



# AUTOLIV POST CMD CONFERENCE

**Autoliv**



Welcome

US NDR – Post CMD'17

Jan Carlson

Chairman, President & CEO

Creating more value  
Saving more lives

# Agenda

- |             |  |
|-------------|--|
| 09:45-10:30 | <b>Welcome Investors and Analysts</b>                                    |
| 10:30-11:15 | <b>Formal Presentation – Jan Carlson (Chairman, President &amp; CEO)</b> |
| 11:15-11:45 | <b>Q&amp;A</b>   |
| 11:45-12:00 | <b>Wrap-Up</b>   |

# Safe Harbor Statement\*

This presentation contains statements that are not historical facts but rather forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include those that address activities, events or developments that Autoliv, Inc. or its management believes or anticipates may occur in the future. All forward-looking statements, including without limitation, statements related to the Company's strategic review of its operating structure or the terms, timing or structure of any such transaction as a result of such review, if any; the outlook for Passive Safety and Electronics as separate businesses; statements related to the future performance of the Company or of any such businesses if any such transaction is completed; other targets regarding the Company's performance as a single entity; management's examination of historical operating trends and data, as well as estimates of future sales, operating margin, cash flow, effective tax rate or other future operating performance or financial results, are based upon our current expectations, various assumptions and/or data available from third parties. Our expectations and assumptions are expressed in good faith and we believe there is a reasonable basis for them. However, there can be no assurance that such forward-looking statements will materialize or prove to be correct as forward-looking statements are inherently subject to known and unknown risks, uncertainties and other factors which may cause actual future results, performance or achievements to differ materially from the future results, performance or achievements expressed in or implied by such forward-looking statements. In some cases, you can identify these statements by forward-looking words such as "estimates", "expects", "anticipates", "projects", "plans", "intends", "believes", "may", "likely", "might", "would", "should", "could", or the negative of these terms and other comparable terminology, although not all forward-looking statements contain such words. Because these forward-looking statements involve risks and uncertainties, the outcome could differ materially from those set out in the forward-looking statements for a variety of reasons, including without limitation, changes in light vehicle production; fluctuation in vehicle production schedules for which the Company is a supplier, changes in general industry and market conditions or regional growth or decline; changes in and the successful execution of our capacity alignment, restructuring and cost reduction initiatives and the market reaction thereto; loss of business from increased competition; higher raw material, fuel and energy costs; changes in consumer and customer preferences for end products; customer losses; changes in regulatory conditions; customer bankruptcies, consolidations, or restructurings; divestiture of customer brands; unfavorable fluctuations in currencies or interest rates among the various jurisdictions in which we operate; component shortages; market acceptance of our new products; costs or difficulties related to the integration of any new or acquired businesses and technologies; continued uncertainty in pricing negotiations with customers; successful integration of acquisitions and operations of joint ventures; successful implementation of strategic partnerships and collaborations; our ability to be awarded new business; product liability, warranty and recall claims and investigations and other litigation and customer reactions thereto; (including the resolution of the Toyota recall); higher expenses for our pension and other postretirement benefits, including higher funding requirements for our pension plans; work stoppages or other labor issues; possible adverse results of pending or future litigation or infringement claims; our ability to protect our intellectual property rights; negative impacts of antitrust investigations or other governmental investigations and associated litigation relating to the conduct of our business; tax assessments by governmental authorities and changes in our effective tax rate; dependence on key personnel; legislative or regulatory changes impacting or limiting our business; political conditions; dependence on and relationships with customers and suppliers; the uncertainty as to which strategic alternatives may be available with respect to the Electronics business, whether any transaction will be commenced or completed as a result of such review, and the timing and value of any such transaction; risks related to the potential separation of the Electronics business; and other risks and uncertainties identified under the headings "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Reports and Quarterly Reports on Forms 10-K and 10-Q and any amendments thereto. For any forward-looking statements contained in this or any other document, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995, and we assume no obligation to update publicly or revise any forward-looking statements in light of new information or future events, except as required by law.

*(\*) Non-US GAAP reconciliations are disclosed in our regulatory filings available at [www.sec.gov](http://www.sec.gov) or [www.autoliv.com](http://www.autoliv.com)*

# Automotive industry in its largest transformation ever

## Automotive Mega trends



AUTOMATED DRIVING & CONNECTIVITY



NEW MOBILITY

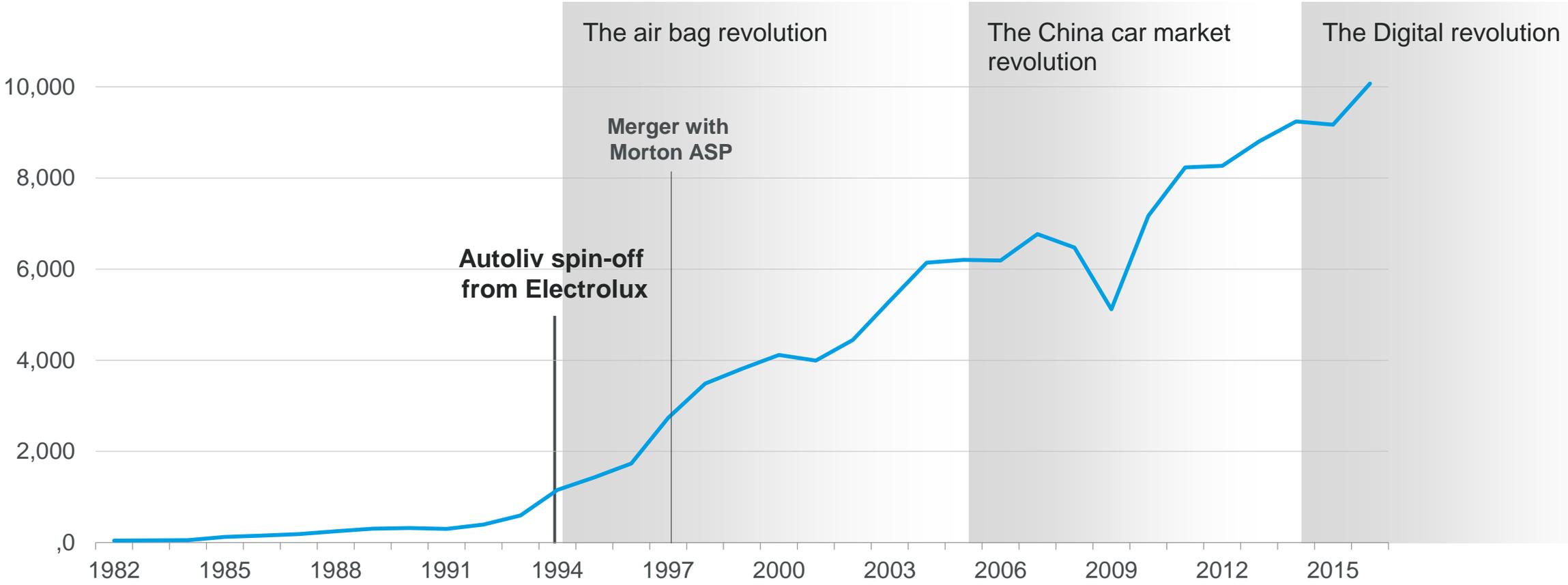


CLEAN MOBILITY

# A historical decision that resulted in a world leader

## Autoliv Group

US\$ (millions)



# Autoliv – Stronger than ever



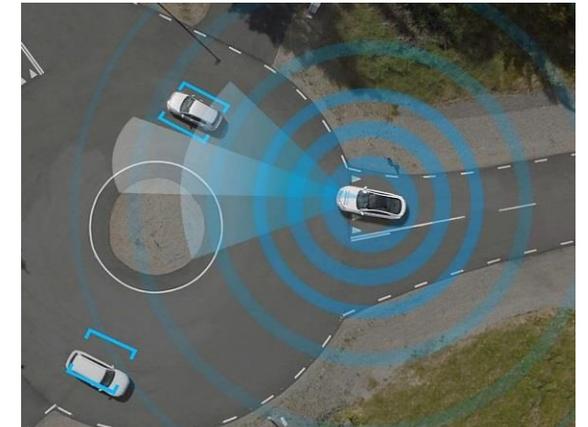
QUALITY LEADER in all parts and aspects of our business



PEOPLE AND CULTURE  
We rely on the skills of our people



WORLD LEADING FOOTPRINT  
in manufacturing and engineering



INNOVATION  
builds the long term success

# Our Strategies to Stay Ahead



**Quality** – Zero defects by flawless execution



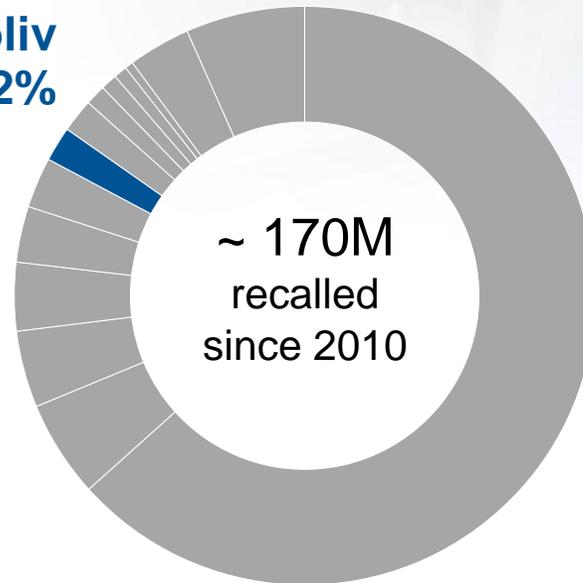
**One Product One Process** to improve cost effectiveness and robustness



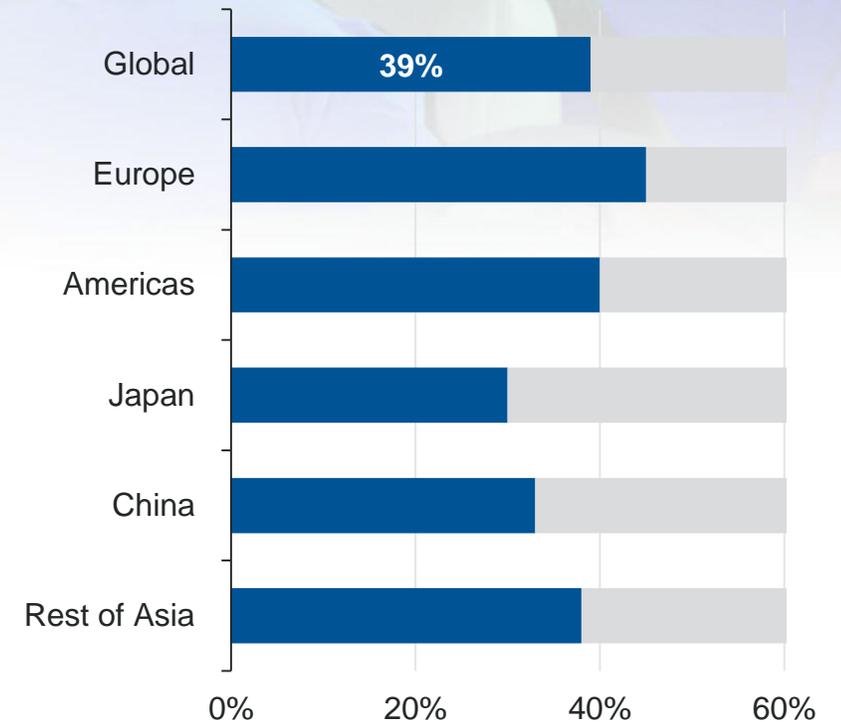
**Innovation** to lead industry in Real Life Safety

RECALLS\*

**Autoliv**  
2%



MARKET SHARE 2016\*\*



# Autoliv stronger than ever – with sustainability in focus

## **Autoliv's vision of Saving More Lives**

*Directly supports the UN Sustainable Development Goal no 3, Good Health and Well-being, focused on reducing global deaths and injuries from road traffic accidents by 50%.*



# A decade of transformation

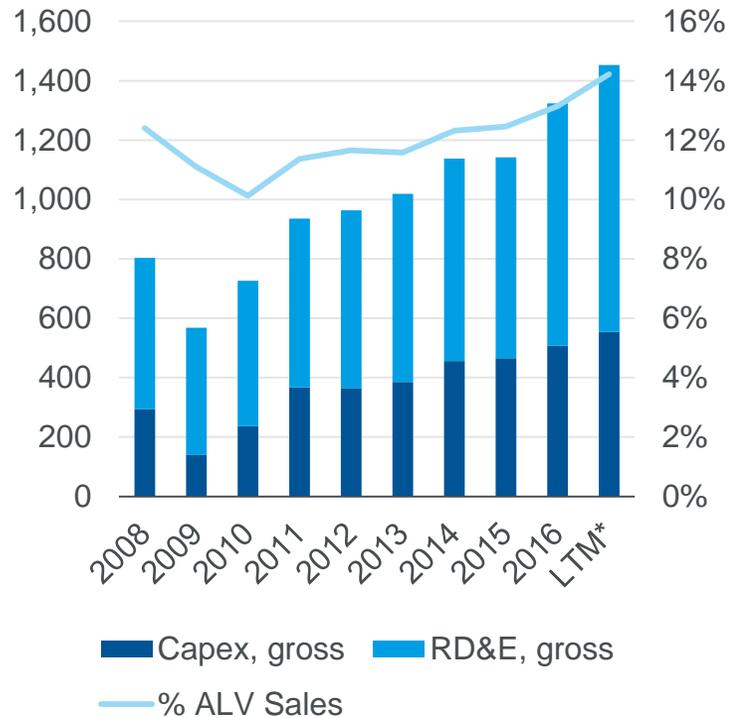
- Company transformed for the digital age
- Made substantial investments in technology, capacity and operational efficiency
- Made an already strong company even stronger
- Built Electronics into a world-leading entity
- Invested in vertical integration for cushions and inflators in China
- Supported the industry in difficult times
- Investment in technology for small car safety
- Building up steering wheels capacity in Eastern Europe
- Restructuring in South America
- Capacity alignment in Europe

*A new technology shift, a new evolution*

# A decade of transformation

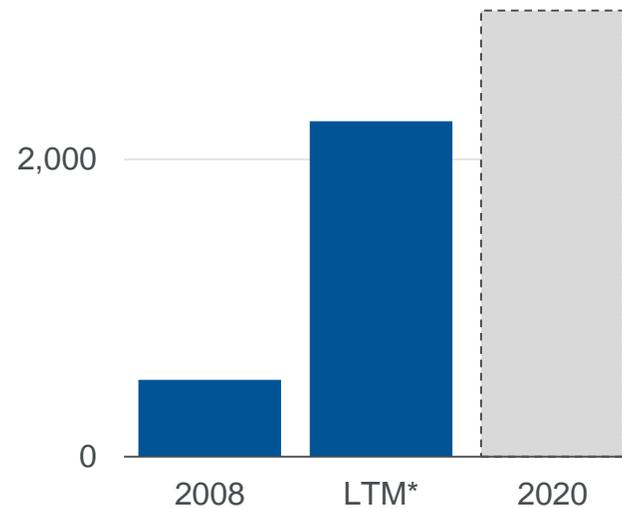
Built a new company and strengthened existing business further

