Sustainability Presentation
EXANE BNP PARIBAS 5th SRI Forum

Paris – November 22, 2017

Ticker: CON
ADR-Ticker: CTTAY
http://www.continental-ir.com

Michael Sämann, IR Manager
Sabine Reese, IR Manager
### AGENDA

<table>
<thead>
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<th></th>
<th>Title</th>
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<td>36</td>
</tr>
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<td>6</td>
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<td>50</td>
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</tbody>
</table>
1) Continental at a Glance

Continental Ranks No. 2 in Worldwide Supplier Ranking

Top 10 Global OEM Suppliers – 2016 Sales (in € bn)

Source: Company filings. Calendarized to December year-end. Based on average currency exchange rates 2016.

1 Robert Bosch only includes Mobility Solutions division.
2 Continental not including ContiTech industrial business and other non-OE Automotive business.
3 ZF excluding Industrial Technology Business.
4 Bridgestone including Diversified Products.
1) Continental at a Glance
Megatrends in the Automobile Industry

Environment – For Clean Power

CO₂ Fleet Emission Targets 2020/21 (NEDC)¹

1. New European Driving Cycle.
2. Mandatory for 95% of the OEMs fleets.

Information – For Intelligent Driving

Safety – For Safe Mobility

Road Traffic Deaths
Number of Road Traffic Deaths per 100,000 Inhabitants by Region¹

Affordable Cars – For Global Mobility

A&B Production Segment¹ in BRIC (mn units)

¹ Data based on framework created by the World Health Organization (WHO) for estimating road traffic mortality.

### Continental at a Glance
A Leading Global Supplier for Key Automotive Electronics Applications

<table>
<thead>
<tr>
<th>Chassis &amp; Safety</th>
<th>Powertrain</th>
<th>Interior</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Actuation</td>
<td>• Diesel injection systems</td>
<td>• Body and security products</td>
</tr>
<tr>
<td>• Advanced driver assistance systems (ADAS)</td>
<td>• Gasoline injection systems</td>
<td>• Commercial vehicle interiors</td>
</tr>
<tr>
<td>• Airbag electronics</td>
<td>• Transmission control units</td>
<td>• Device connectivity and telematics units</td>
</tr>
<tr>
<td>• Electronic brake systems (EBS)</td>
<td>• Turbochargers</td>
<td>• Instrumentation, displays and human machine interfaces</td>
</tr>
<tr>
<td>• Foundation brake systems</td>
<td>• 48 V and Plug-In Hybrid</td>
<td>• Intelligent Transport Systems</td>
</tr>
<tr>
<td></td>
<td>• Full Electric Vehicle</td>
<td></td>
</tr>
</tbody>
</table>

Sales 2016 €8,978 mn
% of total 22%
Adj. EBIT 1 €592 mn
Adj. EBIT margin 6.6%

ADAS 2 installation rate worldwide 2

Sales 2016 €7,320 mn
% of total 18%
Adj. EBIT 1 €398 mn
Adj. EBIT margin 5.5%

Gasoline direct injection systems installation rate worldwide (%)

Sales 2016 €8,325 mn
% of total 20%
Adj. EBIT 1 €642 mn
Adj. EBIT margin 7.8%

Market for Automotive Electronics 3
(USD bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2021E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td>2021E</td>
<td>1.81</td>
<td></td>
</tr>
</tbody>
</table>

CAGR = 13%

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2021E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>2021E</td>
<td>61%</td>
<td></td>
</tr>
</tbody>
</table>

CAGR = 4%

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2021E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>255</td>
<td></td>
</tr>
<tr>
<td>2021E</td>
<td>317</td>
<td></td>
</tr>
</tbody>
</table>

1 Before amortization of intangibles from PPA, consolidation and special effects.
2 ADAS: Advanced Driver Assistance System. Average amount of ADAS including sensing rear/surround view cameras but w/o parking assist functions based on ultrasonic
1) Continental at a Glance
A Leading Global Supplier of Tire and Non-Tire Rubber Products

### Tires

**Passenger & Light Truck Tires**
- Markets
  - EMEA
  - The Americas
  - APAC
- Products
  - Original equipment
  - Replacement
  - Summer tires, winter tires, high performance tires

<table>
<thead>
<tr>
<th>Sales 2016</th>
<th>€10,717 mn</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of total</td>
<td>26%</td>
</tr>
<tr>
<td>Adj. EBIT¹</td>
<td>€2,306 mn</td>
</tr>
<tr>
<td>Adj. EBIT margin</td>
<td>21.7%</td>
</tr>
</tbody>
</table>

**Commercial Vehicle Tires**
- Markets
  - EMEA
  - The Americas
  - APAC
- Products
  - Original equipment
  - Replacement
  - Commercial Specialty Tires

**ContiTech**
- Automotive hoses and hose lines
- Automotive interior trim
- Conveyor belts
- Industrial hoses
- Multiple V-ribbed belts and timing belts
- Air springs for railways, trucks & buses
- Vibration absorbers
- Elastomer coatings

<table>
<thead>
<tr>
<th>Sales 2016</th>
<th>€5,463 mn</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of total</td>
<td>14%</td>
</tr>
<tr>
<td>Adj. EBIT¹</td>
<td>€522 mn</td>
</tr>
<tr>
<td>Adj. EBIT margin</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

¹ Before amortization of intangibles from PPA, consolidation and special effects.

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ContiTech

Sustainability Presentation – November 22, 2017
Exane BNP Paribas - 5th SRI Forum
EDMR – Equity and Debt Markets Relations 6
1) Continental at a Glance
Systematic Entrepreneurial Approach

Value Creation is Our Driving Force

Environment –
For clean power

Information –
For intelligent driving

Safety –
For safe mobility

Affordable Cars –
For global mobility

Technological balance
Great people culture
Regional sales balance
Top market position
Balanced customer portfolio
In the market for the market
2) Sustainability Responsibility at Continental
Our Policies and Guidelines

Principles of our Corporate Social Responsibility

<table>
<thead>
<tr>
<th>Environmental Responsibility</th>
<th>Social Responsibility</th>
<th>Corporate Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESH(^1) Policy – implements worldwide the responsibility for protecting the environment</td>
<td>Business Partner Code of Conduct – personal ethics, conflicts of interest</td>
<td>Corporate Governance Policy – to further a responsible management of the company focused on value creation</td>
</tr>
<tr>
<td>The BASICS – the guidelines, codex and basic principles of our business activities</td>
<td>Risk Report – overview of our Risk Management</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Environment, Safety and Health.
2) Sustainability Responsibility at Continental
Materiality Matrix

For more information please go to the GRI Report 2016, page 10ff.
2) Sustainability Responsibility at Continental Roadmap 2020

In 2015, we developed a consolidated sustainability program and set ourselves goals for 2020 in order to achieve measurable improvement in our four fields of action. Some of these extend until 2025. These goals form our Roadmap 2020.

Fields of activity:

› Corporate governance and corporate culture
  › Compliance & Supply Chain
  › Lobbying

› Employees and society
  › Diversity & equal opportunities
  › Occupational safety and health
  › Attractiveness as an employer
  › Job training and continuing education

› Environment
  › Climate protection/air
  › Waste
  › Water

› Products
  › Road and vehicle safety
  › Raw materials
  › Sustainable products

For more information please go to GRI Report 2016, page 12ff.
3) Environmental Responsibility at Continental
Status of Environmental Certification at Continental

Continental established an environmental management system throughout the corporation more than 30 years ago.

