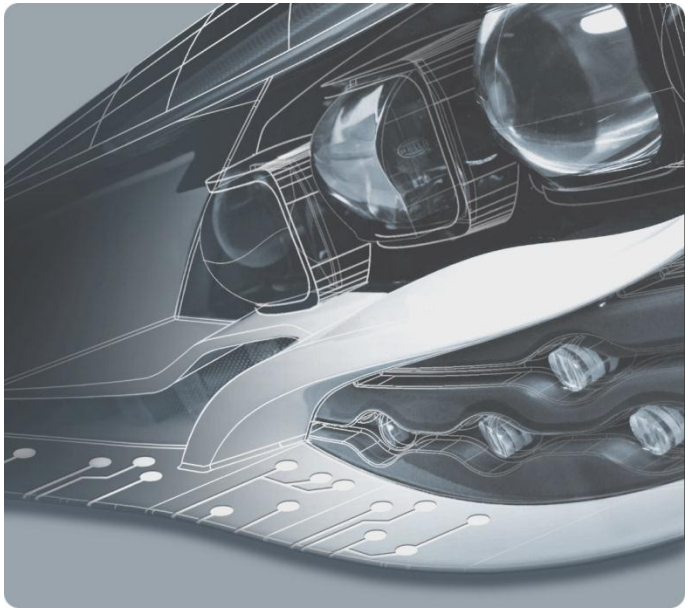
Technology with Vision

CAPITAL MARKETS DAY 2015



HELLA KGaA Hueck & Co

London

02 December 2015

HF-7761DE_C (2012-12)

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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.

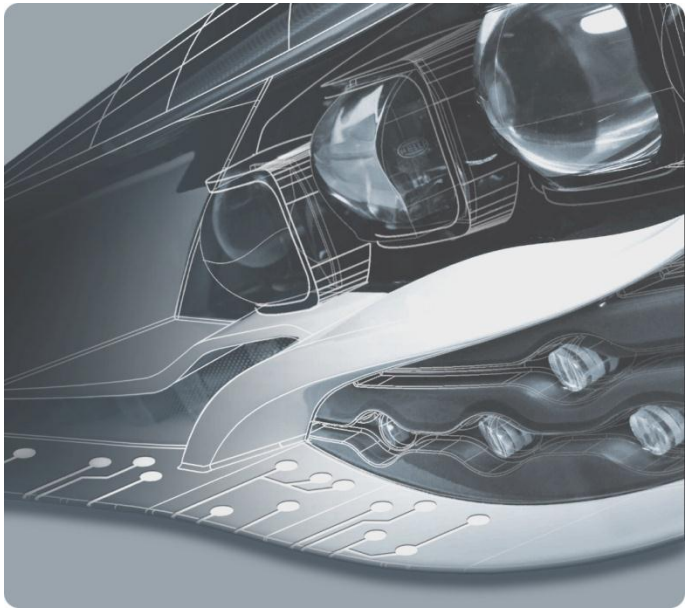
HELLA Capital Markets Day 2015
Agenda for today

Time (GMT)	Subject	Speaker
08:30 – 09:00	Arrival and Registration	
09:00 – 09:05	Welcome	Dr. Kerstin Dodel, Head of Investor Relations
09:05 – 09:30	HELLA's Strategic Growth Path	Dr. Rolf Breidenbach, CEO
09:30 – 10:00	Road to Future Mobility Market Trends & Outlook for HELLA	Dr. Kristian Döscher, Head of Global Marketing Original Equipment
10:00 – 10:40	New Trends in LED-Lighting- Future Possibilities for Styling and Functionality	Dr. Michael Kleinkes, Head of Design & Development Lighting
10:40 – 11:00	Coffee Break	All
11:00 – 11:40	Smart Solutions for Automated Driving, Increased Efficiency and Connectivity	Michael Jaeger, Member of the Executive Board Electronics
11:40 – 12:10	Financial Overview and Perspectives	Dr. Wolfgang Ollig, CFO
12:10 – 13:30	Q&A	All
13:30	Lunch	All
14:30	Expected End of CMD	

Technology with Vision

HELLA's Strategic Growth Path

CAPITAL MARKETS DAY 2015



Dr. Rolf Breidenbach, CEO

London

02 December 2015

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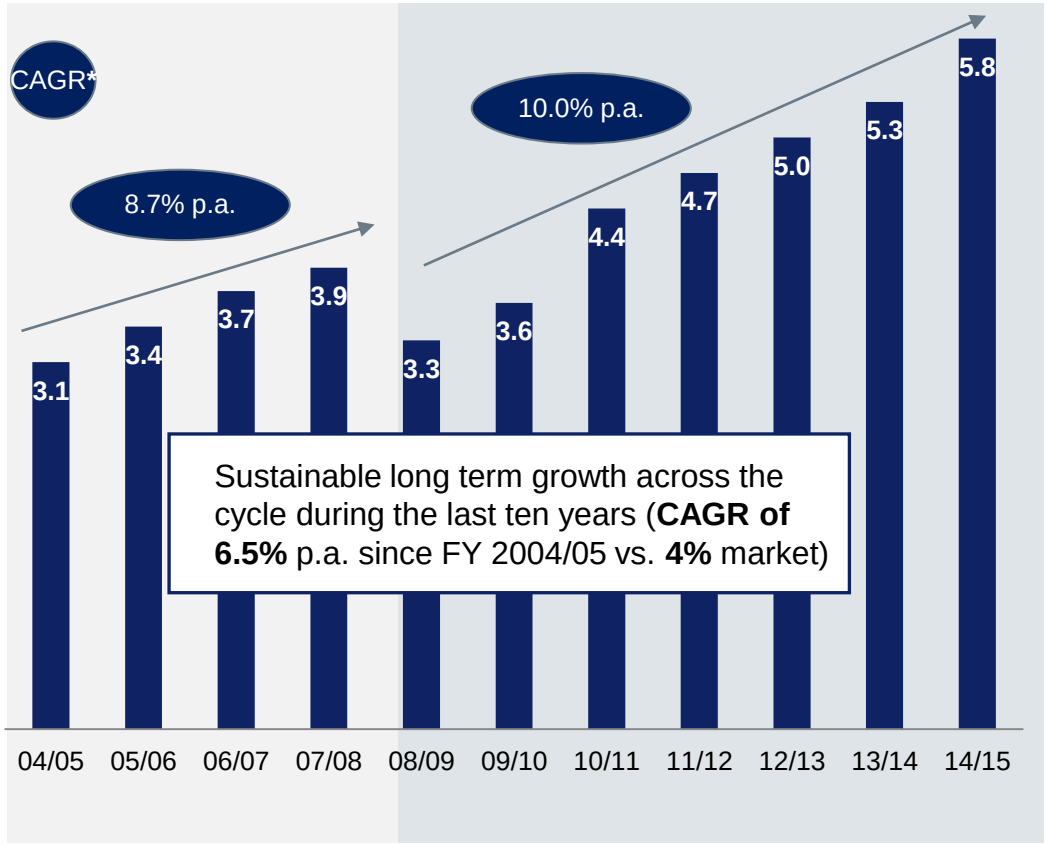
How will HELLA's growth path continue?

Above market growth in the last 10 years

HELLA Group sales, EURbn*



Investors and analysts comments

"…we understood your historical growth, how can we **assess your future sales development**?..."

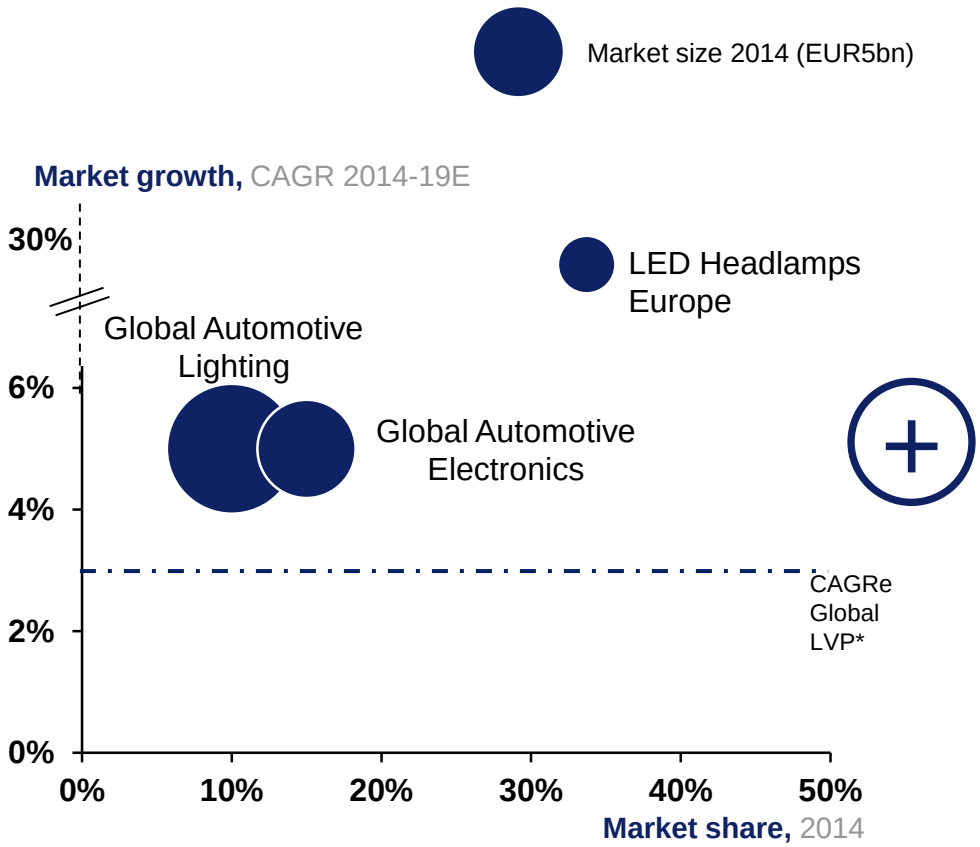
"…outperformance has been 50% in the past, at a market growth of 2-3% in the upcoming years, is that maybe too **conservative for the future**?..."

"…investors are still hesitating about your **future growth rates**, whereas they have **no concerns** with **high growth rates** of your **competitors**..."

*Sales as reported w/o adjustments for consolidation or accounting changes

HELLA's automotive segments are growing stronger than the market

HELLA's positioning for future growth



HELLA in market leadership positions[1]

→ Automotive Lighting

1 market position in **LED headlamps Europe**

3-4 global market position in **OE passenger car lighting**

#1-2 European market position in OE passenger car lighting

→ Automotive Electronics
2-3 global position in **defined** automotive **electronic** segments

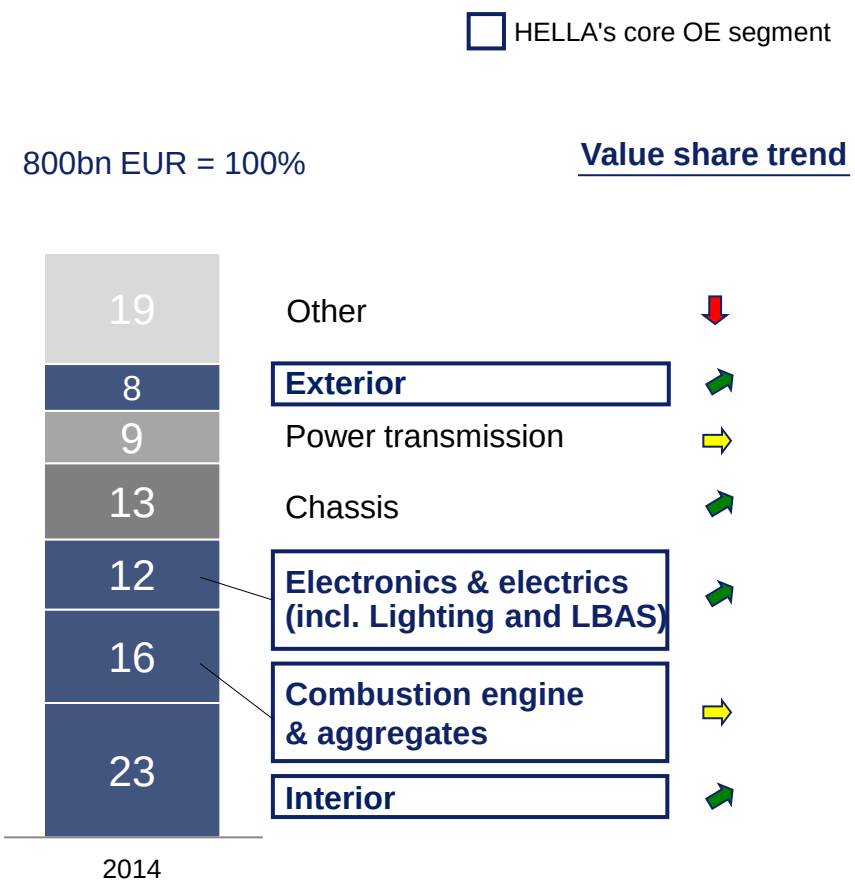
1-2 European position

Source: External market study commissioned by HELLA (2014), HELLA analysis
*expected 5-years CAGR

1) All figures related to selected markets and product categories based on HELLA's portfolio, as covered in the market study

Value added of Lighting and Electronics in automotive expected to rise due to further innovations

Value share of modules in the auto industry



Increasing value added captured

- → HELLA's segments show healthy growth due to an **ongoing trend towards** sophisticated applications and **innovation**
- → Supplier gain **increasing share in value chain –** need and frequency for innovations lead to more outsourcing by OEMs
- → Automotive electronics **experienced rapid innovation process**
- → **Innovations shifting** from single, standalone solutions to **complex system or module innovations**

Source: External market study commissioned by HELLA (2014), HELLA analysis

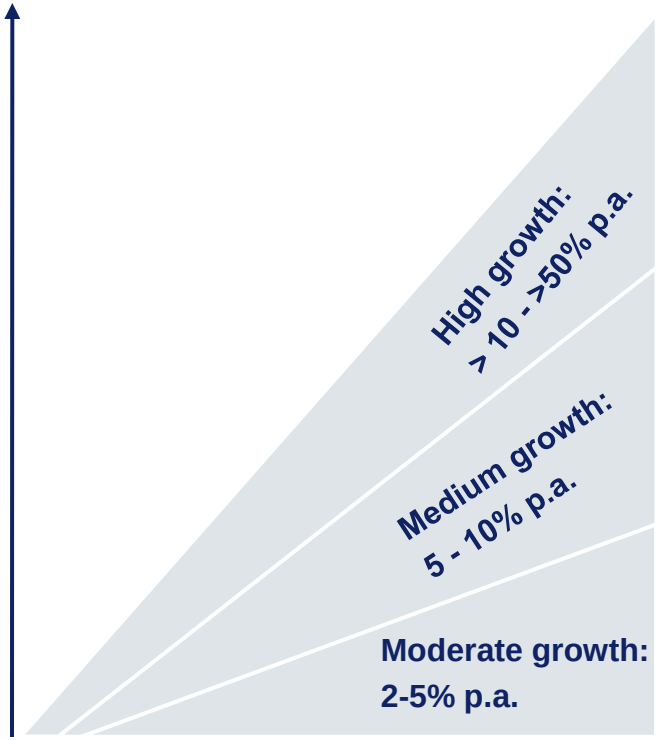
HELLA is well positioned to benefit from the fundamental market trends in the future

Market trends		Lighting (selected products)	Electronics (selected products)
Environment/ Efficiency	**Energy efficiency** → Fuel System and Energy Management technologies for ICE & PHEV powertrains → Efficient lighting technologies like LED	 Matrix-LED Headlight  LED Rear lamp	 48V DC/DC Converter  Cooling Valve Actuator
Safety	**Driver safety / automated driving** → Light based assistance systems and optimal illumination → Sensors for detection of the driving environment	  HD headlamps systems (Advanced Front-Lighting)	 24 GHz Rear radar  77GHz Front radar
Styling Comfort	**Styling and comfort** → Optical elements for individual styling with LED or OLED lighting technology → Enhanced personalization and interactions (vehicle to environment) → Individualized and designed parts	 OLED Rear lamp  LED Styling Headlight  Ambient Interior Lighting	 Design-driven Remote keys  Structural Health Sensor  BCM

→ **Unique combination** of **competence set** in **advanced electronics** and **lighting technologies**

Broad automotive product portfolio in strong growing areas

Market growth, CAGR 2014 - 2019E



Hella products (examples)

- → Full-LED headlamps and rear lamps
- → OLED rear lamps
- → Engine Compartment Actuators (waste gate, TAS, TOS)
- → Rear applications
- → DC/DC converter
- → Intelligent battery sensors

- → Hybrid rear lamps
- → Interior lighting systems
- → Vacuum pumps
- → Radio transmitter keys

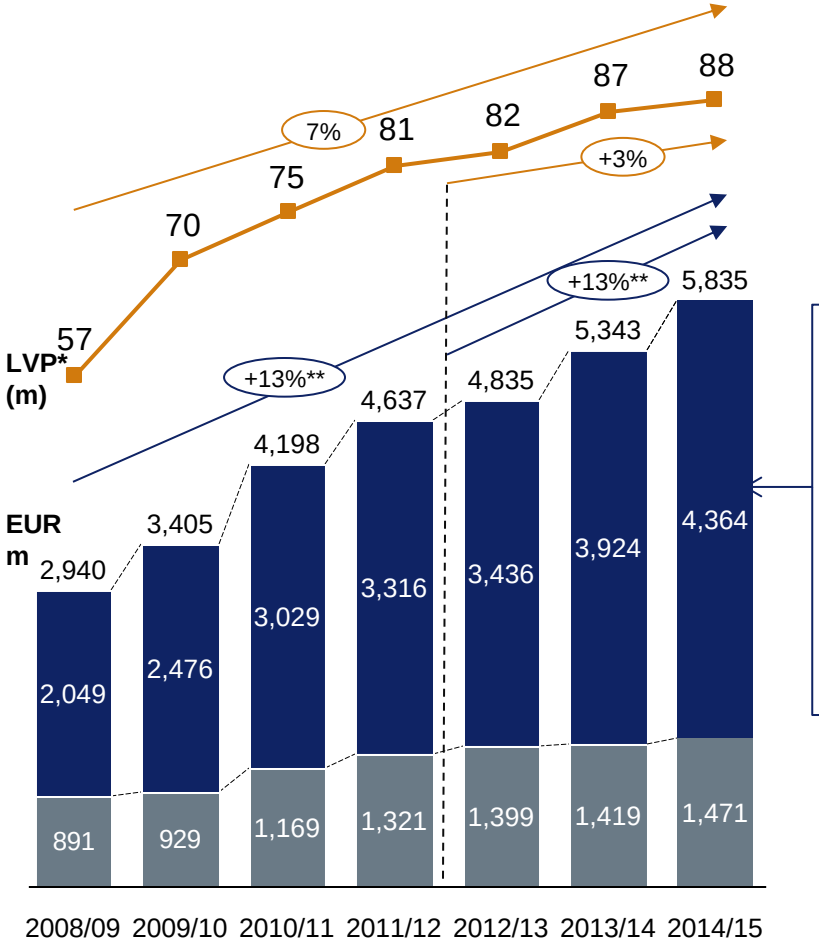
- → Small lamps (e.g. fog, CHMSL, side turn indicator)
- → Electrical power steering
- → Accelerator pedal sensors
- → Body control modules

- → HELLA with clear strategic focus on **areas that show attractive growth potential** (emission reduction, safety increase)
- → Electronic components projected to substantially benefit from **higher electronic content** in future cars
- → Multiple **innovative products** already on the market and innovations to come from current **pipeline**

Source: External market study commissioned by HELLA (2014), HELLA analysis

HELLA's automotive portfolio has outperformed the market by 600bsp, acceleration to >900bsp in the last 3 years

HELLA market outperformance in Automotive



Sources of growth by business divisions

Automotive Lighting

Automotive Electronics

→ HELLA **one of the technology leaders** in LED with competence set in Light Based Assistance Systems

→ **Next development** steps in **lighting solutions and LED penetration** strong organic growth drivers

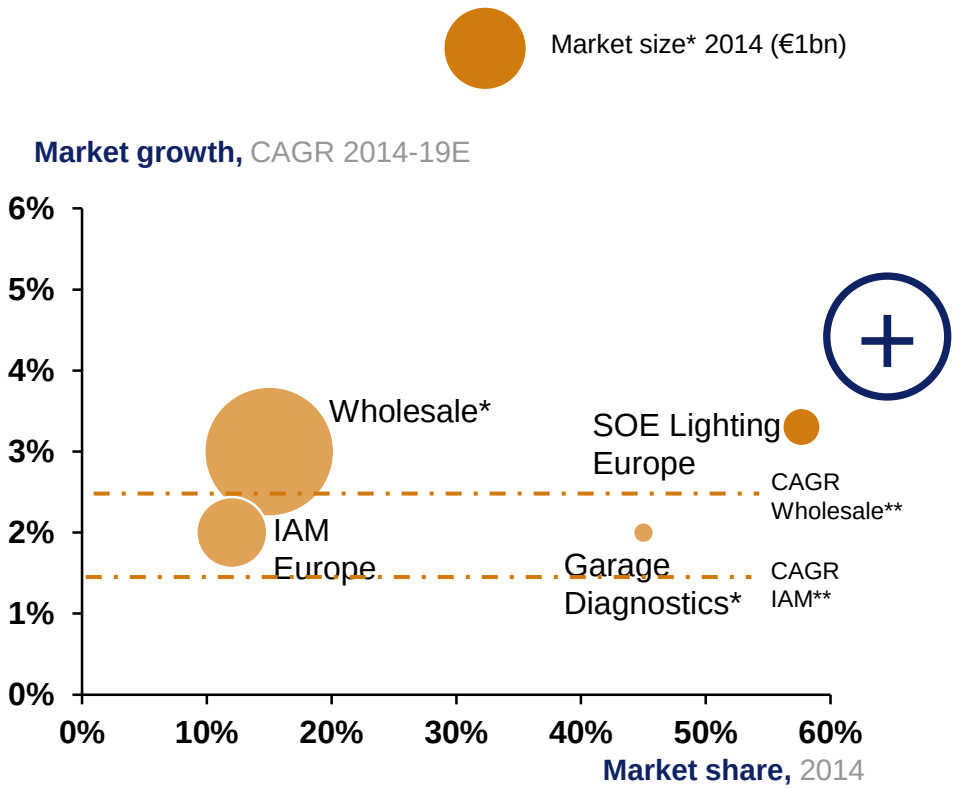
→ HELLA **solutions** played **key role in automotive progress** since decades

