



# **FY2017 Financial Results ended March 31, 2017**

- I. Closing results**
- II. Strategies**

Apr 28, 2017  
DENSO CORPORATION

# Overview of FY2017 Financial Results

1. Revenue increased due to production volume increase and sales expansion despite appreciation of the Yen.  
Despite production volume increase and cost reduction efforts, operating profit excludes other income/expenses decreased due to the appreciation of the Yen.

2. Revenue will increase in FY2018 due to production volume increase and sales expansion.  
Operating profit excludes other income/expenses will increase due to production volume increase and cost reduction efforts.

# FY2017 Financial Results

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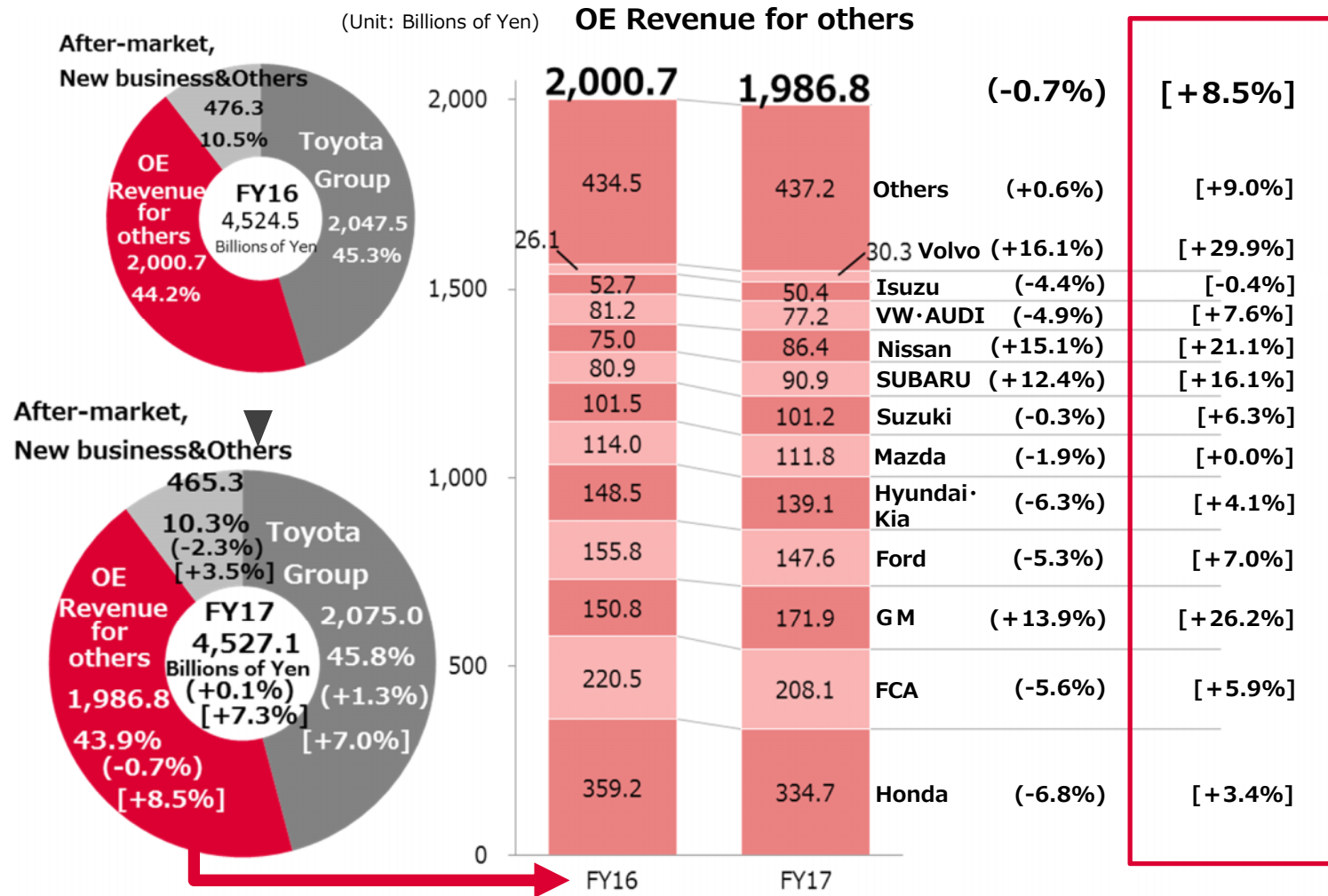
		FY17		FY16	Change		
<b>Revenue</b>		<b>4,527.1</b>		4,524.5	+2.6	+0.1%	
<b>Operating Profit</b> ( Excludes other income/ expenses)		<b>326.4</b>		365.2	-38.8	-10.6%	
Other income/ expenses	(7.2%)		(8.1%)		+53.6		
<b>Operating Profit</b> Finance income/ costs & others(*1)		<b>4.1</b>		-49.5	+14.8	+4.7%	
<b>Profit before Income Taxes</b>	(7.3%)	<b>330.6</b>	(7.0%)	315.7	-1.3		
<b>Profit (*2)</b>	(8.0%)	<b>360.9</b>	(7.7%)	347.3	+13.6	+3.9%	
	(5.7%)	<b>257.6</b>	(5.4%)	244.3	+13.4	+5.5%	
(Unit:Millions of Units)							
<b>Precondition</b>	Foreign Exchange Rate	JPY	108/\$	JPY	120/\$	-12 JPY	
		JPY	119/Euro	JPY	133/Euro	-14 JPY	
	Domestic Car Production		9.10		8.93	+0.17	+1.8%
	Overseas Car Production of Japanese Manufacturers (North America)		19.67		18.75	+0.92	+4.9%
			(6.38)		(6.26)	(+0.12)	(+1.9%)

1 Finance income, Finance costs, Foreign exchange gains/loss, Share of the profit of associates accounted for using the equity method

