HELLA GmbH & Co. KGaA

dbAcces Berlin Conference

Berlin, June 2019
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This document contains an English translation of the accounts of the Company and its subsidiaries. In the event of a discrepancy between the English translation herein and the official German version of such accounts, the official German version is the legal valid and binding version of the accounts and shall prevail.
HELLA Presentation dbAccess June 2019

Outline

- HELLA Financial Results 9M FY 2018/19
- HELLA at a Glance
- HELLA Strategy
- HELLA’s View on Automotive Market Trends
Positive sales growth and EBIT increase in 9M FY 2018/19
Financial Highlights 9M FY 2018/19

Sales
- HELLA Group currency and portfolio adjusted sales grew by 6.2% YoY to 5.1 bill. EUR

Profitability
- Adj. Gross Profit margin at 27.4% (+0.2%-points YoY)
- Adj. EBIT +22 mill. EUR (+5.6% YoY) at 417 mill. EUR
- Adjusted EBIT margin -0.1pp to 8.1%

Liquidity
- Adjusted Free Cash Flow from operating activities increased by 31 mill. EUR (+17.2% YoY) to 210 mill. EUR

Note: Adjusted P&L and Balance Sheet figures for FY 17/18 and FY 18/19 exclude items from the Wholesale distribution since closing of the transactions. Adjustments of profitability figures for all years include restructuring expenses. For details see financial report. Please note that where sums and percentages in the presentation have been rounded, differences may arise as a result of commercial rounding.
HELLA top line growth with positive development in 9M FY 18/19
Financial Highlights 9M FY 2018/19

HELLA Group sales (in EUR millions)

<table>
<thead>
<tr>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Currency</strong> (+0.1pp) and portfolio (-5.5pp) adjusted growth of HELLA Group at 6.2%</td>
</tr>
<tr>
<td>** Reported sales growth of HELLA Group at 0.8% (increased by 39.4 mill. EUR to 5,169 mill. EUR)**</td>
</tr>
<tr>
<td>- <strong>Automotive</strong> +7.5% to 4,240 mill. EUR. Demand for energy management products, radar solutions and advanced lighting systems drives business</td>
</tr>
<tr>
<td>- <strong>Aftermarket</strong> +3.8% to 492 mill. EUR, positively driven by Workshop product sales</td>
</tr>
<tr>
<td>- <strong>Special Applications</strong> -5.4% to 298 mill. EUR due to end of Australian production. Excl. this effect, growth at 3.8% with positive development in agricultural, construction and trailer business</td>
</tr>
</tbody>
</table>

*Wholesale sales excluded
### HELLA Automotive outperforming LVP in all regions

**Financial Highlights 9M FY 2018/19**

#### HELLA Automotive external sales by region (in EUR millions)

<table>
<thead>
<tr>
<th>Region</th>
<th>9M FY 15/16</th>
<th>9M FY 16/17</th>
<th>9M FY 17/18</th>
<th>9M FY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>3,527</td>
<td>3,610</td>
<td>3,905</td>
<td>4,208</td>
</tr>
<tr>
<td>North &amp; South America</td>
<td>2,356</td>
<td>2,320</td>
<td>2,408</td>
<td>2,575</td>
</tr>
<tr>
<td>Asia &amp; RoW</td>
<td>918</td>
<td>602</td>
<td>660</td>
<td>788</td>
</tr>
<tr>
<td>Global</td>
<td>15.8</td>
<td>15.5</td>
<td>15.8</td>
<td>15.0</td>
</tr>
</tbody>
</table>
| Global Light vehicle production (in million units)

<table>
<thead>
<tr>
<th>Region</th>
<th>9M FY 15/16</th>
<th>9M FY 16/17</th>
<th>9M FY 17/18</th>
<th>9M FY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>66.0</td>
<td>70.4</td>
<td>71.2</td>
<td>68.5</td>
</tr>
<tr>
<td>North &amp; South America</td>
<td>15.5</td>
<td>15.8</td>
<td>16.4</td>
<td>15.8</td>
</tr>
<tr>
<td>Asia &amp; RoW</td>
<td>34.2</td>
<td>37.9</td>
<td>38.3</td>
<td>36.6</td>
</tr>
</tbody>
</table>

#### HELLA Automotive growth vs. market (Light vehicle production growth):

<table>
<thead>
<tr>
<th>Region</th>
<th>9M FY 15/16</th>
<th>9M FY 16/17</th>
<th>9M FY 17/18</th>
<th>9M FY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>-4.4%</td>
<td>+7.1%</td>
<td>+11.5%</td>
<td>-3.9%</td>
</tr>
<tr>
<td>North &amp; South America</td>
<td>-3.9%</td>
<td>+0.4%</td>
<td>+10.7%</td>
<td>+8.7%</td>
</tr>
<tr>
<td>Asia &amp; RoW</td>
<td>0.5%</td>
<td>+11.2%</td>
<td>+5.3%</td>
<td></td>
</tr>
</tbody>
</table>

Source: HELLA; IHS (as of March 2019)
Adj. GPM increased due to strong overall business development
Financial results 9M FY 2018/19

<table>
<thead>
<tr>
<th></th>
<th>Adj. Gross Profit</th>
<th>Adj. Gross Profit margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>9M FY 15/16</td>
<td>1,264</td>
<td>27.2</td>
</tr>
<tr>
<td>9M FY 16/17*</td>
<td>1,295</td>
<td>27.1</td>
</tr>
<tr>
<td>9M FY 17/18*</td>
<td>1,320</td>
<td>27.3</td>
</tr>
<tr>
<td>9M FY 18/19</td>
<td>1,412</td>
<td>27.4</td>
</tr>
</tbody>
</table>

**Highlights**

- **Adj. Gross Profit increased** by 91 mill. EUR (+6.9%) to 1,412 mill. EUR
  - Automotive +7.5% to 1,071 mill. EUR
  - Aftermarket +7.0% to 179 mill. EUR
  - Special Applications +6.6% to 116 mill. EUR

- **Adj. Gross Profit margin** improved by 0.2%-points to 27.4%
  - constant GPM Automotive, higher volumes but increasing headwinds from raw material & personnel costs
  - increased GPM in Aftermarket (+1.1pp) due to product mix
  - higher GPM in Special Applications (+4.4pp) due to positive mix effects

*Restated for the reclassification of costs.*
Continuous high R&D expenses to secure technology leadership in accelerating industry dynamics
Financial results 9M FY 2018/19

