Time to prove our strengths
Meeting the Management – 15 November 2019

Matthias Zachert, CEO
The way forward – Providing direction from four perspectives

- Strategy
- Operations
- Financials
- Sustainability
The way forward – Providing direction from four perspectives

Strategy

- Continuous portfolio management
- Fix underperforming businesses
- Innovation
- Digitalizing the value chain

Operations

Financials

Sustainability
LANXESS Portfolio Transformation
2016

- Rubber
- Intermediates
- Engineering Materials
- Performance Chemicals
LANXESS Portfolio Transformation
2016

- Rubber
- Intermediates
- Engineering Materials
- Performance Chemicals
LANXESS Portfolio Transformation

- Intermediates
- Specialty Additives
- Engineering Materials
- Performance Chemicals
LANXESS Portfolio Transformation
2019
LANXESS Portfolio Transformation
2019

Intermediates
Specialty Additives
Engineering Materials
Consumer Protection Chemicals
The way forward – Continuous Portfolio Management

Strategy

Why do we like Consumer Protection Chemicals?
Perfect match: The characteristics of Consumer Protection Chemicals and our competences

**Characteristics:**
- High entry barriers due to increasing regulation
- Strong expertise in Regulatory Affairs
- Data ownership* essential for product registration
- Attractive secular growth, independent of industry cycles

**Our competences:**
- Global set-up in Regulatory Affairs
- Regulatory competence: One of the largest global expert teams in the industry
- Unique portfolio in Animal Protection Chemicals
- One of the strongest water purification technologies

*Identity, phys.-chem, analytical, methodology information
LANXESS Consumer Protection: Our products follow strong application-driven trends

<table>
<thead>
<tr>
<th>Food Safety</th>
<th>Water Purification</th>
<th>Biosecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Velcorin®</td>
<td>Lewatit®</td>
<td>Virkon™</td>
</tr>
<tr>
<td>~5%</td>
<td>~5%</td>
<td>~27%</td>
</tr>
</tbody>
</table>

Sales CAGR* (2017-2019)

* CAGR figures represent LXS sales growth
Velcorin: The solution provider for beverage stabilization ensures food chain safety

**Strong market presence**
- Over 500 customers including global top brands
- >1,500 Velcorin® dosing units (DT) in the market

**Full solution offering**
- Comprehensive application-specific advice and service
- Extensive regulatory support on food law and legislation

**Product benefits**
- Highly effective against bacteria and fungi without impacting color and taste
- Cost-effective for the customer
- Dissolves into naturally occurring components
Lewatit: Unique process knowledge allows top performance in high-end applications

Strong market presence
- Complete ion exchange resins portfolio focused on high value applications
- LANXESS among the top four players worldwide

Matching growing demand driven by global water trend
- Water scarcity is a global threat
- Therefore, more and more countries are increasing regulation to accelerate industrial water recycling

Product benefits
- Our ion exchange resins have high cleaning efficiency at moderate customer operating costs
- LANXESS products suitable for high end applications (e.g. selective removal of heavy metals in mining)
We help to counter fight African Swine Fever outbreak

**Americas: Not yet infected by ASF, but preparatory measures increase**
- **Washington Post** (Oct 16th) US begins preparations aimed at fending off ASF
- **FT** (May 6th) Tyson Foods chief warns African swine fever could reach US
- **Forbes** (May 6th) earlier this year, the U.S. National Pork Producers’ Council canceled its annual World Pork Expo in Des Moines, Iowa

**Europe: Directly and indirectly affected**
- **Financial Times** (Oct 14th) ASF drives up European pork prices
- **Poland**: (Oct 10th) ASF infects 46th Polish farm
- **ZEIT** (June 3rd) around 150-200 million animals will be infected until end of 2019, prices for pork will increase also in Europe

**Asia: Epicenter for ASF, the disease is now spreading rapidly**
- **Reuters** (Oct 14th) Philippines detects ASF infections in two more provinces
- **The guardian** (Oct 12th) ASF: The deadly virus that has landed on Australia’s doorstep
- **Reuters** (Sep 23rd): China reports new African swine fever case in Guangxi region
- **ABC News** (Sep 18th)
  One quarter of world’s pigs killed by African swine fever as disease spreads to South Korea
- **The guardian** (Sep 17th): South Korea confirms African swine fever outbreak
- **CNN** (May 15th): Fever could kill a third of China’s pigs. That’s almost as many as are farmed in the US and Europe
- **New York Times** (May 14th) Vietnam culls 1.2 million pigs over African swine fever
The way forward –
Fix underperforming businesses

Which businesses are we addressing?
Rigorously addressing under-performing businesses across our portfolio

