Rationale for new management and reporting structure

- Clearly defined strategic roles
- More homogeneous divisions
- Higher transparency
- More efficient internal management
- Leaner organization

3 “Growth” divisions with >3% volume growth target
Performance Materials as “Efficiency” division

Common themes & trends in growth divisions

4 divisions; sales split for sub-divisions

Clear-cut technology platforms

Reduction of 150 FTE, €25 m p.a. savings by end of 2021

1: mainly in cross-segment- and administrative functions in the operating segments
New divisional structure
Growth divisions with common themes and attractive growth drivers

<table>
<thead>
<tr>
<th>Specialty Additives</th>
<th>Nutrition &amp; Care</th>
<th>Smart Materials</th>
<th>Performance Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>Broad spectrum of additives solutions for maximum performance which make the key difference in industrial applications for coatings, polyurethane foam &amp; lubricants</td>
<td>Sustainable solutions for basic human needs in resilient end markets like pharma, personal care &amp; animal nutrition</td>
<td>Innovative materials for resource-saving solutions and substitution of conventional materials in environmental, mobility and construction end markets</td>
<td>Efficient platforms for production of high-volume intermediates for mobility, plastics &amp; rubber as well as superabsorbent polymers for consumer applications</td>
</tr>
</tbody>
</table>

**Portrait**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bread spectrum of additives solutions</strong></td>
<td><strong>Sustainable solutions</strong></td>
<td><strong>Innovative materials for resource-saving solutions</strong></td>
<td><strong>Efficient platforms</strong></td>
</tr>
<tr>
<td>for maximum performance which make the key difference in industrial applications for coatings, polyurethane foam &amp; lubricants</td>
<td>for basic human needs in resilient end markets like pharma, personal care &amp; animal nutrition</td>
<td>and substitution of conventional materials in environmental, mobility and construction end markets</td>
<td>for production of high-volume intermediates for mobility, plastics &amp; rubber as well as superabsorbent polymers for consumer applications</td>
</tr>
</tbody>
</table>

**Main Growth Drivers**

- More sophisticated additive effects
- Environmentally-friendly additives
- Social trends in health, well-being and nutrition
- Natural-based ingredients
- Saving resources
- Use of lightweight materials
- Stricter regulation and safety standards
- Focus on efficiency in production & procurement
- Biotechnology and fermentation
New divisional structure
Technology platforms and end market exposure

**Technology platforms**

<table>
<thead>
<tr>
<th>Specialty Additives</th>
<th>Nutrition &amp; Care</th>
<th>Smart Materials</th>
<th>Performance Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Silicone chemistry</td>
<td>▪ Biotechnology / Fermentation</td>
<td>▪ Inorganic particle design</td>
<td>▪ C4 processing and derivatizing</td>
</tr>
<tr>
<td>▪ Isophorone platform</td>
<td>▪ Methionine platform</td>
<td>▪ Specialty polymers</td>
<td></td>
</tr>
<tr>
<td>▪ Amines platform</td>
<td>▪ Oleo chemistry</td>
<td>▪ Active oxygens</td>
<td></td>
</tr>
<tr>
<td>▪ Biotechnology platform</td>
<td></td>
<td>▪ Process catalysts</td>
<td></td>
</tr>
<tr>
<td>▪ Isophorone platform</td>
<td>▪ Specialty polymers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Amines platform</td>
<td>▪ Active oxygens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Biotechnology platform</td>
<td>▪ Process catalysts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key products & global market positions**

<table>
<thead>
<tr>
<th>Specialty Additives</th>
<th>Nutrition &amp; Care</th>
<th>Smart Materials</th>
<th>Performance Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ #1-2 in Coating Additives</td>
<td>▪ #1 in Methionine</td>
<td>▪ #1 in Silica</td>
<td>▪ C4 Derivatives</td>
</tr>
<tr>
<td>▪ #1 in PU Additives</td>
<td>▪ Strong position in Active Cosmetic Ingredients</td>
<td>▪ #2 in H₂O₂</td>
<td>▪ Superabsorbers</td>
</tr>
<tr>
<td>▪ #1 in Viscosity Modifiers (for lubricants)</td>
<td>▪ #2 in Drug Delivery Systems</td>
<td>▪ Leading in Catalysts¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ #1 in PA12</td>
<td></td>
</tr>
</tbody>
</table>