**R&D expenses**

<table>
<thead>
<tr>
<th>EUR millions</th>
<th>9M FY 15/16</th>
<th>9M FY 16/17*</th>
<th>9M FY 17/18*</th>
<th>9M FY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D expenses</td>
<td>449</td>
<td>422</td>
<td>460</td>
<td>507</td>
</tr>
</tbody>
</table>

Absolute R&D expenses increased by 48 mill. EUR (+10.4% YoY) to 507 mill. EUR; main drivers:

- intensification of spending due to further accelerating industry change
- secure and strengthen technology leadership along the market trends
- preparation and realization of production ramp-ups & continuous development of R&D capacities

**R&D expenses ratio**

<table>
<thead>
<tr>
<th>% sales</th>
<th>9M FY 15/16</th>
<th>9M FY 16/17*</th>
<th>9M FY 17/18*</th>
<th>9M FY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D expenses ratio</td>
<td>9.6</td>
<td>8.8</td>
<td>9.5</td>
<td>9.9</td>
</tr>
</tbody>
</table>

9M FY 18/19 ratio +0.4pp to 9.9% due to over-proportional increase in absolute R&D expenses

*Restated for the reclassification of costs.

Highlights

- **Absolute R&D expenses** increased by 48 mill. EUR (+10.4% YoY) to 507 mill. EUR; main drivers:
  - intensification of spending due to further accelerating industry change
  - secure and strengthen technology leadership along the market trends
  - preparation and realization of production ramp-ups & continuous development of R&D capacities

- 9M FY 18/19 ratio +0.4pp to 9.9% due to over-proportional increase in absolute R&D expenses
SG&A costs with slight increase due to continuous investments
Financial results 9M FY 2018/19

Adj. SG&A expenses (EUR millions)

<table>
<thead>
<tr>
<th>9M FY 15/16</th>
<th>9M FY 16/17*</th>
<th>9M FY 17/18*</th>
<th>9M FY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>504</td>
<td>542</td>
<td>498</td>
<td>520</td>
</tr>
</tbody>
</table>

Adj. SG&A expenses ratio (% sales)

<table>
<thead>
<tr>
<th>9M FY 15/16</th>
<th>9M FY 16/17*</th>
<th>9M FY 17/18*</th>
<th>9M FY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.8</td>
<td>11.4</td>
<td>10.3</td>
<td>10.1</td>
</tr>
</tbody>
</table>

Highlights

- Adj. SG&A costs increased (+22 mill. EUR, +4.4%) to 520 mill. EUR
  - higher logistic costs (+13 mill. EUR) related to growth
  - higher admin expenses (+7 mill. EUR) with continuous investments in processes, systems and functions
  - lower other adj. income and expenses (-2.0 mill. EUR) due to positive one-offs in PY

- Adj. SG&A ratio increased (-0.2ppt) to 10.1%
- Under-proportional increase in absolute SG&A expenses due to savings programs

*Restated for the reclassification of costs.
Adjusted EBIT above prior-year’s level, margin pressure through high R&D

Financial results 9M FY 2018/19

Adjusted EBIT
EUR millions

<table>
<thead>
<tr>
<th>9M FY 14/15</th>
<th>9M FY 15/16</th>
<th>9M FY 16/17</th>
<th>9M FY 17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>345</td>
<td>373</td>
<td>395</td>
<td>417</td>
</tr>
</tbody>
</table>

+28
+22
+22

Highlights

- **Adjusted EBIT** increased by 22 mill. EUR (+5.6%) to **417 mill. EUR**:
  - increase in adj. Gross Profit by 91 mill. EUR (+6.9%)
  - higher R&D (+48 mill. EUR, +10.4%)
  - increase in adj. SG&A (mainly distribution) by 22 mill. EUR (+4.4%)

Adjusted EBIT margin
% sales

<table>
<thead>
<tr>
<th>9M FY 14/15</th>
<th>9M FY 15/16</th>
<th>9M FY 16/17</th>
<th>9M FY 17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.4</td>
<td>7.8</td>
<td>8.2</td>
<td>8.1</td>
</tr>
</tbody>
</table>

+0.4
+0.4
-0.1

Highlights

- **Adj. EBIT margin decreased** by 0.1%-points to **8.1%**:
  - increase of adj. GPM by 0.2pp
  - higher R&D expenses (+0.4pp)
  - lower SG&A (-0.2pp)
## P&L including reconciliation

### Financial results 9M FY 2018/19

<table>
<thead>
<tr>
<th>HELLA GROUP</th>
<th>9M FY 17/18</th>
<th>9M FY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>in EUR mill.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gross Profit</strong>*</td>
<td>reported</td>
<td>1,415.9</td>
</tr>
<tr>
<td></td>
<td>Adjustments</td>
<td>-95.7</td>
</tr>
<tr>
<td></td>
<td><strong>adjusted</strong></td>
<td>1,320.2</td>
</tr>
<tr>
<td><strong>Other income and expenses</strong></td>
<td>reported</td>
<td>13.4</td>
</tr>
<tr>
<td></td>
<td>Adjustments</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td><strong>adjusted</strong></td>
<td>15.4</td>
</tr>
<tr>
<td><strong>Distribution</strong>*</td>
<td>reported</td>
<td>425.9</td>
</tr>
<tr>
<td></td>
<td>Adjustments</td>
<td>-85.0</td>
</tr>
<tr>
<td></td>
<td><strong>adjusted</strong></td>
<td>340.9</td>
</tr>
<tr>
<td><strong>Admin</strong>*</td>
<td>reported</td>
<td>172.9</td>
</tr>
<tr>
<td></td>
<td>Adjustments</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td><strong>adjusted</strong></td>
<td>172.9</td>
</tr>
<tr>
<td><strong>EBIT</strong></td>
<td>reported</td>
<td>403.9</td>
</tr>
<tr>
<td></td>
<td>Adjustments</td>
<td>-8.6</td>
</tr>
<tr>
<td></td>
<td><strong>adjusted</strong></td>
<td>395.3</td>
</tr>
<tr>
<td><strong>Net financial result</strong></td>
<td></td>
<td>-32.7</td>
</tr>
<tr>
<td><strong>Taxes</strong></td>
<td></td>
<td>-94.7</td>
</tr>
<tr>
<td><strong>Earnings for the period</strong></td>
<td></td>
<td>276.5</td>
</tr>
<tr>
<td><strong>Earnings per share (EUR)</strong></td>
<td></td>
<td>2.48</td>
</tr>
</tbody>
</table>

*Reported 9M FY 17/18 restated for the reclassification of R&D costs. For details see financial report.

