



# Evonik Nutrition & Care - Much more than Methionine and Baby Care

13 April 2017  
Credit Suisse, London

**Dr. Reiner Beste**  
Chairman of the Board of Management Nutrition & Care

# Segment overview

## What our businesses have in common

### Structural growth trends



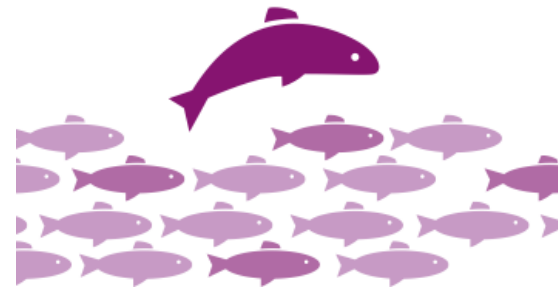
We serve growth markets fueled by megatrends with a direct and immediate link to our business.

### Globalization



We fulfill basic human needs in a globalizing world.

### Differentiation



Our common strategic goal is to strive for differentiation.

### Future success



We are a group of businesses with an equally promising future.

## Segment overview

More than a fashion: Sustainability is a major growth driver for N&C

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- Helping to ensure a **sustainable food chain** for 9 billion people:
  - by reducing the ecological footprint in **food protein production**
  - by lowering risk of **over-fishing** as demand for seafood rises
  - with **natural compounds** for advanced food ingredients
- Addressing the need for **more sustainable products**:
  - by responding to the overall “**natural**” trend in cosmetics
  - by enabling the commercial viability of **biosurfactants**
  - by reducing the ecological footprint to meet new standards in various industries (e.g. textile, agrochemicals, adhesives)



# Segment overview

## Portfolio of seven Business Lines

### Nutrition & Care Business Lines

**Animal Nutrition  
beyond  
Amino Acids**



**Health  
Care**



**Comfort &  
Insulation**



**Animal Nutrition  
(Amino Acids)**



**Personal  
Care**



**Interface &  
Performance**



**Baby  
Care**



**Household  
Care**

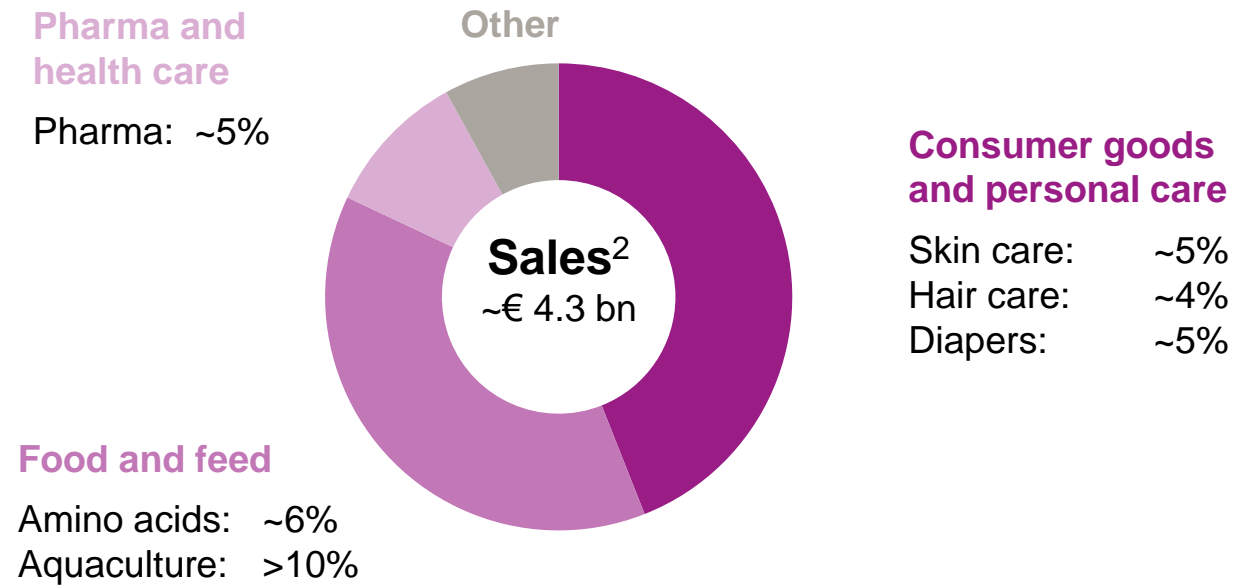


**Focus for today**

# Segment overview

## Serving end markets with robust and resilient growth

### End markets and growth rates<sup>1</sup>



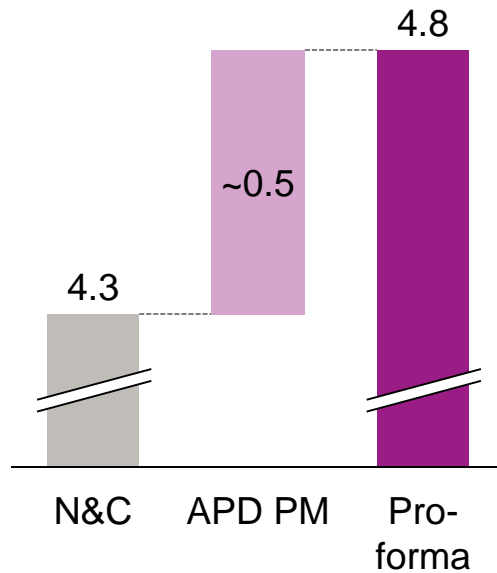
1. Expected end market growth rates p.a. according to industry reports and Evonik estimates

2. 2016 numbers

# APD PM acquisition and strong underlying growth strengthen resilience of Nutrition & Care

## Nutrition & Care Sales 2016 incl. APD PM

(€ bn)

