

# DSM Capital Markets Day 2018

## *Animal Nutrition & Health*

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ROYAL DSM CAPITAL MARKETS DAY | LONDON (UK) 20 JUNE 2018

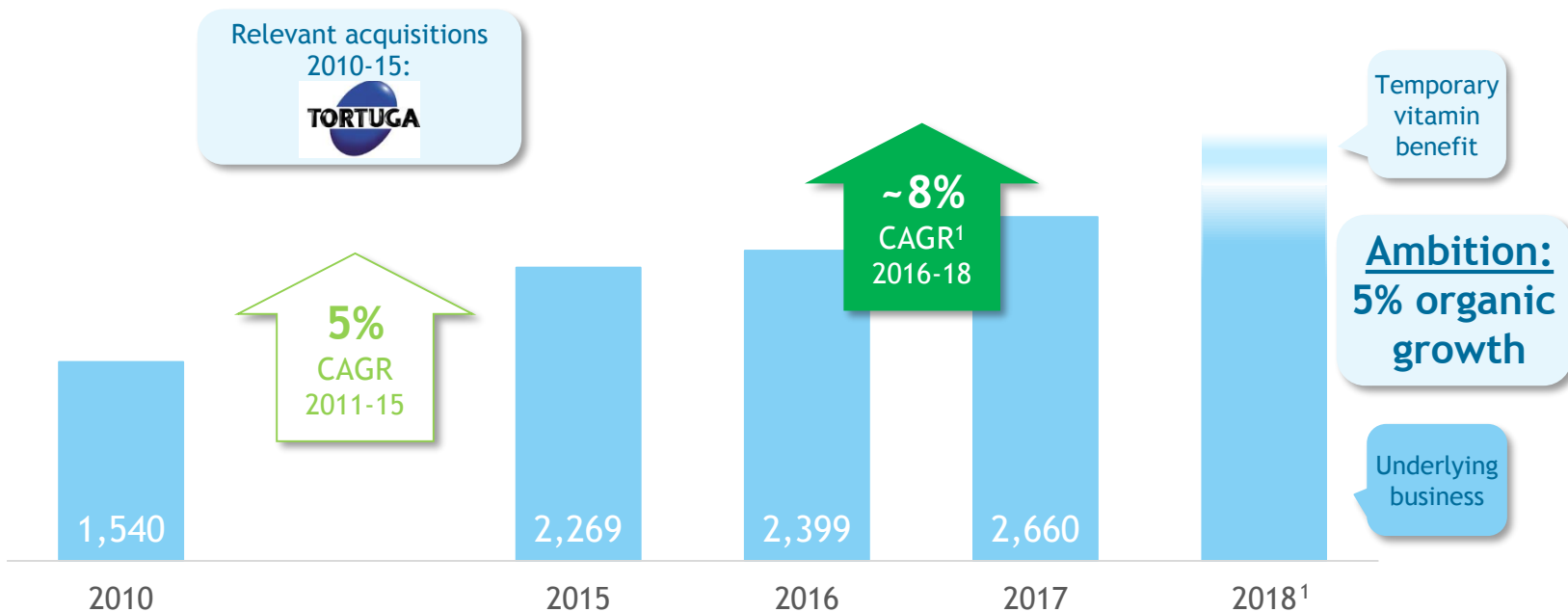


## Safe harbor statement

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- This presentation may contain forward-looking statements with respect to DSM's future (financial) performance and position. Such statements are based on current expectations, estimates and projections of DSM and information currently available to the company. DSM cautions readers that such statements involve certain risks and uncertainties that are difficult to predict and therefore it should be understood that many factors can cause actual performance and position to differ materially from these statements. DSM has no obligation to update the statements contained in this presentation, unless required by law
- A more comprehensive discussion of the risk factors affecting DSM's business can be found in the company's latest Annual Report, which can be found on the company's corporate website, [www.dsm.com](http://www.dsm.com)

