Welcome & Strategy

Patrick Thomas
June 29, 2017
## Agenda

**Capital Markets Day Covestro, London**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30</td>
<td>Welcome &amp; Strategy</td>
</tr>
<tr>
<td>11:00</td>
<td>New Growth Opportunities</td>
</tr>
<tr>
<td>11:30</td>
<td>Financial Performance</td>
</tr>
<tr>
<td>12:00</td>
<td>Q&amp;A</td>
</tr>
<tr>
<td>12:45</td>
<td>Lunch break</td>
</tr>
<tr>
<td>14:00</td>
<td>Breakout session I – hosted by heads of business segments</td>
</tr>
<tr>
<td>15:00</td>
<td>Breakout session II – hosted by heads of business segments</td>
</tr>
<tr>
<td>16:00</td>
<td>Breakout session III – hosted by heads of business segments</td>
</tr>
<tr>
<td>17:00</td>
<td>Informal get-together &amp; cocktail dinner</td>
</tr>
<tr>
<td>18:30</td>
<td>End</td>
</tr>
</tbody>
</table>

Thursday, 29<sup>th</sup> June 2017
The presentation team

Welcome & Strategy
Patrick Thomas
CEO

New Growth Opportunities
Dr. Markus Steilemann
CCO

Financial Performance
Patrick Thomas
Interim CFO
The breakout sessions team
Head of business segments

Polyurethanes
Dr. Markus Steilemann

Polycarbonates
Michelle Jou

Coatings, Adhesives, Specialties
Daniel Meyer
Global leader in high-tech material solutions

Covestro key investment highlights

1. Favorable industry environment
   with long-term, above GDP growth prospects in a diverse range of end markets

2. Portfolio with broad-based geographical and industry footprint
   with increasing share of differentiated, resilient business

3. Leading and defendable global industry positions
   as innovation and cost leader

4. Positioned to deliver future volume growth in line with industries
   through well-invested asset base and smart capex approach

5. Attractive cash flow growth outlook
   with use of cash focused on value creation
1. Favorable industry environment

Long-term, above GDP industry growth supported by global trends

<table>
<thead>
<tr>
<th>Global trends</th>
<th>Needs</th>
<th>Industry demand outlook(^{(a)}) 2016 – 2021e</th>
<th>Covestro solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate change</td>
<td>• Zero emission concepts, Low energy buildings</td>
<td></td>
<td>• Building insulation, Insulation along the cold chain, Foam mattresses and comfort solutions, Weight-saving car parts</td>
</tr>
<tr>
<td>Mobility</td>
<td>• Energy efficient mobility, Lightweight transportation, Electric vehicles</td>
<td></td>
<td>Lightweight materials for transportation, Roofing and glazing for buildings, Blends and composites for electronics / IT and consumer goods</td>
</tr>
<tr>
<td>Growing population</td>
<td>• Food preservation, Low cost durable goods</td>
<td></td>
<td>High performance surfaces and coatings, High-tech films, Solvent-free coatings and adhesives</td>
</tr>
<tr>
<td>Increasing urbanization</td>
<td>• Affordable housing, Living comfort, Public infrastructure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
(a) Assumes global GDP CAGR 2016–2021e of 2-3% (b) Comprises MDI, TDI and polyether polyols (c) Shows PU raw materials industry demand in Coatings, Adhesives and Sealants
Source: Covestro estimates and Orr & Boss 2016
2. Portfolio with broad-based geographical and industry footprint

Covestro core volume growth of +5.1% CAGR in 2014-2016

Sales split by regions(a)
2016 Group sales in % / Core volume growth, CAGR 2014-2016

- Germany 13% CAGR Vol. +5%
- US 22% CAGR Vol. +6%
- NAFTA 27% CAGR Vol. +3%
- APAC 30% CAGR Vol. +8%
- China 18% CAGR Vol. +11%
- EMLA 43% CAGR Vol. +3%

Sales split by end-market
2016 Group sales in % / Core volume growth, CAGR 2014-2016

- Sports / Leisure, Cosmetics, Health & diverse industries CAGR Vol. +10%
- Chemicals CAGR Vol. +4%
- Electrical / Electronics CAGR Vol. +4%
- Wood / Furniture CAGR Vol. +4%
- Construction CAGR Vol. +4%
- Automotive(b) / Transportation CAGR Vol. +3%

Notes:
(a) Based on Covestro Annual Report 2016; EMLA = Europe, Middle East, Africa, Latin America (without Mexico);
NAFTA = USA, Canada, Mexico; APAC = Asia, Pacific
(b) Automotive with CAGR 2014-2016 Vol. +3%
2. Portfolio geared towards differentiated products

Over 50% of sales and ~70% of earnings generated with resilient businesses

Sales by Segments
% of 2016 Group sales

Earnings of resilient businesses
% of 2016 Group earnings

Note: (a) Calculated based on contribution margin
2. Margin resilience in CAS

Focus on stable high margins in CAS business with defendable competitive advantages

Global leading supplier of high performance materials to the coatings, adhesives and sealants industries

CAS products have all the characteristics of niche coating / ingredients chemicals

- High value-add materials
- Priced on the basis of performance, high level of margin resilience
- Competition with other players based on performance, distinct entry requirements
- Small proportion of cost to end-customer
- Low volumes and large number of niche-customized products sold
- Products tailored to customer needs lead to significant switching efforts
- Product innovation and R&D critical to success

EBIT contribution of segments\(^{(c)}\)

in €m / average 2014-2016

- CAS 42%
- PCS 31%
- PUR 27%

Notes:

- (a) Includes direct customers only
- (b) Based on total aliphatic isocyanates volume in 2016 relative to competitors as per Covestro estimates
- (c) Excluding contribution of “Other segments / Consolidation”
2. Margin resilience in polyols
Polyether polyols demonstrate inherently stable margins

Resilience of polyether polyols business confirmed in 2016, although at low end of historic band

% of 2016 group sales

- Non-integrated polyether polyols producers with limited competitiveness
- Single capacity addition with little influence on supply / demand dynamics
- Distinct entry requirements for new players, e.g. capex and technology

- Resilient industry margins over the last decade reflective of overall Covestro polyether polyols profitability
- Spreads not materially impacted by high volatility of propylene prices, particularly during the financial crisis
- Propylene oxide supply / demand dynamics create local pricing opportunities in the short-term

Note: (a) The global average polyols / propylene prices have been calculated based on the polyols / propylene prices in Europe, US and China and weighting this average against the respective demand in those regions
2. Margin resilience in PCS

Excellent global position to access differentiated, high-value polycarbonates applications

- High-value industry application (e.g. automotive, medical, electrical)
  - Greater technical specification requirement
  - Longer lifecycles, higher market growth
  - Comprehensive innovation capabilities and technical service is key
  - Premium pricing in selected segments
- Limited disruptions from new capacity additions
  - Niche applications with strong differentiation potential
  - Customer intimacy and distinct industry entry requirements
  - Investment need for material switch

Resilience portion of PCS volumes improved from ~40% to ~50% in the last 5 years, supported by continuous progress of innovative offerings
2. Margin resilience in MDI

MDI product portfolio leads to increased resilience in earnings

**Differentiated grades account for ~30% of MDI sales in 2016**

- Joint sales of polyols and MDI
  - Examples: CASE\(^{(c)}\), soft furniture, automotive seating

- Specialty or downstream products
  - Examples: Selected MDI grades (pre-polymers, blends, monomeric), TPU

- Formulations as market access requirement
  - Examples: Automotive, appliances

- Customized solutions
  - Example: Window frames

**Differentiation potential beyond standardized products**

- Differentiated business with ~0.25€/kg higher gross margin

Notes:

(a) Contribution margin per kg
(b) Resilience measured as standard deviation / average
(c) CASE – Coatings, Adhesives, Sealants and Elastomers
3. Global industry positions

Covestro is a leader across its entire portfolio

- Sizable investment requirement
- Intense pressure to advance process technology
- Global asset base to enable customer proximity
- Persistent demand for product and process innovation
- Efficient feedstock integration required

**Polyurethanes**

- **MDI**
  - Others 10%
  - #1 in PUR

- **TDI**
  - Others 26%
  - #1 in PUR

- **Polyether polyols**
  - Others 49%
  - #1 in PUR

- **PC**
  - Others 19%
  - #1 in PC

- **Others**
  - 29%

**Polycarbonates**

- **PC**
  - Others 19%
  - #1 in PC

- **Polyurethane dispersions**
  - #1 in CAS

**Coatings, Adhesives, Specialties**

- **Aliphatic isocyanate derivatives**
  - Others 11%

- **Polyurethane dispersions**
  - Others 58%

**Entry requirements**

- Economies of scope crucial
- Formulation and application know-how necessary
- Close customer relationships and long-term R&D collaborations
- Operation of global platform essential

**Capacity share in 2016**

- **Top 5: 90%**
  - 2021e: Top 5 expected to account for 91%

- **Top 5: 74%**
  - 2021e: Top 5 expected to account for 75%

- **Top 5: 52%**
  - 2021e: Further consolidation expected, especially in China

- **Top 5: 81%**
  - 2021e: Top 5 expected to account for >70%

- **Top 5: 89%**
  - 2021e: Industry structure expected to remain stable

- **Top 5: 42%**
  - 2021e: Industry structure expected to remain stable

**Source:** Covestro estimates and Orr & Boss 2016
3. Innovation leadership

Pushing boundaries in use of alternative raw materials

**Highlights**

- Coating hardener developed with ~70% bio-based content and ~30% reduction in carbon footprint
- Collaboration with Audi and BASF - clearcoat containing bio-based hardener applied to Audi Q2 test bodies
- Improved eco-balance goes hand in hand with full performance

**Benefits**

- New technology permits to use CO₂ in the production of polymers – saving crude oil
- First products already commercialized: polyols for flexible foam with up to 20% CO₂ content
- More CO₂-based components to come – e.g. for rigid foam, elastomers, thermoplastics
- For the first time, aniline has been derived from renewable raw materials instead of petrochemicals
- Aniline is widely used in the chemical industry – key component of insulation foam
- Plans to produce bio-based aniline on a large industrial scale for own use, as of mid-2020s
3. Leading process technologies

Competitive advantages based on world-class chemical engineering

**Highlights**
- Conversion cost advantage of around 20% vs. competitors technologies
- Raw material cost on par or better than competitive technologies
- Pushing economies of scale to new standard of 150kt/a per line in Caojing, China
- Consumes 30% less electricity vs. conventional processes
- Significant economic and ecological benefits vs. conventional processes

**Benefits**
- Capex reduced by 20% (a)
- Reduced conversion cost due to lower energy demand and reduced solvent usage
- Reduced phosgene hold-up by 40% and energy consumption by 60% vs. liquid phase
- Capex reduced by 20%

Notes:
(a) The plant size for a given capacity is smaller, because the reaction time for the gas-phase phosgenation process is shorter than the conventional process and results in a significantly higher throughput
(b) ODC is oxygen depolarized cathode
3. Competitive cost position

Leading cash costs across business segments and regions

- MDI / TDI are mainly regional industries due to relatively high transportation costs, whereas PC is a rather global industry
- In the US, there are only 2-4 producers, whereas APAC is most fragmented with around a dozen players for each product
- Covestro is the global low-cost producer in TDI / PCS with a cash cost advantage of ~50% / ~30% compared to the average of the 5 least competitive plants
- Covestro is one of the low-cost producers in MDI, which has a relative flat cost curve given the limited cash cost advantage of only ~20% between the average of the best and worst 5 plants

Notes:
(a) Cost of production based on total raw material costs less co-product credits, variable and fixed conversion costs at 100% utilization based on nameplate capacity for FY 2016
(b) Cost ex gate, 82% utilization rate for all plants based on nameplate capacity for FY 2016. Integrated players are shown without any margins for BPA, phenol, acetone, etc.
4. Historical industry development and outlook

Above GDP growth driving industry capacity utilization and supporting stable margins

|-----------------------------------|-----------------------------------|------------|
| (kt)\(^{(a)}\)                    | (kt)\(^{(b)}\)                    | • MDI margins currently above long-term historical level based on robust industry utilization above 90%
| **MDI**                           | **TDI**                           | • In 2018 / 19, margins expected to slightly decrease based on new investments (e.g. Sadara, Covestro) |
| 4,850                             | 5,670                             | • Upside margin potential towards the end of the decade along with increasing industry utilization |
| CAGR 5.5%                         | CAGR 4.5%                         |           |
| 2011                               | 2011                               |           |
| 6,350                             | 7,070                             | • TDI margins higher than long-term average due to delayed start-up of major investments |
| CAGR -7.900                        | CAGR -8.560                        | • From 2018, margins expected to drop based on new world-scale capacities (BASF, Sadara, Wanhua) |
| 2016                               | 2021e                              | • Possible industry consolidation in China |
|                                    |                                    | • Sustainable margins driven by high utilization rates |
|                                    |                                    | • Very diversified growth drivers ensure stability of demand development |
|                                    |                                    | • New industry players likely to only penetrate low-end applications |
| **PCS**                           | **MDI**                           |           |
| 3,585                             | 4,365                             | • MDI margins currently above long-term historical level based on robust industry utilization above 90%
| CAGR -3.0%                        | CAGR -2.6%                        | • In 2018 / 19, margins expected to slightly decrease based on new investments (e.g. Sadara, Covestro) |
| 2011                               | 2011                               | • Upside margin potential towards the end of the decade along with increasing industry utilization |
| 4,150                             | 4,960                             | • TDI margins higher than long-term average due to delayed start-up of major investments |
| CAGR -5.100                        | CAGR -6.050                        | • From 2018, margins expected to drop based on new world-scale capacities (BASF, Sadara, Wanhua) |
| 2016                               | 2021e                              | • Possible industry consolidation in China |
|                                    |                                    | • Sustainable margins driven by high utilization rates |
|                                    |                                    | • Very diversified growth drivers ensure stability of demand development |
|                                    |                                    | • New industry players likely to only penetrate low-end applications |

Notes: (a) Assumes global GDP CAGR 2016-2021e of 2-3%
(b) Based on historical and announced future nameplate capacities
## 4. World-scale production assets – timing

Sample timeline for industry-typical, green-field project planning and construction process