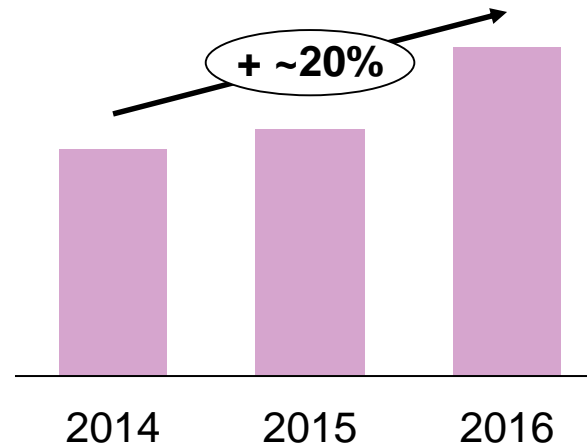


### Main businesses strengthened:

- Comfort & Insulation
- Household Care
- Interface & Performance

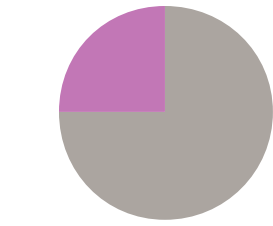
## N&C EBITDA excl. Animal Nutrition & Baby Care

(€ bn)



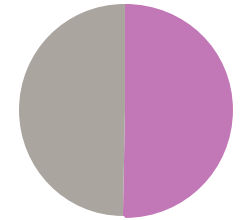
## Indicative EBITDA share

2015



*less than 1/4*

2017E  
(incl. APD PM)



*more than 1/2*

- Animal Nutrition + Baby Care
- N&C excl. AN + BC

## Spotlight Personal Care

### Develop specialties portfolio for cosmetic applications

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#### **Strategic Objective:**

**Further develop into specialties supplier with broad portfolio for cosmetic applications**

- Attractive global growth market with low volatility (CAGR ~5 % p. a.)
- Persisting trend to natural cosmetics based on sustainable raw materials
- Opportunities for differentiation via Marketing, Application Know-how, Technology and Innovation



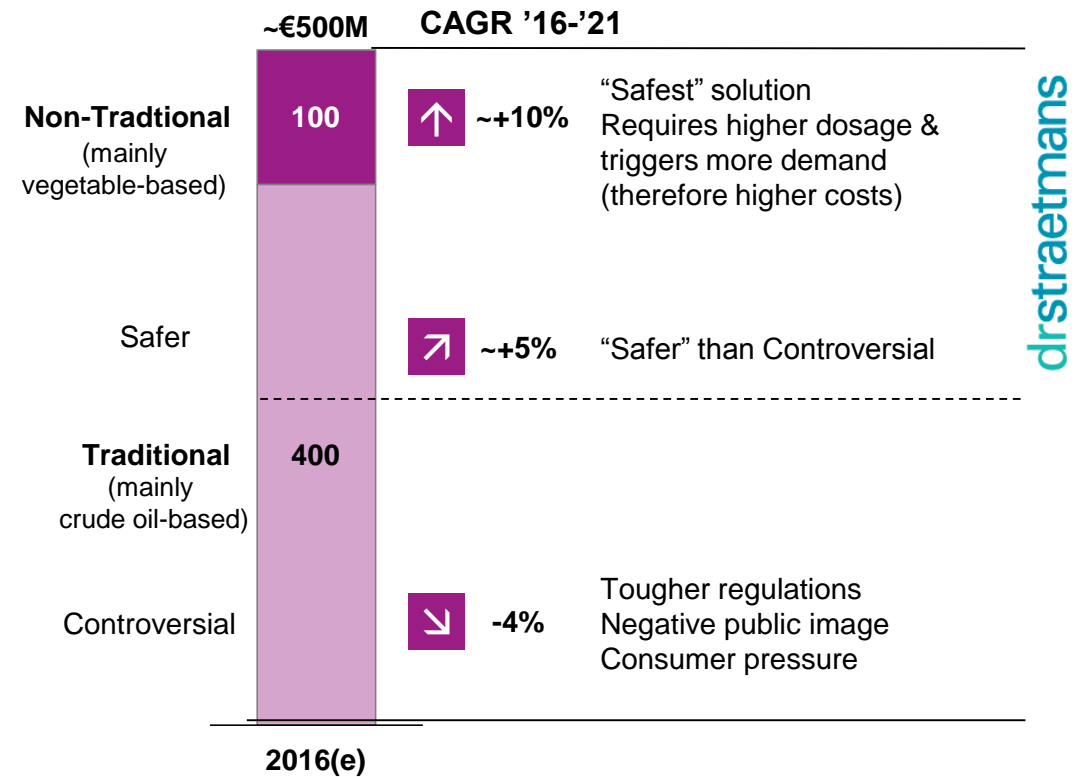
# Acquisition of Dr. Straetmans

## Sustainable preservation with state of the art multifunctionals

### Preservatives

- Preservatives are an essential part of any cosmetics formulation preventing product deterioration (e.g. via oxidation) → important cross-sectional technology
- Trend towards non-traditional preservatives due to criticism of traditional preservatives (e.g. possible estrogenic effects of paraben)
- Use of non-traditional preservatives is more complex and requires higher dosages and higher application and formulation know-how