→ Well positioned in **automotive trends** energy efficiency and automated driving

*Global Light Vehicle Production; ** CAGR Automotive segment only (external sales) including FX

Aftermarket and Special OE will contribute to growth and profitability

HELLA's positioning for future growth



HELLA in market leadership positions[1]

- → Leadership in European Aftermarket **# 1-3** in IAM, WD, and diagnostic systems
- → HELLA Aftermarket generating **structurally slower but stable growth**
- → **Stable cash flow generation** by HELLA Aftermarket
- → Future market discontinuities
  - Consolidation
  - Digitalization
  - Changing customer preferences

- → Leadership in Special OE **# 1** in **Special OE Lighting Europe**
- → The transfer of competence offers opportunities like **LEDification**
- → Importance of generating **critical business sizes**

Source: External market study commissioned by HELLA (2014), HELLA analysis
*Wholesale includes DN,PL,NOR, Garage diagnostics DACH, ** expected 5-years CAGR

1) All figures related to selected markets and product categories based on HELLA's portfolio, as covered in the market study

Unique Aftermarket positioning in the value chain to capture opportunities of new market trends

	Unique position	Strategic focus
IAM	Customer proximity and high distribution power together with core product competences as OE supplier	→ Optimization and increase of current portfolio → Additional potential through clearly defined portfolio competence → Improvement of customer access
Wholesale	Strong network concept that integrates HELLA wholesalers to achieve scale benefits	→ Completion of NORDIC FORUM organization to utilize synergies and economies of scales → Selected share increase and acquisitions → Use UCANDO as digital asset
Garage	Portfolio development tailored to meet market requirements and technological trends	→ Integration of HELLA Gutmann into HELLA network → Systematic use of HELLA Gutmann date and diagnostic competence → Offer advanced high tech products and technologies

Key trends

Consolidation and new players
- → Wholesale consolidation and professionalization at wholesale and garage level
- → Influence of intermediaries
- → Low cost parts suppliers entering market

Digitalization
- → New online business channels and interfaces
- → Big data and comparability of offering

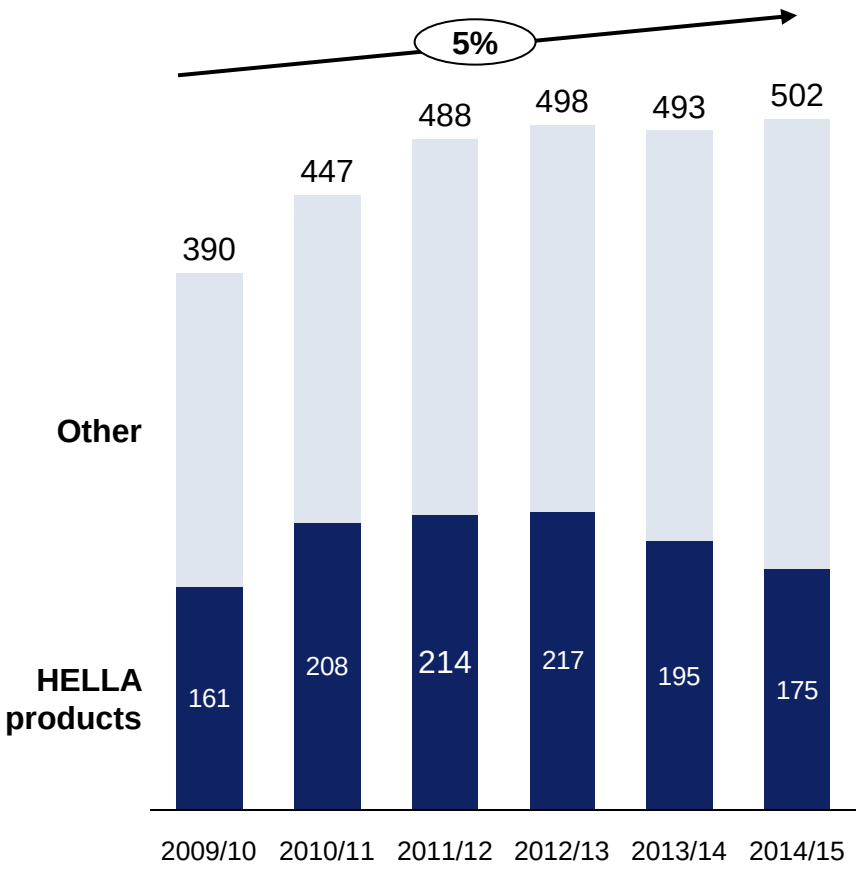
Changing customer preferences
- → E-mobility and autonomous driving need highly sophisticated products and garages
- → Less importance of car and need for more efficient repairs

HELLA's stable IAM business is well positioned for future key market trends

A

HELLA historic growth path

EUR millions



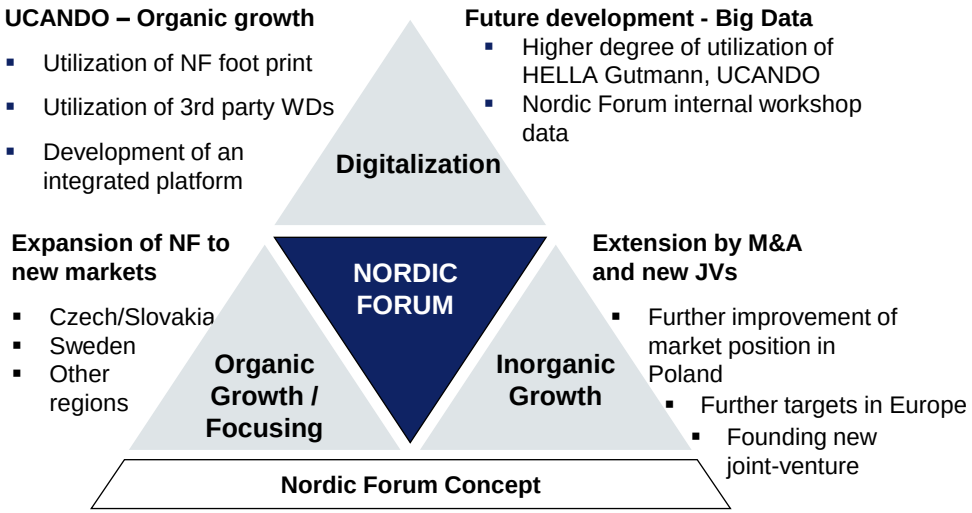
Levers for execution of growth strategy

- → Achieve sales growth through **portfolio competence** and a **portfolio roll-out** in all local entities
  - OE production
  - Qualified IAM production
  - Re-packaging
- → **Increase share of HELLA products** at core European customers. Improve customer access
  - International KAM-structure
  - Key account improvements
- → **Closure of** regional distributions **gaps**
- → Maintain competitiveness through **cost optimization**
- → Explore **e-Commerce** opportunities

HELLA's wholesale business participates in European consolidation and digitalization

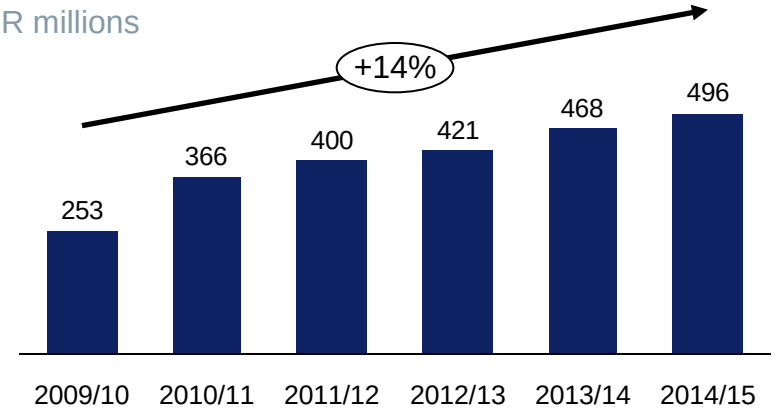
B

NORDIC FORUM integrated concept



Historical growth path

EUR millions



Levers for execution of growth strategy

- → Further **optimization of procurement**
- → Further harmonization of IT
- → Ramp-up and **expansion of digitalizatio**n strategy with e-commerce (B2C)
- → Developing and testing the **digitalization strategy for B2B2C** (Integrated Services Platform)
- → **Inorganic expansion**

Takeover of **100% shares** in **INTER-TEAM** and **FTZ** in September and November 2015

Workshop business with pivotal role for buying process based on high tech offering and competences

C

HELLA Gutmann positioning

- → Development **from diagnostics provider to repair and maintenance specialist** for high tech workshop products
- → Generation, analysis and usage of "**Big Data**" in new business fields
- → Premium provider of **workshop solutions, diagnostic tools** and **garage equipment**
- → Workshop proximity enables **technical services** for HGS and whole HELLA IAM organization
- → **High tech offering** based on diagnostic competence (camera systems, radar, exhaust systems)

Market & trends

Customer Requirement

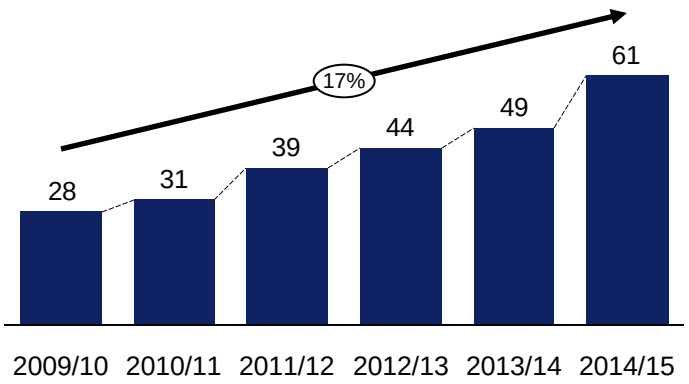
- → E-mobility and autonomous driving
- → Car-sharing solutions
- → Less importance of car

Technology & Market

- → Increasing complexity, functionality and interfaces in modern cars
- → Steering of customers/ drivers and related parts' purchase by OEMs, IAM & Intermediates

Historical growth path

EUR millions



High tech product portfolio and service offering

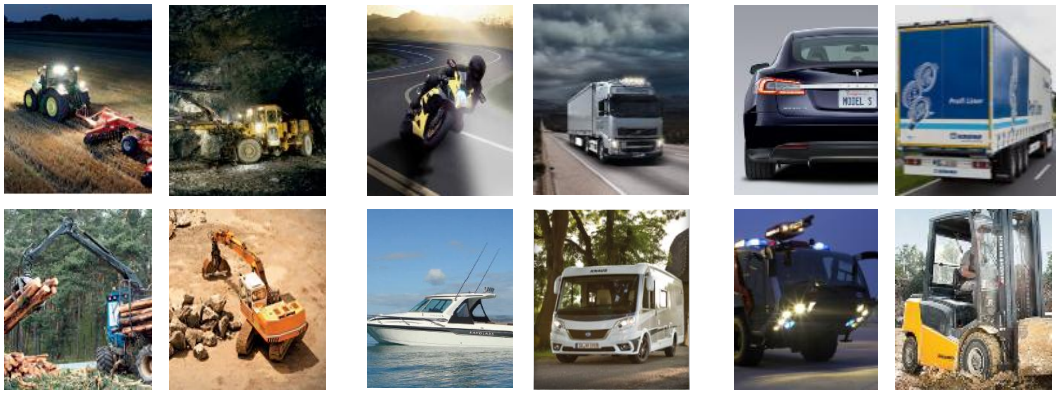
Repair Concepts	Calibration & Alignment	Testing & Analysis
DIAGNOSIS	CAMERA SYSTEMS	EXHAUST SYSTEMS
SOFTWARE SOLUTIONS	RADAR SENSORS	AIR CONDITIONING
TECHNICAL DATA	HEADLIGHTS	BATTERY SYSTEMS
HAND TOOLS	TIRES	LEAKS

Unique high tech workshop competence

Growth path for HELLA's Special OE segment to be strengthened by clear product and marekt strategy

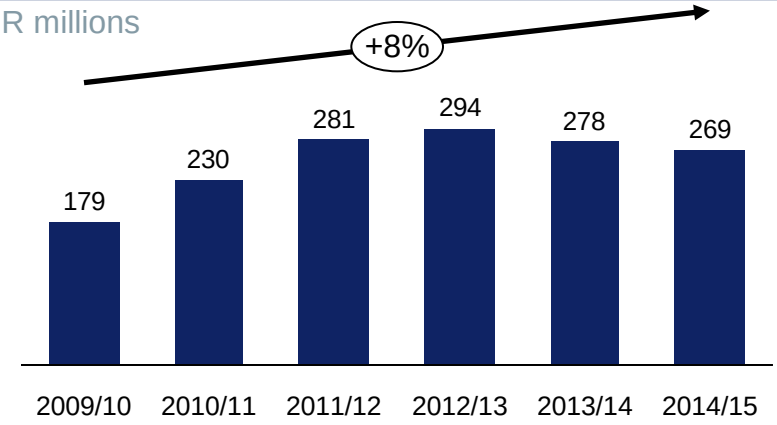
Areas

Off-highway	Highway & Leisure Vehicles	Premium & Special Vehicles



Historical growth path

EUR millions



Strategic direction

- → Drive **LEDfication**
- → Drive advantage of **synergies with automotive** sector
- → Customized / semi-customized headlamp solutions with **innovative technology**
- → **Push technology upgrade** growth with E/E off-the-shelf
- → **Leverage lighting customer base to** develop **electronic product portfolio**
- → Local portfolios for emerging markets
- → Parts of business to be analyzed if **competitive size** is **achievable**

HELLA is well positioned to outperform the market in the future

Historical performance

→ Track record of long term market outperformance

Existing position

→ Strong competitive positions

→ Attractive market segments

→ Technological leadership

Concept for future growth

→ System competence **in Lighting** and **Electronics** to participate in fundamental market trends

Products for the **reduction of C02 emissions** and increase of **energy efficiency**

Product for **prevention of accidents**

Products for higher **individualization** and **personalization**

Products for **comfortable convenient driving**

→ **Aftermarket** business is well positioned to capture major key trends (consolidation, digitalization and change in customer preferences)

→ **Special Applications** business pushed by extended product-market strategy

HELLA

Technology with Vision

Technology with Vision

Road to Future Mobility - Market Trends & Outlook for HELLA CAPITAL MARKETS DAY 2015

Dr. Kristian Döscher

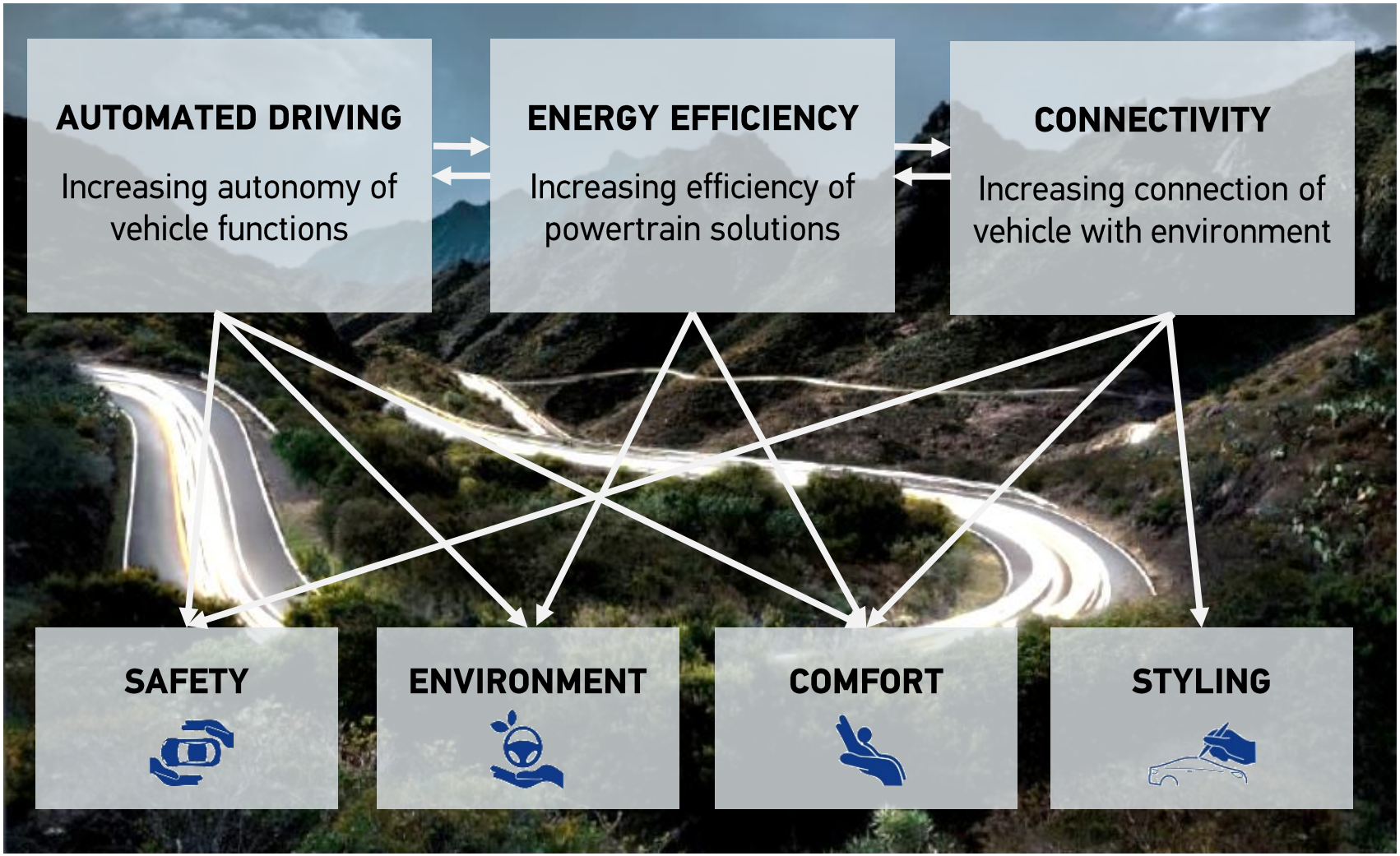
Head of Global Marketing Original Equipment

London

02 December 2015

The Road to Future Mobility

The three fundamental market trends drive growth of HELLA product domains



The Road to Future Mobility

Market demand for automated driving expected to grow by 19.2% until 2019

AUTOMATED DRIVING – Trend towards automation of driving and parking

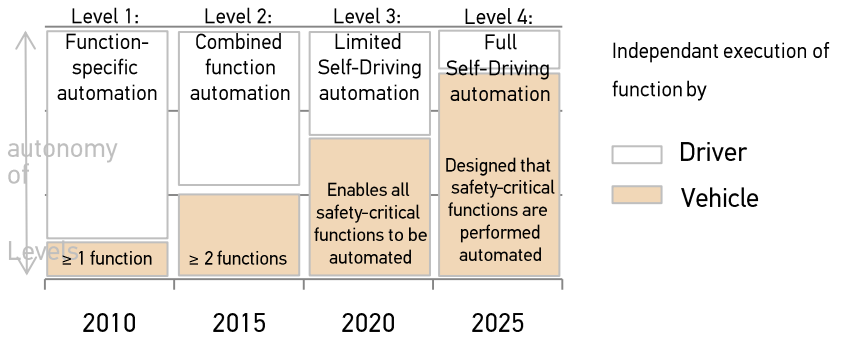


Figure 1: Levels of autonomous driving (Source: NHTSA, modified)

Gradual transition from Driver Assistance functions to Automated Driving functions

- Acceptance of automated driving functions determined by reliable, proven safety features
- Fundamental change in consumer value for individual mobility if accepted by consumers

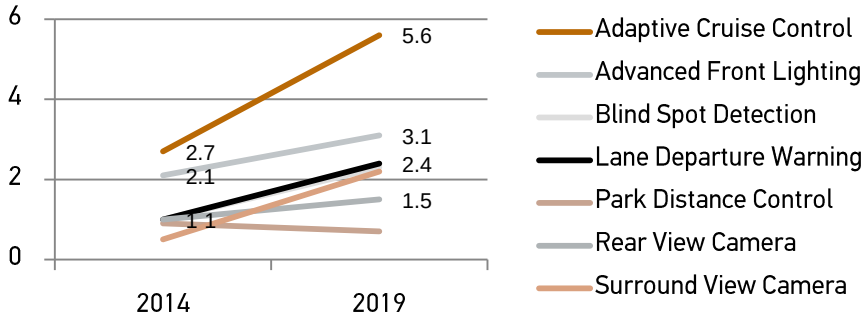


Figure 2: Growth of driver assistance technologies in bn USD (Source: Strategy Analytics)

Transition to Automated Driving increases penetration rates of existing new technologies

- Existing driver assistance functions are key enablers for automated driving functions
- New functional requirements facilitate growth of new technologies (i.e. Front/Side Detection)

Sources: IHS, NTHSA, Strategy Analytics

The Road to Future Mobility

Market demand for energy efficiency is expected to grow by 40% until 2025

ENERGY EFFICIENCY – Trend towards reduction of energy consumption and emissions

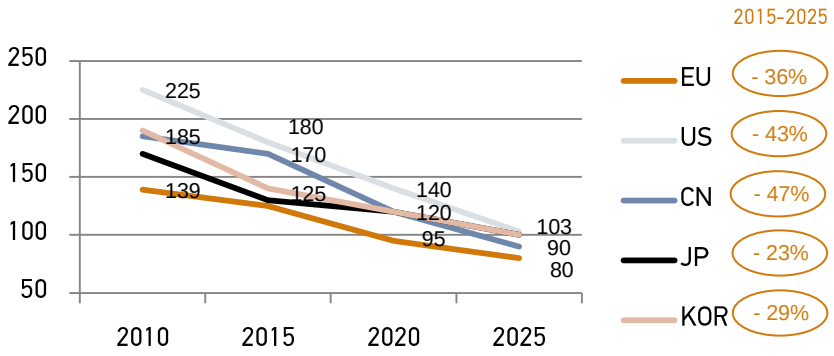


Figure 3: Global emission regulations in C02 (g/ km) per NEDC (Source: IHS)