<table>
<thead>
<tr>
<th>New site selection &amp; business set-up</th>
<th>Program / development &amp; execution &amp; start-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project start</td>
<td>1. Operation</td>
</tr>
<tr>
<td>2. Screening of sites</td>
<td>2. Appropriation Request (AR)</td>
</tr>
<tr>
<td></td>
<td>3. Start Front-End-Loading (FEL)(^{(a)})</td>
</tr>
<tr>
<td></td>
<td>4. Detail engineering &amp; construction</td>
</tr>
<tr>
<td></td>
<td>5. FEL 1</td>
</tr>
<tr>
<td></td>
<td>6. FEL 2</td>
</tr>
<tr>
<td></td>
<td>7. FEL 3</td>
</tr>
<tr>
<td>3. Land lease / purchase &amp; site</td>
<td>3. Mechanical completion</td>
</tr>
<tr>
<td>4. Basic infrastructure</td>
<td></td>
</tr>
<tr>
<td>5. FEL 1</td>
<td></td>
</tr>
<tr>
<td>6. FEL 2</td>
<td></td>
</tr>
<tr>
<td>7. FEL 3</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** (a) FEL also referred to as pre-project planning

- Approx. 24 months
- Approx. 60 months
- 24 months
- 30 months
- 6 months
## 4. World-scale production assets – announcements

Delayed execution to be considered with every announcement

<table>
<thead>
<tr>
<th>Business</th>
<th>Project</th>
<th>Country / Region</th>
<th>1st public reference</th>
<th>Initial start-up plan</th>
<th>Delayed by</th>
<th>Expected start-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDI</td>
<td>Project S</td>
<td>KSA</td>
<td>2011</td>
<td>2016</td>
<td>~2 years</td>
<td>Expected mid 2017</td>
</tr>
<tr>
<td>MDI</td>
<td>Project H</td>
<td>US</td>
<td>2014</td>
<td>2018</td>
<td>&gt;2 years</td>
<td>Beyond 2020</td>
</tr>
<tr>
<td>MDI</td>
<td>Project W</td>
<td>US</td>
<td>2015</td>
<td>2020</td>
<td>~1 year</td>
<td>Expected 2021</td>
</tr>
<tr>
<td>MDI</td>
<td>Project B</td>
<td>China</td>
<td>2007</td>
<td>2010</td>
<td>~5 years</td>
<td>~50% capacity in 2015 / full in 2017</td>
</tr>
<tr>
<td>TDI</td>
<td>Project S</td>
<td>KSA</td>
<td>2011</td>
<td>2016</td>
<td>~2 years</td>
<td>Expected H2 2017</td>
</tr>
<tr>
<td>TDI</td>
<td>Project B</td>
<td>Germany</td>
<td>2011</td>
<td>2014</td>
<td>~4 years</td>
<td>2016 / full capacity in 2018</td>
</tr>
<tr>
<td>TDI</td>
<td>Project W</td>
<td>China</td>
<td>2010</td>
<td>&gt;2014</td>
<td>~4 years</td>
<td>Expected 2018</td>
</tr>
<tr>
<td>TDI</td>
<td>Project HJ</td>
<td>China</td>
<td>2011</td>
<td>2015</td>
<td>~3 years</td>
<td>Expected 2018</td>
</tr>
<tr>
<td>PCS</td>
<td>Project SS</td>
<td>China</td>
<td>2008</td>
<td>2009</td>
<td>&gt;10 years</td>
<td>Beyond 2019</td>
</tr>
<tr>
<td>PCS</td>
<td>Project N</td>
<td>China</td>
<td>2011</td>
<td>2013</td>
<td>~2 years</td>
<td>2015</td>
</tr>
<tr>
<td>PCS</td>
<td>Project P</td>
<td>Thailand</td>
<td>2007</td>
<td>2010</td>
<td>&gt;10 years</td>
<td>Beyond 2020</td>
</tr>
</tbody>
</table>
4. Modeling future supply additions

Illustrative example of the wave effect in supply models

Typical supply model assumes oversupply in the coming year

- Supply models are usually based on public information
- Delays and/or cancellations are commonly not announced by companies or publicly available
- In models, delayed capacities are moved to the next year, thus add up and create an unreal, inflated level of supply additions in the following years
4. World-scale production asset – investments

Industry-typical investments for green-field plants

Notes:
- Chart contains key feedstock only
- (a) via Deacon or HCl-ODC technology and/or Chloralkali Electrolysis, (b) Interface process, (c) Melt process
4. Planned and optional Covestro capacity additions

Young asset base allows growth through smart capex approach

<table>
<thead>
<tr>
<th>Year</th>
<th>TDI/MDI</th>
<th>PO</th>
<th>PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>TDI +25kt Caojing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>MDI +40kt Caojing</td>
<td>+~20kt debottlenecking existing JV-site</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>MDI +200kt Brunsbüttel</td>
<td></td>
<td>+100kt Caojing</td>
</tr>
<tr>
<td>2020</td>
<td>+100kt Caojing</td>
<td></td>
<td>+50kt Caojing</td>
</tr>
<tr>
<td>2021</td>
<td>+50kt Caojing</td>
<td></td>
<td>+50kt Caojing</td>
</tr>
</tbody>
</table>
4. Smart capex approach: Caojing capacity expansions

Examples for specific investment cost developments

**Advantages of brownfield expansion:**

- Lower specific capital investment required due to:
  - Process improvement through progress on learning curve: technology progress enables higher throughput
  - Only adjustment or replacement of selected equipment necessary (debottleneck), many parts of the plants suitable for higher load
  - Site infrastructure existing and only to be adjusted to minor extent

**PCS capacity expansion**

<table>
<thead>
<tr>
<th>Capex €/kt</th>
<th>2005 Phase I (+100kt)</th>
<th>2009 Phase II (+100kt)</th>
<th>2016 Phase III (+200kt)</th>
<th>2019 Phase IV (+200kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td>-30%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| MDI capacity expansion**

<table>
<thead>
<tr>
<th>Capex €/kt</th>
<th>2008 Phase I (+350kt)</th>
<th>2014 Phase II (+150kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td>-50%</td>
<td></td>
</tr>
</tbody>
</table>
5. Cumulative FOCF for next 5 years

Commitment to deliver free operating cash flow

5 years = €5bn

Note: Based on exchange rate of USD/EUR ~1.10 and a global GDP CAGR 2016-2021e of 2.3%
Leverage industry leadership to capture growth

Covestro strategy

1. Capture market growth over the next years with existing world-scale assets and our smart capex approach

2. Improve cost position
   - align overall costs with best-in-class chemical industry benchmarks

3. Protect and build profitable competitive positions
   - through focused R&D

4. Embed sustainability in every element of the strategy

5. Efficient use of cash
   - with focus on value creation
New Growth Opportunities (Innovation)

Dr. Markus Steilemann
June 29, 2017
Polymers – ubiquitous in modern life

The material of the 21st century

Indispensable in our daily lives

Used in key fields
- Cars
- Buildings
- Electronic devices
- Sporting goods
- Medical technology
- And much more

Attractive niche markets
Right answers for big challenges
Covestro set to outpace global growth

<table>
<thead>
<tr>
<th>Trends…</th>
<th>and needs…</th>
<th>lead to demand for Covestro products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate change</td>
<td>Renewable energy</td>
<td>Core volume growth CAGR 2014-2016 +5%</td>
</tr>
<tr>
<td>Urbani-zation</td>
<td>Energy-efficient lighting</td>
<td>Global GDP CAGR 2016-2021 (a) 2-3%</td>
</tr>
<tr>
<td>Population &amp; prosperity growth</td>
<td>Functional clothing</td>
<td></td>
</tr>
<tr>
<td>Increasing mobility</td>
<td>Goods transport</td>
<td></td>
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<td></td>
<td></td>
<td>Conventional &amp; E-vehicles</td>
</tr>
</tbody>
</table>
Covestro - driving growth through innovation leadership

Innovation highlights

1. Product innovation is long-term driver of above GDP growth addressing ever-changing customer needs for new material solutions

2. Effective R&D spend at Covestro based on newly introduced marketing led stage gate process

3. Focused R&D to build and protect profitable competitive positions with ~20% of budget allocated to process R&D, critical to maintain cost leadership position

4. Innovation leadership in the industry with continuous break-through contributions as the inventor of polyurethanes and polycarbonates
Long tradition of research
80 years of ideas and inventions at Covestro

1937 Otto Bayer invents polyurethanes
1953 Hermann Schnell invents polycarbonates
1954 Kuno Wagner invents cross-linking agent for lightfast polyurethane coatings
1959 Introduction of polyurethane in the fashion industry
1962 Market launch of rigid polyurethane foam for insulating refrigeration systems
1967 Presentation of the first car made almost entirely of plastic
1982 Introduction of CDs made of polycarbonate
1985 First office machines made of flame-retardant polycarbonate composite
1991 Introduction of polyurethane “memory” foam for mattresses
1995 Films based on polycarbonate are introduced for security documents
1998 First automotive glazing for the rear window of the Smart
1999 Polycarbonate used for the first time in automotive headlamps
2001 Construction begins at the Covestro world-scale production site in Shanghai, China
2011 Plant in Shanghai equipped with eco-friendly and efficient gas-phase phosphonation technology
2013 Epoxy resins replaced by polyurethane resins in wind turbine rotor blades
2014 Introduction of INSQIN® technology for a water-based polyurethane textile coating
2015 First coating hardener made of renewable raw materials is introduced
2016 TCG company acquired in order to expand market position in thermoplastic fiber composites
2017 Start of production of foam components with CO2 in Dormagen, Germany
2017 Key chemical aniline won from renewable raw materials for the first time
Focused R&D to build and protect profitable competitive positions

Stage gate funnel

Progress of product and process innovation projects\(^{(a)}\)

- Harmonized process across all regions & BUs
- Best allocation of resources aligned with Marketing Process
- Fully implemented in 2016

~€350m R&D spend\(^{(b)}\)
190 Patent applications in 2016
~80% of R&D spend\(^{(b)}\) focused on product innovation
~16% of 2016 net sales with new products (not >5 years)

Notes:
(a) Status June 2017
(b) Based on FY 2016 incl. ~€100m customer advisory
## Making wind power plants more efficient

### Climate change: renewable energy

<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate change</td>
<td>More durable and economical wind power plants</td>
<td>Energy consumption(^{(a)}) CAGR: ~3%</td>
<td>Novel components for wind power plants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offshore wind energy(^{(b)}) CAGR: ~19%</td>
<td>• Rotor blades: Polyurethane resins for more stability and durability</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Towers: Polyurethane materials for anti-corrosion coatings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Undersea cables: Elastomers for protection systems</td>
</tr>
</tbody>
</table>

---

Sources:

- \(^{(a)}\) BP, Energy Outlook, 2017 for 2015 – 2020 based on million tons oil equivalent
## Enabling highly efficient insulation

### Climate change: lower energy buildings

<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
</table>
| Climate change | Energy- and cost-efficient buildings | Construction market<sup>(a)</sup>  
CAGR: ~2%  
Polyurethane insulation market<sup>(b)</sup>  
CAGR: ~5% | Raw materials for polyurethane foam  
(rigid and in spray form)  
- For residential and commercial buildings, from basement to attic  
- Material of choice for high thermal insulation  
- Possible to save >50% of average heating energy |

### Sources:

- (a) B+L, Construction Quarterly Report, Q4 2016 + Q1 2017, 2017 for 2016 – 2021 based on billion €
- (b) B+L, Construction Quarterly Report, Q3 2016, for 2016 – 2021
### Fostering LED technology

**Urbanization: energy-efficient lighting**

<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
</table>
| Urbanization| Reduction of high energy consumption of lighting                      | Luminaire market\(^{(a)}\)  
CAGR: ~3%                                      | Polycarbonates in LED lenses, light guides, heat sinks |
|             |                                                                     | Luminaire LED market\(^{(a)}\)  
CAGR: ~19%                                     | • For vehicle headlamps, street lights, flat-panel displays |
|             |                                                                     |                                             | • Transparent, heat-resistant, freedom of design |
|             |                                                                     |                                             | • Easy to produce in high volumes             |

Source: (a) Global Luminaires, Lighting Market Analysis and Forecast 2016, PennWell for 2015 - 2022
Lowering CO₂ footprint
Urbanization: sustainable living

<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
</table>
| Urbanization | Eco-friendly produced furniture | Coating industrial furniture market\(^{(a)}\)  
CAGR: ~3% | New bio-based hardener for water-based wood coatings  
• Furniture surface protection in demanding environments like bathrooms and kitchens  
• Biomass content of 66% and improved carbon footprint  
• High hardness and chemical resistance |
|       |      | Waterbased industrial furniture market\(^{(b)}\)  
CAGR: ~5% |
<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population &amp; prosperity growth</td>
<td>Sustainable and functional fashion</td>
<td>Waterborne, solvent-free materials for functionalized textiles in diverse applications</td>
<td>• Better occupational safety, environmental protection, resource consumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Helps brand owners and producers meet their sustainability goals, e.g. ~45% lower carbon footprint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Enables new functionalities</td>
</tr>
<tr>
<td>Textile coating market(^{(a)})</td>
<td>CAGR: ~6%</td>
<td>Covestro relevant textile coating market(^{(b)})</td>
<td>CAGR: ~11%</td>
</tr>
</tbody>
</table>

Sources:
(a) IAL PUD market report 2015 for 2014 – 2019
(b) Covestro estimates
Lower energy consumption and higher consumer satisfaction

Population & prosperity growth: food preservation

<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population &amp; prosperity growth</td>
<td>More and better cooling devices</td>
<td>Number of refrigerators$^{(a)}$ CAGR: ~3%</td>
<td>Raw materials for particularly effective insulating foams</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Refrigeration insulation foam$^{(b)}$ CAGR: ~8%</td>
<td>• 40% smaller pores allow up to 10% better insulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Support refrigerators with higher energy efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Less material cost and higher production speed</td>
</tr>
</tbody>
</table>

Sources:
(a) Euromonitor Consumer Appliance Annual Report, 2017 for 2016 – 2021 based on retail units
(b) IAL PU Global Database (2017), for 2016 – 2019 based on consumption in kt
Solutions for growth in temperature-controlled shipments