Sales of businesses to be addressed ~€800 m

Transforming action
- Solving the Chrome problem
- Accelerating OMS performance to peer level
- Turnaround Rubber Additives and Membrane businesses

Target structure ~€500 m

Margin Level: ~8%

Margin Level: >15%

* Realignment focused on Chrome value chain, sales contribution includes Chrome Chemicals, sold to Brother Enterprises, closing expected in 2019, subject to antitrust approval
Strong progress in solving the Chrome problem

Structure
Business Unit Leather

Chrome Ore
South Africa

Chrome Chemicals
South Africa

Organic Leather Chemicals
EMEA, China

Exit

Sold*

Reposition
2020-2022

* Sold to Brother Enterprises, closing expected in 2019, subject to antitrust approval. LANXESS continues manufacturing at Merebank site as part of a 5 years tolling agreement
Improving Organometallics’ performance to competitive peer level

Organometallics Sales

2018:
~€160 m

Transforming action

Aluminum based Organometallics:
Set for organic growth

Tin based Organometallics:
Exit partner found with PMC

Gallium based Organometallics1:
Exit in preparation

Target structure
~€100 m

Margin Level:
0-5%

%

% Margin Level:
15-20%

1 LANXESS Electronic Materials, Pyeongtaek (Korea)
2 LANXESS will continue to manufacture these products on a contract basis for PMC with first exit option end of 2021
The way forward – Innovation

What innovations are we working on?
We focus on product, process and technology innovation

Our philosophy

- Result-oriented product innovation
- Process innovation with focus on energy & resource efficiency
- Technology innovation that will change chemical business models (esp. digitalization)

Global innovation platform

- 33 application centers in 14 countries focusing on product innovation
- Dedicated task force teams continuously optimize production processes worldwide
- Centralized digital team to introduce new technologies and change business models

Strong alliances

- More than 150 research cooperations with customers, universities and other research institutes worldwide
- Collaboration with leading AI specialists Citrine, Palantir, et al.
Some examples…
Identifying innovations that fit to our business –
A natural preservative derived from an edible fungus

<table>
<thead>
<tr>
<th>BU MPP</th>
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<tbody>
<tr>
<td>Nagardo</td>
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**Acquisition of IMD Natural Solutions completed in 2017**
- 9 FTE with a lab in Dortmund, Germany

**Rationale**
- Strong trend to replace chemicals with natural preservatives
- LANXESS has a global sales force and regulatory expertise
- Currently no comparable natural product on the market

**Potential:**
- Key market: USA; FDA approval received in 2018, further market approvals in preparation
- First meaningful sales in 2020
- Full potential to be reached 2025-2030

**Accessible initial market (USA)**
~ €200-250 m
Identifying innovations that fit to our business – Tepex: Fiber reinforced high performance plastic

Acquisition of Bond Laminates completed in 2012
- ~80 FTE
- Purchase Price: ~€35 m, additional investments to follow

Rationale
- Leading manufacturer of thermoplastic composites
- Customer advantages:
  - Easier product handling
  - Potential to reduce production costs
  - Product functionality (strength and stiffness)

Potential:
- Strong market potential e.g. in automotive, consumer electronics, industry, and sports (e.g. solar panels, helmets)
# Tepex: Application examples

<table>
<thead>
<tr>
<th>Audi Seat Shell</th>
<th>Mercedes Front End Carrier</th>
<th>Dell Laptop Casings</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Audi Seat Shell" /></td>
<td><img src="image" alt="Mercedes Front End Carrier" /></td>
<td><img src="image" alt="Dell Laptop Casings" /></td>
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- **45% weight reduction**
- **30% weight reduction**
- **Very thin but also very stiff and strong**
We consider E-Mobility as a major opportunity

**E-Mobility: Key driver for battery growth**
- Battery demand grew by 30% p.a. (2010-2018) to 180 GWh\(^1\)
- Globally, E-Mobility will account for >85% of total battery demand\(^2\)

**High share of chemicals**
- Chemicals account for >50% of total cost of battery cells
- Announced cell capacities lead to €8-9 bn p.a.\(^3\) chemicals demand

**Growth markets**
- Changing battery market: An Asia dominated market will turn into a global market with increasing shares for EU & US
- E-Mobility growth drives ramp-up of cell production sites in Europe
- Supportive governmental regulation

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\(^1\) Global Battery Alliance ² relates to 2030 / McKinsey / \(^3\) VCI, from 2025 onwards
LANXESS offers key products for Li-Ion batteries

**Battery housing**
- PA/PBT compounds for components of the e-powertrain (BU HPM)

**Electrolyte**
- Key materials (Hydrofluoric acid, phosphorus chemicals) for electrolyte salt (LiPF₆) (BU AII/BU PLA)
- Flame retardants (BU PLA)