2 Profit attributable to owners of the parent company

# FY2017 Consolidated Revenue ( By Customer )

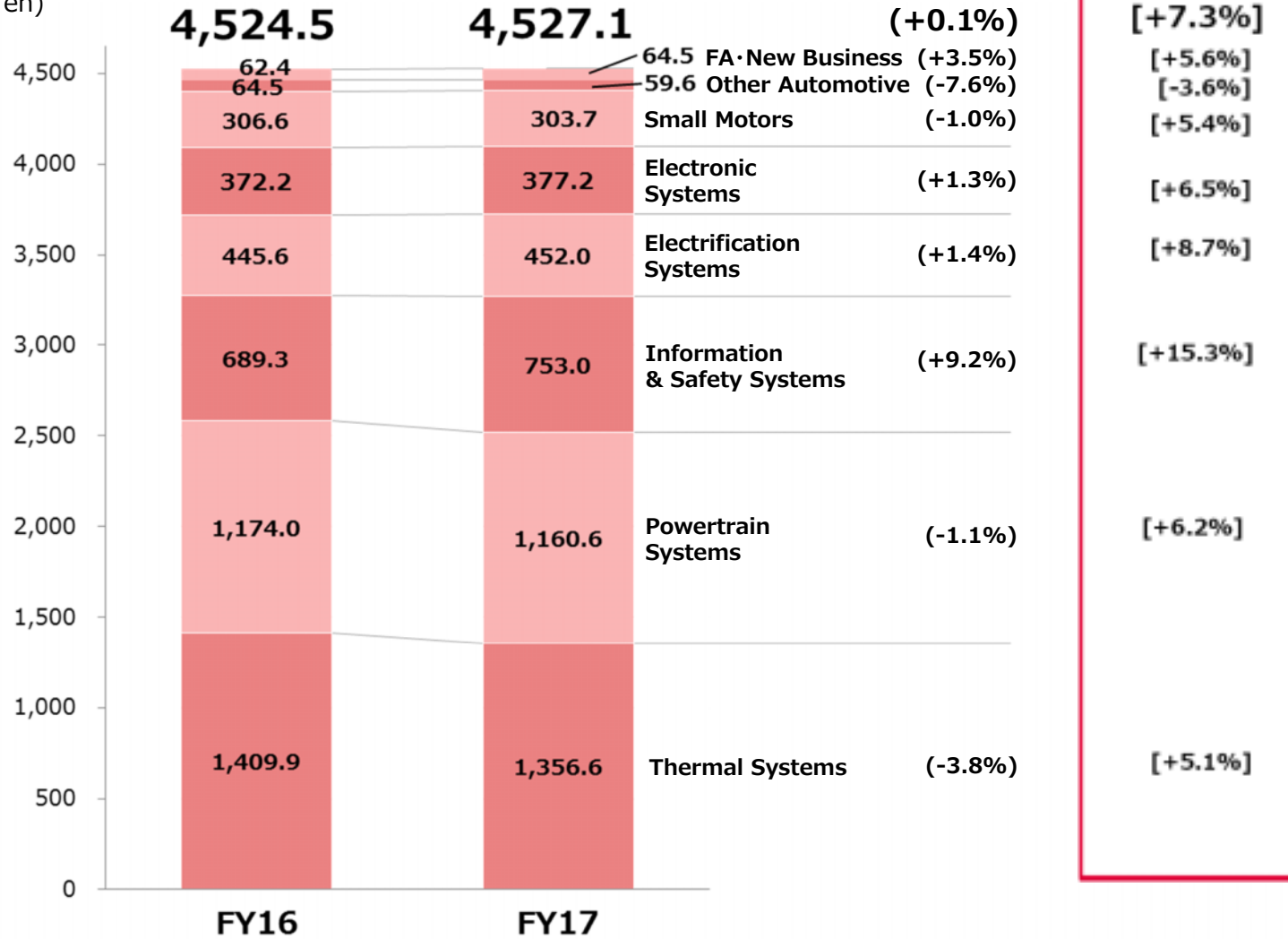
( ): Change from FY16  
 [ ]: Change from FY16 excludes FX difference



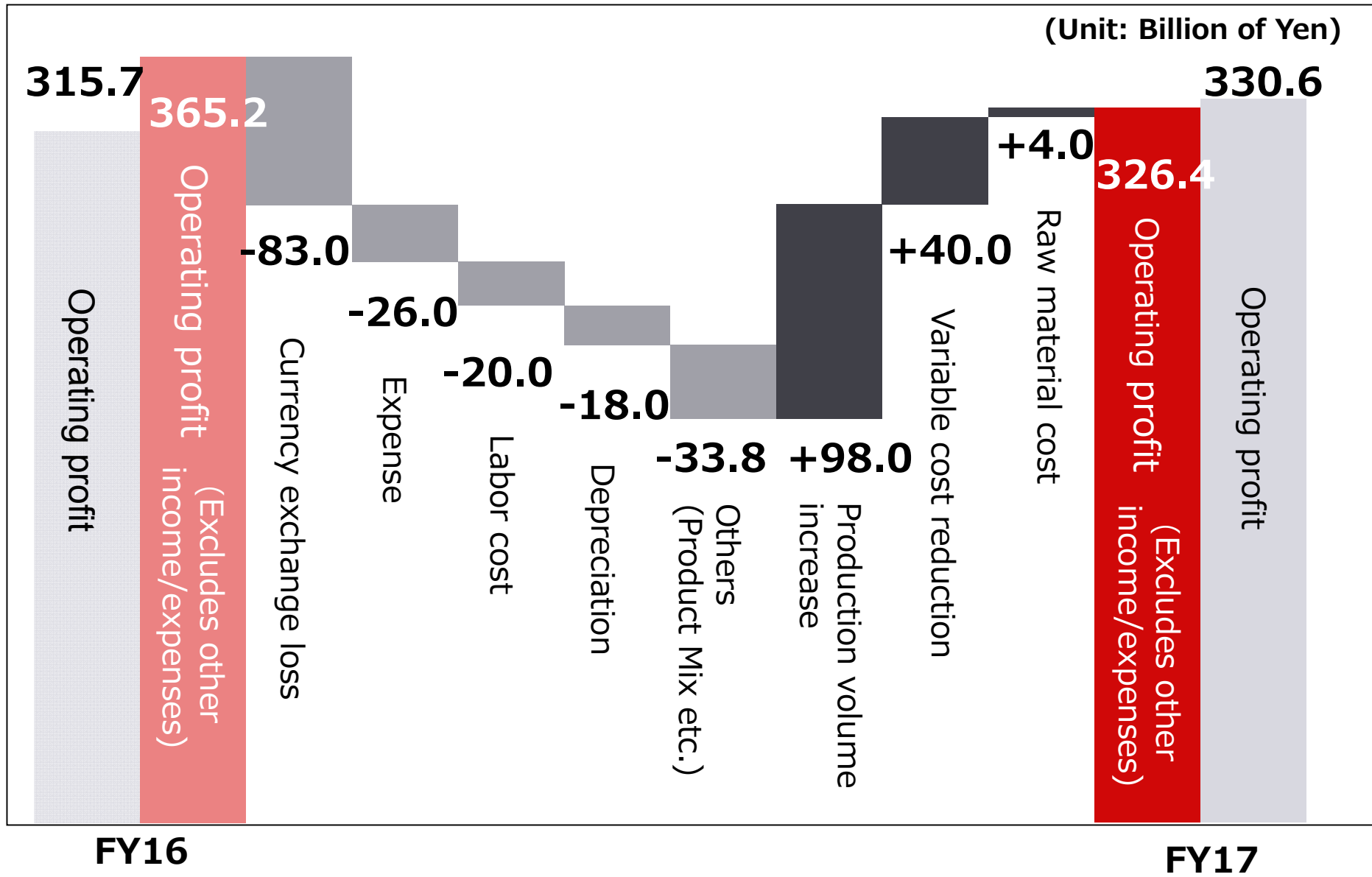
# FY2017 Consolidated Revenue ( By Product)