## A decade of growth investments

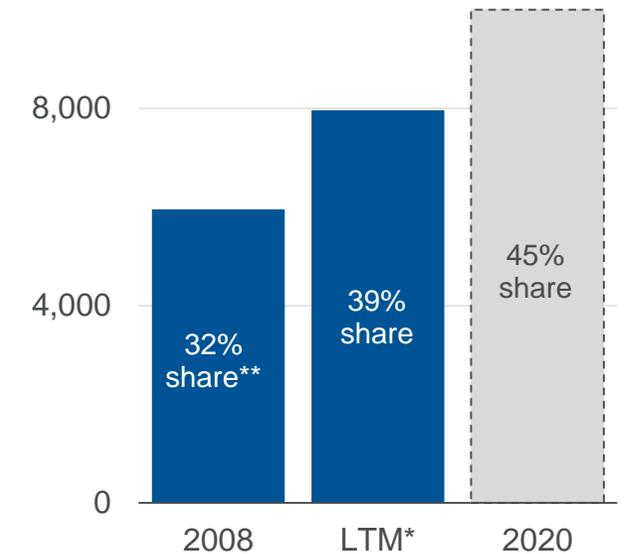


## Sales

### Electronics



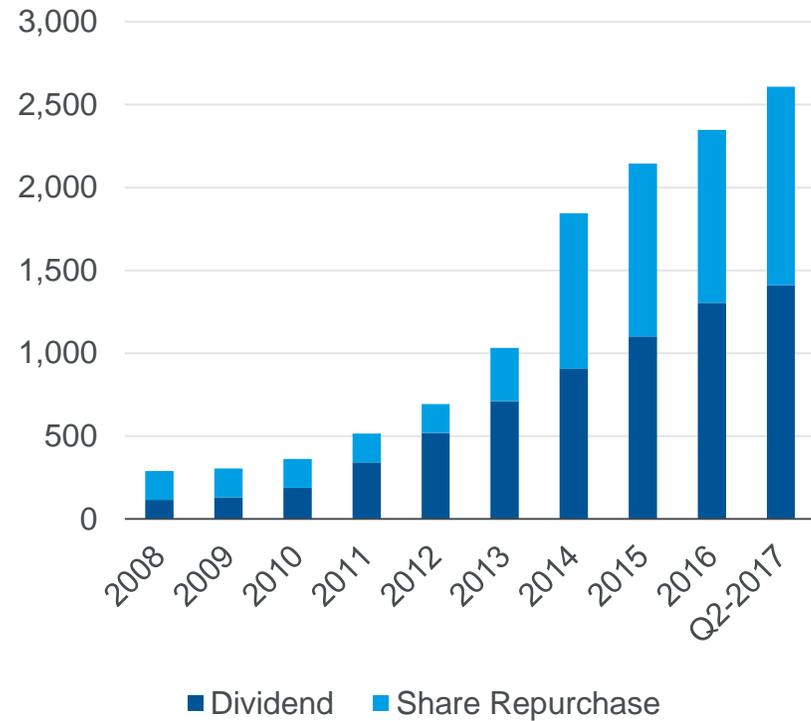
### Passive Safety



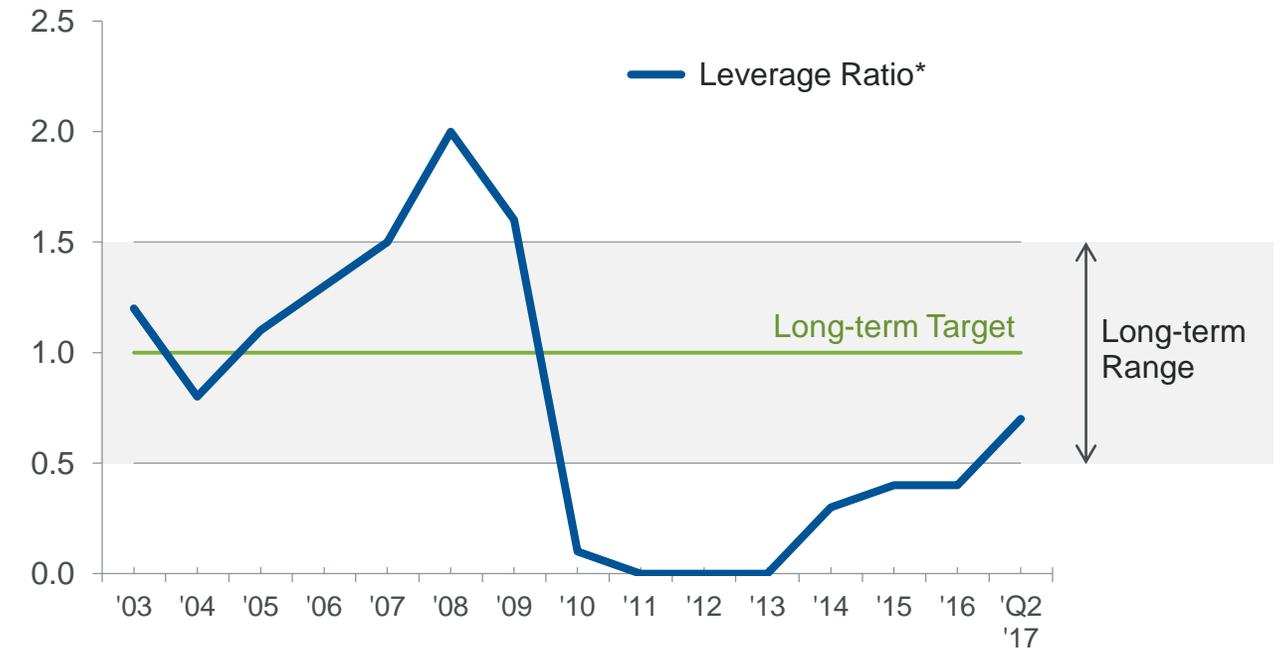
# A decade of transformation while creating Shareholder Value

## Increasing shareholder returns with a strong balance sheet and FCF conversion

**An accumulated \$2.6B returned to shareholders**  
US\$ Millions

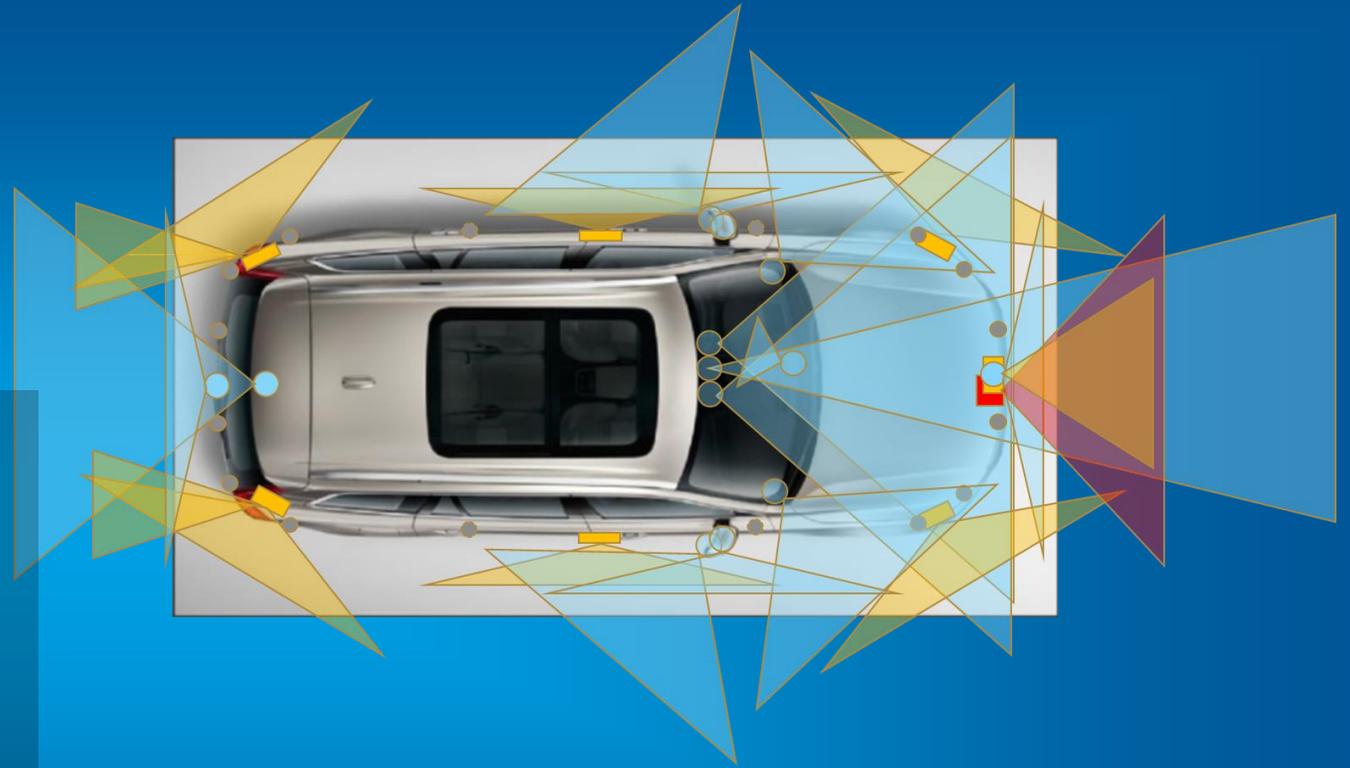


**Net Debt\* / EBITDA**  
Times



(\* Last Twelve month sales as of June 30, 2017.

# Our Transformation continues



# Strategic review of transition to stand alone entities

**Autoliv**

PRESS RELEASE

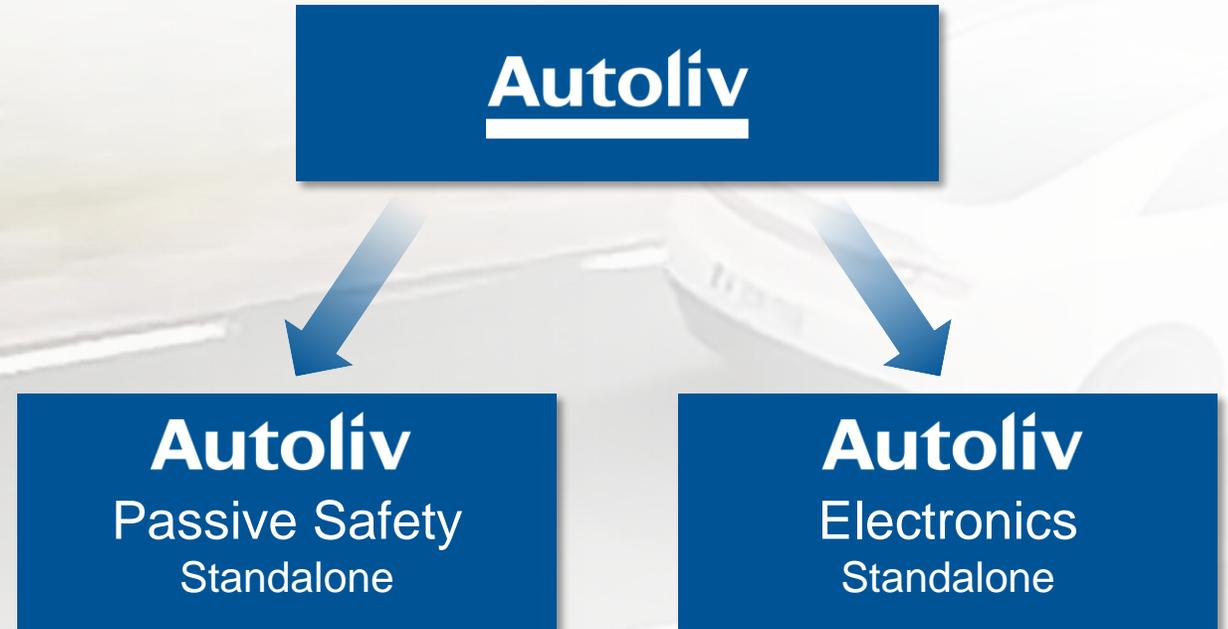
**Autoliv initiates strategic review of separating its business segments, Passive Safety and Electronics**

(Frankfurt, Germany, September 14, 2017) – Autoliv, Inc. (NYSE: ALV and SSE: ALIVsdb), the worldwide leader in automotive safety systems, today announced that its Board of Directors has instructed management to conduct a strategic review of its operating structure with the intent to create separate companies of its current business segments, Passive Safety and Electronics.

The intent is to create two publicly traded companies capable of addressing two distinct, growing markets with leading product offerings and thereby create additional value to for shareholders, customers and other stakeholders as compared to the current, combined structure of Autoliv. The strategic review process will evaluate this and other options. Although the strategic review has been initiated there is no guarantee that the review will result in any transaction, including a separation or listing of the businesses.

“The current operational model has served Autoliv very well, creating tremendous value for its shareholders and other stakeholders since the initial listing on the Stockholm stock exchange in 1994. Over the last decade our Electronics business has grown and matured next to our world leading Passive Safety business and today we have two distinct, successful businesses, each with its own unique business drivers. We believe it’s time to let them both individually maximize their potential,” said Jan Carlson, Chairman, President and CEO of Autoliv.

Electronics consists of Active Safety Products (automotive radars, cameras with driver assist systems,



# Different success factors shaping the future

## PASSIVE SAFETY



*MARKET & TECHNOLOGY*

*KEY PRIORITIES*

*CRITICAL  
COMPETENCES*

*ATTRACT TALENT*

*MANAGEMENT*

*WORKING  
ENVIRONMENT*

*KEY SELLING POINTS*

*CAPITAL MARKETS  
ATTRACTION*

## ELECTRONICS

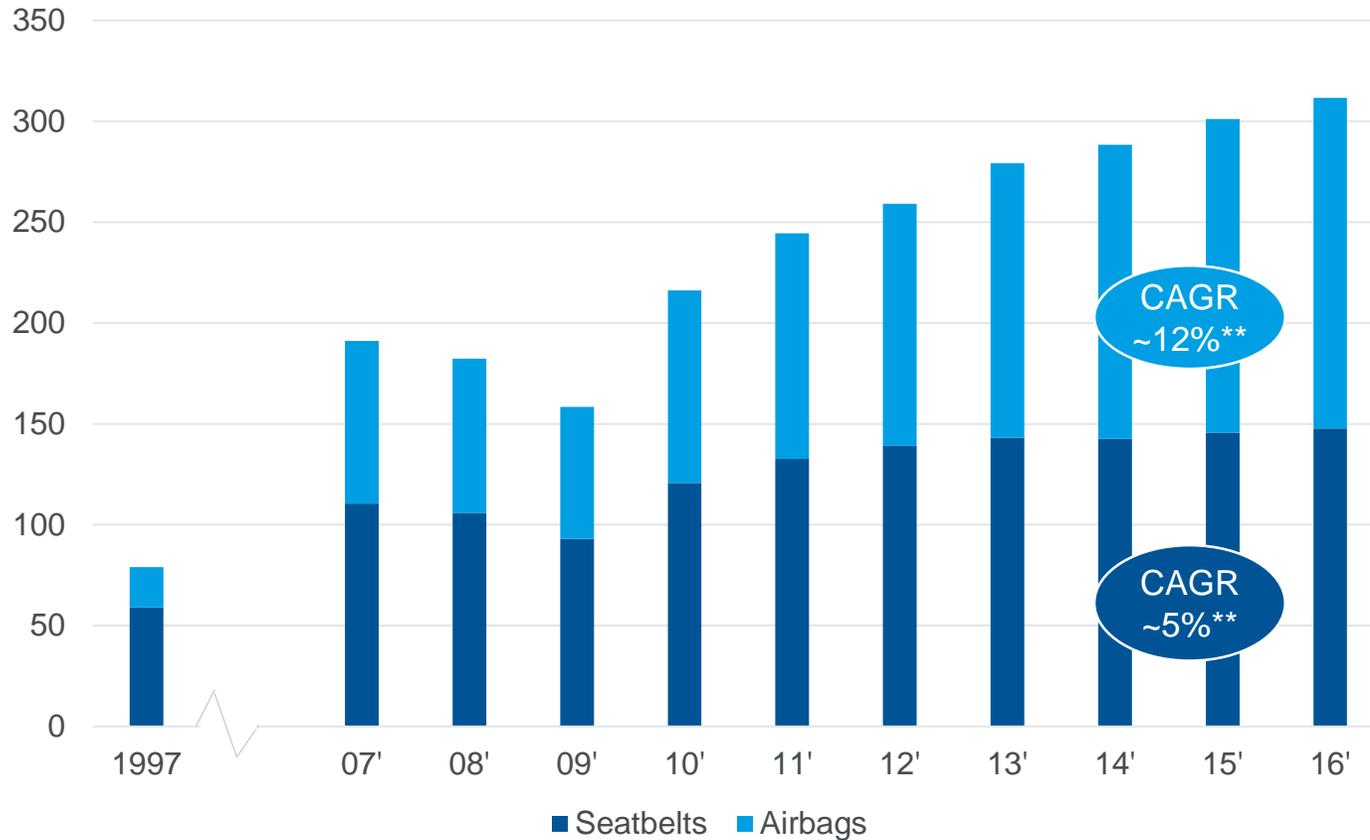




Passive Safety  
never in a better  
position

# A Winning Business Formula

Number of units  
(million)\*



Statistically, more than **3 airbags and seatbelts** from **Autoliv** have been delivered to **every vehicle** produced globally **last 10 years**