### Market shift to high-growth non-traditional preservatives

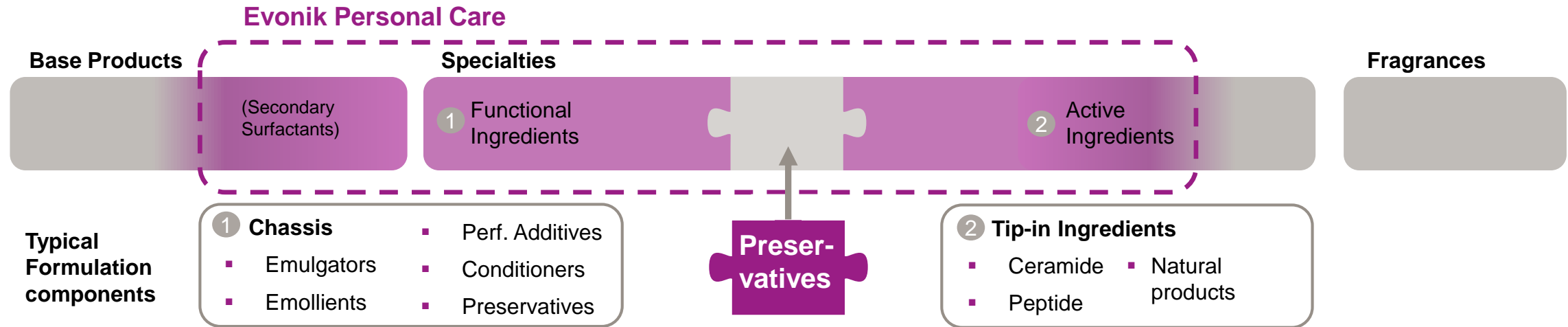


Source: Expert interviews, Advancy analysis



## Acquisition of Dr. Straetmans

Helping Evonik Personal Care to become a wide technology player



### Strategic rationale

- Combination of preservatives know how of Dr. Straetmans with emulsifier know how of Evonik
- Expanded formulation skills in one hand, thus enhanced capability to offer formulation packages
- Reduced development time and costs for customers

# Spotlight Health Care

Solution provider and development partner to the health care industry

## Strategic Objective: Further development of the three product lines with their specific success factors

### Pharma Polymers & Services



- Drug delivery systems
  - Functional medical devices
  - Services
- ~6% market growth
  - Further extension of attractive growth business
  - Broadening of technology basis and competencies
  - Transformation to solution provider and development partner with broad portfolio for pharma customers

### Exclusive Synthesis



- Service provider for development and manufacturing of APIs and intermediates
- ~5% market growth
  - Addition of further differentiating competencies
  - Pursue advanced technologies to grow the business in differentiated areas
  - Additional preferred partnerships with selected high-value Pharma companies

### Pharma & Food Ingredients



- Pharma-Intermediates and Amino Acids
  - Ingredients for medical nutrition / dietary supplements
- ~4% market growth
  - Further strengthen and grow existing business
  - Expand activities in nutritional supplements via organic growth (innovation) and selected bolt-on acquisitions

## Pharma Polymers & Services

Building up competences and solution portfolio by Technology M&A



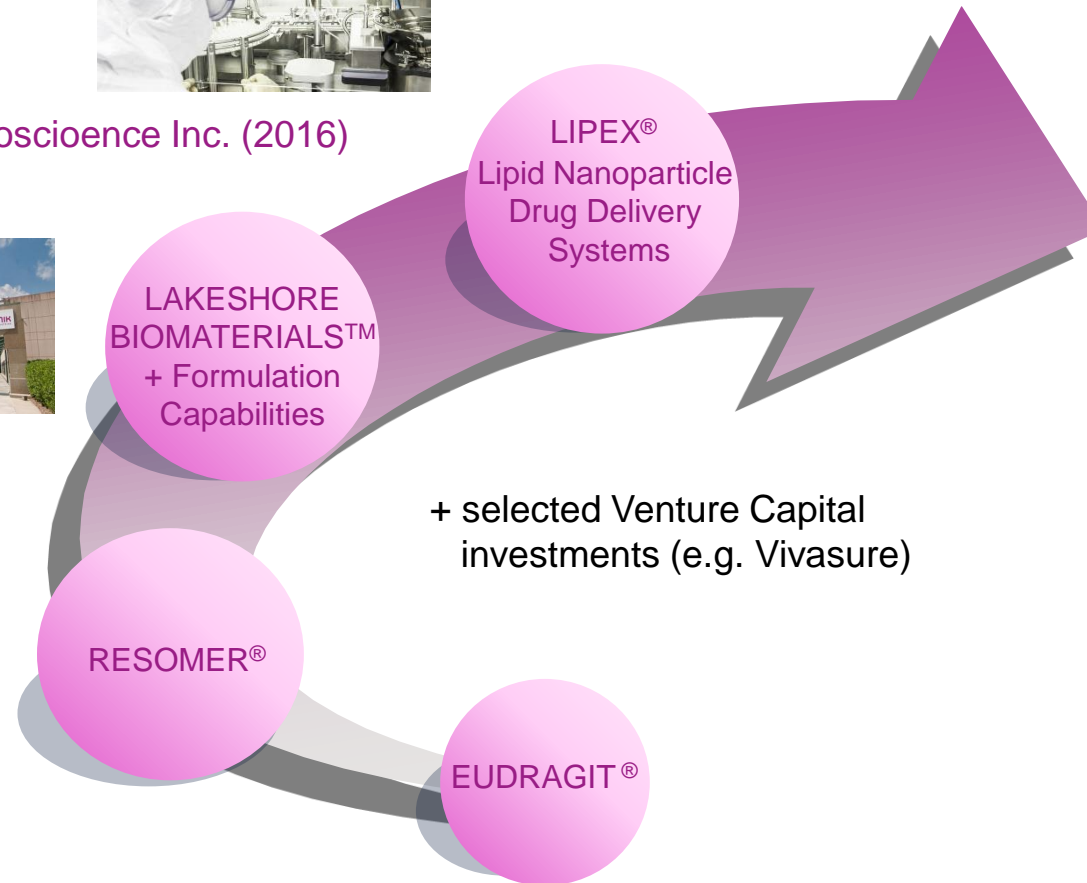
Transferra Nanoscience Inc. (2016)



Surmodics Inc. (2012)