( ): Change from FY16  
 [ ]: Change from FY16 excludes FX difference

(Unit: Billions of Yen)



# Change in FY2017 Operating Profit



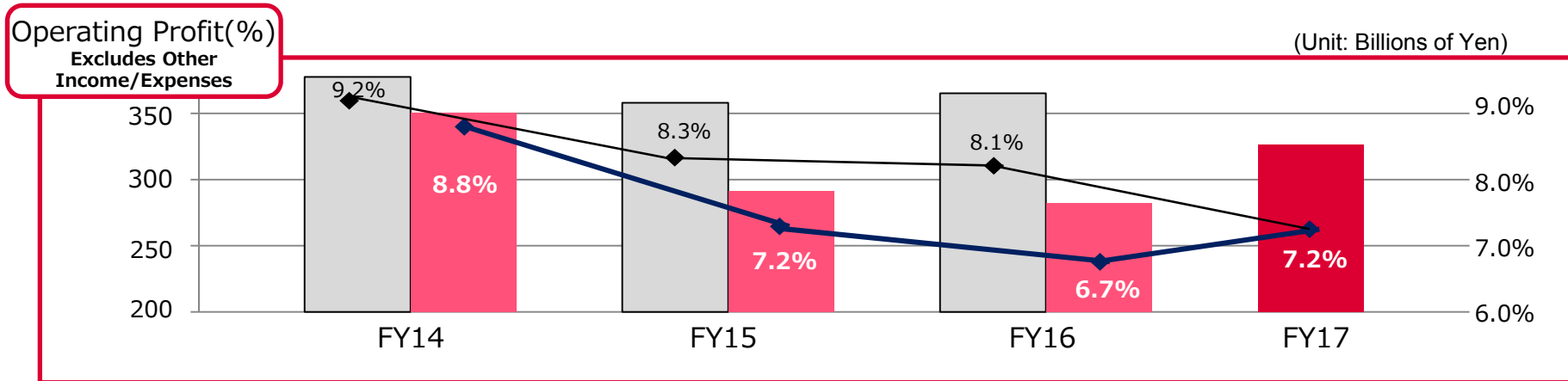
# Movement of Revenue/Operating Profit of Past Four Years

(Excludes Other Income/Expenses)

□ :Actual

■ :Actual converted at FY17 FX Rate

(Unit: Billions of Yen)



#### Precondition

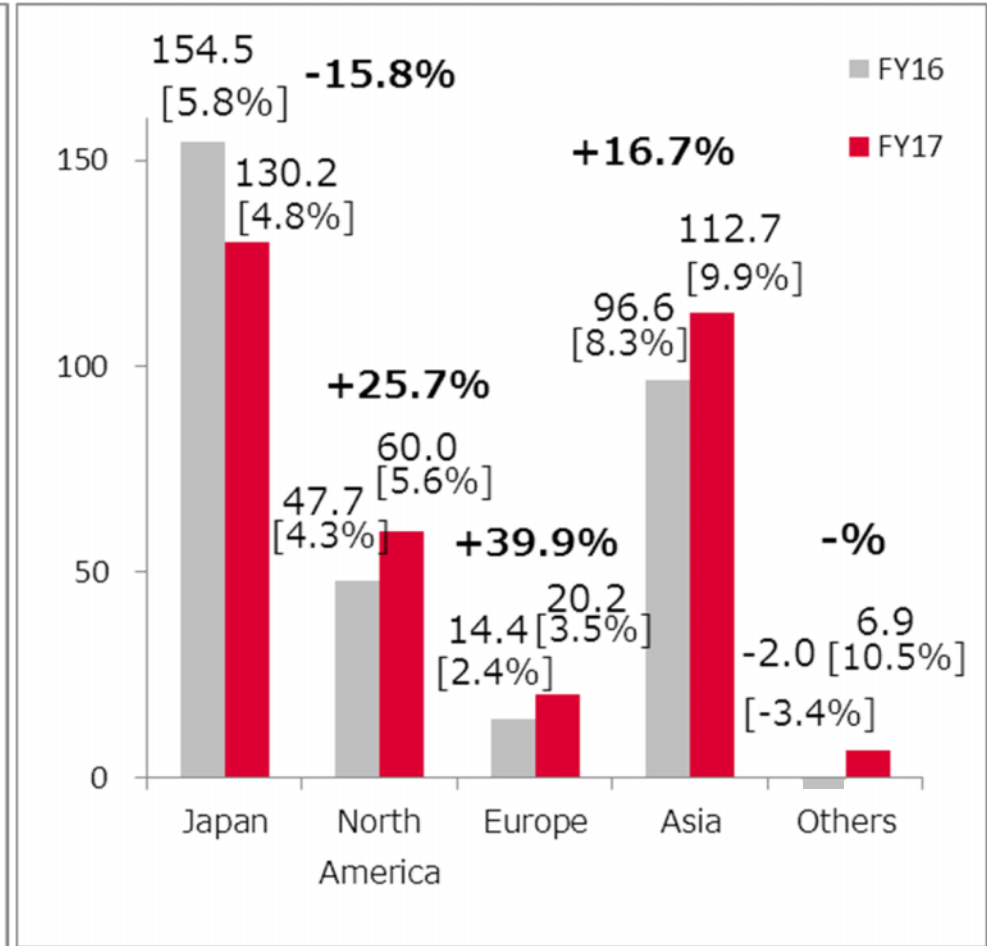
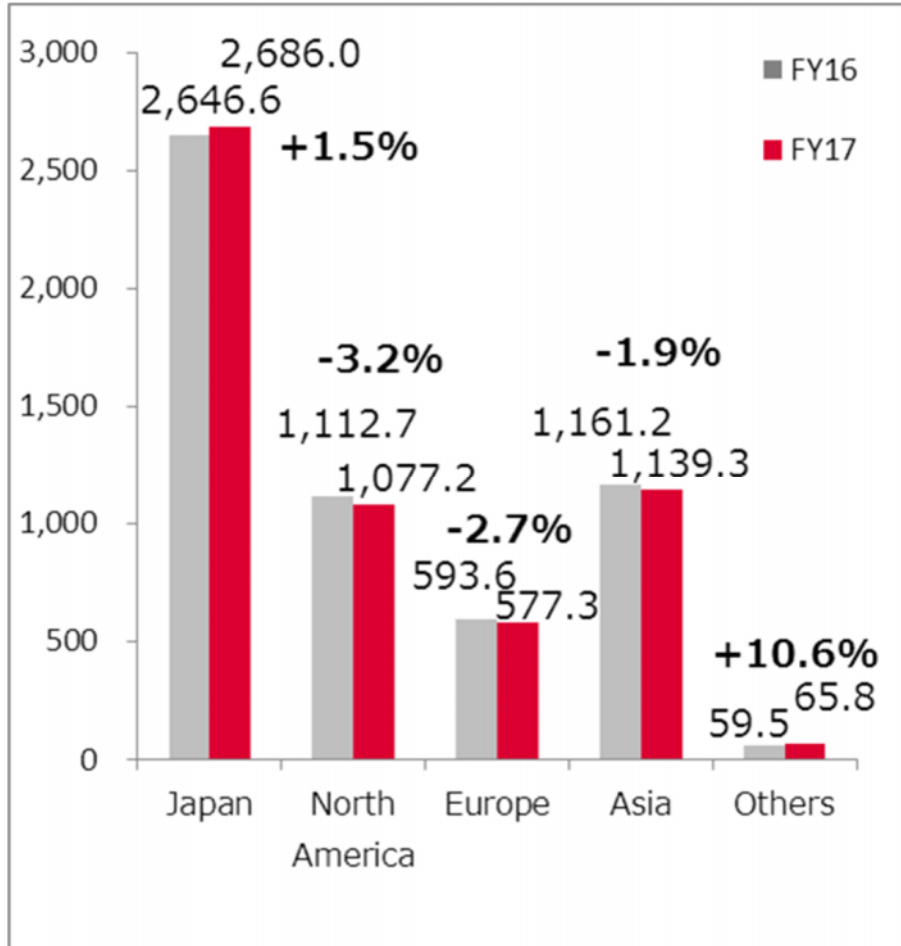
FX Rate(\$)	100	108		110	108		120	108		108
FX Rate(€)	134	119		139	119		133	119		119