The environmental management system incorporates all levels of the value chain and the complete life cycles of Continental products. As a result, our environmental responsibilities extend from research and development, the purchasing of raw materials and components, logistics and production, to the use and recycling of our products.

Our activities are geared toward continually optimizing the use of resources in relation to business volume. We manufacture products that make an active contribution toward protecting the environment and conserving resources throughout their entire duration of use as well as when they are ultimately recycled.

In manufacturing, we are aiming for a 20% reduction in relation to the adjusted sales volume of energy and water consumption, CO2 emissions and waste generation by 2020\(^1\) (base year: 2013). At the same time we are doing our best to increase the recycling rate of industrial waste by 2% each year.

<table>
<thead>
<tr>
<th>Production Locations worldwide</th>
<th>Thereof ISO 14001 certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>189</td>
</tr>
</tbody>
</table>

1 Roadmap 2020
3) Environmental Responsibility at Continental

Status of Quality Certification at Continental

“The ISO 9000 family addresses “Quality management”. This means what the organization does to fulfill:

› the customer’s quality requirements, and
› applicable regulatory requirements, while aiming to
› enhance customer satisfaction, and
› achieve continual improvement of its performance in pursuit of these objectives.”¹

<table>
<thead>
<tr>
<th>ISO/TS 16949</th>
<th>ISO 9001 or ISO/TS 16949</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Group: production sites</td>
<td>100%</td>
</tr>
<tr>
<td>Rubber Group Tires: production plants</td>
<td>100%</td>
</tr>
<tr>
<td>Rubber Group ContiTech: production sites</td>
<td>100%</td>
</tr>
</tbody>
</table>

¹ Source: ISO (International Organization of Standardization) www.iso.org/iso/home.html.

ISO/TS 16949 specifies requirements using ISO 9001 for service and replacement production in the automobile industry.
3) Environmental Responsibility at Continental
Certification of Suppliers

1. Assessments to determine status of the supplier.
2. Measures (joint projects, training sessions, and workshops for example) are initiated to achieve our goals in supplier development as necessary.

We monitor the environmentally friendly production of our suppliers as part of internal supplier audits. Relevant issues in the scope of these audits include compliance, organization and the provision of resources for EH&S.

Starting in 2017, we will systematically evaluate our suppliers based on sustainability criteria with the help of an independent service provider. Our goal in doing so is to better fulfill our responsibilities and ensure that we are able to comply with our requirements within the worldwide supply chain.

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<table>
<thead>
<tr>
<th>Suppliers in the</th>
<th>thereof ISO 14001 certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Group</td>
<td>85%</td>
</tr>
<tr>
<td>Rubber Group</td>
<td>73%</td>
</tr>
</tbody>
</table>

1 Roadmap 2020.
3) Environmental Responsibility at Continental
Corporate Environmental Key Performance Indicators

<table>
<thead>
<tr>
<th>CO₂ Emissions¹</th>
<th>Water consumption¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2014</strong></td>
<td><strong>2014</strong></td>
</tr>
<tr>
<td>1,974</td>
<td>1,642</td>
</tr>
<tr>
<td>662</td>
<td>487</td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td><strong>2015</strong></td>
</tr>
<tr>
<td>2,073</td>
<td>1,671</td>
</tr>
<tr>
<td>715</td>
<td>480</td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td><strong>2016</strong></td>
</tr>
<tr>
<td>2,252</td>
<td>1,932</td>
</tr>
<tr>
<td>794</td>
<td>442</td>
</tr>
<tr>
<td><strong>Ziel 2020</strong></td>
<td><strong>Ziel 2020</strong></td>
</tr>
<tr>
<td>1,974</td>
<td>1,932</td>
</tr>
<tr>
<td>613</td>
<td>394</td>
</tr>
</tbody>
</table>

- **Scope 1**: Direct CO₂ Emissions (1000 metric tons)
- **Scope 2**: Indirect CO₂-emissions from external sources (1000 metric tons)
- Specific CO₂ emissions (100kg/€ million in adjusted sales)

<table>
<thead>
<tr>
<th>Energy consumption¹</th>
<th>Waste production¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2014</strong></td>
<td><strong>2014</strong></td>
</tr>
<tr>
<td>2,789</td>
<td>291</td>
</tr>
<tr>
<td>816</td>
<td>85</td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td><strong>2015</strong></td>
</tr>
<tr>
<td>2,935</td>
<td>310</td>
</tr>
<tr>
<td>777</td>
<td>85</td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td><strong>2016</strong></td>
</tr>
<tr>
<td>3,299</td>
<td>353</td>
</tr>
<tr>
<td>819</td>
<td>88</td>
</tr>
<tr>
<td><strong>Ziel 2020</strong></td>
<td><strong>Ziel 2020</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2,789</td>
<td>68</td>
</tr>
<tr>
<td>816</td>
<td>90</td>
</tr>
</tbody>
</table>

- **Scope**: Energy consumption (10.000 GJ)
- Specific energy consumption (GJ/€ million in adjusted sales)

- **Waste Generation**: (1000 metric tons)
- Specific waste generation (100kg/€ million in adjusted sales)
- Abfallverwertung (%)

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1 Reviewed with limited assurance by an independent auditor.
3) Environmental Responsibility at Continental
Corporate Environmental Key Performance Indicators

<table>
<thead>
<tr>
<th>Scope 3 emissions in metric tons of CO₂</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Self commissioned incoming logistics</td>
<td>1,152,124</td>
</tr>
<tr>
<td>Self commissioned outgoing logistics</td>
<td>539,058</td>
</tr>
<tr>
<td>Purchased goods and services</td>
<td>8,721,849</td>
</tr>
<tr>
<td>Waste produced through operational processes</td>
<td>20,660</td>
</tr>
<tr>
<td>Fuels and energy-related activities not included in Scope 1 and 2</td>
<td>449,081</td>
</tr>
<tr>
<td>Fuels and energy-related activities not included in Scope 1 and 2</td>
<td>449,081</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,882,772</strong></td>
</tr>
</tbody>
</table>

For the selected indirect CO2 emissions (Scope 3), we follow international standards such as the Corporate Value Chain Accounting and Reporting Protocol of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).
### Environmental Responsibility at Continental
**Sustainable Product-Solutions for Automotive Industry by Continental**

<table>
<thead>
<tr>
<th>Technology / Feature</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full hybrid electric vehicle (FHEV)</td>
<td>20-25%</td>
<td></td>
</tr>
<tr>
<td>Compressed Natural Gas (CNG)</td>
<td>15-20%</td>
<td></td>
</tr>
<tr>
<td>Piezo common rail injection</td>
<td>10-20%</td>
<td></td>
</tr>
<tr>
<td>Mild hybrid electric vehicle (MHEV, 48V)</td>
<td>10-15%</td>
<td></td>
</tr>
<tr>
<td>Engine downsizing and turbocharger</td>
<td>~15%</td>
<td></td>
</tr>
<tr>
<td>Telematics, ACC, ADAS</td>
<td>5-12%</td>
<td></td>
</tr>
<tr>
<td>SCR² systems/DDS³</td>
<td>2-5%</td>
<td></td>
</tr>
<tr>
<td>Tires (rolling resistance, TPMS⁴)</td>
<td>2-5%</td>
<td></td>
</tr>
<tr>
<td>Energy management (POD⁵/AES⁶)</td>
<td>1-5%</td>
<td></td>
</tr>
<tr>
<td>Connected energy management</td>
<td>3-4%</td>
<td></td>
</tr>
<tr>
<td>Double clutch transmission (DCT)</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Transmission (POD⁵)</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

1. Saving potential compared with gasoline direct injection Euro 5 / NEDC.
2. SCR = Selective Catalytic Reduction.
3. DDS = DEKA injector for diesel dosing into exhaust gas.
4. TPMS = Tire Pressure Monitoring System.
5. POD = Power-On-Demand.
6. AES = Advanced Energy Supply.