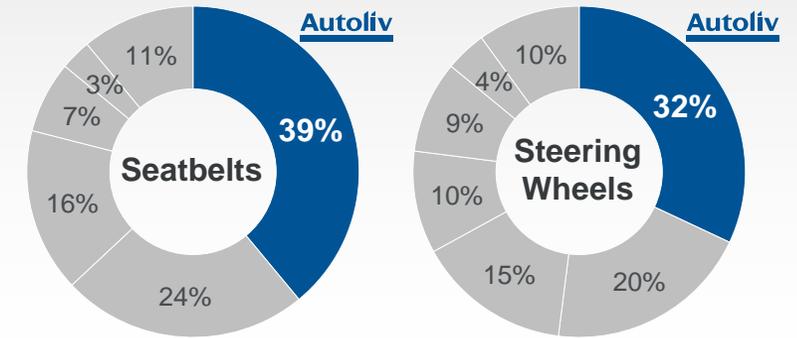
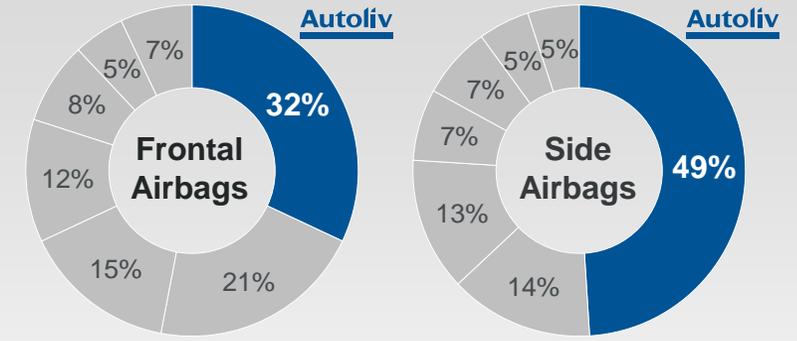
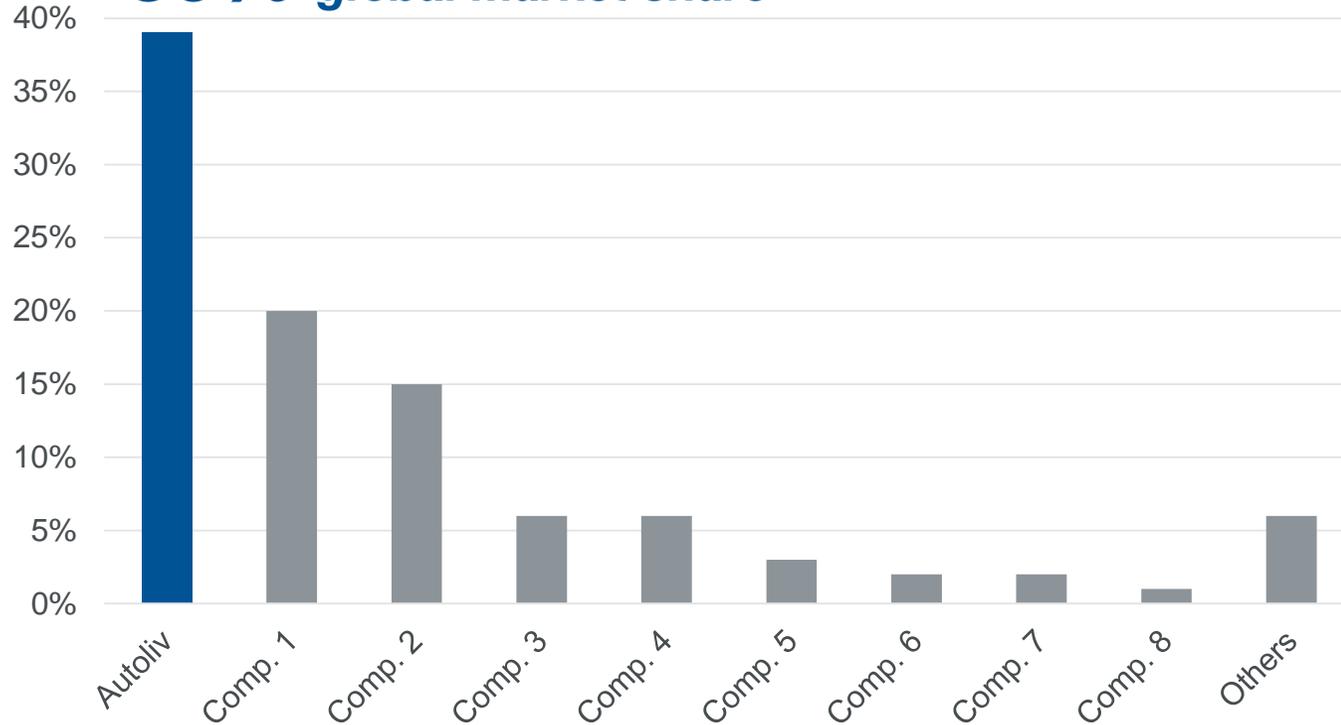
**1.3B**  
Airbags\*

**1.2B**  
Seatbelts\*

# A Winning Business Formula

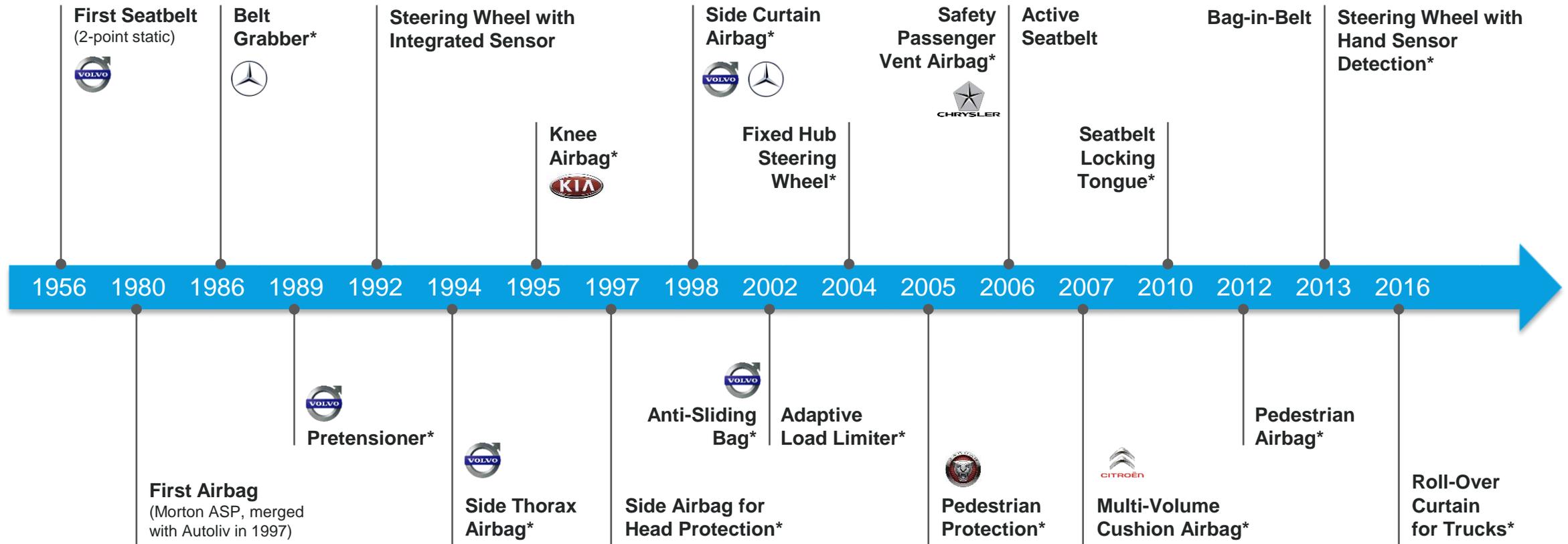
Today the global leader in passive safety

**39%** global market share



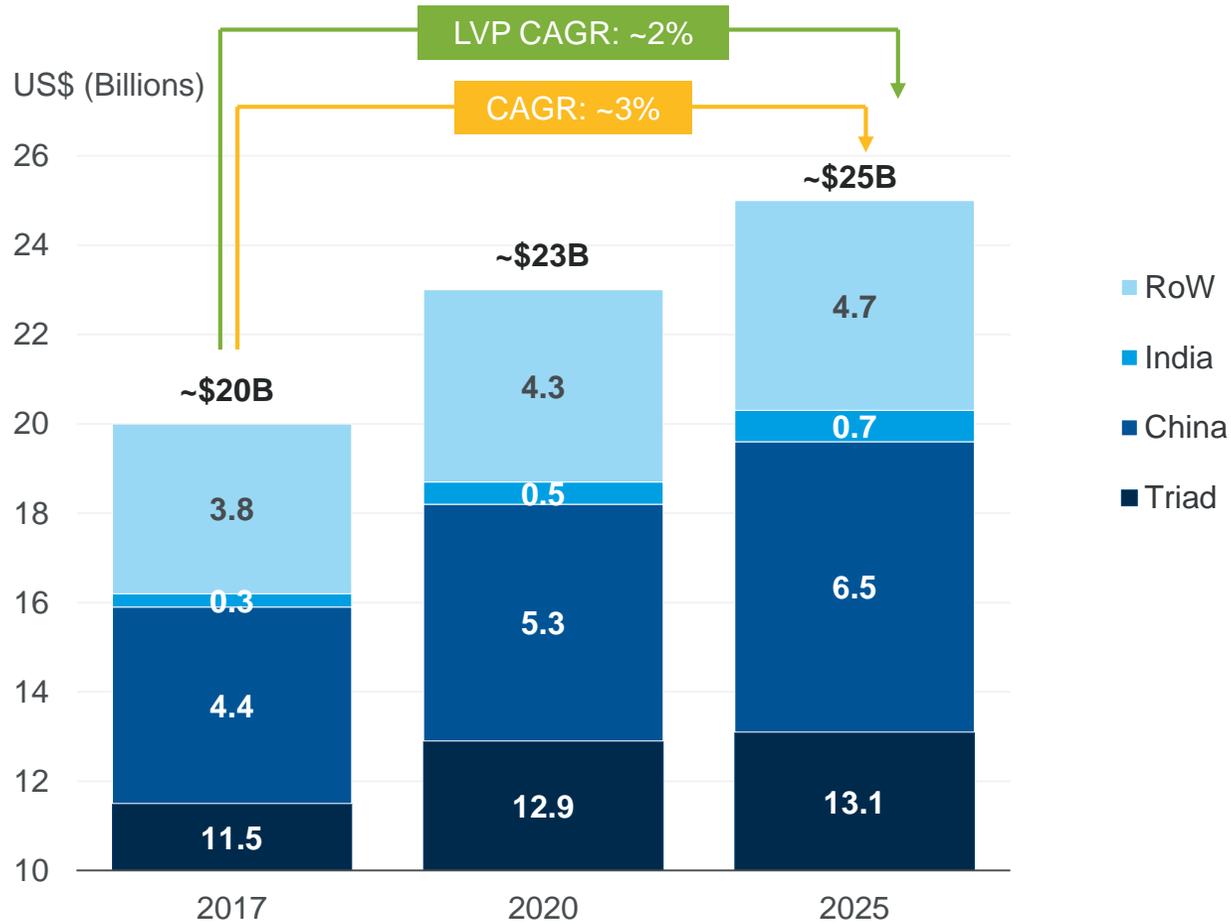
Serving **1,300** models and **100** car brands

# Passive Safety Technology – Our Industry First's



# Passive Safety a ~\$25B Market in 2025

Market is expected to grow 1 pp faster than the underlying LVP



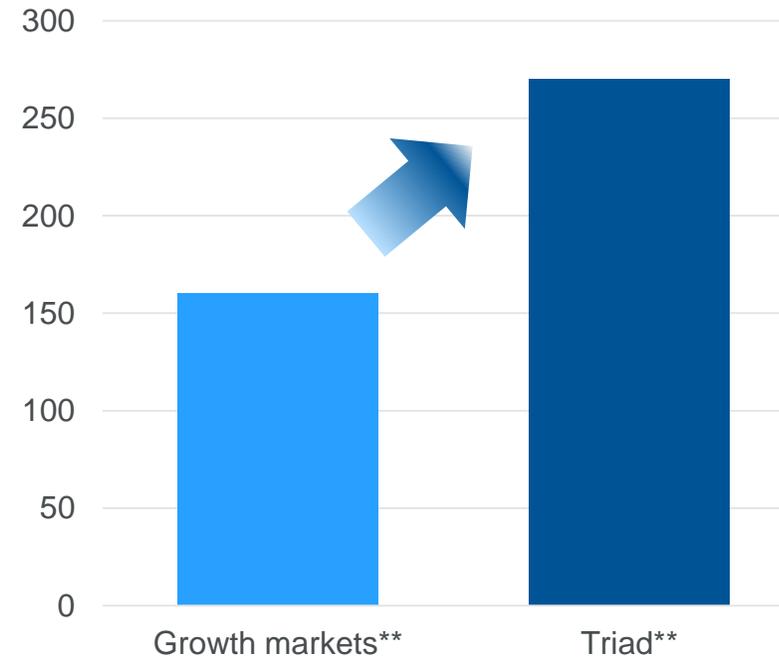
## New opportunities in the AD World



# Passive Safety – Market Trends and Growth Drivers

- Increasing GDP/capita in growth markets
- Higher LVP in Growth Markets
- More stringent safety rating & regulations
  - China NCAP 2018
  - Regulations in India
  - Additional crash test in Triad
- Consumer demand for road safety
- New vehicle configuration in the AD world

Content per Vehicle\* \$ 2017



*Results in higher installation rates*

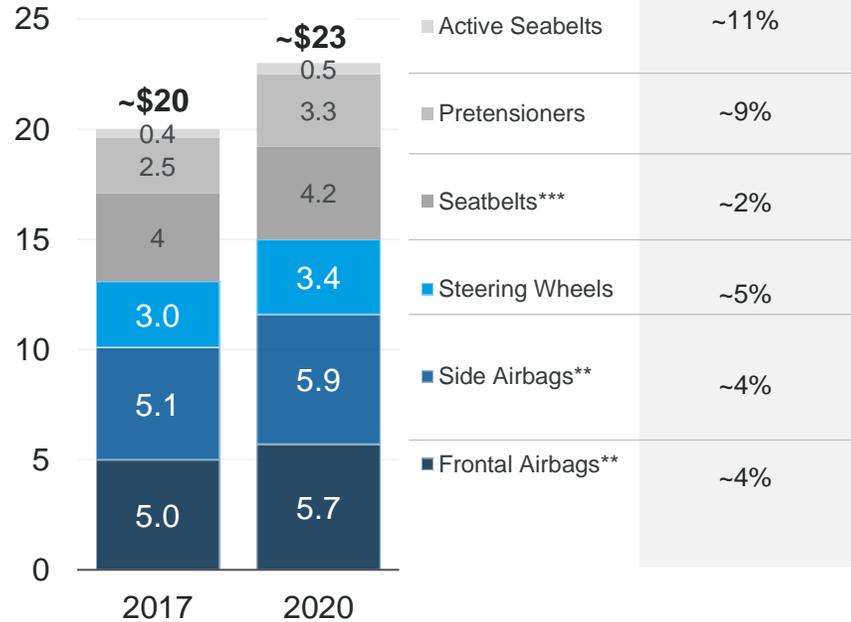
(\* ) 2017 Content per Vehicle for selected products based on Autoliv internal data, includes airbags, seatbelts and steering wheels.

(\*\* ) Growth Markets: China, Eastern Europe, India, Southeast Asia, South America, Middle East, and Africa. Triad: North America, Western Europe and Japan.

# Passive Safety – Airbag and Seatbelt Markets and Installation Rates

## Passive Safety Market\*

US\$ Billions

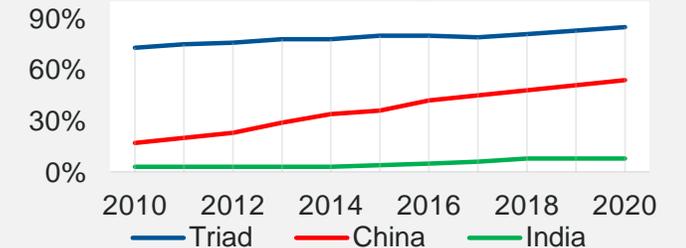


Continued market potential beyond 2020 from increasing installation rates\*

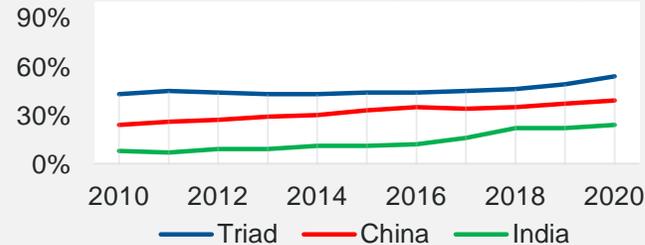
Driver and passenger airbags



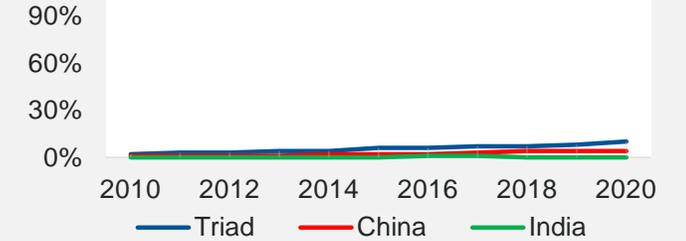
Side airbags



Pretensioners (front & rear)



Active Seatbelts



(\*) Market installation rates for selected products based on Autoliv internal data in constant currency 2017, CAGR (Compound Annual Growth Rate).