# Geographical Segments by Company Location

## Revenue

## Operating Profit

(Unit: Billions of Yen)  
[ ]: Ratio to Revenue



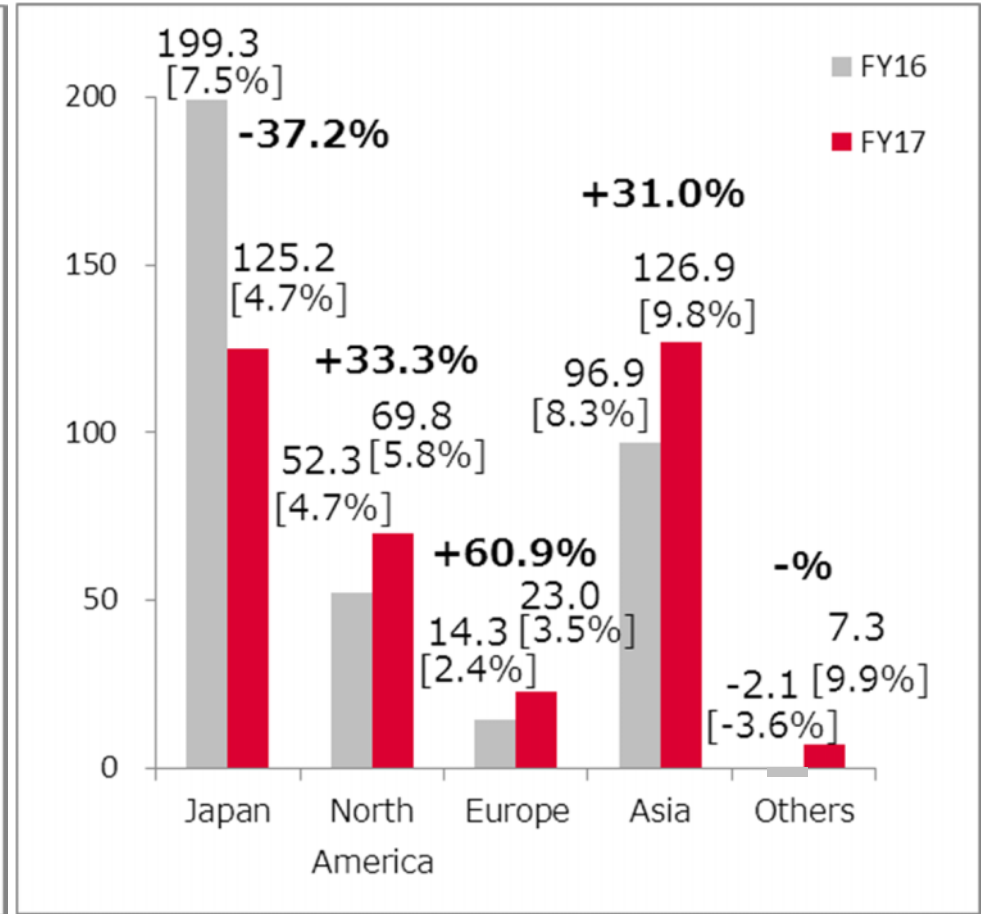
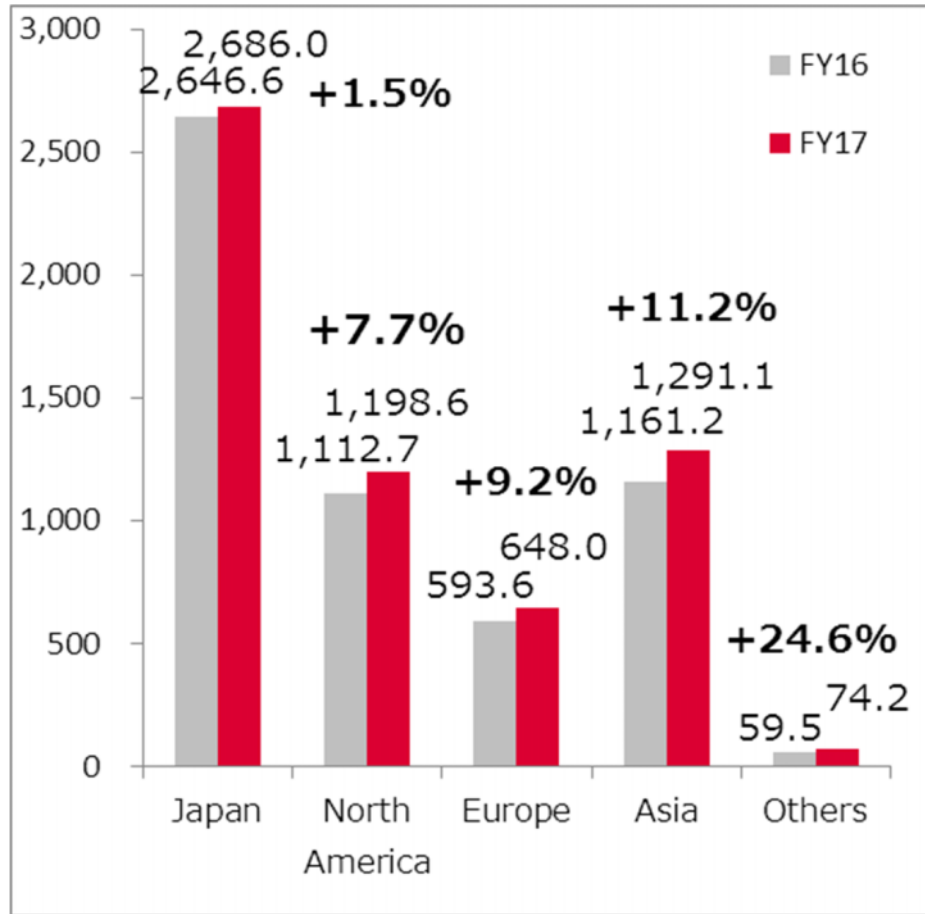