### Comments

- Reported EBIT 9M FY 18/19 increased by 245 mill. EUR, thereof + 256 mill. EUR profit from Wholesale (pre closing costs).
- Net financial result improved slightly after local financing in Mexico.
- Earnings for the period increased driven by growth and profit from Wholesale.
- EPS increased by 2.11 EUR (+85%) to 4.59 EUR.
Automotive segment with increasing growth, profitability under pressure

Financial results 9M FY 2018/19

Automotive Sales

- **Growth** of 7.5% with ongoing production ramp-ups and high production volumes:
  - Demand for energy management and driver assistance products
  - Demand for innovative lighting products
  - Demand driven by NSA and Europe (ex. Germany)

Automotive Profitability

- **Increase** of adj. EBIT by 2.3% to 336 mill. EUR, (margin -0.4pp) mainly:
  - increase in Gross Profit (+7.5%), increasing volumes compensating higher raw material and personnel expenses (GPM stable at 25.3%)
  - increase in R&D (+10.2%) with accelerating industry change: strengthen technology leadership along the megatrends and prepare ramp-ups, R&D ratio + 0.3pp
HELLA Presentation dbAccess June 2019

Outline

- HELLA Financial Results 9M FY 2018/19
- HELLA at a Glance
- HELLA Strategy
- HELLA’s View on Automotive Market Trends
Non Automotive segments with positive margin developments
Financial results 9M FY 2018/19

- **Total sales** growth (+3.8%) due to **workshop business** and positive IAM demand
- **Increase in adj. EBIT margin** by 0.4pp to 8.4%
  - Growth in GPM by 0.9pp due to positive mix effects
  - Stable distribution ratio (cost control) and higher admin costs ratio (+0.5pp, mainly reorganization)

**Aftermarket***
- **Negative top-line development** (-5.4%):
  - increasing demand in **Construction and Agricultural** sector, other product groups e.g. **Trailer** and **Trucks** also growing
  - **End of production** in **Australia** with negative impact especially on growth
- **Profitability up** by 15.5% (excluding Australia closing +20.3%), margin + 2.2pp to 12.4% (excl. Australia + 1.7pp to 12.7%)
  - Underlying business with positive development

*The figures for Aftermarket exclude the items from wholesale distribution.
As one of the top 40 automotive suppliers worldwide HELLA specializes in innovative lighting systems and vehicle electronics

HELLA at a Glance – Overview

KEY FACTS

- Founded 1899 in Lippstadt (Germany)
- Global footprint with over 40,000 employees at more than 125 locations in some 35 countries
  - Thereof 41 research & 28 production sites
- Integrated business portfolio in Automotive, Aftermarket, and Special Applications
- Leading market positions in automotive Lighting and Electronics
- One of the top 40 automotive suppliers in the world and one of the 100 largest German industrial companies

SALES BY BUSINESS SEGMENT

external sales, fiscal year 2017/18*

- Automotive Lighting €3,014 million
- Automotive Electronics €2,368 million
- Aftermarket €1,225 million
- Special Applications €418 million

SALES BY REGION

based on the HQs of HELLA’s customers, fiscal year 2017/18*

- North & South America €1,221 million
- Asia, Pacific, RoW €1,208 million
- Rest of Europe €2,497 million
- Germany €2,134 million

*Including Wholesale business

KEY FINANCIALS

in EUR millions and % of sales

<table>
<thead>
<tr>
<th></th>
<th>FY 2016/17</th>
<th>FY 2017/18*</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>6,585</td>
<td>7,060</td>
<td>+7.2%</td>
</tr>
<tr>
<td>Adjusted EBIT</td>
<td>534</td>
<td>581</td>
<td>+8.8%</td>
</tr>
<tr>
<td>Adjusted EBIT margin</td>
<td>8.1%</td>
<td>8.2%</td>
<td>+0.1% points</td>
</tr>
<tr>
<td>Adjusted Free Cash Flow</td>
<td>149</td>
<td>241</td>
<td>+61.7%</td>
</tr>
</tbody>
</table>
In the Automotive segment, HELLA develops and produces innovative solutions for automobile manufacturers worldwide.

**HELLA at a Glance – Business Segment Automotive**

### BUSINESS OVERVIEW

**Lighting**
- Headlamps
- Rear Combination Lamps
- Small Lamps
- Interior Lighting
- Lighting Electronics

**Electronics**
- Components
- Energy Management
- Driver Assistance Systems
- Body Electronics
- Steering

**#1 market position in LED headlamps Europe**

**#3-4 global and #1-2 European market position in OE passenger car lighting**

**#2-3 global and #1-2 European market position in defined automotive electronic segments**

### KEY FINANCIALS

<table>
<thead>
<tr>
<th></th>
<th>FY 2016/17</th>
<th>FY 2017/18</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Sales</strong></td>
<td>4,980</td>
<td>5,383</td>
<td>+8.1%</td>
</tr>
<tr>
<td><strong>Adjusted EBIT</strong></td>
<td>444</td>
<td>457</td>
<td>+2.8%</td>
</tr>
<tr>
<td><strong>Adjusted EBIT margin</strong></td>
<td>8.8%</td>
<td>8.5%</td>
<td>-0.3% points</td>
</tr>
</tbody>
</table>

**Ext. Sales Lighting**
- 2,788
- 3,014
- +8.1%

**Ext. Sales Electronics**
- 2,191
- 2,368
- +8.1%

### AUTOMOTIVE SALES BY CUSTOMERS

**fiscal year 2017/18**

- Tier X: 41%
- USD: 13%
- Japanese: 9%
- German: 30%
- Other: 7%

**fiscal year 2017/18**

- US OEM: 41%
- Other: 7%
- Tier X: 30%

**$5.4 billion**

### AUTOMOTIVE SALES BY REGIONS

**fiscal year 2017/18**

- **Rest of Europe**
  - €1,457 million
- **North & South America**
  - $1,112 million
- **Germany**
  - €1,827 million
- **Asia, Pacific, RoW**
  - $987 million

*) Adjustments including restructuring expenses

**) Including European OEM (ex Germany) and trucks.
HELLA with a comprehensive offering of automotive parts, diagnostics, and services within Europe

HELLA at a Glance – Business Segment Aftermarket

BUSINESS OVERVIEW

**Independent Aftermarket (IAM)**
- Sale of **own and third-party spare parts** to IAM wholesalers
- **Own sales presence** in >25 countries
- **Strong position** of sales network and brand presence in European market (#1-3)

**Workshop Equipment**
- Premium provider of **workshop solutions**, **diagnostic tools** and advanced **equipment** to garages
- Offering of **professional services**, e.g. technical data/hotline, trainings & financial services
- **market position**: #1 #2 #3