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Our products currently in volume production already are capable of reducing CO₂ emissions by about 26 g/km¹.

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Exane BNP Paribas - 5th SRI Forum
EDMR – Equity and Debt Markets Relations
3) Environmental Responsibility at Continental
Sales of Products to Reduce CO\textsubscript{2} Emissions

Sales 2016 (€ 40.5 bn)

- Green tires: Tires optimized on rolling resistance (all tires labelled B and better)
- Lightweight components: Light weight brakes, road database (green maps), intelligent transportation systems
4) Technologies in the Automotive Group

Today’s Vehicle Emissions vs. Future Targets

4) Technologies in the Automotive Group
How to Reach the European CO$_2$ Target of about 80g/km

Areas of Improvements:
- Vehicle
- Combustion/Transmission
- Electrification
- Eco Innovations / Super Credits

1 Assumptions for CO$_2$ target in the EU by 2025.
4) Technologies in the Automotive Group
Powertrain – Business Units and Key Products

**Engine Systems**
- Engine Management Systems and fuel components for
- Diesel Piezo Common Rail Injection System
- Gasoline Solenoid Direct Injection
- Gasoline Port Injection
- Liquefied Petroleum Gas (LPG) and Compressed Natural Gas (CNG)
- Exhaust Aftertreatment
- Engine Management Systems and exhaust after-treatment products for commercial vehicle applications
- Turbochargers for gasoline engines

**Transmission**
- Control units for
  - Automatic transmission
  - Double clutch transmission
  - Automated manual transmission
  - Continuously variable transmission
- Control units for 4x4 and AWD applications
- Transfer cases
- Differentials
- Limited slip coupling
- Axle disconnect

**Hybrid Electric Vehicle**
- Power electronics
- Electric motors
- Battery management systems
- Energy management
- Power net systems

**Sensors & Actuators**
- Actuators for
  - Electric pumps
  - Electric throttle & air control
  - Exhaust & emission
  - General purpose
- Exhaust & emission sensors for
  - Exhaust gas
  - Fluids: Oil level, fuel, UREA
  - Temperature
- Engine & transmission sensors
  - Airflow
  - Combustion
  - Position
  - Pressure
- Door handle sensors

**Fuel & Exhaust Management**
- Fuel delivery modules
- Fuel level sensors
- Fuel pumps
- Electronics for fuel pump control
- Fluid level sensor with sealed contact system
- Catalysts and filters
- Tank-integrated UREA dosing system
4) Technologies in the Automotive Group
Powertrain – ICE Expected to Grow at Least Until 2025

Light-Vehicle Production Powertrain Split ➔ Continental EV Scenario

[mn vehicles]

2016 | 2020 | 2025 | 2025
---|---|---|---
93 | 102 | 110 | 110

- 26% Internal Combustion Engine
- 49% Pure Diesel
- 20% MHEV 48V
- 30% Pure MPI
- 18% Pure GDI
- 12% FHEV
- 4% EV
- 2% PHEV
- 2% MHEV

1 Internal Combustion Engine
4) Technologies in the Automotive Group
Powertrain – OI\(^1\) Already Shows Shift to Electronics and Electrification

Order Intake

<table>
<thead>
<tr>
<th>Year</th>
<th>Mechanics and Hydraulics</th>
<th>Electronics</th>
<th>Electrification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>40%</td>
<td>50%</td>
<td>10%</td>
</tr>
<tr>
<td>2016</td>
<td>30%</td>
<td>60%</td>
<td>10%</td>
</tr>
<tr>
<td>Sales 2016</td>
<td>20%</td>
<td>60%</td>
<td>20%</td>
</tr>
</tbody>
</table>

\(^1\) Order Intake as Lifetime Sales
### 4) Technologies in the Automotive Group

**Relative Value of Continental’s Content in Powertrains**

<table>
<thead>
<tr>
<th>Business</th>
<th>100%&lt;sup&gt;1&lt;/sup&gt;</th>
<th>160%</th>
<th>160-360%</th>
<th>400%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gasoline-related business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Engine management systems for solenoid direct injection (injector, ECU, pressure pumps)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Exhaust aftertreatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Sensors and actuators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Turbochargers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Diesel-related business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Engine management systems for diesel piezo common-rail injection (injector, ECU, pressure pumps)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Exhaust aftertreatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Sensors and actuators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Turbochargers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HEV-related business including extended offering</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Engine management systems (gasoline/diesel)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Exhaust aftertreatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Sensors and actuators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Turbochargers and 48V solutions (12kW/ 15kW/ 25kW) or Plug-in hybrid solutions (incl. thermal components &amp; charging systems)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BEV-related business including extended offering</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› High-voltage axle drive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Power electronics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Onboard charging systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Battery management systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› DC/DC converter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Thermal management components</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<sup>1</sup> Value of displayed gasoline content per car is indexed at 100%; all other values read relative to the gasoline content.
### 4) Technologies in the Automotive Group
#### Powertrain - Solutions for Charging

**Conductive Charging (Basic Charging)**
- **On-board charger (3.6 - 11kW)**
  - Re-charge high-voltage battery from power grid
  - Unique electronic topology for worldwide charging

**Inductive Charging (Improved Convenience)**
- High-voltage battery charging
- 11kW power transfer
- Including all safety features

**AllCharge® (Bi-directional Charging)**
- ‘Universal charger’ for all types of cable-based charging stations:
  - Up to 800V/350kW
  - Up to 12-times faster charging at urban AC charging stations

---

**Battery performance and convenient charging are crucial for the success of electric mobility**
4) Technologies in the Automotive Group
Powertrain - 48V Technology Enables Intelligent Hybrid Strategies

- **Mild Hybrid**
  - 48V “cost-optimized” (10-12kW)
  - 48V “CO₂-optimized” (15kW)
  - 48V “inner city driving” (25kW)

- **High Voltage**
  - No clear trend visible, i.e. still high proliferation of unique technical solutions

€1 billion order intake for 48V already received
4) Technologies in the Automotive Group
Powertrain - AES – 48V Roadmap in addition to 15kW already in production

- **Air-cooled**
  - Feb 2017: Motor A-Sample
  - Apr 2017: B0 for internal test and exhibition on Auto Shanghai
  - Aug 2017: Customer sample

- **Liquid-cooled**
  - SOP of 12kW
  - SOP of 25kW
  - Aug 2017: Customer sample
  - Apr 2017: B0 for internal test
  - Nov 2016: Motor A-Sample