# Geographical Segments by Company Location (Local Currency Base ,excludes other income/expenses)

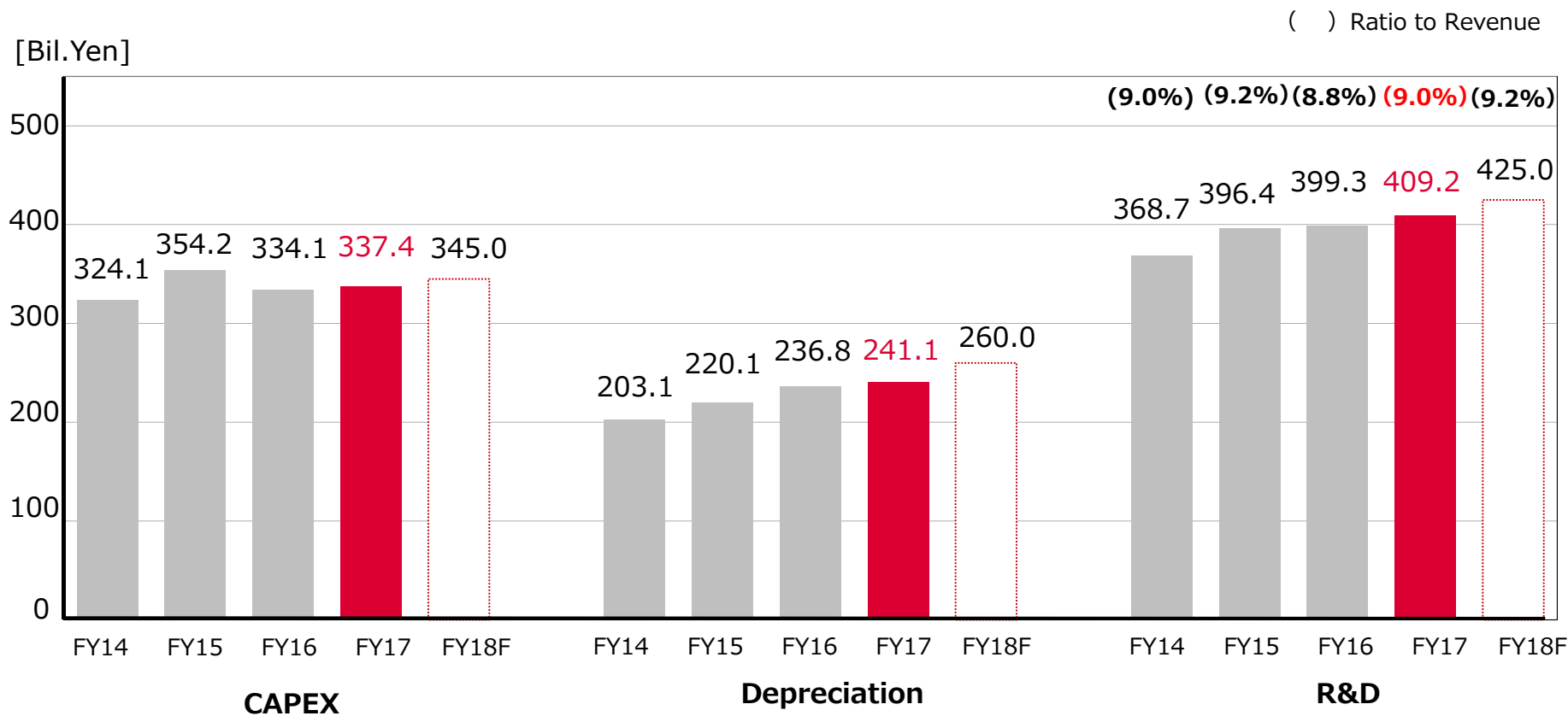
(Unit: Billions of Yen)  
[ ]: Ratio to Revenue

## Revenue

## Operating Profit



# Trend of Capital Expenditures, Depreciation and R&D Expenditures



# FY2018 Financial Forecast

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(Ratio to Revenue)

(Unit: Billions of Yen)

	FY18 Revised		FY17		Change	
<b>Revenue</b>		<b>4,610.0</b>		4,527.1	+82.9	+1.8%
<b>Operating Profit</b> ( Excludes other income/ expenses)	(7.1%)	<b>327.0</b>	(7.2%)	326.4	+0.6	+0.2%
Other income/ expenses		<b>0.0</b>		4.1	-4.1	
<b>Operating Profit</b> Finance income/ costs & others(*1)	(7.1%)	<b>327.0</b>	(7.3%)	330.6	-3.6	-1.1%
		<b>33.0</b>		30.3	+2.7	
<b>Profit before Income Taxes</b>	(7.8%)	<b>360.0</b>	(8.0%)	360.9	-0.9	-0.2%
<b>Profit (*2)</b>	(5.6%)	<b>260.0</b>	(5.7%)	257.6	+2.4	+0.9%

