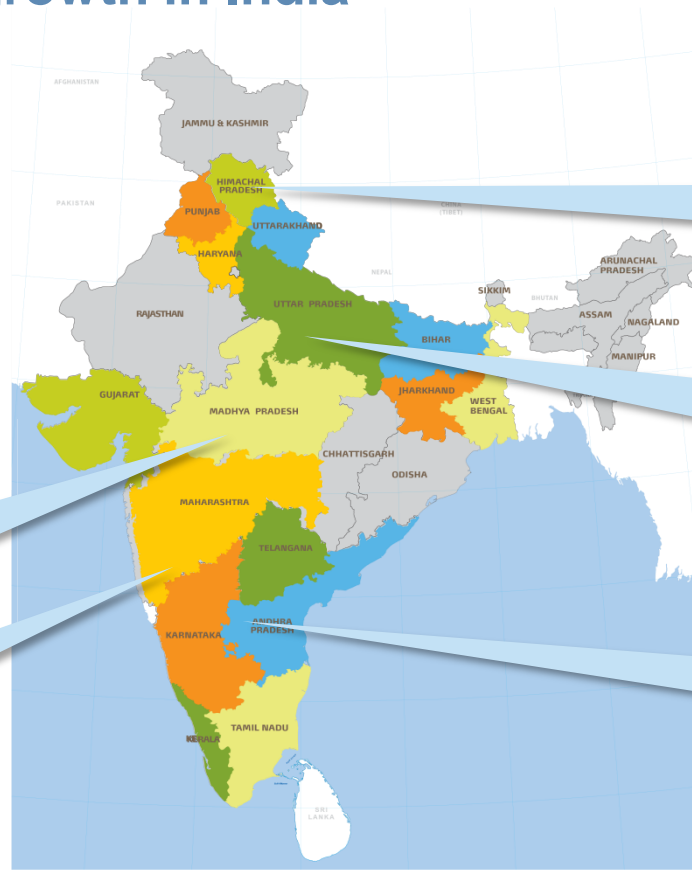
Crop-focused Yara growth in India



Central India



Maharashtra



Himachal Pradesh



North India



South India



Acquisition of Tata Chemicals' fertilizer business expands our footprint, enabling accelerated premium product growth



Integrated world scale urea plant in Babrala, Uttar Pradesh

- ~0.7 million tons ammonia production
- ~1.2 million tons urea production
- Commissioned in 1994

World-class operations and energy efficiency

- Workforce is committed to high HESQ standards; solid safety track record
- Energy consumption below 21 mmbtu/t, on par with Sluiskil

Significant distribution footprint

- Warehouses: 4 own and approx. 100 third-party operated
- Salesforce: 60 own, and approx. 300 on contract

Acquisition provides footprint to accelerate premium product growth

- Yara India 17% p.a. growth in premium product sales since 2010
- Yara Brazil premium products growth provides reference case

Leading the digitalization is key to deliver on our Farmer Centric strategy



Strengthened and aligned brand positioning

Develop **farmer centric solutions** that commercially integrate knowledge, digital tools and services to our product portfolio

Actively develop **aligned market channels** that enable knowledge sharing with the farmer

Actively develop profitable local and global **partnerships** along the **value chain**

Be in the **forefront of innovation and R&D**, and pursue smaller M&A to add new knowledge areas

Safety and compliance – key priority in everything we do

Digitization, big data, and precision sensors are disrupting agriculture

Real-time precision sensors and insights

Data science, modelling, machine learning



Automation of application and farm operations

Tailored digital two-way communication

The farm of the future is getting more interconnected, sophisticated, and convenient

The digital disruption can unlock multiple benefits for the farmer

More insights

millions of datapoints

Unmatched precision

< 1 m²

Smarter choices

"computational agronomy"

Unseen connectivity

reach a universe of knowledge



Higher yield

to feed the world

Higher quality

for better food

Less waste

to protect the planet

More value

for the farmer

Yara has a long and successful history in innovation to build on



1956
Launch of Crop
Nutrition R&D



2005
Commercialization
of broad range of
digital tools

1905
The invention



1997
First prototype N-sensor



NOW
Stepping up
Digital



Our Digital Aspiration

*Building
the Global Digital Leader
in Crop Nutrition*

Cornerstones of our Crop Nutrition Digital Strategy

Our offer

- We innovate **industry-leading digital nutrition solutions** that make a real difference for the farmer
- We stand for **world-leading nutrition knowledge**

Our customers

- We have a unique **global reach** into 160 countries
- We target **all farmers** with offers tailored to their specific local needs

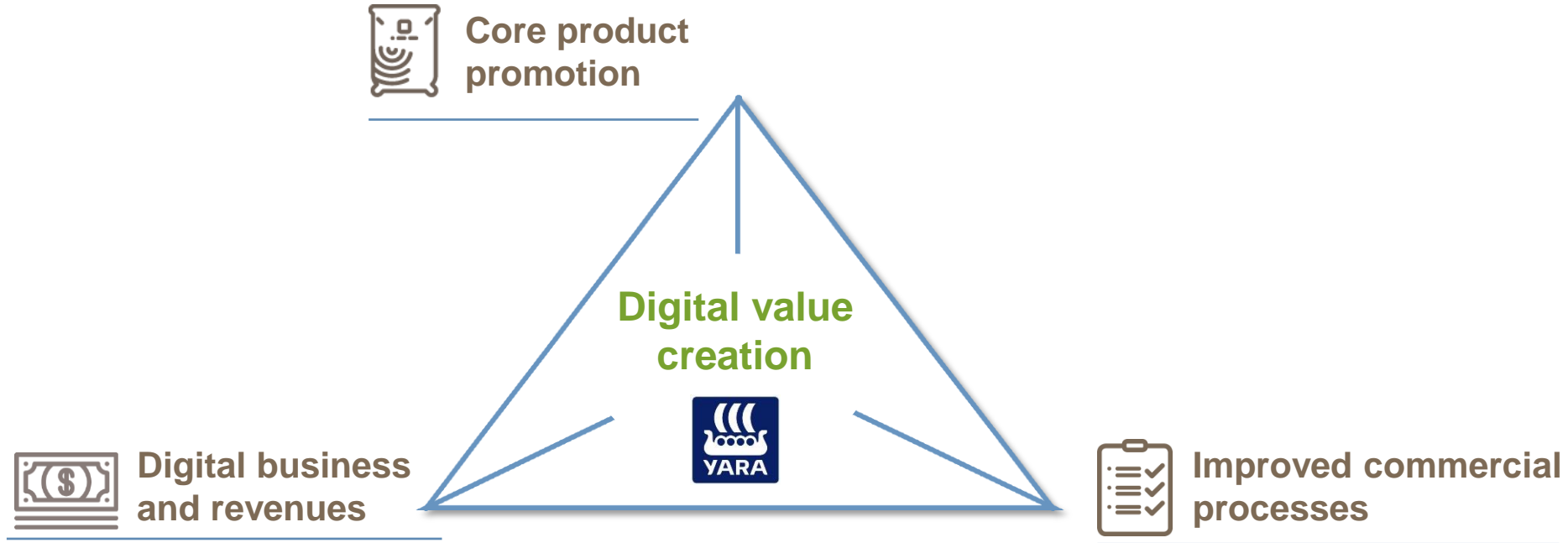
Our benefits

- We build on the **world leading fertilizer business**
- Our integrated business models allows **holistic value creation** that sets us apart from competition

Our focus

- We are building a new way of working around **speed and agility**
- We are quickly **stepping up our digital capabilities** in a new unit: Yara Digital Farming

Our ability to holistically create value will set us apart



Where we stand

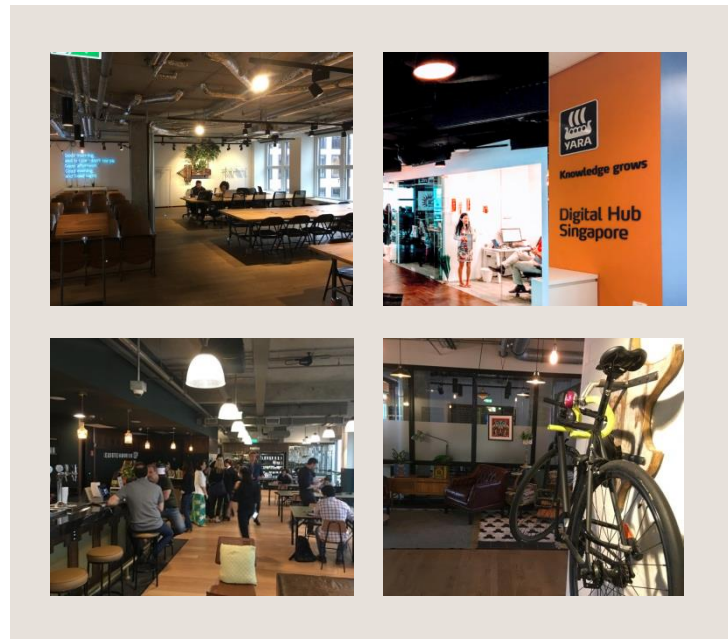
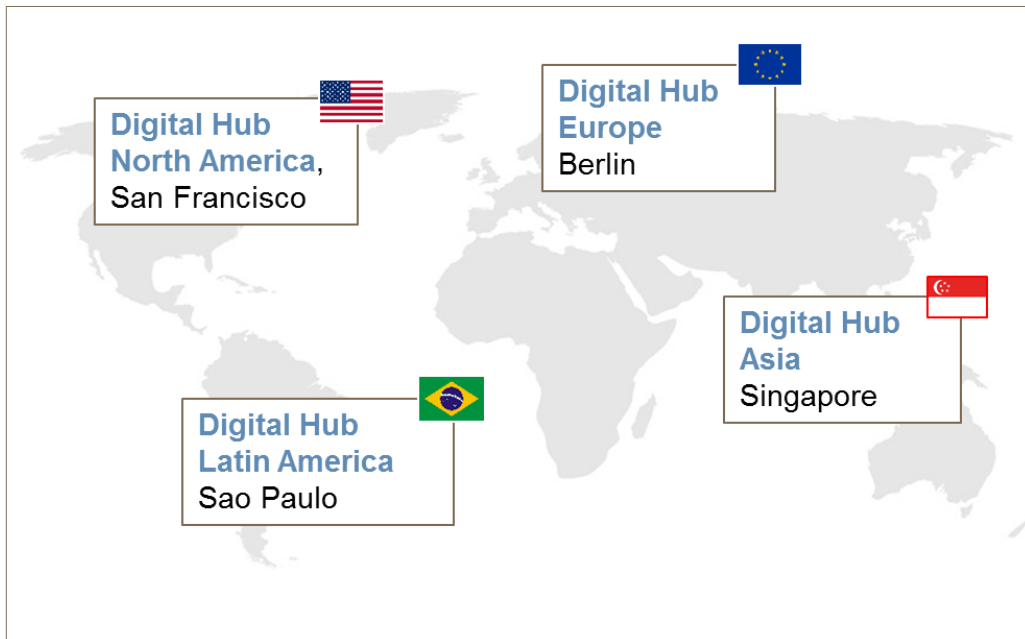
**Rapid expansion of our
activities in Digital
Farming**