Continuing trend towards energy efficiency gains driven by global emission regulations

- Ambitious emission targets drive need for higher energy efficiency across all regions
- Efficiency gains are increasingly difficult to achieve by more sophisticated technologies

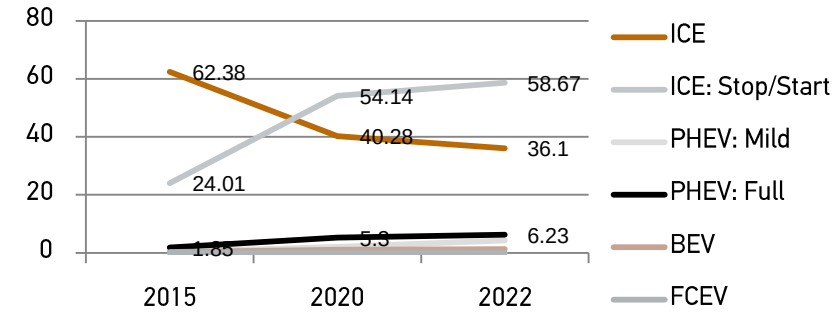


Figure 4: Allocation of powertrain technologies in mill. vehicles (Source: IHS)

Future powertrain concepts to be dominated by internal combustion engines with start/stop

- Initiatives like down-sizing and turbo-charging prevail, but growing focus on Hybrid technology
- Further efficiency gains drive growth of new technologies (i.e. 12V/48V dual-voltage systems)

Source: IHS, Strategy Analytics

The Road to Future Mobility

Market demand for connectivity is expected to grow by 204% until 2021

CONNECTIVITY – Trend towards integration of internet, sensors and big data

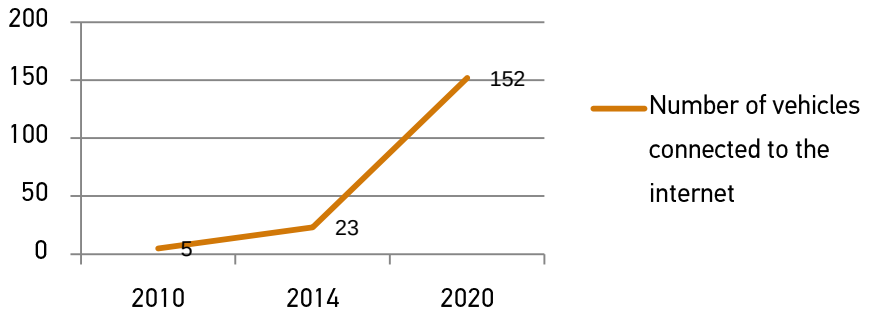


Figure 5: Number of vehicles connected to the internet in mill. pieces (Source: IHS)

Consistent trend to permanent connection of vehicles to environment and Internet of Things

- Increasing integration of digital technologies to interact with vehicles and infrastructure (V2X)
- Higher connectivity drives growth of vehicle-based sensors, control units and interfaces

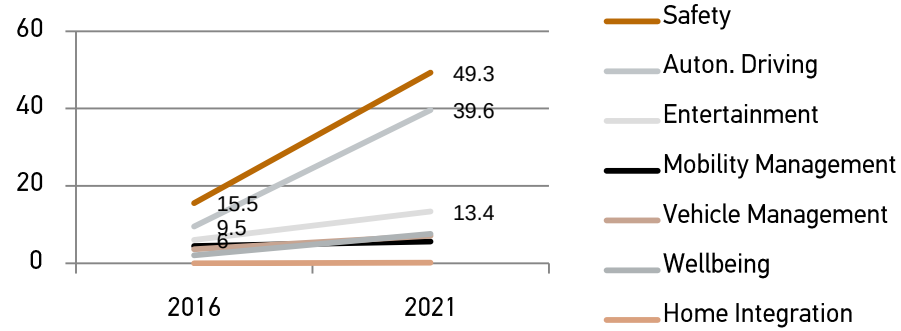


Figure 6: Market potential for connected car technologies in bn. USD (Source: PwC)

Increasing connectivity enhances new vehicle functions and drives new business models

- High levels of connectivity create high volumes of data for processing, analysis and usage
- Service-based business models are emerging from permanent connectivity of vehicles

Source: IHS, FIPA, Visiongain

The Road to Future Mobility

HELLA develops Electronics & Lighting functions in the domain SAFETY

SAFETY – Products for the prevention of accidents

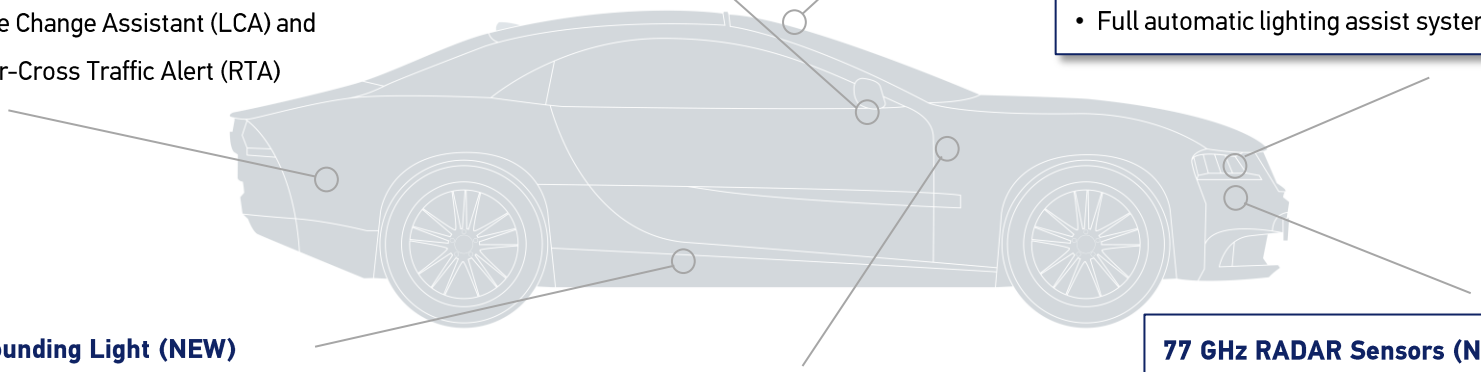
Surround View Camera Software (NEW)
- Increasing safety by object detection (parking lanes, wireless charging plates) to facilitate automated parking processes

24 GHz RADAR Sensors (UPDATE)
- Increasing safety by rear / side functions such as Blind Spot Detection (BSD), Lane Change Assistant (LCA) and Rear-Cross Traffic Alert (RTA)

Electric Power Steering (UPDATE)
- Redundant Steering approach (control unit & sensors) for automated driving requirements

Front Camera Software (UPDATE)
- Increasing safety by front functions such as Lane Departure Warning (LDW) & Traffic Sign Detection (TSR)

High Definition LED Headlamps (NEW)
- Glare-Free High beam functionality
- High resolution for precise beam pattern
- Full automatic lighting assist system



Surrounding Light (NEW)
- Multiple lighting elements placed around the car
- Interaction with light based on sensor information
- Multi Lens Array generates uniform light carpet

LED Signal lamp functions (NEW)
- Advanced lighting functions to enhance recognition of autonomous vehicles

77 GHz RADAR Sensors (NEW)
- Increase of safety by front / side functions to detect other vehicles (i.e. Front Cross Traffic Alert)

The Road to Future Mobility

HELLA develops Electronics & Lighting functions in domain ENVIRONMENT

ENVIRONMENT – Products for the reduction of C02 emissions & increase of energy efficiency

Intelligent Battery Sensor
- Detection of battery status
- Identification of state of health, charge & cranking

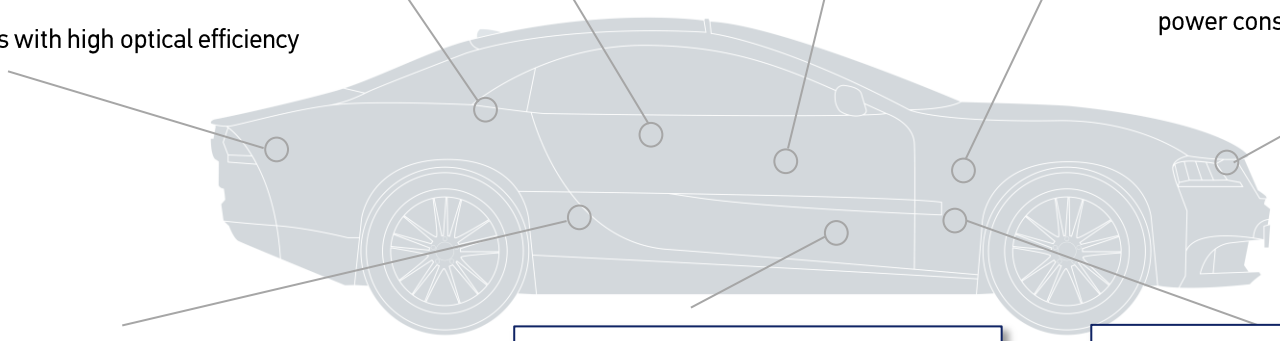
Fuel Control Modules (UPDATE)
- On-demand supply of fuel from tank system to engine to reduce fuel consumption

Fuel Level Quality Sensor (NEW)
- Continuous measurement of fuel level and quality to optimize fuel supply and combustion process

Electrical Vacuum Pump (UPDATE)
- On-demand supply of vacuum for braking systems for down-sized combustion engines

LED Rear Lamps (UPDATE)
- Adaptive systems with less brightness
- Reduction of number of LED due to optics with high optical efficiency

LED Headlamps (UPDATE)
- New optical elements for LEDs
- Basic LED headlamps with lower power consumption than Halogen



Battery Management Systems (NEW)
- Active Management of Lithium-Ion batteries by active cell balancing
- Suitable for 12V, 48V power systems

Dual Voltage DC/DC Converter (NEW)
- Dynamic management of power levels for active start/stop and engine-off coasting functions (12V / 48V)

Cooling Valve Actuator (NEW)
- Active management of auxiliary cooling circuits to improve heat-up phase and reduce CO2 emissions

The Road to Future Mobility

HELLA develops Electronics & Lighting functions in the domain COMFORT

COMFORT – Products for the increase of comfortable, convenient driving

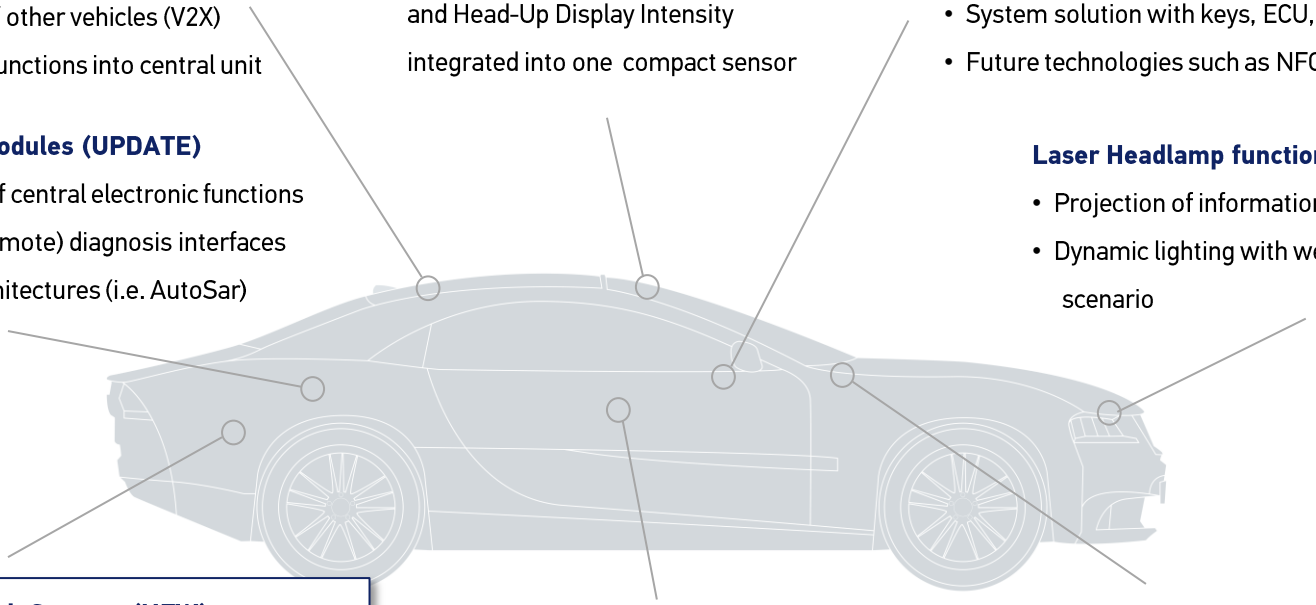
Intelligent Antenna Module (NEW)
- Coordination of communication with infrastructure / other vehicles (V2X)
- Integration of functions into central unit

Rain Light Sensors (UPDATE)
- Detection of Sun, Rain, Solar, Humidity and Head-Up Display Intensity integrated into one compact sensor

Passive Access Systems (UPDATE)
- Entry & Start functions based remote keys
- System solution with keys, ECU, antennas
- Future technologies such as NFC & BTLE

Body Control Modules (UPDATE)
- Coordination of central electronic functions
- Handling of (remote) diagnosis interfaces
- Latest SW architectures (i.e. AutoSar)

Laser Headlamp functions (NEW)
- Projection of information on road
- Dynamic lighting with welcome scenario



Structural Health Sensors (NEW)
- Detection of parking & transport damages
- Detection of pedestriants (emergency stop)
- Value-Added for CarSharing / Leasing / Rental

Feedback Accelerator Pedal (UPDATE)
- Intuitive, haptic feedback to driver in specific situations (i.e. safety, economy, change of powertrain settings)

Air Quality Sensors (NEW)
- Detection of C02 emissions and particular matter concentration to support active air / oxygen management of vehicles

The Road to Future Mobility

HELLA develops Electronics & Lighting functions in the domain STYLING

STYLING – Products for higher individualization and personalization

Intelligent OLED Rear Lamps (NEW)

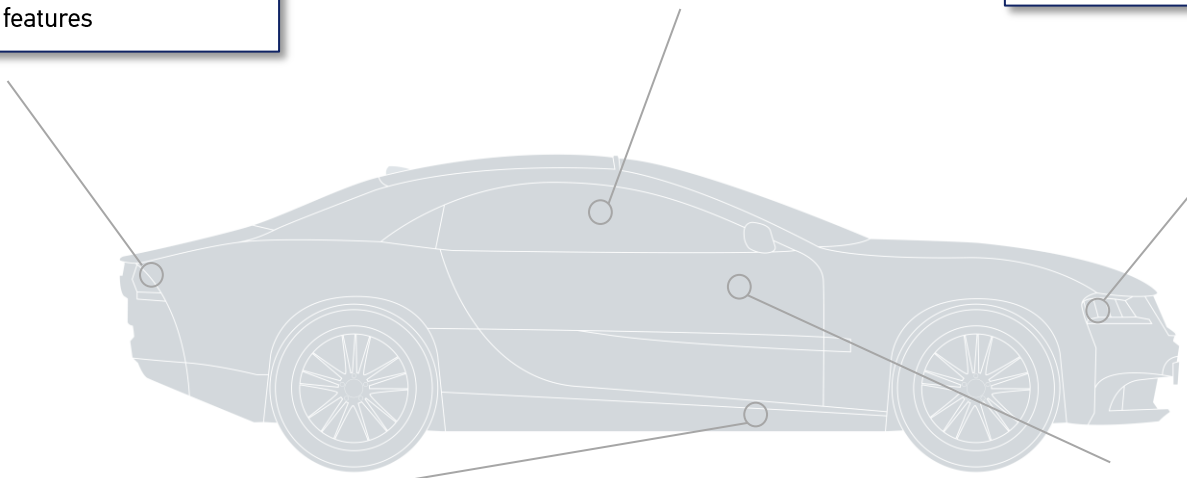
- New Organic LED Light Sources
- New appearances with Holographic light effects in rear lamps
- Dynamic light features

Ambient Interior Lighting (UPDATE)

- Direct coupling with vehicle sensor information
- Multi-Color LED Modules and Light Guides
- Personalization and Interaction with driver

LED Headlamps (NEW)

- New optical elements allow for smaller packaging concepts which facilitate slim headlamp design



Ambient Exterior Lighting (NEW)

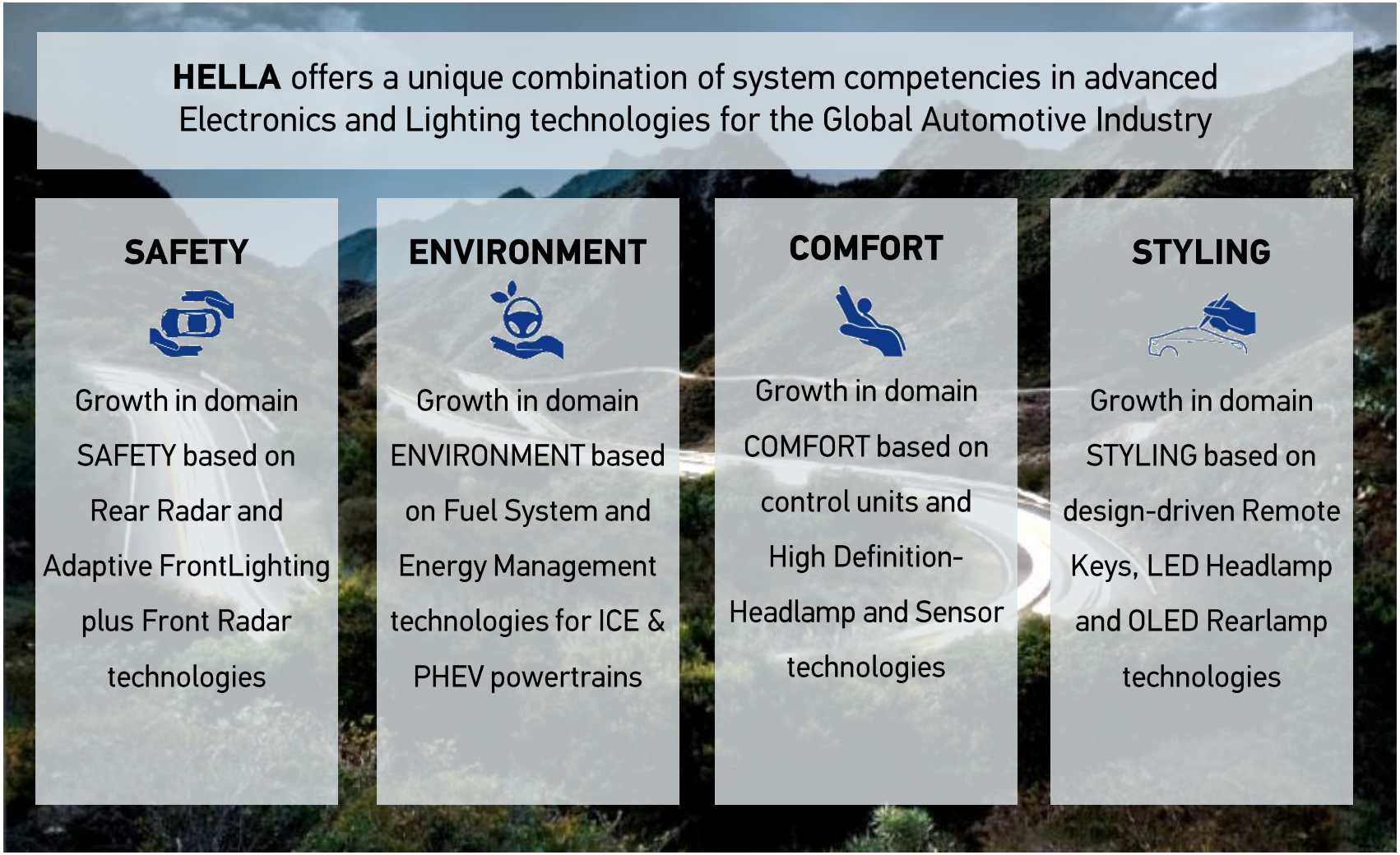
- New lighting features around the vehicle enabled by multi-lens array technology
- Individualization and personalization

Design-driven remote keys (NEW)

- Innovative materials for remote keys
- New haptics for keys to enhance personalization & value appearance

The Road to Future Mobility

HELLA well positioned to benefit from market trends in Automotive Industry



HELLA offers a unique combination of system competencies in advanced Electronics and Lighting technologies for the Global Automotive Industry

SAFETY

Growth in domain SAFETY based on Rear Radar and Adaptive FrontLighting plus Front Radar technologies

ENVIRONMENT

Growth in domain ENVIRONMENT based on Fuel System and Energy Management technologies for ICE & PHEV powertrains

COMFORT

Growth in domain COMFORT based on control units and High Definition-Headlamp and Sensor technologies