Boehringer Ingelheim (2011)

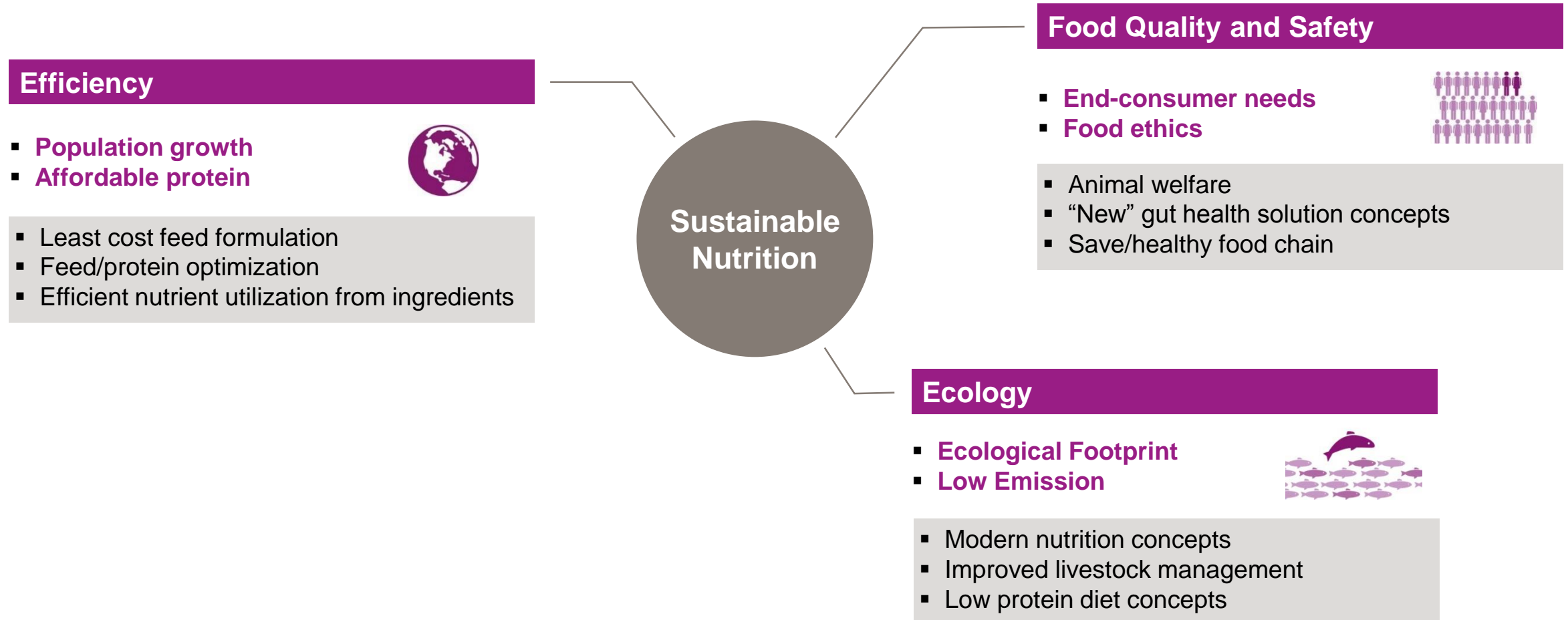


Evonik Healthcare  
as enabler and  
strategic partner for  
pharma industry

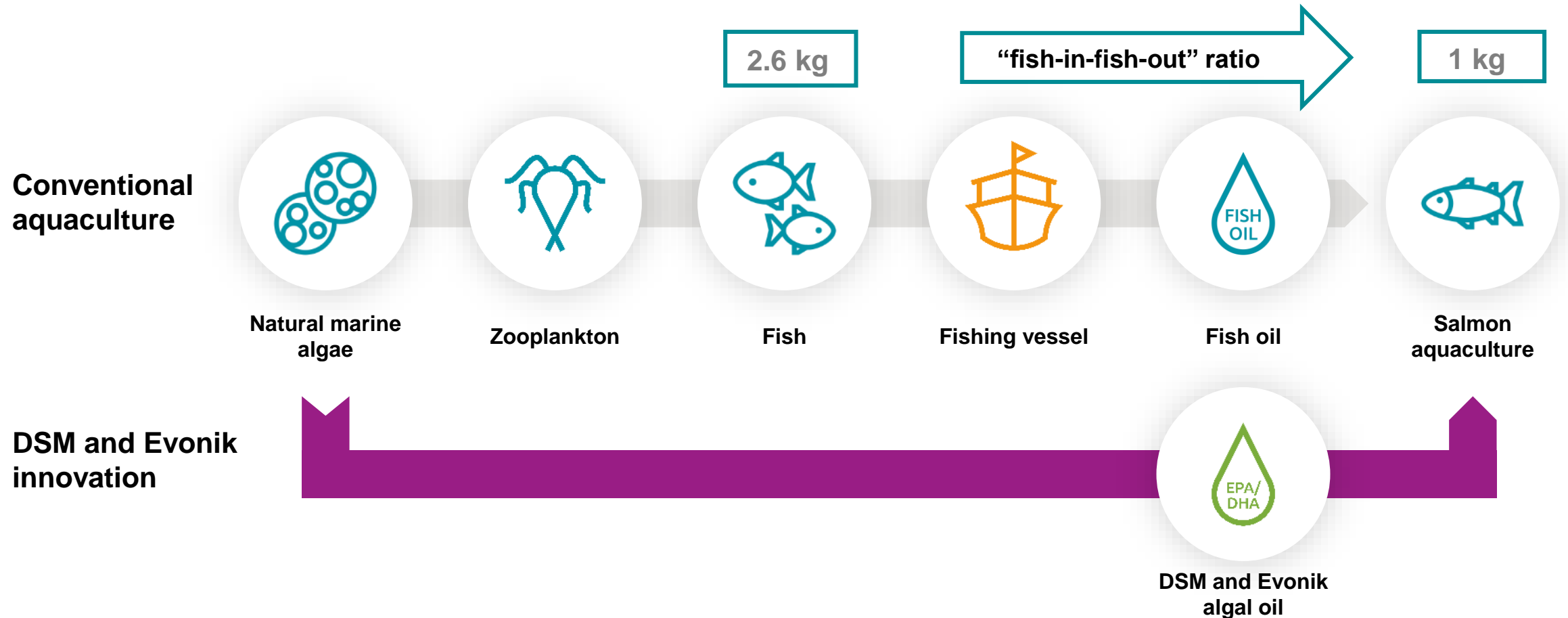
- Unique technology portfolio
- Formulation services