Increased mobility: goods transport

<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
</table>
| Increasing mobility | Perfect insulation for perishable products | Containers<sup>(a)</sup>  
CAGR: ~4%  
Reefer containers<sup>(b)</sup>  
CAGR: ~9% | Rigid polyurethane foam components  
- For heat-sensitive goods in international sea traffic  
- Optimum insulation, high stability, low weight  
- Economic production according to individual wishes |

**Sources:**
(a) World Cargo News (Feb 2017), Drewry Maritime Research (Feb 2016), for 2016 – 2021 based on No. of „normal“ container in Units or TEU (2 TEU = 1 FEU)
(b) All four global reefer manufacturers, World Cargo News, Drewry Maritime Research, Sextant Consultancy, Irish Shipbrokers, in units or FEU
In the sweet spot of replacing traditional materials

Increased mobility: focus on light-weight and quality

<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
</table>
| Increasing       | Reduced weight and increased comfort      | Global car production\(^{(a)}\)  
CAGR: ~3%  
Covestro relevant  
car market\(^{(b)}\)  
CAGR: ~5%         | Attractive alternatives to conventional materials |
| mobility         |                                           |                                       | • Adhesive polymer solutions to replace mechanical fixing |
|                  |                                           |                                       | • Sustainable coating                                 |
|                  |                                           |                                       | • Polycarbonates to replace glass and metal           |
|                  |                                           |                                       | • Polyurethanes to increase comfort                    |

Sources:
(a) LMC 01/2017 for 2016 – 2021  
(b) Covestro estimates for 2016 – 2021
Conventional car: exterior

Lightweight and aerodynamic

CAS
Metal body coatings, bumpers, body panels

PCS
Panoramic roofs, tailgates, roof panels, pillar covers, rear mirrors, filler flaps, headlamps, rear lamps, fog lamps, radiator grills

PUR
Car body parts, noise insulation, under the hood applications
Conventional car: interior

Individual and comfortable

CAS
Airbags, door panels, window shields, leather & topfinish, coatings, cockpit

PCS
Cockpit, pillar covers, middle consoles, seat covers, glove boxes, air vents

PUR
Seatings, headliners, instrument panels, load floors, head rests
### Technology enabler

**Increased mobility: E-vehicles and autonomous driving**

<table>
<thead>
<tr>
<th>Trend</th>
<th>Need</th>
<th>Market</th>
<th>Covestro contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing mobility</td>
<td>Environmentally friendly and freedom of design</td>
<td>Global car production&lt;sup&gt;(a)&lt;/sup&gt; CAGR: ~3%</td>
<td>Pioneering all-around material concept</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global hybrid and electrical car production&lt;sup&gt;(a)&lt;/sup&gt; CAGR: ~25%</td>
<td>• Efficient thermal management to reduce energy demand</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• New lighting functions revolutionize design and safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Most stringent weight reductions</td>
</tr>
</tbody>
</table>

Source: (a) LMC 01/2017 for 2016 – 2021
Future car: exterior
Materials inspiring autonomous E-vehicles

Design freedom
Unique aesthetic
Good aerodynamics

Holographic lighting
Integrated light and signal elements, sensors, antennas
Vehicle to environment communication
Entirely new possibilities in design

Wrap-around glazing
Improved visibility
Enhanced safety
Less weight
Better thermal management
Future car: interior
Materials inspiring design and functionality

Interactive 3D displays
Innovative rear projection solutions

Surfaces with integrated features
Displays, touch screens for multiple styling options and brand differentiation

Efficient manufacturing
Direct Coating, a cost efficient lean one-step process of coated polymer components
Covestro - driving growth through innovation leadership

Innovation highlights

1. Product innovation is long-term driver of above GDP growth addressing ever-changing customer needs for new material solutions

2. Effective R&D spend at Covestro based on newly introduced marketing led stage gate process

3. Focused R&D to build and protect profitable competitive positions with ~20% of budget allocated to process R&D, critical to maintain cost leadership position

4. Innovation leadership in the industry with continuous break-through contributions as the inventor of polyurethanes and polycarbonates
Financial Performance

Patrick Thomas
June 29, 2017
Attractive cash flow profile
Key financial highlights

1. Strong cash generation history and future commitment
   driven by volume growth, operational leverage and profitability enhancement measures

2. Smart capex approach
   balances required capacity additions and capital-efficient growth investments

3. Disciplined M&A strategy with focus on value creation
   follows clear strategic direction, defined process and strict financial criteria

4. Commitment to return excess cash to shareholders
   after 24 months without significant M&A activity

5. Attractive dividend policy
   with focus on increasing or at least stable dividends going forward
**Dynamic volume growth**

**Sales bridge**

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume (€ million)</th>
<th>Price (€ million)</th>
<th>FX (€ million)</th>
<th>Total Sales (€ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>11,761</td>
<td>-1,529</td>
<td>+761</td>
<td>11,904</td>
</tr>
<tr>
<td>2016</td>
<td>4,342</td>
<td>+911</td>
<td>-1,529</td>
<td>4,794</td>
</tr>
</tbody>
</table>

**Highlights**

**Dynamic volume development**
- Core volumes (in kt) expanded by +10.4% since 2014
- Sales volumes (in €) expansion of +7.7% since 2014
- Core volume growth above sales volume expansion due to declining non-core volumes

**Prices and FX effects**
- Selling price decline driven by lower raw material prices
- Lower selling prices negatively impacted sales by 13.0% since 2014
- FX effects contributed +6.5% since 2014 mainly due to stronger USD
FY 2014-2016 – Adj. EBITDA bridge
Positive pricing delta and volume leverage drive earnings growth

Adj. EBITDA bridge

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume</th>
<th>Pricing Delta</th>
<th>FX</th>
<th>Others</th>
<th>Adj. EBITDA bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1,161</td>
<td>+561</td>
<td>+344</td>
<td>-264</td>
<td>2,014</td>
</tr>
<tr>
<td>2016</td>
<td>2,014</td>
<td>+73%</td>
<td>+212</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Highlights

Positive volume leverage
- Driven by all segments
- Ongoing growth expected to deliver €100-150m volume leverage p.a.

Improved cash margin
- Positive pricing delta driven by all segments
- PCS contributed approx. 2/3 of pricing delta effect, after industry emerged from optical media decline

Other items driven by FM & STI
- Higher costs from force majeure (FM) and bonus provisions (STI: short-term incentive)
Adj. EBITDA per ton development

Current earnings levels are not excessive by historic standards

### Adj. EBITDA per ton(a) development

<table>
<thead>
<tr>
<th>Year</th>
<th>Group adj. EBITDA per ton of core volume</th>
<th>PUR adj. EBITDA per ton of core volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Index: 2006 level = 100</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
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<td>2010</td>
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<td>2011</td>
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<tr>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017e</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Highlights

- Several years of high earnings levels recorded prior to 2008 financial crisis
- Global corrections of GDP growth assumptions in 2008/2009 resulted in oversupply for many years
- Adjusted industry supply assumptions are now aligned with adjusted GDP growth expectations of 2-3% p.a.
- Comparing asset utilization levels, 2017 and following years are expected to operate on higher levels compared to 2007 and before
- Covestro stand-alone operating costs per ton in mid-term future expected to be lower compared to pre-IPO

Note: (a) Adj. EBITDA per ton of core volume
# Guidance 2017

## Strong momentum continues

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>Guidance FY 2017</th>
<th>Guidance update as of Apr. 25</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Volume Growth</strong></td>
<td></td>
<td><em>Low- to mid</em>-single-digit percentage increase Y/Y</td>
<td>Unchanged</td>
</tr>
<tr>
<td><strong>FOCF</strong></td>
<td>€1,367m</td>
<td><em>Slightly above</em> the average of the last three years</td>
<td><em>Significantly above</em> the average of the last three years</td>
</tr>
<tr>
<td><strong>ROCE</strong></td>
<td>14.2%</td>
<td><em>Slightly above</em> the 2016 level</td>
<td><em>Significantly above</em> the 2016 level</td>
</tr>
</tbody>
</table>

## Additional financial expectations

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>Guidance FY 2017</th>
<th>Guidance update as of Apr. 25</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EBITDA 2017 FY</strong></td>
<td>€2,014m</td>
<td><em>At or above</em> the 2016 level</td>
<td><em>Significantly above</em> 2016</td>
</tr>
<tr>
<td><strong>EBITDA 2017 Q2</strong></td>
<td>Q2: €542m</td>
<td>n.a.</td>
<td><em>Significantly above</em> Q2 2016</td>
</tr>
<tr>
<td><strong>D&amp;A</strong></td>
<td>€683m</td>
<td>~€650-700m</td>
<td>~€650m</td>
</tr>
<tr>
<td><strong>Financial results</strong></td>
<td>€-196m</td>
<td>€-170 to -190m</td>
<td>€-180 to -200m</td>
</tr>
<tr>
<td><strong>Tax rate</strong></td>
<td>29.0%</td>
<td>≤30%</td>
<td>Unchanged</td>
</tr>
<tr>
<td><strong>Capex</strong></td>
<td>€419m</td>
<td>~€550m</td>
<td>Unchanged</td>
</tr>
</tbody>
</table>

---

**Note:**
Basic Assumptions: Exchange rate of USD/EUR ~1.10 and a similar macroeconomic environment as in 2016
Smart capex approach

Expand existing asset base through capital-efficient growth investments

Investments following strict criteria catalogue

<table>
<thead>
<tr>
<th>Year</th>
<th>(€m)</th>
<th>Capex as % of D&amp;A (2015 adjusted for impairment losses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>753</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>2007</td>
<td>889</td>
<td>178%</td>
</tr>
<tr>
<td>2008</td>
<td>831</td>
<td>165%</td>
</tr>
<tr>
<td>2009</td>
<td>512</td>
<td>97%</td>
</tr>
<tr>
<td>2010</td>
<td>505</td>
<td>91%</td>
</tr>
<tr>
<td>2011</td>
<td>574</td>
<td>74%</td>
</tr>
<tr>
<td>2012</td>
<td>652</td>
<td>61%</td>
</tr>
<tr>
<td>2013</td>
<td>631</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>2014</td>
<td>673</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>2015</td>
<td>514</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>2016</td>
<td>419</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>2017e</td>
<td>~550</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>2018e</td>
<td>~650</td>
<td>&gt;100%</td>
</tr>
<tr>
<td>2019e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021e</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Highlights

Until 2008
- Capacity expansion through growth investments
- Building up an integrated, multi-BU, world-scale site in Caojing, China, as APAC production hub

2009 to 2016
- Continue expansion of Caojing site
- Increasing utilization of underutilized assets
- Optimize regional production network

2017e to 2021e
- Accompany industry growth by adding capacity through smart capex approach

2022e and beyond
- New growth investments lead to capacity expansions
- Strengthen leading industry positions
## Disciplined decision process for capex projects

Focus on value creation

<table>
<thead>
<tr>
<th>Financial fit</th>
<th>Strategic fit</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ROCE (return on capital employed)</td>
<td>• Relevancy for strategy realization</td>
<td>1. Definition of resource framework</td>
</tr>
<tr>
<td>• NPV (net present value)</td>
<td></td>
<td>2. Definition of strategic priorities and financial expectations</td>
</tr>
<tr>
<td>• POT (pay-off time)</td>
<td></td>
<td>3. Prioritization of investment proposals:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Maintenance capex projects: risk assessment, financial impact from project delay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Growth and efficiency capex projects: ROCE, NPV, POT and strategic fit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Approval of overall project portfolio by Covestro Board of Management and inclusion in Covestro financial plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Individual project approval according to stage-gate process</td>
</tr>
</tbody>
</table>
Savings potential: structured profitability enhancement program

Net saving expected to start ramping up in 2018

### Key Measures

<table>
<thead>
<tr>
<th>Asset optimization plan</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility and asset management cost improvements</td>
<td>ongoing</td>
</tr>
<tr>
<td>* Global initiative to reduce facility and asset management costs</td>
<td></td>
</tr>
<tr>
<td>* More efficient turnaround execution</td>
<td></td>
</tr>
<tr>
<td>* Further operational optimizations</td>
<td></td>
</tr>
<tr>
<td>Asset restructuring / efficiency projects</td>
<td>executed</td>
</tr>
<tr>
<td>* Closure of Belford Roxo</td>
<td></td>
</tr>
<tr>
<td>* TDI EMEA restructuring</td>
<td></td>
</tr>
<tr>
<td>* Site consolidation: closure of South Korea PC sheet production</td>
<td>executed</td>
</tr>
<tr>
<td>Continuous improvement</td>
<td>ongoing</td>
</tr>
<tr>
<td>* In manufacturing area</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost improvement measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate overhead cost savings</td>
<td>initiated</td>
</tr>
<tr>
<td>* Streamlining IT landscape and services</td>
<td></td>
</tr>
<tr>
<td>* More tailor-made service function designs to replace TSA(^{(a)}) with Bayer, e.g. Shared Service Center in Bratislava</td>
<td></td>
</tr>
<tr>
<td>BU-level specific savings</td>
<td>ongoing</td>
</tr>
<tr>
<td>* Streamline sales force and back-office</td>
<td></td>
</tr>
<tr>
<td>* Focus on core areas and customers</td>
<td></td>
</tr>
<tr>
<td>* Consolidation within regional functions, product management and sales</td>
<td></td>
</tr>
<tr>
<td>* Maximize use of existing trade and distribution channels</td>
<td></td>
</tr>
<tr>
<td>Continuous improvement</td>
<td>ongoing</td>
</tr>
<tr>
<td>* In non-manufacturing area</td>
<td></td>
</tr>
</tbody>
</table>

### Phasing of net savings
- Higher costs in 2017 mainly due to process duplications during transition period
- Net benefits of >€100m to be realized in 2018 and 2019

Targeted gross savings: ~420

Accumulated inflation of existing cost base

Profitability enhancement potential by 2019

Expected net savings potential by 2019

Note: (a) Transitional Service Agreements
### Example 1: Lowering maintenance costs