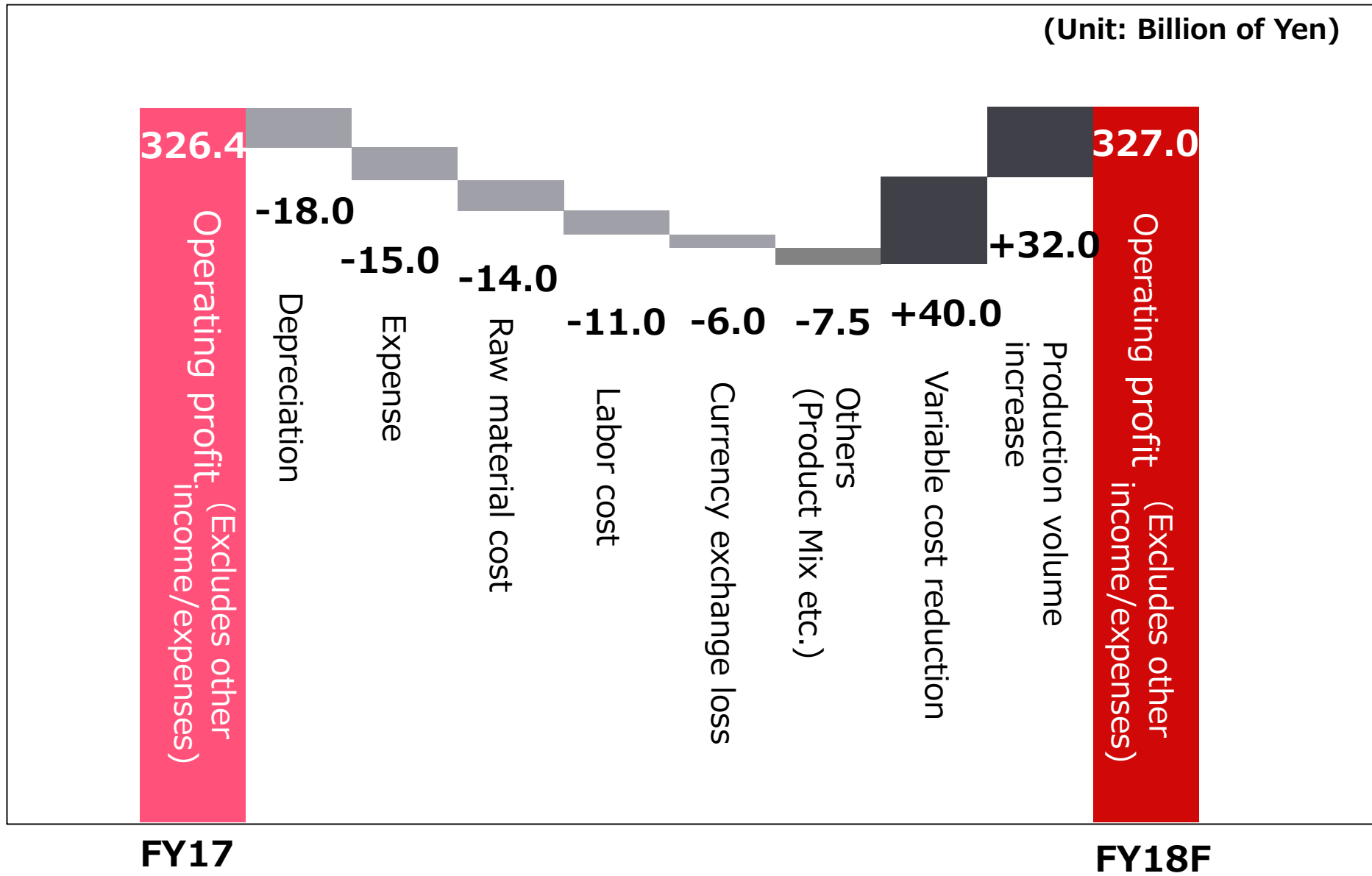
(Unit: Millions of Units)

Precondition	Foreign Exchange Rate	JPY	110/\$	JPY	108/\$	+2 JPY	
		JPY	115/Euro	JPY	119/Euro	-4 JPY	
	Domestic Car Production		9.18		9.10	+0.08	+0.9%
	Overseas Car Production of Japanese Manufacturers (North America)		20.02 (6.54)		19.67 (6.38)	+0.35 (+0.16)	+1.8% (+2.6%)

1 Finance income, Finance costs, Foreign exchange gains/loss,  
Share of the profit of associates accounted for using the equity method

2 Profit attributable to owners of the parent company

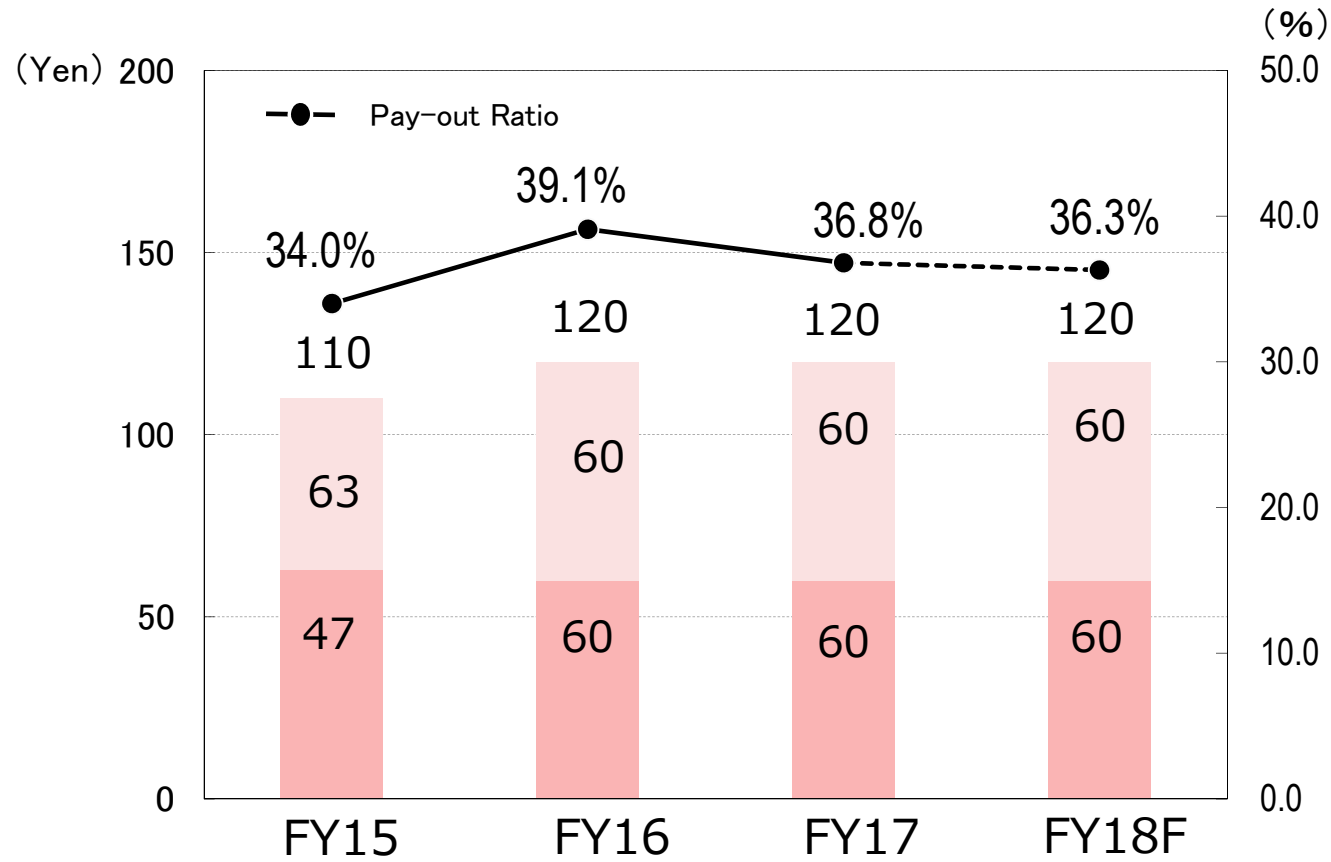
# Change in FY2018 Operating Profit



# Return to Shareholders

FY17 Annual Dividend per Share: 120 yen same as FY16

FY18 Annual Dividend per Share: 120 yen same as FY17



***DENSO***

Crafting the Core

# II. Strategy

1. Business environment surrounding DENSO and future priority areas

2. Priority areas

1) Electrification

2) ADAS/AD

3) Connected

4) FA business

(Non-automotive business)