SOP = Start of Production
B0 = B sample
4) Technologies in the Automotive Group

Chassis & Safety – Business Units and Key Products

**Vehicle Dynamics**
- Electronic Brake Systems
  - Passenger Cars / Motorcycles
  - ABS / ESC / oCB
  - Software functions
    - Traction control
    - Adaptive cruise control
    - Regenerative brake system
    - Active front steering
    - Hill start assist
    - Hydraulic brake assist
    - Trailer stability assist
- Suspension systems

**Hydraulic Brake Systems**
- Calipers
- Drum brakes
- Brake hoses
- Boosters
- Tandem master cylinders
- Electric parking brakes
- Pedal modules
- Brake pressure regulators
- Washer systems

**Passive Safety & Sensorics**
- Integrated vehicle safety development, safety testing & validation
- Airbag control units / safety (domain) control units
- Crash sensors
- Inertial measurement units
- Chassis and driver intention sensors
- Battery and energy monitoring sensors
- Electronic components (1st tier customer)
- Wheel, engine and transmission speed sensors
- Accelerator Force Feedback Pedal (AFFP®)
- V2X systems
- Electronic Chassis Components

**Advanced Driver Assistance Systems**
- Sensors
  - Camera
  - Surround View
  - Long Range Radar
  - Short Range Radar
  - High Resolution Flash Lidar
  - Short Range Lidar
- ADCU
  - Assisted Driving Control Unit
  - Automated Driving Control Unit
- Driving Functions
4) Technologies in the Automotive Group

Chassis & Safety – History and roadmap for Accident-Free Driving

Fatal Accidents in Germany 1953 - 2016

* Federal Statistics Office, Germany (Destatis);
  ABS - Anti-lock Brake System, ESG - Electronic Stability Control, BA - Brake Assist, ACC - Adaptive Cruise Control, LDW - Lane Departure Warning, AEB – Autonomous Emergency Braking
4) Technologies in the Automotive Group
Chassis & Safety – History and roadmap for Accident-Free Driving


- AEB = Automatic Emergency Brake
- ACC = Adaptive Cruise Control

History:
- 2015 – 2016:
  - ACC (longitudinal/lateral)
  - Traffic Jam Assistant (highway)
  - Lateral Collision Avoidance
  - Emergency Steering Assistant
- 2015 – 2016:
  - ACC
  - Traffic Jam Assistant (highway)
  - Lateral Collision Avoidance
  - Emergency Steering Assistant

Roadmap:
- 2015
- 2020
- > 2025

- Construction Site Assist
- Automated Parking
- Autonomous Driving
- Highway (highly automated)
- City Stop&Go
- Inter-Urban
- Remote parking

- AEB Pedestrian
- AEB > 60 kph
- AEB City < 50 kph
- Parking Assist
- Driver Distraction
- Highway Assist Stop&Go, Cruising, 0-130km/h

Sustainability Presentation – November 22, 2017
Exane BNP Paribas - 5th SRI Forum
EDMR – Equity and Debt Markets Relations

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4) Technologies in the Automotive Group
Chassis & Safety – Self Driving Car Project CUbE – Continental Urban Mobility Experience

Driving Intelligence
› Situation analysis
› Decision-making
› Low-level vehicle control
› ADCU (mid-term)

Localization
Robust localization in urban areas
› Radar
› Wireless infrastructure beacons

Seat Material
Tailored seat surfaces
› Resilient
› Easy to clean
› Comfortable

Tires
› ContiEcoContact™ 5

Camera Sensing
› Object detection
› Barrier detection
› Front sensor cover drive path

Radar Sensing
Short range sensor
› Object detection
› Barrier detection
› 4 sensors for 360° view

Lidar Sensing
Solid state flash lidar (mid-term)
› Object detection
› Barrier detection
› 4 sensors for 360° view

Drive Module
› One axle drive from Continental (2018)

We will become a full system supplier!
4) Technologies in the Automotive Group
Chassis & Safety - Market for Automated Driving: Three-Layer Model

Recent additions to strengthen PF

- ASC (solid-state flash lidar), Continental ADCU
- Digilens
- Elektrobit, Easymile, Argus Cyber Security
- Quantum Innovation, Baidu, NTT Docomo, BMW/Intel platform
- China Unicom

Market for Automated Driving ~€17 bn\(^1\) by 2020

- Components: ~€13 bn
- Sensors
- System: ~€4 bn
- Electronics Software Integration
- Environmental Model: <€1 bn
- Software Electronics

\(^1\) Source: Continental estimates.
## 4) Technologies in the Automotive Group

### Chassis & Safety – Leading Position in ADAS

<table>
<thead>
<tr>
<th>System Manufacturers</th>
<th>Component Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (€ mn)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>2016</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conti ADAS</td>
<td>&gt;€3 bn</td>
<td></td>
</tr>
<tr>
<td>Bosch ADAS</td>
<td>&gt;€1,200</td>
<td></td>
</tr>
<tr>
<td>Denso ADAS</td>
<td>€1,000</td>
<td></td>
</tr>
<tr>
<td>Autoliv ASP</td>
<td>€816</td>
<td></td>
</tr>
<tr>
<td>Mobileye</td>
<td>€667</td>
<td></td>
</tr>
<tr>
<td>Hella</td>
<td>€249</td>
<td></td>
</tr>
<tr>
<td>Delphi</td>
<td>€240</td>
<td></td>
</tr>
<tr>
<td>Valeo CDA</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

1. Continental ADAS = Radar, Lidar, Camera and ADCUs
2. Bosch PR May 4th, 2017; Bosch has not communicated any future ADAS sales target; Bosch includes ultrasonic in ADAS sensors
3. Denso reports ADAS sales as part of “Information and safety systems”; Denso’s ADAS target 03/2021 looks for JPY 200 bn; sales are annualized
4. Autoliv active safety products: radar systems, vision and night systems, active seatbelts and brake systems, dynamic spotlight and system integration; 2020 target
5. Mobileye 2016 sales; company has the target to achieve 1.1 bn USD sales by 2019
6. Hella: according to Jefferies Research
7. Delphi 2016 sales represent company communication from Q2 2016 and target to achieve 1 bn USD sales by 2019
8. Valeo reports sales for comfort and driving assist only. It includes rain, lighting and ultrasonic sensors in DA sales; it has no official target for future ADAS sales communicated
9. ZF has not provided any sales data on its ADAS business

ADAS definitions vary greatly amongst suppliers.
### 4) Technologies in the Automotive Group

#### Chassis & Safety – Automated Driving: Function and Sensor Scenarios

<table>
<thead>
<tr>
<th>Partially Automation</th>
<th>Conditional Automation</th>
<th>High/Full Automation</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2</td>
<td>L3</td>
<td>L4/5</td>
</tr>
<tr>
<td>› Autonomous Emergency Braking (incl. intersections)</td>
<td>› Cruising Chauffeur</td>
<td>› Urban Chauffeur</td>
</tr>
<tr>
<td>› Lane Keeping Assist</td>
<td>› Traffic Jam Chauffeur</td>
<td>› Cruising Chauffeur (Enhanced)</td>
</tr>
<tr>
<td>› Lane Change Assist</td>
<td>› Remote Parking</td>
<td>› Traffic Jam Chauffeur (Enhanced)</td>
</tr>
<tr>
<td>› Adaptive Cruise Control (Anticipatory and Cooperative ACC)</td>
<td></td>
<td>› Automated Parking (e.g. Trained Parking, Valet Parking)</td>
</tr>
<tr>
<td>› Traffic Jam Assist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Back-up Assist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>› Parking Assist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Full Automation Standards