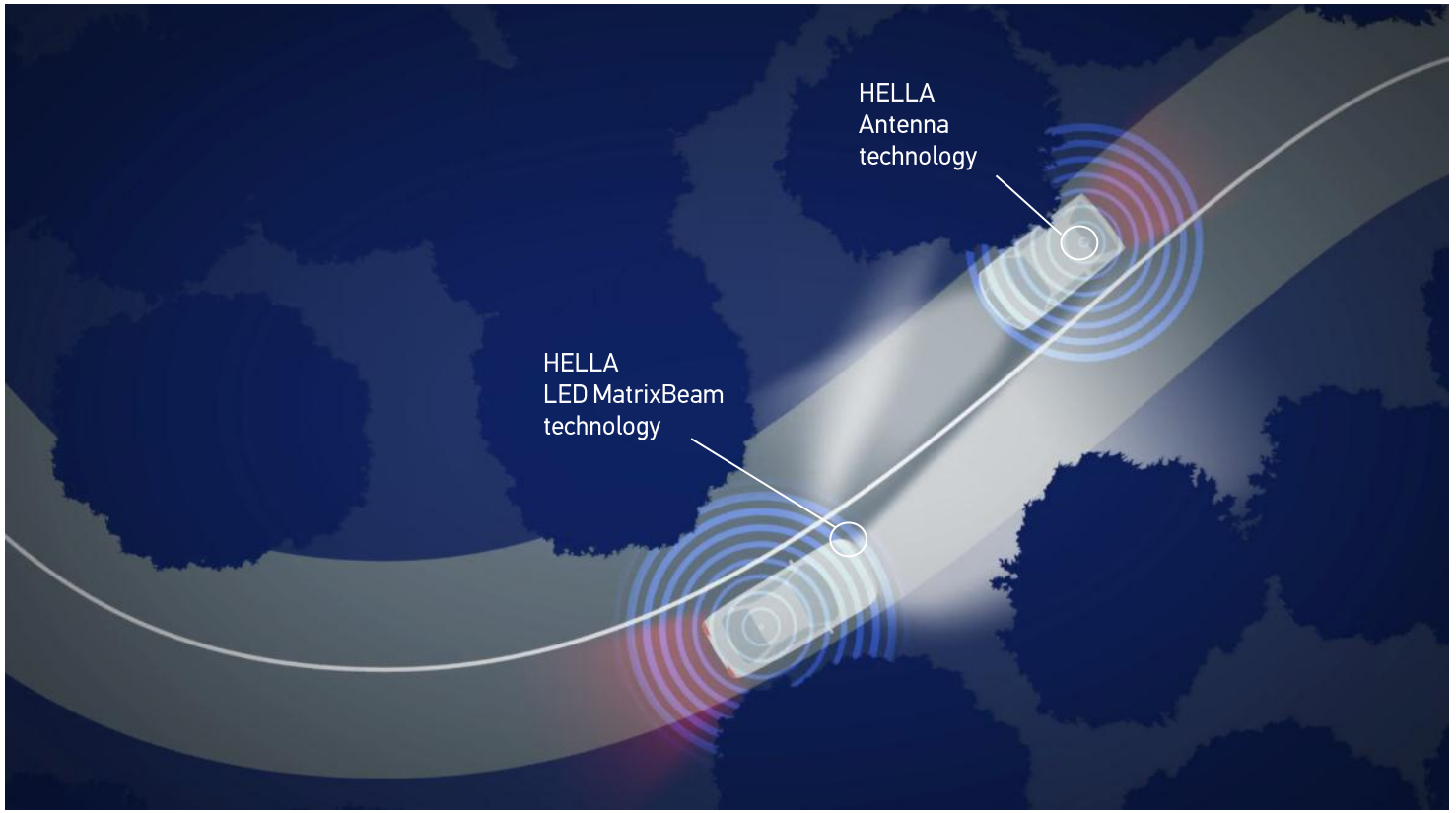
STYLING

Growth in domain STYLING based on design-driven Remote Keys, LED Headlamp and OLED Rearlamp technologies

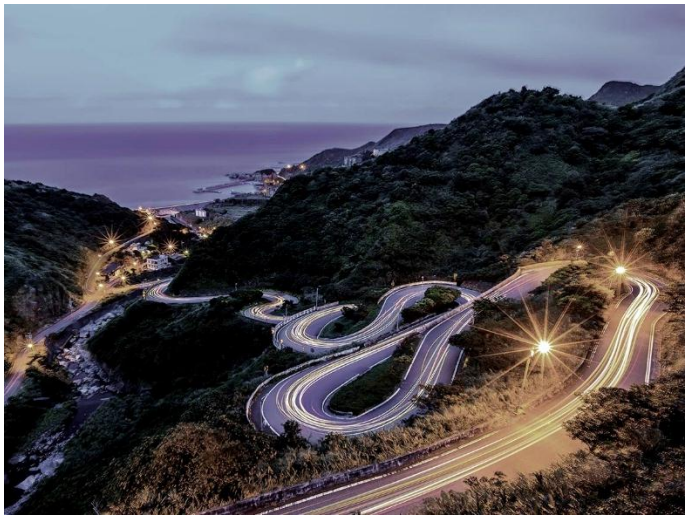
The Road to Future Mobility

HELLA well positioned to benefit from market trends in Automotive Industry

EXAMPLE – How vehicles will sense the and interact with their environment in the future



F-7761DE_C (2011-06)



New Trends in LED-Lighting - Future possibilities for styling and functionality

CAPITAL MARKETS DAY 2015

Dr. Michael Kleinkes

Head of Design & Development

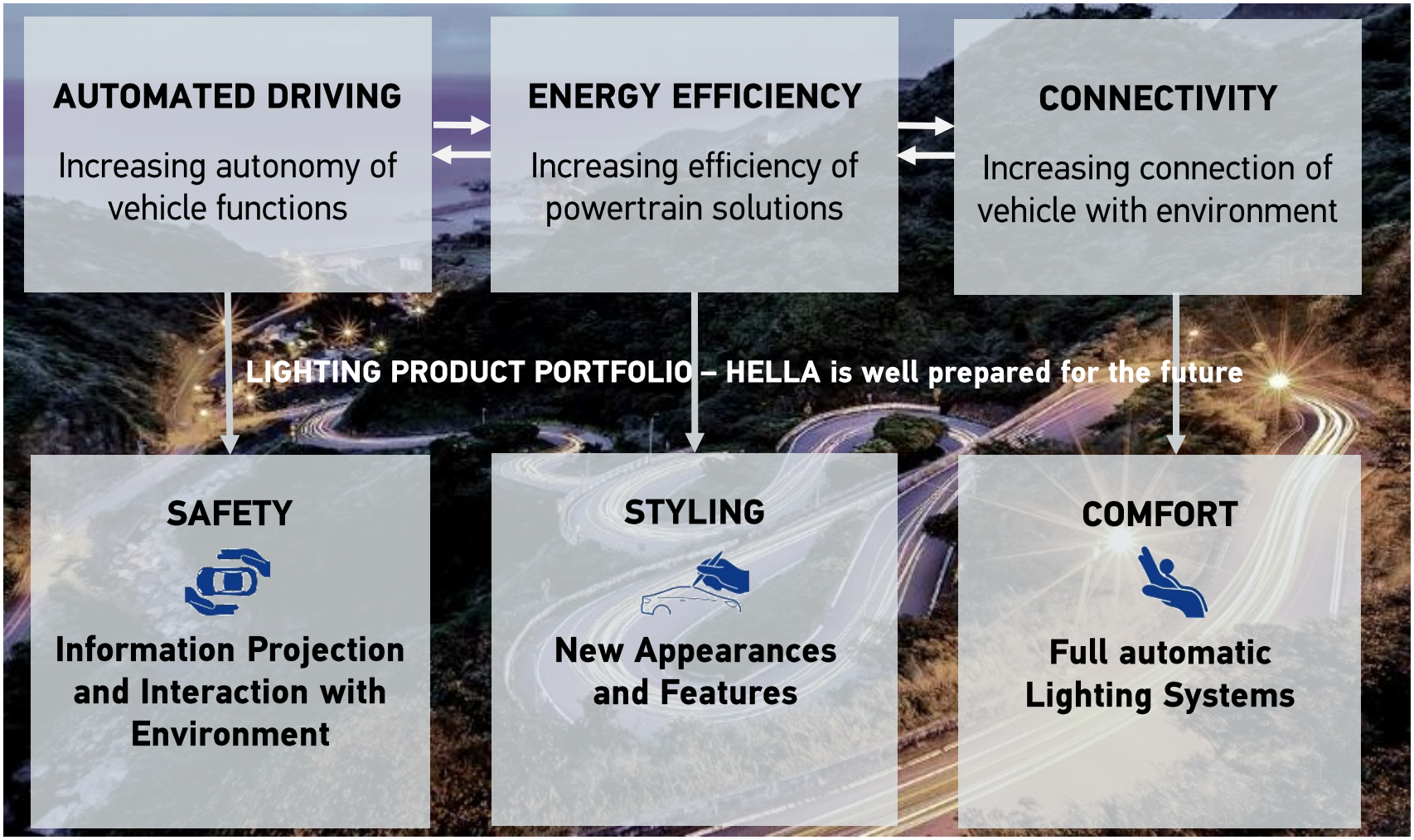
Business Division Lighting

London

02 December 2015

Lighting Portfolio on the Road to Future Mobility

HELLA Products as Perfect Fit to Future Market Trends



Lighting + Electronics + Software offer further innovation potential

Market demand for new headlamps features require high tech solutions

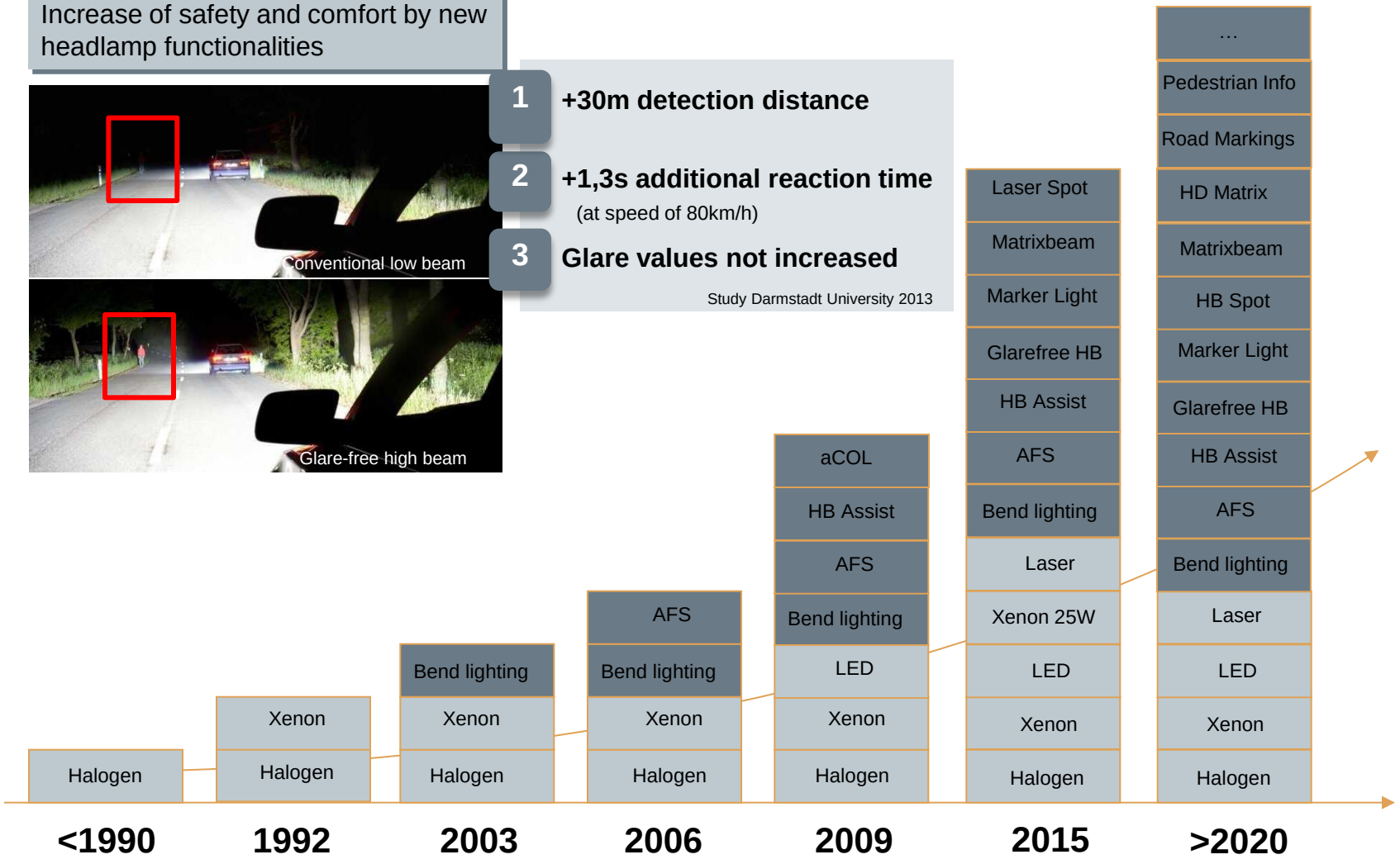
Increase of safety and comfort by new headlamp functionalities

1 **+30m detection distance**

2 **+1,3s additional reaction time**
(at speed of 80km/h)

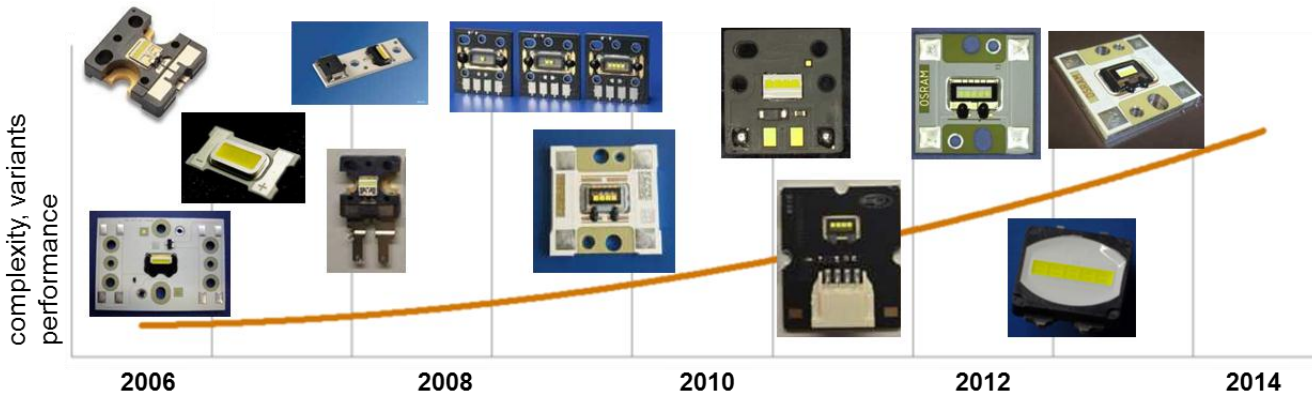
3 **Glare values not increased**

Study Darmstadt University 2013



Miniaturization in LED-Technology – opportunities and challenges

Car stylists just discover the opportunities of LED lighting

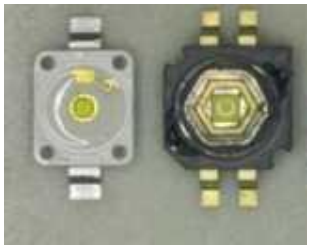


Standardization in LED-Package-Technology seems very challenging

Progress in LED-Technology

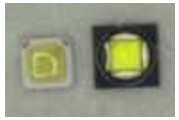
“Standardization of LEDs” by reducing package size

Miniaturization Singlechip-LED



2005
30 lm @ 1W

SMD-Technology



2010/11
70 lm @ 1W

SMD-Technology

> 2014
> 90 lm @ 1W

CSP-Technology

> 2017
? lm @ 1W

RealCSP-/ WLP-LED tomorrow

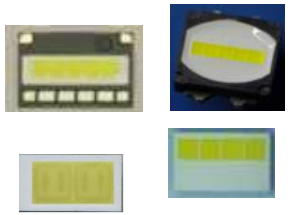
Source: Philips, Datasheet

Miniaturization Multichip-LED

2007
30 lm/W

2009/10
65 lm/W

2012/13
90 lm/W



> 2014
> 110 lm/W

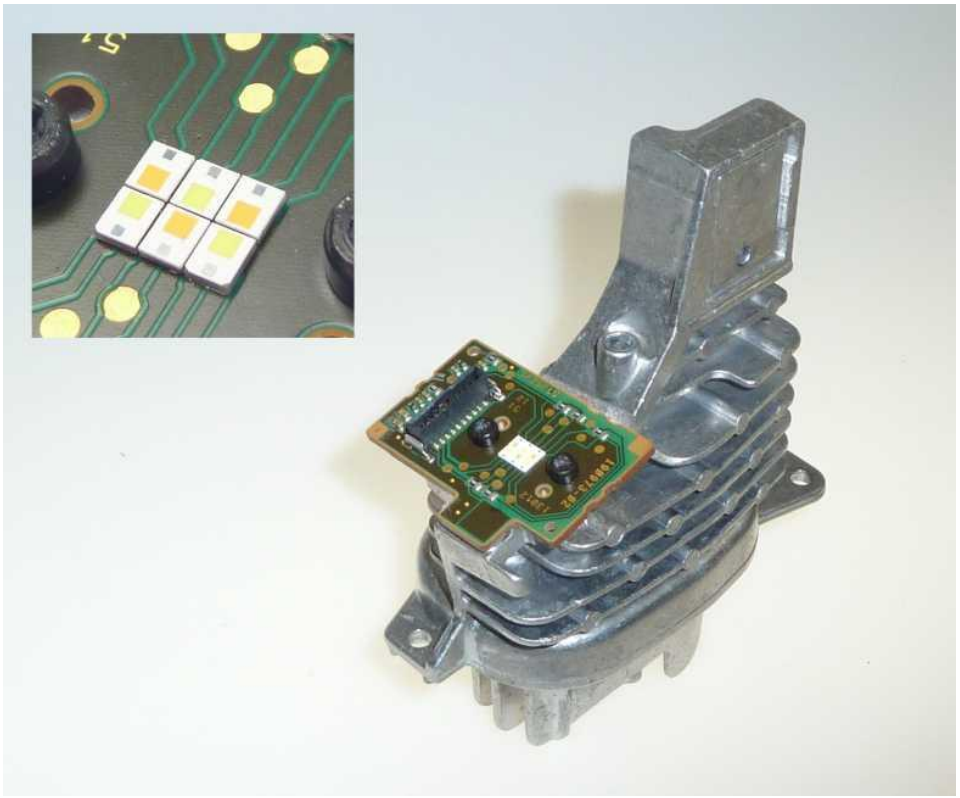
SMD-Technology

Big challenge in LED-Technology: High degree of innovation, growing complexity, miniaturization of LED package, increasing mix of technologies, robustness on system level

Miniaturization in LED-Technology – opportunities and challenges

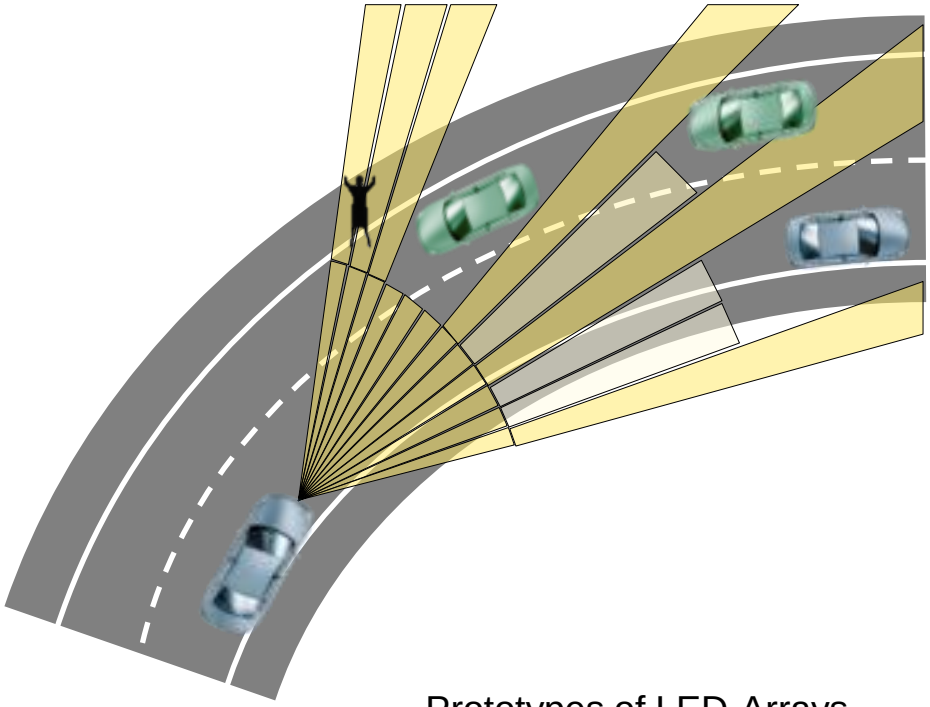
Opportunity: New light functions

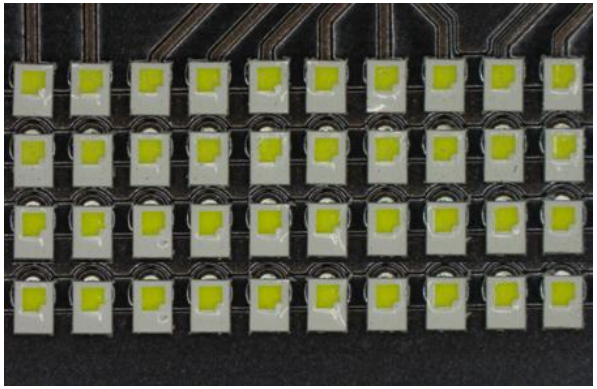
Audi A3 Day-time- Running Light and Turn-Indicator out of one light guide

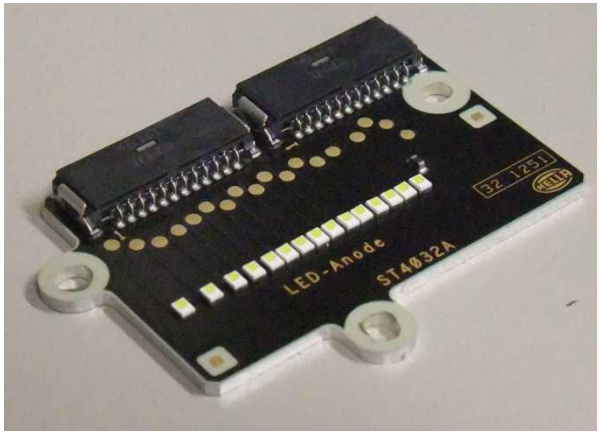


Miniaturization in LED-Technology – opportunities and challenges

Opportunity: Capable of adapting LED AFS light sources



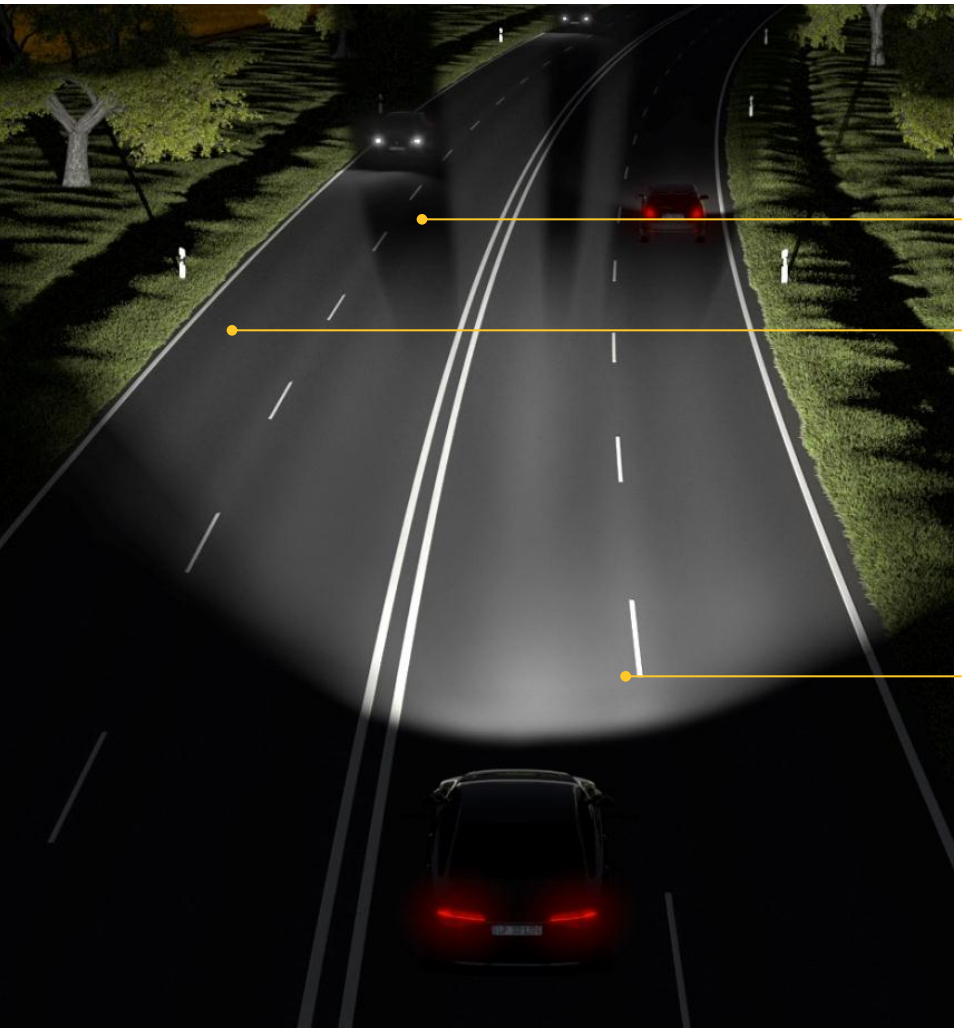




Prototypes of LED-Arrays
with CSP-LED technology
for an LED AFS headlamp

Matrix Systems
Principle

Addressable LEDs enalbe selective fading out of other road users.