# Animal Nutrition & Health significantly outperformed its organic growth in the last 3 years

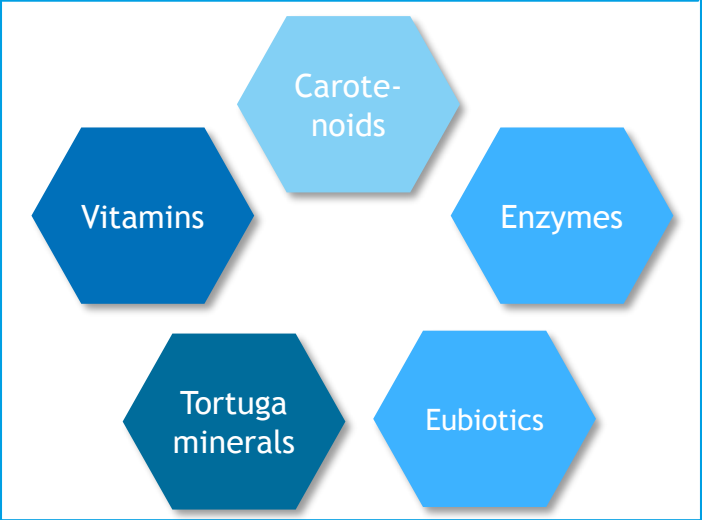


1. Approximation using 2018E, based on underlying business corrected for best estimate of the temporary vitamin effect

# Growth driven by leveraging our unique business model and initial wins from the Auctus strategy

## GLOBAL PRODUCTS

### Complete Product Portfolio

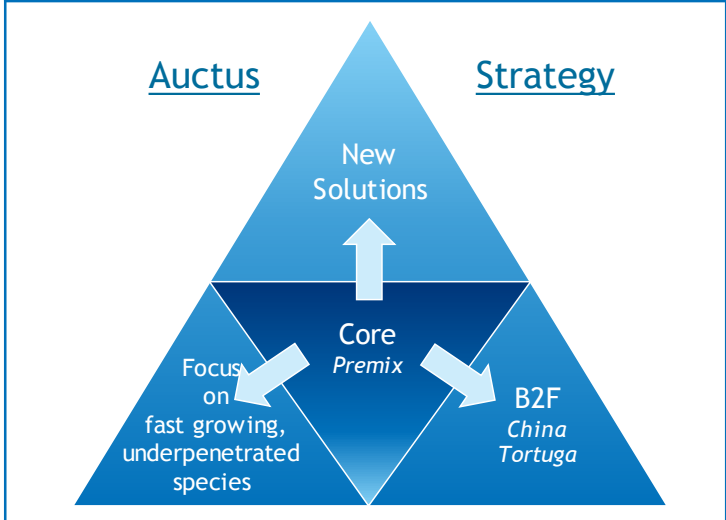


DEMAND CREATION  
MARKET SEGMENT NEEDS

LEADING COST POSITION  
RADICAL INNOVATION






## LOCAL SOLUTIONS

### Full Value Chain Player



# Outgrowing the CFE<sup>1</sup> market through premix, innovation and B2F, leveraging its unique business model

## Market growth (CFE<sup>1</sup>)

	2-3% Poultry
	1-2% Swine
	0-1% Ruminants
	5-6% Aqua
	4-5% Pet

Σ

~2-3%

Animal Nutrition relevant market

## Animal Nutrition & Health growth enhanced by

Geo presence/ premix	Feed efficiency & gut health	B2F
✓	✓	✓
✓	✓	✓
✓		✓
✓		
✓		

Σ

~5% organic sales growth ambition<sup>2</sup>

1. CFE = Complete Feed Equivalent

2. Based on underlying business, excluding the temporary vitamin effect

# acCElerate launched for sustainable organic growth above-market



## ELEVATE OUR AMBITION

### *Operating Model*

- ✓ Align global-local to improve focus & execution

### *Baselining Regions*

- ✓ Define metrics & assess performance

2018

## BUILD CAPABILITIES

### *Marketing & Sales Excellence*

- ✓ Species marketing organization and strategies
- ✓ Competitive value propositions: products & services
- ✓ Price & margin management
- ✓ Specialized Sales force
- ✓ Key Account management