**End market split**

1: #2 in activated nickel catalysts, #3 in Oil & fat hydrogenation catalysts
Specialty Additives – Key characteristics
Leading Specialty Additives portfolio for maximum customer value

Key characteristics

- Leading portfolio of additive solutions for maximum performance which make the key difference
- Minor share of cost in customers’ end products
- Unique formulation know-how guarantees deep integration into customers’ innovation processes

Growth drivers

- Trend towards more sophisticated additive effects
- Constantly rising demand for environmentally-friendly solutions
- Leverage capabilities in silicone and amine technology platforms into new applications
Specialty Additives – Growth drivers
Additives solutions making the key difference in various applications

<table>
<thead>
<tr>
<th>Less maintenance</th>
<th>Less energy</th>
<th>More protection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rust doesn’t stand a chance</strong></td>
<td><strong>Colder drinks for less money</strong></td>
<td><strong>The paint stays put</strong></td>
</tr>
<tr>
<td>Crosslinkers for composite-reinforced bars with outstanding mechanical and chemical properties</td>
<td>PU foam surfactants create performance advantages in insulating foams for appliances and buildings</td>
<td>Additives for paint systems creating a lasting barrier against chemical cleaning agents</td>
</tr>
<tr>
<td>Global corrosion cost ~US$2.5 tn Prevention best practices can reduce costs by 15-35%</td>
<td>Reducing the electricity bill with increased sustainability</td>
<td>Protecting rail car surfaces and helping to avoid €30,000 of repainting costs</td>
</tr>
</tbody>
</table>
Specialty Additives – Financials

Continue strong growth track record on very attractive margin level

- Steady earnings growth and outstanding 26% margin level
- Strong track record of pricing power and good volume development
- Attractive ROCE of ~18% in 2019 (including APD goodwill)

**Ambitions going forward:**
- Continue strong growth track record
- Maintain very attractive margin level

---

1: Organic Sales / EBITDA CAGR = adjusted for APD acquisition
Specialty Additives – Strategic agenda
Strategic agenda to drive growth and expand market leadership

- Expand leading additives portfolio towards environmentally-friendly systems and formulations
- Exploit new applications via innovation and customer application development
- Continue successful capex-light approach
- Ongoing expansions and debottleneckings
- Additives portfolio offers bolt-on M&A opportunities in complementary products and technologies

1: Target
Nutrition & Care – Key characteristics
Sustainable solutions in defensive end markets

Key characteristics

- **Resilient business models** in defensive end markets
- Unique combination of **technology infrastructure** and customer-centric formulation know-how
- **Close partnerships and R&D collaborations** with leading personal care and pharma players

Growth drivers

- **Social trends** for sustainable nutrition and natural-based cosmetics ingredients
- **Leading biotech / fermentation know-how** offers new growth arenas
Nutrition & Care – Growth drivers
Leading position in the growing market for fermentation-based materials

Strong foundation in microbial fermentation...

- > 30 years industry expertise
- > 25 fermentation-based products commercialized
- Wide range of bacteria, yeast and algae-based organisms used in strain development and fermentation
- Global network of sites across Europe, USA and Asia
  - > 7,000m³ fermentation capacity - One of the industry’s largest players
- Internal and CMO projects in high-growth areas:
  - e.g. protein fermentation of food ingredients and biofabricated materials (e.g. leather)

...with an outstanding project pipeline

- Algae fermentation for omega-3 EPA / DHA in salmon aquaculture
- Production facility in Nebraska, USA
- Latest innovation: recombinant collagen platform
- Fermentation-based & animal-free
- ~€1.5 bn accessible collagen market for pharma & healthcare
- Contract manufacturing and industrialization projects with large & growing list of innovators
- Protein fermentation, pharma
Nutrition & Care – Growth drivers
Strong setup for future growth in Care Solutions

