

IR Business Briefing Automotive products & Batteries Business

Takamitsu Kozuka

Automotive Products Division Manager

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Forward-Looking Statements

Projections of future sales and earnings in these materials are “forward-looking statements.”

Management offers these projections in good faith and on the basis of information presently available.

Information in these statements reflects assumptions about such variables as economic trends and currency exchange rates.

Forward-looking statements incorporate known and unknown risks as well as other uncertainties that include, but are not limited to, the following items.

- Economic trends in the U.S., Europe, Japan and elsewhere in Asia, particularly with regard to consumer spending and corporate expenditures.
- Changes in exchange rates of the U.S. dollar, euro, and Asian currencies.
- The Furukawa Electric Group’s ability to respond to rapid advances in technology.
- Changes in assumptions involving financial and managerial matters and the operating environment.
- Current and future trade restrictions and related matters in foreign countries.
- Changes in the market value of securities held by the Furukawa Electric Group.

Due to the above factors, actual sales, earnings, and other operating results may differ significantly from Looking Statements in these materials. In addition, following the release of these materials, Furukawa Electric Group assumes no obligation to announce any revisions to forward-looking statement in these materials

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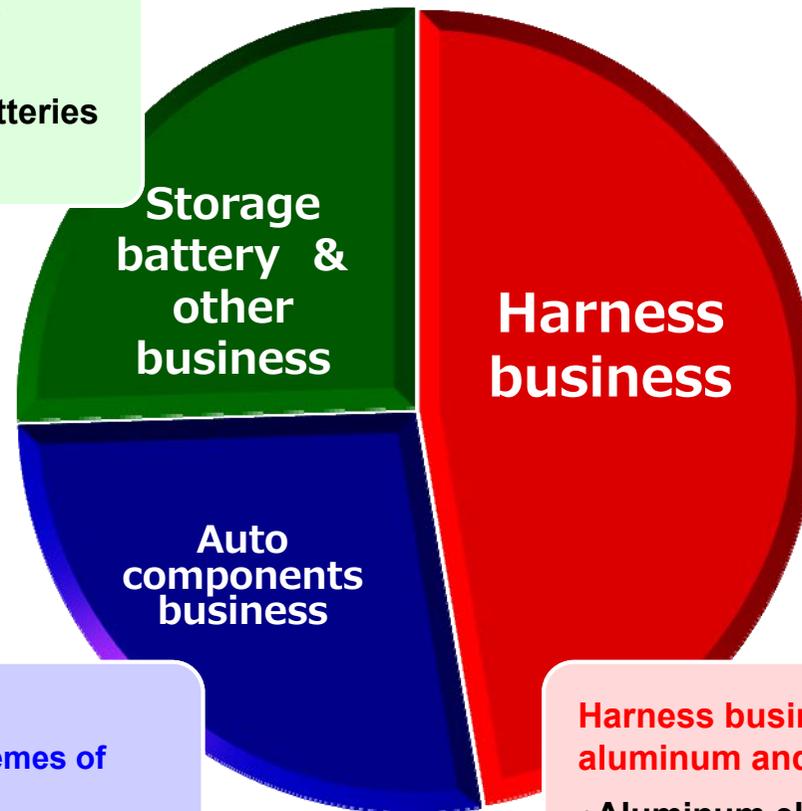
Furukawa Electric Co., Ltd

Automotive products & Batteries

– Business composition (FY2017 forecast)

Storage battery and other business

- Ultra batteries for idling stop system
- EN standard lead storage batteries



Auto components business

– Expand the business with themes of safety & ecology

- SRC (steering roll connector)
- BSS (battery state detection sensor)
- On-vehicle radar, vehicle interior lighting, etc.

