



Animal Nutrition

David Blakemore - President Animal Nutritional & Health

ROYAL DSM
HEALTH NUTRITION MATERIALS



Safe harbor statement

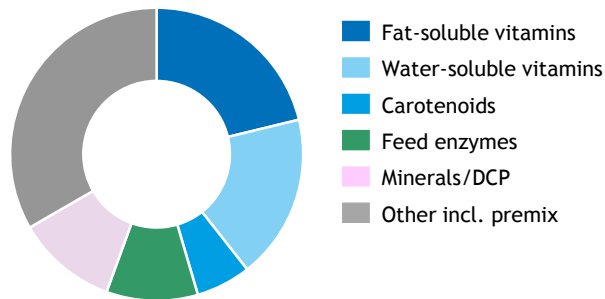
- This presentation may contain forward-looking statements with respect to DSM's future (financial) performance and position. Such statements are based on current expectations, estimates and projections of DSM and information currently available to the company. DSM cautions readers that such statements 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

Animal Nutrition & Health

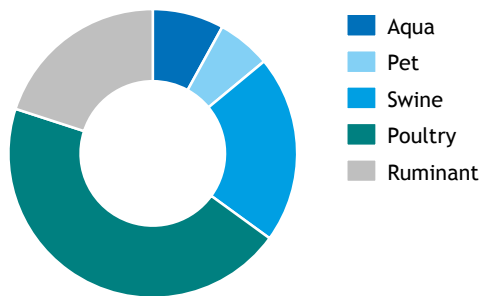
Feed value chain



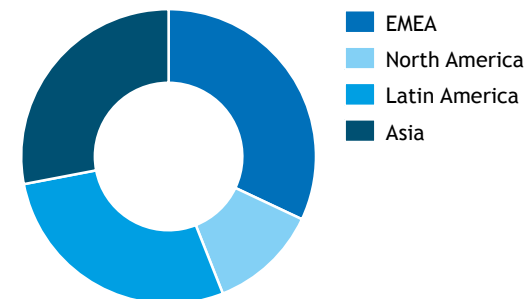
Sales related to ingredient (%)



Sales by application landscape (%)

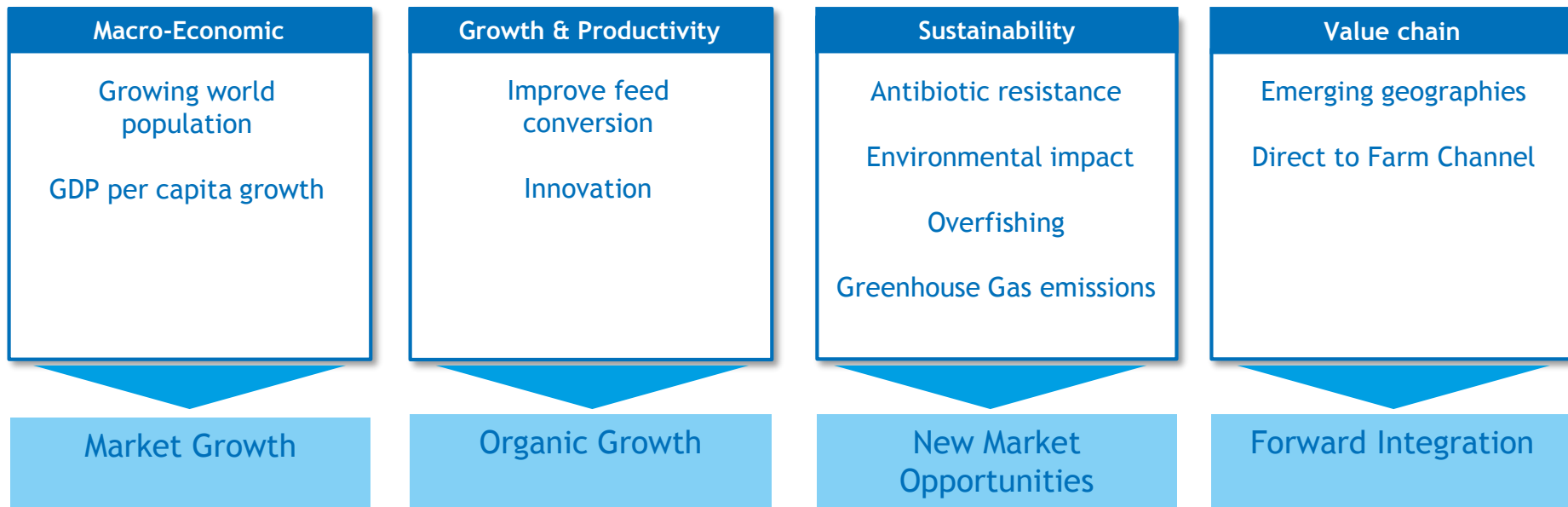


Sales by region (%)