> 100 employees
implementing our digital strategy

+ 60 employees in the past 6 months
in Digital Farming



We have launched 4 Digital Hubs as centers of gravity for our efforts





We are building new capabilities in Yara

Digital Entrepreneurs

UX Design

Digital commercial models

Agile innovation

We are working in an agile way

Agile innovation

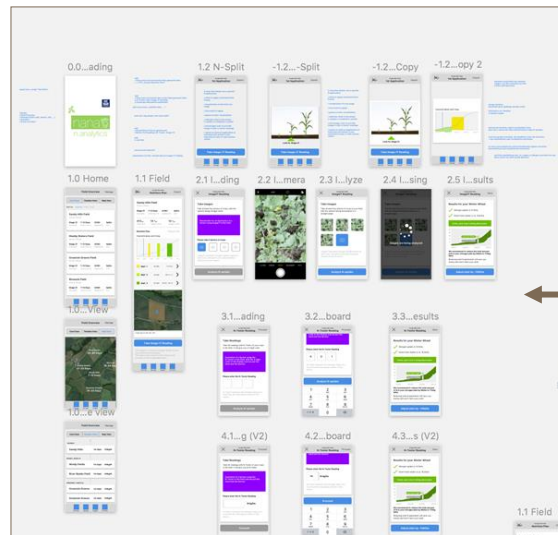
Weekly sprints,
first farmer testing in week 1

Farmer centricity

Tested digital solution with
>50 farmers in **6 weeks**

Fail fast (to succeed)

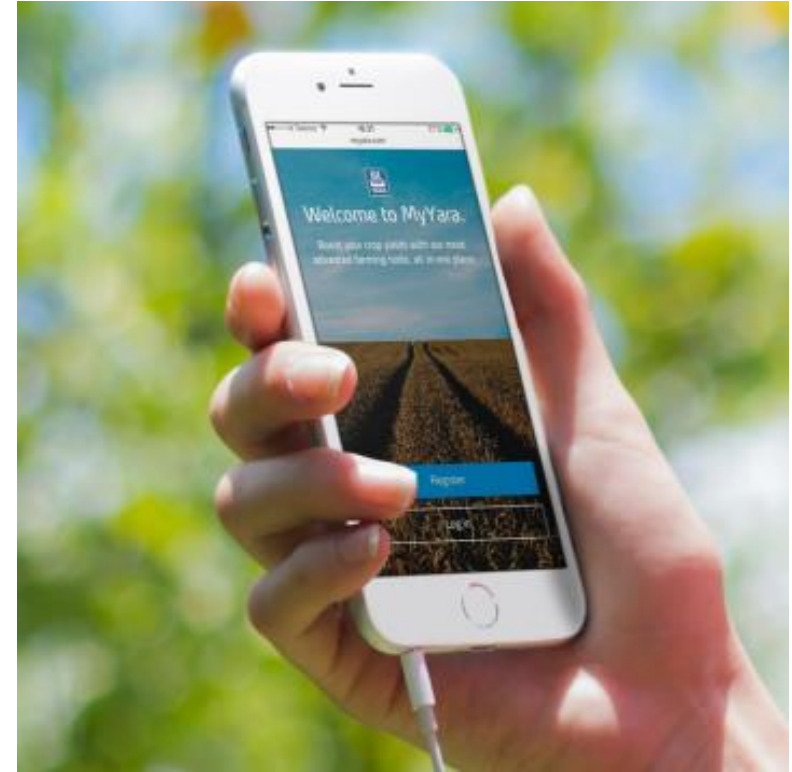
Fundamentally **changed**
hypothesis on digital product
value proposition **after 4**
weeks



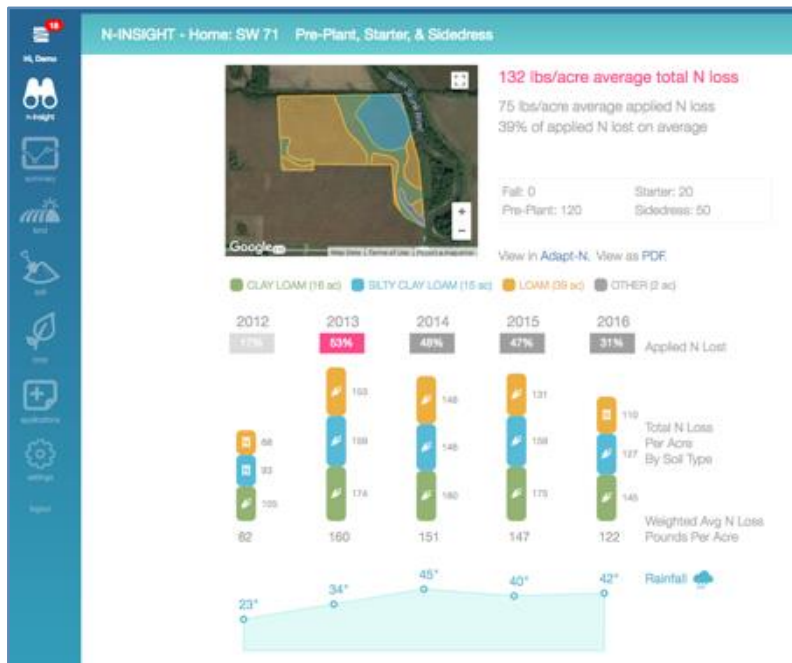
**Our Digital teams work as
“start-ups in a grown-up”**

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



Adapt-N – expanding our position in digital farming



- **Leading** Nitrogen recommendation platform
- **>15 years of scientific validation**
- **Proven benefits for farmers**
– well beyond competing digital tools
- **Reducing N-loss** by 35-40%
- **Winner** of Tulane 1 million N-Challenge



Benefits for Yara

- **Unmatched customer engagement**
Significantly higher reach to farmers, two-way exchange, deeper relationships
- **Knowledge leadership**
Invaluable insights into farmer needs to catalyze as a differentiator
- **New sources of value**
Build-up of digital service businesses and integrated fertilizer-service solutions
- **New instruments to fulfill our mission**
Smarter application of fertilizer to feed the world and protect the planet

Roadmap – Digital Farming

2018

- Capability building
- Innovating
- Piloting

2019

- Launch in core markets
- Prepare for global scale-up

2020+

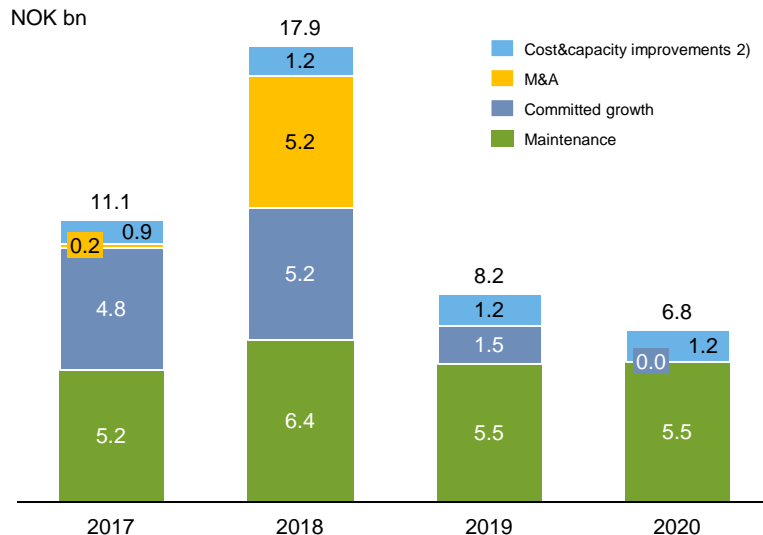
- Global expansion
- Financial viability

Our Digital Aspiration

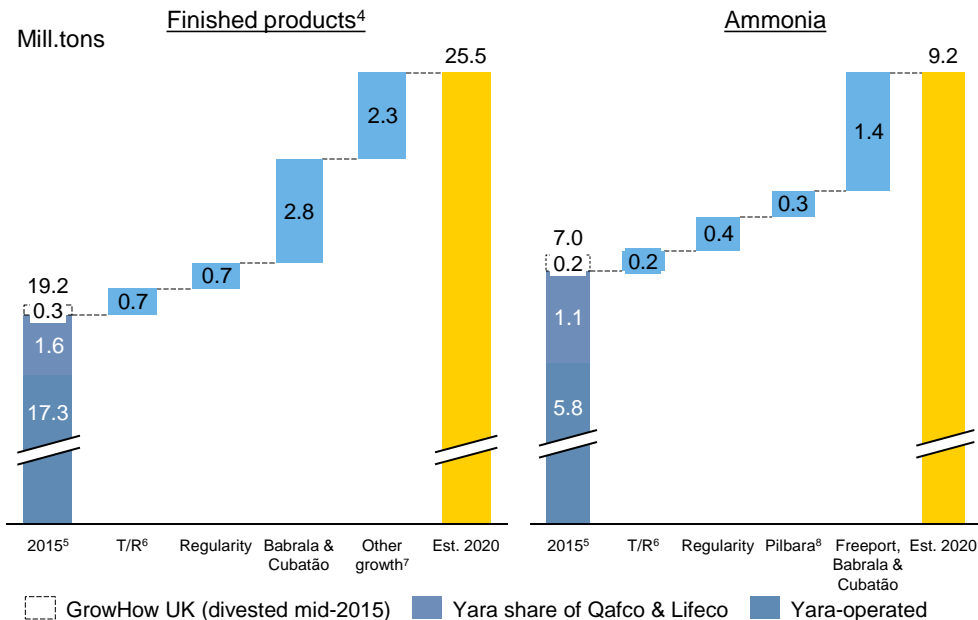
*Building
the Global Digital Leader
in Crop Nutrition*