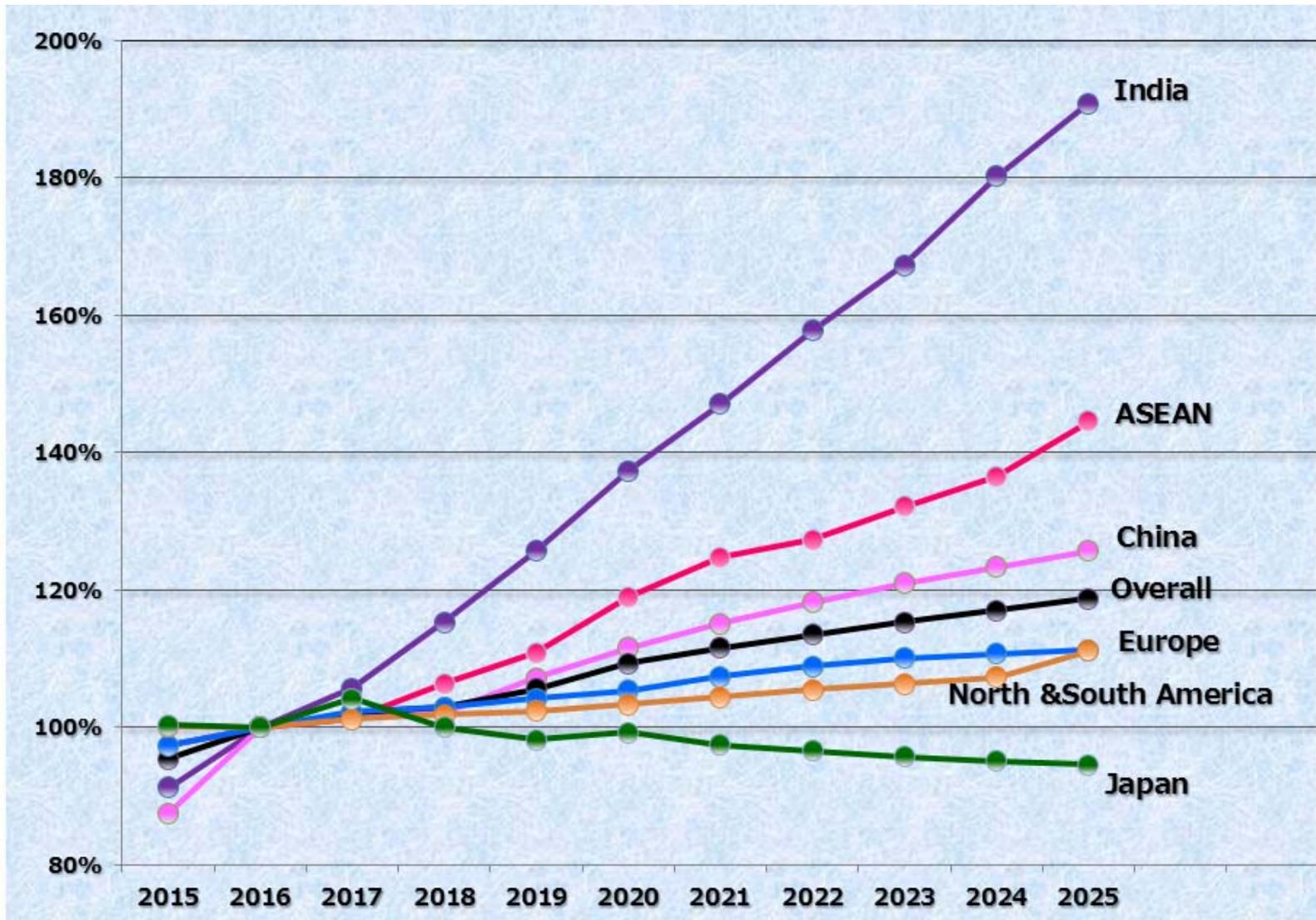
Harness business – Change to aluminum and globalization

- Aluminum electric wires
- Anti-corrosion terminals (α terminal series)
- High-voltage harness