2019 - 2021

## SUSTAIN THE GAINS

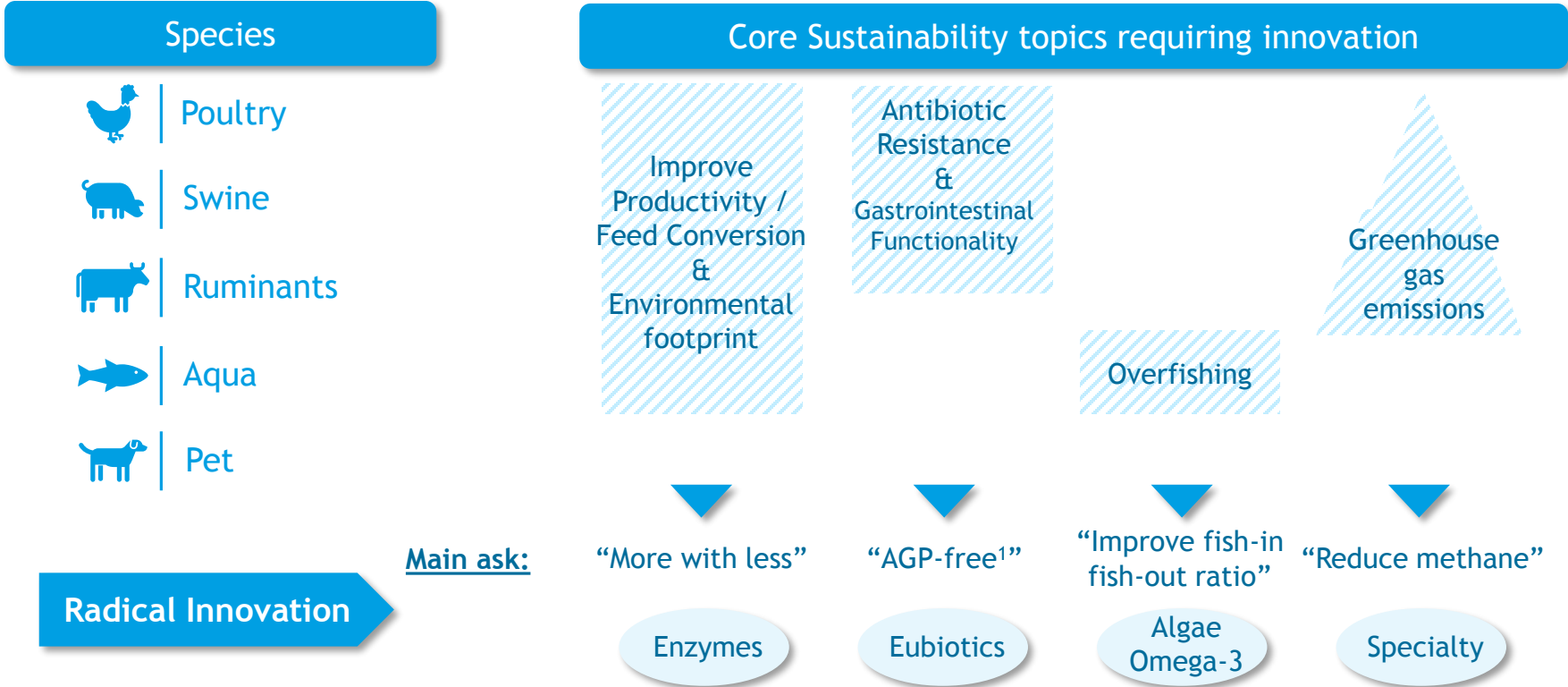
### *Culture*

- ✓ Performance metrics
- ✓ Training

### *Customer Centricity & Agility*

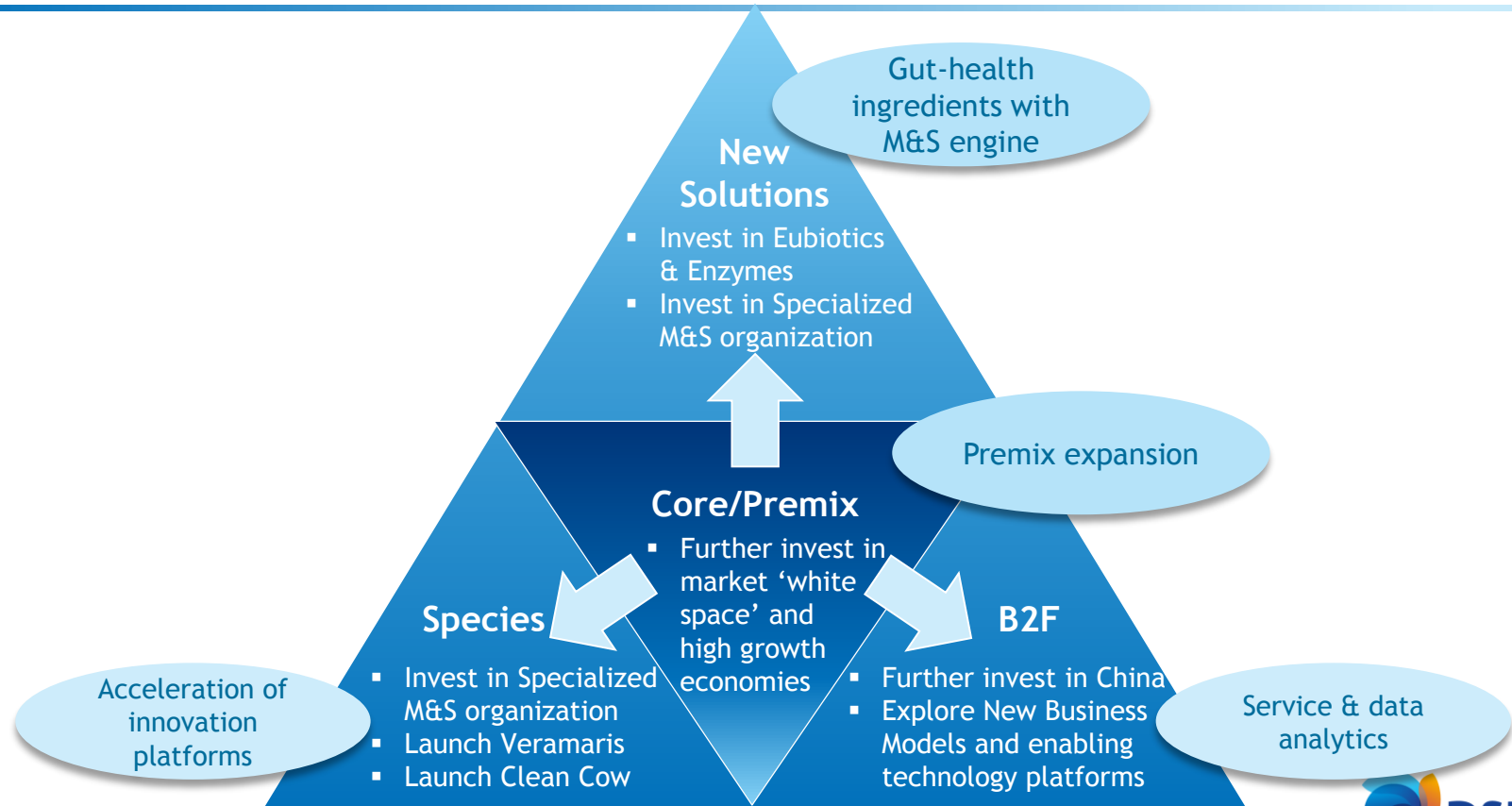
- ✓ End-to-end experience: supply chain & quality
- ✓ Institutionalized customer feedback loop (frontline NPS)

# Core sustainability topics require radical innovation, resulting in new market opportunities for our Animal Nutrition & Health business



1. AGPs = Antibiotic Growth Promotors

# Investing for organic growth through innovation & specialty sales force - M&A mainly for premix expansion, gut-health & go-to-market engine





# Expanding our leadership position in feed enzymes and eubiotics

## Feed Enzymes for improved Feed Utilization

- Alliance with Novozymes since 1998 (20 years)
- Market leader with ~25% market share
- Complete portfolio of
  - ✓ Phytases
  - ✓ Carbohydrases
  - ✓ Proteases
- Aggressive innovation pipeline to expand leadership position
- Market potential of €1bn, growing ~5% per year