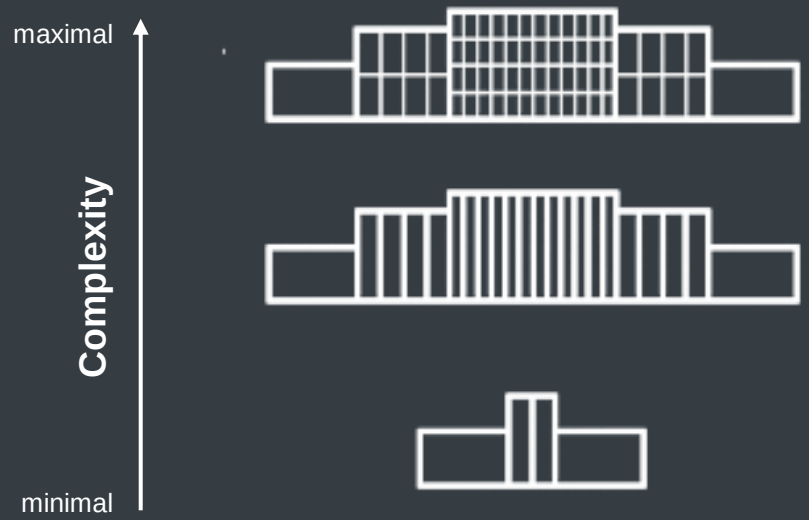
Dimmed area

Illuminated area

Viewing area of the front camera recognizes oncoming traffic and vehicles being followed

HD-Matrix Systems

Market and Customer Situation for the next 2-5 Years



Different matrix systems are under development. Concepts with 5 – 90 illuminated segments will enter the market in near future.

- High Resolution Matrix Systems: ~84 Pixel , SOP 2015 - 2019
- Additional Matrix System: 7 - 50 Pixel, SOP 2015 - 2019

Matrix Systems
Audi A8 (SOP 2013)

MATRIX BEAM 5 reflectors each with a 5-chip-LED

FEATURES

- First glare-free high beam functionality masking out of up to 8 different road users at the same time
- 25 individually controllable segments per headlight
- Vehicles driving ahead are detected in a distance of 300- 400m

BENEFITS

- Elimination of glare for oncoming vehicles
- Increased safety: 30m more detection distance means 1,3s additional response time
- Reduced driver fatigue due to an automatic system

Matrix Systems *Audi A8 (SOP 2013)*

Complexity of data & facts

15
control units in an interconnected system

29
meters of electric cables

27
plug-in connections

31
heat sinks

3
thermal sensors

4
control units on the headlamp

1
ventilator

5
printed circuit boards

19
adjustments/settings

224
mechanical components

82
LEDs

966 million
light distributions

51
cut-off lines

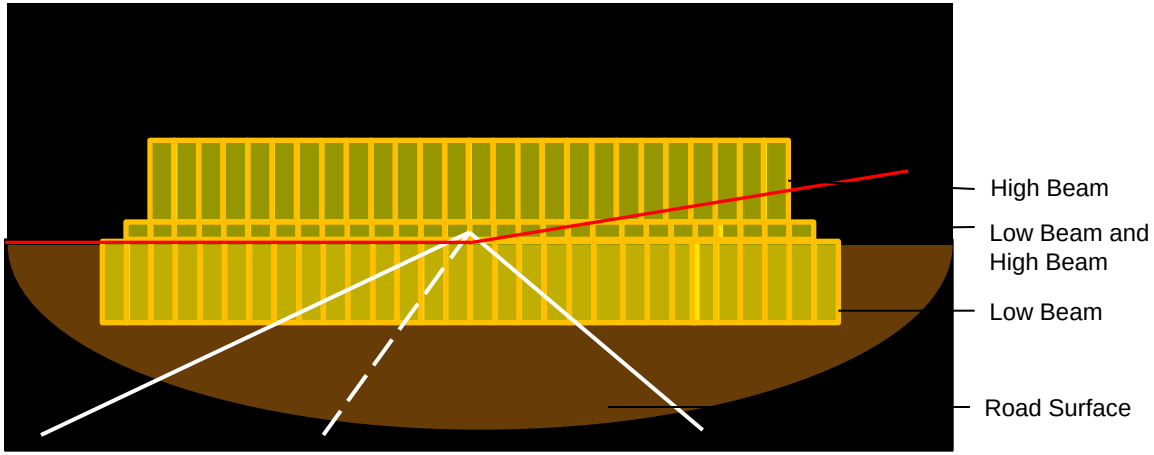
84
tools

Matrix Systems Daimler

Next generation Daimler Multibeam in the new E-class

- High-Resolution LED Grid Module with 84 LEDs
- Freely configurable light distribution
- Resolution increased by a factor of 3.5
- Up to 2.5 times greater illuminance compared with regularly available systems

- Specific cells of the Light Distribution can be hidden/ covered up
- Dynamic functions within low beam mode
- Ultra-high speed, precision and performance



Matrix Systems Daimler

Next generation Daimler Multibeam in the new E-class

HIGHER RESOLUTION

- Precision
- Use of high beams
- Reduced glare
- Glare-free hazard lighting

HD(High-Definition)-Matrix Systems
Next Generation Headlamps until 2020

Customers searching for new functionalities, demand for higher resolution

Possible Functionalities

FEATURES

- Lane guidance
- Animations
- Illuminated information on the road
- Combination of light functions
- Project adaption by software

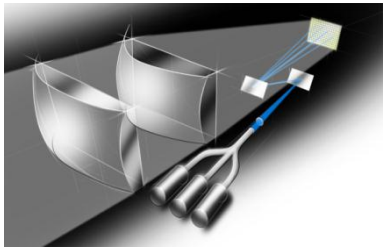
BENEFITS

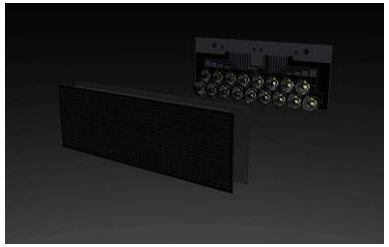
- Increasing safety
  - Early obstacle detection
  - Information in field of view keeping eyes on the road
- Increased visibility due to high beam always on

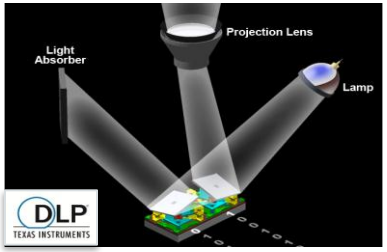
HD-Matrix Systems

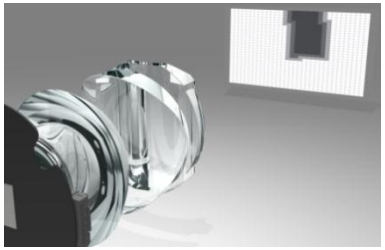
Overview of possible Technologies for Next Generation Headlamps

1	2	3	4
Laser Scanner	LCD-Technology	DMD-Technology	High definition solid state lightsource



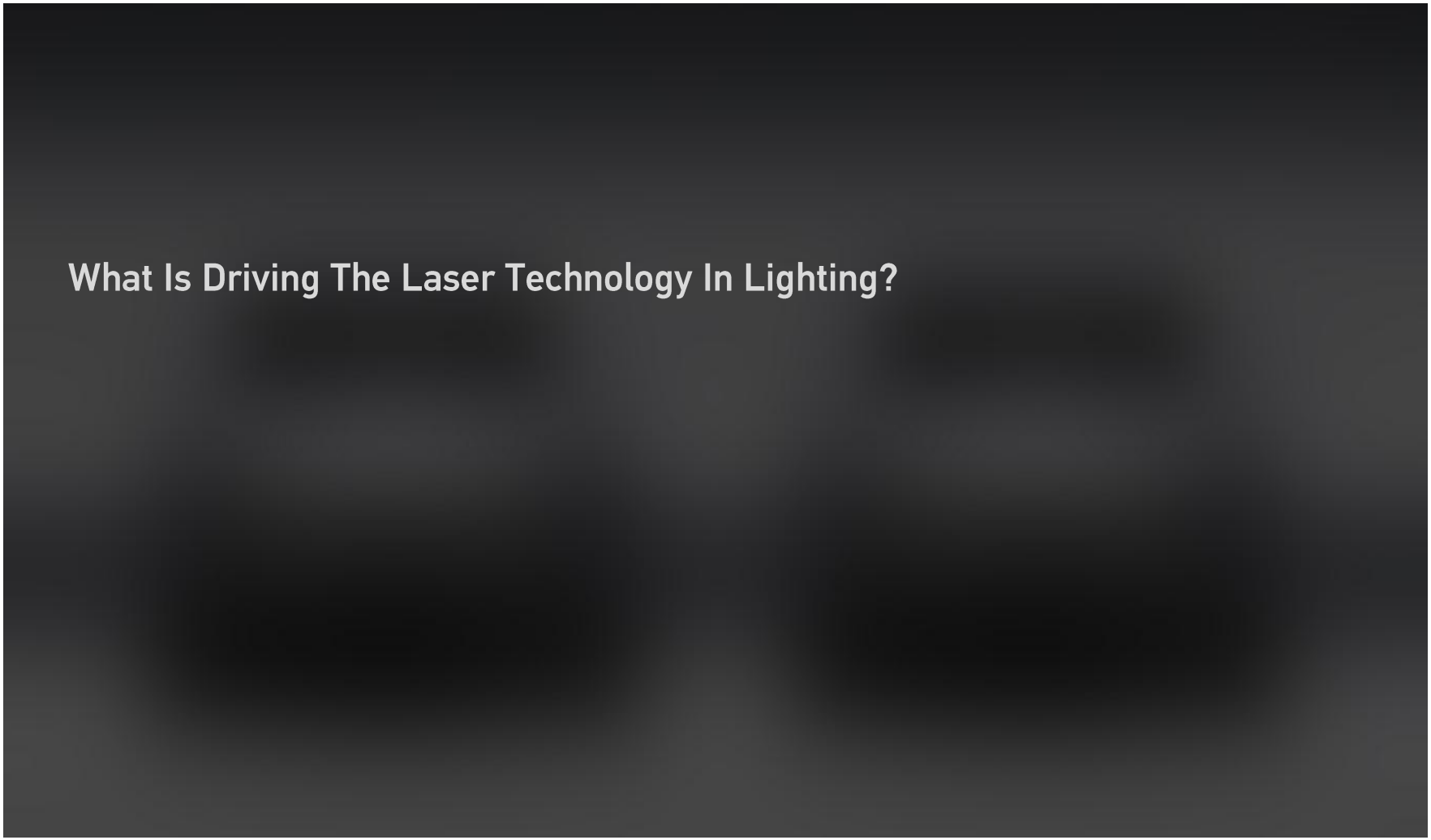




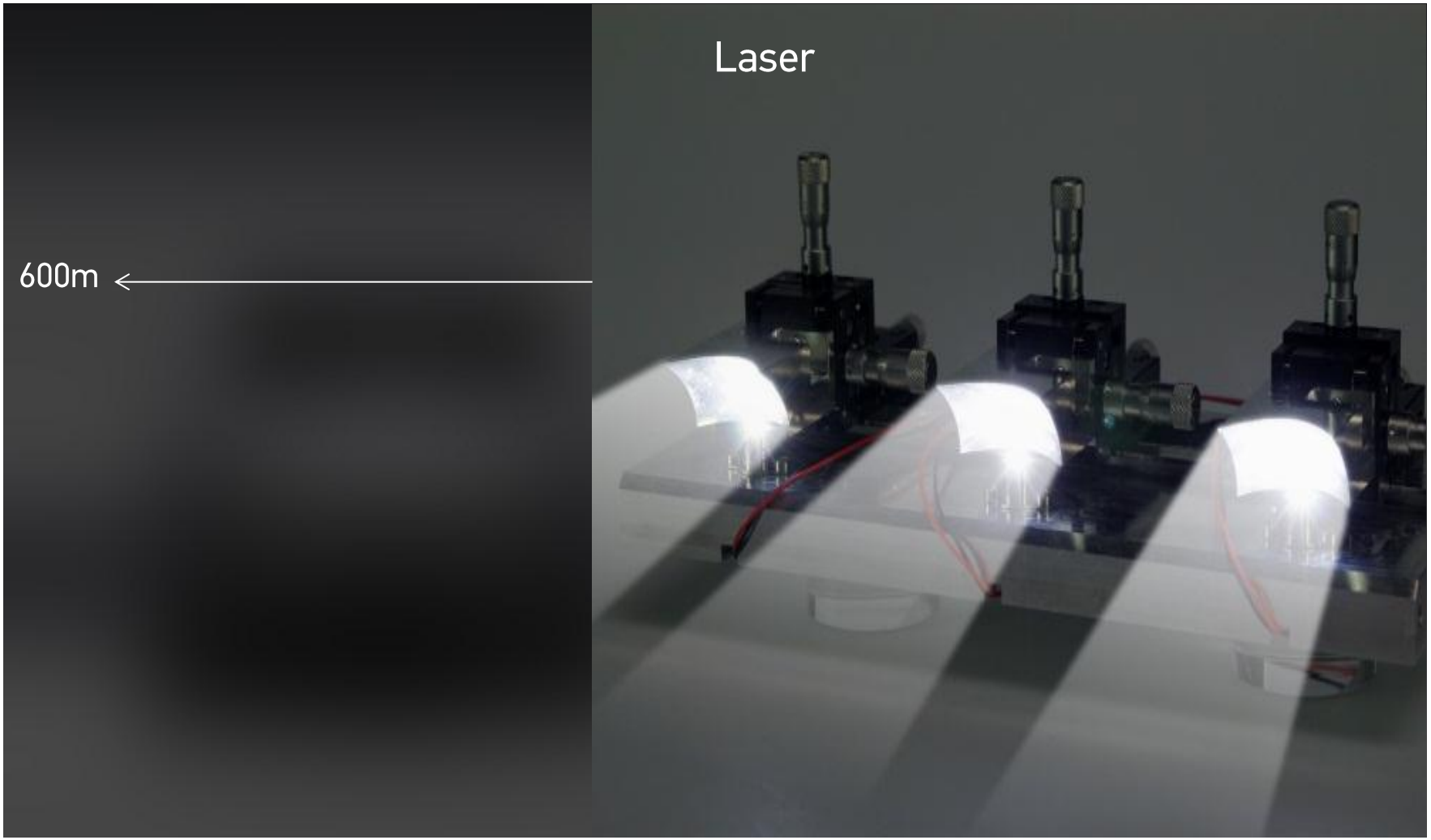


High definition concepts with switchable light emitting areas („pixel“) between 1.000 and 400.000 pixel are under development to realize free programmable light distribution.

Laser in Automotive Lighting
Now And In The Future



Laser in Automotive Lighting
Now And In The Future

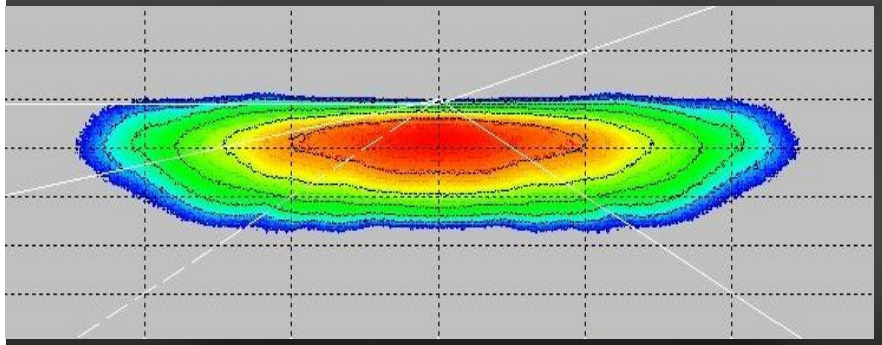


Laser in Automotive Lighting
Now And In The Future

Laser in Automotive Lighting
Now And In The Future

Laser in Automotive Lighting
Foreground Illumination

Total light distribution:
Foreground left + right headlamp



Laser allows for a foreground light output of only 10 mm in height

Features

- Light Output ≈ 1600 lm
- Efficiency: 57%
- Peak Performance ≈ 30 lx

Benefits

- New headlamp design with very thin appearance
- Reduced space for headlamp integration
- High-tech image of laser

Laser in Automotive Lighting
Signal Lighting

Features

- Red laser diode for signal lighting
- Stop light with line-laser and EdgeLight light guide
- Dark-red color of laser diodes (648 nm)

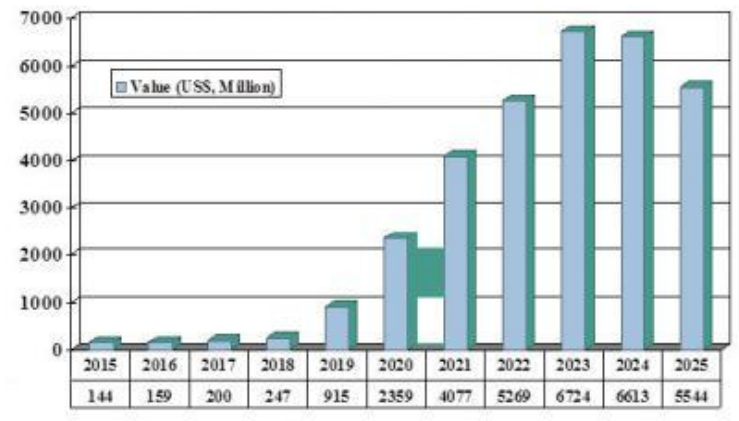
Benefits

- High tech styling
- Intense color saturation

OLED Lighting – opportunities for new night time appearances

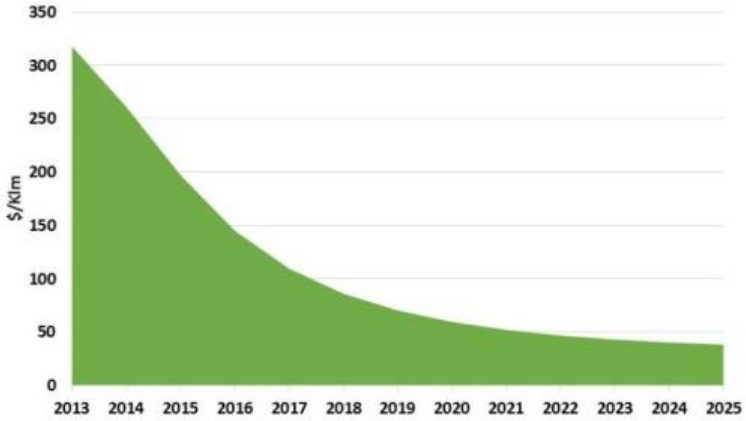
The market for OLED lighting sees strong growth

OLED lighting panel forecast sees technology break through in 2020



Source: ElectroniCast Consultant, Sep 04, 2015

Further OLED lighting panel cost reduction will boost market penetration



OLED in vehicle lighting will accelarate market penetration due to it‘s drive on cost reduction

Form factor, light controllability and light quality → Cost reduction acceleration → Lifetime improvements