Automotive products & Batteries

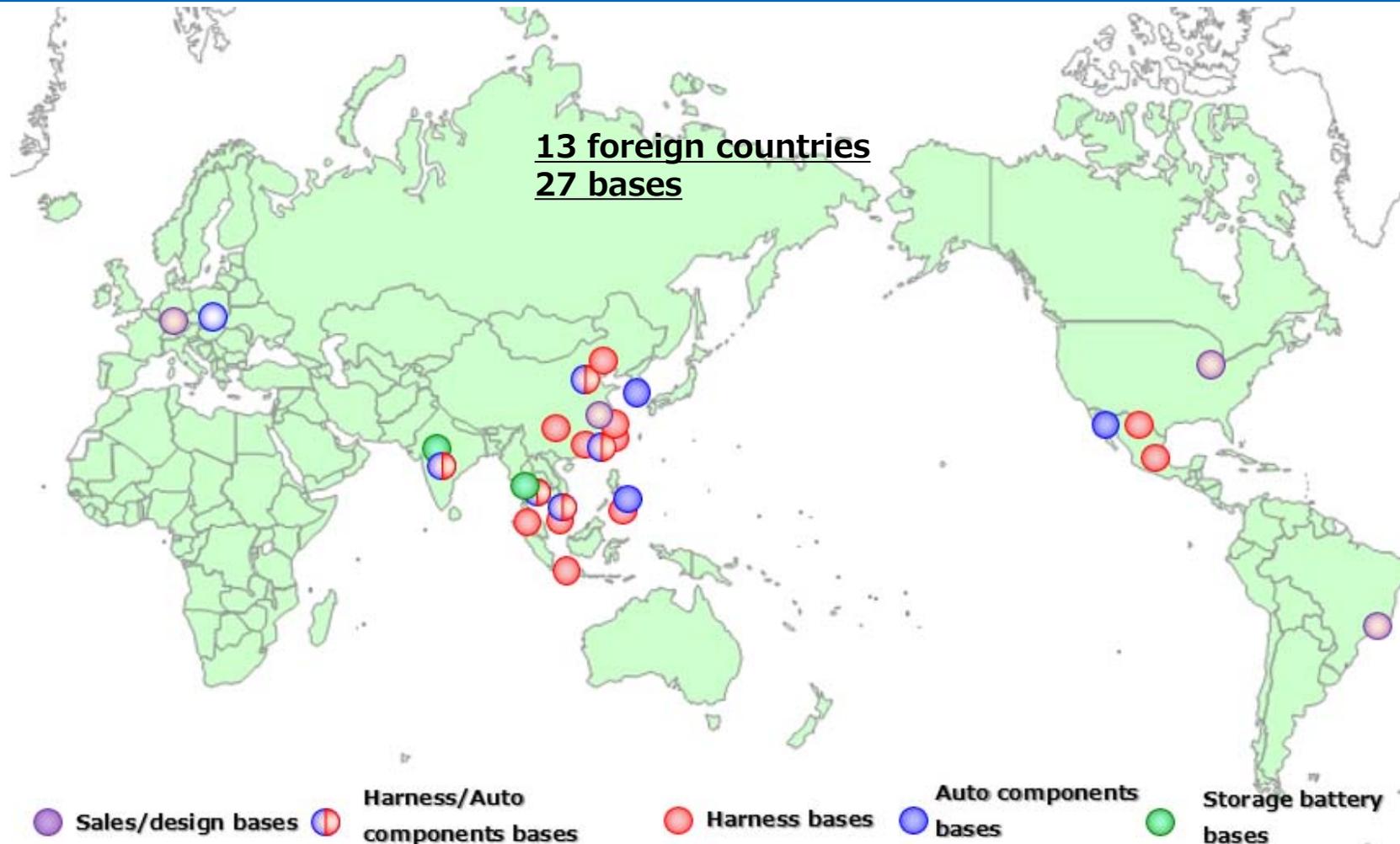
– Assumed vehicle production volume

Assumed yearly production volume taking the result of FY2016 as 100% (FY2017 onward: forecasts)



Automotive products & Batteries

– Global bases



Maximum utilization of the existing bases
Rebuilding the production structure to reduce risks of labor and currency exchange

Automotive products & Batteries

– Sales and Operating income (FY2017 Forecast)