**Cathode & Anode**
- Iron oxide as precursor for cathode active materials (BU IPG)
- Ion-exchange resins for refining battery grade cobalt, nickel and lithium (BU LPT)
- Lithium chemicals from tail-brine (BU PLA)*

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PA = Polyamid / PBT = Polybutylene terephthalat / PLA = Polymer Additives, All = Advanced Industrial Intermediates, IPG = Inorganic Pigments, HPM = High Performance Materials, LPT = Liquid Purification Technologies

* In case of successful feasibility
Cooperation with Standard Lithium could deliver upside in a promising market

JV characteristics*
- 60-70% LANXESS ownership
- Exclusive access to technology in Smackover formation
- Absorption of El Dorado infrastructure cost

Project rationale
- Use existing site infrastructure
- Brines from bromine wells in El Dorado contain Lithium
- Lithium demand growing double digit
- Limited additional cost during piloting
- In case of successful pilot project: €100-400 m capex possible**

* In case of successful feasibility
**100% capacity basis, across multiple phases
Cooperation with Standard Lithium: Pilot plant status update

Current status
- All 18 modules are installed on site in El Dorado
- Freedom to operate analysis completed
- Lab and finalization of installation taking place end of November
- Commissioning: end of November/beginning of December
- Proof of concept within Q1 2020
The way forward –
Digitalizing the value chain

What are we focusing on?
Digitalizing the value chain
LANXESS to be digital leader in the chemical industry

From itemized elements …

… towards a fully integrated digitalized value chain:

R&D
Sourcing
Production
Logistics
Marketing/ Sales
General/ Administration

R&D
Production
Marketing & Sales
Sourcing
Logistics
Digitalizing the value chain: CheMondis
Paving the way to the future of trading chemicals

- Project start in 2017: LANXESS’ chemical industry knowledge combined with external digital experts
- Pioneering into digital trading platform for chemicals to get ready for digital future
- First minimal viable product (MVP) created in 2018, preparation of fully separated industry platform
- Largest and fastest growing B2B marketplace for industrial chemicals in the western world
- Exceptional team of skilled and dedicated experts combining chemical, digital and technical know-how
- Unique setup, backed by industry know-how and capital

* CheMondis is a stand-alone company, neither run, governed nor represented by LANXESS.
CheMondis is the largest and fastest growing B2B marketplace for industrial chemicals in the western world.

**Fact #1**
>1,000 companies active (65% buyer, 35% supplier)

**Fact #2**
13,000+ products for use in >15 different industries

**Fact #3**
~€150 m transaction value (cumulated, YTD ‘19)

*CheMondis is a stand-alone company, neither run, governed nor represented by LANXESS.*
The way forward – Providing direction from four perspectives

- Strategy
- Operations
- Financials
- Sustainability
Advanced Intermediates – Focus on additional organic growth

Key differentiators
- Cost, technology and process leadership
- Leading market position
- Proven resilience

Value drivers
- Debottlenecking
- Fix Organometallics
- Benefit from agro recovery

EBITDA pre development

<table>
<thead>
<tr>
<th>Year</th>
<th>Organic growth</th>
<th>Portfolio effect</th>
<th>LTM 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTM 2019</td>
<td></td>
<td></td>
<td>[€ m]</td>
</tr>
</tbody>
</table>

CAGR ~4.2%
Specialty Additives – Consolidate, benefit from regulation, exploit growth trends

Key differentiators

- Small volume, high impact
- Leading market position
- Integrated value chains
- Broad product portfolio
- Small to medium-sized competitors

Value drivers

- Synergies & optimization of production footprint
- Innovation: Exploit regulatory trends, e.g. Emerald 3000
- Benefit from market consolidation
Key differentiators

- Leading regulatory affairs as strategic competence
- Global reach & scale
- Strong products and brands
- Asset light, capex primarily for data generation

Value drivers

- Growth trend Consumer Protection Chemicals
- Benefit from market consolidation
- Fix chrome value chain and membrane business

Performance Chemicals – Segment realignment and focus on Consumer Protection Chemicals

EBITDA pre development

[€ m]

- CAGR ~1.8%

2014  LTM 2019

- Organic growth
- Portfolio effect
Engineering Materials – Exploit additional chances from lightweight trend

Key differentiators
- Cost-advantage due to integrated value chain
- Competitive market position
- High-tech application know-how
- Customer proximity (regionally)

Value drivers
- Innovation & new applications
- Strong trends: E-Mobility, light-weight, sustainable production
- Continue to optimize value chain (additional compounding capacity)
Capital allocation follows clear individual strategies for each business