High on-going Yara growth investment activity

Capex plan¹



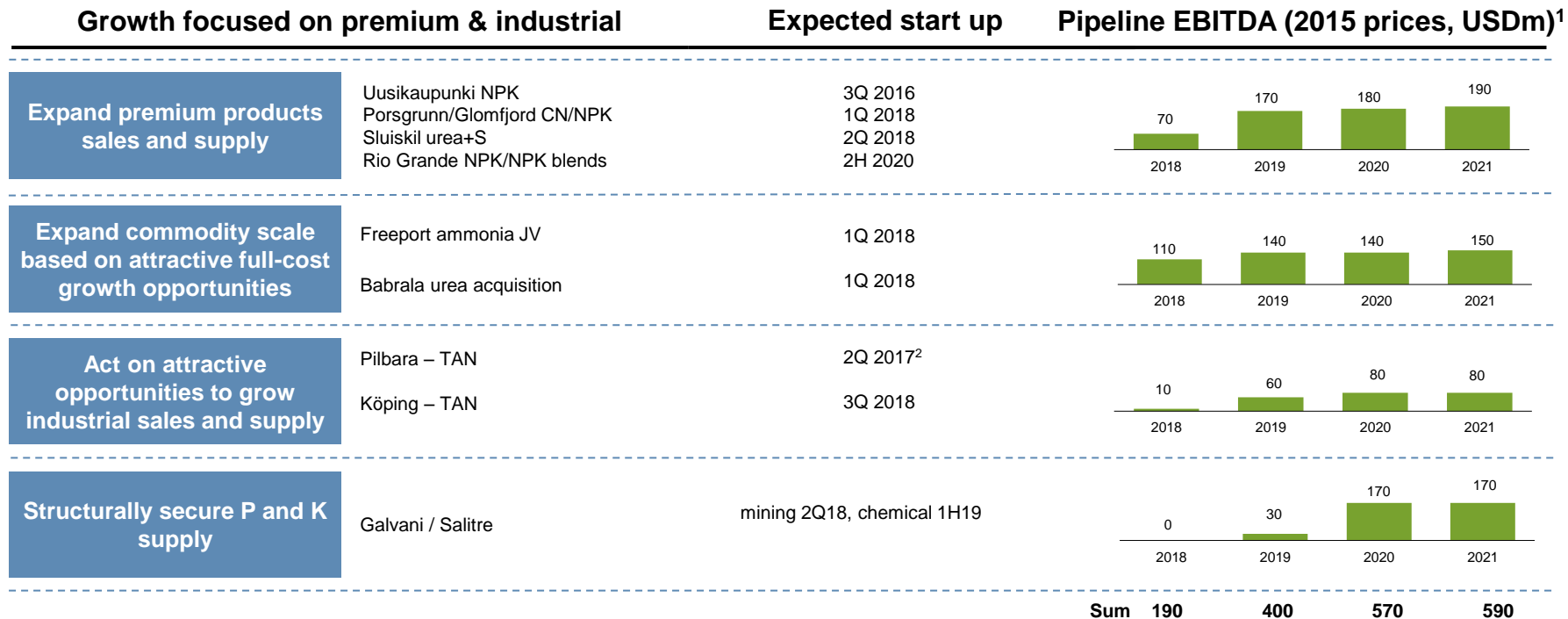
Production growth 2015 - 2020³



- 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: 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 NH₃ plant

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



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

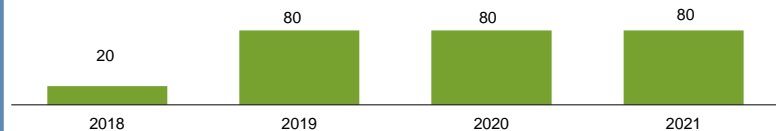
² Plant started up in 2Q 2017, but has been down for technical reasons since 3Q 2017. Expected re-start 2Q 2018.



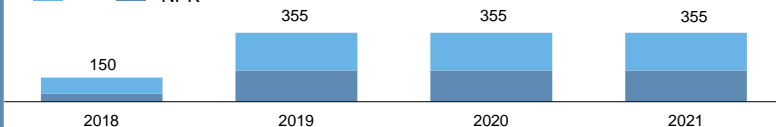
350 kt NPK and Calcium Nitrate expansion in Porsgrunn and Glomfjord, Norway

Business case highlights

EBITDA (2015 prices, USDm)



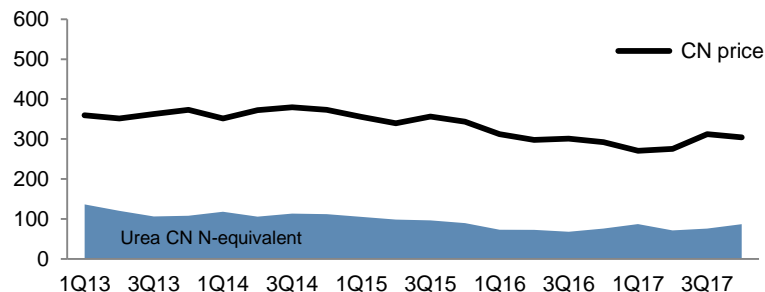
Volume phasing (kt)



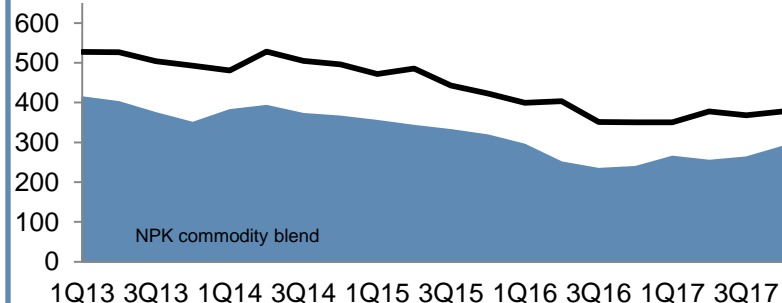
Investment highlights

- Project adds 200 kt calcium nitrate and 50 kt compound NPK annual capacity in Porsgrunn.
- Enables further 70 kt NPK and 35 kt calcium nitrate annual capacity in Glomfjord through optimization
- Expected start up in 1Q 2018
- 16% IRR at 2015 prices
- Est. capex USD 330 million
- First full earnings effect 2Q 2018

Calcium nitrate premium above urea (USD/t)



Compound NPK premium above commodity blend (USD/t)

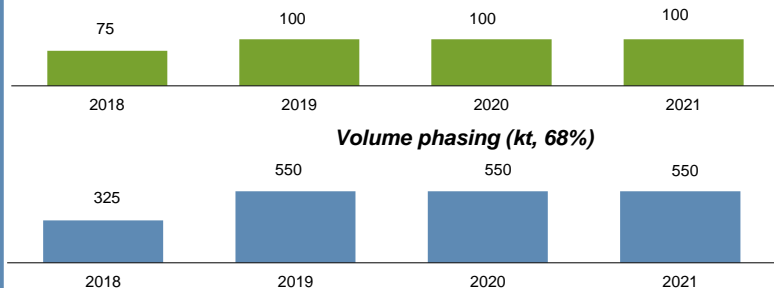




Joint investment with BASF in world-scale ammonia plant in Freeport, USA

Business case highlights

EBITDA (2015 prices, USDm, 68%)



Investment highlights

- Attractive long-term partnership:
 - BASF has strong existing presence in the United States and ammonia sourcing requirement for US downstream activities
 - Yara has a strong global ammonia production and trade network, investment would further strengthen this position, and increase its North American upstream presence
- US Gulf location advantageous due to existing industry infrastructure, construction resources and natural gas
- Expected start up 1Q 2018. First full earnings effect 2Q 2018
- 17 % IRR at 2015 prices
- Est. capex (68%) USD 434 million





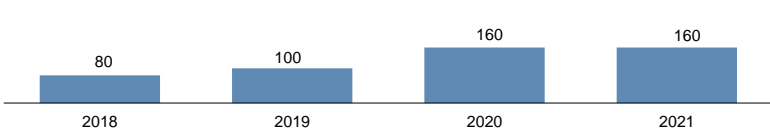
330 kt technical ammonium nitrate (TAN) plant in Pilbara, Australia

Business case highlights

EBITDA (2015 prices, USDm, 50%)



Volume phasing (kt, 50%)



Investment highlights

- JV with Orica (50%/50%)
- Plant ideally located in the world's biggest iron ore mining region
- A distribution and marketing joint venture is established to distribute all ammonium nitrate and associated products and services to mining customers in the Pilbara region
- Start up 2Q 2017. First full earnings effect 1Q 2020
- 6% IRR
- The project return has been negatively impacted by delayed construction and downturn in the mining sector. However a gradual recovery in the sector is anticipated.
- Est. capex (50%) USD 360 million

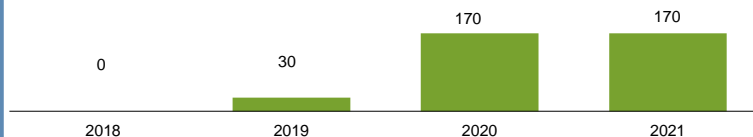




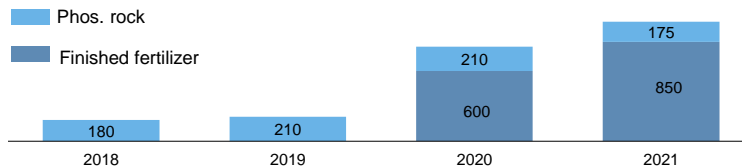
Phosphate project in Salitre, Brazil

Business case highlights

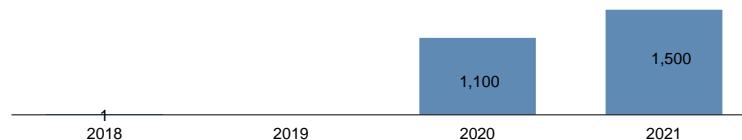
EBITDA (2015 prices, USDm, 100%)



Volume phasing (kt)



Finished fertilizers SSP equivalents (kt)



Investment highlights

- The Salitre project, located in the state of Minas Gerais, a traditional mining region, will include a chemical plant in addition to the mining operation.
- Start up mining 2Q 2018, chemical production 1H 2019. First full earnings effect 1Q 2022
- Chemical production of MAP, NP, TSP, DAP, SSP
- 24% IRR at 2015 prices
- Est. capex USD 575 million