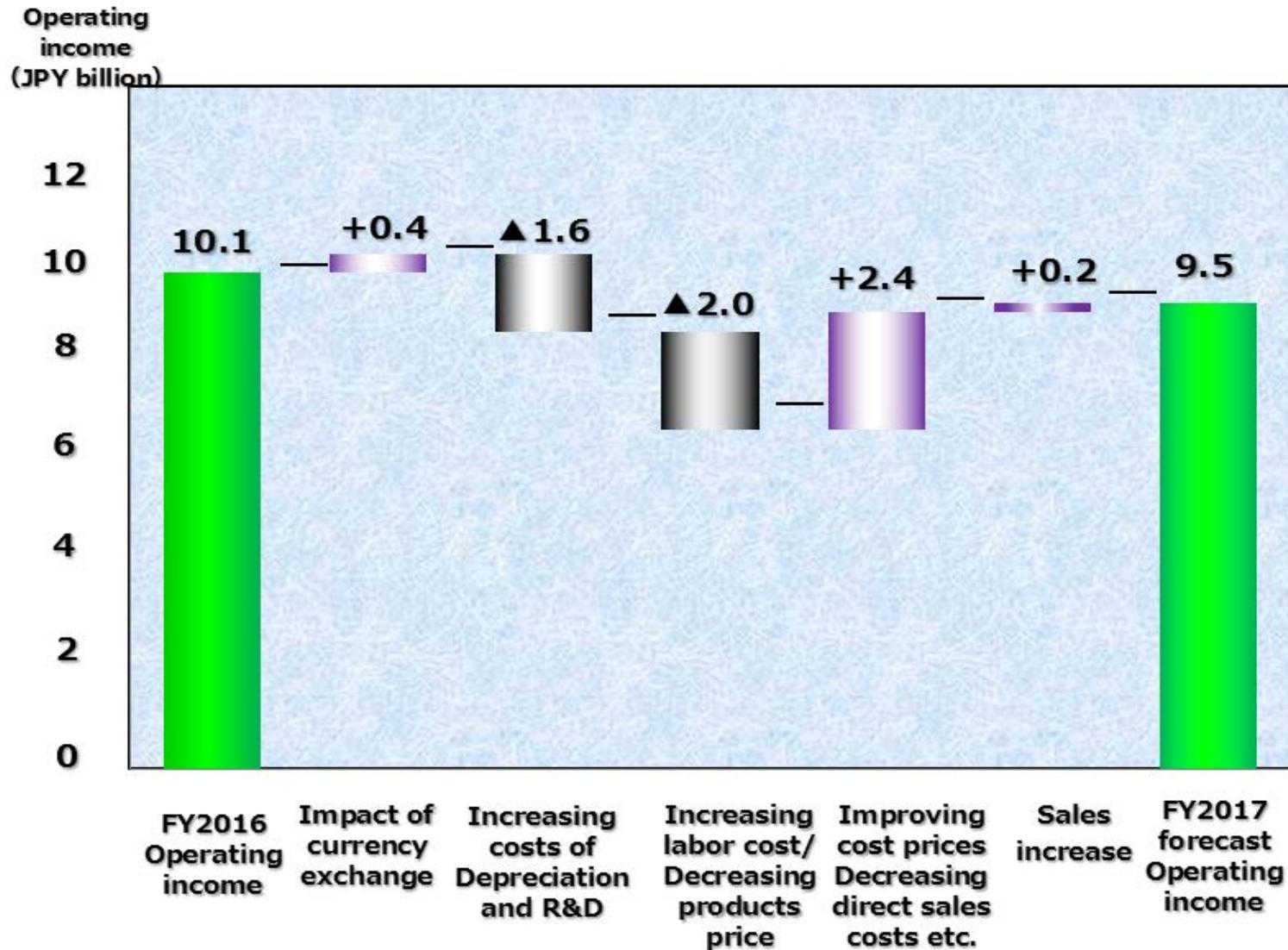
**FURUKAWA
ELECTRIC**

(JPY billion)

	FY2016	FY2017	
			YOY
Sales	223.4	230.0	103 %
Operating income	10.1	9.5	94 %
Operating margin	4.5 %	4.1 %	▲0.4 %

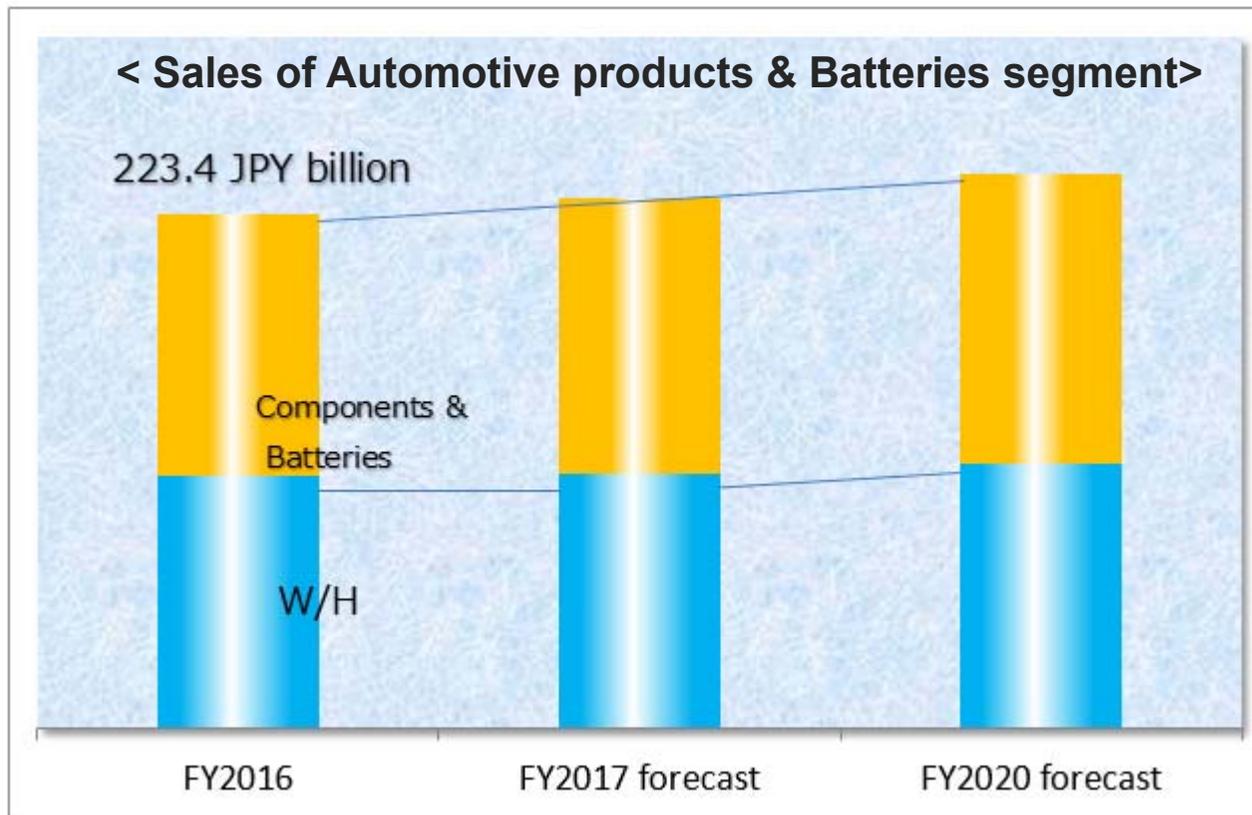
Automotive products & Batteries

– Analysis of Changes in Operating income (YoY)