(\*\*) Frontal Airbags includes Driver, Passenger and Knee, Side Airbags includes Inflatable Curtains and Thorax.

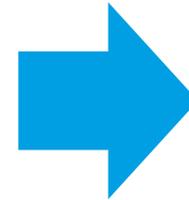
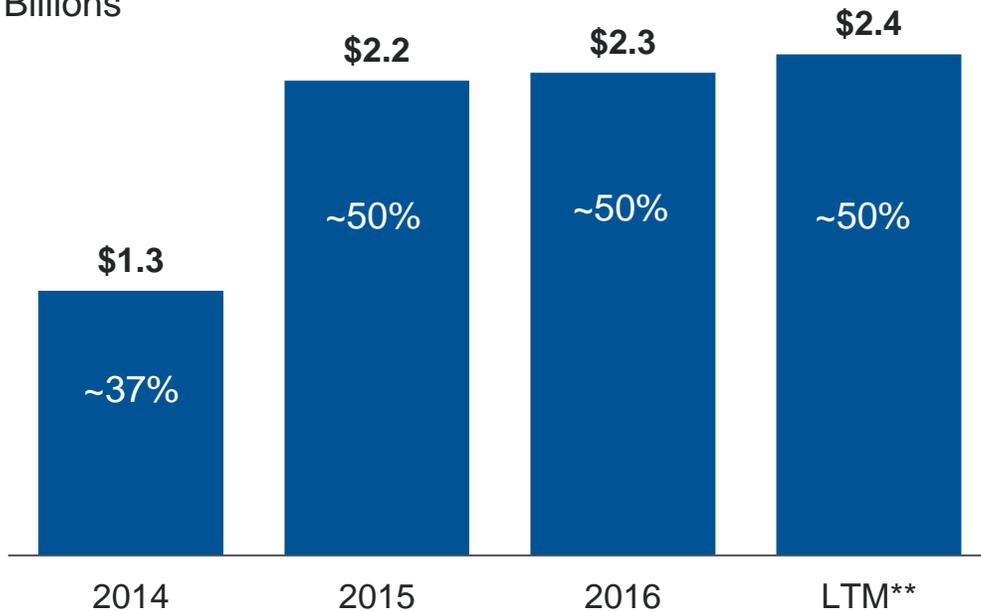
(\*\*\*) Seatbelts includes retractors, buckles and other.

# Passive Safety

~50% of Industry Order Wins in 2015 to 2017 YTD

## Order Intake\*

Billions



## Stand alone targets 2020:

- >\$10B = 8% CAGR\*\* 2017 - 2020
- ~13% adj Operating Margin\*\*\*

## Beyond 2020:

- At least maintain market share and grow at least with LVP plus 1 percentage point

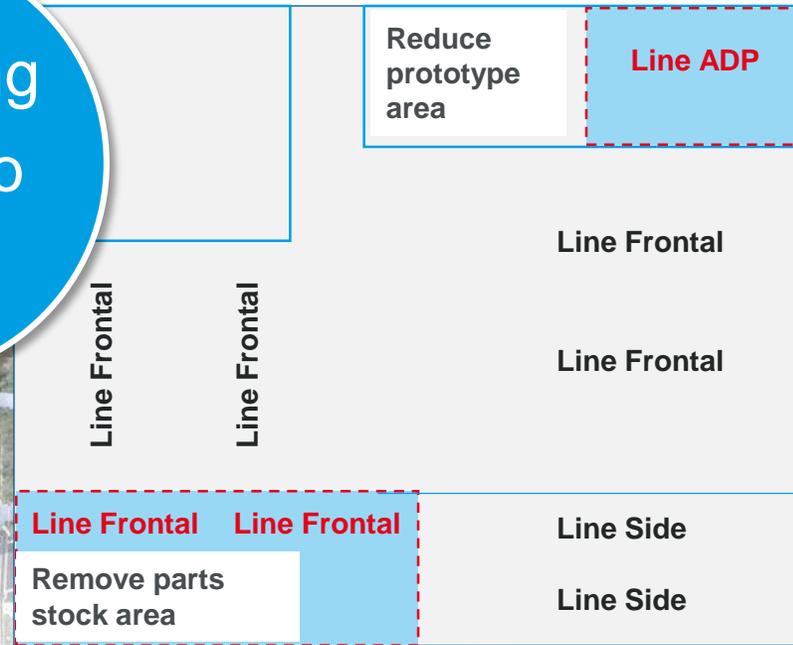
*Successfully capturing the market opportunity while supporting the industry*

# Cost Efficiency: Growth Within Existing Footprint

Freeing-up factory space lowers CAPEX and improves RoCE

Pyrotechnic inflator plant in Taketoyo, Japan

Expanding  
from 6 to  
9 lines

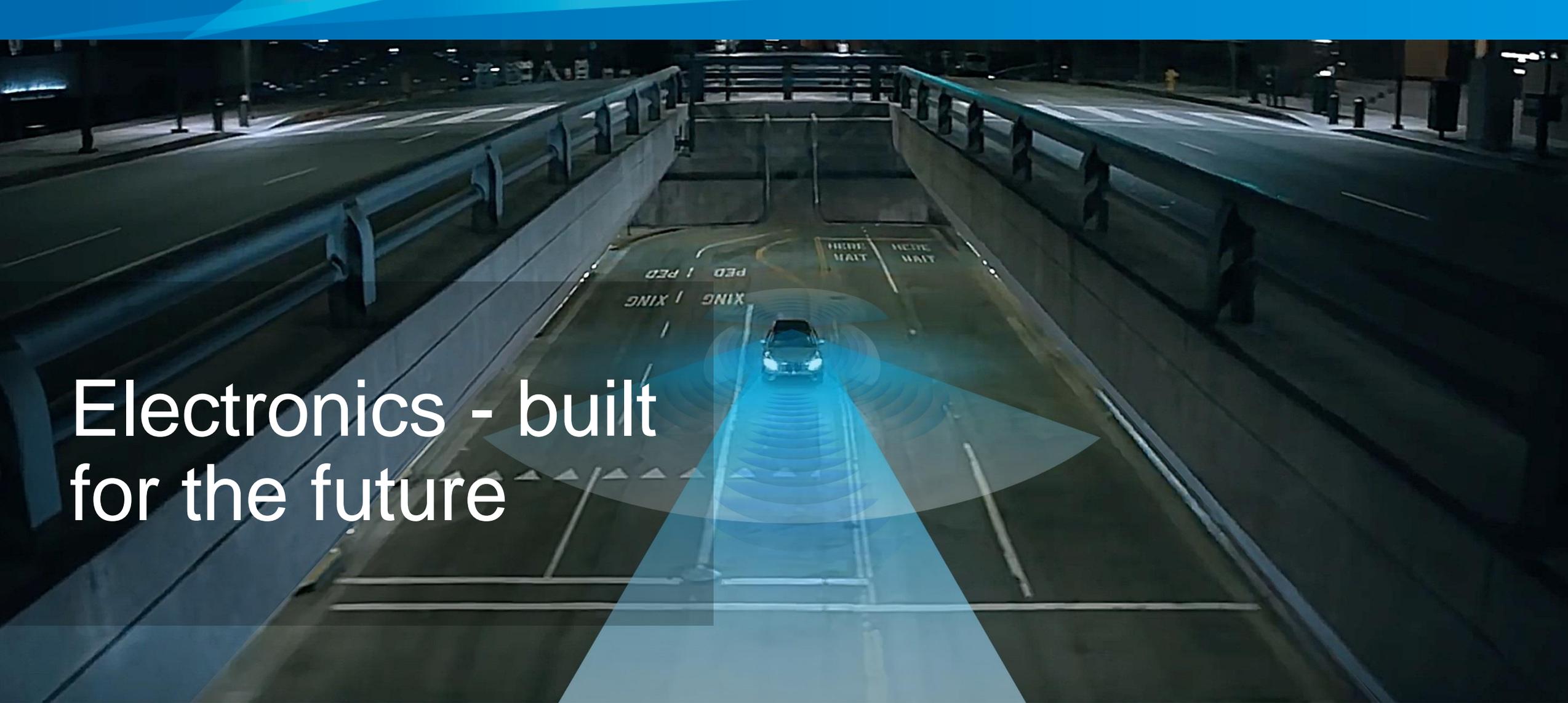


No of production lines  
**+ 50%**

No of products /  
production m<sup>2</sup>  
**+ 70%**

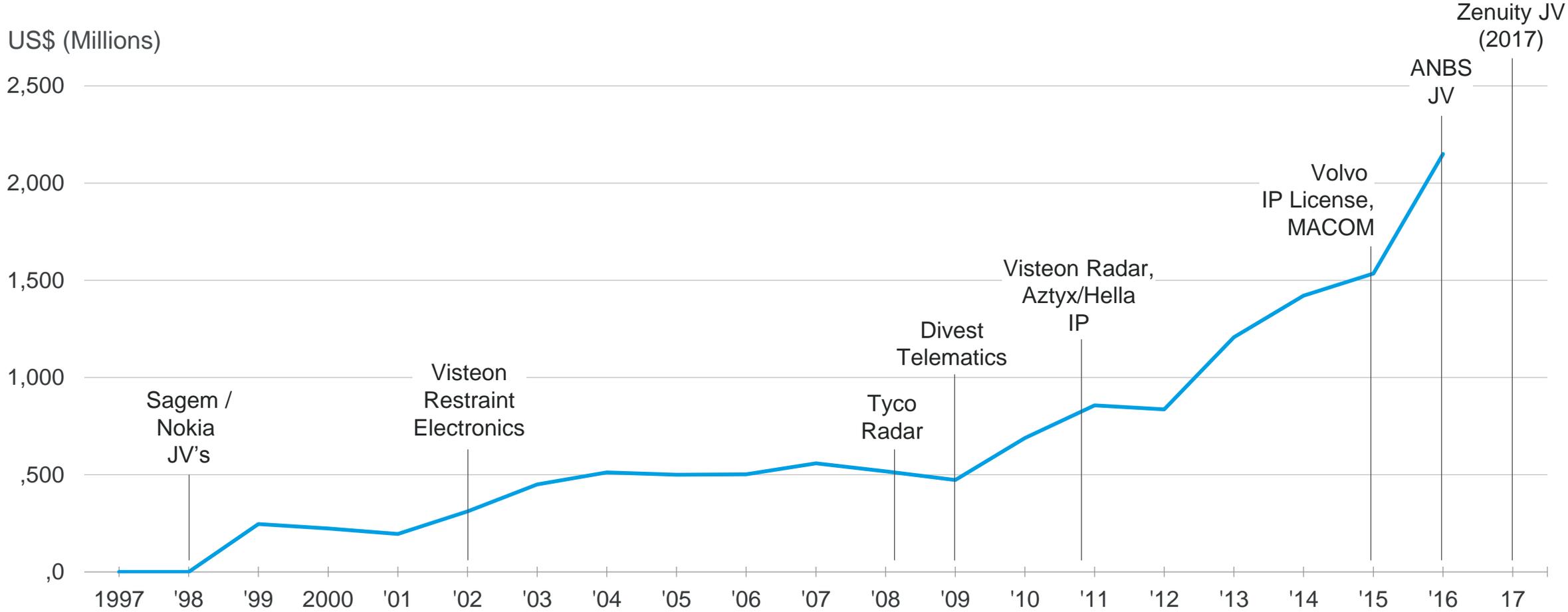
No of material-  
handlers  
**- 33%**





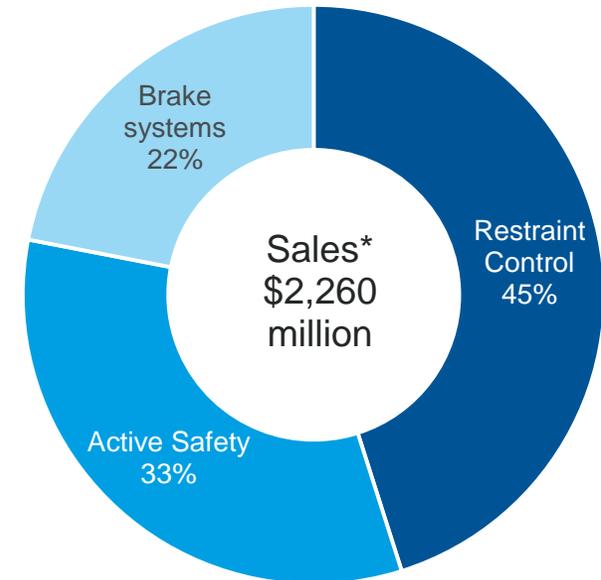
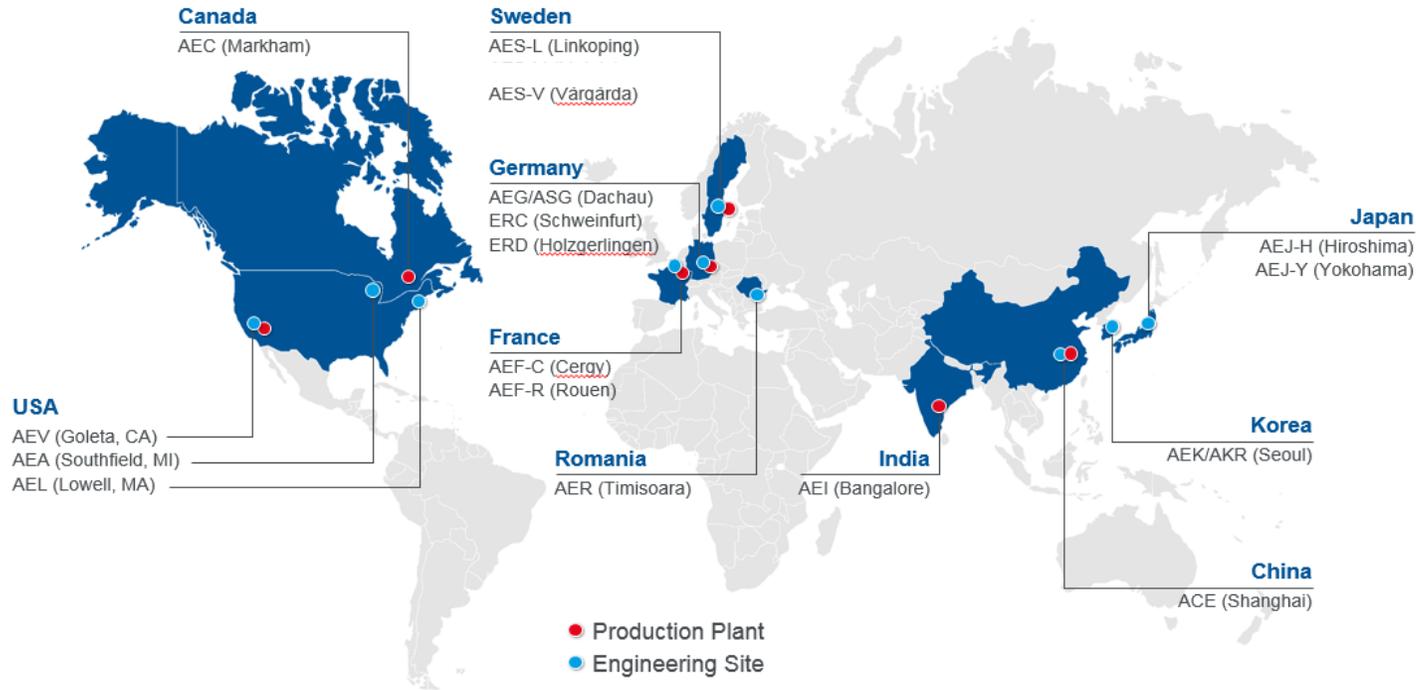
# Electronics - built for the future

# Autoliv Electronics – Our Journey so far



(\*) Active Safety includes: Radar, Vision (Forward looking Mono/Stereo/Night), Advanced Driver Assist Electronic Control Unit, Positioning Modules.