KEY FINANCIALS

<table>
<thead>
<tr>
<th></th>
<th>FY 2016/17</th>
<th>FY 2017/18*</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1,222</td>
<td>647</td>
<td>n.m.</td>
</tr>
<tr>
<td>Adj. EBIT</td>
<td>73.0</td>
<td>52.6</td>
<td>n.m.</td>
</tr>
<tr>
<td>Adj. EBIT margin</td>
<td>6.0%</td>
<td>8.1%</td>
<td>n.m.</td>
</tr>
<tr>
<td>Sales IAM</td>
<td>553</td>
<td>568</td>
<td>+2.7%</td>
</tr>
<tr>
<td>Sales Garage Equipment</td>
<td>66</td>
<td>67</td>
<td>+2.6%</td>
</tr>
</tbody>
</table>

STRATEGIC FOCUS

- **Further strengthen IAM product portfolio**
  e.g. enhance offering of Electronics/ Electrics and universal lighting products, expand partner network, push roll-out of 3rd party products to additional markets

- **Further enhance workshop products and services**
  e.g. set-up new digital offers and software driven business models (remote fleet manager, workshop broker platform), develop calibration solutions for complex cars

*excludes Wholesale business (9 months). Closing September 3, 2018 for FTZ and INTERTEAM
In Special Applications HELLA incorporates the extensive technological expertise in lighting and electronics

HELFA at a Glance – Business Segment Special Applications

BUSINESS OVERVIEW

- Development, production and sale of lighting and electronics products for special vehicle manufacturers
- “Fast follower” of technological innovations in automotive segment along megatrends LED, energy efficiency and safety
- Application of know-how through own research and development resources and dedicated production footprint
- Strong market position in lighting product areas based on long-standing experience, in particular in Europe
- Focusing on a variety of attractive target groups

TARGET GROUPS

- Off-highway
- Highway & Leisure Vehicles
- Premium & Special Vehicles

KEY FINANCIALS

<table>
<thead>
<tr>
<th></th>
<th>FY 2016/17</th>
<th>FY 2017/18</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>385</td>
<td>430</td>
<td>+11.6%</td>
</tr>
<tr>
<td>EBIT</td>
<td>19.7</td>
<td>48.0</td>
<td>+143.7%</td>
</tr>
<tr>
<td>EBIT margin</td>
<td>5.1%</td>
<td>11.2%</td>
<td>+6.1% points</td>
</tr>
</tbody>
</table>

STRATEGIC FOCUS

- Drive further LEDfication
  e.g. build-up competences in intelligent lighting solutions, push Visiotech technology, broaden innovative roadmap (LED matrix beam, Shapeline), increase number of vehicle specific lighting projects

- Boost growth of Electrics / Electronics business
  e.g. extend electronics scope (focus on sensors and actuators), foster cooperation and M&A opportunities

- Penetrate growing customer segments
  e.g. drive growth in segments mining, power sports, and marine, push solutions for e-cars and small cars, explore further growth potential of truck business
High financial stability ensures long-term growth perspective and provides freedom for entrepreneurship
HELLEA at a Glance – Financial Stability

### Solid capital structure
- **Capital-market-oriented capital structure with investment grade rating**
- **Good liquidity profile** and consistent liquidity management
- EUR 117m dividends (1.05EUR/share) paid October 2018
- Equity ratio at 41.9% and cash & assets at 1,021 mill. EUR

*As of August, 2018; Euro Bond I: 2.375%, Euro Bond II: 1.00%; Aflac bonds hedged values ** Mostly long term debt; starting with Aug 2018 lease liabilities according to IFRS 16 *** Abbreviation for "American Family Life Insurance Company"

---

### Leverage (Net debt / EBITDA)

<table>
<thead>
<tr>
<th>Month</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>0.7x</td>
<td>0.6x</td>
<td>0.2x</td>
<td>0.3x</td>
<td>0.3x</td>
<td>0.2x</td>
</tr>
<tr>
<td>May</td>
<td>0.6x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Debt and maturity profile*, in millions EUR

<table>
<thead>
<tr>
<th>Year</th>
<th>Bond (2.375%)</th>
<th>Bond (1.00%)</th>
<th>Aflac*** bond I</th>
<th>Aflac bond II</th>
<th>Other Debt**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>500</td>
<td>300</td>
<td>70</td>
<td>105</td>
<td>352</td>
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<tr>
<td>2024</td>
<td>200</td>
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</tr>
<tr>
<td>2032</td>
<td>70</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>2033</td>
<td>105</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
</tbody>
</table>

**Mid term target: Leverage < 1.0x**

### Strategic flexibility
- HELLA has a stable and solid financial fundament which forms the basis for its future strategic plans
- Prudent financial policy throughout the cycle with leverage < 1.0x
- Financing of long-term growth strategy secured
- Well balanced debt portfolio
- New issuing (senior, unsecured / bearer debt) for attractive conditions
- Mid term target: Leverage < 1.0x

### Additional Revolving Credit (2022) of EUR 450m with 10 core banks as back-up facility

---

### Gearing (Net debt / Equity)

<table>
<thead>
<tr>
<th>Month</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>0.3x</td>
<td>0.3x</td>
<td>0.1x</td>
<td>0.1x</td>
<td>0.1x</td>
<td>0.1x</td>
</tr>
<tr>
<td>May</td>
<td></td>
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</tbody>
</table>

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HELLEA has a stable and solid financial fundament which forms the basis for its future strategic plans

→ Prudent financial policy throughout the cycle with leverage < 1.0x
→ Financing of long-term growth strategy secured
→ Well balanced debt portfolio
→ New issuing (senior, unsecured / bearer debt) for attractive conditions
→ Mid term target: Leverage < 1.0x
HELLEA Presentation dbAccess June 2019

Outline

- HELLEA Financial Results 9M FY 2018/19
- HELLEA at a Glance
  - HELLEA Strategy
- HELLEA’s View on Automotive Market Trends
HELLA’s strategic pillars are valid, but to cope with current market challenges HELLA has to adapt its behavior