# Spotlight Sustainable Nutrition

## Innovating for a more sustainable food chain

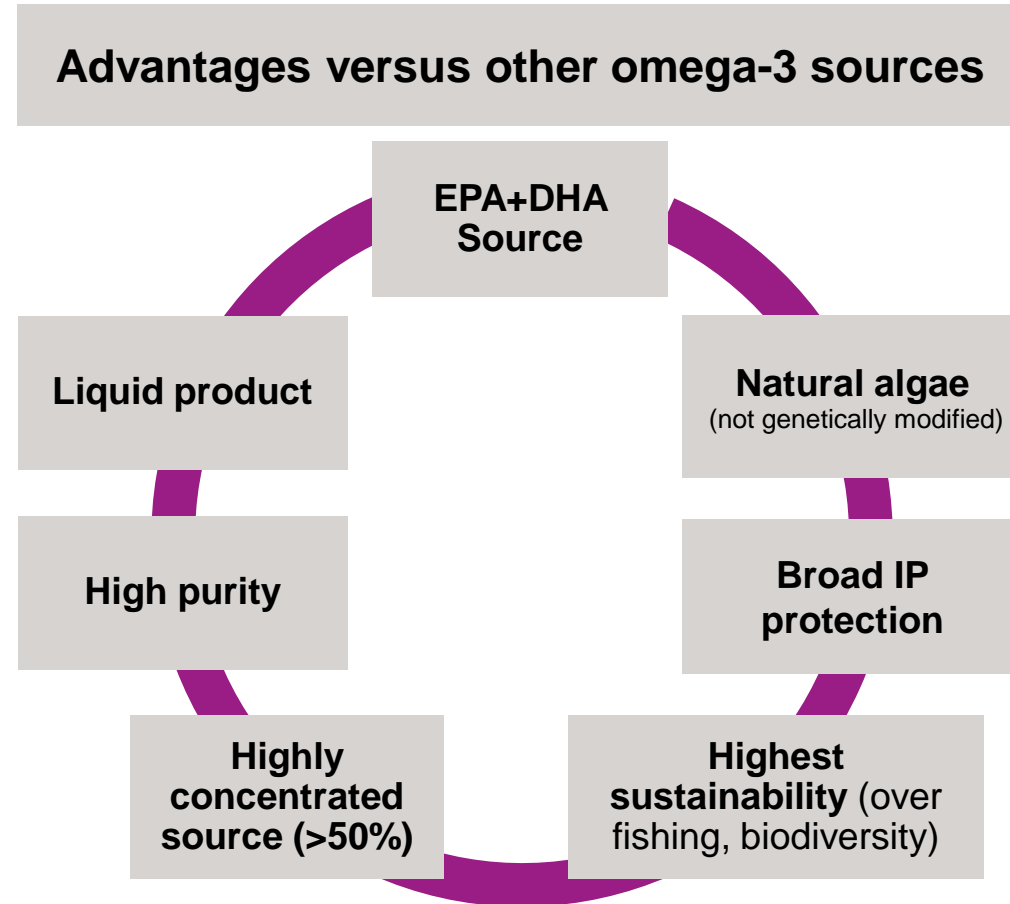


## Natural marine algal oil is a sustainable alternative solution for omega-3 fatty acids used in aquacultures



**DSM and Evonik breakthrough – shortening the natural food chain**

# Algal oil as a high-quality source of omega-3 for the use in animal nutrition has many advantages



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



Meeting roughly **15%** of the EPA and DHA  
demand of the **global salmon industry**



## DSM and Evonik establish joint venture

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- DSM and Evonik to found a **50:50 joint venture** to be named **Veramaris™**, headquartered in The Netherlands
- Joint venture for high value omega-3 fatty acid products rich in **EPA and DHA** for **animal nutrition** produced from **natural marine algae**
- Joint venture's capital expenditure in the facility will amount to around **US\$ 200 million** over the next 2 – 3 years
- Facility is scheduled to **open in 2019**
- New facility will be built in the United States, at an existing site of Evonik
- Global aquaculture production **growth is 5-6%** per year with high increasing requirements in fish oil





## Spotlight Comfort & Insulation

Leading supplier of specialty additives for the PU-industry

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### Strategic Objective:

**Further strengthen position as the leading supplier of enabling additives for the PU-industry**

- Polyurethane is a versatile material with annual growth rates of 5-6%
- Evonik is the global No.1 in silicone stabilizers for PU-foams
- Acquisition of Air Products-PMD business expands product portfolio in the area of PU-catalysts