- L4: 3x Camera, 6x Short-range Radar, 3x Long-range Radar, 1x Flash Lidar, 1x Surround View System (4 cameras + 1x ECU optional), 1x Rear View System (option), 2x ADCU
- L4 (Enhanced): 3x Camera, 6x Short-range Radar, 3x Long-range Radar, 4x Flash Lidar, 1x Surround View System (4 cameras + 1x ECU optional), 1x Rear View System, 2x Mirror View System, 3x ADCU

*1 Depending on customers and future regulatory requirements.*
### 4) Technologies in the Automotive Group

#### Interior – Business Units and Key Products

<table>
<thead>
<tr>
<th>Instrumentation &amp; Driver HMI</th>
<th>Infotainment &amp; Connectivity</th>
<th>Intelligent Transportation Systems</th>
<th>Body &amp; Security</th>
<th>Commercial Vehicles &amp; Aftermarket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument clusters</td>
<td>Radios</td>
<td>Commercial fleet operations &amp; logistics</td>
<td>Body control modules</td>
<td>Tachographs, telematics and services</td>
</tr>
<tr>
<td>Display solutions</td>
<td>Infotainment</td>
<td>Emergency management</td>
<td>Access control systems</td>
<td>Visual and haptic human-machine interface</td>
</tr>
<tr>
<td>Head-up displays</td>
<td>Connectivity &amp; telematics</td>
<td>Maintenance management</td>
<td>Door control units</td>
<td>Chassis, body, and transmission electronics</td>
</tr>
<tr>
<td>Haptic controls</td>
<td>Software &amp; connected solutions</td>
<td>Advanced public transportation systems</td>
<td>Seat comfort systems</td>
<td>Wear parts, spare parts, tools, services, and multi-brand vehicle diagnostics for the independent aftermarket, as well as diagnostics and services for vehicle manufacturers</td>
</tr>
<tr>
<td>Interior cameras</td>
<td></td>
<td>Advanced traveler information systems</td>
<td>Power closures</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advanced traffic management systems</td>
<td>Tire information systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safety</td>
<td>Gateways</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Traffic payment</td>
<td>Power stabilization</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LED light control units</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intelligent antenna modules</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Smart device integration</td>
<td></td>
</tr>
<tr>
<td>Cockpit modules</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Image of automotive technologies]
4) Technologies in the Automotive Group
Interior – Products/Systems for Electrical Vehicles

LED light control unit

› Our products: headlamp mounted standalone control units operating adaptive front lighting functions and LED based front lighting applications. A simple LED low-beam headlight requires only 18 watts as against 35 for the xenon counterpart.

eHorizon

› Various vehicle systems know attributes of the road ahead such as slope or curve radius. The motor output or gear can be adjusted accordingly, or the climate controls uses information about an approaching downhill stretch to adjust the climate performance individually.

Filling Assistant

› The Filling Assistant specifies the exact inflation pressure of each tire with a new application that reports the tire pressure directly to a smart phone. Only at a optimum inflation pressure, the rolling resistance is low and the vehicle requires less energy when driving.
5) Technologies in the Rubber Group
Tires – Business Units and Tire Brands

<table>
<thead>
<tr>
<th>Passenger and Light Truck Tires</th>
<th>Passenger and Light Truck Tires</th>
<th>Passenger and Light Truck Tires</th>
<th>Commercial Vehicle Tires</th>
<th>Two Wheel Tires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Equipment</td>
<td>Replacement EMEA</td>
<td>Replacement The Americas</td>
<td>Truck Tires EMEA</td>
<td>Tires and tubes for:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Truck Tires The Americas</td>
<td>Bicycles:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Truck Tires APAC</td>
<td>Race, Mountainbike, City/Trekking</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Motorcycles:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Scooters, Big bikes &gt;150cc, Bikes &lt;150cc</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Tires for:
- Compact, medium-size and full-size cars
- 4x4 and SUVs
- Vans, light trucks and recreational vehicles

Tires, services and solutions for customer segments:
- Goods
- People
- Construction

Tires, services and solutions for the applications:
- Material handling
- Agriculture
- Earthmoving

Ext. mobility systems:
- SSR
- Minispares
- Conti KomfortKit
- Conti MobilityKit
- ContiSeal
- ContiSilent
- NVH engineering services

Racing Tires only:
- Hoosier

---

1) Segmentation into Premium, Quality and Budget.
2) Except North America, Colombia, Peru.
3) Only in Australia and Taiwan.
4) Trademark rights for Malaysia, Singapore and Brunei.
5) Only in Australia, China, Malaysia and Taiwan.
5) Technologies in the Rubber Group
Tires – EU Tire Label Criteria, Tests and Classes

### Rolling resistance

<table>
<thead>
<tr>
<th>RRC</th>
<th>Energy efficiency class</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRC ≤ 6.5</td>
<td>A</td>
</tr>
<tr>
<td>6.6 ≤ RRC ≤ 7.7</td>
<td>B</td>
</tr>
<tr>
<td>7.8 ≤ RRC ≤ 9.0</td>
<td>C</td>
</tr>
<tr>
<td>Not assigned</td>
<td>D</td>
</tr>
<tr>
<td>9.1 ≤ RRC ≤ 10.5</td>
<td>E</td>
</tr>
<tr>
<td>10.6 ≤ RRC ≤ 12.0</td>
<td>F</td>
</tr>
<tr>
<td>RRC ≥ 12.1</td>
<td>G</td>
</tr>
</tbody>
</table>

RRC = Rolling resistance coefficient
(Coefficient between resistance and wheel load)

- Influences fuel consumption
- Better: Lower RRC values

### Wet grip

<table>
<thead>
<tr>
<th>WGI</th>
<th>Wet grip class</th>
</tr>
</thead>
<tbody>
<tr>
<td>155 ≤ WGI</td>
<td>A</td>
</tr>
<tr>
<td>140 ≤ WGI ≤ 154</td>
<td>B</td>
</tr>
<tr>
<td>125 ≤ WGI ≤ 139</td>
<td>C</td>
</tr>
<tr>
<td>Not assigned</td>
<td>D</td>
</tr>
<tr>
<td>110 ≤ WGI ≤ 124</td>
<td>E</td>
</tr>
<tr>
<td>WGI ≤ 109</td>
<td>F</td>
</tr>
<tr>
<td>Not assigned</td>
<td>G</td>
</tr>
</tbody>
</table>

WGI = Wet grip index
(% improvement in relation to reference tires)

- Braking performance on wet roads
- Better: Higher WGI values

### External noise

- More than 3 dB(A) below the legal limit
- 0-3 dB(A) below the legal limit
- Overshooting of the limits (no longer permissible from June 2016 onwards)

Absolute values for noise emission and classification in relation to legal limits

- External noise of a passenger car (four tires) measured at 80 km/h
- No information about internal noise
### 5) Technologies in the Rubber Group

**Tires – Business Units and Tire Brands**

**Fuel saving per label class**
(Sample calculation with Ø consumption of 6.6 liters)

<table>
<thead>
<tr>
<th>Label</th>
<th>Fuel Saving (l/100 km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>± 0.00 l</td>
</tr>
<tr>
<td>B</td>
<td>+ 0.10 l</td>
</tr>
<tr>
<td>C</td>
<td>+ 0.12 l</td>
</tr>
<tr>
<td>E</td>
<td>+ 0.14 l</td>
</tr>
<tr>
<td>F</td>
<td>+ 0.15 l</td>
</tr>
<tr>
<td>G</td>
<td>+ 0.15 l</td>
</tr>
<tr>
<td>D</td>
<td>Not assigned</td>
</tr>
</tbody>
</table>

Saving potential from class A to G, it is a total of up to 0.66 l/100 km.