Realize gross savings of ~€100m

<table>
<thead>
<tr>
<th>Key Measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility and asset management cost improvements</strong></td>
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<tr>
<td>Site consolidation: closure of South Korea PC sheet production</td>
<td>executed</td>
</tr>
<tr>
<td><strong>Continuous improvement</strong></td>
<td></td>
</tr>
<tr>
<td>In manufacturing area</td>
<td>ongoing</td>
</tr>
<tr>
<td><strong>Cost improvement measures</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Corporate overhead cost savings</strong></td>
<td></td>
</tr>
<tr>
<td>Streamlining IT landscape and services</td>
<td>initiated</td>
</tr>
<tr>
<td>More tailor-made service function designs to replace TSA(3) with Bayer, e.g., Shared Service Center in Bratislava</td>
<td></td>
</tr>
<tr>
<td><strong>BU-level specific savings</strong></td>
<td></td>
</tr>
<tr>
<td>Streamline sales force and back-office</td>
<td>ongoing</td>
</tr>
<tr>
<td>Focus on core areas and customers</td>
<td></td>
</tr>
<tr>
<td>Consolidation within regional functions, product management and sales</td>
<td></td>
</tr>
<tr>
<td>Maximize use of existing trade and distribution channels</td>
<td></td>
</tr>
<tr>
<td><strong>Continuous improvement</strong></td>
<td></td>
</tr>
<tr>
<td>In non-manufacturing area</td>
<td>ongoing</td>
</tr>
</tbody>
</table>

**Maintenance cost reduction program**
- Goal: reduce annual spending for maintenance of production facilities globally by gross ~€100m
- Running multi-year facility and asset management cost savings program, based on pre-IPO (FY 2014) cost basis

**Response to intense competition**
- Maintenance cost analysis revealed significant savings potential
- Cost efficiency must never come at the expense of safety and plant availability

**Multitude of bottom-up projects**
- Almost every plant and site contributes to this program.
- Measures were implemented to improve the efficiency and effectiveness of our maintenance, inspections, and process cleaning activities; reducing the demand for service contractors

Note: (a) Transitional Service Agreements
Example 2: Streamlining IT landscape
Achieve best-in-class IT cost level in the chemical industry

<table>
<thead>
<tr>
<th>Key Measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility and asset management cost improvements</td>
<td>ongoing</td>
</tr>
<tr>
<td>Asset restructuring / efficiency projects</td>
<td>executed</td>
</tr>
<tr>
<td>Asset restructuring / efficiency projects</td>
<td>executed</td>
</tr>
<tr>
<td>Asset restructuring / efficiency projects</td>
<td>executed</td>
</tr>
<tr>
<td>Continuous improvement</td>
<td>ongoing</td>
</tr>
<tr>
<td>Corporate overhead cost savings</td>
<td>ongoing</td>
</tr>
<tr>
<td>BU-level specific savings</td>
<td>ongoing</td>
</tr>
<tr>
<td>Continuous improvement</td>
<td>ongoing</td>
</tr>
</tbody>
</table>

**Streamlining IT**
- **Goal:** standardization and lean IT solutions
- **Actions (examples):** move HR landscape to cloud solution; migrate SAP master data system to SAP P1; streamline approx. 80 product data collecting systems to a product life management solution; consolidate all internal service offerings into and onto one platform “Service4you”

**Economies of scale**
- **Goal:** Realize synergies through review of all IT contracts with focus to optimize offerings on a global level
- **Actions (examples):** Lenovo global PC fleet; Ricoh global printing fleet; Vodafone phone and data plans

**Modernizing IT landscape**
- **Goal:** Meeting business expectations through future orientated technology based on standards and business needs
- **Actions (examples):** Take advantage of simplifications, standardizations and consolidations while renewing workplace and infrastructure services; transition into a smart business cloud that opens up new paths towards collaborative ecosystems and further enhances Covestro’s digital capabilities
Example 3: Optimizing service delivery model

Create best-in-class shared service center

<table>
<thead>
<tr>
<th>Key Measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility and asset management cost improvements</strong></td>
<td>ongoing</td>
</tr>
<tr>
<td>• Global initiative to reduce facility and asset management costs</td>
<td></td>
</tr>
<tr>
<td>• More efficient turnaround execution</td>
<td></td>
</tr>
<tr>
<td>• Further operational optimizations</td>
<td></td>
</tr>
<tr>
<td><strong>Asset restructuring / efficiency projects</strong></td>
<td>executed</td>
</tr>
<tr>
<td>• Closure of Belford Roxo</td>
<td></td>
</tr>
<tr>
<td>• TDI EMEA restructuring</td>
<td></td>
</tr>
<tr>
<td>• Site consolidation: closure of South Korea PC sheet production</td>
<td></td>
</tr>
<tr>
<td><strong>Continuous improvement</strong></td>
<td>executed</td>
</tr>
<tr>
<td>• In manufacturing area</td>
<td></td>
</tr>
</tbody>
</table>

**Future Accounting SSC set-up**
- Global shared service center (SSC) hub located in Bratislava, Slovakia, plus satellite in Shanghai, China
- Main task is processing major accounting services globally for Covestro, e.g. accounts payables and receivables, financial closings
- Optimized service delivery model end-to-end (SSC, robotics center and local finance)
- Expected go-live in April 2018

**Process design and innovation**
- Strong global process ownership model
- Increased automation
- End-to-end process optimization

**Enhanced governance model**
- Optimized activity split
- Streamlined process governance model
- Integrated global process governance organization
High EBITDA to FOCF conversion rate

Record FOCF in 2015 and 2016

Free operating cash flow development 2013-2016

in € million

<table>
<thead>
<tr>
<th>Year</th>
<th>FOCF</th>
<th>Adj. EBITDA</th>
<th>Special items</th>
<th>Working Capital</th>
<th>Capex</th>
<th>Income taxes paid or accrued</th>
<th>Other effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1,056</td>
<td>-583</td>
<td>-119</td>
<td>-85</td>
<td>-119</td>
<td>-157</td>
<td>-157</td>
</tr>
<tr>
<td>2014</td>
<td>1,161</td>
<td>-612</td>
<td>-84</td>
<td>-84</td>
<td>-612</td>
<td>-39</td>
<td>-157</td>
</tr>
<tr>
<td>2015</td>
<td>1,641</td>
<td>-509</td>
<td>-194</td>
<td>-194</td>
<td>-509</td>
<td>-222</td>
<td>-194</td>
</tr>
<tr>
<td>2016</td>
<td>2,014</td>
<td>-419</td>
<td>-418</td>
<td>-418</td>
<td>-419</td>
<td>-25</td>
<td>-418</td>
</tr>
</tbody>
</table>

Highlights in 2016

- The FOCF to EBITDA conversion rate increased to 68% compared to 59% in 2015 due to the absence of cash-out for special items
- Working capital to sales ratio almost unchanged at 15.6% vs. 15.4% end of 2015, in the targeted range of 15-17%
- Capex of €419m significantly down Y/Y partly due to project delays; capex below D&A of €683m; D&A/sales above long-term average given the young asset base and the conservative lifetime applied
- High cash-tax rate of 37% vs. effective tax rate of 29% due to prepayments
Track record of reducing total net debt

Strong balance sheet

**Highlights – as of Q1 2017**

- Total net debt (net financial debt plus pension provisions) to EBITDA ratio\(^{(a)}\) reduced to 1.1x
- Target of 1.5x achieved earlier than previously assumed, driven by strong cash flow generation
- Pension provisions decreased to €1,144m due to CTA funding of €450m in Q4 2016 and lower interest rates
- Equity ratio further improved to 44%
- Long-term commitment to a solid investment grade rating, since IPO “Baa2” by Moody’s

---

\(^{(a)}\) Method of calculation: Total net debt on 31.03.2017 divided by EBITDA of last four quarters

\(^{(b)}\) Including CTA funding of €450m in Q4 2016
Cumulative FOCF for next 5 years

Commitment to deliver free operating cash flow

5 years = €5bn

Note: Based on exchange rate of USD/EUR ~1.10 and a global GDP CAGR 2016-2021e of 2.3%
Use of free cash flow
At the core: value creation and cash return to shareholders

Dividend policy
- Focus on increasing or at least stable dividends
- FY 2016 dividend of €1.35 per share represents a dividend yield of 2.1% (year end DY)

Portfolio
- Disciplined & focused approach
- Bolt-on acquisitions to boost R&D and business development
- Focus on high margin, differentiated business areas and continuous portfolio optimization

Return to shareholders
Options of
- Share buyback
- Special dividends
Disciplined M&A approach with focus on value creation
Clear strategic direction, defined process and strict financial criteria

<table>
<thead>
<tr>
<th>Business case</th>
<th>Financial impact evaluation</th>
</tr>
</thead>
</table>
| • Positive NPV based on ramp-up of risk-adjusted synergies | • ROCE after synergies above WACC  
• Positive contribution to FOCF through the cycle  
• No significant change of credit rating |

<table>
<thead>
<tr>
<th>Strategic evaluation based on multiple criteria scorecard</th>
<th></th>
</tr>
</thead>
</table>
| • Strategic fit | • High revenue share in markets / industries of the future  
• Contributing to sustainability / benefiting from sustainable development goals  
• Growth rate above GDP  
• Increasing resilience  
• Fit to „Covestro DNA“ – To make the world a brighter place  
• Leading position in its key markets and technologies / jointly creating leading positions |
| • Operational fit / integration risks | • Cultural fit  
• Low to moderate need for divestments  
• Low to moderate need for restructuring |
Commitment to return excess cash to shareholders

After 24 months without significant M&A activity

- Option of share buyback
- Option of special dividends
Attractive cash flow profile

Key financial highlights

1. Strong cash generation history and future commitment
   driven by volume growth, operational leverage and profitability enhancement measures

2. Smart capex approach
   balances required capacity additions and capital-efficient growth investments

3. Disciplined M&A strategy with focus on value creation
   follows clear strategic direction, defined process and strict financial criteria

4. Commitment to return excess cash to shareholders
   after 24 months without significant M&A activity

5. Attractive dividend policy
   with focus on increasing or at least stable dividends going forward
Financial Performance

Appendix
STI solely based on three financial Group KPIs

Short-term incentive program “Profit Sharing Plan (PSP)”

- Based on three equally weighted Group performance metrics core volume growth, FOCF and ROCE above WACC
- PSP target amounts (equal 100% payout) are a percentage of annual base salary, linked to individual position grade, ranging from 9% for non-managerial level to 100% for board members
- For each metric, payout can range from zero to 300%, depending on Group achievement levels; total payout capped at 250%

Program details

Notes: Participation description based on German eligibility; may vary in other countries
LTI component based on total shareholder return
Long-term incentive program “Prisma”

Program details

- Cash settled plan with four-year performance periods (January to December)
- Globally consistent program for all eligible employees
- Target amount based on fixed percentage of annual base salary
- Payout criteria based on:
  - TSR (Total Shareholder Return) as absolute performance criterion
  - Outperformance factor as relative payout criterion based on STOXX® Europe 600 Chemicals index
- Start and end prices for Covestro share and index are determined by the average closing prices during November and December before the start and at the end of the performance period
Benchmark analysis of incentive programs

Exane BNP Paribas study

---

Study confirms Covestro’s focus on few, meaningful KPIs

Covestro is one of three companies with highest exposure of Return on Capital Employed on total variable compensation, reflecting high emphasis on value creation

The study confirms a “high exposure” of the variable compensation elements (volume growth, cash flow and ROCE for STI, TSR for LTI) to the used KPIs – Covestro is the only company with high score in all analyzed KPIs

The incentive components are – also in comparison with competitor companies – well aligned with external targets and thus provide a strong pay-for-performance relation

---

Figure 6: Eclectic range of metrics used

Estimated low/mid/high (indicated by shading) exposure of total variable compensation to metrics

Source: Exane BNP Paribas
Polyurethanes (PUR)

Dr. Markus Steilemann
June 29, 2017
Solid earnings growth potential through global PU leadership

PUR key investment highlights

1. Attractive industry outlook
   based on robust structural demand growth and stable supply / demand dynamics

2. Global #1 producer of PU
   with leading and defendable industry positions owing to distinct entry requirements, broad customer base and access as well as polyols-driven innovation capabilities

3. Well-invested asset base and growth through smart capex
   complemented by evaluation of investment options to capture long-term market growth

4. Cost leadership in TDI and competitive cost positions in MDI and Polyols
   due to competitive process technologies, integrated production model and leading scale assets

5. EBITDA growth potential
   driven by volume growth and product mix improvements

Note: (a) #1 position based on combined 2016 MDI, TDI and polyether polyols nameplate capacities as per Covestro estimates
Inventor of and leader in polyurethanes

PUR at a glance

- Inventor and producer of polyurethane raw materials and formulations mainly for rigid and flexible foams (a)
- Broad portfolio spanning MDI and TDI (isocyanates) and polyether polyols
- Competitive integration from feedstock to formulations
- Global production platform comprising 18 facilities located in Europe, USA and Asia (b)
- Total production capacity of around 3,500kt globally
- Largest business unit generating half of Covestro sales and above 40% of EBITDA in FY 2016

#1 Manufacturer of PU globally (c)
€5.9bn Sales 2016
14.9% EBITDA margin 2016
50% of total Covestro sales 2016

Notes:
(a) As well as integral foam, semi rigid foam, RIM, TPU and CASE (Coatings, Adhesives, Sealants and Elastomers) applications
(b) Includes all MDI, TDI and polyether polyols facilities that partially reside at one site; feedstock, TPU and systems houses are excluded
(c) Based on total combined nameplate capacity for MDI, TDI and polyether polyols in 2016 year end as per Covestro estimates
Full scope advantage as basis for innovation and growth

Industry structure and position

Advantages of broad access play

- **Full innovation leverage**
  - Full-spectrum chemistry scope allows for broad solutions offering
  - Global backbone in technical support and production start-ups for customers
  - Proximity to customers and customized blends

- **Broad coverage of customer needs**
  - Reliable supply out of large production facilities globally
  - Joint sales of polyols and isocyanates (“one-stop-shop”) allow for economies of scope
  - Offering of specialty polyol and isocyanate grades

- **Smoothened cyclicality**
  - Optimized asset utilization at any point in the industry cycle
  - Broad geographical, customer and application portfolio
  - Strong positioning in niche application segments