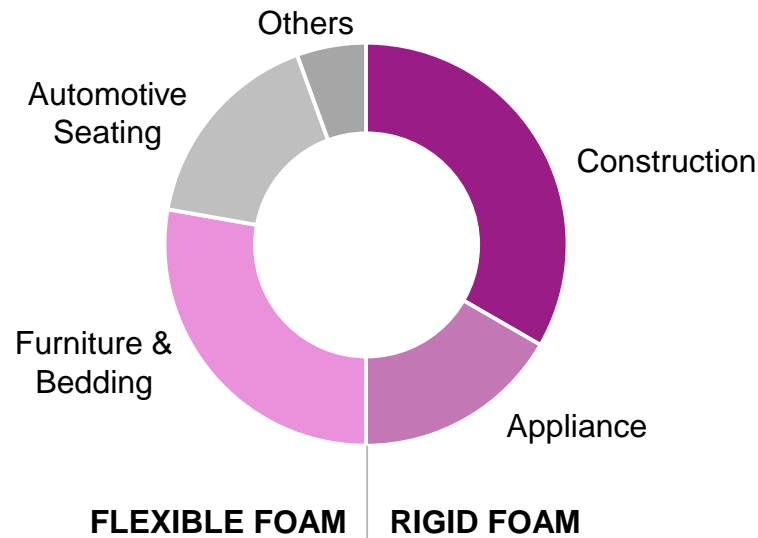
## Comfort & Insulation at a glance

### Prime partner for Polyurethane (PU) foam additives

#### Business Model

- Global strategic partner of key customers with production in all major regions
- Differentiation by quality, product development, application technology and superior logistics

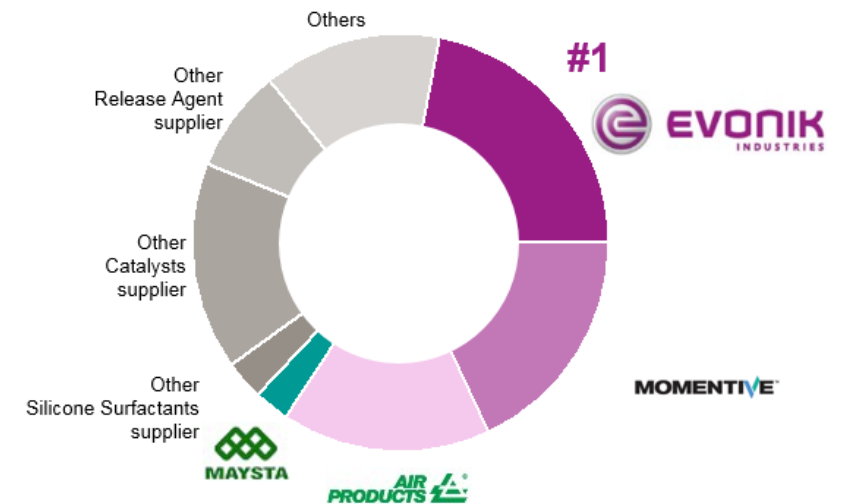
#### PU foam end markets



#### Customers (exemplary)



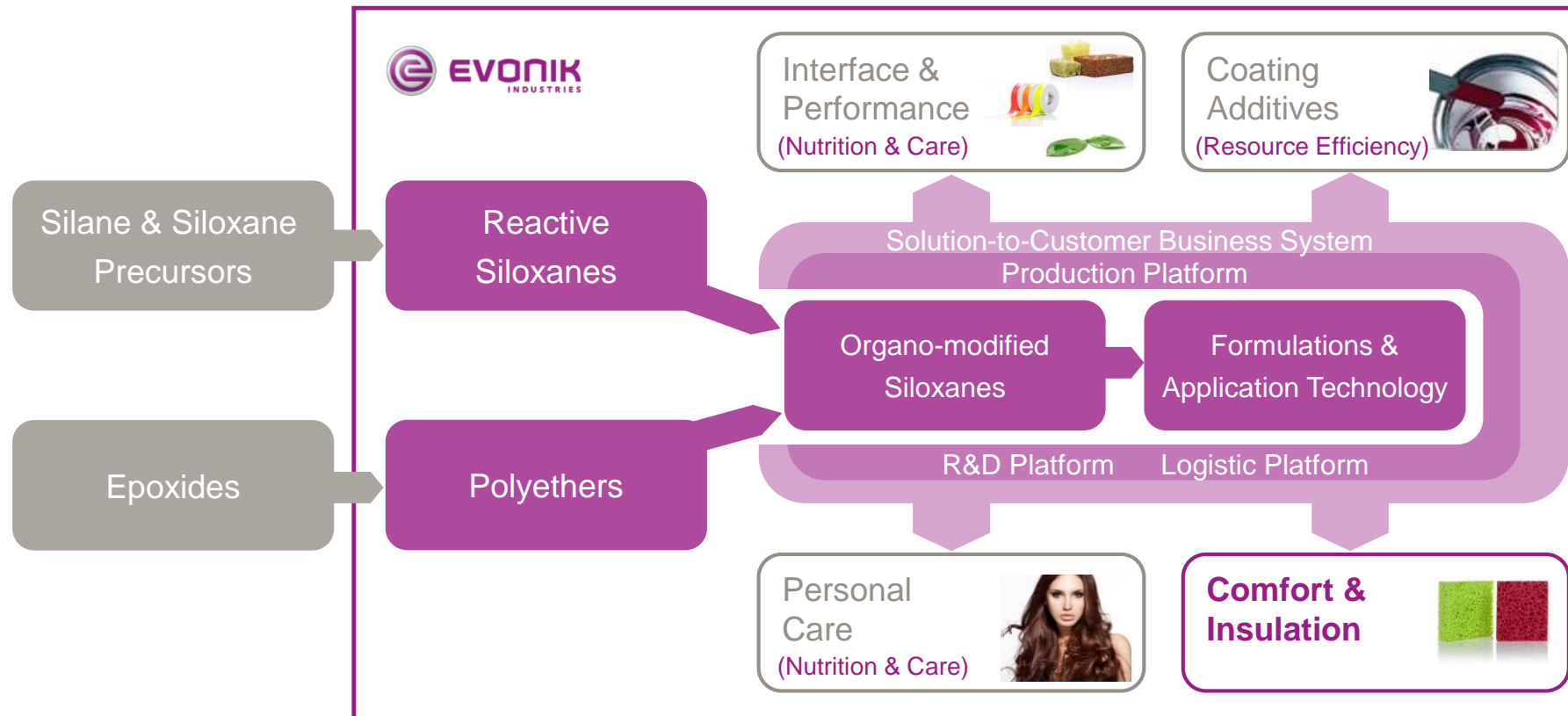
#### Competitive landscape



## Strong technology base

Silicone platform for unique and individual products at attractive economies of scale