<table>
<thead>
<tr>
<th>Business</th>
<th>Organic growth / Capex</th>
<th>Likelihood for M&amp;A</th>
<th>Turnaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Intermediates</td>
<td>Red</td>
<td>Red, grey</td>
<td>Organometallics</td>
</tr>
<tr>
<td>Specialty Additives</td>
<td>Red</td>
<td>Red, grey</td>
<td>Rubber additives</td>
</tr>
<tr>
<td>Performance Chemicals</td>
<td>Red</td>
<td>Red, grey</td>
<td>Chrome value chain, Membranes business</td>
</tr>
<tr>
<td>Engineering Materials</td>
<td>Red</td>
<td>Red, grey</td>
<td></td>
</tr>
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</table>
The way forward – Providing direction from four perspectives

- Strategy
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- Financials
- Sustainability
Despite a challenging environment we are well on track to achieve our goals.

- **EBITDA pre margin** (group, Ø through the cycle): 14-18%
- **EBITDA margin volatility**: 2-3% pts
- **Cash conversion**: >60%

**Details by CFO**
Capital allocation: Maximizing the benefit of our investors based on best value creation

In line with our shareholders’ interests whilst committed to a solid investment grade rating

**Growth**
- **Organic** growth with attractive returns
- **External** growth along disciplined M&A criteria

**Shareholder value**
- Increase dividend or at least keep it at **stable level**
- Share **buyback**

**Debt profile**
- Debt repayment
- Pension funding
The way forward –
Providing direction from four perspectives

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Sustainability direction –
We see sustainability as a competitive advantage

Strong progress that is recognized externally

Dow Jones Sustainability Indices
In Collaboration with RobecoSAM

MEMBER OF

EcoVadis „Gold Recognition Level“

Climate Change Score A-

2016 2017 2018 2019

#15 #7 #3 #1

Ranking refers to DJSI Europe after 2017, LANXESS is listed in DJSI Europe since 2017, DJSI World since 2009
We delivered strongly on emission reduction and aim high for 2030

CO₂e scope 1+2 emissions in thousand tons, LXS*

- Clearly defined measures to reduce today's emissions:
  - Maximize reduction of N₂O emissions
  - Implement process changes in our “Verbund” structures
  - Exit coal-based power generation wherever possible
  - Compensate growth effects with efficiency

*Increase of existing specific 2025 Scope 2 and energy efficiency target from -25% to -40%, compared to 2015; existing business parameters, in case of significant M&A timeline to be adjusted
LANXESS goes climate neutral by 2040 – New long-term commitment

- Strong ambition!
- Majority of projects with reasonable investment costs
- Good for LANXESS, good for our customers, good for our planet!

**CO₂e scope 1+2 emissions in thousand tons, LXS**

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2018</th>
<th>2025e</th>
<th>2030e</th>
<th>2040e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions (thousand tons)</td>
<td>6,500</td>
<td>3,200</td>
<td>2,400</td>
<td>1,600</td>
<td>Climate neutral</td>
</tr>
</tbody>
</table>

-50% decrease compared to 2015 (existing business parameters).

*Increase of existing specific 2025 Scope 2 and energy efficiency target from -25% to -40%, compared to 2015; existing business parameters, in case of significant M&A timeline to be adjusted; climate neutral:<300kt CO₂e p.a.*
LANXESS ahead of regulation and far sighted in management of ETS certificates

- LANXESS actively reduced CO$_2$e emissions in line with Emission Trading Scheme (ETS) reduction targets
- Cost effect from ETS is currently neutral
- We will continue to reduce CO$_2$e emissions and remain ahead of ETS reduction targets

*Increase of existing specific 2025 Scope 2 and energy efficiency target from -25% to -40%, compared to 2015; existing business parameters, in case of significant M&A timeline to be adjusted; performance calculated versus 2004 level (foundation of LANXESS); performance compared to 1990 level even higher (-65%), but not fully in our responsibility due to pre-spin-off set-up, trajectories based on BDI: *Klimapfade für Deutschland*. Existing business parameters, in case of significant M&A timeline to be adjusted
Sustainability counts!

Sustainability targets…

- …have been incorporated into our **strategic KPIs**
- …will be incorporated into **top management remuneration**
The way forward – Strongest set of opportunities since spin-off

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Well defined strategy that we will rigorously execute</th>
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</thead>
<tbody>
<tr>
<td>Operations</td>
<td>We outlined clear growth paths for each segment and continuously optimize operations</td>
</tr>
<tr>
<td>Financials</td>
<td>We are on track and committed to deliver</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Sustainability is a priority to us and we will seize this competitive advantage</td>
</tr>
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