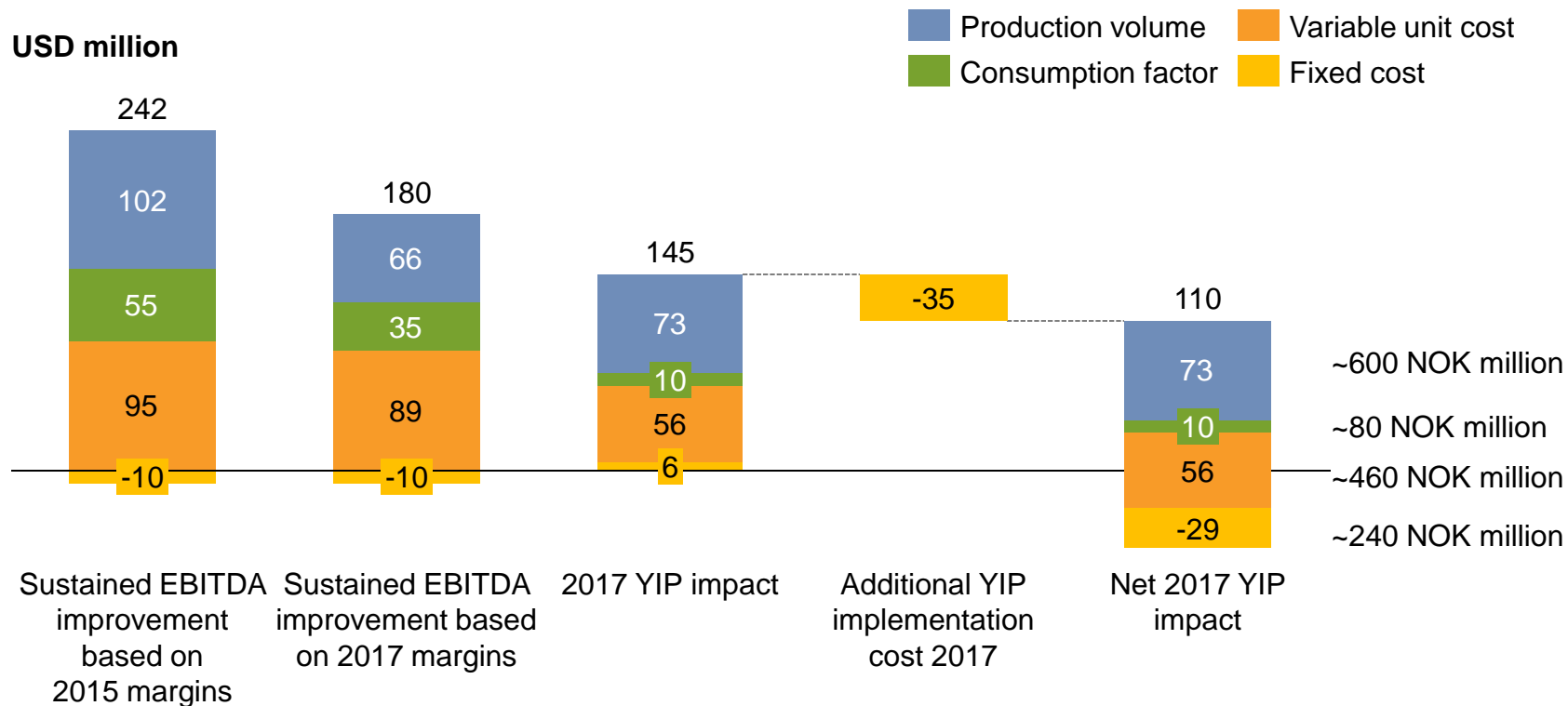
Yara to acquire Vale Cubatão Fertilizantes complex in Brazil – and establish Yara as a nitrogen producer in Brazil

Vale Cubatão Fertilizantes:

- Strong competitive position as only nitrate assets in Brazil
- Annual production capacity of 200 kt ammonia, 600 kt nitrates and 980 kt of phosphate fertilizers
- Approx. 970 permanent and 930 contracted employees
- Agreed enterprise value: USD 255 million
- Upgrading investments of USD 80 million up to 2020 to realize annual synergies of USD 25 million
- Closing expected by mid 2018
- Acquisition will strengthen Yara's production footprint, complement existing distribution position and add significant scale for the IND segment in Brazil

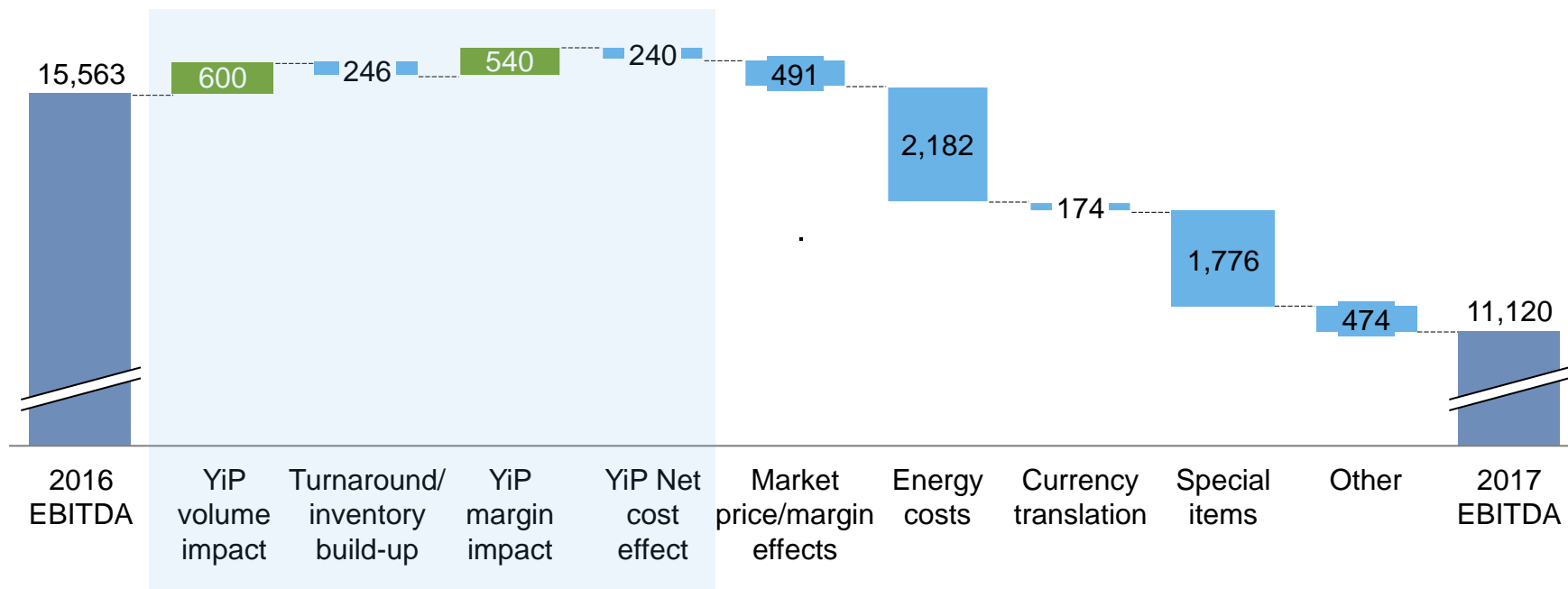


Yara Improvement Program effects



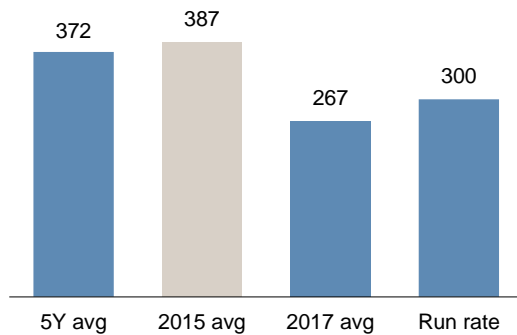
Significant positive impact of the Improvement Program in 2017

NOK millions

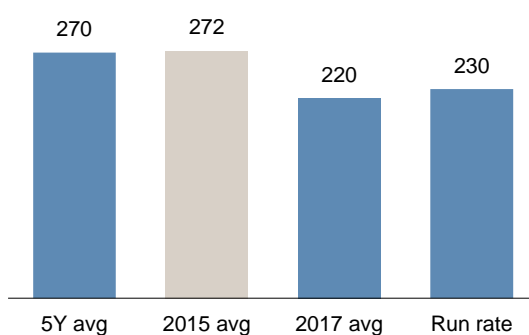


Price and currency scenario assumptions

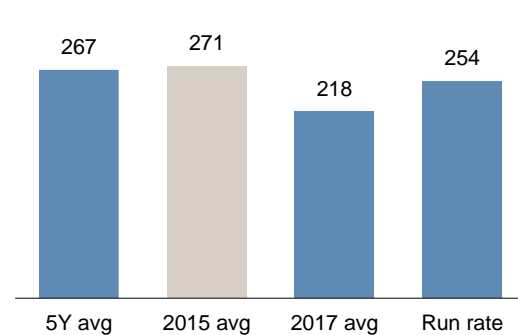
Ammonia fob Black sea, USD/t



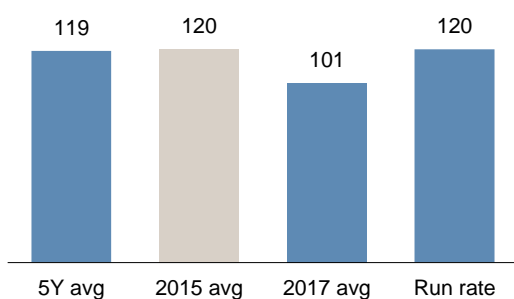
Urea fob Black sea, USD/t



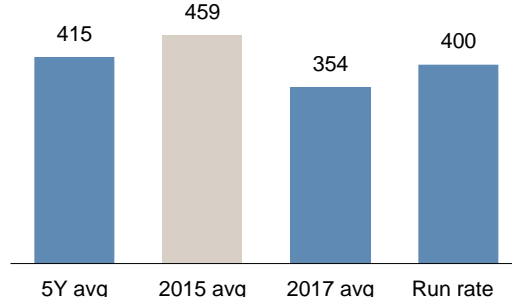
CAN cif Germany, USD/t



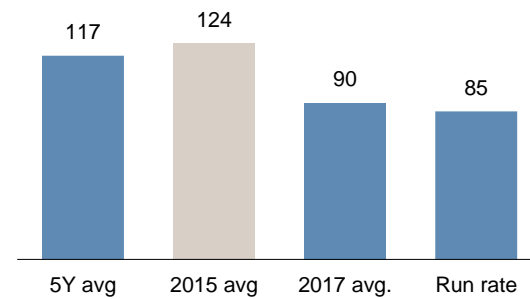
NPK compound premium, USD/t¹



DAP fob US Gulf, USD/t



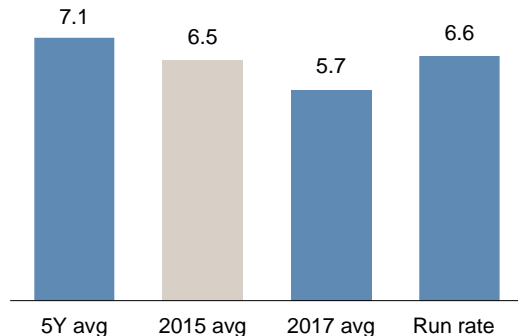
Phosphate rock fob North Africa, USD/t



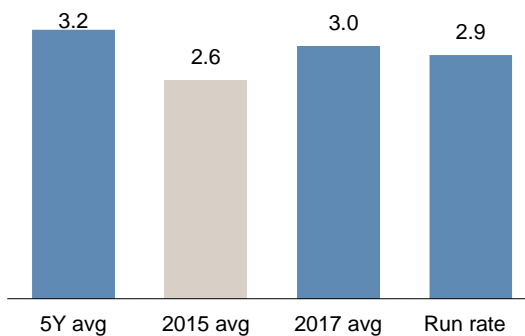
1) Based on weighted realized NPK price brought back to CIF Germany and compared with a nitrate based blend