Comfort & Insulation embedded in Evonik's **ORGANO SILICONE PLATFORM** that feeds four Evonik Business Lines



# Evonik Nutrition & Care

**Much more than  
Methionine and Baby Care**



**EVONIK**

**POWER TO CREATE**

## Segment overview

Shared technology platforms to create innovative solutions for our customers

Shared technology platforms of Nutrition & Care are enabling for >90% of sales

- We are the home of **strong technology platforms**
- We create extraordinary solutions from a **huge and diverse skill-set**
- We enable our customers for **differentiating solutions** in their markets

Baby  
Care

Animal  
Nutrition

Health  
Care

Personal  
Care

Household  
Care

Comfort &  
Insulation

Interface &  
Performance

Oleochemicals

Challenging chemicals processes

Silicone chemistry

Advanced biotechnology

Controlled release functionalities

# Segment strategy

## Growth strategy based on three strong pillars

### Organic growth projects



#### Specialty Silicones

Groundbreaking  
Shanghai, March 2016



#### New Lysine plant

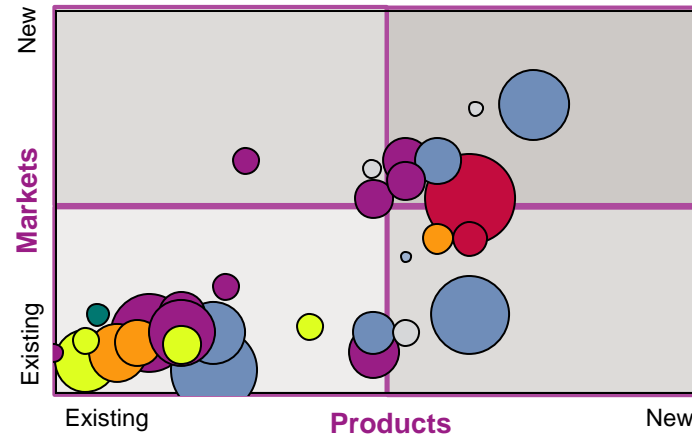
Start-up Parana (Brazil),  
July 2016



#### Methionine

Groundbreaking  
Singapore, October 2016

### Innovation



- Strong pipeline of innovation projects
- Focus on four innovation Growth Fields

### Bolt-on acquisitions



#### MedPalett AS, Norway

Advanced Food  
Ingredients



#### Norel Probiotics, Spain

Sustainable Nutrition



#### Transferra Nanosciences, Canada

Healthcare Solutions



#### Dr. Straetmans, Germany

Cosmetic Solutions

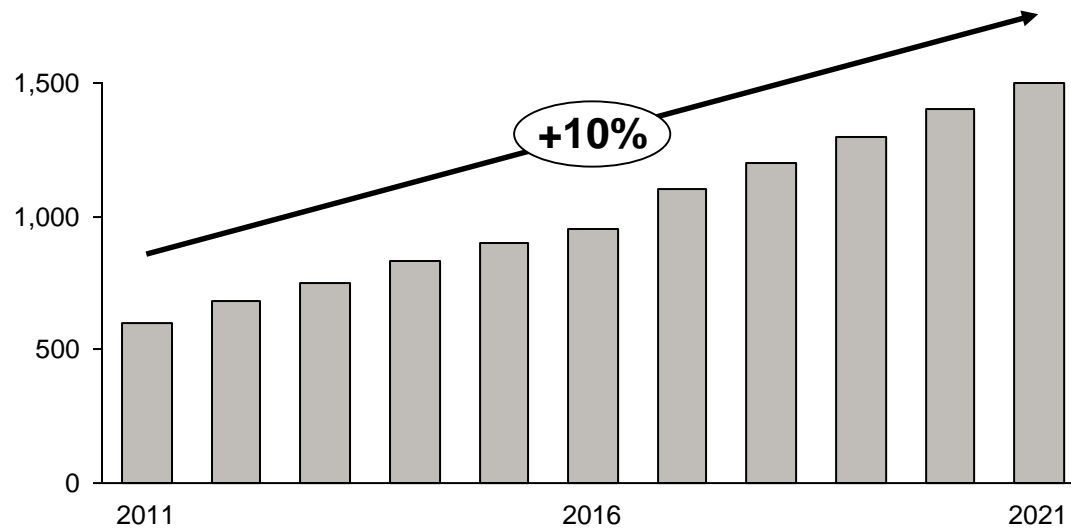


# Probiotics: Driving sustainable nutrition beyond amino acids

## Significant market potential and attractive growth rates

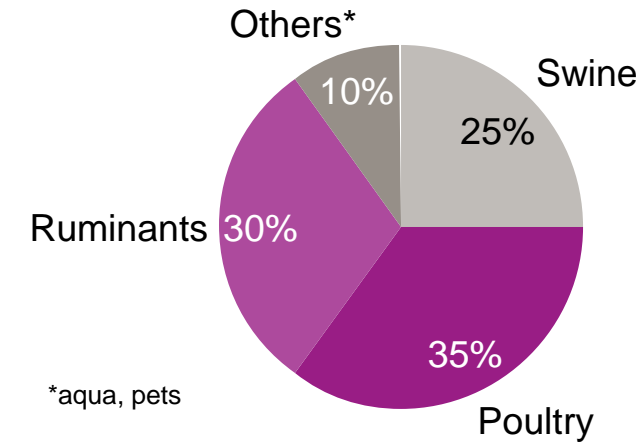
### Probiotics in Feed account for ~ US\$ 1 bn in 2016