3. Alliance policy and status

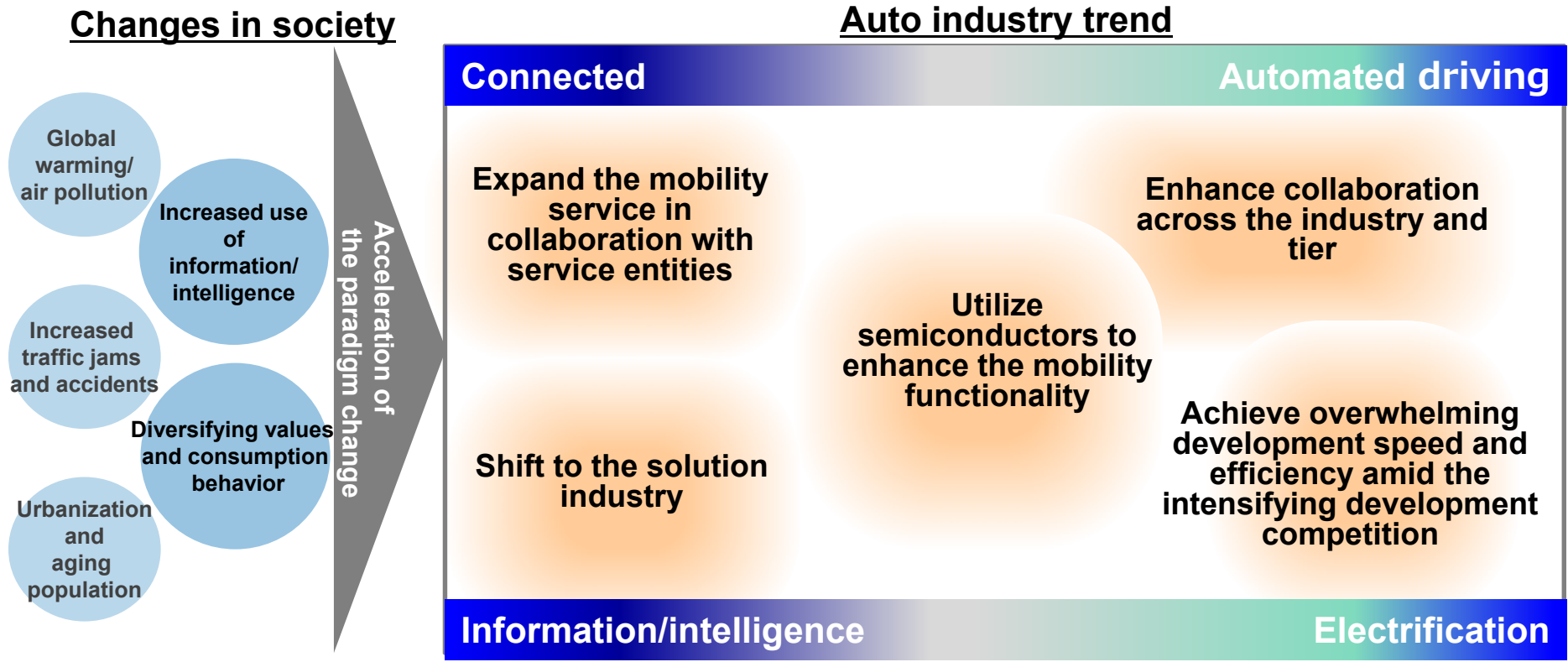
4. Revenue and profit goals for FY2021

**1.**

# **Business environment surrounding DENSO and future priority areas**



# 1. Business environment surrounding DENSO and future priority areas



**DENSO's priority areas**

**Electrification**

**ADAS/AD**

**Connected**

**Factory Automation (FA)**

The paradigm change provides DENSO with an opportunity to start new businesses. DENSO will offer highly reliable products and services to help build a society where everyone can have a sense of security and live in harmony.