Price and currency scenario assumptions

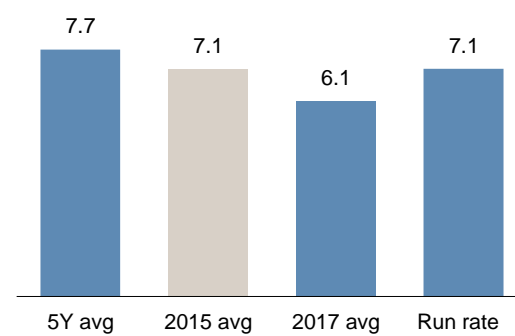
European gas (TTF), USD/mmbtu



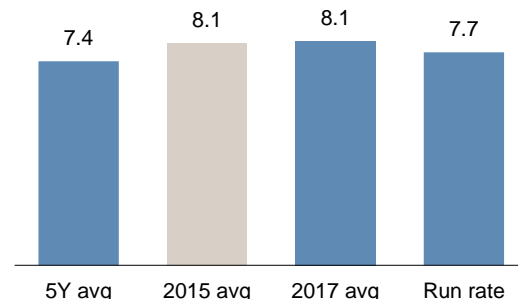
Henry HUB, USD/mmbtu



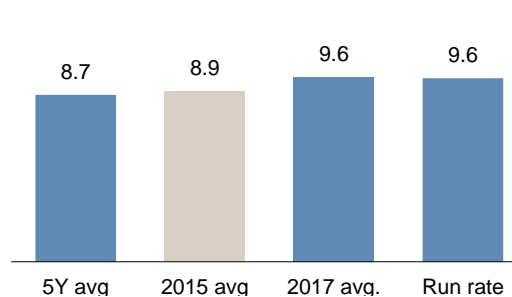
Yara's European gas price, USD/mmbtu



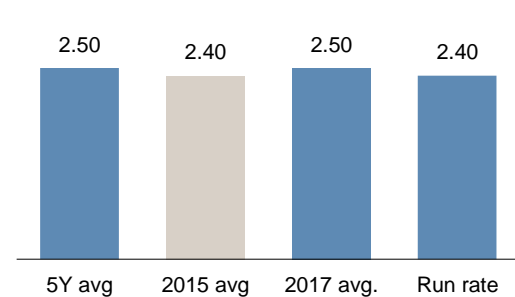
NOK per USD



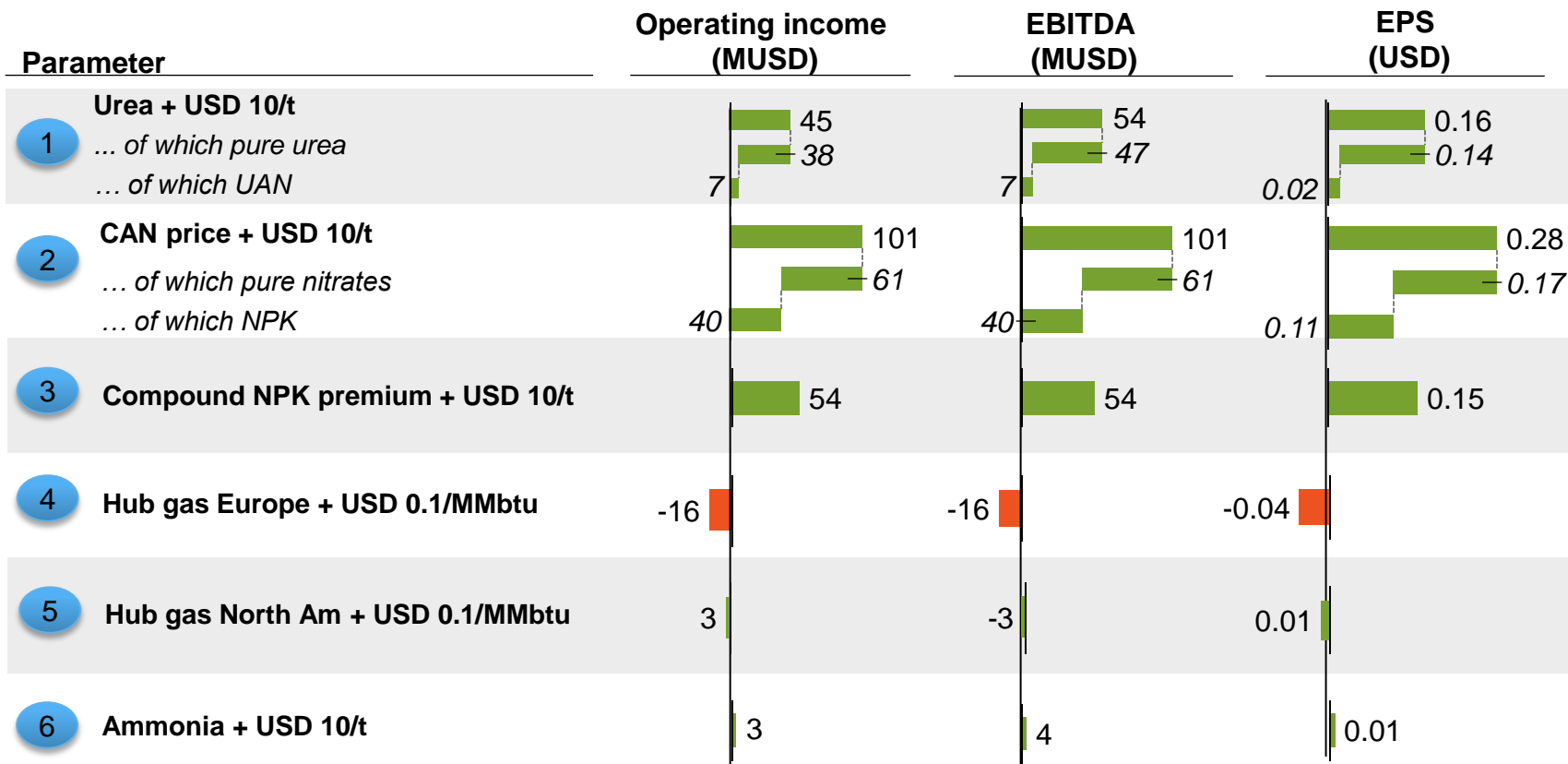
NOK per EUR



NOK per BRL



Price sensitivities linked to capacities



Yara will change to USD as reporting currency as of 1Q 2018

Why?

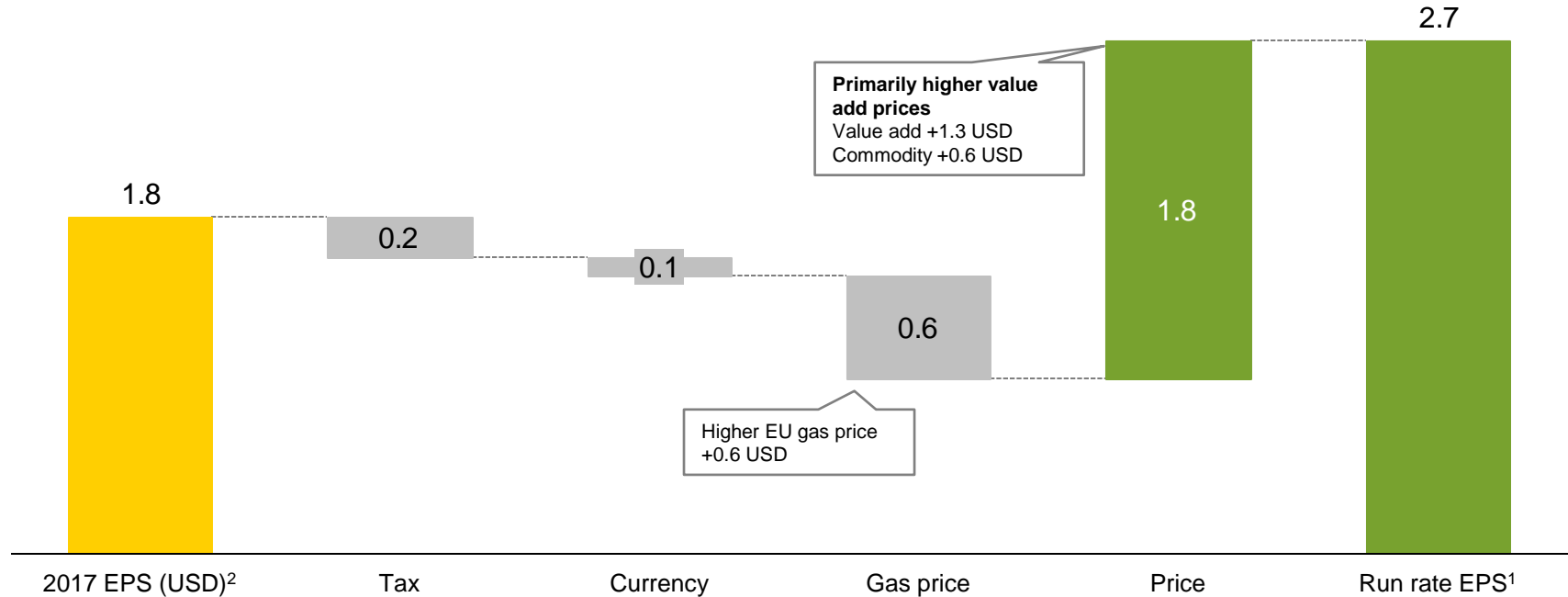
- The fertilizer business is fundamentally a USD business
- USD as reporting currency would better reflect the underlying business of Yara

What does the change imply?

- Yara's financial statement will be consolidated and presented in USD from 1Q 2018 reporting
- Listing and dividend currency remains NOK
- 2017 financial statements and key historical figures will be recalculated and presented at yara.com by end February
- Yara's sensitivities will remain the same except for currency where USD will form the base

Currency sensitivities	Operating income	EBITDA	EPS
	USD million	USD million	USD
10%-points EUR appreciation versus USD	-120	-95	-0.30
10%-points NOK appreciation versus USD	-50	-35	-0.10
10%-points BRL appreciation versus USD	-40	-25	-0.10