Office and Industrial Lighting

Automotive Lighting

Architectural and Shop Lighting

Source: IDTechEx, Sep 03, 2014

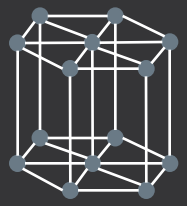
Adoption Timeline By Sector

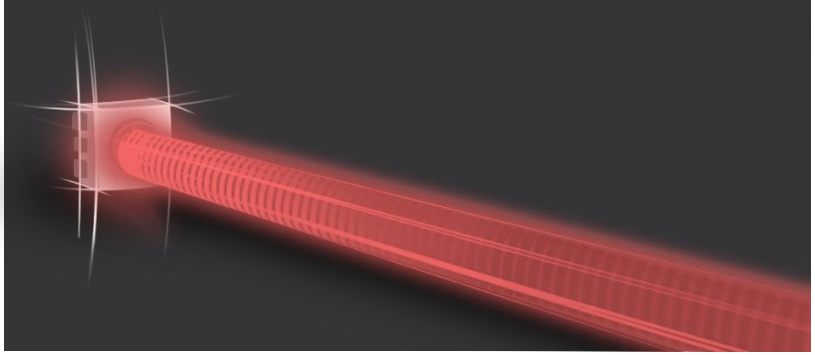
OLED - Innovative Graphics and Future Possibilities

OLED Technology

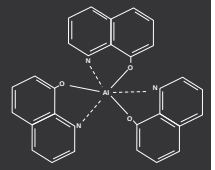
LED + LIGHT GUIDE

- anorganic semiconductors (InGaN, AlInGaP): solid state crystals
- point light source





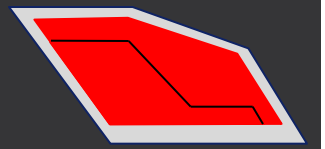
OLED



- organic semiconductors: carbon hydrates, small molecules or polymers
- ultra thin layers (< 1µm) deposited on large area substrates → surface emitter

Advantages

- new styling possibilities
- no optical system needed
- homogeneity
- Segmented areas

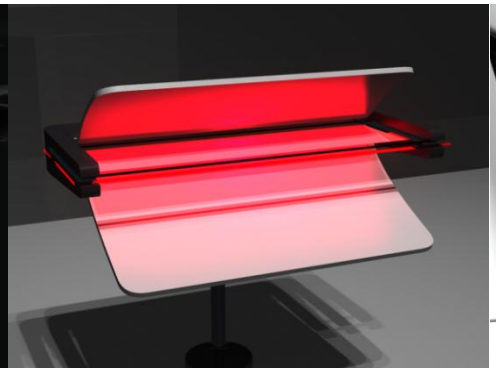


OLED - Innovative Graphics and Future Possibilities

Next Generation of OLED Technology

2D OPAQUE

FLEXIBLE/ 2 ½ D

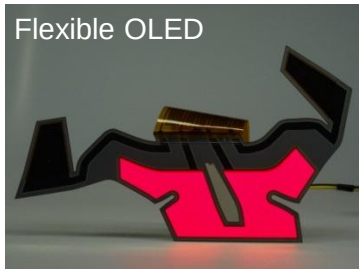


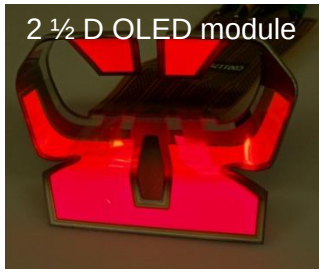
TRANSPARENT

MULTICOLOR

OLED - Innovative Graphics and Future Possibilities

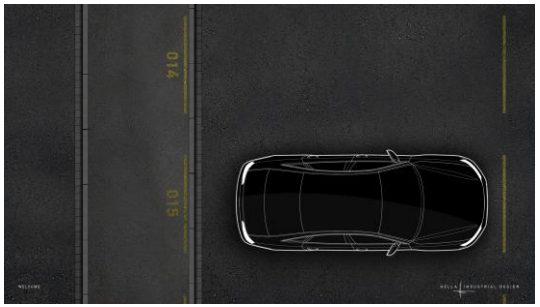
Flexible OLED



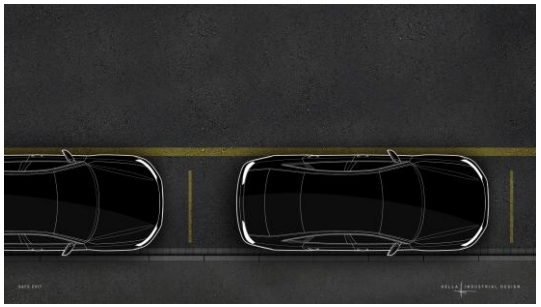


The Road to Future Mobility

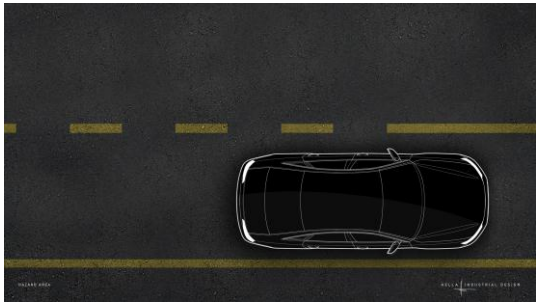
Mult-Lens Array for dynamization of Exterior and Interior Lighting



Welcome Function



Advanced Exit Lighting



Hazard Warning

Size of Multi Lens Array

10 x 10 x 2 mm

170 micro lenses per Multi Lens Array generating ***1*** image

Staging and Interaction of Light as general trend

Emotionalization by Light Scenarios

Opportunities of **additional Comfort and Safety Features**

Possible Applications

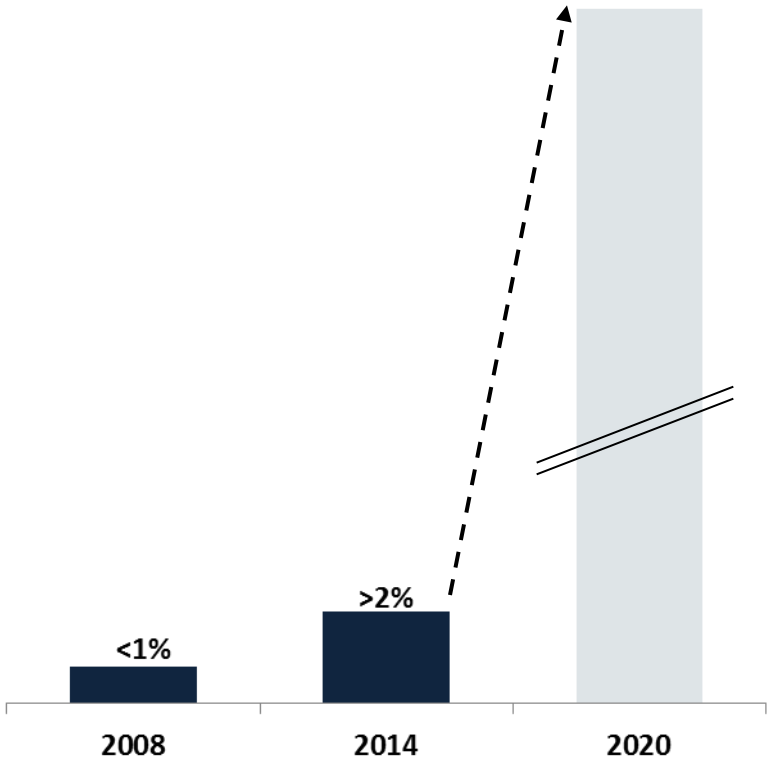
- Welcome-Light
- Entrance- / Exit Light with color change
- Maneouvering Light with additional side lighting
- Light Animations in Headlamps or Rear Lamps
- Advanced warning scenarios for broke down cars
- Light Scenarios for Interior lighting with dynamic color change

The Road to Future Mobility

LED/OLED technology – Safety, Efficiency and Styling drive penetration

Global LED trend

Share in the global headlamp market:
The LED era begins



- **Establishment** of LED technology in the **volume segment** and **development** of complex **high-definition headlamps**
- **New functionalities** adds to road safety

- Accelerated development in the **OLED** segment increases scope for brand differentiation through **lighting design**

- **Ambient lighting** sets the stage in the passenger compartment

- Energy efficient lighting systems reduce the total energy consumption of the car and long lifetime to create a cleaner environment

HELLA

Technology with Vision

Technology with Vision

Smart Solutions for Automated Driving, Increased Efficiency and Connectivity

CAPITAL MARKETS DAY 2015

Michael Jaeger

Member of the Executive Board
Business Division Electronics

London

02 December 2015

HELLA Electronics
Agenda

ELECTRONIC PORTFOLIO

ON THE ROAD TO FUTURE MOBILITY

AUTOMATED DRIVING

ENERGY EFFICIENCY

CONNECTIVITY

CONCLUSION

HELLA Electronics
Agenda

ELECTRONIC PORTFOLIO

ON THE ROAD TO FUTURE MOBILITY

AUTOMATED DRIVING

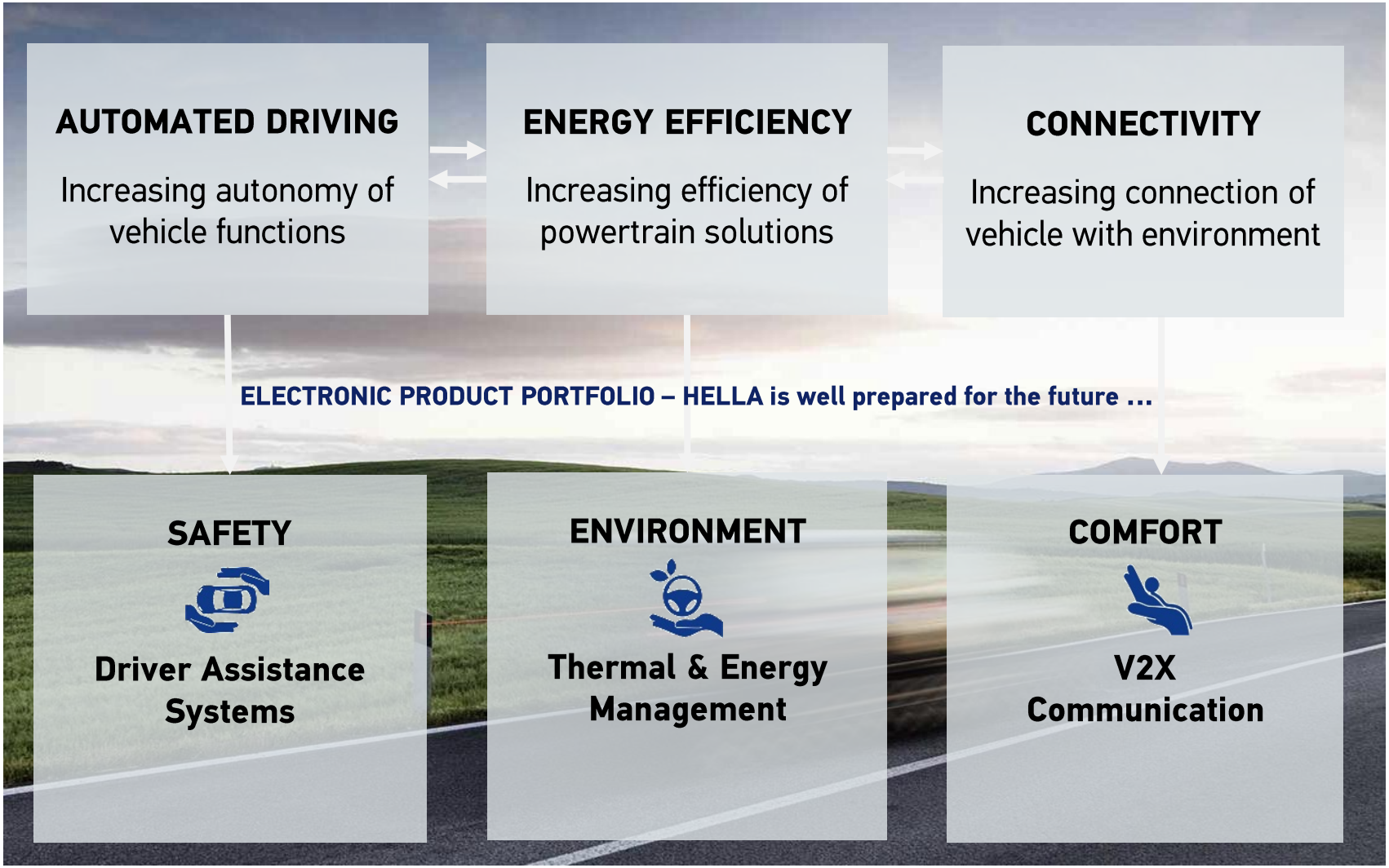
ENERGY EFFICIENCY

CONNECTIVITY

CONCLUSION

Electronic Portfolio on The Road to Future Mobility

HELLA Product Domains as Perfect Fit to Benefit from Future Market Trends



HELLA Electronics
Agenda

ELECTRONIC PORTFOLIO

ON THE ROAD TO FUTURE MOBILITY

AUTOMATED DRIVING

ENERGY EFFICIENCY

CONNECTIVITY

CONCLUSION

Automated Driving

Radar Technologies for more Safety and Comfort in Vehicles of Tomorrow

77GHz Radar

FRONT CROSS TRAFFIC ALERT (FCTA)

Identifies & reacts on approaching vehicles from the front side

ENHANCED BLIND SPOT DETECTION (EBSD)

Identifies & reacts on approaching objects (e.g. cyclist) from the side

BLIND SPOT DETECTION (BSD)

Identifies & warns on approaching vehicles in the blind spot zone

EXIT ASSISTANT (ESTA)

Identifies & warns on approaching vehicles during exit process

LANE CHANGE ASSISTANT (LCA)

Identifies & warns on approaching vehicles from the distance

REAR CROSS TRAFFIC ALERT (RCTA)

Identifies & warns on rear-crossing traffic while reversing

24GHz Radar

Automated Driving

24GHz Radar Sensor – HELLA as Pioneer for Rear Applications

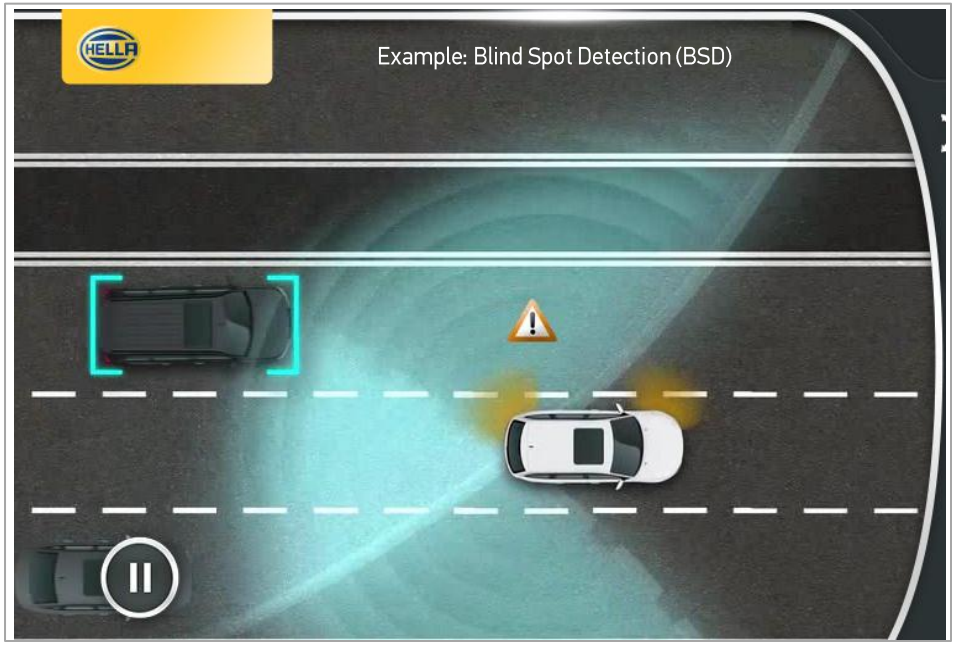
// FEATURES

- Fast chirp modulation principle provides higher functional performance
- High integration level of processor (Single Core -> Dual Core)
- Max. synergies between 4th Gen (24 GHz) and 5th Gen (77GHz)
- High integration of Radar Chip (2 MMIC ext. IF -> 1 MMIC integr. IF)

// BENEFITS

- Increased level of detection certainty
- Enhancement of sample data by fast chirp modulation
- Integrated band-pass filter
- Improved separation between standing and mobile objects
- Scalable processor family

24 GHZ RADAR



Automated Driving

77GHz Radar Sensor - High Performance for Front-Side Applications

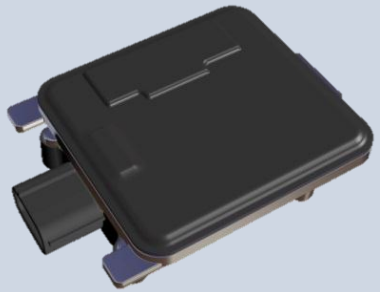
// FEATURES

- New RF-CMOS Radar System Chip (RSC) technology
- High integration due to Radar System Chip including MMIC + ADC + Chirp-Gen.
- New fast chirp modulation principle provides higher functional performance
- Master/Master – Concept
- ASIL B compliant HW-design

77 GHZ RADAR

// BENEFITS

- Front-side application possible
- Reduced size & weight (significant package reduction compared to previous sensors)
- Significantly increased measurement performance especially for near range applications
- Enlargement of sensor detection areas, trend towards 360° detection



HELLA Electronics
Agenda

ELECTRONIC PORTFOLIO

ON THE ROAD TO FUTURE MOBILITY

AUTOMATED DRIVING

ENERGY EFFICIENCY

CONNECTIVITY

CONCLUSION

Energy Efficiency

HELLA Key Technologies on the Road towards Electrification

Conventional Engine

- Thermal Management

- Fuel Supply

- Boosting & Downsizing

HELLA technologies for more engine efficiency, CO_2 and fuel reduction

Electric Powertrain

- Stop/Start Function

- Recuperation / Coasting

- Hybrid Vehicle

- Electric Vehicle

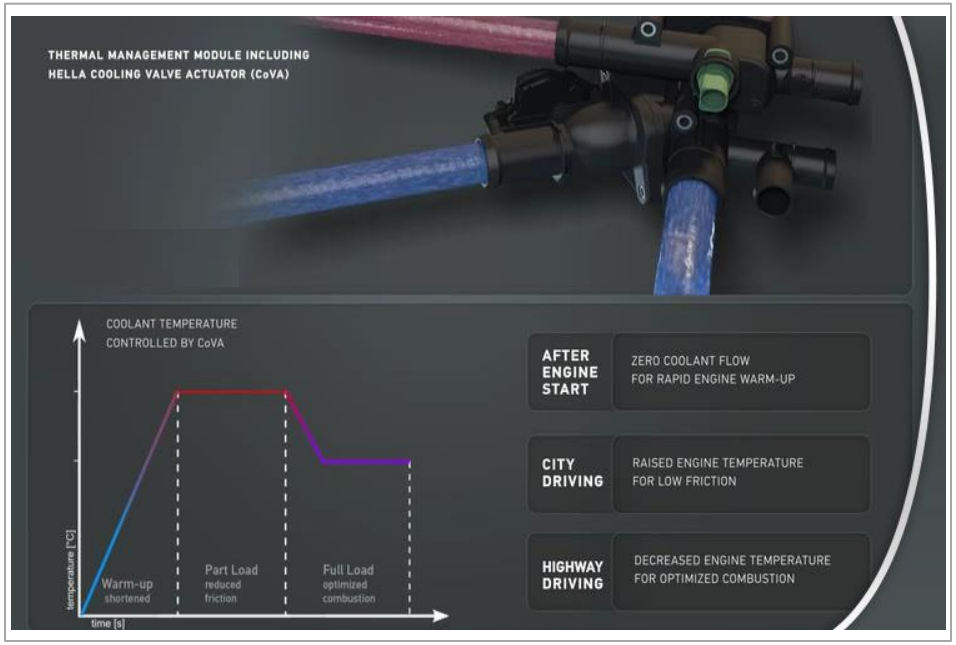
Energy Efficiency

Cooling Valve Actuator (CoVA) for Optimal Cooling Circuit Control & Precision

// FEATURES

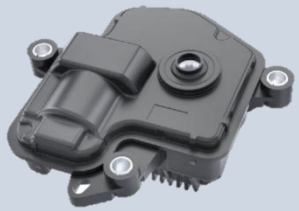
After Engine Start	▪ Shortening of engine warm-up phase
City Driving	▪ Minimization of friction
Highway Driving	▪ Optimization of engine combustion

Cooling Valve Actuator (CoVA)



// BENEFITS

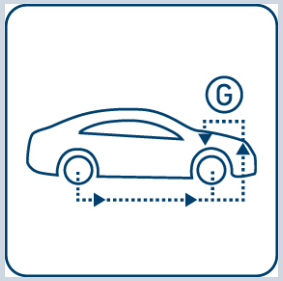
- Zero coolant flow for rapid engine warm up → CO_2 reduction
- Independent from the coolant temperature
- High accuracy and robustness due to CIPOS® technology
- Qualified to 160 °C ambient temperature
- Flexible mounting solutions
- Component protection by preventing temperature overshoots