Strategic scheme of the Automotive-related business

Expand the global trading area of products for which we have advantages in areas of ecology, safety and self driving



**Ecology: Aluminum wire harness, BSS, EPS-related products
(harness, Electronic units)**

Safety: SRC, Radar

Self driving: Radar

Key Products, Usage, and Customer Segments

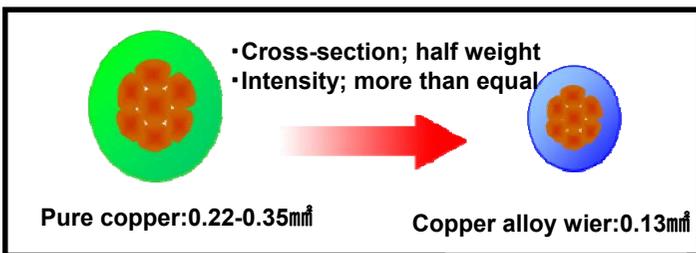
Business	Key Products	Usage/Volume	Main Customer Segments	Overseas Sales Ratio, Main market
Auto components (Approximately 30%)	<ul style="list-style-type: none"> •SRC (connectors for automotive airbag) 	Connectors for airbags 2016: 29 million 2017: 30 million	Global automakers including Tier 1	75% Worldwide
	<ul style="list-style-type: none"> •BSS (Battery state detection sensor) 	Vehicle power management 2016: 2.5 million 2017: 2.7 million	Japanese automakers	75% Japan, China, North America
	<ul style="list-style-type: none"> •Perimeter monitoring radar 	Advanced driver assistance system (ADAS) 2016: 80,000 2017: 600,000	Japanese automakers	Japan
Harness (Approximately 50%)	<ul style="list-style-type: none"> •Aluminum harness 	Promote "Green cars" by making vehicles lighter	Japanese automakers	30% Japan
	<ul style="list-style-type: none"> •Anti-corrosion terminals 	Water-resistant terminals for aluminum harness	Japanese automakers	
	<ul style="list-style-type: none"> •High-voltage harness 	High electric voltage-resistant harness for EV	Japanese automakers	
Batteries (Approximately 20%)	<ul style="list-style-type: none"> •Lead storage batteries for idling stop system vehicles •EN standard lead storage batteries •Auxiliary batteries for hybrid vehicles 		Automakers (new cars) Car dealers (OTC)	Japan, Asia

Wiring harnesses (W/H)

- Use **high-strength, highly conductive materials** to make thinner and lighter W/H possible. Supply W/H made of these materials along with aluminum W/H to respond to the need for more fuel-efficient, lighter cars