# Autoliv Electronics



**7,100 EMPLOYEES**  
in 10 countries

**3,200 ENGINEERS**  
of which 65% software

**31 OEM CUSTOMERS**  
and 7 new entry customers

**20 FACILITIES**

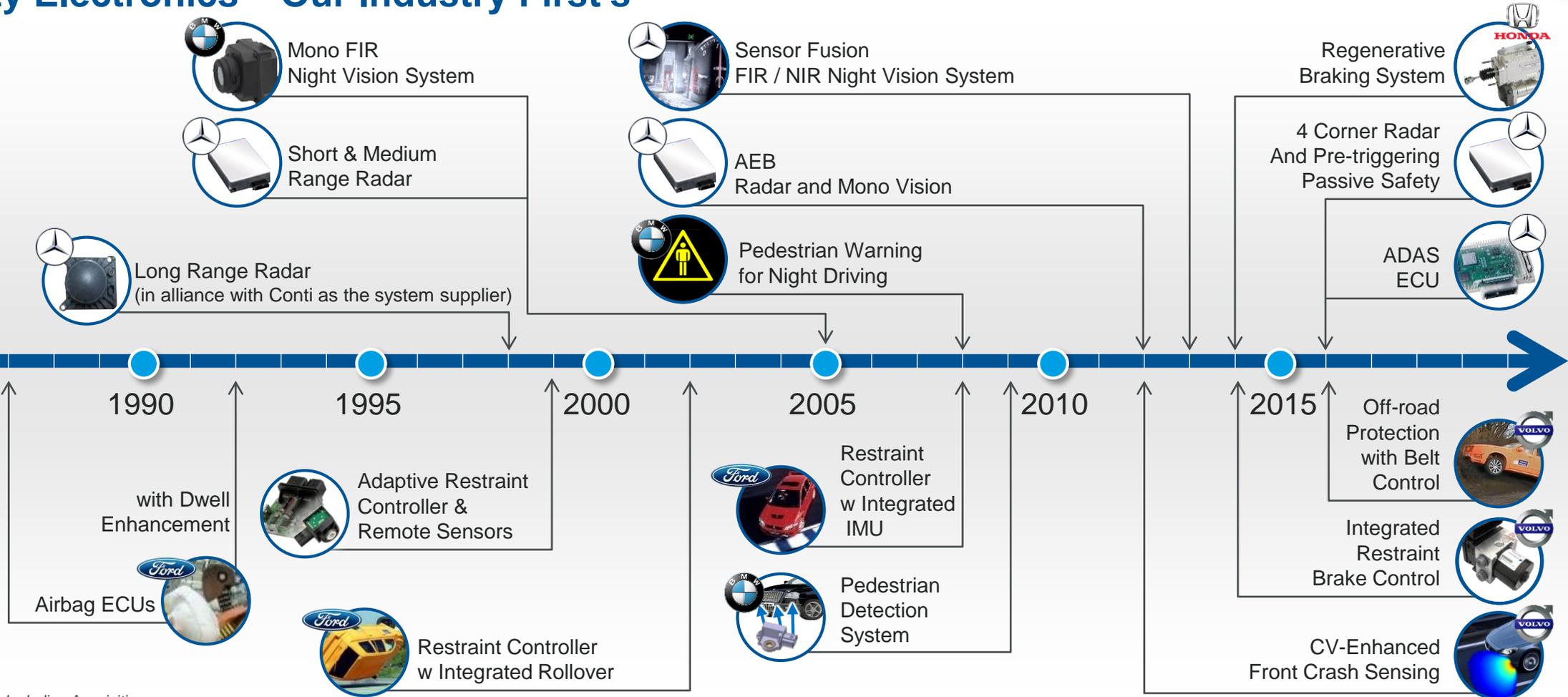
# Customer trust

## Safety Electronics – Our Industry First's\*



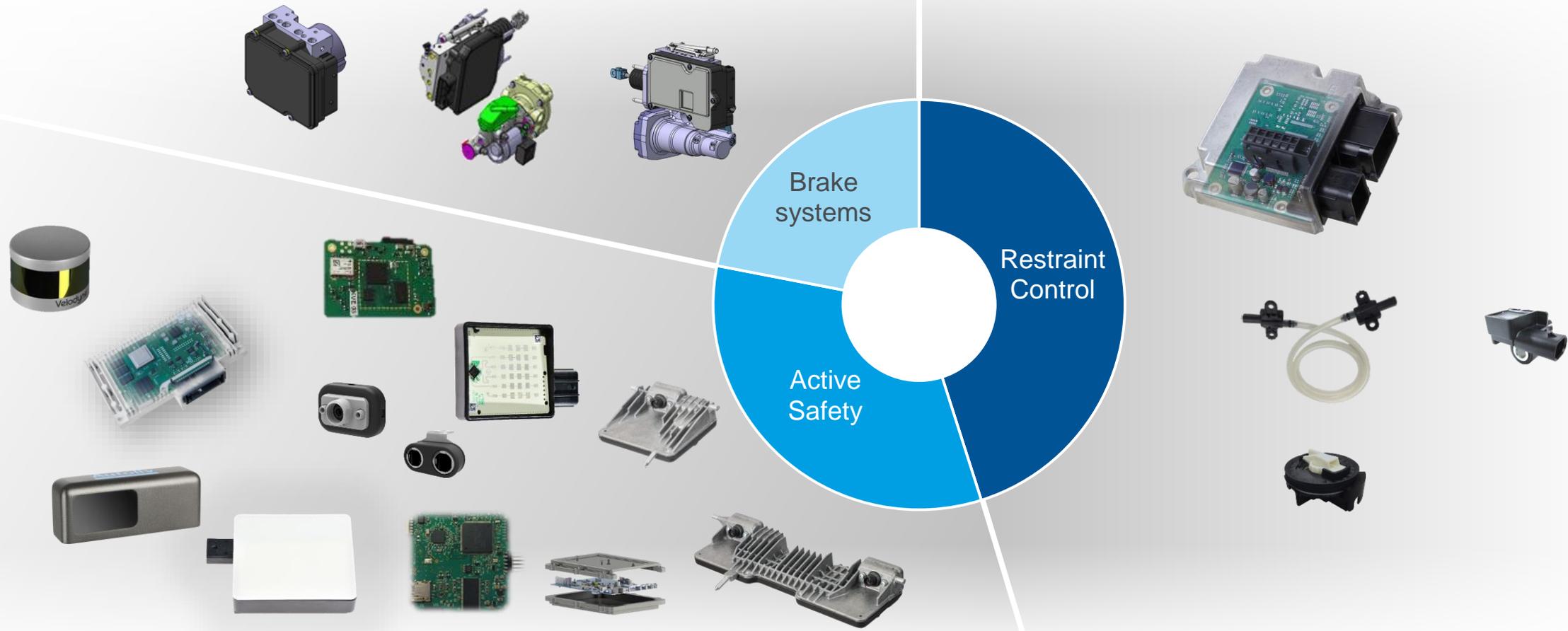
Active Safety  
and Braking

Restrain Control  
and Sensing



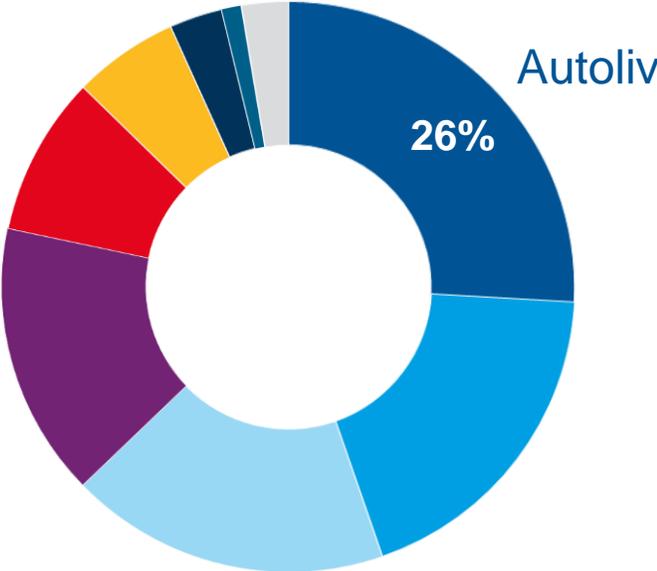
(\* Including Acquisitions)

# One of the world's broadest safety electronics product range

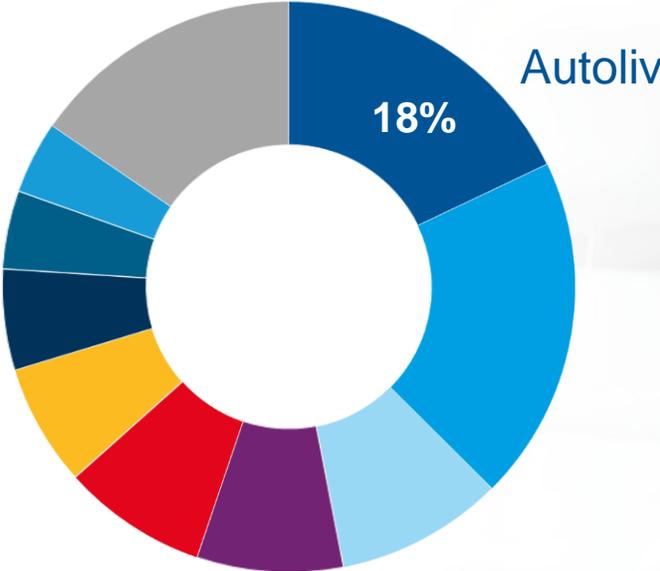


# Autoliv Electronics – Market Shares 2016

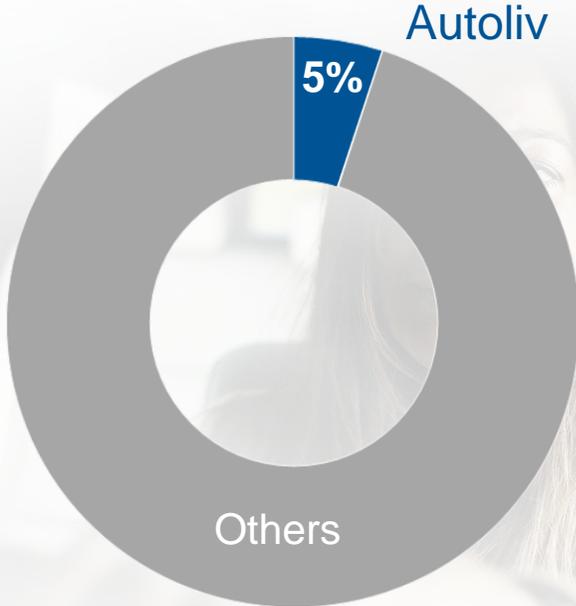
RESTRAINT CONTROL SENSING



ACTIVE SAFETY



BRAKE CONTROL

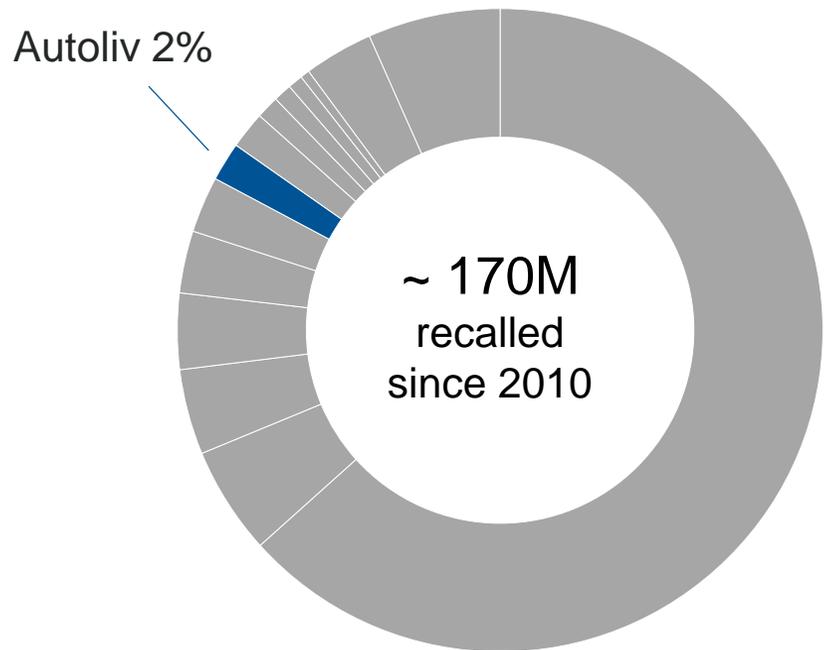


# Customer trust

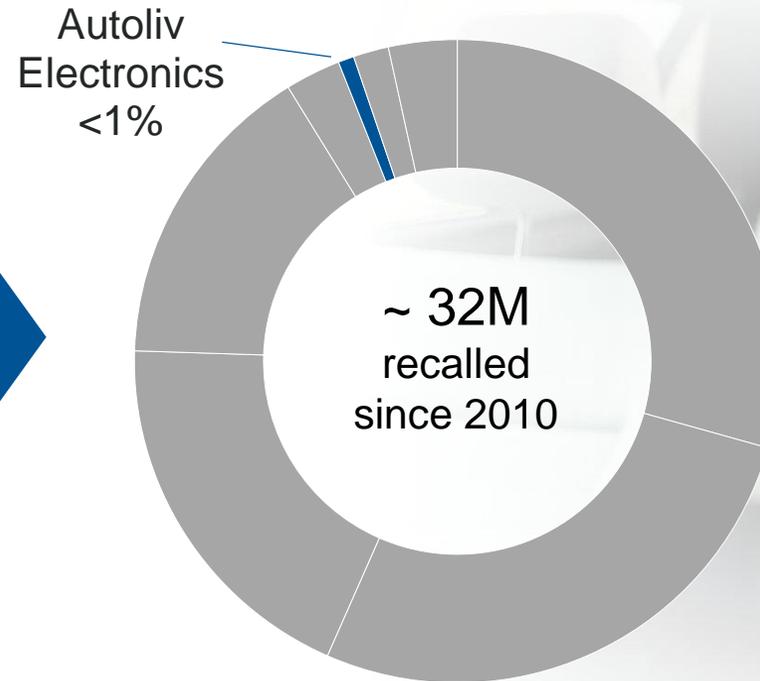
Our Passive Safety quality journey extends really well into Electronics