**Wet grip**

**Residual speed**

<table>
<thead>
<tr>
<th>Label</th>
<th>Residual Speed (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>25</td>
</tr>
<tr>
<td>B</td>
<td>34</td>
</tr>
<tr>
<td>C</td>
<td>42</td>
</tr>
<tr>
<td>E</td>
<td>49</td>
</tr>
<tr>
<td>F</td>
<td>Not assigned</td>
</tr>
<tr>
<td>G</td>
<td>Not assigned</td>
</tr>
</tbody>
</table>

Increase in braking distance compared to tires from label class A. In lower wet grip classes, the stopping distance is much longer!

**Differences in braking distance**
(from 80 km/h to a standstill)

<table>
<thead>
<tr>
<th>Label</th>
<th>Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>+ 3 m</td>
</tr>
<tr>
<td>B</td>
<td>+ 7 m</td>
</tr>
<tr>
<td>C</td>
<td>+ 12 m</td>
</tr>
<tr>
<td>E</td>
<td>+ more than 18 m</td>
</tr>
<tr>
<td>F</td>
<td>Not assigned</td>
</tr>
<tr>
<td>G</td>
<td>Not assigned</td>
</tr>
</tbody>
</table>

---
5) Technologies in the Rubber Group

Tires – Conti.eContact

With reduced rolling resistance, the Conti.eContact supports to extend the range of electric cars.
5) Technologies in the Rubber Group
Tires – Rubber from Dandelions

- This natural rubber used from dandelion roots has at least the same quality and performance characteristics as conventional rubber from rubber trees.

- The plants can be cultivated in Northern and Western Europe on land that is unsuitable for food crops. “Plantations beside the tire plants” in Central Europe makes both economic and ecological sense.

   **Benefits:**
   - Reduction in dependency on harvest situation in subtropical regions
   - Lower requirements on the fertility of the soil
   - Lower environmental impact due to reduced logistic requirements
   - Optimal material properties enable first-class products in terms of technology

- The new dandelion rubber Taraxagum should enter production within the next five to ten years and then flow step-by-step into our rubber products.

Source: [www.taraxagum.com](http://www.taraxagum.com)

- Innovation and the Green Award both at the international trade fair Automechanika 2016
- Joseph von Fraunhofer Prize 2015
- GreenTecAward 2014
5) Technologies in the Rubber Group

Tires – ContiLifeCycle for Commercial Vehicle Tires

- New Continental Tires
- Retreading Hot | Cold
- Regrooving
- Casing Management

Acknowledgements

- German Federal Ministry of Environment (BMU), Berlin
- Umweltbundesamt, Berlin
- KfW Bankengruppe, Bonn
- Hannover Impuls GmbH, Hannover

Based in Hannover-Stöcken
Total investment of more than € 10 million
180,000 tires annual capacity (150,000 hot retread, 30,000 cold retread)
4,000 tons annual recycling capacity
5) Technologies in the Rubber Group
Tires – ContiLifeCycle for Commercial Vehicle Tires (2)

› General Information
Breathing life into tires a second and even a third time is the basic idea behind the ContiLifeCycle approach (CLC). What has worked with glass and metals for decades is now also possible for premium truck tires, with the world’s first fully integrated recycling and retreading plant in Hannover-Stöcken.
The ContiLifeCycle Plant is a combined facility for hot and cold retreading of truck tires and recycling rubber from used tires.

› Coming round again for a cleaner world.
The Continental LifeCycle™ is a retreaded solid rubber tire using only casings that pass strict quality checks. The tread is completely replaced using materials identical to those used in the production of new tires.
  › Reduce the number of scrap tires
  › Reduce the amount of raw materials used
  › Energysaving
  › Eco-friendly
5) Technologies in the Rubber Group
Tires – ContiLifeCycle

End-of-life tires in the European Union
A total of approximately 3 million tons of used tires accumulate in the EU per year. The majority of these tires are used for energy recovery in the cement industry and for material recycling (mainly downcycling). The rest is used for civil engineering, landfill and is reused or exported.

Recycling versus raw material
The total amount of energy for producing one kilogram of tire compound is 82 megajoule, including other factors, such as logistics. The amount of energy needed to recycle one kilogram of used rubber is only 8.7 megajoule, or roughly 11% of the energy needed for one kilogram of new compound.

Rubber saving
The recycling plant’s annual material output results in the saving of 2,400 tons of rubber, which equals the annual production of roughly 1.3 million rubber trees.

CO₂ emissions
By recycling 4,000 tons of used rubber in the recycling plant, an annual 8,000 tons of CO₂ emissions are saved. In order to achieve this CO₂ reduction by natural means, 625 hectares of pine forest (the size of 877 soccer fields) are needed.
5) Technologies in the Rubber Group
Tires – ContiLifeCycle (2)

- Challenges for the Transport Industry

<table>
<thead>
<tr>
<th>%</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>97</td>
<td>Dependence of transport on fossil fuels &amp; increasing scarcity</td>
</tr>
<tr>
<td>80</td>
<td>Reduction in Greenhouse Gas (GHG) emissions of developed countries by 2050</td>
</tr>
<tr>
<td>45</td>
<td>Of operating costs of a long haul truck fleet are influenced by tires</td>
</tr>
<tr>
<td>5</td>
<td>Direct costs for tires only make up for up to 5% of a fleet’s operating costs**</td>
</tr>
</tbody>
</table>

**Source: Spanish Ministry of Transport | “Transport Cost Observation”, October 2010

*based on levels of 1990
5) Technologies in the Rubber Group
Tires – ContiLifeCycle (3)

- Direct tire costs only represent a total of up to 5% of the total operating costs of a transport company.