Growth expected due to continuous ban of antibiotic growth promoters (AGP) from feed



Sources: marketsandmarkets,

### Market split by species



### Target species



## Probiotics: Driving sustainable nutrition beyond amino acids

Newly acquired and own developed probiotics promote use of less antibiotics

### Product portfolio acquired from NOREL S. A. in July 2016

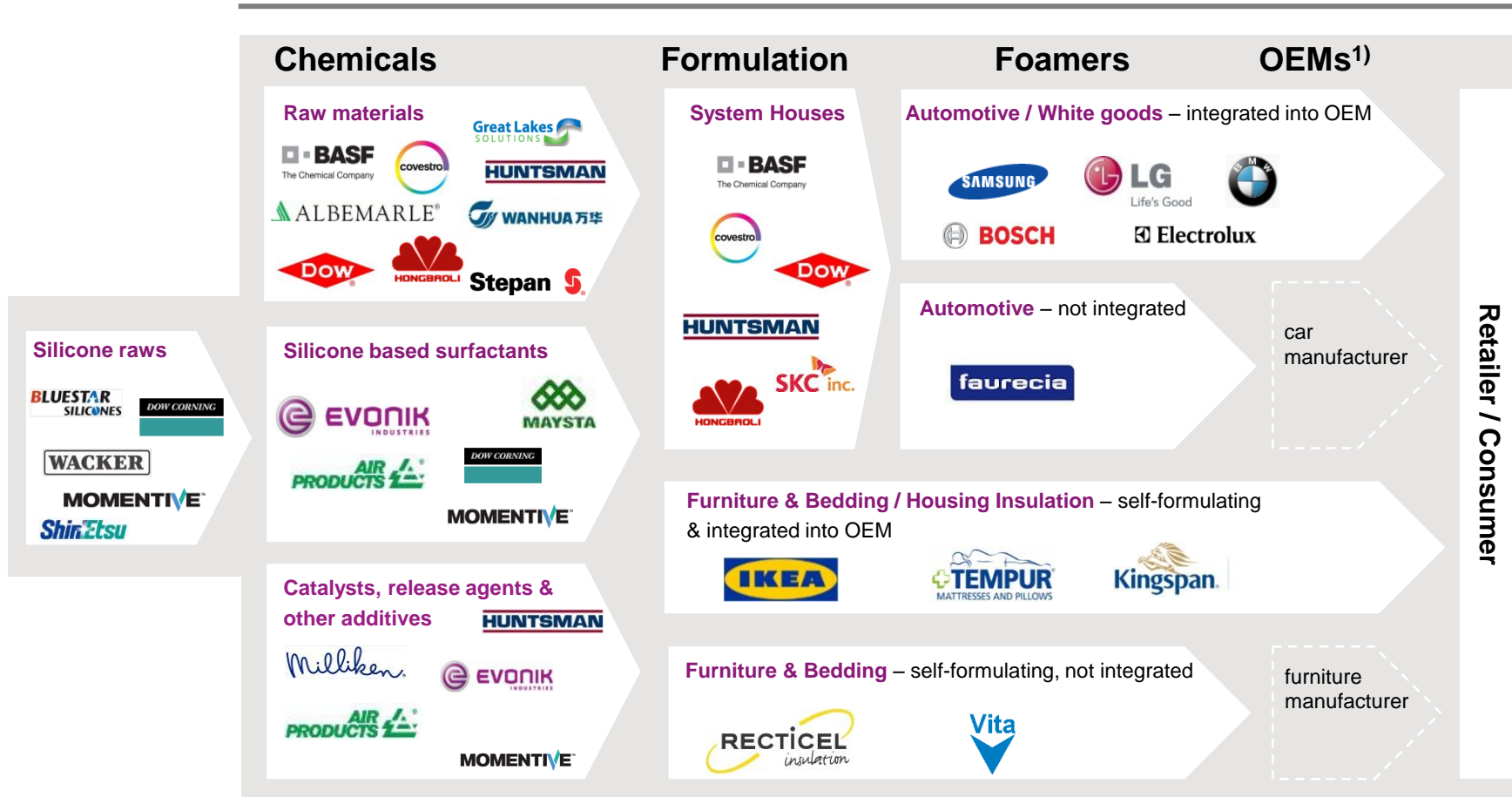
PRODUCTS	DESCRIPTION	SPECIES	PRESENT MILESTONES
<b>Ecobiol®</b>	ECOBIOI® (AQUA) contains a <i>Bacillus amyloliquefaciens</i> strain which is able to positively modulate the intestinal microbial flora	Poultry	Introduction of Ecobiol® as new part of Evonik product portfolio in Asia South in March 2017 at VIV, Bangkok
		Aquaculture	
<b>Fecinor®</b>	FECINOR® contains an <i>Enterococcus faecium</i> strain that positively affects the intestinal balance	Swine	Presentation of Fecinor® at EuroTier in Hanover in November 2016

### First own developed probiotic product by Evonik

PRODUCT	DESCRIPTION	SPECIES	PRESENT MILESTONES
<b>GutCare® PY1</b>	GutCare® contains a <i>Bacillus subtilis</i> strain that improves the overall conditions of the animals	Poultry	First launch of GutCare® in USA at IPPE in January 2017 Launch of GutCare® in China Feed show in April 2017

# Comfort & Insulation is well positioned within a complex value chain

## Supply chain for Polyurethane Foams



<sup>1</sup> Direct sales to customers

## Disclaimer

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