Competitive position of key PU players in 2016

- **Full-spectrum chemistry scope** allows for broad solutions offering
- **Global backbone** in technical support and production start-ups for customers
- **Proximity to customers and customized blends**
- **Reliable supply** out of large production facilities globally
- **Joint sales of polyols and isocyanates** (“one-stop-shop”) allow for economies of scope
- **Offering of specialty polyol and isocyanate grades**
- **Optimized asset utilization** at any point in the industry cycle
- **Strong positioning** in niche application segments

Note: (a) Excluding CASE - Coatings, Adhesives, Sealants and Elastomers
Source: Covestro estimates
Balanced business with attractive growth and margin trajectory

**PUR in numbers**

**PUR sales split by End-markets**

- **Comfort / furniture**: 33%
- **Construction**: 24%
- **Automotive**: 14%
- **Chemicals**: 8%
- **Appliances**: 8%
- **Others**: 13%

**Strategic Business Entities**

- **MDI**: ~40%
- **Polyether polyols**: ~40%
- **TDI**: ~20%

**Regions**

- **APAC**: 28%
- **EMLA**: 42%
- **NAFTA**: 30%

**Total sales: €5.9bn**

**Net sales and core volume growth**

- **Net Sales (€m)**
- **Core volume growth**

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Sales (€m)</th>
<th>Core volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>5,993</td>
<td>4.2%</td>
</tr>
<tr>
<td>2013</td>
<td>6,052</td>
<td>3.1%</td>
</tr>
<tr>
<td>2014</td>
<td>6,282</td>
<td>4.0%</td>
</tr>
<tr>
<td>2015</td>
<td>6,088</td>
<td>1.8%</td>
</tr>
<tr>
<td>2016</td>
<td>5,927</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

**Adj. EBITDA and margin**

- **Adj. EBITDA (€m)**
- **Adj. EBITDA margin**

<table>
<thead>
<tr>
<th>Year</th>
<th>Adj. EBITDA (€m)</th>
<th>Adj. EBITDA margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>724</td>
<td>12.1%</td>
</tr>
<tr>
<td>2013</td>
<td>639</td>
<td>10.6%</td>
</tr>
<tr>
<td>2014</td>
<td>592</td>
<td>9.4%</td>
</tr>
<tr>
<td>2015</td>
<td>624</td>
<td>10.2%</td>
</tr>
<tr>
<td>2016</td>
<td>881</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

- Significant EBITDA margin increases since bottoming out in 2014
- Core volume growth outpaces turnover increase due to sales declining roughly in line with raw material prices
- PUR asset base strengthened by more than €1.4bn capex in 2012 - 2016
Sustainable solutions leading to above GDP growth

Tailwind from macro trends

### Global PU industry (a)

<table>
<thead>
<tr>
<th>Macro trend</th>
<th>Impact on industries</th>
<th>PUR solution example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource depletion</td>
<td>Increasing focus for sustainable solutions</td>
<td>Closing carbon cycle</td>
</tr>
<tr>
<td>Urbanization</td>
<td>New industry regulations on efficiency</td>
<td>Baytherm® Microcell (high-efficient microcellular foam)</td>
</tr>
<tr>
<td>Population growth</td>
<td>Increasing needs for more intelligently insulated buildings</td>
<td>Enhanced insulation</td>
</tr>
<tr>
<td>Mobility</td>
<td>Material for lightweight vehicles and enhanced consumer driving experience</td>
<td>Baypreg® (Composite material for load floor)</td>
</tr>
<tr>
<td>Digital revolution</td>
<td>Unleash the power of artificial intelligence to improve efficiency</td>
<td>Intelligent solutions</td>
</tr>
</tbody>
</table>

**Note:**
(a) Global PU market comprises combined MDI, TDI and polyether polyols industry demands as per Covestro estimates.

**Source:**
UN, OECD, IPCC
PU industry expected to grow at CAGR ~4% until 2021

Global PU industry growth driven by various applications

**Global PU industry**

- **Rigid foam**
  - CAGR 2016-2021e: ~4%
  - Demand ('000kt)
    - 2011: 12.9
    - 2016: 16.1
    - 2021e: 19.5
    - GDP 2.6%

- **Soft foam**
  - CAGR 2016-2021e: ~4.5%
  - Demand ('000kt)
    - 2011: 0.8
    - 2016: 4.4
    - 2021e: 7.0
    - GDP 4.5%

- **Wood/furniture**
  - CAGR 2016-2021e: ~4%
  - Demand ('000kt)
    - 2011: 1.3
    - 2016: 1.5
    - 2021e: 1.6
    - GDP 3%

- **Construction**
  - CAGR 2016-2021e: ~5%
  - Demand ('000kt)
    - 2011: 0.3
    - 2016: 5.3
    - 2021e: 6.3
    - GDP 2.6%

- **Automotive**
  - CAGR 2016-2021e: ~5%
  - Demand ('000kt)
    - 2011: 0.8
    - 2016: 1.0
    - 2021e: 1.2
    - GDP 4%

- **Others**
  - CAGR 2016-2021e: ~4%
  - Demand ('000kt)
    - 2011: 4.7
    - 2016: 5.8
    - 2021e: 7.0
    - GDP 3%

**Impact per Covestro cluster**

- **Appliance**
  - CAGR 2016-2021e: +4%
  - + Consumer spend and increasing size of refrigerators
  - Potential substitutes (vacuum insulation panel) need PU for structural properties

- **Construction**
  - CAGR 2016-2021e: +5%
  - + Stricter building codes and energy regulations: PU material of choice in selected applications
  - + Following same drivers as for insulation

- **Automotive**
  - CAGR 2016-2021e: +4%
  - + Driven by automotive growth (trend of greater mobility)
  - + Weight reduction and sound absorption favors use of PU

- **Wood/furniture**
  - CAGR 2016-2021e: +3%
  - + Urbanization / rising income in emerging regions
  - Increasing demand for comfort in mature regions (health & age)

- **Automotive**
  - CAGR 2016-2021e: +4%
  - + Driven by trend for greater mobility (e.g. weight reduction, sound absorption)
  - + PU technology of choice (expected to keep share)
  - Growth of automotive / light vehicle industry benefiting from mobility trends

**Notes:**

(a) Global PU market comprises combined MDI, TDI and polyether polyols industry demands as per Covestro estimates
(b) Coatings, Adhesives, Sealants and Elastomers
Market-driven innovation as key value driver

PUR R&D highlights

R&D project examples

- Replacing epoxy resins by PU resins in wind turbine rotor blades
- 40% smaller cells allow up to 10% better insulation: BAYTHERM® Microcell
- Bio-based aniline: biomass used as alternative raw material to benzene
- Innovative technology enables use of up to 20% CO₂ as feedstock in polyether polyols production

Highlights 2016

- 100 Mio € R&D spend
- 134 official approvals for product launches
- ~80% of R&D spend going into product innovation
- 74 patent applications
Polyurethanes (PUR)

MDI

TDI

Polyether polyols
Leading global player in industry with growth 1-2pp above GDP

MDI at a glance

- Leading supplier in all key regions for MDI consuming industries
- Robust growth expectation of 1-2pp above GDP support stable industry utilization / margin outlook
- Covestro to grow volumes in-line with industry growth based on smart capex approach
- World-scale integrated production facilities support competitive cost position\(^{(a)}\)
- Proven track record of cost discipline with asset restructuring potential in Europe to deliver further efficiency upsides
- Uplift potential in EBITDA due to volume growth and product mix improvements

<table>
<thead>
<tr>
<th>#3</th>
<th>1,420kt</th>
<th>~40%</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDI player globally(^{(b)})</td>
<td>Capacity 2016(^{(b)})</td>
<td>of PUR sales 2016</td>
<td>Production facilities globally(^{(b)})</td>
</tr>
</tbody>
</table>

Notes:
(a) World-scale defined as MDI facility with capacity of 400-500kt p.a.
(b) Based on nameplate capacity 2016 at year end
Diverse end-markets in all regions support robust growth

MDI industry demand outlook

- Growing demand for insulation foam to comply with regional energy efficiency directives, particularly in developed economies
- Increase in global construction activity
  - broader macro upturn
  - high growth in emerging economies
- Higher consumption of appliances (refrigerators)
- Steady GDP-driven growth in other applications, e.g. CASE, textiles and footwear

MDI demand by region

<table>
<thead>
<tr>
<th>Region</th>
<th>2011</th>
<th>2016</th>
<th>2021e</th>
</tr>
</thead>
<tbody>
<tr>
<td>APAC</td>
<td>4.9</td>
<td>6.4</td>
<td>7.9</td>
</tr>
<tr>
<td>LATAM</td>
<td>0.9</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td>EMEA</td>
<td>1.7</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>NAFTA</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

GDP 2.6% GDP 2-3% 4-5% 7.9%

CAGR 2016 – 2021e

Underlying application growth driver

- Construction ~5%
- Appliances ~4-5%
- CASE(b) ~4-5%
- Diverse applications(c) ~4-5%

Notes:

(a) Figures represent CAGR 2016-2021e
(b) CASE - Coatings, Adhesives, Sealants and Elastomers
(c) Include applications such as flexible foams and polyurethane elastomer used in e.g. coated textiles and shoe soles
MDI product portfolio leads to increased resilience in earnings

MDI margin resilience

Differentiated grades account for ~30% of MDI sales in 2016

Differentiation potential beyond standardized products

Joint sales of polyols and MDI
- Examples: CASE\(^{(c)}\), soft furniture, automotive seating

Specialty or downstream products
- Examples: Selected MDI grades (pre-polymers, blends, monomeric), TPU

Formulations as market access requirement
- Examples: Automotive, appliances

Customized solutions
- Example: Window frames

Differentiated business with ~0.25€/kg higher gross margin

Notes:

(a) Contribution margin per kg
(b) Resilience measured as standard deviation / average
(c) CASE - Coatings, Adhesives, Sealants and Elastomers
## MDI overview

### Global capacity by producer

<table>
<thead>
<tr>
<th>Year</th>
<th>Top 5</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>2016</td>
<td>91%</td>
<td>9%</td>
</tr>
<tr>
<td>2021e</td>
<td>91%</td>
<td>9%</td>
</tr>
</tbody>
</table>

### Industry

<table>
<thead>
<tr>
<th>Capital intensity</th>
<th>Covestro position</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Considerable investment required to develop world-scale plants&lt;sup&gt;(a)&lt;/sup&gt; - €1.1 – 1.4bn investment for full train - Approx. 5 years to full operation after completed environmental impact assessment</td>
<td>• Well-invested, large- to world-scale asset base • Economies of scale • Total capacity 1,420kt&lt;sup&gt;(b)&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process technology</th>
<th>Covestro position</th>
</tr>
</thead>
<tbody>
<tr>
<td>• State-of-the-art technology along the process chain of high importance</td>
<td>• Competitive process technology • Cost leader in NAFTA and advantageous position in Asia • Restructuring potential in EMLA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feedstock integration</th>
<th>Covestro position</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Security of precursor supply essential • Backward-integration as major value lever</td>
<td>• Favorable backward-integration • Long-term supply contracts for important precursors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical capabilities and expertise</th>
<th>Covestro position</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Systems demanding greater knowledge and expertise • Permits required to handle hazardous feedstock, e.g. phosgene</td>
<td>• Superior expertise and know-how in application development and customer insight • Reputation cemented through 60+ years experience</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proximity to customer markets</th>
<th>Covestro position</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Importance of proximity to customer markets • Global asset base critical to support ambitions of global customer base</td>
<td>• Diverse, global footprint • Plants in all core regions • Ability to service all key areas of demand</td>
</tr>
</tbody>
</table>

### Notes:

(a) World-scale defined as MDI facility with capacity of 400-500kt p.a.  
(b) Based on nameplate capacity 2016 at year end
Well-positioned production network to supply customers globally

**Covestro MDI operations**

- **Baytown, TX, USA**
  - Nameplate capacity: 320kt
  - Start of production: 1974
  - Continuous investments into increased reliability

- **Pittsburgh, PA, USA**
  - Nameplate capacity: 170kt
  - Start of production: 1964
  - Expansion in 2002
  - EMEA facility with focus on specialties production

- **Tarragona, Spain**
  - Nameplate capacity: 200kt
  - Start of production: 1995
  - Economic expansion to 400kt p.a. by end of 2018

- **Brunsbuttel, Germany**
  - Nameplate capacity: 200kt
  - Start of production: 1988
  - Expansion in 2002

- **Uerdingen, Germany**
  - Nameplate capacity: 200kt
  - Start of production: 1992
  - Debottlenecking to 400kt by 2018

- **Leverkusen, Germany**
  - Nameplate capacity: 70kt
  - Start of production: 1978, MDI-2 1995
  - Covestro has 60% JV share of Sumika Bayer Urethane
  - 2010 shutdown of older MDI train

- **Shanghai, China**
  - Nameplate capacity: 460kt
  - Start of production: 2006

- **Amagasaki, Japan**
  - Nameplate capacity: 70kt
  - Start of production: MDI-1 1972, MDI-2 1995

- **Niihama, Japan**
  - Nameplate capacity: 70kt
  - Start of production: MDI-2 1978, MDI-3 1997

**Note:** All nameplate capacities based on year-end 2016
Leading cost position in US, efficiency potential in other regions
MDI regional industry cost curves

Covestro cost leadership through backward-integration
European leader with large and energy efficient MDI capacity plus cost efficient raw material supply
Uerdingen more cost efficient relative to other Covestro facilities in Europe due to level of backward-integration
Chinese leader with larger backward-integration including energy supply
Covestro ahead due to larger MDI train capacity and energy efficiency

Note: (a) Cost of production based on total raw material costs less co-product credits, variable and fixed conversion costs at 100% utilization based on nameplate capacity for FY 2016
Competitive cost position through continuous improvements

Covestro asset efficiency

Track record of improving cost position in MDI

- Shutdown in New Martinsville
- Investment in Shanghai
- Restructuring Japan
- Belford Roxo exit
- Caojing debottlenecking
- Brunsbüttel expansion
- Continuous optimization

Covestro global average MDI cash costs driven by structural and technology improvements without benzene (a)

Covestro global average MDI cash costs driven by structural and technology improvements without benzene

Closure of Belford Roxo, Brazil

- Operations discontinued since July 2015
- Decision driven by relative cost competitiveness vs. other production sites