<table>
<thead>
<tr>
<th>Total costs of a transport company [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
</tr>
<tr>
<td>24</td>
</tr>
</tbody>
</table>

Source: Spanish Ministry of Transport | “Transport Cost Observation”, October 2010

- Cost Saving Potential (Example)
  - **Tire Cost per km** (150,000 km / year)
    - New Tire 3,24 cent / km
    - New Tire + ContiRe 2,90 cent / km
    - New Tire + ContiRe + Regrooving 2,53 cent / km

- **22% Savings**

**Eco - nomical**

**Costs under the influence of tires: 45%**

**Configuration:**
2 x 315/80 R 22.5 HSR2
4 x 315/80 R 22.5 HDR2
6 x 315/80 R 22.5 HTR2
5) Technologies in the Rubber Group
Tires – ContiLifeCycle (4)

Development pro
### 5) Technologies in the Rubber Group

**ContiTech – Business Units and Key Products**

<table>
<thead>
<tr>
<th><strong>Air Spring Systems</strong></th>
<th><strong>Benecke-Kaliko Group</strong></th>
<th><strong>Compounding Technology</strong></th>
<th><strong>Conveyor Belt Group</strong></th>
<th><strong>Elastomer Coatings</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Air suspensions systems for bus, trucks rail vehicle</td>
<td>Technical and decorative surface materials for automotive interior trim</td>
<td>Compounds</td>
<td>Steel cord conveyor belts</td>
<td>Coated fabrics</td>
</tr>
<tr>
<td>Air actuators for pneumatics &amp; vibration isolation</td>
<td>Surface materials for decoration &amp; protection</td>
<td>Compound development</td>
<td>Textile conveyor belts</td>
<td>Printing blankets/forms</td>
</tr>
<tr>
<td>Compensators</td>
<td></td>
<td>Testing services</td>
<td>Special conveyor belts</td>
<td>Diaphragms/materials</td>
</tr>
</tbody>
</table>

**Industrial Fluid Solutions**

- Industrial hoses
- Fittings
- Hoses for onshore & offshore applications

**Mobile Fluid Systems**

- Hoselines in vehicles:
  - Exhaust & fuel systems
  - Powertrain
  - Air conditioning
  - Heating/cooling systems
  - Steering and chassis
  - Turbocharger

**Power Transmission Group**

- V-belts
- Multiple V-ribbed belts
- Timing belts
- Flat belts
- Belt drive systems

**Vibration Control**

- Rubber-to-metal bonded products
- Hydromounts
- Mount systems
- Precision molded parts
- Blow molded parts
- Plastic parts
5) Technologies in the Rubber Group
Sustainable Product-Solutions for Other Industries by ContiTech

- Technological expertise for customer-specific solutions made from rubber and plastic
- Sustainable management with long-sighted economic, ecological and social solutions
- Creating added value for our customers, human beings and the environment

- Components for engine downsizing & emissions reducing
- Health-friendly Interiors
- Lightweight engineering
- Rubber tracks for more efficiency
- Added value through functional integration
- Flexible insulation for energy saving
- Climate-friendly conveyor belts
- Climate-friendly printing blankets
- Drive belts from renewable resources
- Perfect mount for wind power
- Printing technology for printed electronics/solar cells
- Drive System for eBikes and pedelecs

Source: Fact Book Fiscal Year 2014
5) Technologies in the Rubber Group

ContiTech

- Lightweight Air Springs
- Air Actuators
- Acella® Eco Natural Seating Upholstery Material (renewable raw material content of up to 50%)
- TEPEO® Foam Foil (weight advantages of up to 60%)
- Conveyor Belts Optimized in Energy Consumption (lower energy consumption up to 25%)
- Conti® Thermo-Protect (heat losses reduction up to 80%)
- Environmental Friendly Printing Blankets (reduced energy consumption up to 70%)
- Recycling Concept for Metal Printing Blankets
- SCR-Technology (heatable high performance hoses)
- Efficient Air Conditioning Units
- CONTI® BELT IN OIL
- CONTI® UNIPOWER ECO2-FLEX
- Start-Stop Application
- Light Weight Components for Passenger and Light Truck Tires
### 6) Outlook 2017

**PC & LT Production by Quarter in Major Regions**

<table>
<thead>
<tr>
<th>Region</th>
<th>2015</th>
<th>2016</th>
<th>2017E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe (mn units)</td>
<td>20.7</td>
<td>21.4</td>
<td>22.0</td>
</tr>
<tr>
<td>North America (mn units)</td>
<td>17.5</td>
<td>17.8</td>
<td>17.2</td>
</tr>
<tr>
<td>China (mn units)</td>
<td>23.7</td>
<td>27.1</td>
<td>27.5</td>
</tr>
</tbody>
</table>

#### Graphical Representation

- **Europe**
  - Q1/15: 5.382
  - Q2/15: 5.408
  - Q3/15: 5.172
  - Q4/15: 5.509
  - Q1/16: 5.879
  - Q2/16: 5.336
  - Q3/16: 5.116
  - Q4/16: 5.673
  - Q1/17: 4.950
  - Q2/17: 5.610

- **North America**
  - Q1/15: 4.267
  - Q2/15: 4.521
  - Q3/15: 4.350
  - Q4/15: 4.363
  - Q1/16: 4.456
  - Q2/16: 4.601
  - Q3/16: 4.409
  - Q4/16: 4.360
  - Q1/17: 4.457
  - Q2/17: 3.994
  - Q3/17E: 4.190

- **China**
  - Q1/15: 5.971
  - Q2/15: 5.708
  - Q3/15: 4.830
  - Q4/15: 7.170
  - Q1/16: 6.393
  - Q2/16: 6.059
  - Q3/16: 6.302
  - Q4/16: 8.309
  - Q1/17: 6.851
  - Q2/17: 6.088
  - Q3/17E: 6.378
  - Q4/17E: 8.190

*Source: IHS and own estimates. Europe excluding Kazakhstan and Uzbekistan*
6) Outlook 2017

Market Outlook for Major Regions

PC & LT\textsuperscript{1} Production (mn units)

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2017E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>21.4</td>
<td>22.0</td>
</tr>
<tr>
<td>North America</td>
<td>17.8</td>
<td>17.2</td>
</tr>
<tr>
<td>South America</td>
<td>2.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Asia</td>
<td>50.0</td>
<td>51.4</td>
</tr>
</tbody>
</table>

Worldwide production to increase by 2% to 95 mn units

Commercial Vehicle\textsuperscript{2} Prod. (k units)

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2017E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>635</td>
<td>680</td>
</tr>
<tr>
<td>North America</td>
<td>471</td>
<td>490</td>
</tr>
<tr>
<td>South America</td>
<td>85</td>
<td>88</td>
</tr>
<tr>
<td>Asia</td>
<td>1,888</td>
<td>1,945</td>
</tr>
</tbody>
</table>

Global truck OE production to increase by about 4%

PC & LT Repl.\textsuperscript{3} Tire Market (mn units)

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2017E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>340</td>
<td>346</td>
</tr>
<tr>
<td>North America</td>
<td>285</td>
<td>285</td>
</tr>
<tr>
<td>South America</td>
<td>66</td>
<td>70</td>
</tr>
<tr>
<td>Asia</td>
<td>431</td>
<td>450</td>
</tr>
</tbody>
</table>

World replacement PC & LT tire market to increase by 2%

CV Repl.\textsuperscript{4} Tire Market (mn units)

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2017E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>24.4</td>
<td>25.3</td>
</tr>
<tr>
<td>North America</td>
<td>23.6</td>
<td>24.4</td>
</tr>
<tr>
<td>South America</td>
<td>13.8</td>
<td>15.1</td>
</tr>
<tr>
<td>Asia</td>
<td>86.1</td>
<td>89.0</td>
</tr>
</tbody>
</table>

World replacement truck tire market to increase by 4%

\textsuperscript{1} Passenger car and light truck <6t
\textsuperscript{2} Heavy vehicles >6t
\textsuperscript{3} Passenger car & light truck replacement
\textsuperscript{4} Commercial vehicle replacement (radial and biased)
### 6) Outlook 2017