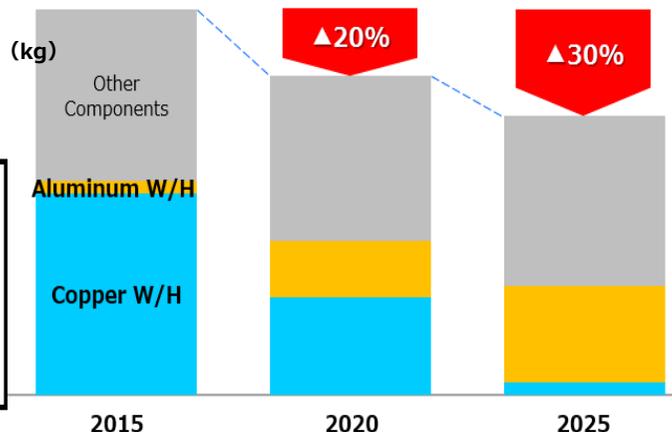
Features of high spec copper alloy wire



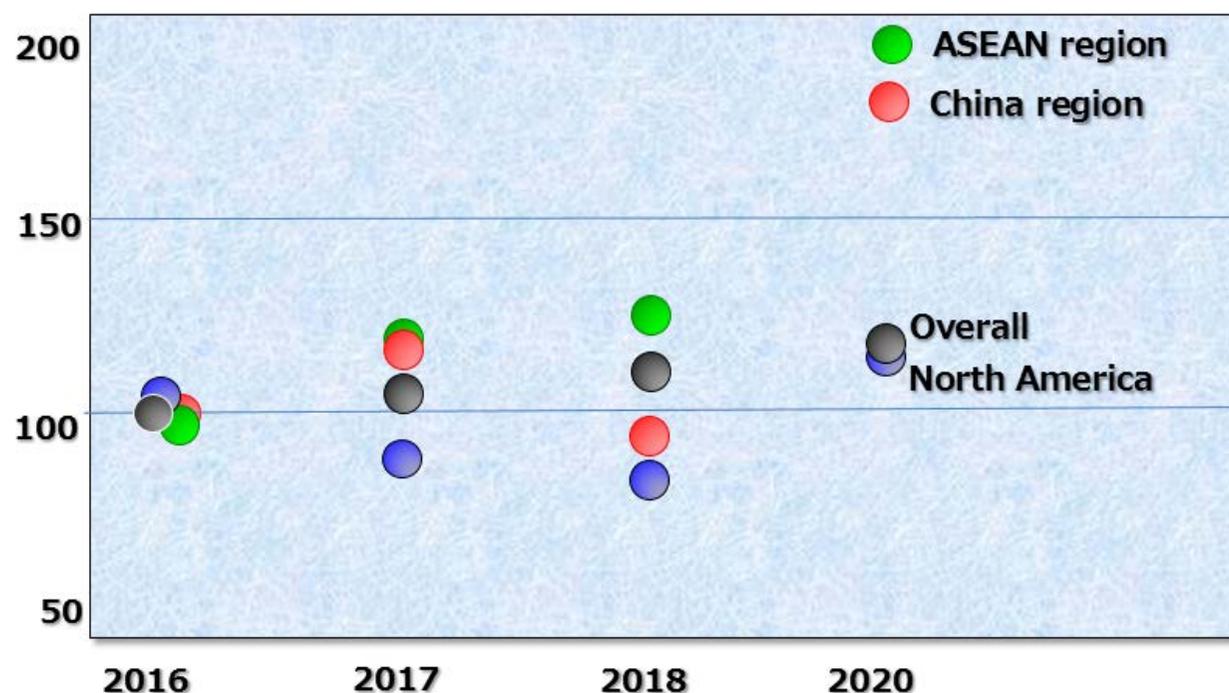
Harness terminals

- Take advantage of the **excellent balance between strength and conductivity** as well as superior bending workability to make smaller terminals.
 - Use our **optical fiber laser welding technology** to supply anti-corrosion terminals for aluminum wires (α terminals) with an airtight, corrosion-resistant structure.
- Enhance our lineup of terminals to increase the ratio of aluminum harnesses

W/H lighter weight case example



Wire Harness Sales Trend (forecast) FY2016 = 100



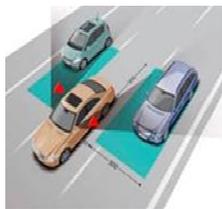
- Accommodate the needs for lighter products by utilizing distinguished technology for aluminum W/H power cables and joining parts
- With the weakening of automakers' intention "local production for local consumption", consider optimizing production bases on a global basis
- China: Increase orders for locally developed vehicles and global vehicles of Japanese automakers
- ASEAN: Expand market shares of pickup trucks and motorcycles by leveraging lightweight features (aluminum power cables + terminals)
- North America: Reconstruct the production structure

Perimeter monitoring radar

- Employing our proprietary sensing technology (the pulse method), which combines **signal transmission and high-frequency technologies that we have developed through the telecommunication infrastructure business**, perimeter monitoring radar detects a person or object located behind a car or in the driver's blind spot.