HELLA Strategic Perspective

<table>
<thead>
<tr>
<th>STRATEGIC FOUNDATION PILLARS</th>
<th>Short-term</th>
<th>2018/19</th>
<th>2019/20</th>
<th>2020/21</th>
<th>Mid- to long-term</th>
<th>2022/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Technology Leadership</td>
<td><strong>Focus &amp; balance</strong></td>
<td></td>
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</tr>
<tr>
<td>Roll-out and further development of core technologies for market trends</td>
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<td></td>
</tr>
<tr>
<td>B Market Leadership</td>
<td>Selective strengthening of global presence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Resilient Portfolio</td>
<td>Business portfolio optimization</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>D Operational Excellence</td>
<td>Strict cost control management</td>
<td></td>
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<tr>
<td></td>
<td><strong>Grow &amp; win</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of innovations and new business models</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion of global market position</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energizing growth in Aftermarket and Special Applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Further optimization of processes and global set-up</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### HELLA continues to invest in major market trends to expand innovation leadership and benefit from industry transformation

#### Technology Leadership

<table>
<thead>
<tr>
<th>Major Market Trends</th>
<th>Short-term</th>
<th>Mid- to long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomous Driving</strong></td>
<td>Roll-out and further development of core technologies</td>
<td>Implementation of innovations and new business models</td>
</tr>
<tr>
<td></td>
<td>Strengthen position as component supplier with a complete portfolio in the area of sensing</td>
<td>Expand component strategy with system approach</td>
</tr>
<tr>
<td></td>
<td>Roll-out of 24 GHz and 77 GHz radar components</td>
<td>Become subsystem supplier for specific AD functions linking camera software and radar</td>
</tr>
<tr>
<td></td>
<td>Realize camera software potential (focus on Levels 1-3)</td>
<td>Offer specific functions as software product “on demand”</td>
</tr>
<tr>
<td></td>
<td>Complete product portfolio, e.g. SHAKE, LiDAR</td>
<td>Develop new lighting functionalities for AD scenarios</td>
</tr>
<tr>
<td><strong>Efficiency &amp; Electrification</strong></td>
<td>Focus and strengthen business with components for different powertrain concepts</td>
<td>Enlarge product portfolio with new solutions addressing all stages of electrification</td>
</tr>
<tr>
<td></td>
<td>Drive global product roll-out for ICE and hybrids, e.g. DC/DC converters, Intelligent Battery Sensors</td>
<td>Push subsystems for Mild Hybrids, e.g. Dual Voltage Battery Management, PowerPack 48V, On Board Charger</td>
</tr>
<tr>
<td></td>
<td>Roll out specific solutions for fully electrified vehicles, e.g. battery management systems</td>
<td>Extend business model for Electrical Power Steering, e.g. shift to fail operational ECUs</td>
</tr>
<tr>
<td><strong>Connectivity &amp; Digitalization</strong></td>
<td>Roll-out digital product solutions</td>
<td>Offer new digital business models</td>
</tr>
<tr>
<td></td>
<td>Push market penetration of HD Matrix LED headlamp technologies</td>
<td>Further leverage digital innovations from HELLA incubator network and ventures ecosystem</td>
</tr>
<tr>
<td></td>
<td>Introduce new digital diagnostic services for workshops, e.g. digital multifunctional glasses</td>
<td>Introduce new mobility solutions for the Aftermarket, e.g. business models for fleet management and insurances</td>
</tr>
<tr>
<td><strong>Individualization</strong></td>
<td>Push market penetration of lighting-based styling features</td>
<td>Advance business with comprehensive interior and car body lighting solutions</td>
</tr>
<tr>
<td></td>
<td>Introduce customizable interior lighting concepts with RGB LED modules of the second generation</td>
<td>Accelerate interior lighting solutions for a personalized cockpit environment</td>
</tr>
<tr>
<td></td>
<td>Further roll-out of of multi-lense-array solutions for light projections, e.g. welcome scenarios</td>
<td>Drive holistic integration of lighting technologies into the vehicle exterior</td>
</tr>
</tbody>
</table>
HELLA strengthens its leading position by tailored market strategies and expansion of its global network

**Market Leadership**

<table>
<thead>
<tr>
<th>MAJOR LEVERS</th>
<th>REGIONAL PRODUCT STRATEGY</th>
<th>FOOTPRINT</th>
<th>PARTNERSHIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Deep dive</td>
</tr>
</tbody>
</table>

**Selective strengthening of global market presence**

- **CHINA**: Boost e-mobility solutions, e.g. BMS, 48 DC/DC converters
- **INDIA**: Roll-out of additional product solutions specifically geared to 2/3 wheelers
- **NSA**: Enhance product portfolio with local OEMs, e.g. Energy Management, Radar

- Extension of production footprint for electronics, e.g. opening of new plants in Lithuania and Mexico in 2018, plant extension in Shanghai, opening of new Indian plant in 2019
- Opening of HELLA Incubator in Shanghai

**Expansion of global market position**

- **CHINA**: Enhance growth with core products, e.g. 77 GHz radar, camera software, HV-solutions
- **INDIA**: Introduce products related to vehicle safety using ADAS portfolio and e-mobility solutions
- **NSA**: Explore additional opportunities, e.g. for 2VBM, 77 GHz radar, Lidar, water pump

- Capacity expansions for new product launches, especially in the area of energy efficiency and electrification
- Ramp-up of new HELLA BHAP Joint Venture Electronics plant in China

- **ELECTRONICS**: AEye (Lidar-based solutions), BAIC (Intelligent Connected Infrastructure)
- **LIGHTING**: Faurecia (Interior Lighting), Plastic Omnium (Car Body Lighting)
- **AFTERMARKET**: CarForce (Digital Mobility Solutions)

- **ELECTRONICS/LIGHTING**: Deepening of established partnerships and market launches
- **AFTERMARKET**: Expansion of partnership network for IAM and mobility solutions
- **SPECIAL APPLICATIONS**: Establish new partnerships
HELLA is establishing additional open partnerships to further enhance innovation speed and efficiency and capture growth chances.

## Market Leadership – Latest partnerships

<table>
<thead>
<tr>
<th>FIELD OF COOPERATION</th>
<th>HELLA CONTRIBUTION</th>
<th>PARTNER CONTRIBUTION</th>
<th>SCOPE OF PARTNERSHIP</th>
</tr>
</thead>
</table>
| **INTERIOR LIGHTING** | - Innovative products and proven expertise in the field of interior lighting, e.g. (dynamic) interior lighting solutions to support drivers safety and comfort | - Innovative solutions for the cars interiors  
- Expertise as a complete system integrator for vehicles | - Interior lighting solutions for a comprehensive personalized cockpit environment ("cockpit of the future")  
- Joint development with special focus on surface-lighting and dynamic-lighting  
- First results demonstrated at Paris Motor Show 2018 |
| **CAR BODY LIGHTING** | - Advanced know-how with respect to light-based styling features and functionalities for the car body exterior | - Competence regarding design, development, and assembly of front and rear exterior body systems  
- Special know-how in plastics processing | - Holistic, innovative integration of lighting technologies into the vehicle exterior, especially for the front and rear areas  
- Bundling of dedicated development resources at one site planned |
| **LIDAR** | - Automotive experience  
- Know-how in embedded software  
- Image processing expertise  
- Industrialization capabilities | - iDAR™ technology, new form of intelligent data collection that fuses LIDAR with a low-light HD camera and embedded AI to intelligently capture data at the sensor level | - Customized sensing and perception solutions for ADAS and Automated Driving based on LIDAR sensor and iDAR™ system development  
- First results demonstrated at CES 2019 |
HELLA shapes its Aftermarket and Special Applications business to ensure further growth