**Continental Corporation**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated sales</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adj. EBIT(^1) margin</td>
<td>€40.5 bn</td>
<td>To increase to &gt;€44 bn at constant FX rates;</td>
</tr>
<tr>
<td></td>
<td>€4.3 bn</td>
<td>~€44 bn at current FX rates;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;10.5% adj. EBIT(^1) margin</td>
</tr>
<tr>
<td><strong>Automotive Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adj. EBIT(^1)</td>
<td>€24.5 bn</td>
<td>To increase to ~€26.5 bn</td>
</tr>
<tr>
<td></td>
<td>€1.6 bn</td>
<td>~8.5% adj. EBIT(^1) margin</td>
</tr>
<tr>
<td><strong>Rubber Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adj. EBIT(^1)</td>
<td>€16.1 bn</td>
<td>To increase to &gt;€17 bn</td>
</tr>
<tr>
<td></td>
<td>€2.8 bn</td>
<td>&gt;15% adj. EBIT(^1) margin</td>
</tr>
<tr>
<td><strong>Raw materials cost impact</strong></td>
<td>Relief of about €150 mn</td>
<td>Raw materials to burden Rubber Group with about €450 mn</td>
</tr>
<tr>
<td><strong>Special effects</strong></td>
<td>-€70 mn</td>
<td>Below -€100 mn</td>
</tr>
<tr>
<td><strong>Net interest result</strong></td>
<td>-€117 mn</td>
<td>~~€200 mn at constant FX rates</td>
</tr>
<tr>
<td>Tax rate</td>
<td>28%</td>
<td>&lt;30%</td>
</tr>
<tr>
<td><strong>Capex</strong></td>
<td>€2.6 bn</td>
<td>Capex at around 6.5% of sales</td>
</tr>
<tr>
<td>PPA</td>
<td>€144 mn</td>
<td>PPA amortization: below €200 mn</td>
</tr>
<tr>
<td><strong>Free cash flow before acquisitions</strong></td>
<td>€2.3 bn</td>
<td>~€2 bn</td>
</tr>
</tbody>
</table>

\(^1\) Before amortization of intangibles from PPA, consolidation and special effects
Thank you!
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Social Media
Phone: +49 511 938 14034
E-mail: marvin.kalberlah@conti.de
## Continental
### Financial Calendar

**2017**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary figures for fiscal 2016</td>
<td>January 9, 2017</td>
</tr>
<tr>
<td>Annual Financial Press Conference</td>
<td>March 2, 2017</td>
</tr>
<tr>
<td>Annual Shareholders’ Meeting (incl. key data for Q1 2017)</td>
<td>April 28, 2017</td>
</tr>
<tr>
<td>Q1 Financial Report</td>
<td>May 9, 2017</td>
</tr>
<tr>
<td>Nine-Month Financial Report</td>
<td>November 9, 2017</td>
</tr>
</tbody>
</table>

**2018**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary figures for fiscal 2017</td>
<td>January 9, 2018</td>
</tr>
<tr>
<td>Annual Financial Press Conference</td>
<td>March 8, 2018</td>
</tr>
<tr>
<td>Annual Shareholders’ Meeting (incl. key data for Q1 2018)</td>
<td>April 27, 2018</td>
</tr>
<tr>
<td>Q1 Financial Report</td>
<td>May 8, 2018</td>
</tr>
<tr>
<td>Half-Year Financial Report</td>
<td>August 2, 2018</td>
</tr>
<tr>
<td>Nine-Month Financial Report</td>
<td>November 8, 2018</td>
</tr>
</tbody>
</table>
# Continental

## Share Data/ADR Data

### Share Data

<table>
<thead>
<tr>
<th>Type of share</th>
<th>No-par value share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomberg Ticker</td>
<td>CON</td>
</tr>
<tr>
<td>Reuters Ticker</td>
<td>CONG</td>
</tr>
<tr>
<td>German Security Identification Number (WKN)</td>
<td>543 900</td>
</tr>
<tr>
<td>ISIN</td>
<td>DE0005439004</td>
</tr>
<tr>
<td>Shares outstanding as at March 31, 2017</td>
<td>200,005,983</td>
</tr>
</tbody>
</table>

### ADR Data

<table>
<thead>
<tr>
<th>Ratio (ordinary share: ADR)</th>
<th>1:5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomberg Ticker</td>
<td>CTTAY</td>
</tr>
<tr>
<td>Reuters Ticker</td>
<td>CTTAY.PK</td>
</tr>
<tr>
<td>ISIN</td>
<td>US2107712000</td>
</tr>
<tr>
<td>ADR Level</td>
<td>Level 1</td>
</tr>
<tr>
<td>Exchange</td>
<td>OTC</td>
</tr>
<tr>
<td>Sponsor</td>
<td>Deutsche Bank Trust Company Americas</td>
</tr>
</tbody>
</table>
## Continental Bond Data

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Continental AG</th>
<th>Continental Rubber of America, Corp.</th>
<th>Continental AG</th>
<th>Continental AG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
<td>Senior Notes</td>
<td>Senior Notes</td>
<td>Senior Notes</td>
<td>Senior Notes</td>
</tr>
<tr>
<td>Principal amount</td>
<td>€750 mn</td>
<td>€500 mn</td>
<td>€600 mn</td>
<td>€750 mn</td>
</tr>
<tr>
<td>Offering price</td>
<td>98.950%</td>
<td>99.739%</td>
<td>99.410%</td>
<td>99.228%</td>
</tr>
<tr>
<td>Rating at issuance date</td>
<td>Ba2 (Moody’s)</td>
<td>BBB (S&amp;P)</td>
<td>BBB+ (S&amp;P)</td>
<td>BBB (Fitch)</td>
</tr>
<tr>
<td></td>
<td>BB (Fitch)</td>
<td>BBB (Fitch)</td>
<td>BBB+ (Fitch)</td>
<td>BBB (Fitch)</td>
</tr>
</tbody>
</table>

### Current corporation and bond ratings

- BBB+ (Fitch), BBB+ (S&P), Baa1 (Moody’s)

| Coupon | 3.0% p.a. | 0.5% p.a. | 0.0% p.a. | 3.125% p.a. |
| Maturity | July 16, 2018 | February 19, 2019 | February 5, 2020 | September 9, 2020 |
| Interest payment | Semi annual | Annual | Not applicable | Annual |
| WKN | A1X24V | A1Z7C3 | A2DARM | A1X3B7 |
| ISIN | XS0953199634 | DE000A1Z7C39 | XS1529561182 | XS0969344083 |
| Denomination | €1,000 with min. tradable amount €1,000 | €1,000 with min. tradable amount €1,000 | €1,000 with min. tradable amount €1,000 | €1,000 with min. tradable amount €1,000 |

---

1. Guaranteed by Continental AG
2. Non-contracted rating at date of issuance
3. Fitch since October 24, 2016; S&P since May 11, 2016; Moody’s since June 30, 2015
4. Non-contracted rating since February 1, 2014
## References

### Useful Links

<table>
<thead>
<tr>
<th>Category</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continental Investor Relations website</td>
<td><a href="http://www.continental-ir.com">www.continental-ir.com</a></td>
</tr>
<tr>
<td>Corporate Social Responsibility</td>
<td><a href="http://www.continental-sustainability.com">www.continental-sustainability.com</a></td>
</tr>
<tr>
<td>Continental IR on Twitter</td>
<td><a href="http://twitter.com/Continental_IR">twitter.com/Continental_IR</a></td>
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</tbody>
</table>