Blind spot detection



Lane changing support



Proximity detection driving a car in reverse



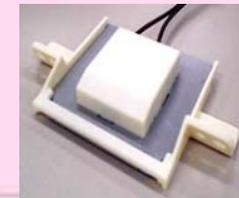
■ Signal transmission technologies

- I T L A



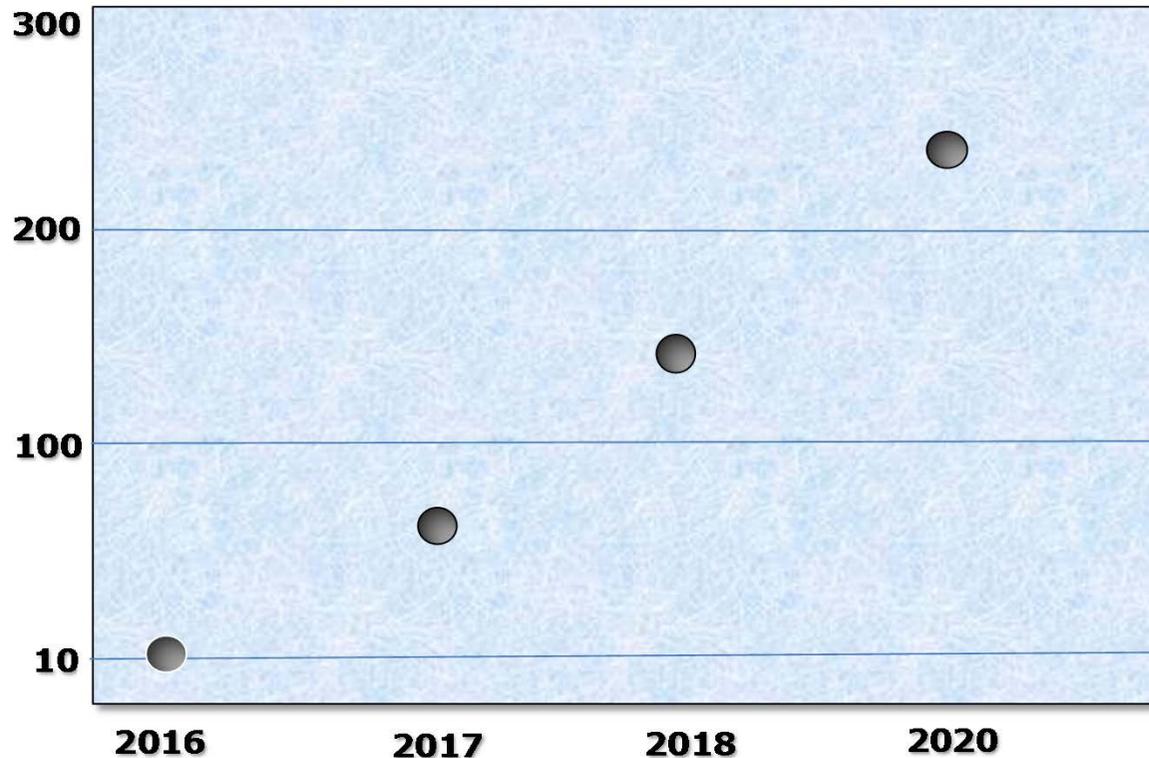
■ High-frequency technologies

- Automotive composite antenna



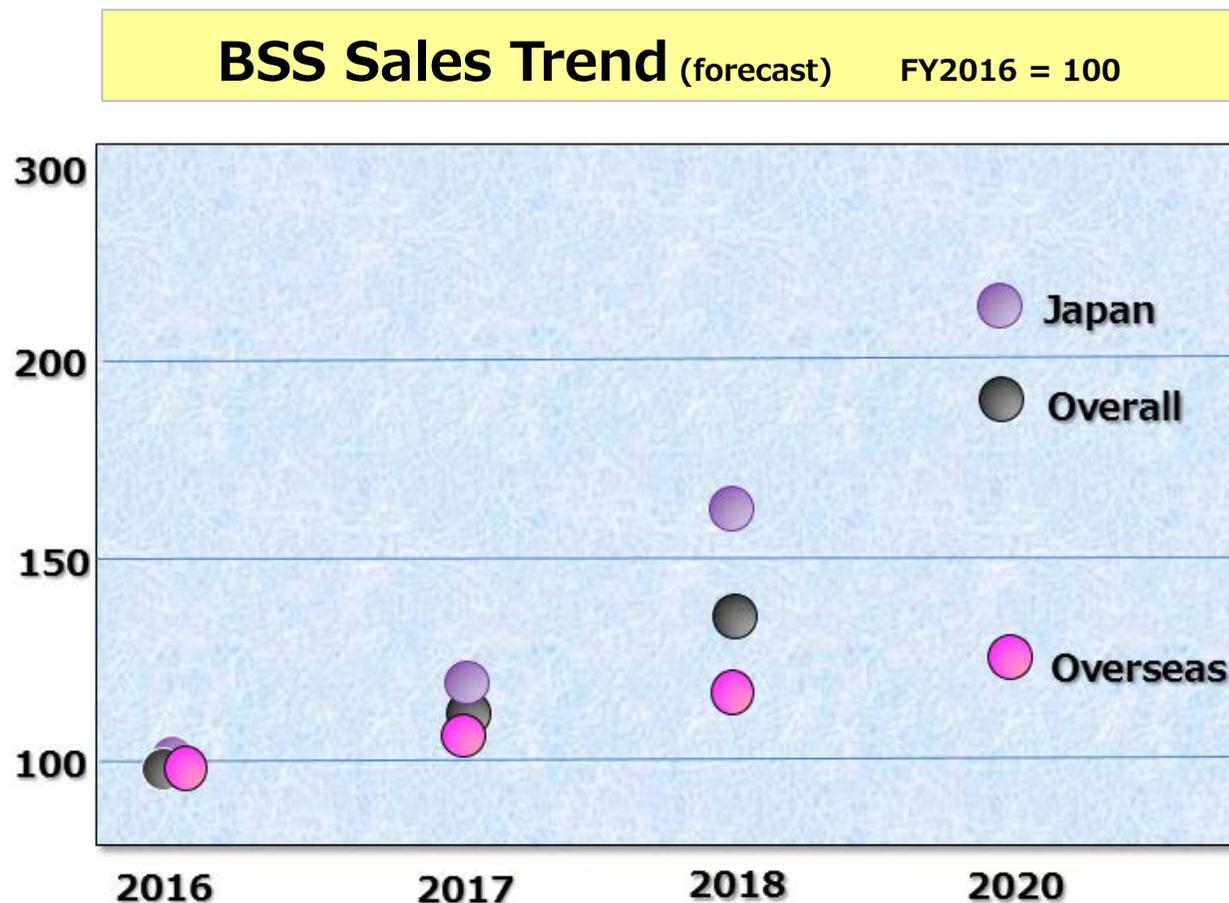
Perimeter monitoring radar Sales Trend

(forecast) FY2016 = 100



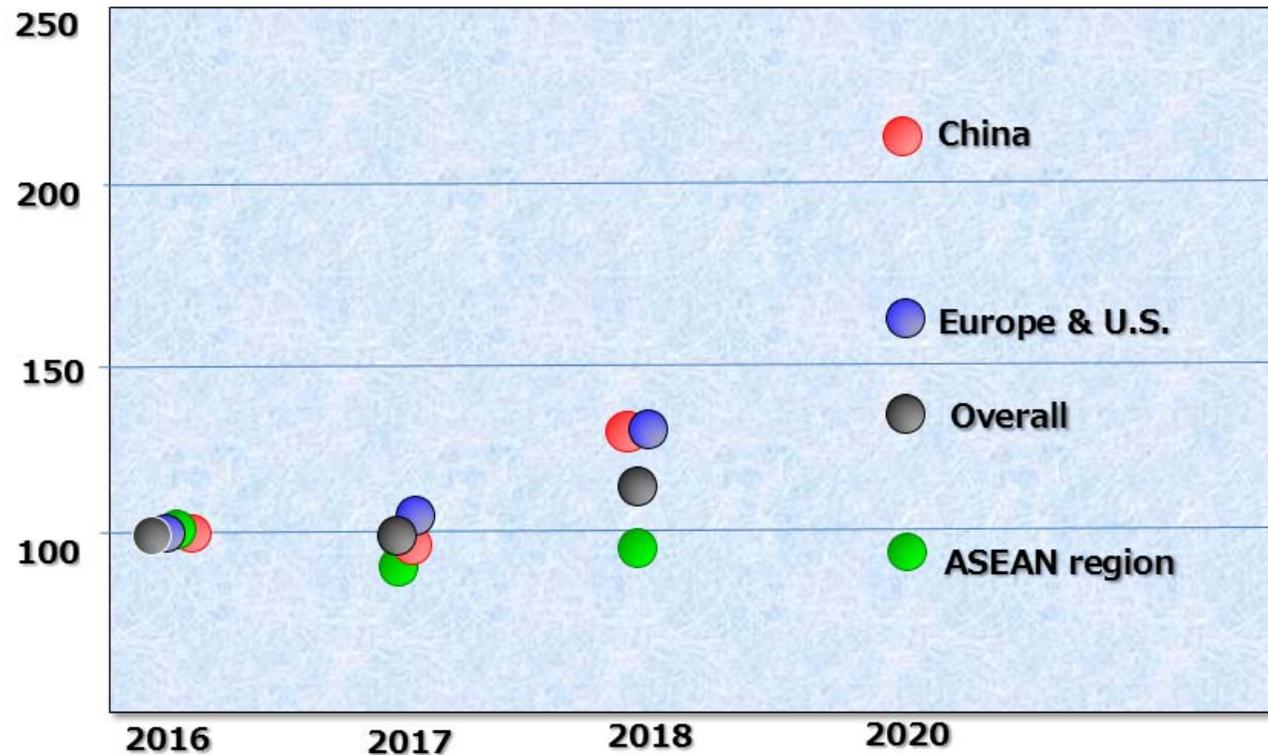
A thin unit which can be mounted on back of the vehicle near the bumper

- Adopted in Mazda CX-5, the volume is increasing
 - Increase production volume by launching the second line from July 2017
- Sales expansion activities are in progress for other models



- **Japan:** Further expand share with the new type
- **Overseas:** Expand share by obtaining orders for global vehicles

SRC Sales Trend (forecast) FY2016 = 100



- Strengthen cost competitiveness by taking advantage of scale based on the No. 1 market share
- Aim to expand orders from European and U.S. automakers

Thank you very much
for your attention.