Expansion of technology portfolio in natural-based ingredients…

2016
- Botanical Extracts
  “Consumer request for sustainable sourced botanicals”

2017
- Alternative preservatives & Formulation service
  “Consumers demand alternative solutions to parabens – which are by far more complex to formulate”

2020
- Natural products
  “Plant-derived active ingredients and intermediates”

…delivering outstanding customer benefits

Transformation into a sustainable specialty products provider to provide outstanding formulation concepts

Peptides & Amino acids
Plant extracts & Phytochemicals
Biopolymers
Animal Nutrition transformation
From Amino Acid producer into system house for sustainable nutrition

**Efficient Nutrition**
- Strong position in amino acids, especially Methionine
- Unparalleled sales force and direct customer access in > 120 countries

**Sustainable Healthy Nutrition**
- Building a system house for sustainable healthy nutrition, e.g.:
  - Expand existing product and customer portfolio for Gut Health Solutions (e.g. probiotics)
  - Leverage bio solutions like new algae oil omega 3 fatty acids (Veramaris)

**Precision Livestock Farming**
- Concepts to implement digital farming approach, e.g.:
  - In-feed analytics
  - On-farm monitoring
  - In-vivo-in-vitro gut modelling

Today

Leverage global customer outreach

Target setup

Today + Leverage global customer outreach + Target setup
**Nutrition & Care – Financials**

Strong H&C performance; Animal Nutrition with healthy & steady volume growth

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (€ bn)</td>
<td>3.6</td>
<td></td>
<td></td>
<td></td>
<td>2.9</td>
</tr>
<tr>
<td>Health &amp; Care</td>
<td>1.2</td>
<td></td>
<td></td>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>Animal Nutrition</td>
<td>2.4</td>
<td></td>
<td></td>
<td></td>
<td>1.4</td>
</tr>
</tbody>
</table>

**CAGR**

- H&C: +5%
- AN: -12%

**Adj. EBITDA (€ bn)**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margin</td>
<td>34%</td>
<td></td>
<td></td>
<td></td>
<td>16%</td>
</tr>
</tbody>
</table>

**ROCE of ~8% in 2019**

- Strong track record in Health & Care now becoming more visible
- Healthy & steady market growth in Methionine (5-6% p.a.) overcompensated by price decline
- Ambitions going forward:
  - Bring back margin level into target range of 18 - 20%
    - Foster specialty growth in Health & Care
    - Execute differentiated growth & efficiency strategy in Animal Nutrition

---

1: Organic Sales / EBITDA CAGR = adjusted for APD acquisition
Nutrition & Care – Strategic agenda
Foster growth trend for sustainable nutrition and natural-based ingredients

Portfolio development
- Expand portfolio of natural-based ingredients
- Leverage strong biotechnology platform across all businesses

Investments
- Well-invested asset base, limited capex needs going forward
- Focus on debottleneckings and customer-financed projects
- Capex/sales: ~5%

M&A
- M&A opportunities to strengthen Animal Nutrition in growth areas outside amino acids
- Attractive niches for adjacent technology acquisitions in Health & Care

1: Target
Smart Materials – Key characteristics
Resource-efficient and environmentally-friendly solutions

**Key characteristics**

- Environmentally-friendly solutions
- Broad expertise and portfolio for complex customer requirements
- Global market leading positions with high economies of scale

**Growth drivers**

- Saving resources
- Increasing use of lightweight materials
- Stricter regulation and safety standards
## Smart Materials – Growth drivers
Broad-based specialty silica portfolio with >€1 bn of sales

<table>
<thead>
<tr>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>#1</strong></td>
</tr>
<tr>
<td><strong>32</strong></td>
</tr>
<tr>
<td><strong>&gt;100</strong></td>
</tr>
<tr>
<td><strong>~260</strong></td>
</tr>
<tr>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