**Resilient Portfolio**

<table>
<thead>
<tr>
<th>Business portfolio optimization</th>
<th>Energizing growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short-term</strong></td>
<td><strong>Mid- to long-term</strong></td>
</tr>
<tr>
<td>2018/19</td>
<td>2019/20</td>
</tr>
</tbody>
</table>

**FOCUS AREAS**

**INDEPENDENT AFTERMARKET (IAM)**
- Streamline product range and customer portfolio, e.g. focus on OE competencies lighting/electronics, phase out of thermal management business (Behr Hella Service)
- Slim down organizational set-up, e.g. realignment of global sales organization, standardization of processes
- Closer linkage of IAM and workshop business, e.g. alignment of marketing/sales activities, use of diagnosis data to optimize IAM portfolio
- Further roll-out of innovative diagnostics and calibration solutions, e.g. camera and sensor calibration tool
- Integrate advanced data analytics/AI in diagnostics and combine with new service portfolio, e.g. digital multifunction glasses for workshops
- Enhance organizational set-up to drive digital mobility solutions, e.g. dedicated business unit formed
- Further growth in key product categories, e.g. Electrics/Electronics with expanded range and external partnerships, growth in universal lighting
- Further standardize IAM organization and processes, e.g. increase EDI share (Electronic Data Interchange), roll-out B2B web shops for smaller customers
- Push new distribution channels, e.g. e-commerce and intermediates

**WORKSHOP PRODUCTS**
- Portfolio shift towards new LED and Electronics/Electric solutions, e.g. intelligent lighting systems, Body Actuators for various customer applications
- Build-up of additional R&D resources for consistent customization of products and further innovations to accomplish future ambitions
- Complexity reduction and active life cycle management, e.g. closure of Australian plant
- Grow with future repair solutions with new diagnostic/calibration technologies, e.g. shift towards software and automate certain diagnostics
- Further develop future mobility solutions, e.g. data as a service for fleets, workshops and insurances, automated data analytics and repair recommendations
- Develop new service portfolio, e.g. pay-per use, enhanced user interface of diagnostic tools

**SPECIAL APPLICATIONS**
- Further push vehicle specific lighting solutions for highway and off-highway
- Additional strengthening of market position through partnerships and M&A, e.g. in the area of Electric/Electronics
- Acceleration of E/E growth with application of electronic products and new developments

Deep dive
HELLA strengthens its global competitiveness by continuously advancing its corporate set-up and processes

### Operational Excellence

#### KEY LEVERS

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>PROCESS</th>
<th>PEOPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Strict cost control management</td>
<td>- Enhancement of global supplier base with focus on further localization</td>
<td>- Realignment of global headcount planning in line with flattening industry outlook</td>
</tr>
<tr>
<td>- Roll-out of global standard organization, e.g. each plant with same organizational units and standardized roles</td>
<td>- Roll-out of global standard organization, e.g. each plant with same organizational units and standardized roles</td>
<td>- Focusing of worldwide training activities on necessary technical skills</td>
</tr>
<tr>
<td>- Optimization of IT infrastructure, e.g. faster workflow system by lean corporate IT</td>
<td>- Continuous improvement of development processes to optimize project maturity and launch readiness</td>
<td>- Enhancement of virtual collaboration by roll-out of new digital tools</td>
</tr>
<tr>
<td>- Roll-out of global standard organization, e.g. each plant with same organizational units and standardized roles</td>
<td>- Optimization of production planning, e.g. floor space utilization</td>
<td>- Continuous optimization of work assignment within global HELLA network</td>
</tr>
<tr>
<td>- Roll-out of global standard organization, e.g. each plant with same organizational units and standardized roles</td>
<td>- Stricter release process for procurement of indirect materials and services</td>
<td>- Roll-out of targeted training concepts to ensure digitalization and industry transformation</td>
</tr>
</tbody>
</table>

#### Short-term

<table>
<thead>
<tr>
<th>2018/19</th>
<th>2019/20</th>
<th>2020/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous improvement of development processes to optimize project maturity and launch readiness</td>
<td>Optimization of production planning, e.g. floor space utilization</td>
<td>Stricter release process for procurement of indirect materials and services</td>
</tr>
</tbody>
</table>

#### Mid- to long-term

<table>
<thead>
<tr>
<th>2022/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further strengthening of purchasing power, e.g. consolidation of global supplier base, partnerships</td>
</tr>
<tr>
<td>Implementation of fully-fledged global Shared Service Organization with defined process ownership, stringent task split and responsibilities</td>
</tr>
<tr>
<td>Further investments in IT systems and new applications, e.g. roll-out of SAP S/4 HANA</td>
</tr>
<tr>
<td>Roll-out of smart automation strategy e.g. integration of collaborative robots, fully-automated preproduction, modular assembly lines</td>
</tr>
<tr>
<td>Implementation of “HELLA process house” with globally harmonized business processes</td>
</tr>
<tr>
<td>Implementation of advanced systems to digitalize RfQ process and ensure “guided buying”</td>
</tr>
<tr>
<td>Roll-out of targeted training concepts to ensure digitalization and industry transformation</td>
</tr>
</tbody>
</table>
HELLA Presentation dbAccess June 2019

Outline

- HELLA Financial Results 9M FY 2017/18
- HELLA at a Glance
- HELLA Strategy
- HELLA’s View on Automotive Market Trends
To benefit from latest market developments, HELLA has incorporated their major implications into its strategic action plan.