€2.4bn sales (2016) diversified across species, geographies, channel and a complete portfolio

Key trends impacting the Animal Nutrition & Health market



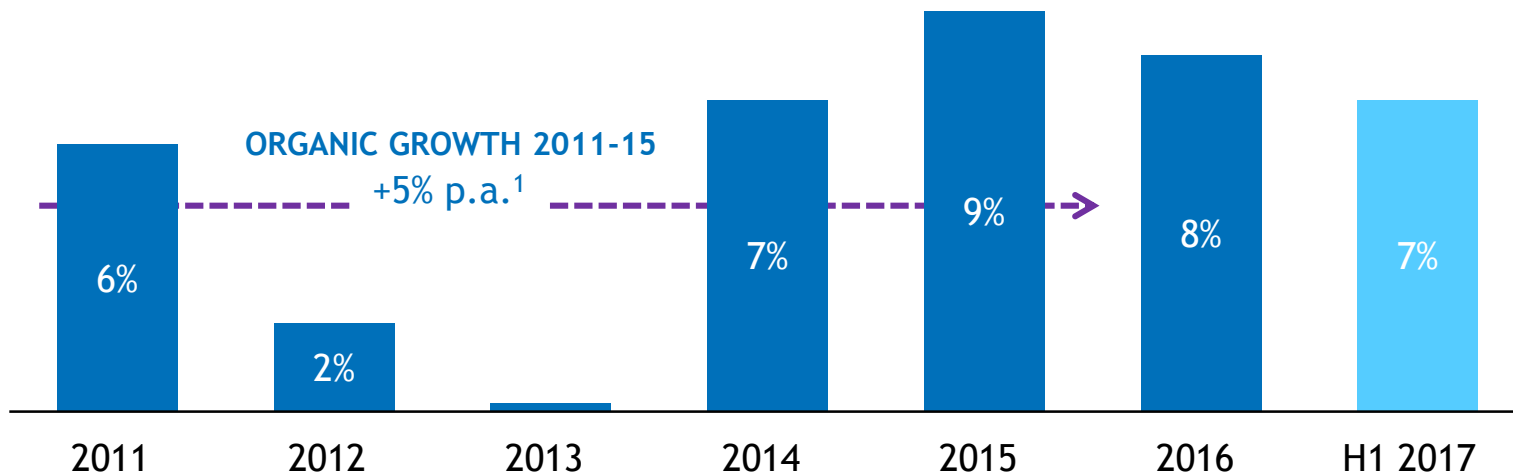
Dynamic, growth market requiring new solutions for sustainable animal protein production