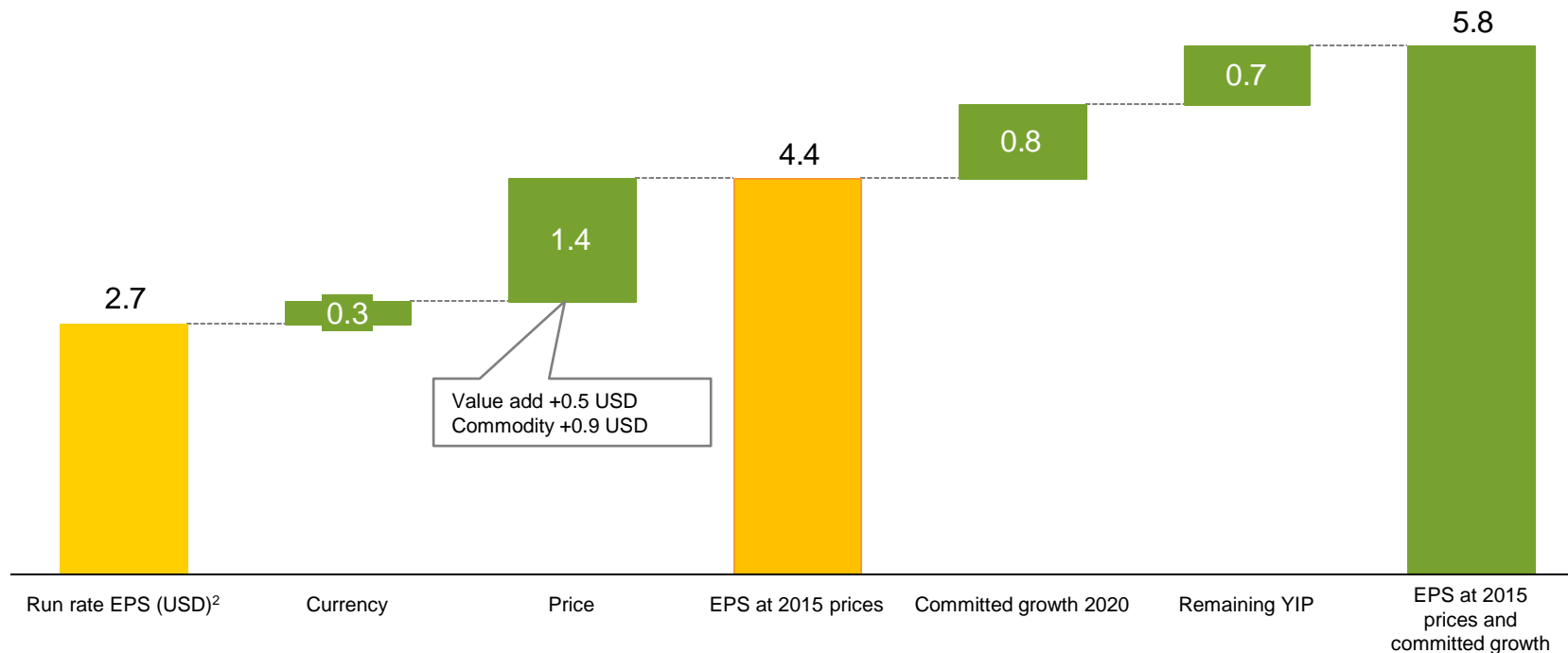
Scenario based on current market prices: Higher prices offset higher energy cost



1) Based on market prices as of 1 Feb 2018, 273.2 million shares outstanding, and 25% tax on underlying business.

2) Excl. special items and currency

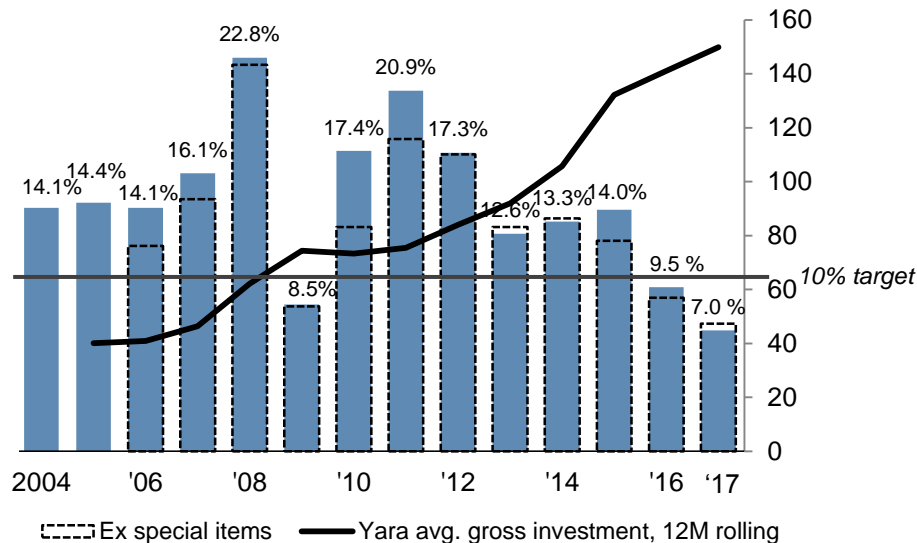
2015 prices, committed growth and Yara Improvement Program add 3.2 USD to run rate EPS



- 1) Based on market prices as of 1 Feb 2018, 273.2 million shares outstanding, and 25% tax on underlying business.
2) Excl. special items and currency

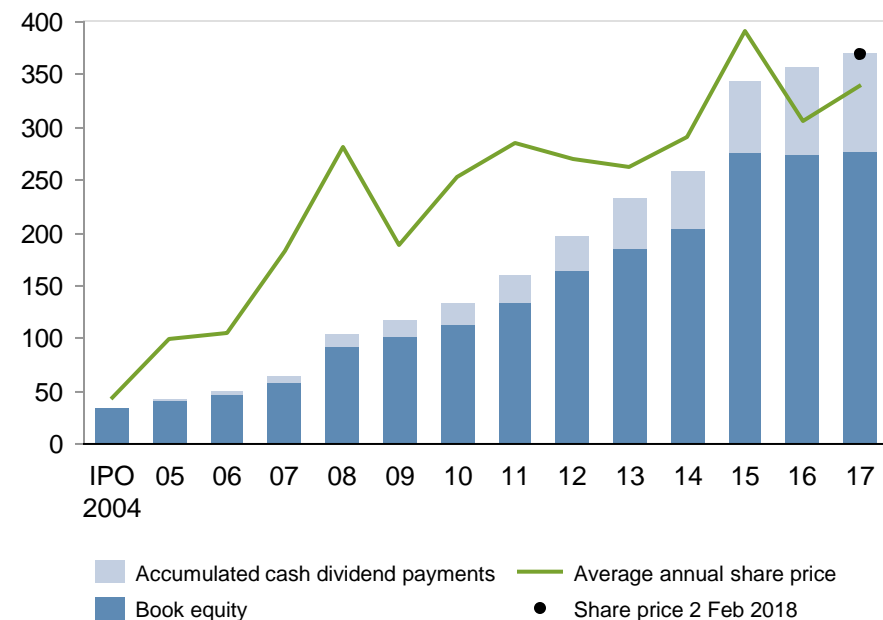
Strong growth and profitability through the cycle

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



Average annual shareholder return of 20%¹

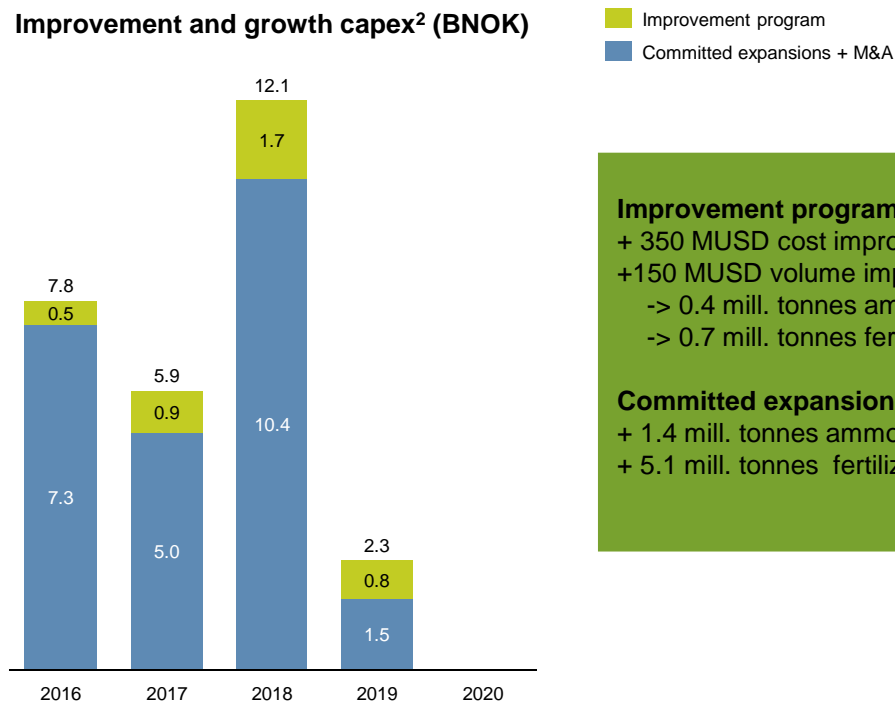
NOK/share



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

Major improvement and growth investments in 2018; main earnings improvement from 2019 onwards¹

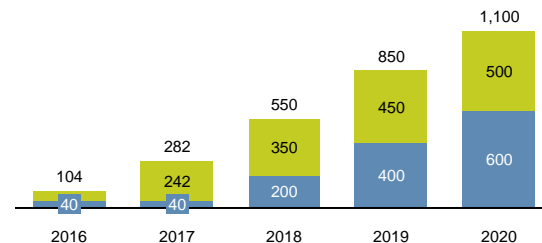
Improvement and growth capex² (BNOK)



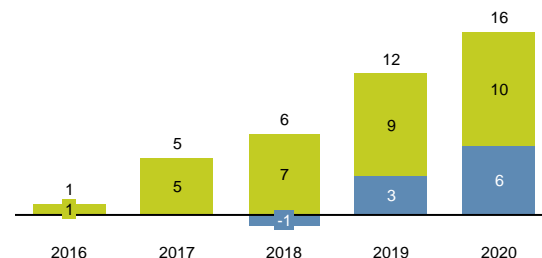
Improvement program:
 + 350 MUSD cost improvement
 +150 MUSD volume improvement:
 -> 0.4 mill. tonnes ammonia
 -> 0.7 mill. tonnes fertilizer

Committed expansions + M&A:
 + 1.4 mill. tonnes ammonia
 + 5.1 mill. tonnes fertilizer

EBITDA improvement³ (MUSD)



Earnings improvement³ (NOK per share)

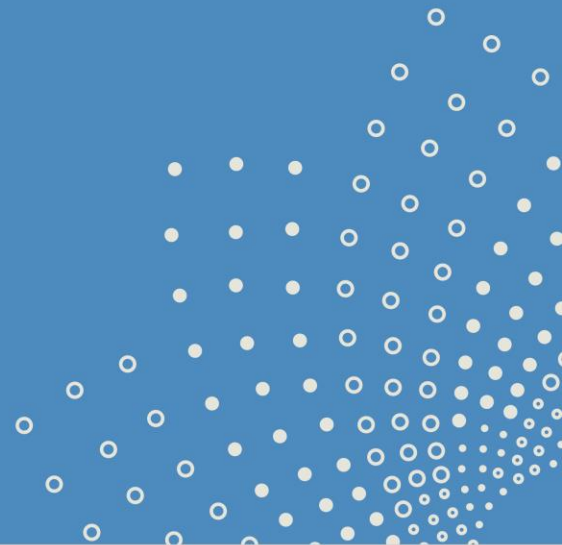


¹ Currency assumptions for 2017 onwards: USD/NOK 7.70, EUR/NOK: 9.55, USD/BRL: 3.20