## All Safety Products



## Electronics



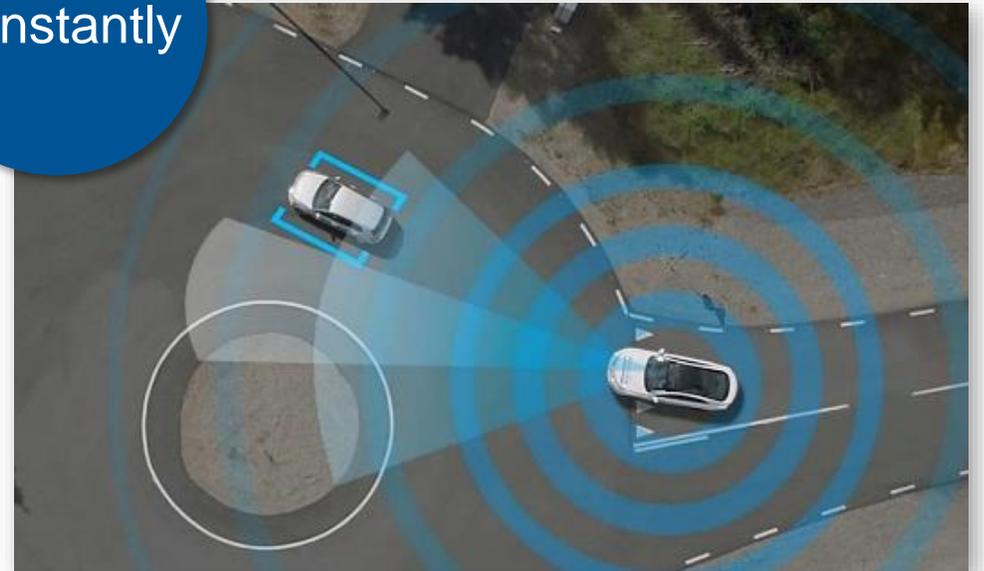
# Robustness never more important

Electronics products needs Robustness at least as much as Passive Products

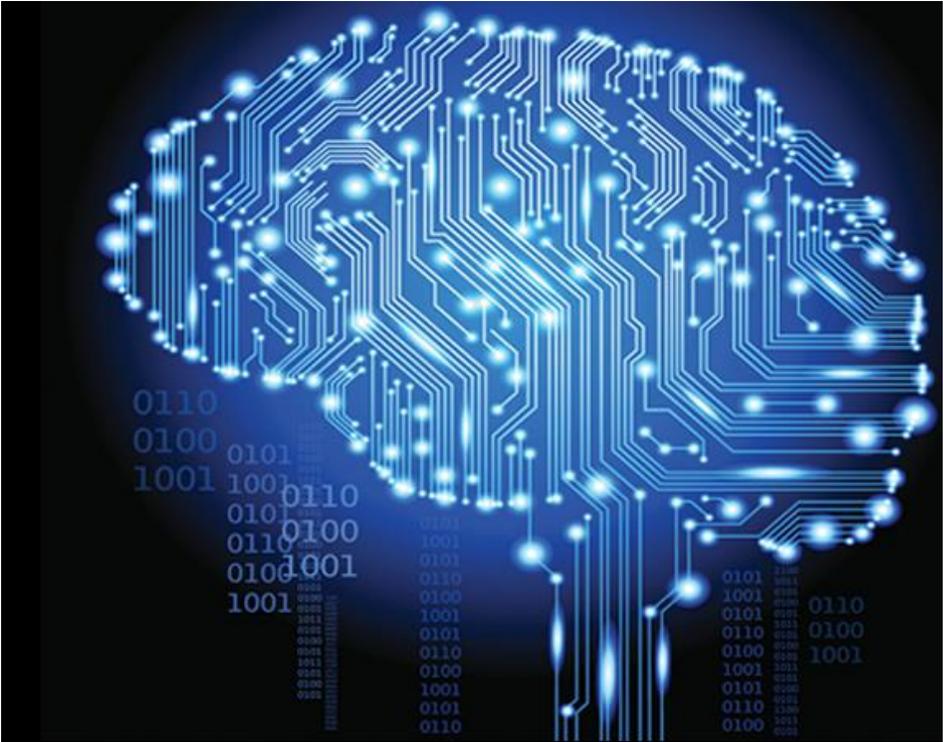
Rarely



Constantly



# Electronics success factors - Technology, Innovation and Agility

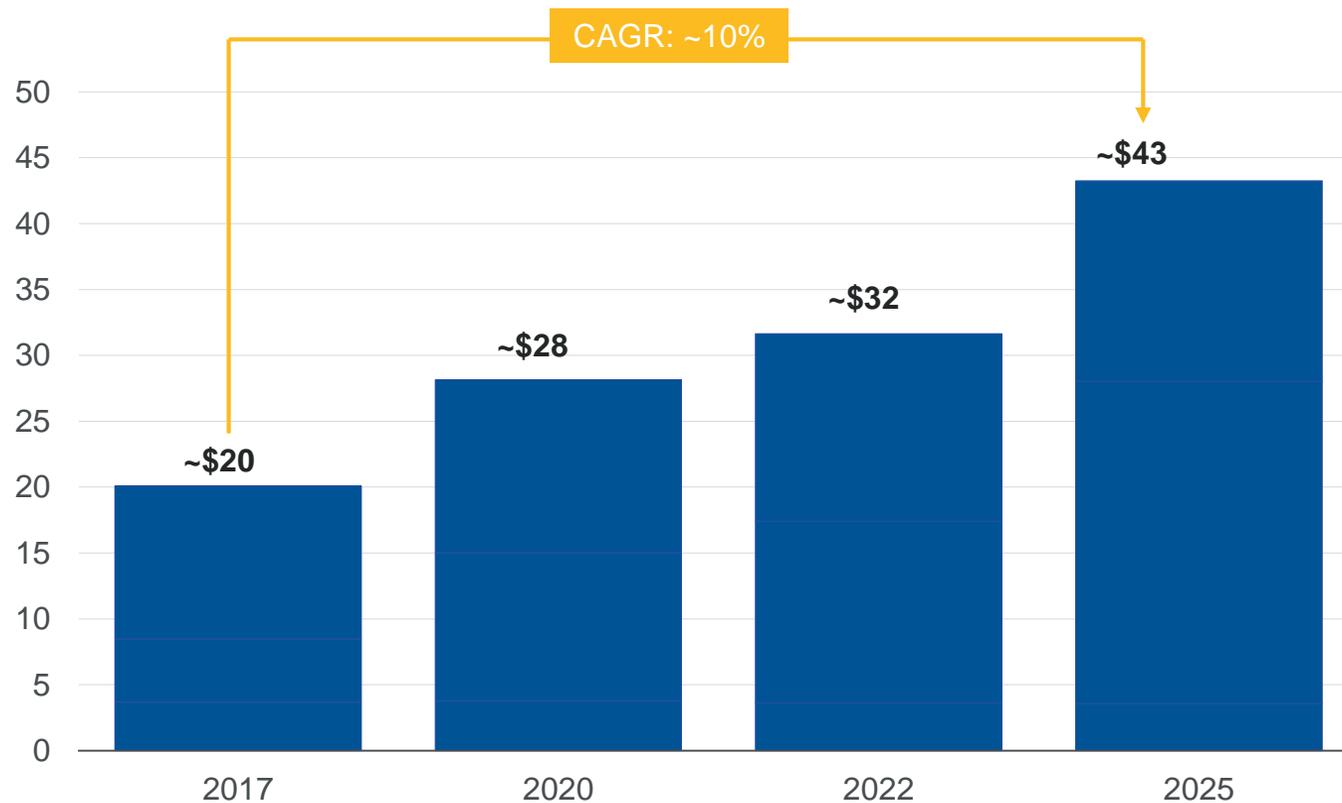


# Electronics – a ~\$43B Market in 2025

~10% CAGR 2017 to 2025

## Electronics TAM\*

US\$ (Billions)



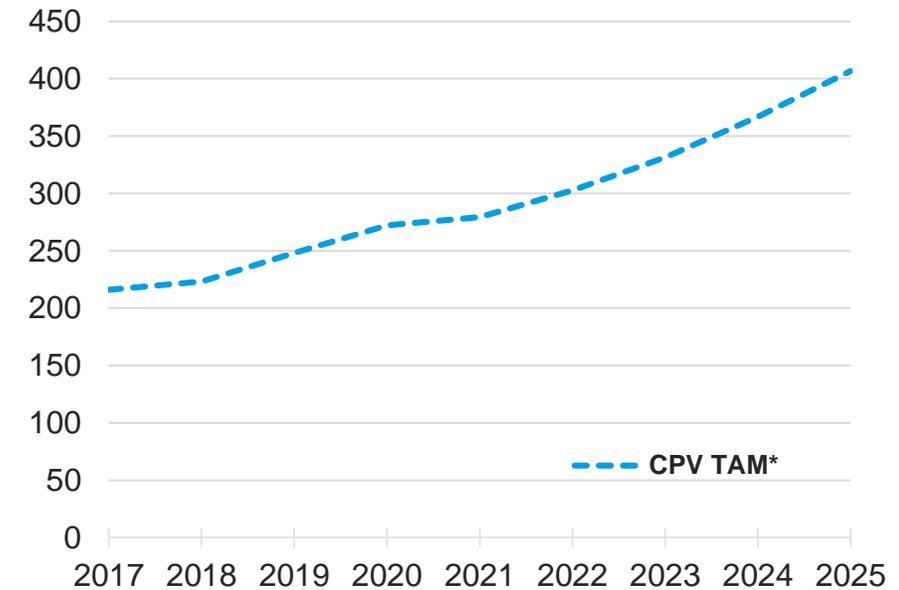
# Electronics – Market Trends and Growth Drivers

Increasing levels of software in the future are required to enhance safety

- **Safety**
  - AEB\*
  - Blind Spot
  - Lane Keep
- **Comfort and assistance**
  - Traffic Sign Presentation
  - Road Surface detection
  - Intelligent headlights
- **Convenience (AD)**
  - Self parking
  - Queue assist
  - Highway driving
  - Fully autonomous driving
- **Technology development**

## Market Growth

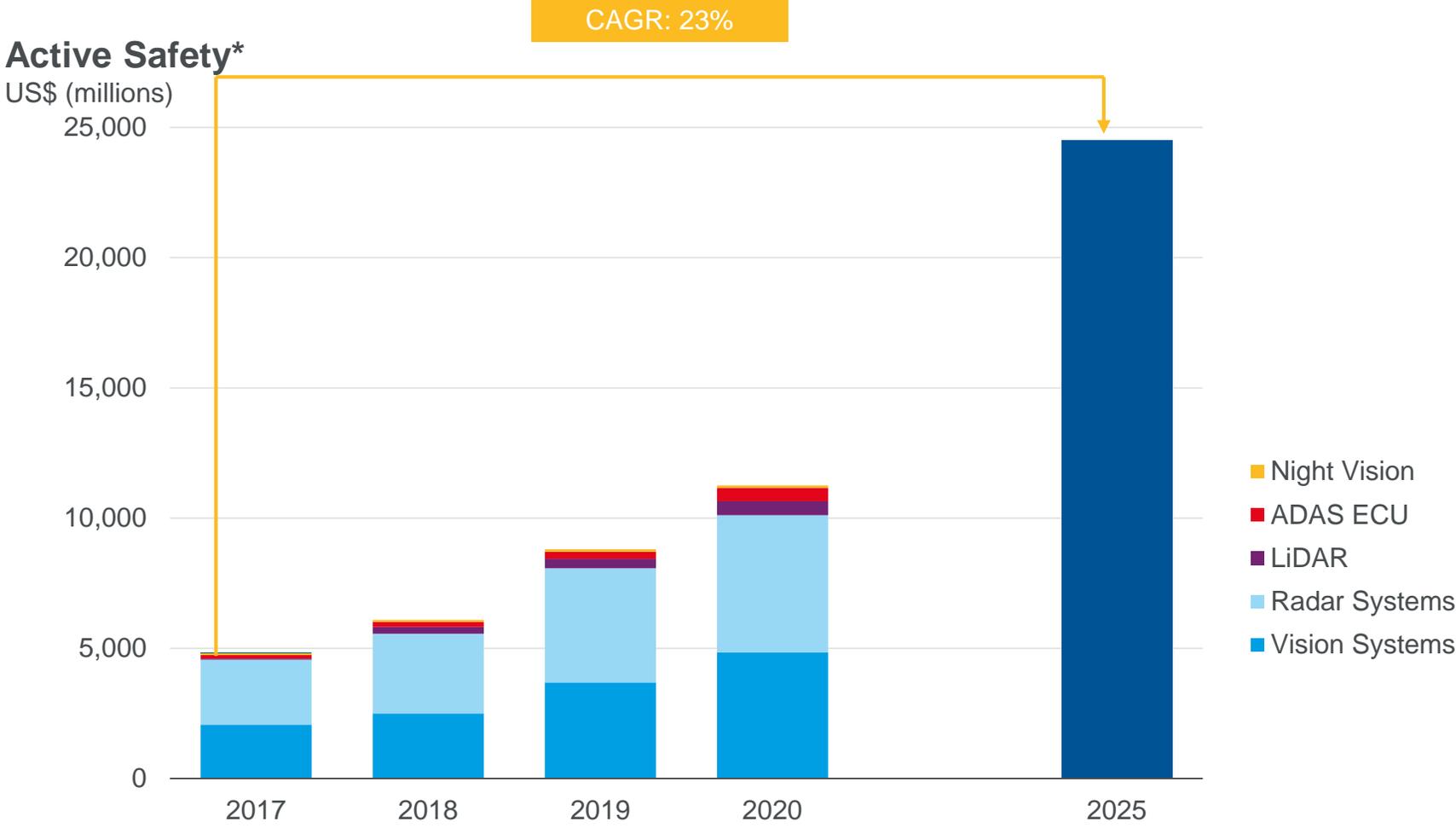
Content per Vehicle \$US



*Active Safety CPV\* is expected to increase from ~\$50 in 2017 and approaching ~\$230 in 2025*

(\*) TAM (Total Addressable Market) includes Active Safety, Restraint Controls & Sensors, and Brake systems, CPV (Content per Vehicle), AEB (Autonomous Emergency Braking).

# Active Safety Sensor market



\*) Active Safety Market includes Radar (Front/side/rear), Forward looking Cameras (Mono/Stereo/Night Vision), Other (Advanced Driver Assist Electronic Control Unit, LiDAR).

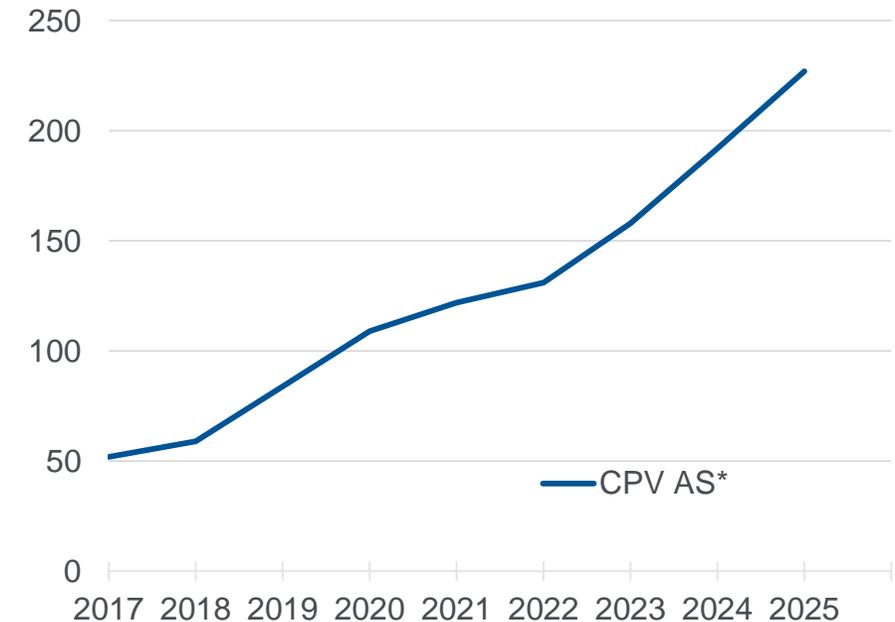
# Electronics – Market Trends and Growth Drivers

Increasing levels of software in the future are required to enhance safety

- ✓ **Consumers are ready**
  - Safety
  - Comfort and assistance
  - Convenience (AD)
- ✓ **Technology is ready**

## Market Growth

Content per Vehicle \$





# Clusters for AD

# The developing eco-system

**Autoliv**

Cloud



**Autoliv**

Sensors



Partners



Decision & Control

Sensor Fusion



ZENUITY System



Actuators



Partner



# ZENUITY – *the technology*

- **World-class driver-assistance**

Concrete ADAS offer in production now  
More than 200 designed customer features

- **Self-driving technologies**

Complete, from raw sensor data to vehicle actuators

Volvo Drive-Me as development platform

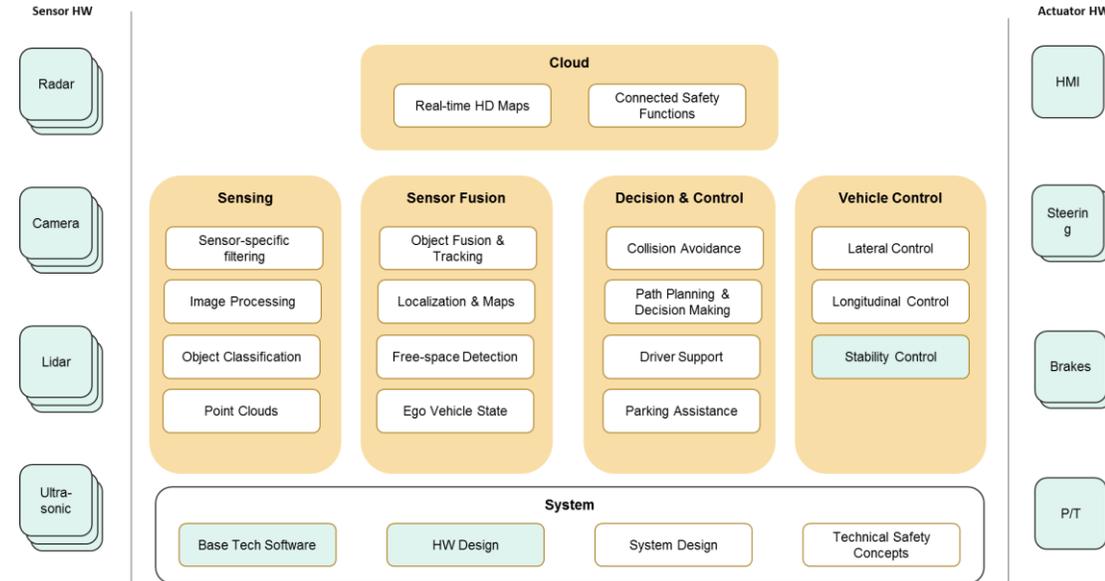
Deep learning integration demonstrated

Automotive graded commercialization

Connected safety in cloud

- **Establishing an eco-system**

Tier1, OEM, Chinset AI, Cloud, Map provider, Urban robotics, Cyber security, ...