Continuous optimization of global production set-up

- Caojing capacity to be debottlenecked to 500kt p.a. by 2018e
- Brunsbüttel expansion to 400kt p.a. in H2 2018e to leverage existing site-infrastructure

Note:
(a) Covestro global average MDI production cash costs without benzene at uniform currency, labor and energy/ feedstock prices based on management information
Smart capex approach to secure growth
Covestro plans for capacity expansions

Brunsbuttel expansion of 200kt p.a.
- Possible re-usage of idle TDI infrastructure and precursors in Brunsbuttel enable economic doubling of MDI capacity by 200kt p.a.
- Expected on stream by end of 2018

Shanghai debottlenecking of 40kt p.a.
- World-scale plant in Caojing to reach targeted capacity of 500kt p.a. in 2018e
- Mid-single digit m€ investment backed by additional market demand

Various options for additional MDI growth will be investigated
- New world-scale plant investments operational approx. 5 years after completed environmental impact assessment
- Debottlenecking can be realized with approx. 3 years lead time
Polyurethanes (PUR)

MDI

TDI

Polyether polyols
Global leader in long-term growth industry

TDI at a glance

- Globally leading producer of TDI with number one positions in all major regions
- Demand growth around GDP driven by all key end-markets and regions, particularly APAC
- TDI margins volatile and currently above sustainable level due to temporary capacity constraints
- Superior cost position through backward-integration, proprietary gas-phase technology and integrated, world-scale asset base\(^{(a)}\)
- Cost savings and increased profitability out of restructuring of European asset base
- Growth into recently expanded world-scale asset base

Notes:

(a) World-scale defined as TDI facility with capacity of 250-300kt p.a.
(b) Based on nameplate capacity 2016 at year end
Diverse end-markets across all regions support robust growth

TDI industry demand

### TDI demand by region

<table>
<thead>
<tr>
<th>Region</th>
<th>2011</th>
<th>2016</th>
<th>2021e</th>
</tr>
</thead>
<tbody>
<tr>
<td>APAC</td>
<td>0.9</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td>LATAM</td>
<td>0.2</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>EMEA</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>NAFTA</td>
<td>1.9</td>
<td>2.2</td>
<td>2.6</td>
</tr>
</tbody>
</table>

- **GDP 2.6%**
  - APAC: 0.9%
  - LATAM: 0.2%
  - EMEA: 0.2%
  - NAFTA: 1.9%

- **GDP 2-3%**
  - APAC: 0.6%
  - LATAM: 0.7%
  - EMEA: 0.3%
  - NAFTA: 2.2%

- **GDP 3-4%**
  - APAC: 0.2%
  - LATAM: 0.1%
  - EMEA: 0.8%
  - NAFTA: 2.6%

### CAGR 2016 – 2021e

- **Bedding**
  - +3%
- **Furniture**
  - +3%
- **Automotive**
  - +2%
- **CASE**
  - +5%

### Underlying application growth driver

- Solid growth across all major end-uses
- Higher consumption of mattresses and furniture by emerging middle class in developing economies
- Favorable substitution trends in CASE owing to relative advantages vs. competing materials

**Notes:**

(a) Figures represent CAGR 2016-2021e
(b) CASE - Coatings, Adhesives, Sealants and Elastomers
## Strong industry position supported by distinct entry requirements

### TDI overview

<table>
<thead>
<tr>
<th>Year</th>
<th>Global capacity by producer</th>
<th>Industry</th>
<th>Covestro position</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td><img src="chart1" alt="2006 chart" /></td>
<td>Capital intensity</td>
<td>3 world-scale production facilities and total capacity of 720kt</td>
</tr>
<tr>
<td>2016</td>
<td><img src="chart2" alt="2016 chart" /></td>
<td>Process technology</td>
<td>State-of-the-art gas-phase phosgenation (GPP) technology leading to global cost leadership</td>
</tr>
<tr>
<td>2021e</td>
<td><img src="chart3" alt="2021 chart" /></td>
<td>Feedstock integration</td>
<td>Long-term supply contracts for important precursors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>Technical capabilities and expertise</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Permits required to handle hazardous feedstock, e.g. phosgene</td>
<td>World-class expertise and know-how in customer-centric application development</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Track record and suitable infrastructure important</td>
<td>Proven reputation with 60+ years experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Impeccable safety record</td>
</tr>
<tr>
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</tr>
</tbody>
</table>

### Notes:
- (a) World-scale defined by company assessment as TDI facility with capacity of 250-300kt p.a
- (b) Covestro global cost leadership position as per company estimates
Efficiency program to enhance quality of existing assets

Covestro TDI operations

- **Nameplate capacity:** 250kt
- **Start of production:** 2011
- **Technology used:** Features proprietary Covestro gas-phase phosgenation
- **Cost leader in APAC and well-positioned to capture strong demand in Asia**
- **Debottlenecking to 275kt by 2017**

- **Shanghai, China**

- **Nameplate capacity:** 220kt
- **Start of production:** 2000
- **Technology used:** Liquid-phase phosgenation
- **Serves both US and non-US markets**

- **Baytown, TX, USA**

- **Note:** All nameplate capacities based on 2016 at year-end
Global cost leadership by scale, integration and technology

TDI regional industry cost curves

**North America**
Cash cost\(^{(a)}\)

- Covestro Baytown
- North American follower

**EMEA**
Cash cost\(^{(a)}\)

- Covestro Dormagen
- European follower
- European laggard

**Asia**
Cash cost\(^{(a)}\)

- Covestro Shanghai
- Chinese follower
- Chinese laggard
- Asian laggard

---

\(A\) Covestro cost leadership through backward-integration

\(B\) Covestro advantages from superior process technology

\(C\) Process technology advantages and larger TDI train capacity driving superior cost position for Covestro

**Note:**
(a) Cost of production based on total raw material costs less co-product credits, variable and fixed conversion costs at 100% utilization based on nameplate capacity for FY 2016
Polyurethanes
(PUR)

MDI
TDI

Polyether polyols
Leading position in polyether polyols as distinctive component

Polyether polyols at a glance

- Leading global supplier of polyether polyols with broad range of products and focus on NAFTA and EMEA
- Resilient profitability and cash generation backed by stable historic and forecast industry margins
- Key source of distinction and critical “enabler” in terms of providing market access and driving product innovation in polyurethanes
- Sustainable cost position through backward-integration into propylene oxide and best-in-class process technology in polyether polyols
- Covestro polyether polyol growth limited in the short term, yet strategy remains to grow in-line with portfolio

#2 Polyether polyols player globally\(^{(a)}\)

1,330kt Capacity 2016\(^{(a)}\)

~40% of PUR sales 2016

9 Production facilities globally

Note:
(a) Based on nameplate capacity 2016 at year end
Polyether polyols drive innovation as competitive advantage

Role of polyether polyols in Covestro portfolio

Polyether polyols mixed with isocyanates lead to versatile applications

<table>
<thead>
<tr>
<th>Rigid foam</th>
<th>Flexible foam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average mix = Molecular ratio: 1 MDI to ~0.7 polyether polyols</td>
<td>Average mix = Molecular ratio: 1 TDI to ~2 polyether polyols</td>
</tr>
<tr>
<td>Building insulation • space and energy efficient • flexible processing</td>
<td>Furniture • durable and supportive cushions</td>
</tr>
<tr>
<td>Cold chain • affordable temperature preservation</td>
<td>Automotive parts • padding for auto seating</td>
</tr>
<tr>
<td>Automotive parts • strong, durable and light • noise and heat insulation</td>
<td>Bedding • design and comfort driven mattress material</td>
</tr>
</tbody>
</table>
Polyether polyols landscape comprising 4 major players; Covestro is #2 producer globally with strong positions in NAFTA and EMEA

APAC is highly fragmented based on a large merchant propylene oxide market; ~50 small producers account for ~20% share

Higher margins and distinct entry requirements for the business model of propylene oxide backward-integrated polyols vs. stand-alone

Distinct entry requirements: capital intensity, propylene oxide access, advanced polyols process technology, R&D and technical infrastructure

Notes:
(a) Based on nameplate capacity
(b) Producers with capacity <70kt p.a. each
Polyols industry spreads
Polyether polyols demonstrate inherently stable margins

Resilience of polyether polyols business also confirmed in 2016, although at low end of historic band

% of 2016 group sales

- Non-integrated polyether polyols producers with limited competitiveness
- Single capacity addition with little influence on supply / demand dynamics
- Distinct entry requirements for new players, e.g. capex and technology

- Resilient industry margins over the last decade reflective of overall Covestro polyether polyols profitability
- Spreads not materially impacted by high volatility of propylene prices, particularly during the financial crisis
- Propylene oxide supply/demand dynamics create local pricing opportunities in the short-term

Notes:
(a) The global average polyols/propylene prices have been calculated based on the polyols/propylene prices in Europe, US and China and weighted by the respective demand in those regions
Competitive cost position through PO backward-integration

Joint venture with LyondellBasell

<table>
<thead>
<tr>
<th>LyondellBasell agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>US propylene oxide joint venture</td>
</tr>
<tr>
<td>• Started in 2000</td>
</tr>
<tr>
<td>• Long-term off-take of propylene oxide from JV plants</td>
</tr>
<tr>
<td>EMEA propylene oxide joint venture</td>
</tr>
<tr>
<td>• 50 / 50 manufacturing JV for world-scale facility in Rotterdam</td>
</tr>
<tr>
<td>• Propylene oxide output used captively by Covestro as feedstock; sells styrene monomer in merchant market</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key benefits to Covestro</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Secure access of propylene oxide in Europe and US</td>
</tr>
<tr>
<td>• Producer cost economics vs. market price in a limited merchant market for propylene oxide</td>
</tr>
<tr>
<td>• Opportunity to explore debottlenecking options with LyondellBasell</td>
</tr>
<tr>
<td>• US propylene oxide JV not exposed to propylene oxide co-product volatility (TBA / MTBE or styrene monomer)</td>
</tr>
<tr>
<td>• Covestro responsible for certain styrene monomer sales from EMEA joint venture</td>
</tr>
</tbody>
</table>
Polycarbonates (PCS)

Michelle Jou
June 29, 2017
Well-positioned to capture global demand

PCS key investment highlights

1. High-value, differentiated business
   with more than 1,000 different PC grades ranging from ~€1.5 to ~€15 per kg

2. Increasing earning resilience
   driven by continuous product mix improvements

3. Opportunity to outgrow the industry
   taking shares for three consecutive years, outgrowing in high value-added applications

4. Leading global player in an attractive industry
   with above GDP growth, driven by broad application range

5. Well-invested, young and highly efficient asset base
   based on low-cost production and smart capex approach
Global leading producer of polycarbonates

PCS serving key growth end-markets

- Global leader and inventor of polycarbonates
- Offers products and solutions for a wide range of applications
- Integrated production processes along the value chain
- Global platform with 5 production sites, 5 R&D centers, 7 compounding centers and business unit headquarter in Shanghai, China
- Total production capacity of 1,480kt

#1 €3.3bn 21.3% 28%
Producer of PC globally\(^{(a)}\) Sales 2016 EBITDA margin 2016 of total Covestro sales 2016

Note: (a) Based on nameplate capacity at year-end 2016 as per Covestro estimates
Reach and access to customers is key competitive advantage

Global asset footprint with world-scale plants\(^{(a)}\) in all key regions

---

**Primary production plants**

- Production of polycarbonate resin for either external sales or internal feedstock for compounding and sheet plants

**Compounding plants**

- Refinement of polycarbonate resin with color and / or other additives (e.g. ABS)
- Color matching, technical service and small-scale production capabilities

**Sheet plants**

- Production and sales of solid sheet in all regions and multi-wall sheet in EMEA and APAC

---

Note: \(^{(a)}\) Defined as a plant with total nameplate capacity of 200-300kt
Engineering thermoplastics
Serving numerous industries with a unique combination of properties

<table>
<thead>
<tr>
<th>Polycarbonates (PC)</th>
<th>Key PC properties</th>
<th>Key applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resins:</td>
<td>Break-resistant</td>
<td>Automotive interior &amp; exterior panels</td>
</tr>
<tr>
<td>Makrolon©</td>
<td>Lightweight</td>
<td>Bodywork parts</td>
</tr>
<tr>
<td>Bayblend©</td>
<td>Transparent</td>
<td>Lighting systems</td>
</tr>
<tr>
<td>Apec©</td>
<td>High dimensional stability</td>
<td>Glazing</td>
</tr>
<tr>
<td>Makroblend©</td>
<td>Heat-resistant</td>
<td>Outer door panels</td>
</tr>
<tr>
<td>Sheets had to be cut by the text editor</td>
<td>High flame retardance</td>
<td>Radiator grills</td>
</tr>
<tr>
<td>Composites</td>
<td>High impact strength</td>
<td>Medical devices</td>
</tr>
<tr>
<td></td>
<td>Electrical insulation</td>
<td>Robotics</td>
</tr>
</tbody>
</table>

PC properties:
- Break-resistant
- Lightweight
- Transparent
- High dimensional stability
- Heat-resistant
- High flame retardance
- High impact strength
- Electrical insulation

Applications:
- Windows
- Conservatories
- Roof structures
- Partition walls
- IT equipment
- Housing for mobile devices & consumer electronics
- Chargers
- Switchbox and other electrical systems
- Diffusion panel of LCD monitors
- LED parts

Resins: Makrolon©, Bayblend©, Apec©, Makroblend©

Sheets

Composites
Strong growth and margin improvement continuing in 2016

PCS historical financial performance

## Net sales and core volume growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Net sales (€m)</th>
<th>Core volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2,822</td>
<td>3.0%</td>
</tr>
<tr>
<td>2013</td>
<td>2,645</td>
<td>(3.2)%</td>
</tr>
<tr>
<td>2014</td>
<td>2,822</td>
<td>9.0%</td>
</tr>
<tr>
<td>2015</td>
<td>3,172</td>
<td>5.1%</td>
</tr>
<tr>
<td>2016</td>
<td>3,298</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

## Adj. EBITDA and margin

<table>
<thead>
<tr>
<th>Year</th>
<th>Adj. EBITDA (€m)</th>
<th>Adj. EBITDA margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>185</td>
<td>6.6%</td>
</tr>
<tr>
<td>2013</td>
<td>94</td>
<td>3.6%</td>
</tr>
<tr>
<td>2014</td>
<td>160</td>
<td>5.7%</td>
</tr>
<tr>
<td>2015</td>
<td>560</td>
<td>17.7%</td>
</tr>
<tr>
<td>2016</td>
<td>704</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