## Eubiotics for improved gastrointestinal functionality and animal performance

- Existing portfolio of
  - ✓ Organic acids
  - ✓ Pro/pre-biotics
  - ✓ Natural extracts
- Portfolio expansion a strategic priority
  - ✓ New product launch planned for Q4 2018
  - ✓ A novel Enzyme from the Alliance with Novozymes
  - ✓ €60-80m sales potential per year



# Veramaris, the JV with Evonik for sustainable EPA/DHA for fish feed is progressing well - Launch expected in H2 2019

## Veramaris JV



- JV organization established & operational
- Selling company HQ in The Netherlands: 50% business consolidation each (VOF)
- Producing company headquartered in the US: fully integrated in large manufacturing complex with direct access to raw materials
- Business support provided by the two mother companies



## New Facility (Blair/Nebraska)



- ~US\$150-200m investment (50%:50%)
- Opening Mid-2019
- Annual capacity ~15% of current annual EPA/DHA demand for salmon

## Potential

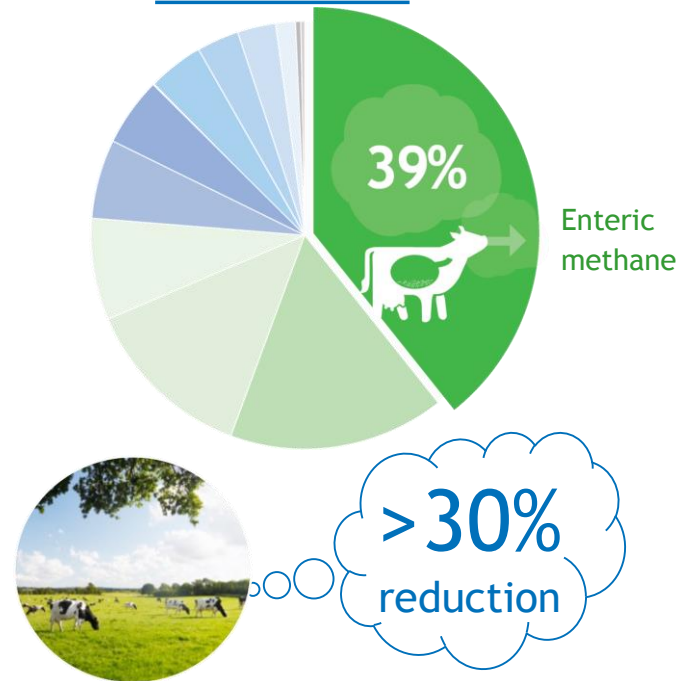
- Focus on salmon (80%) & pet food use
- Concentrated customer base, but need for involvement of entire value chain (from feed producers to retailer) to drive transformation
- Both availability and sustainability as key triggers for adoption
- (Initial) facility in Blair, with ~€150-200m (50%:50%) sales potential per year



# Clean Cow, a sustainable feed ingredient, reducing enteric methane emissions

- Animal proteins are key to nutrition and health, providing essential nutrients and affordable nutrition; cows are a major source of high-quality protein
- Unfortunately, the environmental footprint of cows presents a major challenge
  - Majority of impact comes from enteric (burped) methane emission; a potent greenhouse gas
- Trials with our feed ingredient Clean Cow (and subsequent peer-reviewed publications) show a >30% reduction in emissions
- Currently preparing for registration in key markets and building an ecosystem with partners and experts in nutrition, biology, chemistry, engineering and analytics
- Executing various trials in commercial settings
- Attractive market potential of ~€1-2bn with launch after 2019

## Cows are a significant contributor of GHG emissions



# Animal Nutrition & Health ambitions underpinning DSM's 2021 Targets

Continue to grow the business above market

- Market growth estimated to continue at ~2-3%
- Further growth by:
  - Sustaining growth through **Marketing & Sales excellence and Customer Centricity & Agility** (acCElerate program)
  - **Radical innovation** for core sustainability topics (e.g. DSM/Novozymes alliance, Veramaris, Clean Cow)
  - **Further invest** in B2F and go-to-market capabilities

~5% organic growth



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