**Autoliv**



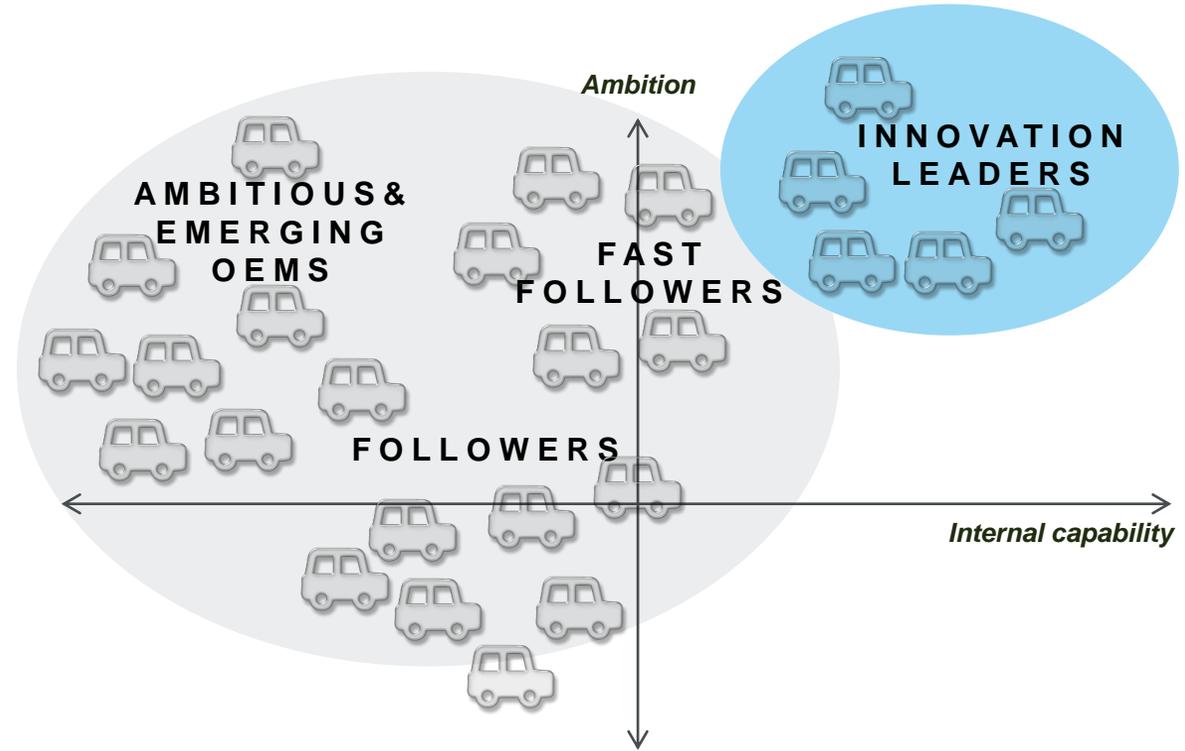
**NVIDIA**



**ERICSSON**

# ZENUITY – the customers

- ✓ Exciting business model
- ✓ Impressed by feature offer
- ✓ Legislation positive for ADAS
- ✓ Total system key for AD
- ✓ ZENUITY media positioning 👍



- **SYSTEM OFFER**  
⇒ Followers, Fast followers, and Ambitious / Emerging OEMs
- **COMPONENTS OFFER**  
⇒ Innovation Leaders

# Technology Cooperations

Recently announced

Velodyne LiDAR®

LiDAR

Volume production of automotive grade LiDAR systems



COMPUTING PLATFORM

Collaborate on AI computing platform



DRIVER MONITORING

Collaboration to develop driver monitoring systems



CLOUD SOLUTIONS

Zenuity are collaborating to develop Connected Cloud

Comprehensive tech scouting through investment in Autotec

# Autoliv Electronics to expand Optics Competence

PRESS RELEASE

**Autoliv**

## Autoliv to acquire LiDAR and Time of Flight camera expertise

*(Stockholm, Sweden, September 28, 2017)* – Autoliv, Inc. (NYSE: ALV and SSE: ALIVsdb), the worldwide leader in automotive safety systems, has signed an agreement to acquire certain assets of a Swedish based LiDAR specialist company.

Located in Stockholm and Skellefteå, Sweden, Fotonic i Norden AB is a LiDAR and Time of Flight camera specialist that designs, develops, and manufactures these products. The acquisition represents a transfer of certain intellectual property rights, development and prototyping assets and development resources of Fotonic i Norden AB, including about 35 engineering experts in the field of LiDAR and Time of Flight cameras.

"LiDAR and Time of Flight cameras are important sensors to make autonomous driving a reality. We are very pleased that this strong and knowledgeable team is joining our company, thereby further improving Autoliv's already strong competence and expertise in LiDAR and vision algorithms," says Johan Löfvenholm, President Autoliv Electronics.

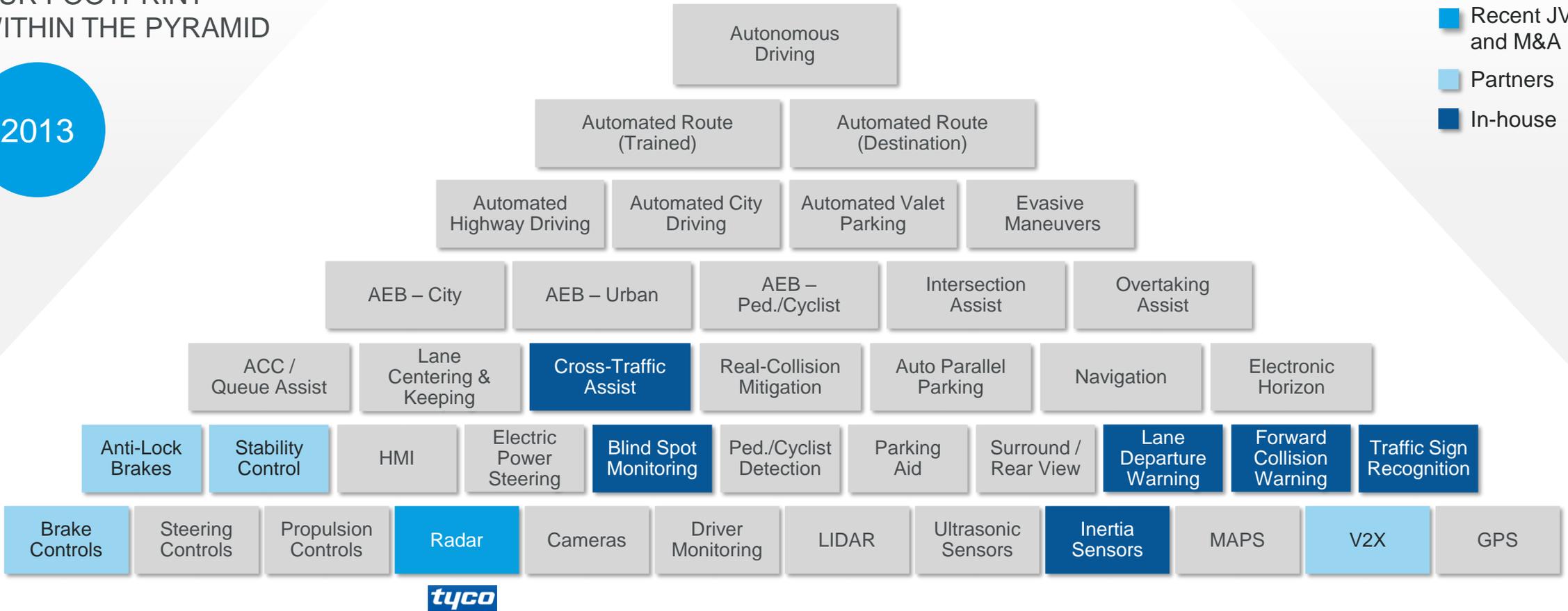
The transaction is expected to close before year-end 2017, and is subject to certain conditions. The acquired assets and resources will be transferred to Autoliv Electronics.

# Electronics Active Safety – Building for the long-term

OUR FOOTPRINT  
WITHIN THE PYRAMID

2013

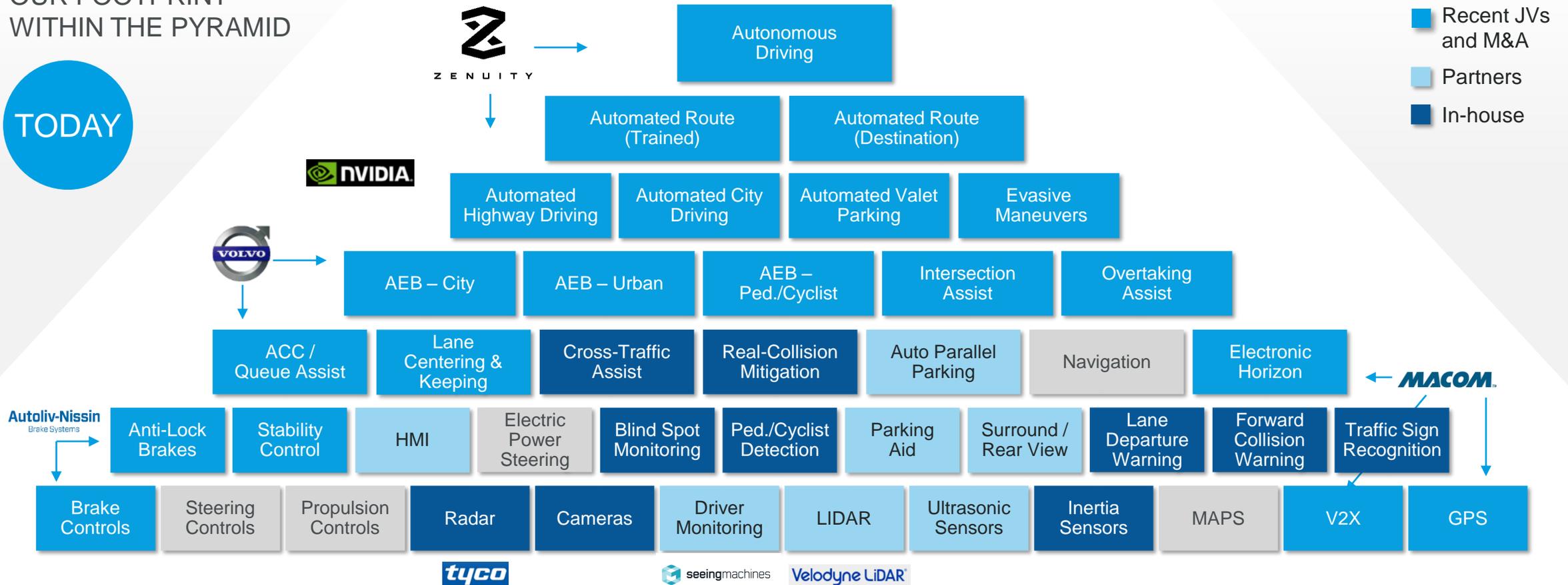
- Recent JVs and M&A
- Partners
- In-house



# Electronics Active Safety – Building for the long-term

OUR FOOTPRINT WITHIN THE PYRAMID

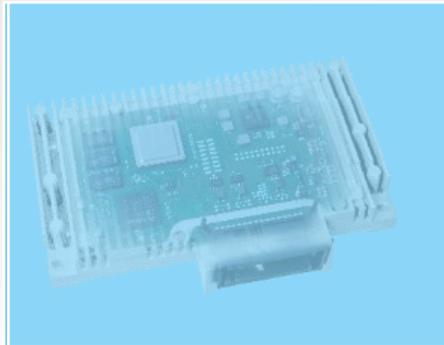
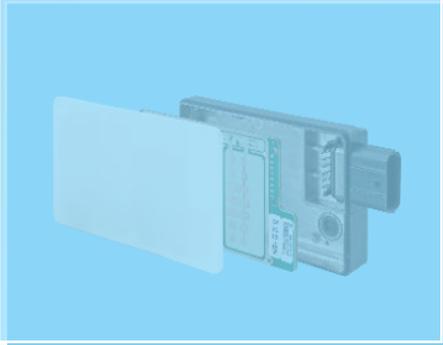
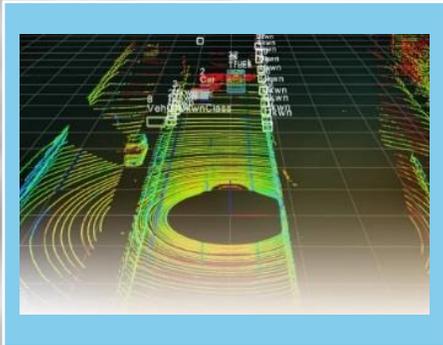
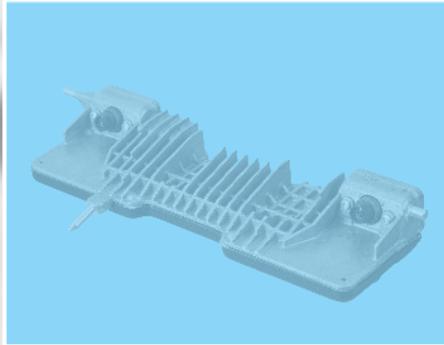
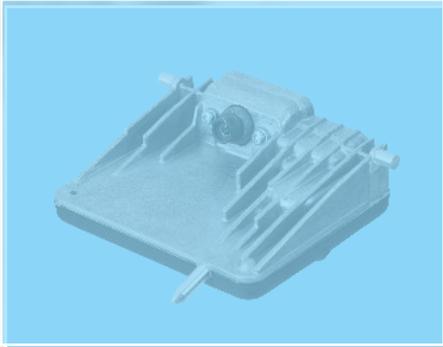
TODAY



2013

2015

2017

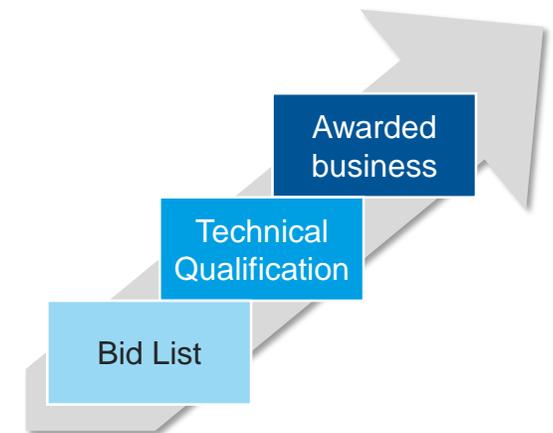


# Active Safety – Customer snapshot

2013

Represents >90% of global light vehicle production

Customer	RADAR			VISION*			ADAS ECU			LIDAR		
Customer 1	█			█			█					
Customer 2				█								
Customer 3												
Customer 4												
Customer 5	█											
Customer 6	█											
Customer 7												
Customer 8	█											
Customer 9	█											
Customer 10												
Customer 11												
Customer 12												
Customer 13												
Customer 14												
Customer 15												
Customer 16												
Customer 17				█								
Total	5	5	5	3	1	1	1	1	1	0	0	0



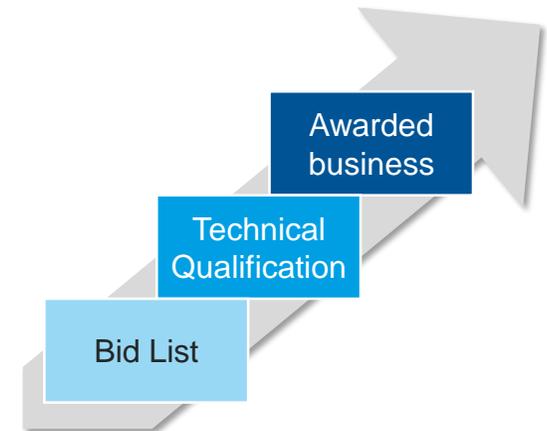
\*Vision based on Autoliv developed algorithms,

# Active Safety – Customer snapshot

2017  
YTD

Represents >90%  
of global light  
vehicle production

Customer	RADAR			VISION*			ADAS ECU			LIDAR		
Customer 1												
Customer 2												
Customer 3												
Customer 4												
Customer 5												
Customer 6												
Customer 7												
Customer 8												
Customer 9												
Customer 10												
Customer 11												
Customer 12												
Customer 13												
Customer 14												
Customer 15												
Customer 16												
Customer 17												
Total	14	11	7	13	8	3	9	5	2	9	2	0



# Active Safety - Selected Customer Launches

## Vision

- Europe (SOP 2018)
- Europe (SOP 2019)
- Asia (SOP 2018)

## ADAS ECU

- Europe (SOP 2019)

## Night Vision

- North America (SOP 2020)

## Advanced ADAS Software

- Europe (SOP 2019)

## Radar 24 GHz NB

- Europe (SOP 2020)
- Asia (SOP 2019)
- North America (SOP 2019)

## Radar 77GHz

- Europe (SOP 2019)
- Asia (SOP 2019)
- North America (SOP 2019)