Auctus - Our strategy for profitable, above-market growth

Staying the course, accelerating execution



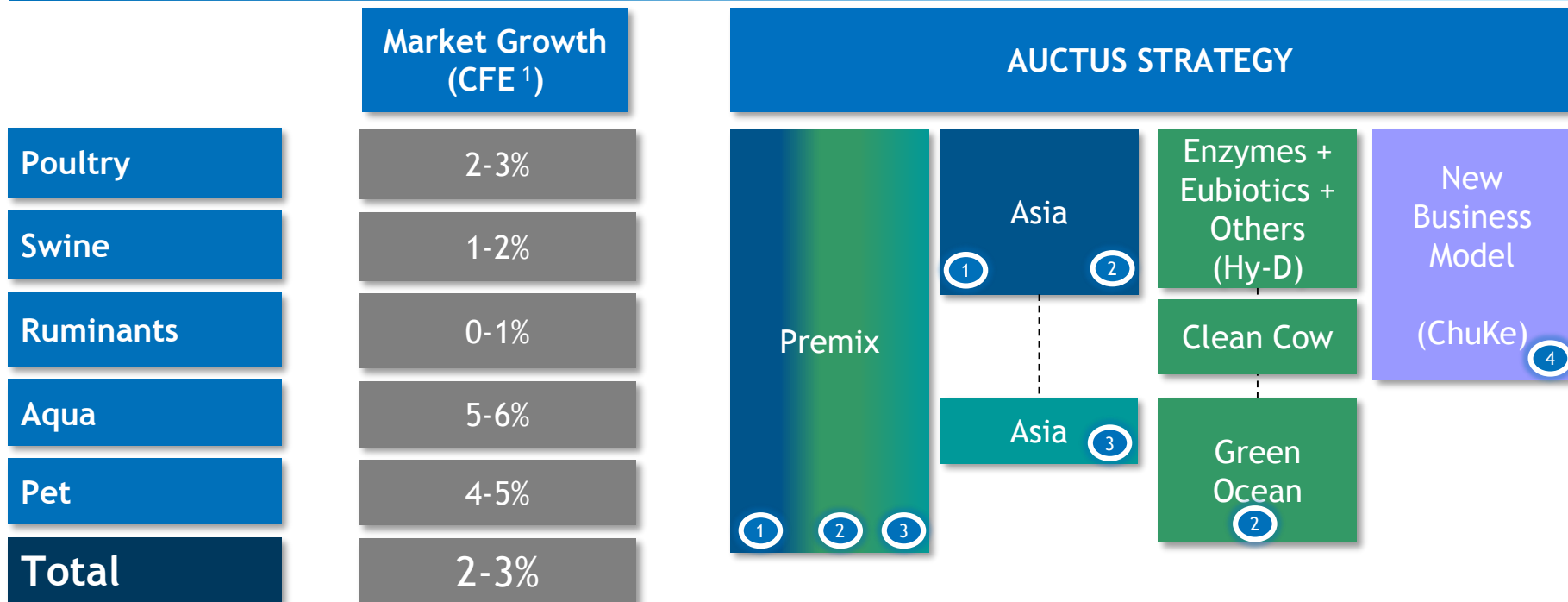
Continuing to deliver above-market growth



¹ excluding Vit E effect, growth in Animal Nutrition & Health would have been 9%

Business performance supports the strategic direction

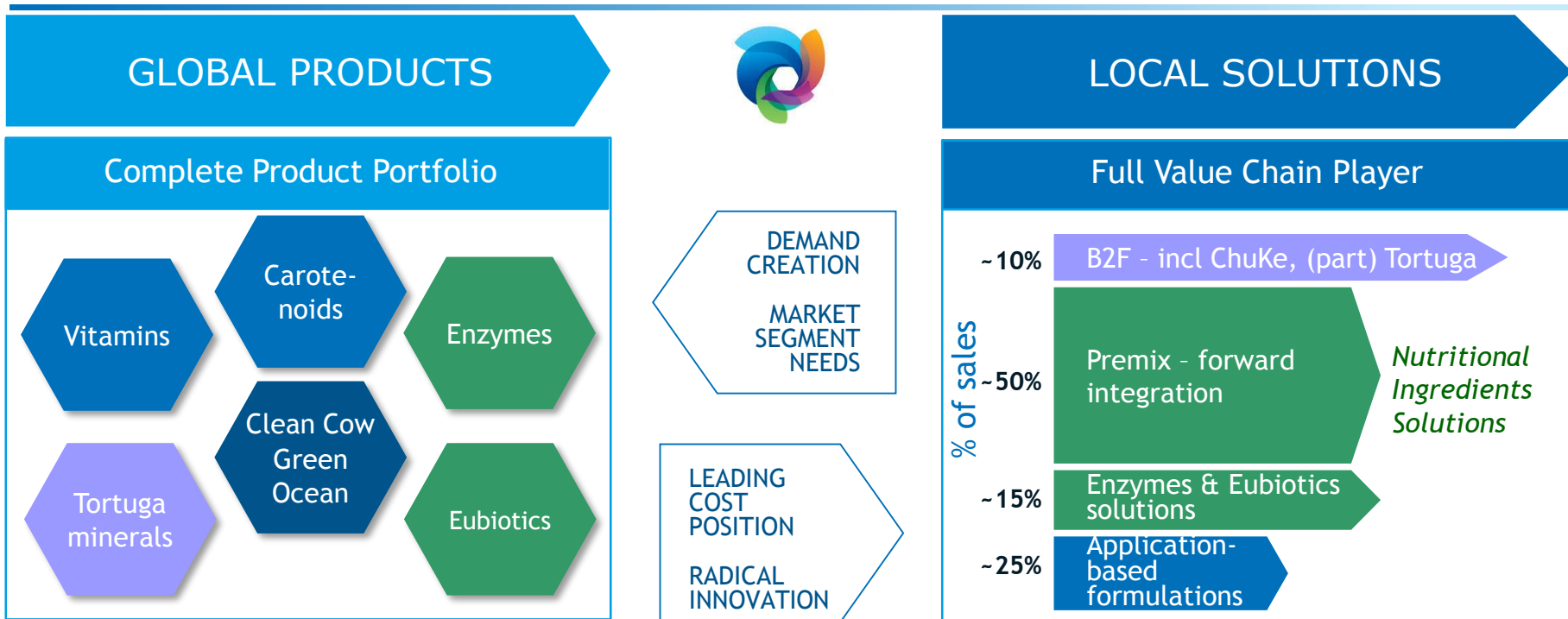
Strategic growth plans aligned to market segments