### Broad specialty silica portfolio

- **Portfolio** with exposure to various end-markets
- Growth focus on customer-oriented solutions in niche markets
- Strong innovation capabilities – 20 new products since 2017

### Specialty portfolio constantly supplemented by product innovations like...

- **SPHERILEX®**
  - Versatile and eco-friendly alternative to microplastics in leave-on and color cosmetic applications

- **AEROXIDE®**
  - High quality pure silica and metal oxides separators increase safety, lifetime and performance of batteries for EVs

1: Portfolio includes precipitated, fumed and metal oxides applications
Smart Materials – Growth drivers
Shifting consumer & producer preferences in food & beverage processing

Customer challenge in aseptic packaging

- Consumer demand for more nutritional natural drinks (more conducive environment for microbial growth)
- Producer demand for more cost effective, high speed PET bottle filling systems
- More innovative bottle designs
- Sustainability trend to thinner packaging

Technical challenges in existing sterilants and applications

![Diagram](image)

**Evonik solution:** Spraying Technology “Vapor PAA”

- New Vapor PAA technology (as alternative to liquid Peracetic Acid or Vapor H₂O₂) for spray sterilization
- Greatly reduces water and energy consumption
- Withstands lower temperatures, which increases bottle options
Smart Materials – Financials
Solid earnings growth and margin progression

- Steady earnings & margin expansion
- Strong pricing power & shift towards lower-volume specialties
- ROCE of ~16% in 2019 (including Huber goodwill)

<table>
<thead>
<tr>
<th>Sales (€ bn)</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inorganics</td>
<td>3.0</td>
<td>2.0</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Polymers</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Adj. EBITDA (€ bn)

<table>
<thead>
<tr>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Margin

1: Organic Sales / EBITDA CAGR = adjusted for Huber acquisition
Smart Materials – Strategic agenda
Expand technology and cost leadership

Portfolio development
- Expand specialty applications, e.g. in Silica & H₂O₂
- Capture opportunities and new markets for non-fossil raw materials and products

Investments
- Expand technology and cost leadership
- Ramp-up of new PA12 and Silica capacities to meet strong market growth
- Capex/sales: ~6%¹

M&A
- Leverage Huber Silica & PeroxyChem acquisitions
- Selective M&A to complement already strong positioning of current portfolio

¹: Target
Performance Materials – Key characteristics
Leading platforms and processes

Key characteristics

- **Leading integrated C4-technology platform** with excellent exploitation of raw materials
- Reliable partner for our customers in **Superabsorbent polymers**
- Global supplier of **Alkoxides** as essential catalyst for the renewable fuel industry
- Highly efficient processes and integrated platforms offer reliable cash contribution

Efficiency examples

- **E-Business solutions** 'C4Connect®' for order and availability management as well as personalized offers
- Constant **process innovation and optimization** (e.g. fluid catalytic cracking to broaden raw material base)
- Consistent digitalization of the whole production **Verbund** leads to a permanent improvement of manufacturing and business processes
Performance Materials – Financials
Focus on cost efficiency and cash generation

- Focus on cost efficiency and cash generation
- Constant process innovation and optimization, also by using digitalization potentials
- Higher exploitation of raw material streams in C4 chain
## Innovation strategy
Targeted approach for market-leading innovations

<table>
<thead>
<tr>
<th>Targeted approach</th>
<th>Sustainability focus</th>
<th>Process innovations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central steering</strong> of innovation activities</td>
<td><strong>Sustainability as key driver</strong> for future innovation initiatives</td>
<td><strong>Higher focus on process innovations</strong> to drive operational excellence</td>
</tr>
<tr>
<td><strong>Focus on innovation growth fields</strong> with clearly assigned responsibilities</td>
<td><strong>Sustainability criteria and KPI’s integrated</strong> into innovation process</td>
<td><strong>Integrate process innovations into continuous improvement process</strong></td>
</tr>
<tr>
<td><strong>Bundling of cross-business competencies</strong> in dedicated R&amp;D hubs</td>
<td><strong>Continuous sustainability analysis</strong> of introduced products</td>
<td><strong>Lower capex and opex levels</strong> for capacity expansions</td>
</tr>
</tbody>
</table>
Precision Livestock Farming
▪ Digital solutions to optimize every aspect of livestock production – in one holistic approach