### HELLA’s view on Automotive Market Trends

#### AUTONOMOUS DRIVING (AD)
- **Trend is gaining speed, especially L1-3** (pushed by safety regulations)
- Penetration L4-5 moved further away
- Increasing number of **partnerships** for L4-5
- **Higher willingness** of consumers to pay for AD features

**Major implication**
- Strong components portfolio core
- Increasing **relevance of system competence and partnerships**

#### EFFICIENCY & ELECTRIFICATION
- **Trend with high dynamics**
- **Accelerated penetration** of electrified vehicles due to **incentives** and **regulatory push**
- Especially increasing demand for 48 Volt solutions
- Strong **growth in China**

**Major implication**
- Substantial growth opportunities for HELLA (worldwide, but especially in China)

#### CONNECTIVITY & DIGITALIZATION
- **Increasing importance of software**: Increase in functionalities with **car value shift from hardware to software**
- 75% of vehicles with internet by 2020
- **Digital related revenues to triple** until 2030 in Aftermarket

**Major implication**
- New business opportunities e.g. cloud-based solutions, domain computer, digital aftermarket solutions

#### INDIVIDUALIZATION
- **Stronger focus** of OEMs and consumers on vehicle design features and personalization
- Increasing demand for passenger related applications and functionalities
- Introduction of **functions on demand**

**Major implication**
- Additional growth opportunities for HELLA especially in the field of interior and car body lighting
HELKA is already benefiting from trend towards Autonomous Driving by focusing on solutions for L1-L3 requirements

### Autonomous Driving – Overview

<table>
<thead>
<tr>
<th>Level</th>
<th>Autonomous Driving Level</th>
<th>HELLA Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>24 GHz Radar</td>
<td></td>
</tr>
<tr>
<td>Level 2</td>
<td>NCAP 77 GHz Radar</td>
<td></td>
</tr>
<tr>
<td>Level 3</td>
<td>NCAP Camera Software</td>
<td></td>
</tr>
<tr>
<td>Level 4</td>
<td></td>
<td>Shake Sensor</td>
</tr>
<tr>
<td>Level 5</td>
<td></td>
<td>LiDAR</td>
</tr>
</tbody>
</table>

**MARKET Development**

- **Strong ADAS penetration** especially penetration of lower levels (L2 and L3) increasing
- **ADAS sensors demand increasing globally**, especially camera, radar and lidar with strong growth
- **Estimated penetration of L4 and L5 moved further away**, penetration starting notably in 2030

**HELKA Position & Strategy**

- **Strong growth perspective with established products and product roadmap**
  - HELKA as key supplier of ADAS, pushing front camera software, radar portfolio e.g. 24 GHz and 77 GHz low cost and supplement SHAKE sensor
  - Develop new products together with partners like AEye for LiDAR to offer new use cases
  - Allocate resources to complex Image Processing and 77 Ghz performance radar to continuously enhance products and offer L3+ functionalities

---

* Based on global LVP, source: Strategy Analytics November 2017, 2018; HELKA analysis
**MARKET SITUATION**

- **24 GHz radar is common technology** for standard assistance functions.
- **77 GHz radar** is satisfying requirements for **Assisted and Automated Driving**.
- **Replacement of 24 GHz radar by cost effective 77 GHz “System on Chip” solutions** has already started.
- **Highest volume growth** driven by NCAP and level 2/3 functionalities in price driven market for standard corner radars.
- **Mid/high performance solutions needed for higher automation levels** (L3+) based on cost competitive, modular, scalable sensors and system designs.

**HELLA APPROACH**

- **Further roll-out of successful 24 GHz radars**
- **Offering 77 GHz radar platform as component or system business** from HELLA sales channels or with cooperation partner ZF:
  - Modular platform (focus on different interfaces)
  - Scalable sensor solutions (processor performance & antenna set-up)
  - Maximize synergies (focus on reuse of SW components)
  - Flexible software deployment (decentralized or centralized functions)

**77 GHz radar product family**

- Cost optimized (e.g. NCAP)
- Truck (e.g. Turn assist)
- Performance driven for AD (e.g. highway pilot)

**KEY ACHIEVEMENTS**

- **Key supplier** for 24 GHz radar with more than 20 million sensors on the market; booked business will more than triple HELLA’s volume.
- **77 GHz radar platform under development**: successful business acquisition for passenger cars (premium & volume) and Truck.
- **Pre-development phase** for next generation technologies (e.g. “Antenna on Chip”) and parking Application with Premium OEM.
HELLA offers scalable camera software platform for NCAP and advanced ADAS functionalities

Autonomous Driving – Key supplier for ADAS: camera software

**MARKET SITUATION**

- Transition to Automated Driving increases penetration rates of cameras
  - 20 million cameras in 2020
  - 40 million cameras in 2025
  - Approximately 2x growth

- Especially growth in NCAP market accelerating, pushing front camera market size to ~3.5bn US$ in 2025

- OEMs push vehicle intelligence and sensor demand in Europe and NSA, governmental push in China for ICV and intelligent infrastructure

- OEM customers require camera software to offer L3+ scalability

**HELLA APPROACH**

- Flexible, scalable approach from cost optimized (NCAP) to complex image processing functions (L3)

- Differentiated customer approach depending on level, customer freedom of choice for vision and SOC IP and creating own USP

- Attractive price per function model

- Increasing function portfolio:
  - AI based vulnerable road user and automatic emergency braking in low cost NCAP camera
  - AI based wide Field of View L2/L3 camera perception on ultra-low power System On Chip (SoC)

**KEY ACHIEVEMENTS**

- Camera software series launch for NCAP market with major European OEM

- Successful acquisition of series orders, e.g. L2+ camera software with European OEM, L1 camera for Chinese OEM, testing services for Korean Tier1

- NCAP software offering available on platforms of 4 semiconductor partners

- Successful demonstration of new AI based L2/L3 perception function on ultra low-power SoC and Camera-lidar integration on AEye next generation lidar at CES2019

1) Strategy Analytics
HELLA is energizing its long-term profitable growth path by offering attractive products for all stages of electrification.

Efficiency & Electrification – Overview

<table>
<thead>
<tr>
<th>HELLA Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency &amp; Electrification</td>
</tr>
<tr>
<td>Internal Combustion Engine (ICE)</td>
</tr>
<tr>
<td>48V Mild Hybrid (MHV)</td>
</tr>
<tr>
<td>Full- (FHEV) &amp; Plug-in Hybrid (PHEV)</td>
</tr>
<tr>
<td>Battery Electric Vehicle (BEV)</td>
</tr>
</tbody>
</table>

MARKET Development

- **Shift within powertrain concepts** with higher dynamics
- **Increasing focus on 48V systems** as bridging technology for OEM’s to reach regulated targets
- **Start-stop technologies growing** next 5 years, pure ICE with sharp decline, ICEs until 2030 still relevant technology