Leveraging our strengths and focusing on growth segments and new space to drive ~5% organic growth

¹ CFE: Complete Feed Equivalent

Supporting Business Model drives above-market growth



The best of both worlds: economies of scale AND local market insights & customer intimacy

Market-back approach for incremental and breakthrough innovation

REGION-SPECIFIC STRATEGIC PLANS

MARKET-DRIVEN INNOVATION

EMEA Latam APAC China NA



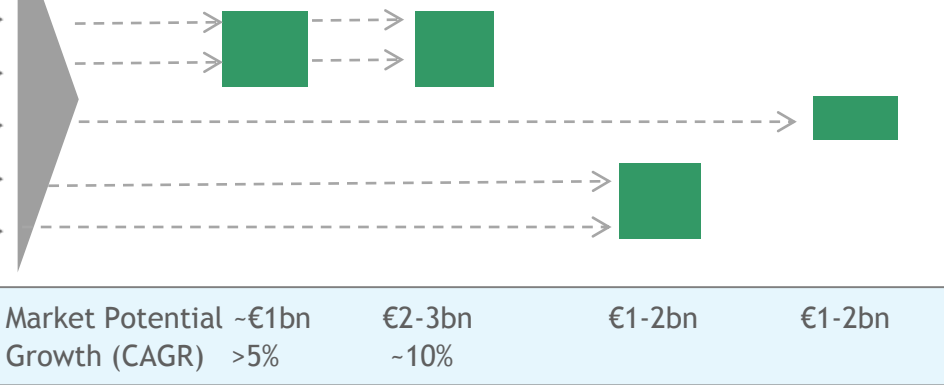
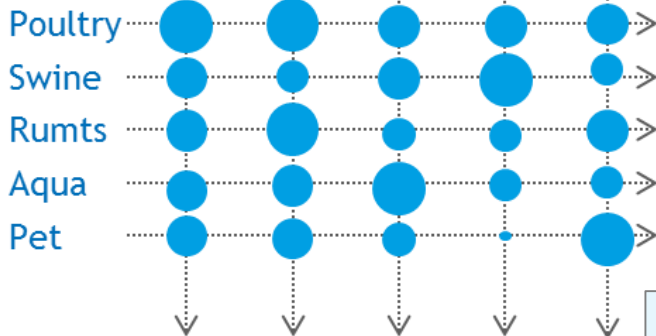
Enzymes