Biosurfactants
▪ Based on Evonik’s leading biotechnology know-how
▪ 100% renewable natural resource & biodegradable

Additive Manufacturing
▪ Evonik’s 3D printing portfolio as beneficiary of trend from “prototyping only” into real series production

Innovation pipeline
A well-filled R&D pipeline with different target horizons

Short-term

Mid-term

Long-term
Additive Manufacturing
A strong existing base offering further growth opportunities

**Strong base established**
- Evonik as market leader in PA12 powder-based 3D printing materials
- Several platforms available to serve all major powder-based printing technologies
- Close partnerships with major printing players and innovators:

**Expand strong position to new applications and new materials**
- Establish position in emerging technologies like high performance photo-resins
- Expand business in medical applications with implantable PEEK and bio-resorbable RESOMER
- Capture growth potential of shift from “prototyping only” into real series production:

Non-metal 3D-printing materials market (in €bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3</td>
</tr>
<tr>
<td>2025</td>
<td>15</td>
</tr>
</tbody>
</table>

+30% p.a.
Biosurfactants
Large-scale production of world’s first “green” biosurfactant (rhamnolipids)

- Renewable resource & biodegradable
- Plant-based sugars as only carbon source – no oils used
- Unique product properties, especially cleansing & foaming

![Diagram showing the process from raw materials to Biosurfactants (rhamnolipids) through Fermentation and Cosmetics & cleaning agents]

2016 Development phase
- Raw materials
- Fermentation
- Cosmetics & cleaning agents

2018 Test phase & first products
- Personal Care ingredient “RHEANCE® One” awarded at “in-cosmetics” 2018
- Test launch in selected personal care products
- Unilever with successful market launch of a dishwashing product in 2019

2020 Industry-scale investment
- Commercializing Evonik’s leading biotechnology capabilities
- Evonik will be the first company to produce biosurfactants on industrial scale
- Basic engineering at our biotech hub in Slovakia
Precision Livestock Farming
Digital solutions to optimize every stage of livestock production

Digital in-flock monitoring of animals

Provide real-time recommendations for

- Optimized farming
  - Growth monitoring and prediction
  - Efficient use of resources
  - Limited Nitrogen emissions

- Better nutrition
  - Analyze exact feed quality
  - Optimum balance of nutrient ingredients

- Improved health
  - Implement preventive measures
  - Avoid disease outbreak
  - Reduce antibiotics use

First offerings available

Big data technology & biostatistics combined with poultry science and poultry production

- Production planning
- Intuitive dashboard
- Accurate predictions
- Internal benchmarking
- Early warning system
- Health management

Porphyrio®
An Evonik product.

Evonik
Leading Beyond Chemistry
New divisional structure
Divisions, Sub-Divisions, Key products & Raw materials

**Specialty Additives**
- Animal Nutrition

**Nutrition & Care**
- Health & Care

**Smart Materials**
- Inorganics
- Polymers

**Performance Materials**

### Key Products
- Coating additives
- PU additives
- Lubricant additives
- Amino acids
- Drug delivery systems
- Cosmetic ingredients
- Silica
- H\(_2\)O\(_2\)
- Catalysts
- PA 12
- C4 derivatives
- Superabsorbers

### Key Raw materials
- Acetone
- Ammonia
- Fatty Alcohol
- Propylene
- Methanol
- Dextrose
- Ammonia
- Sodium Silicate
- Silicone Metal
- Sodium Hydroxide
- Crack C4
- Propylene
- Acrylic Acid
- Raffinate 1