² Excluding maintenance capex on existing assets. 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

Additional information



Sensitivity tables reflecting 2018 production capacities

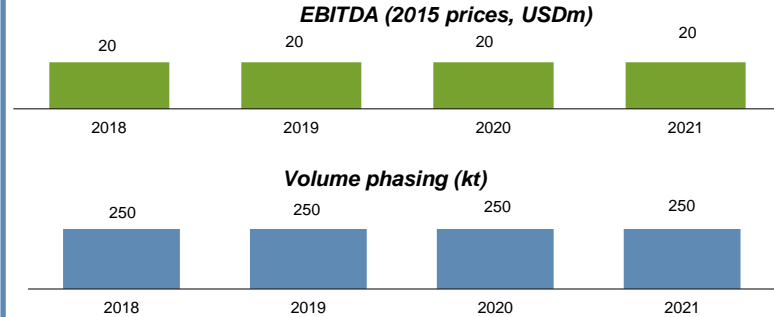
	Operating income	EBITDA	EPS
	USD million	USD million	USD
Urea sensitivity +10 USD/t	45	54	0.16
...of which pure Urea	38	47	0.14
...of which UAN	7	7	0.02
Nitrate sensitivity CAN +10 USD/t	101	101	0.28
...of which pure Nitrates	61	61	0.17
...of which NPKs	40	40	0.11
Compound NPK premium over nitrate	54	54	0.15
Hub gas Europe + 0.1 USD/MMBtu	-16	-16	-0.04
Hub gas North Am + 0.1 USD/MMBtu	-2.6	-2.6	-0.01
Ammonia + 10 USD/t	3	4	0.01
Currency sensitivity			
10%-points EUR appreciation versus USD	-120	-95	-0.30
10%-points NOK appreciation versus USD	-50	-35	-0.10
10%-points BRL appreciation versus USD	-40	-25	-0.10

Price sensitivities including committed growth projects

	As Is EBITDA impact	Porsgrunn	Sluiskil	Freeport	Salitre	Updated EBITDA sensitivity
Urea sensitivity +10 USD/t	54		1.0			55
...of which pure Urea	47		2.6			50
...of which UAN	7		-1.6			6
Nitrate sensitivity CAN +10 USD/t	101	1.4	1.3			104
...of which pure Nitrates	61		1.3			62
...of which NPKs	40	1.4				41
Compound NPK premium over nitrate	54	2.0				56
Hub gas Europe + 0.1 USD/MMBtu	-16					-16
Hub gas North Am + 0.1 USD/MMBtu	-2.6			-1.5		-4
Ammonia + 10 USD/t	4	-0.9	-0.4	5.4		8

250 kt NPK expansion in Uusikaupunki, Finland

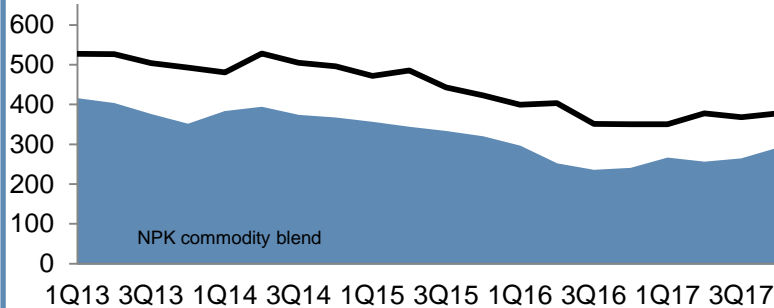
Business case highlights



Investment highlights

- Strong NPK demand growth outside Europe presents solid business case
- Project to install new granulator adds ~250 kt annual capacity
- Completed 2H 2016, UKI NPK production producing at full capacity 1H 2017
- 23% IRR at 2015 prices
- Capex USD 60 million
- First full earnings effect 1Q 2017

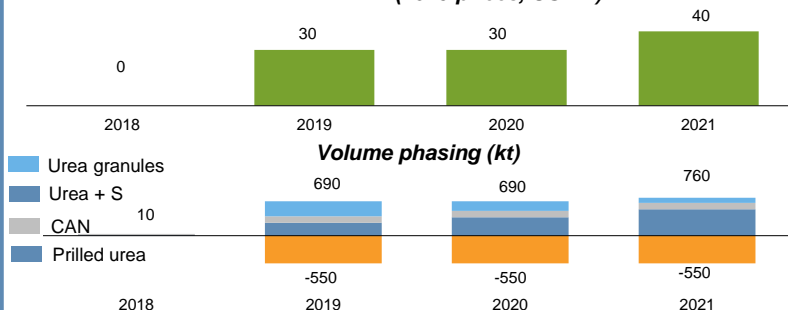
Compound NPK premium above commodity blend (USD/t)



Value-add expansion in Sluiskil, Netherlands

Business case highlights

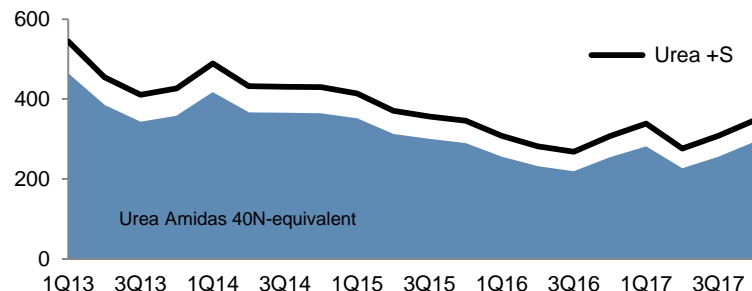
EBITDA (2015 prices, USDm)



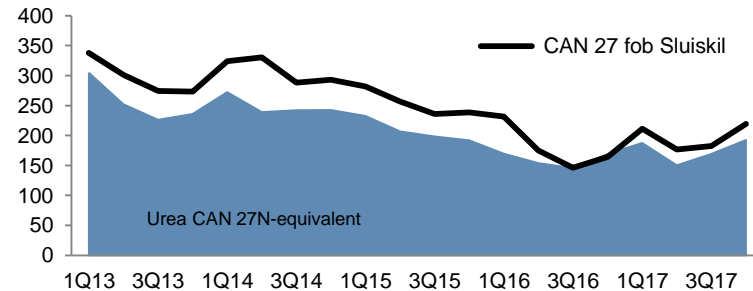
Investment highlights

- New urea granulator with capacity of 660 kt per year, replacing old prilling unit with capacity of 400 kt per year
- Granulator will produce urea with sulphur, a product sold with a premium to regular urea
- Investment frees up nitric acid enabling 130 kt of additional CAN production
- 13% IRR at 2015 prices
- Est. capex USD 263 million
- Expected start up 2Q 2018. Full volume effect from 1Q 2019. First full earnings effect 1Q 2022

Estimated historical urea + S premium (USD/t)



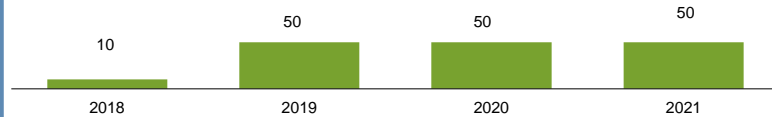
CAN premium (USD/t)



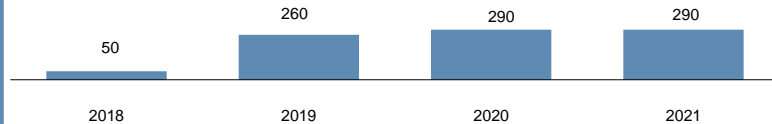
Nitric acid expansion in K ping, Sweden

Business case highlights

EBITDA (2015 prices, USDm)



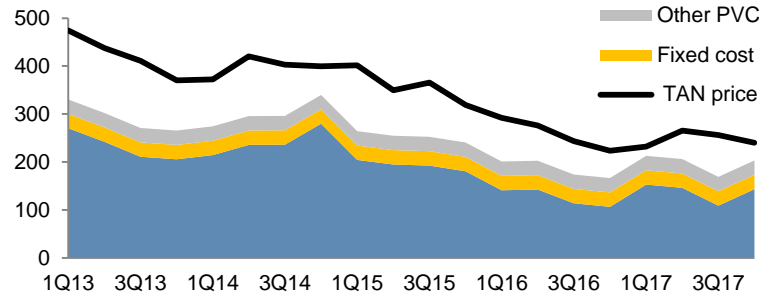
Volume phasing (kt)



Investment highlights

- Nitric acid upgrade and expansion in K ping
- The investment includes the construction of a new nitric acid plant replacing an existing plant which is approaching the end of its operating life. Net volume addition is 90 kt TAN
- Strong long-term fundamentals for mining and civil explosives industries
- 20% IRR at 2015 prices
- Est. capex USD 200 million
- Expected start up 3Q 2018. First full earnings effect 1Q 2019

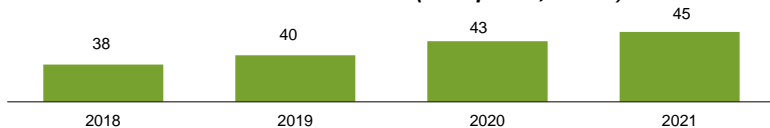
TAN upgrade margins (USD/t)



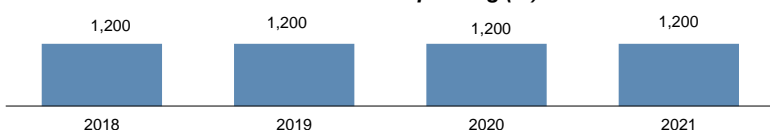
Acquisition of Tata Chemicals' urea business in India

Business case highlights

EBITDA (2015 prices, USDm)¹



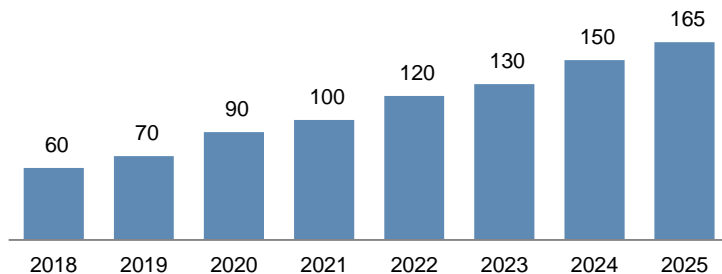
Volume phasing (kt)



Investment highlights

- Integrated world scale urea plant in Babrala, Uttar Pradesh:
 - Commissioned in 1994
 - World-class operations and energy efficiency
- Significant distribution footprint:
 - Warehouses: 4 own and approx. 100 third-party operated
 - Salesforce: 60 own, and approx. 300 on contract
- Acquisition provides footprint to accelerate premium product growth
- Take over January 2018. First full earnings effect 2Q 2018
- IRR 10% in business case
- Est. capex USD 421 million