MARKET Development

- **Strong growth perspective with established products and product roadmap**
  - Further **roll-out of components** and foster **market penetration** of e.g. DC/DC converters and IBS
  - **Leverage Hybrid and Electric Vehicle competence** to benefit from increasing trend for mild-hybrids with further **investments** in new products like Dual Voltage BMS and Power Pack 48V
  - **Further resources allocation** to BMS and **High voltage** products like Inverter and On Board Charger

* Based on global LVP, source: IHS Engine Database January 2018, 2019; HELLA analysis
HELLA accompanies customers comprehensively on their way towards E-Mobility
Efficiency & Electrification – Technology and Product Roadmap

### Strategic Direction

- **Intelligent components** for battery sensing and for fuel pump control reduce CO\(_2\) emissions for non-electrified vehicles (e.g. Start/Stop)
- **Solutions for 48V Mild Hybrids** allow advanced driving functions such as recuperating, coasting & boosting
- **Supported by experience in 48V power electronics and High Voltage** (HV) BMS, HELLA faces several attractive business opportunities

### Development Stages of Electrification

<table>
<thead>
<tr>
<th>ICE incl. Start/Stop</th>
<th>Mild Hybrid</th>
<th>Full Hybrid &amp; Electric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gearbox</td>
<td>Fuel Control Module (FCM I)</td>
<td>Intel. Battery Sensor (IBS)</td>
</tr>
<tr>
<td>Engine</td>
<td>Intel. Fuel Control Module (FCM II)</td>
<td>DC/DC 12V/48V</td>
</tr>
<tr>
<td>Clutch</td>
<td>DC/DC 12V</td>
<td>Fuel Control Module (FCM I)</td>
</tr>
<tr>
<td>12V-Battery</td>
<td></td>
<td>Intel. Fuel Control Module (FCM II)</td>
</tr>
<tr>
<td>Starter</td>
<td>Fuel Control Module</td>
<td>Dual Voltage Battery Management 12V/48V</td>
</tr>
<tr>
<td>Generator</td>
<td>Inverter 48V</td>
<td>PowerPack 48V</td>
</tr>
<tr>
<td>12V-Battery</td>
<td></td>
<td>Inverter 48V (PIM 48V)</td>
</tr>
</tbody>
</table>

**Marketplace**

**HELLA**

**dbAccess Berlin Conference | June 2019**
HELLA supports OEMs to handle increasing complexities and costs by offering system solutions especially for 48V Mild Hybrids

Efficiency & Electrification – Supplier of innovative subsystems

### PRODUCT SOLUTION

<table>
<thead>
<tr>
<th>PowerPack 48 Volt</th>
<th>Dual-Voltage Battery Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Image of PowerPack 48 Volt" /></td>
<td><img src="image2" alt="Image of Dual-Voltage Battery Management" /></td>
</tr>
</tbody>
</table>

### TARGET GROUP

- **Larger vehicles (middle- and premium class)**
  - More power consumers and high power for comfort and performance
- **Compact class**
  - Reduction of weight and volume with minimal change of conventional board system

### UNIQUE SELLING PROPOSITION

- **Modular solution for high power needs in mild hybridization**
  - Functional combination of 48V battery and DC/DC converter into a modular device with minimal change of conventional vehicle architecture
  - Bundling of competence and wide experience for Power Electronics and Battery Management in one single HELLA division
- **Power and efficiency of 48V in a “12V package”**
  - Functional combination of 48V & 12V battery including power electronics into a single device within the size of a conventional 12V battery
  - HELLA first and unique to market
HELLA is working on innovative mobility solutions along the digital Aftermarket value chain
Connectivity & Digitalization – Leading diagnostic supplier

**MARKET SITUATION**

- Share of digital-related revenues expected to triple to almost 20 percent in the global automotive aftermarket until 2030\(^1\)
- OEMs are increasing invest in car driver retention with connected vehicles
- IAM and Intermediates require an open interface into the vehicle
- Retrofit dongle solutions available in a highly fragmented market of telematics suppliers
- No common standard (hardware or software) for dongle retrofit solution with varying degrees of quality

**HELLA APPROACH**

- Create tailor-made maintenance and repair offers reducing waiting times and downtime by passing vehicle data (e.g. tire pressure, battery condition) on to independent repair shops without prior workshop visit
- Introduce B2B remote, retrofit onboard diagnosis solution (with Dongle) based on standardized hardware
- Utilize existing data from stationary diagnostics to improve telematics solution
- Build customer segment specific use cases, e.g. for fleet companies

**EXAMPLE:**

**MOBILITY SOLUTIONS WITH DIGITAL SERVICES FOR WORKSHOPS**

1. Onboard diagnosis device is plugged into car
2. Device is equipped with global SIM card
3. Provide live insights into a car to your customers
4. Realize additional sales based on proofed car diagnosis know-how

**KEY ACHIEVEMENTS**

- Leading position for stationary diagnostics and repair services in DACH
- Partnership with San Francisco based telematics start-up CarForce established
- Pilot solutions to enable workshops to manage connected cars already running in EU
- Launch of fleet solution and driver app planned for 2019

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\(^{1}\) McKinsey&Company, The changing aftermarket game, Advanced Industries, June 2017
HELLA offers innovative lighting designs and functionalities for the inside and outside of the car

Individualization – Leading supplier for personalized functionalities

MARKET SITUATION
- Increasing demand for personalization of vehicle
- Lighting is becoming a key styling element of the vehicle exterior and is penetrating all car segments
- Interior solutions with increasing complexity due to styling demands and functionalities focused on individualization
- Introduction of functions on demand, e.g. multicolor illuminations
- Both interior and exterior lighting solutions support sensor operations for complex use cases, e.g. auto pilot

HELLA APPROACH
- Offer innovative designs and functionalities enabling integrated solutions and connectivity for the inside and outside (front, end, side) car

INTERIOR OF THE CAR
- Smart light as information carrier, supporting various driving scenarios and occupant modes
- Roof Module with added functionalities and seamless design

SIDE OF THE CAR
- Side AV communication and safety, e.g. Contour illumination
- Electric integration with remote control / smart phone

FRONT OF THE CAR
- “Light from nowhere” with semi transparent lenses for metallic appearance and logo animations
- Front panel interactions to communicate V2X

KEY ACHIEVEMENTS
- Expansion of customer base for light projections (with multi lense array solutions), e.g. for welcome scenarios
- First customer orders for illuminated logo/radome
- Series developments for advanced ambient illumination and advanced roof module
- Next generation of grille illumination available, first customer projects in development
- Strategic partnership with Faurecia for interior and Plastic Omnium for exterior solutions
Dr. Markus Richter
Head of Corporate Communications & Investor Relations

Dr. Kerstin Dodel, CFA
Head of Investor Relations

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