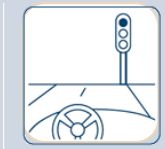
Energy Efficiency

48V System Architecture – Low Cost Hybrid Approach

// FEATURES

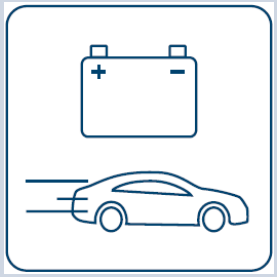


Recuperation



Enhanced Stop Start

Engine Off Coasting

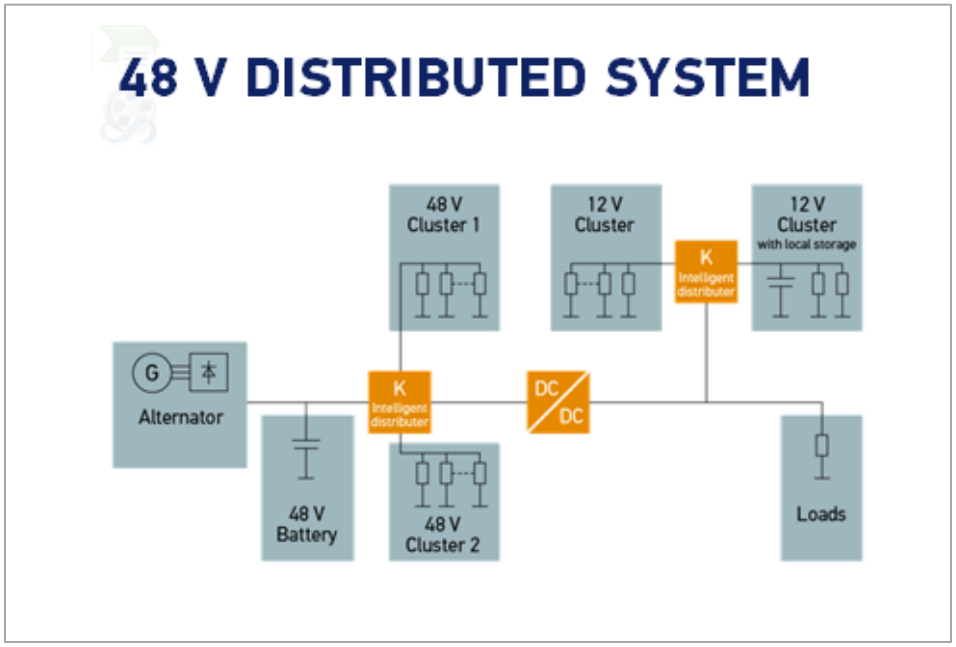


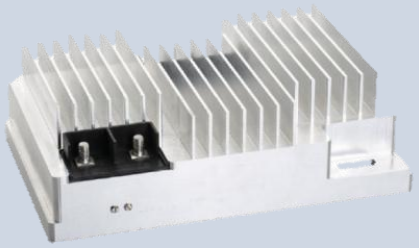
Boosting & Creeping

// BENEFITS

- Scalable Power Class of 1-3kW
- Bi- directional energy transfer
- High efficiency 97%
- Protections
- High availability (fail safe)
- Flexible thermal interface
- Design for manufacturing

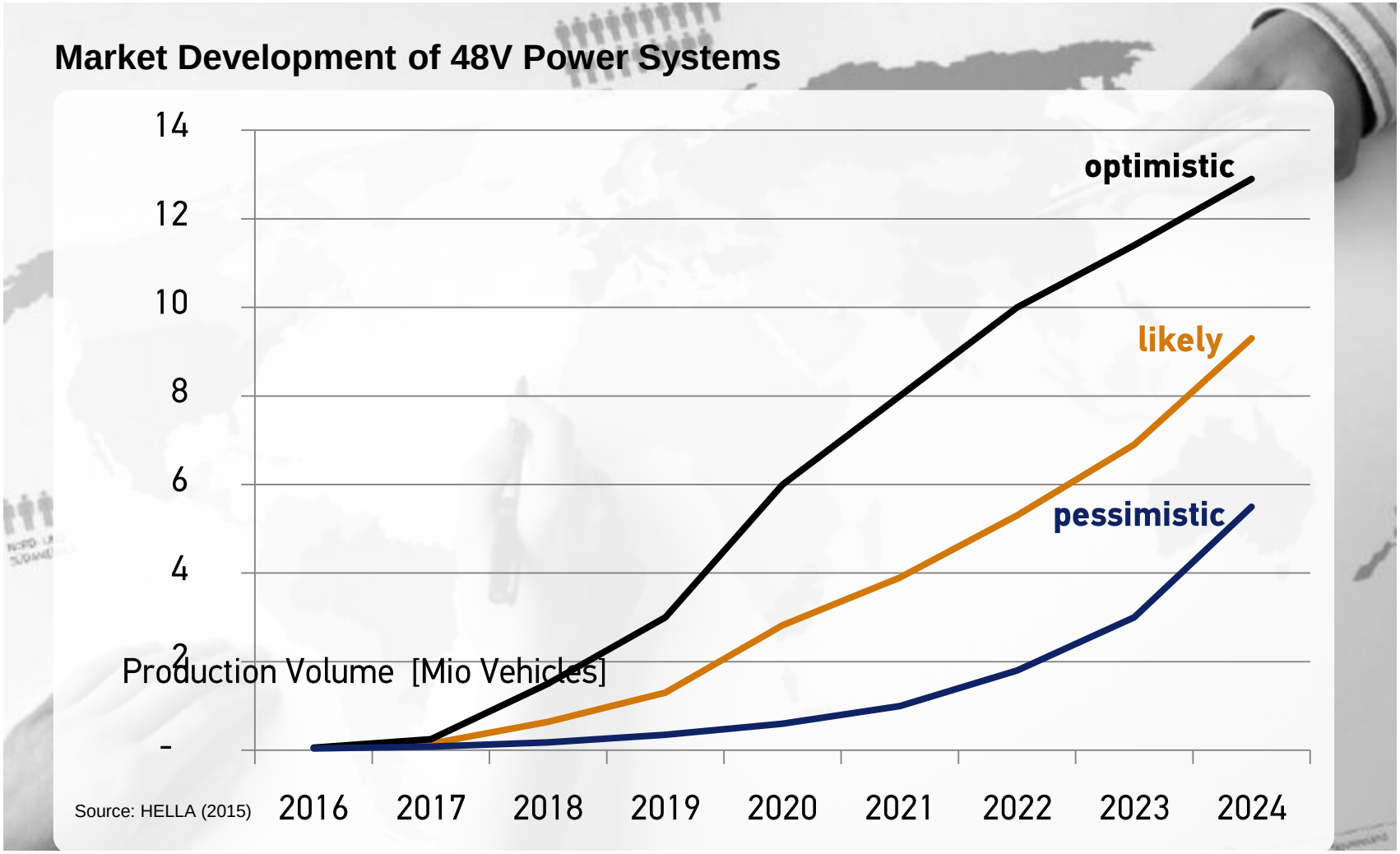
48V Power Systems





Energy Efficiency

48V Power System is Steadily Gaining in Importance in the Future



HELLA Electronics
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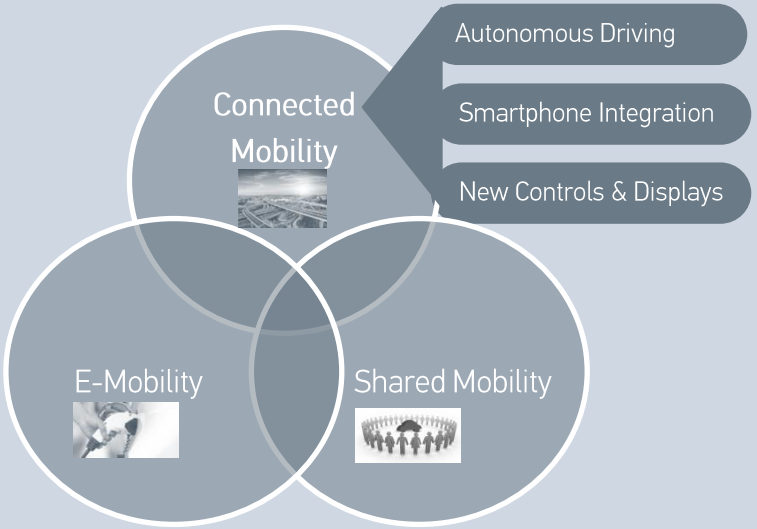
Connectivity

HELLA Benefits from Market Trends Connectivity – Directly and Indirectly

Future technologies are paving the way for new business models:

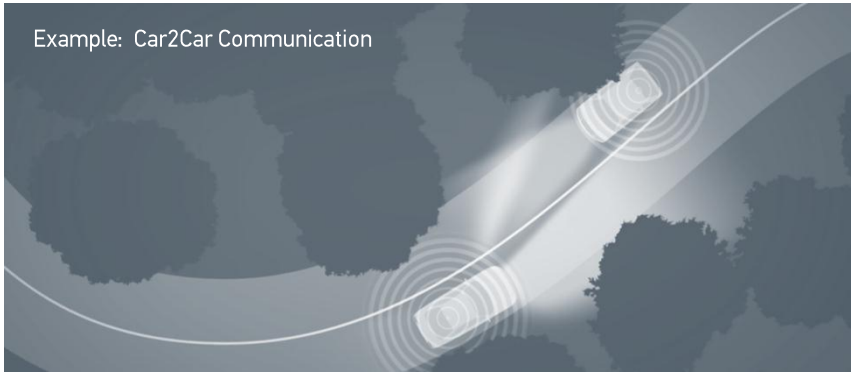


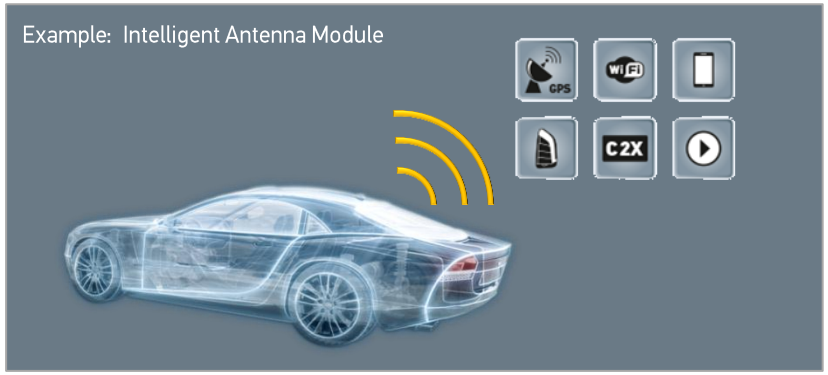
Source: Prime Research – World Car Trends 2015

HELLA is well prepared for offering future technologies ...

... **directly** linked to vehicle connectivity (e.g. smartphone connectivity)

... **indirectly** linked to connectivity by entering new business models (e.g. SHAKE)





Connectivity

Intelligent Damage Detection Gathers Momentum with Future Mobility

// FEATURES

- Structural Health and Knock Emission Sensors integrated in bumper or PDC bracket to measure and analyze vibrations (structure borne sound technology)
- Damage alarm message is forwarded to the BCM, which forwards information (e.g. photo or video) to driver's smartphone or OEM's call centers
- Light carpet is switched on (→ symbiosis of HELLA electronics and lighting)

SHAKE

// BENEFITS

- Transparency about damage location, time and damage type
- Right allocation of person who caused the damage mainly for car rental, leasing and sharing
- Immediate information (e.g. workshop, insurance claim processing)
- Modular system architecture by intelligent sensor nodes at front and/or rear bumper

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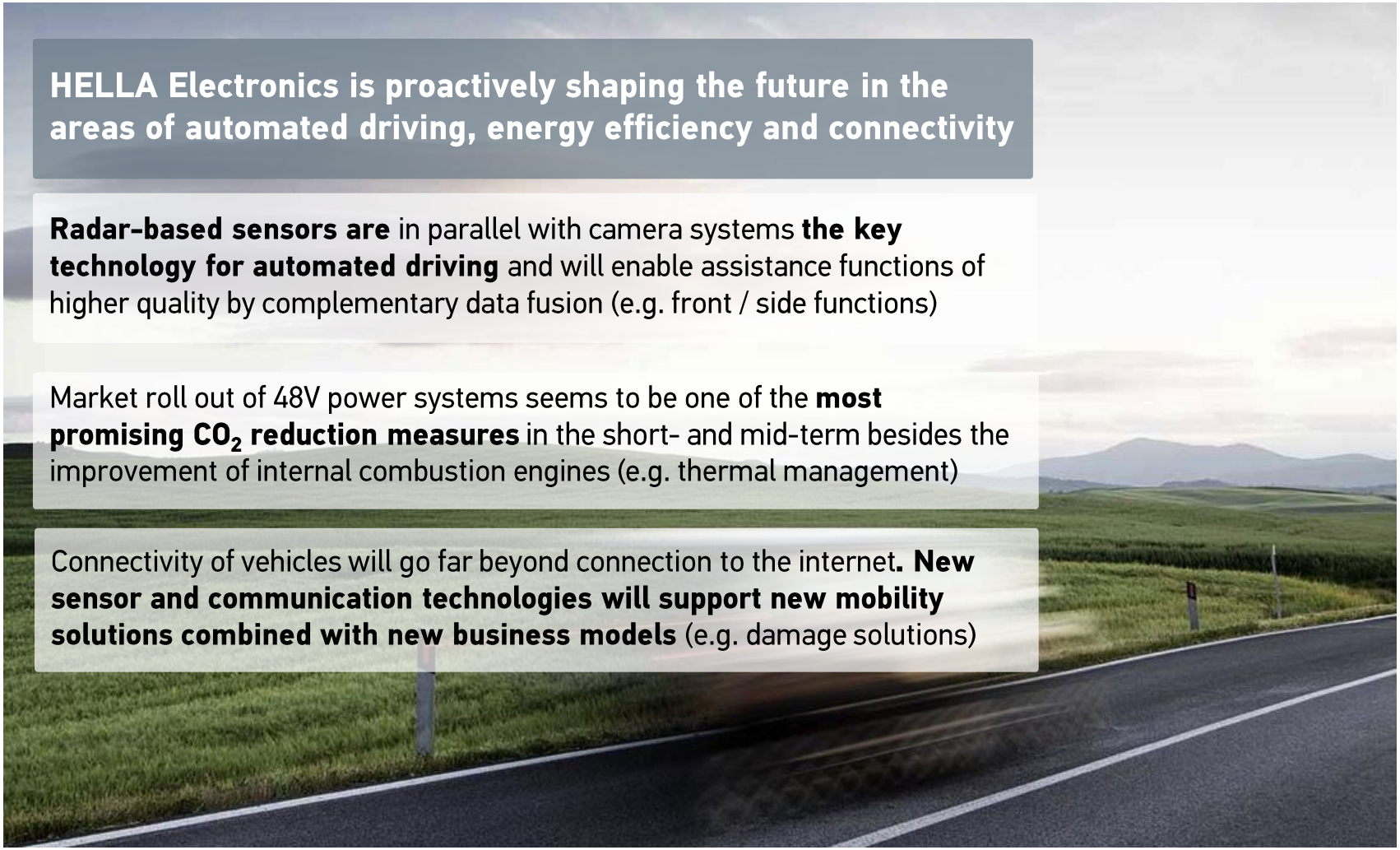
Conclusion

HELLA Electronics as Key Success Factor for Future of Mobility



HELLA Electronics is proactively shaping the future in the areas of automated driving, energy efficiency and connectivity

Radar-based sensors are in parallel with camera systems **the key technology for automated driving** and will enable assistance functions of higher quality by complementary data fusion (e.g. front / side functions)

Market roll out of 48V power systems seems to be one of the **most promising CO_2 reduction measures** in the short- and mid-term besides the improvement of internal combustion engines (e.g. thermal management)

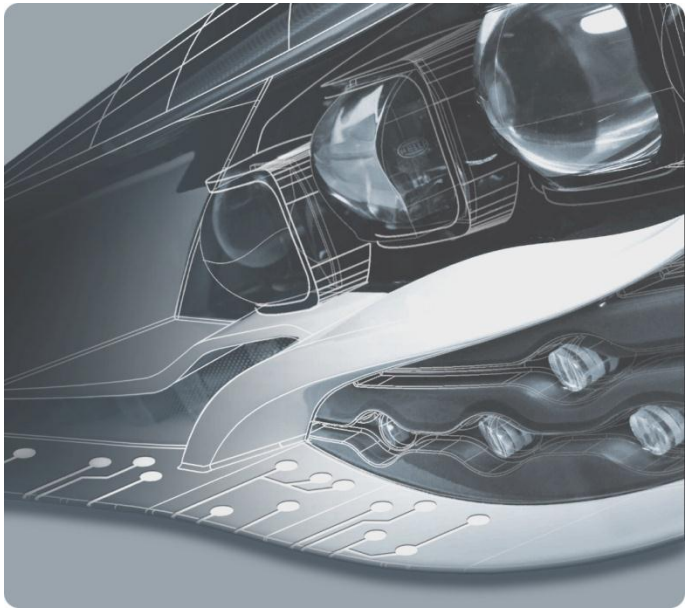
Connectivity of vehicles will go far beyond connection to the internet**. New sensor and communication technologies will support new mobility solutions combined with new business models** (e.g. damage solutions)

F-7761DE_C (2011-06)

Technology with Vision

Financial Overview and Perspectives

CAPITAL MARKETS DAY 2015



Dr. Wolfgang Ollig, CFO

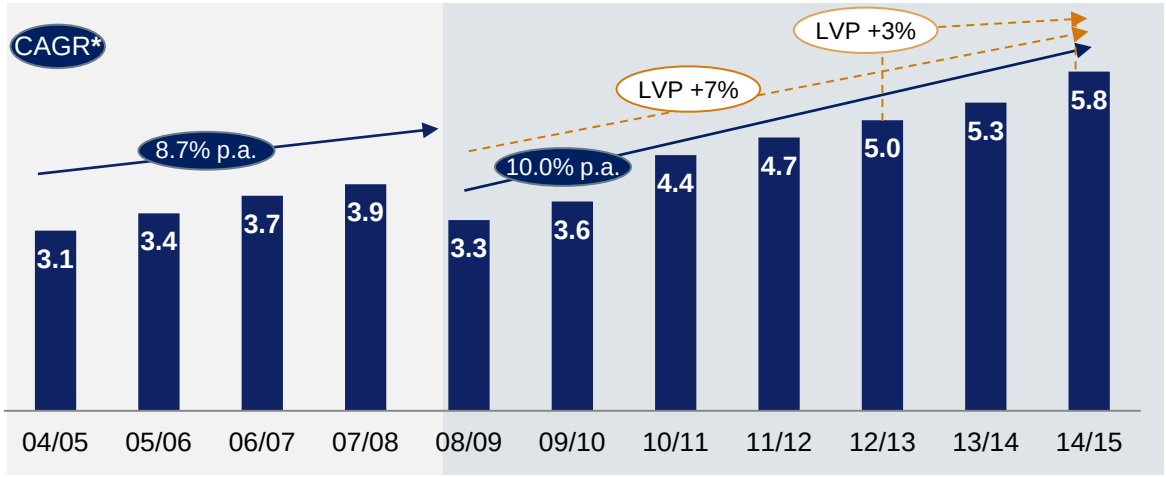
London

02 December 2015

HF-7761DE_C (2012-12)

Track record of steady growth across the cycle and resilience of business model

HELLA GROUP sales* in EURbn

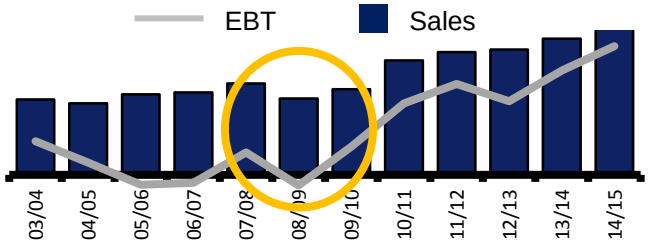


→ **Sustainable long term growth across the cycle** during the last ten years with a clear focus on organic growth (CAGR of 6.5% p.a. since FY 2004/05)

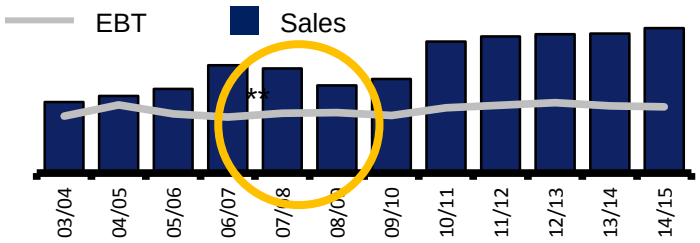
→ **Targeted growth trend continued**

→ **Organic growth** of the HELLA GROUP **outperformed** the automotive market by **>5%**-points in the **last 3 years**

Automotive*



Aftermarket*

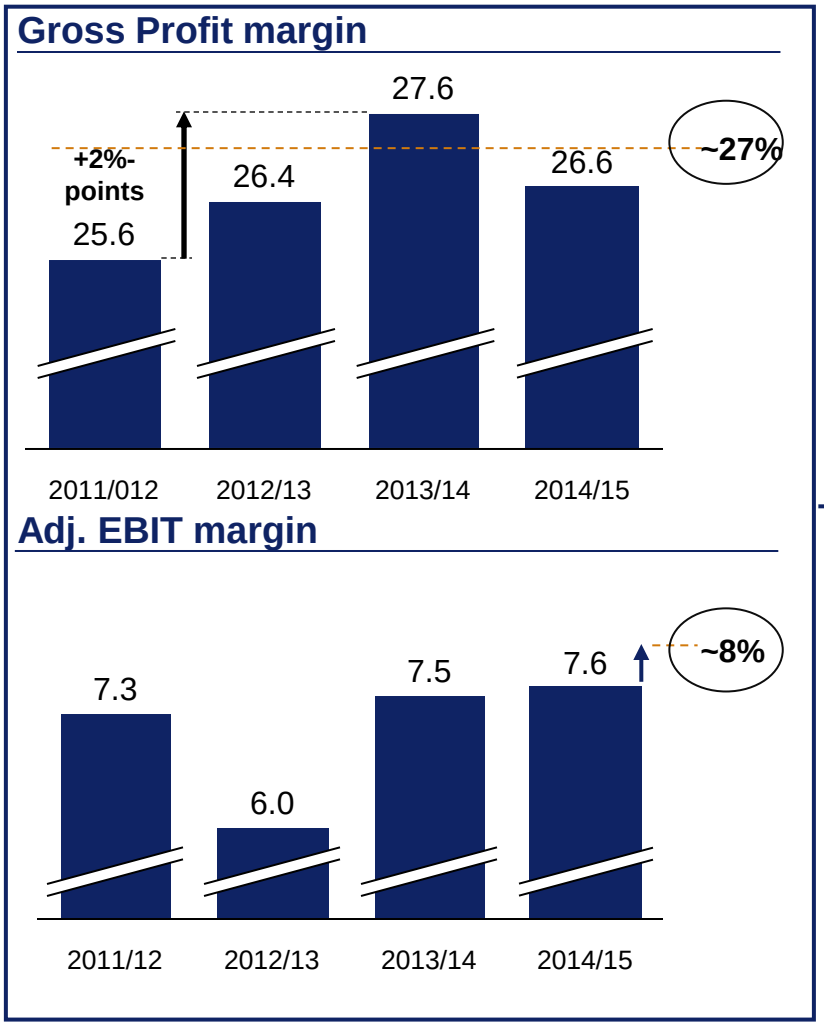


→ **Resilient business model** with **stable cash flow generation** through strong share of aftermarket business