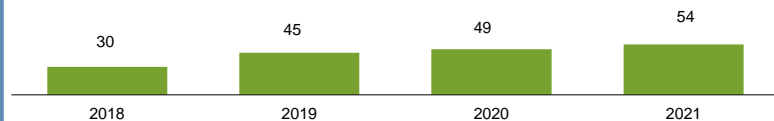
Projected value added volume growth (kt)²



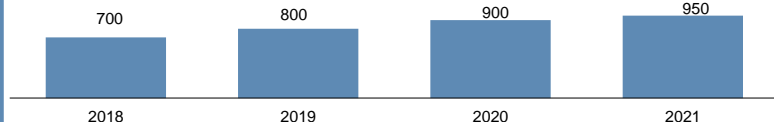
Rio Grande expansion and operational improvement

Business case highlights

EBITDA (2015 prices, USDm)



Volume phasing (kt)

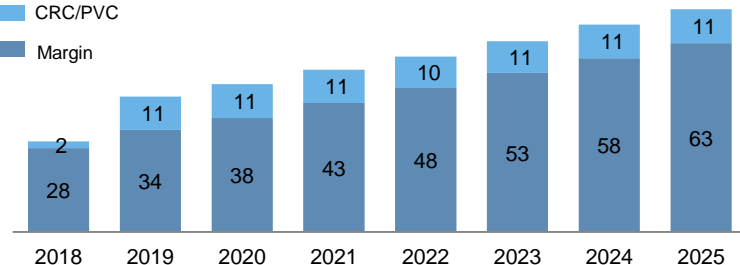


Investment highlights

- Consolidation of 3 sites reduces fixed cost and maintenance investments
- Increased fertilizer production and blending capacity
- Improved safety and lower unit cost
- Increased product quality through improved handling and storage conditions
- Start up 2Q 2020. First full earnings effect 2Q 2020
- IRR 19% at 2015 prices
- Est. capex USD 475 million

Net improvement EBITDA (USDm)

■ CRC/PVC
■ Margin



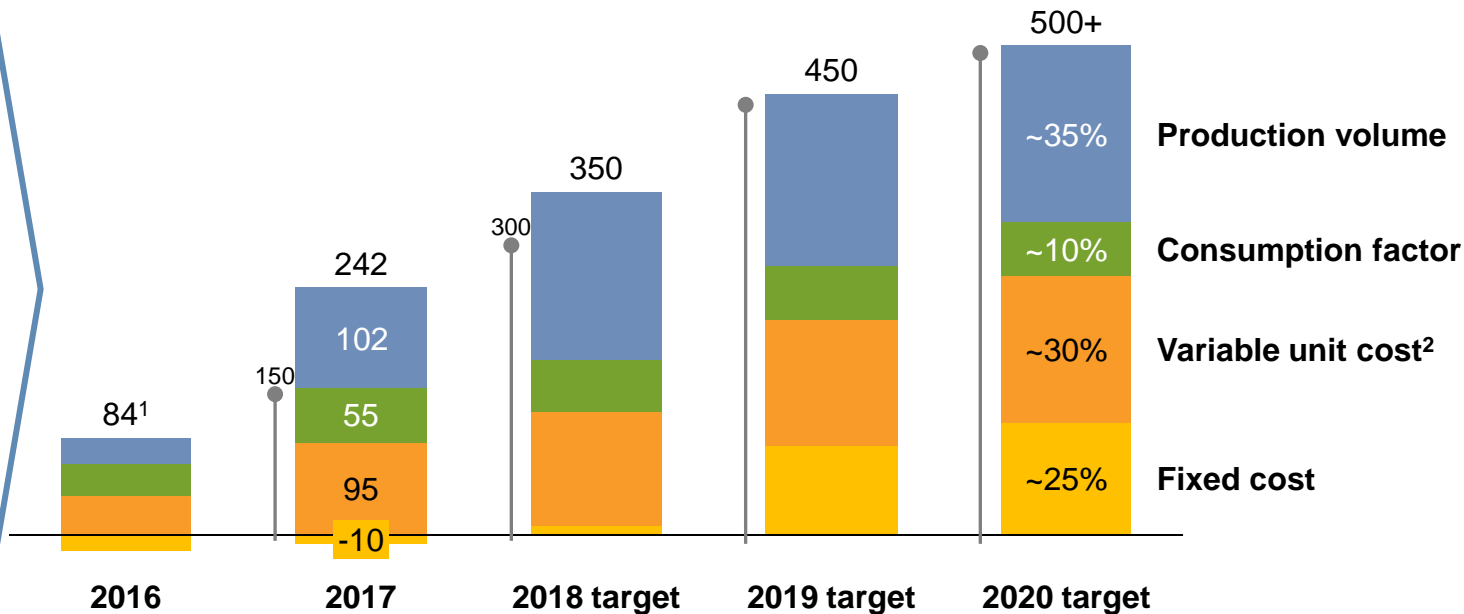
Improvements 90m USD over target for 2017 - target increased by 50m USD for 2018

- 2017 impact over target driven to energy and variable cost
- Volume improvements on track despite ammonia challenges
- 2018 expected 50 USD million over original target driven by volumes
- Volumes and variable unit cost expected to increase as share of total in 2020

Sustained EBITDA improvement

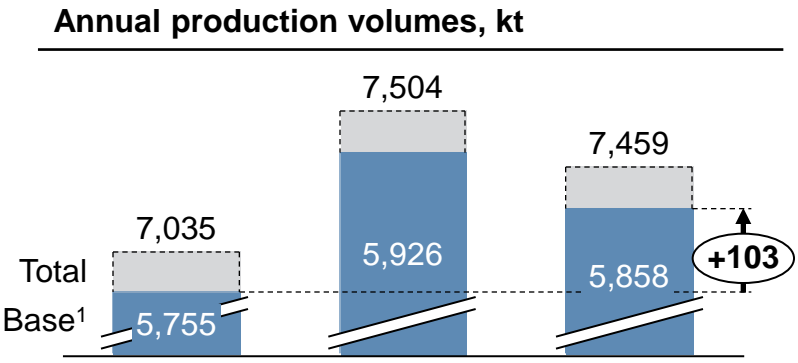
Annual impact, USD million, vs. 2015 baseline, at 2015 margins

● Original target set 4Q '16



Production volume improvements have contributed over USD 100 million in 2015 terms

Ammonia



Margins (value of each extra ton)

2015 margins²

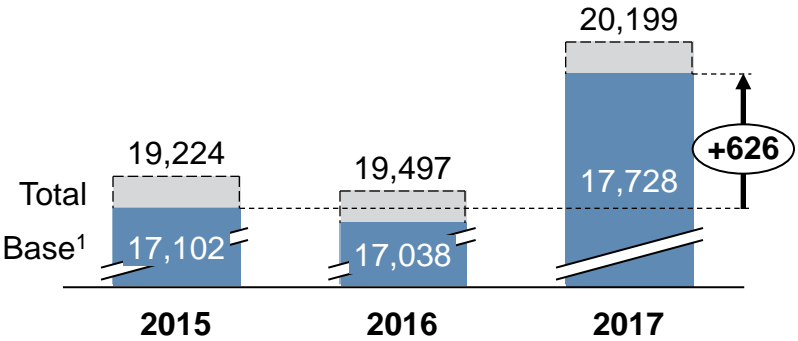
2017 margins³

EBITDA impact⁵, USDm

18

26

Finished fertilizers



2015 margins⁴

2017 margins³

84

40



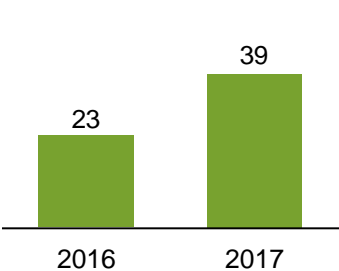
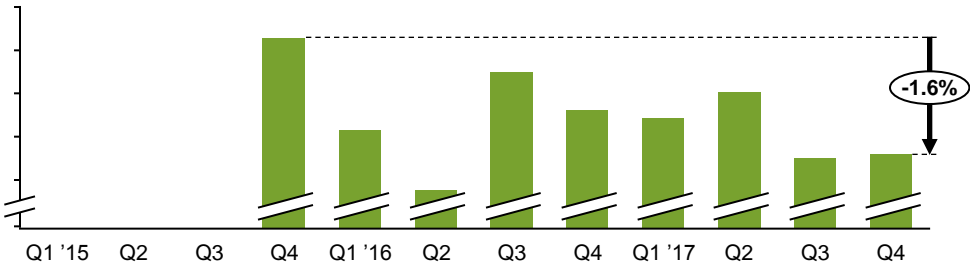
1. Adjusted for turnarounds, expansions, and selected plants not part of scope (e.g., Qafco); 2. Ammonia contribution margins per relevant plant; 3. Applied to volume delta vs 2015; 4. Finished fertilizer products contribution margin per relevant plant and product type; 5. EBITDA impact calculated as volume improvements multiplied by contribution margin (full sales price, less energy and other variable costs)

Yara Productivity System drives significant energy improvements

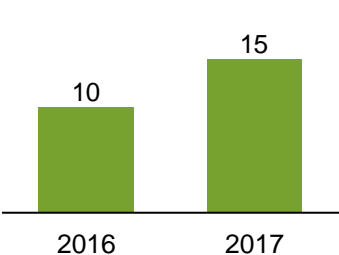
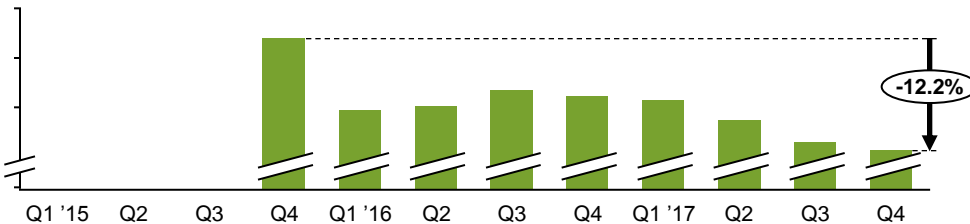
Consumption factor,
GJ (LHV) /ton, based on 12 month rolling average

Financial Benefit,
Accumulated USD million¹

Ammonia



Urea melt



1. Calculated based on 12 month rolling average vs. 2015 baseline, on 2015 energy prices

Procurement benefits calculation methodology

Calculation methodology

Direct categories

- Improvements measured against the most relevant **industry benchmarks**
- Benchmark publications and product **details specified to ensure relevant comparisons** over time

Indirect categories

- Improvements measured against **historical cost levels**
- **Where relevant**, the improvements are **adjusted for volume** (e.g., packaging materials costs measured on a ‘per bag’ basis)
- Guidelines established to tackle **potential cost avoidance issues** (i.e., for new or incomparable products or services)¹

Improvements are included that are evaluated to be the result of specific and concrete improvement initiatives, (i.e., all improvements are related to concrete changes in specifications, contract terms or similar)

1. Cost avoidance is tracked internally to stimulate good choices for the company, but these are generally not reported against the improvement target



Knowledge grows