Eubiotics

Green Ocean

Clean Cow

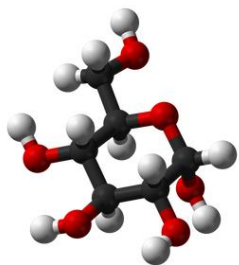
SEGMENT-DRIVEN ORGANIZATION



Intersection of species and regions drives our global innovation priorities

Innovation driving growth: Enzymes and Eubiotics in Poultry and Swine

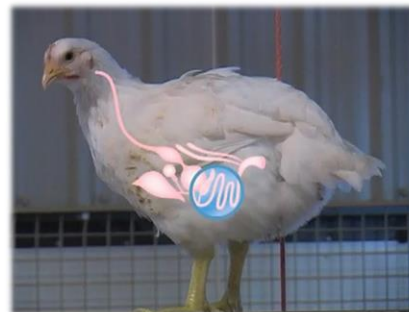
Improved Feed Utilization Feed Enzymes



novozymes



Improved Gut Health Eubiotics

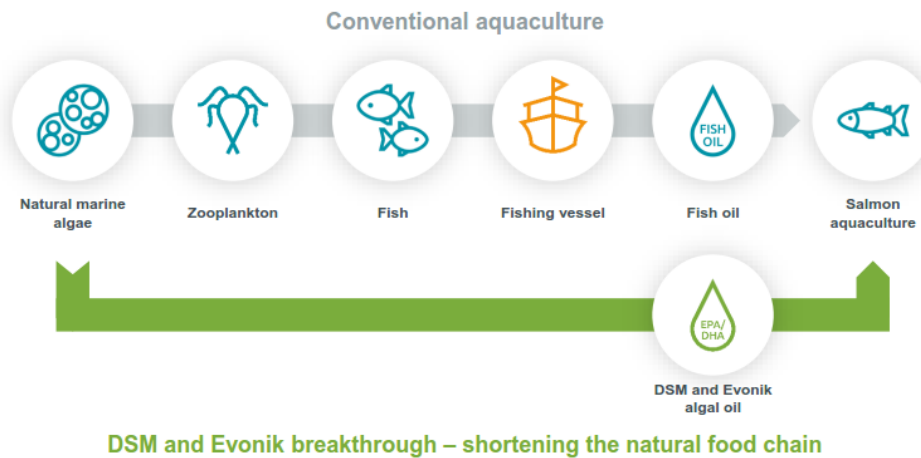


- Well positioned to lead in developing the solutions space, with a renewed focus on nutritional solutions, eubiotic ingredients and innovation

Enzymes: market potential €1bn, growing >5%/yr | Eubiotics: market potential €2-3bn, growing ~10%/yr

Innovation driving growth: Sustainable Omega-3 solution for aquaculture

- Omega-3 fatty acids (EPA and DHA) from natural algae for animal nutrition without using fish oil from wild-caught fish
- Build new facility in the US, scheduled to open in 2019
- Investing US\$200m for a new facility in the US; scheduled to open in 2019 (investment of ~US\$100m for each party, over 2 years)
- Initial annual production capacity: ~15% of current annual demand for EPA and DHA in salmon aquaculture



1 kg of our EPA and DHA algal oil can replace 60 kg of wild catch fish



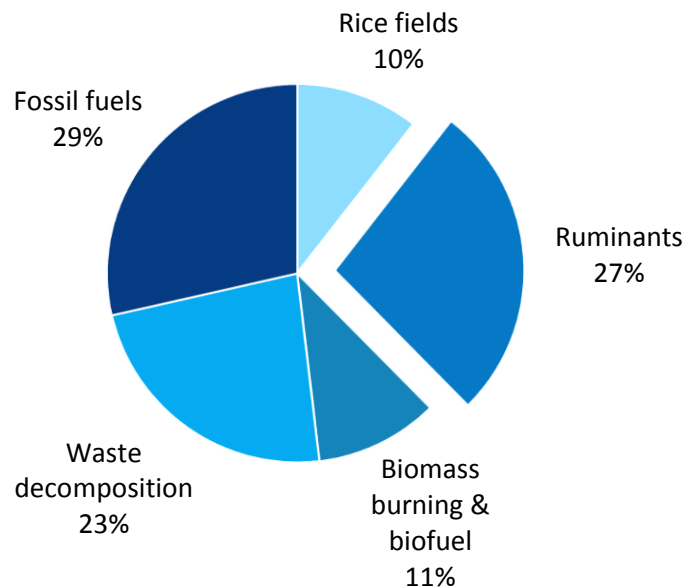
Attractive market potential of €1-2bn

Innovation driving growth: clean cow reducing methane emission

- Cows produce significant amount of methane, a potent greenhouse gas that causes climate change
- Trials with Clean Cow show >30% reduction in emissions
- Focused on markets with highly developed dairy and beef production
- Launch after 2019



Methane sources (%)



Attractive market potential of €1-2bn

Confident on continued organic growth in Animal Nutrition for coming years

- Organic growth supported by ~2-3% market growth and...
 - ✓ Expansion of core premix footprint
 - ✓ New products and solutions
 - ✓ Growth in underpenetrated species
 - ✓ New business models



Enabling continued organic growth of ~5% in Animal Nutrition



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