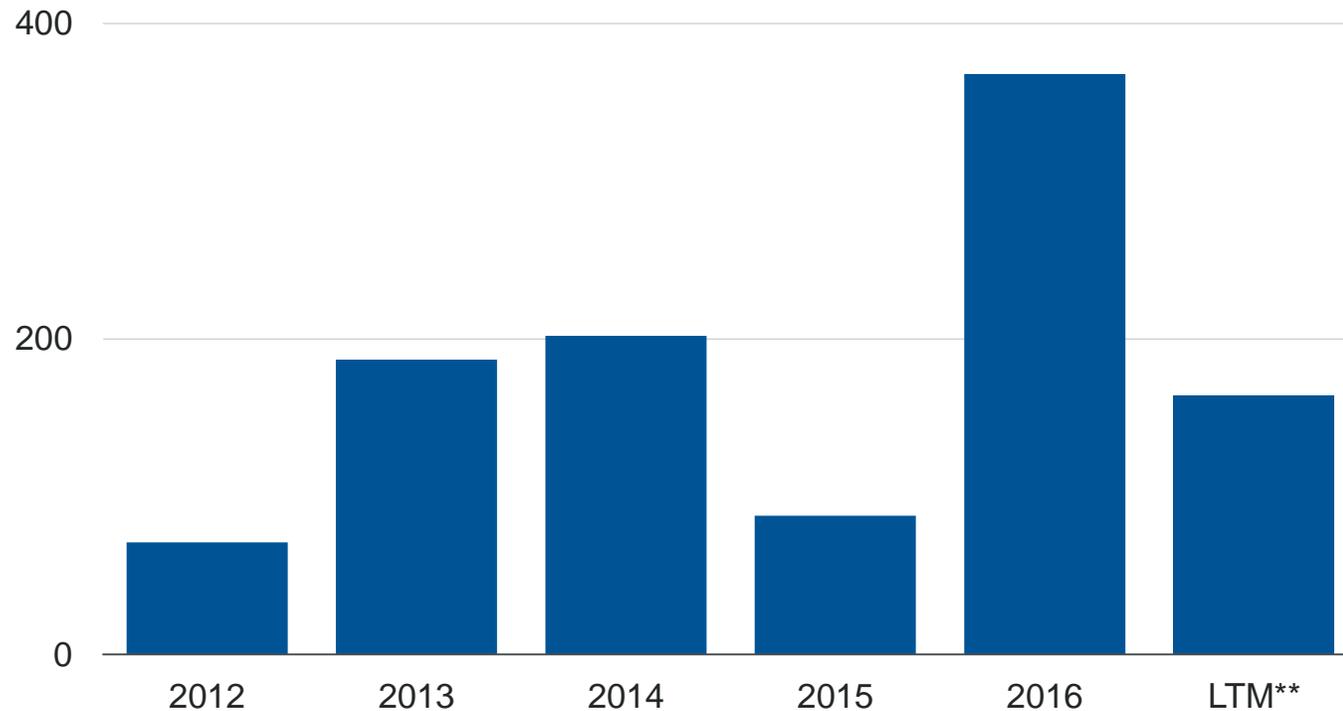


# Active Safety – Order Intake

Expect to increase sales beyond 2018

## ALV Active Safety – Order Intake\*

US\$ (Millions)



- Due to a significant broadening of the product offering and customer bid-list, order intake in 2016 increased substantially over previous years
- Active Safety order intake in 2016 of around \$0.4B was almost twice as high as in any previous year
- Lead time from time of order to start of production is usually around 3 years
- Targeted 2017 orders towards end of the year

\* \$ value represent expected average annualized sales from respective years order intake, Disclosure of orders will not be made regularly

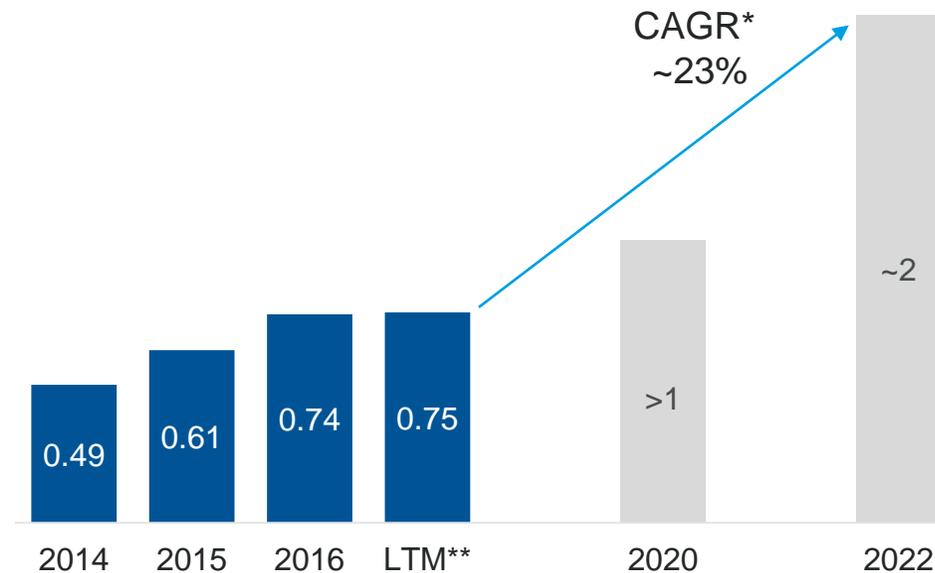
\*\* Last Twelve month order intake, as of August 31, 2017

# Autoliv Active Safety Sales Growth

2020 Sales target of >\$1B

Active Safety Sales – US\$ Billion

- High market growth
- Strong product offering
- Strong bid-list presence
- New order wins during 2016-17

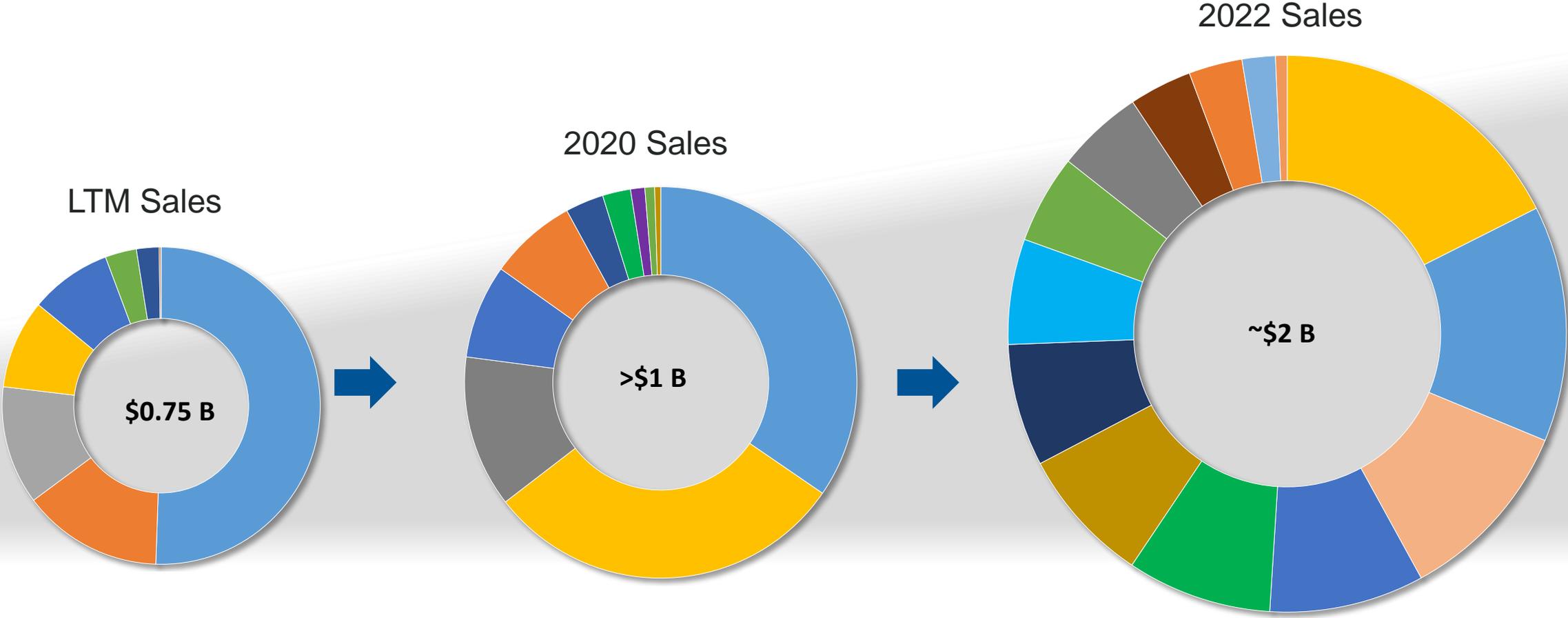


## 2025 Ambition

- Active Safety sales ~\$4B

(\*\* CAGR Compound Annual Growth Rate.  
(\*\*) Last Twelve month sale as of June 30, 2017.

# Active Safety Revenue by OEM group

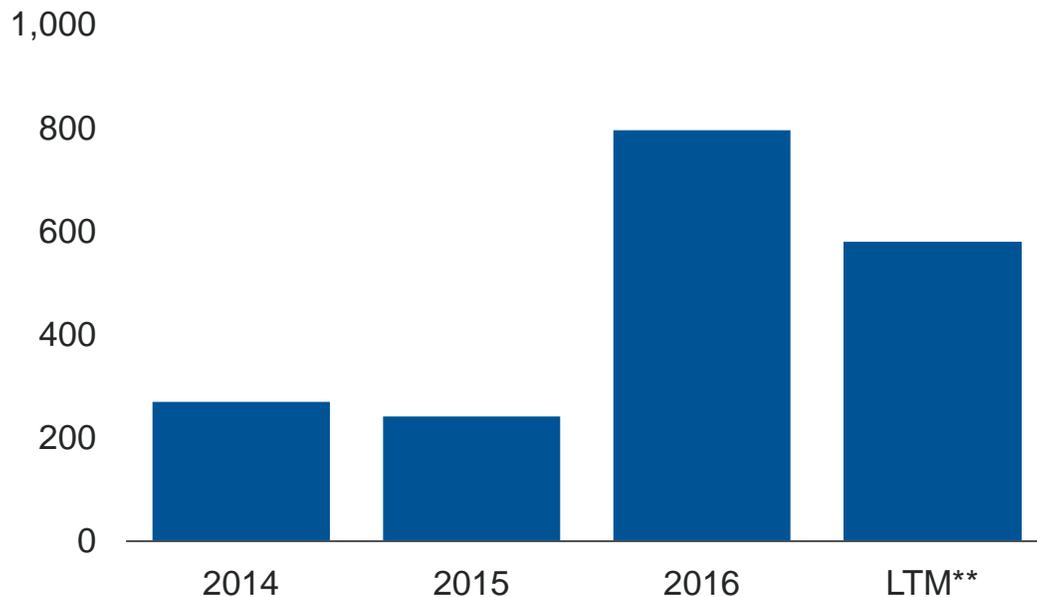


# Electronics – Our Growth Outlook

Expect to increase sales in all three sub-segments over the next 5 years

## ALV Electronics – Order Intake\*

US\$ Millions



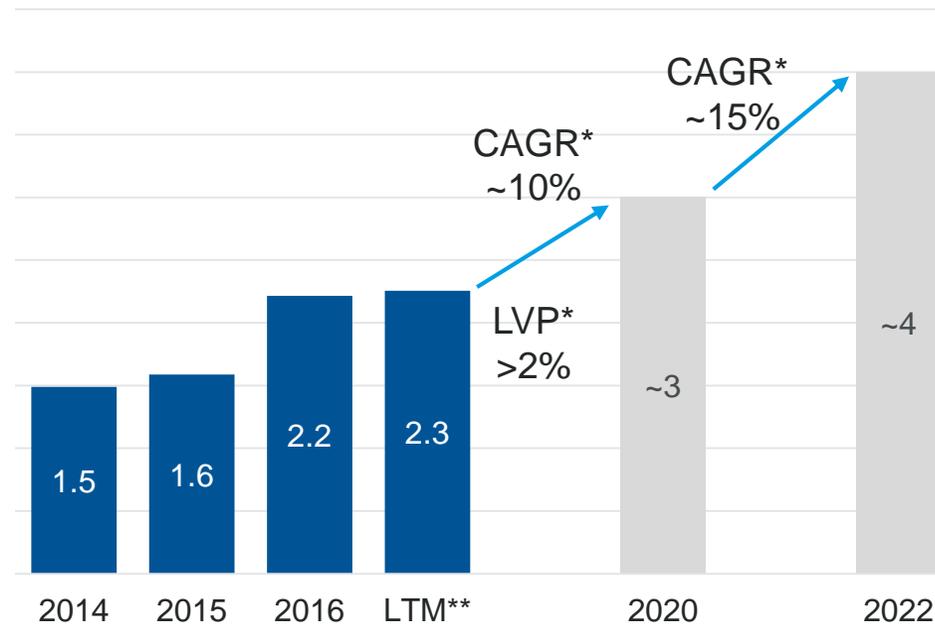
- Due to a significant broadening of the product offering and customer bid-list, order intake in 2016 increased substantially over previous years
- Active Safety order intake in 2016 of around \$0.4B was around two times higher than in any previous year
- Lead time from time of order to start of production is usually around 3 years

# Autoliv Electronics Sales Growth

2020 Sales target of ~\$3B corresponds to a ~10% CAGR from 2017

- High market growth
- Strong product offering
- Strong bid-list presence
- New order wins during 2016-17

Electronics Sales – US\$ Billion



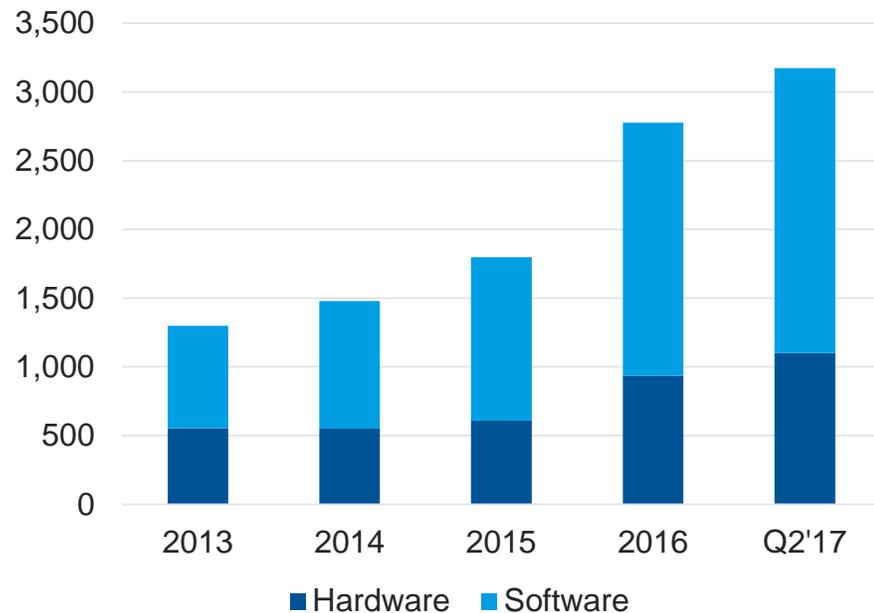
## 2025 Ambition

- Electronics sales >\$6B
- Active Safety sales ~\$4B

# Autoliv Electronics – RD&E for investment to capture growth

Engineering headcount has more than doubled since 2014

## RD&E Headcount



### Medium term profitability impacted by:

- Continued high investments in new technology to secure long-term success
- Limited sales growth in 2018 due to lower product offering and bid list presence pre-2016

### 2020 Target Stand Alone Electronics

- Adjusted Operating Margin\* 0-5%

*RD&E required to support customers and gain new businesses*

(\* Non-US GAAP measure excludes costs related to Antitrust matters and capacity alignment.

# Targets Stand Alone Passive Safety and Electronics

## CMD 2017 – Target Update

	2020 Target	2022 Target
<b>Autoliv Passive Safety</b>	<ul style="list-style-type: none"><li>▪ Sales &gt;\$10B</li><li>▪ Adj. Operating margin* ~13%</li></ul>	<ul style="list-style-type: none"><li>▪ Sales – at least hold market share and at least grow LVP plus 1%</li><li>▪ Adj. Operating Margin* – at least maintain margins from 2020 levels</li></ul>
<b>Autoliv Electronics</b>	<ul style="list-style-type: none"><li>▪ Sales ~\$3B with AS** &gt;\$1B</li><li>▪ Adj. Operating Margin* 0-5%</li></ul>	<ul style="list-style-type: none"><li>▪ Sales ~\$4B with AS** ~\$2B</li><li>▪ Adj. Operating Margin* improve vs. 2020</li></ul>

(\*) Non-US GAAP measure excludes costs related to Antitrust matters and capacity alignment.

(\*\*) Active Safety.



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products save over  
30,000 lives

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Internal

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