## Highlights

- Core volume CAGR of ~5% between 2011 and 2016
- Selling price declines below feedstock price benefits between 2012 and 2016
- Significant market share gains due to capacity expansions and innovative products
- Trough margin of 3.6% in 2013 driven by rapidly declining DVD / CD market
- Margins in 2015 and 2016 back to levels prior to DVD / CD boom and bust period
Supporting our customers in every step of the value chain

Material, application and production know-how ensure leading market access and development

Example of customer product development lifecycle

Definition of customer requirements  →  Material & concept development  →  New application technologies  →  Scale up & customer production

Customer needs

- Distinctive and innovative automotive interior design
- Specialized material solutions providing function integration and safety
- Optimized and highly integrated manufacturing process
- Global competitive offerings
  - Comprehensive and competent product support

Covestro solution

- High-end interior solutions with best-in-class product & technology portfolio
- Creative concepts based on profound understanding of materials and applications
- Support along the whole value chain
- Innovative polycarbonate grades, e.g., for infotainment display solutions
- New designs for lifestyle colors, surface finish and soft touch & feel
- Ductile materials for crash safety
- Best-in-class expertise in thermoplastics and processing technologies
- Reduction of cost and complexity
- First choice development partner for leading OEM, component suppliers and design houses
- Cutting-edge material and process innovation
- Global manufacturing, supply and support network
Macro trends support above GDP demand growth

Polycarbonates industry demand across diverse customer industries and regions

<table>
<thead>
<tr>
<th>Demand ('000kt)</th>
<th>CAGR in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP 2.6%</td>
<td>3.2%</td>
</tr>
<tr>
<td>GDP 2.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td>GDP 2-3%</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

Polycarbonates by application

- Electronics
- Electrical
- Automotive
- Construction
- Consumer, Appliance, Medical, Packaging
- Optical Media

<table>
<thead>
<tr>
<th>Year</th>
<th>Electronics</th>
<th>Electrical</th>
<th>Automotive</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>3.6</td>
<td>0.5</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>2011</td>
<td>4.2</td>
<td>0.6</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>2016</td>
<td>5.1</td>
<td>0.7</td>
<td>0.9</td>
<td>1.7</td>
</tr>
<tr>
<td>2021e</td>
<td>+4%</td>
<td>+8%</td>
<td>+6%</td>
<td>+4%</td>
</tr>
</tbody>
</table>

CAGR 2016 – 2021e

- +4%
- +8%
- +6%
- +4%
- -10%

Accelerated growth 2016-2021e

- APAC ~5%
- EMEA ~3%
- NAFTA ~3%

Continuous upgrades, substitution and new application development: selected examples:

- Upgrade to “smart” electronics and new device class, e.g. smartphones / TV
- New revolutionary technologies, e.g. wearables, audio devices, AR and VR, sensors, robotics, drones
- Penetration of LED luminaires
- E-mobility applications
- Medical housing and device applications
Development of diverse applications drives the demand of PC

Polycarbonates industry demand

Global polycarbonates demand, 2000 – 2021e

Rise of Optical Data Storage (ODS; e.g. DVD/CD) 2000 – 2007

Fin. Crisis 2008/2009

Compensate ODS 2010 – 2013

Growth in future products 2014 – 2021e

Future demand drivers coming from new applications

Supply of PC

ODS demand of PC

PC demand (excl. ODS)
Broad access to customer applications and regions

Covestro position in the PC industry

**Positions in the industry**

- **Broad range**
  - Covestro
  - SABIC
  - Mitsubishi
  - Trinseo

- **Narrow range**
  - Regional small producers / compounders / blenders

**Advantages of broad play**

- Reduced exposure to cyclicalty of single customer industries
- Optimized risk distribution
- Optimized asset utilization
- Better flexibility in portfolio management

**PCS sales split by end-markets**

Covestro 2016

- Automotive / Transport: 23%
- Electrical / Electronics: 34%
- Construction: 16%
- Diverse applications: 27%

**PCS sales split by regions**

Covestro 2016

- APAC: 24%
- EMLA: 34%
- NAFTA: 42%

Note: (a) Bubbles represent 2016 global nameplate capacity as per Covestro estimates
Excellent access to high-growth and resilient end-markets

Benefits from the combination of global market access, innovation capabilities and high quality product portfolio

Resilient portion of PCS volumes accounts for ~50% in 2016

High-value industry application (e.g. automotive, medical, electrical)
- Greater technical specification requirement
- Longer lifecycles, higher market growth
- Comprehensive innovation capabilities and technical service is key
- Premium pricing in selected segments

Limited disruptions from new capacity additions
- Niche applications with strong differentiation potential
- Customer intimacy and distinct industry entry requirements
- Investment need for material switch

Resilient portion of PCS volumes improved from ~40% to ~50% in the last 5 years, supported by continuous progress of innovative offerings

Notes:
(a) Contribution margin per kg
(b) Resilience measured as standard deviation of contribution margin for the years FY 2005-2016
Leading cost positions in key regions

PCS regional industry cost curves

North America

Cash cost<sup>(a)</sup>

- Covestro Baytown
- North American follower
- North American laggard

Europe

Cash cost<sup>(a)</sup>

- Covestro Uerdingen
- European follower
- European laggard

Asia

Cash cost<sup>(a)</sup>

- Covestro Shanghai
- Covestro Map Ta Phut
- Asian follower
- Asian laggard

Note:

(a) Cash cost ex gate, 82% utilization rate for all plants based on nameplate capacity. Integrated players are shown without any margins for BPA, phenol, acetone, etc.
Market-driven innovation as key value driver

PCS R&D highlights

R&D project examples

- Highly durable and chemical resistant housing materials
- High-quality LED optical (transparent and translucent) and functional materials
- Continuous fiber-reinforced thermoplastic composites
- (E-)mobility and transportation

Highlights 2016

- 75 Mio € R&D spend
- 18% of PCS 2016 net sales with new products not older than 5 years
- 36 new grades in 2016
- 37 patent applications
Coatings, Adhesives, Specialties (CAS)

Daniel Meyer
June 29, 2017
Global industry leader with high and resilient profitability

CAS key investment highlights

1. High-end solution provider for value-add materials
   serving intrinsically complex customer industries

2. Market-driven innovation capability and customer proximity
   help create new application space and maintain leadership

3. Global leading and defendable position
   in an industry with distinct entry requirements

4. Strong financial profile due to high margin resilience and low capex requirements
   represent solid platform for future business expansion
Niche enablers business focused on high-end products

CAS at a glance

- Global leading supplier of high-performance materials to the coatings and adhesives industry and other specialties (films, elastomers, ingredients to textiles / medical / cosmetics)
- Inventor of and technology leader in isocyanate derivatives for coatings, adhesives, sealants and specialties
- More than 2,300 products based primarily on six monomers, serving over ten high-end industries and over 4,300 customers
- Product pricing driven by value-added to end-customer, as CAS materials are critical to the performance of the final product, but form a small proportion of the overall cost
- Market-driven innovation in close collaboration with all partners in the value chain, developing customized solutions for specific problems (“forward marketing”)
- Efficient production processes benefitting from low cost technology and integration
- Has delivered high, resilient margins and strong cash flow and returns

<table>
<thead>
<tr>
<th>#1</th>
<th>€2.0bn</th>
<th>24.5%</th>
<th>17%</th>
<th>31%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producer of aliphatic isocyanates (a)</td>
<td>Sales 2016</td>
<td>EBITDA Margin 2016</td>
<td>of total Covestro sales 2016</td>
<td>of total Covestro EBIT 2016</td>
</tr>
</tbody>
</table>

Note: (a) Based on total aliphatic isocyanates volume in 2016 relative to competitors as per Covestro estimates
Specialist in managing complexity and high-end applications
2,300+ products derived from 6+ monomers

Raw materials / amines: 4+
Monomers: 6+
Total CAS products: 2,300+
Customers: 4,300+
Industries: 10+

- **Aliphatic**
  - Derivatives
  - PU-Dispersions
  - HDI
  - H$_{12}$MDI
  - IPDI
  - Newly Developed: PDI, XDI

- **Aromatic**
  - Derivatives
  - NDI
  - TDI
  - MDI
  - PUR Sourced

- **Other chemistries incl. polyol$^{(a)}$**
  - Coatings
  - Adhesives & Sealants
  - Speciality Films

- **Specialty business**
  - Automotive
  - Construction
  - Wood & furniture
  - Electronic
  - Packaging
  - Footwear
  - Medical
  - Cosmetics
  - Textile

Note: (a) includes STP (Silane-Terminated Prepolymer), PAC (Polyacrylate) dispersions, PAS (Polyaspartics), PES (Polyesters), PC (Polycarbonate) diols
Strong growth potential in specialty products

Overview of CAS product portfolio

Product groups

1. **Aliphatic isocyanates and derivatives**
   - Polyurethane resins derived from aliphatic monomers including HDI, IPDI, H$_{12}$MDI
   - Applied mainly to coatings

2. **Specialty products (a)**
   - Polyurethane- and polycarbonate-based specialty films, hot cast elastomers and other specialties

3. **Polyurethane dispersions**
   - Polyurethane polymers dispersed in water and mainly used in coatings and adhesives

4. **Aromatic isocyanate derivatives**
   - Polyurethane resins derived from aromatic monomers including TDI and MDI

Specialty products in detail

**Specialty films:**
- Globally leading producer of TPU and PC films
- Continuous stable cash flow and strong innovation pipeline

**Elastomers:**
- Leading producer in SCPU(b) cast machines, innovation leader for SCPU(b) elastomers and machines
- Global production and sales network with dedicated legal entities in France, UK, China and a large global network of distributors

**Textile:**
- Specialty chemicals for the production of leather alternatives, technical and functionalized textiles for diverse industries (e.g. automotive, footwear)
- Comprehensive customer product development and services offering that is also delivered to downstream textile consuming companies

**Medical:**
- High OEM penetration generates market pull for differentiated PU-based materials for adhesives, foams and films
- Unique market position with broad tailor-made material offering in wound care

**Cosmetics:**
- Film formers and sensory additive for colour cosmetics, skin / sun and hair care
- PU-based solutions for innovative claims and high performance formulations

Notes:
(a) Run as a virtual standalone business within CAS, higher growth and margin, include adjacent technology / chemistry / application
(b) SCPU = Specialty Cast Polyurethanes
Overview of total market and key industrial applications

Polyurethane resins = Isocyanates derivatives + polyols

Key industrial applications

- **Coatings:**
  - Total PU Resins: 2,200kt, €6bn
  - Coatings: 1,500kt
  - Auto Refinish: 14%
  - Factory applied metal: 8%
  - Transportation: 10%

- **Adhesives:**
  - Automotive & Transportation: 24%
  - Others: 15%

- **Sealants:**
  - Automotive & Transportation: 34%
  - Others: 13%

---

Notes:

(a) Coatings, Adhesives and Sealants
(b) Excluding decorative coatings
(c) Polyurethane dispersions

Source: Orr & Boss as of 12/2016, annual figures for 2016
Formulation in diverse chemical environment through partnership

Resins and film formers impact performance of final product

CAS delivers tailored solutions and has contact to all partners in the value chain
Diverse applications require multi-dimensional solutions
Covestro with widest offering

Potential for wide variety of solutions depending upon specific situation

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Environment</th>
<th>Industry specifics</th>
<th>Application method</th>
<th>Curing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td>Abrasive</td>
<td>Automotive</td>
<td>Brush</td>
<td>Crosslinking</td>
</tr>
<tr>
<td>Glass</td>
<td>Alternating</td>
<td>Aviation</td>
<td>Curtain</td>
<td>Air-dry</td>
</tr>
<tr>
<td>Metal</td>
<td>Cold</td>
<td>Construction</td>
<td>Dip</td>
<td>Electro</td>
</tr>
<tr>
<td>Plastic</td>
<td>Dry</td>
<td>Electronics</td>
<td>Roll</td>
<td>beam</td>
</tr>
<tr>
<td>Textile</td>
<td>Exterior</td>
<td>Food</td>
<td>Spray</td>
<td>Infrared</td>
</tr>
<tr>
<td>Wood</td>
<td>Hot</td>
<td>Footwear</td>
<td>Knife</td>
<td>dry</td>
</tr>
<tr>
<td>Wood</td>
<td>Humid</td>
<td>Furniture</td>
<td>...</td>
<td>UV curing</td>
</tr>
<tr>
<td>Hair</td>
<td>Interior</td>
<td>Marine</td>
<td>...</td>
<td>Heat-dry</td>
</tr>
<tr>
<td>Skin</td>
<td>Resistant</td>
<td>Packaging</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>…</td>
<td>...</td>
<td>Cosmetics</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>…</td>
<td>...</td>
<td>Textile</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

10+ 70+ 800+ 4,000+ 21,000+

Notes:
(a) includes STP (Silane-Terminated Prepolymer), PAC (Polyacrylate) dispersions, PAS (Polyaspartics), PES (Polyesters), PC (Polycarbonate) diols
(b) Thermoplastic polyurethane

Chemistries

Total CAS Products: 2,300+

- Isocyanate
- TPU
- PUD
- Polyaspartics
- Epoxy
- Acrylates
- Melamines
- Silicons
- Hybrids

Over 50,000 combinations
Covestro serves profitable niches in diverse end-markets

Competitive advantage through a diverse application portfolio

Notes:
(a) Coatings, adhesives and sealants
(b) Including polyols, excl. decorative coatings
Source: Orr & Boss as of 12/2016, annual figures for 2016
Technology substitution for growth and premium pricing
Leveraging unique characteristics of polyurethanes

Characteristics of PU-based coatings / adhesives
• Highly versatile chemistry; allows tailor-made applications in formulations and solvent nature
• Unique characteristics include:
  – Abrasion resistance
  – Outdoor weathering
  – High flexibility
  – Low-temperature curing
  – Corrosion and chemical resistance
  – Durability
  – Gloss retention
  – Hydrolytic stability
• Offers solutions for environmental challenges (e.g. low VOC)
• Superior combination of performance and price