*Cumulated Annual Growth Rate; sales as reported w/o adjustments for consolidation or accounting changes

Competitive Gross Profit margin and mid-term EBIT margin potential

% sales



Gross Profit margin

Improvement of **GP margin achieved**

- Improvement driven by **innovative product portfolio** and **operational excellence** (LiON)
- Deviations from +/- 27% driven by **segment mix, one-offs** and **new launches in** high tech products
- Launch support especially in H1 FY15/16

Gross Profit margin level ~27% regarded as industry competitive

EBIT margin

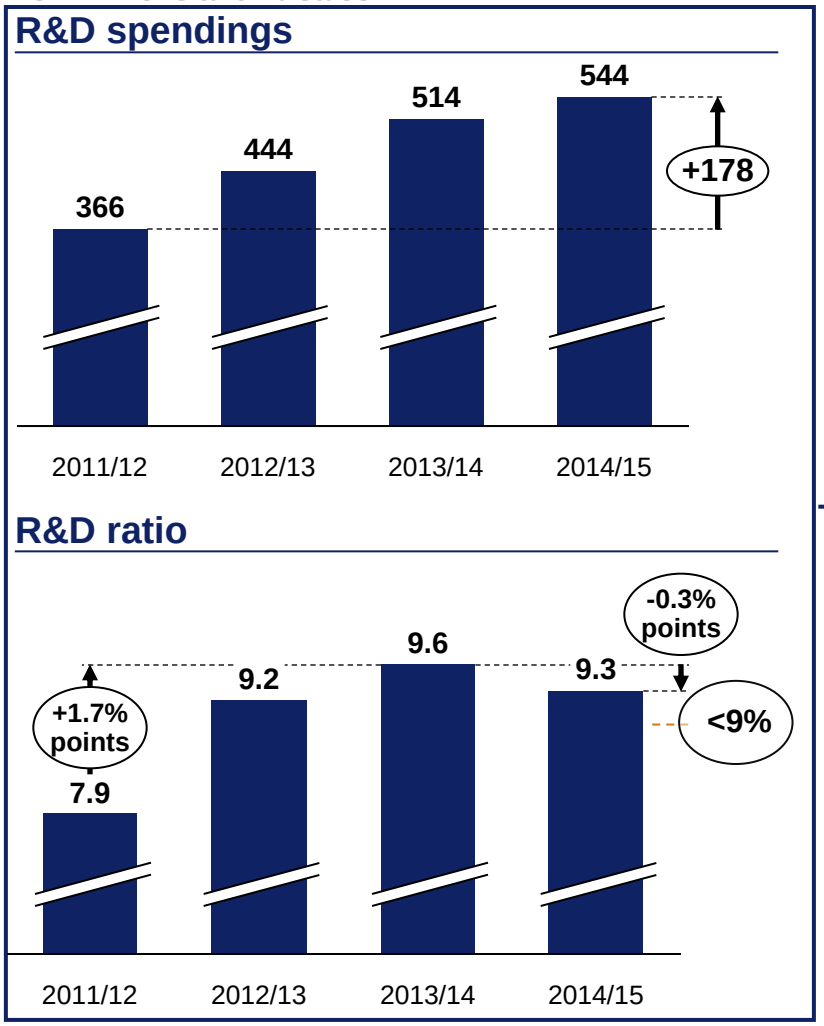
Improvement of **adj. EBIT margin achieved**

- EBIT reduction in FY 12/13 due to investment into future growth and globalization platform (e.g. increased R&D expenses)
- **Scale effects** and **increased efficiency** on structural costs drive margin
- FY15/16 affected by ramp-up expenses

Over the cycle, mid to long-term adjusted EBIT margin of ~**8% feasible**

Continued high R&D as basis for future growth

EUR millions and % sales



R&D

Strong focus on innovations

- Significant R&D investments in previous years set the basis for **strong top line future growth**
- Build-up of **local know-how**, high investment in **new technologies** (basic research), increased product complexity and **new product categories** (e.g. radar) drove recent expenses

Continuous high R&D spending to maintain technology leadership position

R&D ratio

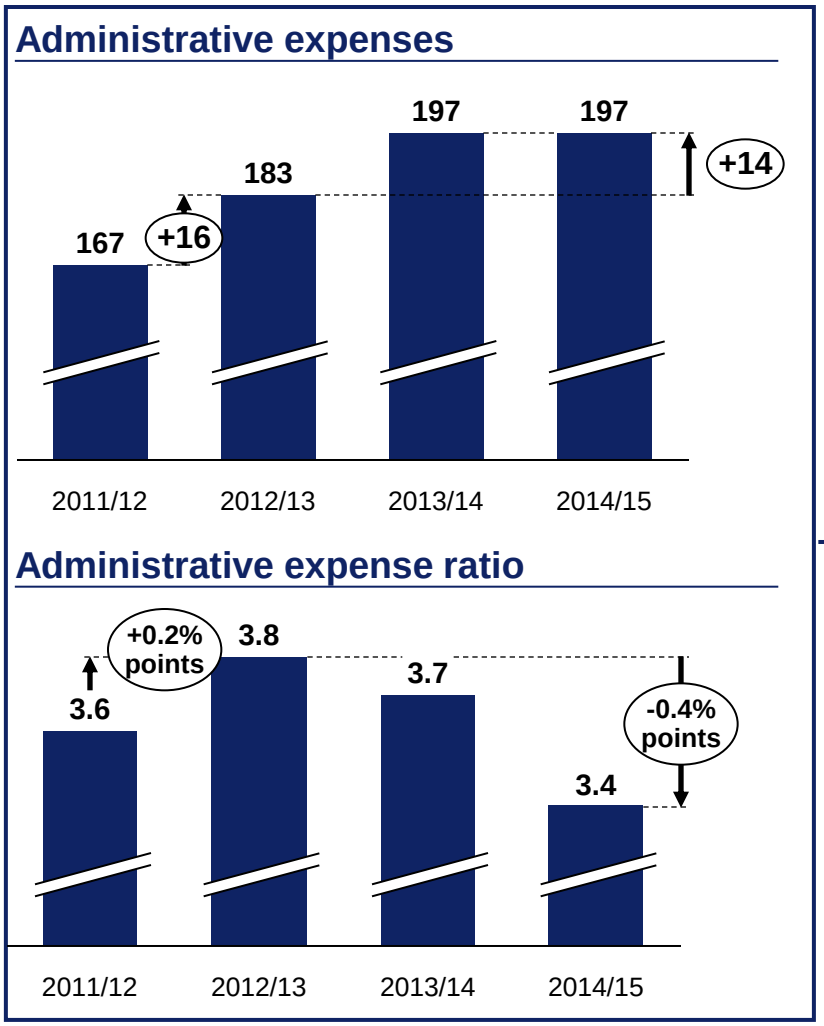
Balance between investments and efficiency

- Higher ratio compared to peers underpins **innovation track record**
- Recent and future R&D ratio improvement by **ongoing efficiency-increases** of teams and scale effects
- Roll-out of **high tech products**
- Ratio itself no optimization target

Mid to long-term reduction <9% feasible

Proven ability to manage costs

EUR milllions and % sales



Admin expenses

Dedicated improvement programs set-up

- Investments in global corporate center network ensure lean administrative processes
- In FY 15/16 further spendings on employee qualification, infrastructure and implementation of standards

Continued focus on global structure to ensure competitiveness

Admin ratio

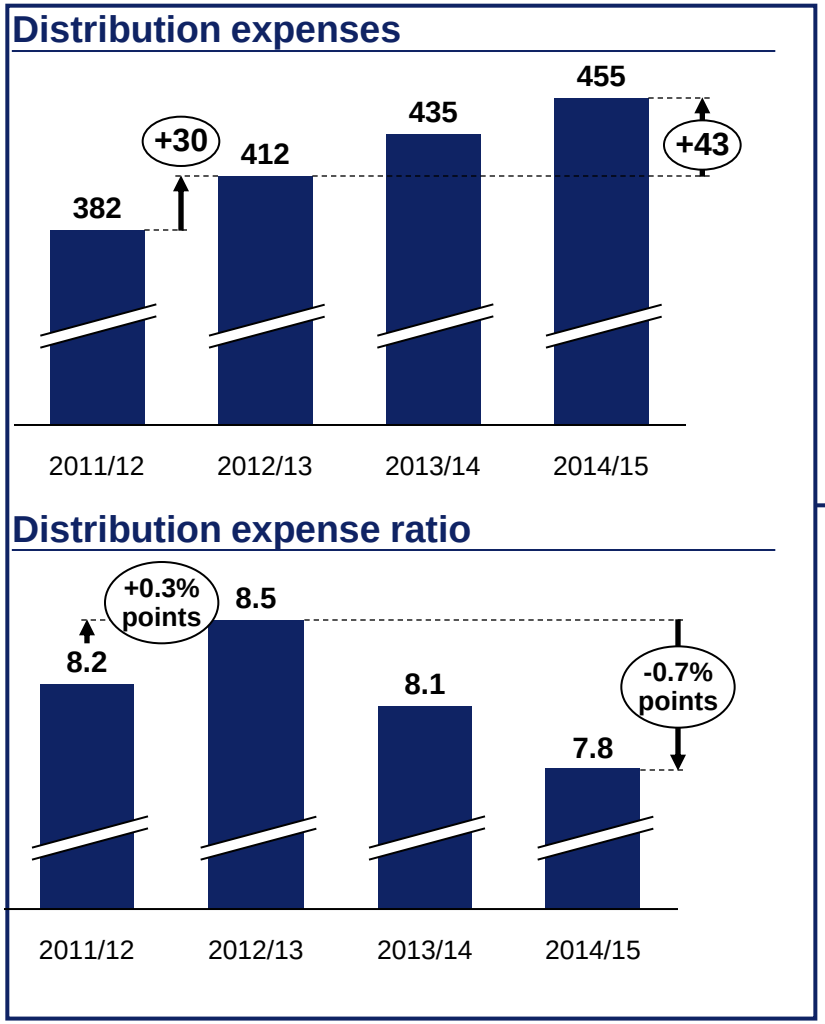
Performance oriented organization

- Efficiency gains through re-location (incl. temporary double-functions) to best cost countries and shared service centers improved OTD and TTM processes
- Continuous optimization through operational excellence improvement initiatives (e.g. LiON)
- Short term constant ratio expected

Process improvements and scale effects drive ratio, long term reduction possible

Proven ability to manage costs

EUR milllions and % sales



Distribution expenses

Under-proportional increase of variable costs

- Global aftermarket network main cost driver
- IAM distribution network and European wholesale network extended
- Ongoing improvements monitored e.g. reduction of overhead functions in sales companies, optimized logistics concept

Development of costs well on track

Distribution expense ratio

Improvements of ratio achieved

- Higher ratio compared to peers due to high aftermarket share
- Investments in global distribution network until FY12/13
- Ratio reduced by efficiencies gains and declining aftermarket business
- Currently increased investments in e-commerce platform

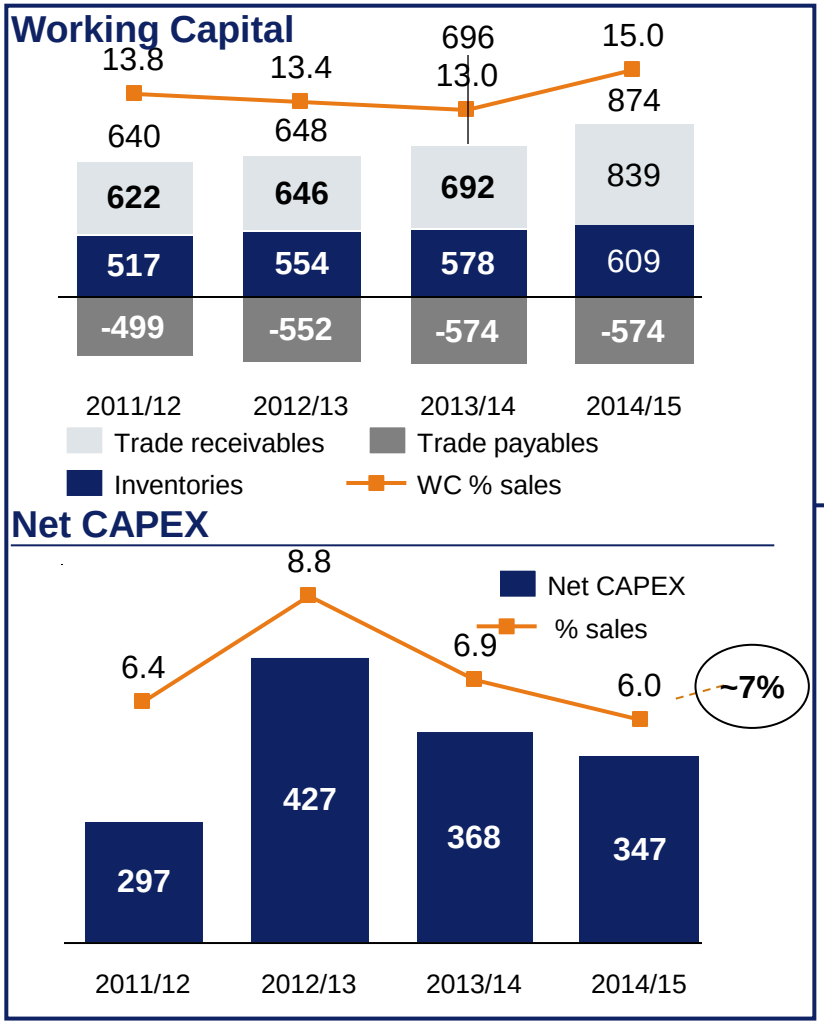
Short to mid-term optimization potential limited

Continuous measure generation to facilitate operating leverage

	Main achievements	Continuous challenges	Actions
Lighting	▪ Production network optimized ▪ Regular design-to-cost workshops during development phase	▪ Roll out complex (LED) projects: HR qualifications, production process, quality of components, supplier certification ▪ Reduction of non-quality expenses	→ Local support from technology hubs → Thorough enforcement of improvement programs → Implement recent "Lessons-learned"
Electronics	▪ Global development network established, optimized and extended ▪ Multiple sourcing strategy implemented	▪ Global competitive TtM organization	→ Improve efficiency in supply chain and own value added
Aftermarket & Special Applications	▪ Overhead functions reduced with optimized logistics for sales comps ▪ Low-cost production in Romania	▪ Further harmonization of NORDIC FORUM (e.g. reporting, IT, procurement), strengthen structures ▪ Leverage of inventories	→ Improve key account organization → Improve customer penetration
Corporate	▪ Corporate center structure established ▪ Overhead functions reduced	▪ Qualification of employees to enable complex production & quality monitoring ▪ Increase efficiency of corporate center structure ▪ Address highly qualified people	→ Investments in HR base → HR talent review → Strengthening 2nd mgmt. level

Clearly directed investments and active Working Capital management

EUR milllions and % sales



Working Capital

Revenue growth, expansion and active management drive WC

- Regional expansion to Asia (increase in receivables)
- Inventory mainly tied to efforts to improve product availability in Aftermarket (increase inventories)
- Currency effects influence WC
- Continuing optimization programs in logistics in place

Net CAPEX

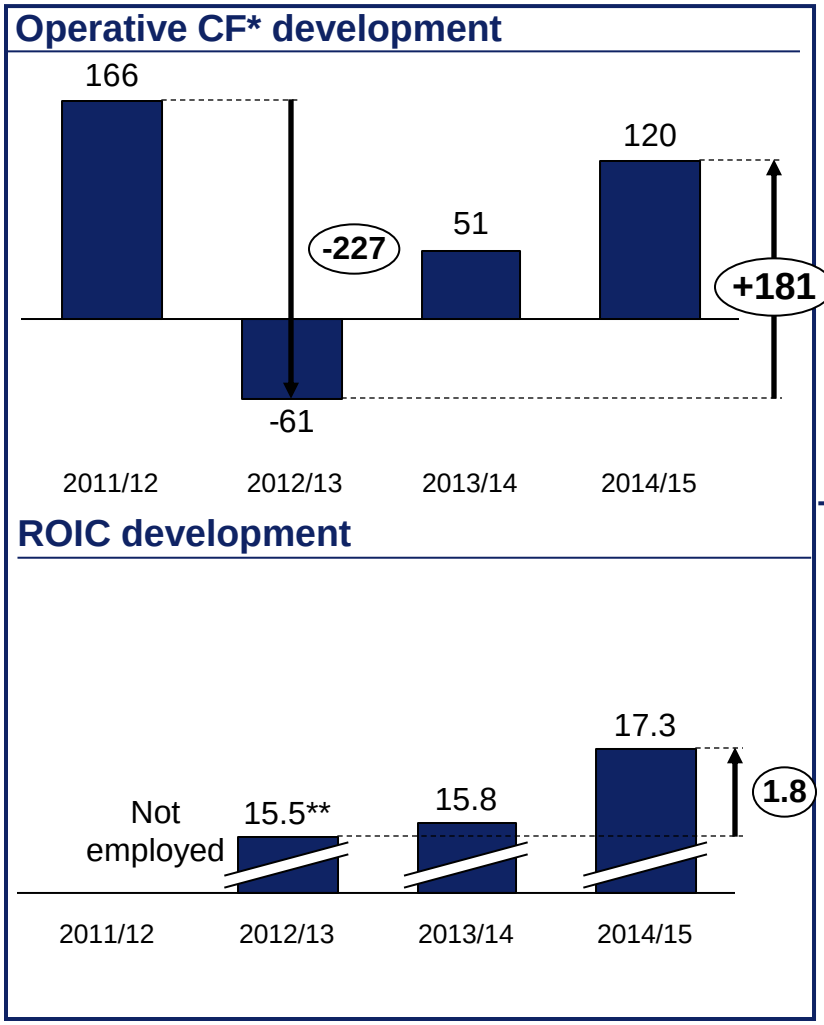
Net CAPEX down after globalization

- Increase in capex in FY12/13 to significant investments in global footprint
- Continuous investments in customer-specific equipment with increased product complexity needed
- Reimbursements around 130 mill. EUR ease need for CAPEX

Net CAPEX ratio around 7% needed to facilitate organic growth

Strong cash flow and ROIC improvement achieved after globalization

EUR milllions and % IC



Operative CF

After FY11/12 consistent improvement

- FY12/13 influenced by high CAPEX as part of the strategic growth program as well as build-up of inventories driven by higher sales and higher expenses in key technologies and innovations
- Increase driven by profitable top-line growth and under-proportional increase of cash-effective working capital
- FY15/16 will by affected by supplier case

Increase in line with expectations

ROIC

ROIC implemented as KPI

- HELLA employs Return on Invested Capital (ROIC) as a further performance indicator in FY 2012/13
- ROIC improvement to 17.3% due to increased operating leverage

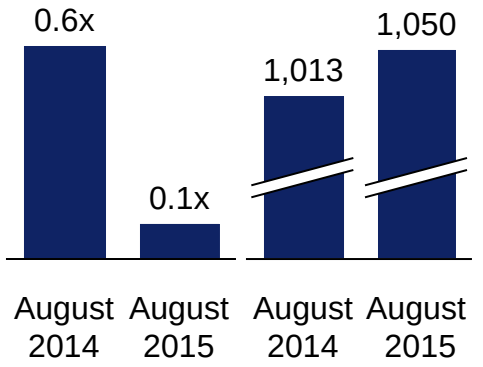
Increasing capital efficiency during the last 2 years

*Operative Cash Flow before dividends and net capital expenditure on financial assets or shares in associates (excluding cash restructuring payments)
**Before reclassification of income from securities and net other financial income/expenses

Capital structure provides flexibility for the long-term growth

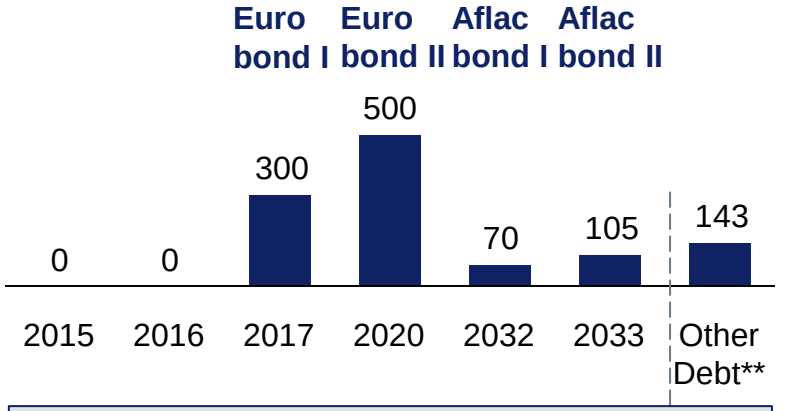
Solid capital structure

Net debt/ EBITDA



Cash & assets

Debt and maturity profile*, EUR millions



Additional Revolving Credit (2015) (1+1+5) of EUR 450m with 10 core banks as **back-up facility**

- → Capital-market-oriented capital structure
- → **Good liquidity profile** and consistent liquidity management
- → **EUR 87m dividends** (0.77EUR/share) paid September 2015

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
- → Financing of long-term growth strategy
- → Acquisition firepower

* As of May, 2015; Euro bond I: 1.15%, Euro bond II: 2.375%, Aflac bonds hedged values **Mostly short-term

Company specific outlook as given in guidance

Sales	→ **Growth story on track,** mid to high single-digit percentage growth for the full FY 15/16 expected → **Potential for medium term- market outperformance** exists through product pipeline
EBIT	→ **FY 15/16 expected to be below previous year due to one-off charges** → Master high-tech LED roll-outs
One-off charges (supplier failure)	→ **Extraordinary event** with effects of up to EUR 50m, predominantly in Q1 – Q2 FY 15/16
EBIT adjusted by one-offs for supplier failure and restructuring	→ **Mid** to **high single-digit percentage** growth for the full FY 15/16 targeted

Technology with Vision

Thanks for your attention

Dr. Kerstin Dodel
Investor Relations

Office phone	+49 2941 38 - 1349
Facsimile	+49 2941 38 - 471349
Mobile phone	+49 174 3343454
E-Mail	kerstin.dodel@hella.com
Internet	www.hella.com