PU raw materials industry demand in CAS

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Resins</td>
<td>2.2</td>
<td>2.6</td>
</tr>
<tr>
<td>CAGR</td>
<td>3-4%</td>
<td></td>
</tr>
</tbody>
</table>

Price index of resins within coatings

- Average Resins: 100%
- Aromatic Isocyanate: 87%
- PUD: 121%
- Aliphatic Isocyanate: 157%

Source: Orr & Boss as of 12/2016, annual figures for 2016
Finding above average growth niches in adjacent industries

Selected CAS applications

**Textile coatings**
- Waterborne solvent-free materials for functionalized textiles in diverse applications
- Textile coating market\(^1\): CAGR: ~6%
- COV relevant textile coating market\(^2\): CAGR: ~11%
- Better occupational safety, environmental protection, resource consumption
- Helps brand owners and manufacturers meet their sustainability goals, e.g. ~45% lower carbon footprint
- Enables new functionalities

**Furniture coatings**
- New bio-based hardener for water-based wood coatings
- Coating industrial furniture market\(^3\): CAGR: ~3%
- Waterbased industrial furniture market\(^4\): CAGR: ~5%
- Furniture surface protection in demanding environments like bathrooms and kitchens
- Biomass content of 66% and improved carbon footprint
- High hardness and chemical resistance

**Wind energy**
- Rotor blades: Polyurethane resins for more stability and durability
- Towers: Polyurethane materials for anti-corrosion coatings
- Undersea cables: Elastomers for protection systems
- Energy consumption\(^5\): CAGR: ~3%
- Offshore wind energy\(^6\): CAGR: ~19%
- Novel components for wind power plants

Source:
1. IAL PUD market report 2015 for 2014 – 2019
2. Covestro estimates
3. CSIL January 2017 for 2017 - 2021
4. Covestro estimates
5. BP, Energy Outlook, 2017 for 2015 – 2020 based on million tons oil equivalent
Strong track record of product innovation

CAS innovation strategy leads to continued competitive differentiation

History of robust product innovations

Highlights 2016

- 84 Mio € R&D spend
- 28% of CAS 2016 net sales with new products not older than 5 years
- ~90% of R&D spend going into product innovation
- 72 patent applications

1960 Blunt
1960
1972 PU Dispersions
1988 Aspartates
1989 Alkphanates
1992 Desmodur N Trimer
1993 Bayhydur
1996 Bayhydrol UV
1997 Asymmetric Trimer
1998 Bayhydur
2015 Desmodur Eco N
2015 Thermo-latent Blulogiq
2017 Bayhydur Eco
2015 Thermo-latent Bayhydur Eco
2017 Blulogiq
2015 Bayhydur Eco
2015 Desmodur Eco N
2017 Bayhydur Eco
2015 Thermo-latent Blulogiq
2017 Bayhydur Eco
2015 Thermo-latent Bayhydur Eco
2017 Blulogiq
2015 Bayhydur Eco
2017 Blulogiq
Continued competitive differentiation through innovation

Selected CAS innovation examples

<table>
<thead>
<tr>
<th>Desmodur® eco – PDI</th>
<th>3D products / cast elastomers</th>
<th>INSQIN® waterborne PU for textiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Covestro developed a coating hardener with ~70% carbon content from renewable raw materials</td>
<td>• Latest 3D printing production technologies help core customers to innovate both products and business models</td>
<td>• High-performance coating material for highly flexible materials e.g. Spandex</td>
</tr>
<tr>
<td>• Successful coating of Audi Q2 under near-series conditions</td>
<td>• Integrating of 3D printing with core technologies and high performance materials, beyond “prototyping” maturity</td>
<td>• Successfully commercialized in Puma, evoPOWER Vigor 1</td>
</tr>
<tr>
<td>• Based on proven 2K PU technology fulfilling high performance standards</td>
<td>• Polyurethane foams elastomers in combination with 3D printed parts exhibit excellent mechanical properties</td>
<td>• Latest top of the range football boot from Puma</td>
</tr>
<tr>
<td>• Application on existing coating lines possible</td>
<td>*</td>
<td>• Technology transformed playing features, construction and design of the product, while being environmentally sustainable</td>
</tr>
<tr>
<td>• Helps customers to lower carbon footprint of their products</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>
Global leadership positions across entire portfolio

CAS competitive positions

Competitive global landscape in derivative products\(^{(a)}\)

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Aliphatic isocyanate derivatives</th>
<th>Aromatic isocyanate derivatives</th>
<th>Polyurethane dispersions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS global position</td>
<td>44%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>CAS volume share</td>
<td>56%</td>
<td>75%</td>
<td>81%</td>
</tr>
</tbody>
</table>

Specialties

<table>
<thead>
<tr>
<th>Product Category</th>
<th>PC films</th>
<th>TPU films</th>
<th>Elastomers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS global position</td>
<td>18%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>CAS volume share</td>
<td>82%</td>
<td>81%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Highlights

CAS is the inventor of aliphatic isocyanate derivatives for the CAS industry, and the global leader with 44% share in a consolidated environment, and #1 player in EMEA, NAFTA and APAC

- NAFTA and EMEA relatively consolidated with only 3 competitors in each region
- APAC relatively fragmented with only 5 key players with shares higher than 5% and multiple others

Industry of aromatic isocyanates is more fragmented

- Global players like CAS compete in the more specialized segment, while regional players compete in the lower value segments

CAS is also the leading player in the PUD industry

- 5 other global players account for 28% share
- Remaining industry is fragmented with smaller regional players that compete in the low-cost, commodity-type products where CAS does not compete

Industry for specialties is quite fragmented

- CAS is one of the two leaders in PC films
- TPU films can be viewed as a regional business rather than global
- 8 other major players in elastomers account for ~60% share

Note:
(a) 2016 share of total volumes
Source: Orr & Boss, hot cast elastomers global position as per company estimates and volume share as per Orr & Boss 2016 analysis
Critical success factors underpinning CAS unique position

Distinct entry requirements for derivative products

<table>
<thead>
<tr>
<th>Entry requirements in derivatives</th>
<th>CAS position</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economies of scope</strong></td>
<td>▪ More than 2,300 products supplied to over 4,300 customers</td>
</tr>
<tr>
<td>▪ Diversity of end-markets and products offered</td>
<td>▪ Focus on high value-add products</td>
</tr>
<tr>
<td>▪ Niche applications with customized solutions</td>
<td>▪ Complementary product offering</td>
</tr>
<tr>
<td><strong>Formulation know-how and technical expertise</strong></td>
<td>▪ Inventor of isocyanate derivative chemistry</td>
</tr>
<tr>
<td>▪ Expertise required to address customers needs with specific formulations</td>
<td>▪ Unique formulation capabilities</td>
</tr>
<tr>
<td><strong>Long-term customer relationships</strong></td>
<td>▪ Solutions provider</td>
</tr>
<tr>
<td>▪ Long-term relationships with customers are key</td>
<td>▪ Proximity to customers</td>
</tr>
<tr>
<td>▪ Expertise required to address customers needs with specific formulations</td>
<td>▪ Superior technical support</td>
</tr>
<tr>
<td><strong>Market-driven innovation</strong></td>
<td>▪ Leader in new product development</td>
</tr>
<tr>
<td>▪ Innovation is key to continuously address customers' needs</td>
<td>▪ Recently developed a new thermolatent hardener</td>
</tr>
<tr>
<td><strong>Global platform</strong></td>
<td>▪ CAS has a strong international footprint with presence across all regions</td>
</tr>
<tr>
<td>▪ Global network to supply customers on a reliable basis</td>
<td>▪ 3 world-scale HDI production hubs</td>
</tr>
<tr>
<td>▪ Expertise required to address customers needs with specific formulations</td>
<td>▪ 11 other production units</td>
</tr>
<tr>
<td>▪ Superior technical support</td>
<td>▪ 9 technical centers</td>
</tr>
</tbody>
</table>
Global leadership position for isocyanate derivatives

CAS value chain position in an attractive industry

<table>
<thead>
<tr>
<th>Raw materials / amines</th>
<th>Monomers / isocyanate derivatives</th>
<th>Coatings/adhesives makers</th>
<th>End-consumer industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVISTA</td>
<td>covestro</td>
<td>PPG, AXALTA, Sika, BASF</td>
<td>Mercedes-Benz, TOYOTA, H&amp;M</td>
</tr>
<tr>
<td>ASCEND</td>
<td>vencorex, Asahi KASEI, BASF</td>
<td>H.B. Fuller, BASF, AkzoNobel, Henkel, SHARON WILLIAMS</td>
<td>ZARA, AIRBUS, adidas, Nike, Nestle</td>
</tr>
<tr>
<td>SOLVAY</td>
<td>WANGHUA 万华, NIPPON POLYURETHANE</td>
<td>BASF, BASF, Henkel</td>
<td></td>
</tr>
<tr>
<td>EVONIK INDUSTRIES</td>
<td>NIPPON POLYURETHANE</td>
<td>AkzoNobel</td>
<td></td>
</tr>
</tbody>
</table>

Distinct entry requirements in isocyanate monomers and derivatives production
CAS is #1 player

Specialty products

Raw materials broadly available, both internally and externally

Well positioned in production of specialty products due to know-how

Customers are fragmented, allowing positive pricing delta to derivative producers

High-value applications
# Best-in-class production technology

## CAS backward-integration into monomers

### Global aliphatic monomer capacities

<table>
<thead>
<tr>
<th>HDI, IPDI, H12MDI, PDI[1]</th>
<th>65%</th>
<th>35%</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 in every aliphatic monomer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Entry requirements in monomers

<table>
<thead>
<tr>
<th>Engineering capability to build monomer plant</th>
<th>Financial resources and know-how required to build efficient isocyanate monomer plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economies of scale</td>
<td>Cost efficiency achieved by benefitting from world-scale assets</td>
</tr>
<tr>
<td>Phosgene handling and environmental permits</td>
<td>Phosgene requires important know-how and legal permits before being handled</td>
</tr>
<tr>
<td>Technology and cost leadership</td>
<td>Technology know-how and capabilities to produce isocyanates</td>
</tr>
<tr>
<td>Innovation in launch of new monomers</td>
<td>Innovation is key to avoid commoditization</td>
</tr>
</tbody>
</table>

### CAS position

- **CAS operates 3 world-scale HDI production hubs across NAFTA, EMEA, APAC at integrated CAS sites**
- **CAS is the global capacity leader in HDI production**
- **Unique expertise in handling phosgene**
- **One of the pioneers in phosgene industrial use**
- **Proprietary gas-phase phosgenation technology**
- **On average 30%[b] less expensive than competing technologies**
- **Launch of Desmodur® eco based on biomass raw materials**

Notes:

(a) Based on year-end 2016 capacities as per Covestro estimates

(b) Corresponds to conversion costs
Unique global set-up for proximity to customers and markets

CAS global asset base

<table>
<thead>
<tr>
<th>Selected customers</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development partners &amp; Customers</td>
<td></td>
</tr>
<tr>
<td>• Active in selected countries or global asset base</td>
<td></td>
</tr>
<tr>
<td>• Require global marketing and technical service</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Production</th>
<th>Technical centers</th>
<th>Specialties</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Three world-scale monomer production hubs in all key regions complemented by regional derivative plants</td>
<td>• Technical centers in all key regions ensure proximity to customers</td>
<td>• Specialty films, elastomers and other specialties facilities allow to capture high growth in adjacent applications</td>
</tr>
<tr>
<td>• Efficient production processes benefitting from low cost technology and integration</td>
<td>• Superior technical support capabilities help to build long-term relationships</td>
<td>• Global footprint provides for leadership in a fragmented industry across regions</td>
</tr>
</tbody>
</table>

Distributors

Important channel to markets

- Production
- Technical centers
- Specialties
High margin resilience reflects specialty character

CAS financial performance

Resilient margin level in a volatile volume environment

- Value-add to customers and diversified application profile secures stable margins
- Gross margin driven by high value portfolio as well as low cost technology

Resilient margin level in a volatile volume environment

Global crisis with V shape recovery

Competitor start up HDI APAC region

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4


CAS sales split by end-markets

Covestro 2016

- Automotive / Transport
- Electrical / Electronics
- Construction
- Wood & Furniture
- Footwear & Textiles
- Others

CAS sales split by regions

Covestro 2016

- EMLA
- APAC
- NAFTA

Note: (a) Defined as net sales proceeds less variable product costs per kg
Growing portfolio-adjusted revenues and EBITDA margin
CAS historical financial performance

Net sales and core volume growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Net sales (€m)</th>
<th>Core volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1,984</td>
<td>5.1%</td>
</tr>
<tr>
<td>2013</td>
<td>1,876</td>
<td>(1.3)%</td>
</tr>
<tr>
<td>2014</td>
<td>1,928</td>
<td>4.3%</td>
</tr>
<tr>
<td>2015</td>
<td>2,093</td>
<td>2.7%</td>
</tr>
<tr>
<td>2016</td>
<td>2,040</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Highlights

• After very strong growth in 2012, CAS experienced market entry of a new competitor in a major product line
• In the following years CAS performed with a CAGR of 3.6%
• Due to divestment of trading products, core volume growth at -0.3% for 2016. Without divestment, growth would have been at 4.5%

• 2012-2014: Margin improvement mainly driven by disposal of low-margin business
• 2015-2016: Margin increase mainly driven by product mix improvements and lower raw material costs

Adj. EBITDA and margin

<table>
<thead>
<tr>
<th>Year</th>
<th>Adj. EBITDA (€m)</th>
<th>Adj. EBITDA margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>364</td>
<td>18.3%</td>
</tr>
<tr>
<td>2013</td>
<td>367</td>
<td>19.6%</td>
</tr>
<tr>
<td>2014</td>
<td>437</td>
<td>22.7%</td>
</tr>
<tr>
<td>2015</td>
<td>491</td>
<td>23.5%</td>
</tr>
<tr>
<td>2016</td>
<td>500</td>
<td>24.5%</td>
</tr>
</tbody>
</table>
Disclaimer

This presentation may contain forward-looking statements based on current assumptions and forecasts made by Covestro AG.

Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Covestro’s public reports, which are available on the Covestro website at www.covestro.com.

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