**2.**

**Priority areas**

**1) Electrification**

# Policy in the area of the environment

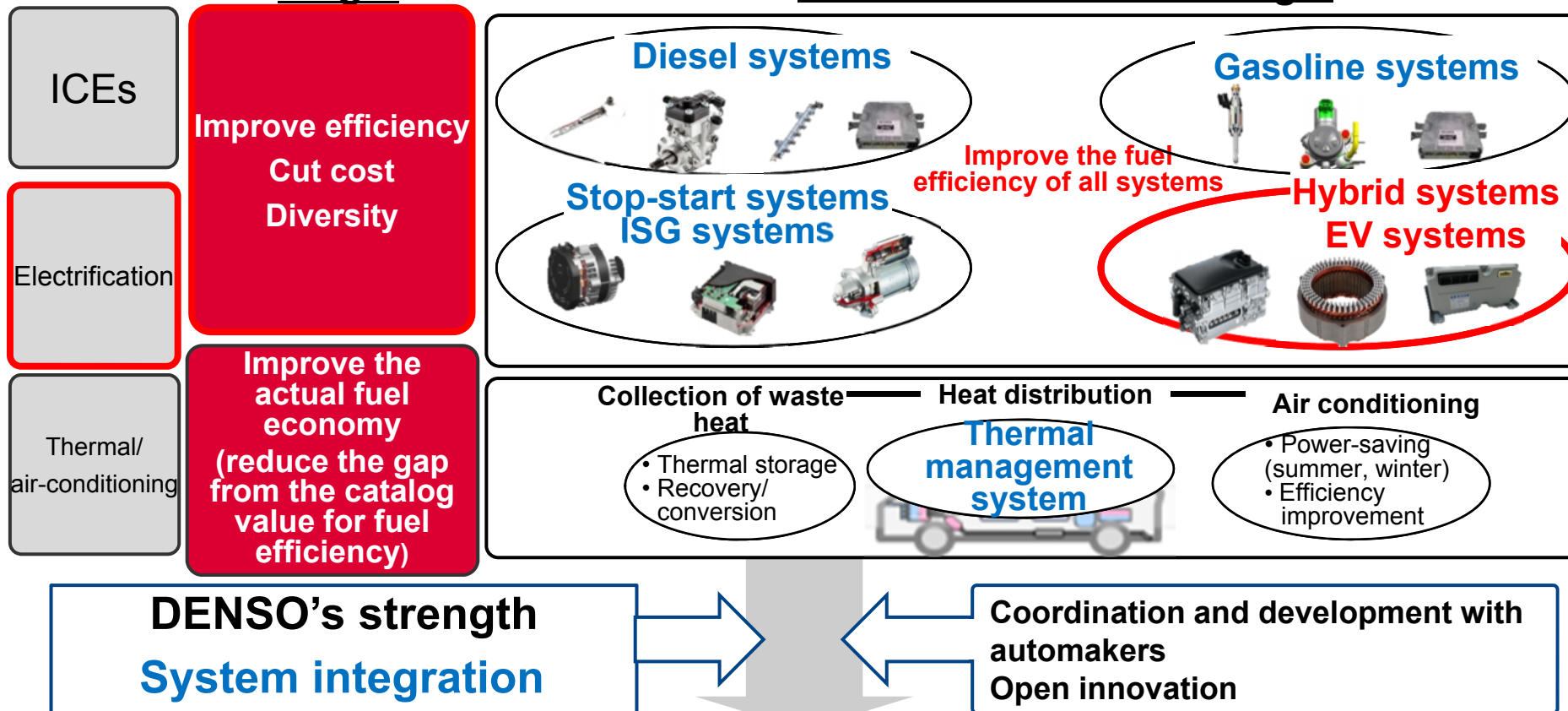
## Value to offer

### Preserve the Planet

- Improve the efficiency of internal combustion engines (ICEs), spread electrification, and achieve optimal combinations -

### Target

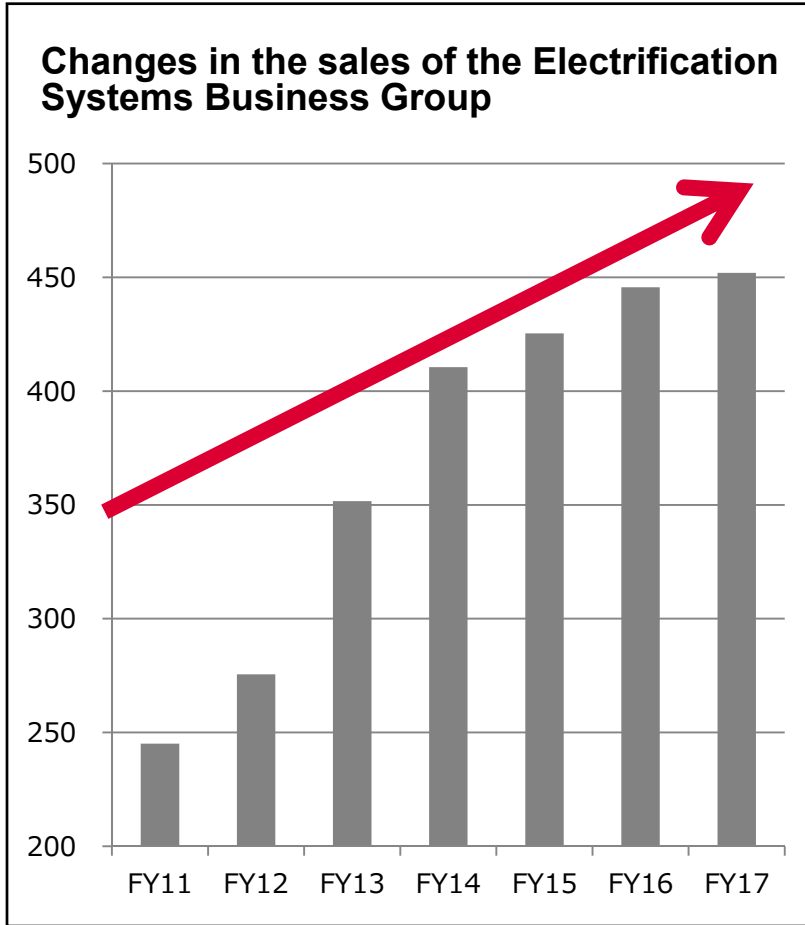
### Efforts to achieve the target



**“Preserve the Planet” with quality and highly reliable technologies**

# DENSO's strengths in the electrification area

## Results of production and sales



## Technology & Development

Compact and low-loss inverters    Compact and highly efficient motors    Compact and highly accurate battery ECUs

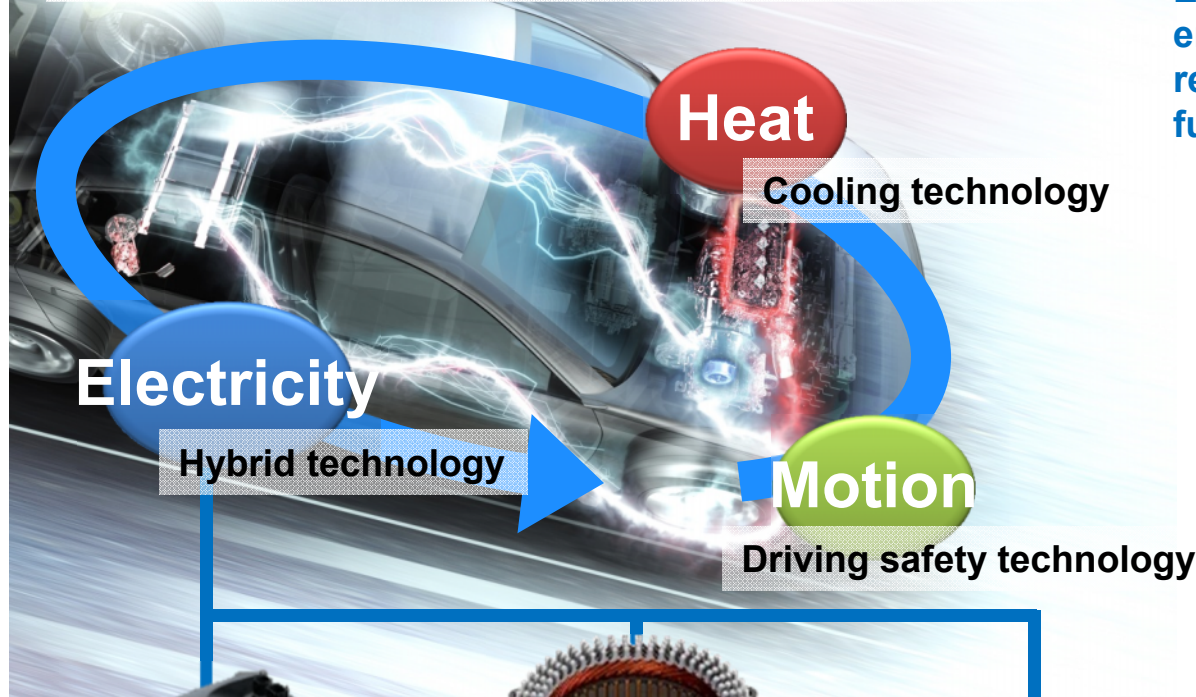
**Example :Reduction in size and increased performance of inverters**  
<Joint development with Toyota Motor Corporation>

- 2in1 power card
- Low cost
- High efficiency
- Small size
- Double-sided cooling structure
- Integration into a single board
- 33% reduction in volume

**Overwhelming strengths in both production and technology development based on many years of experience**

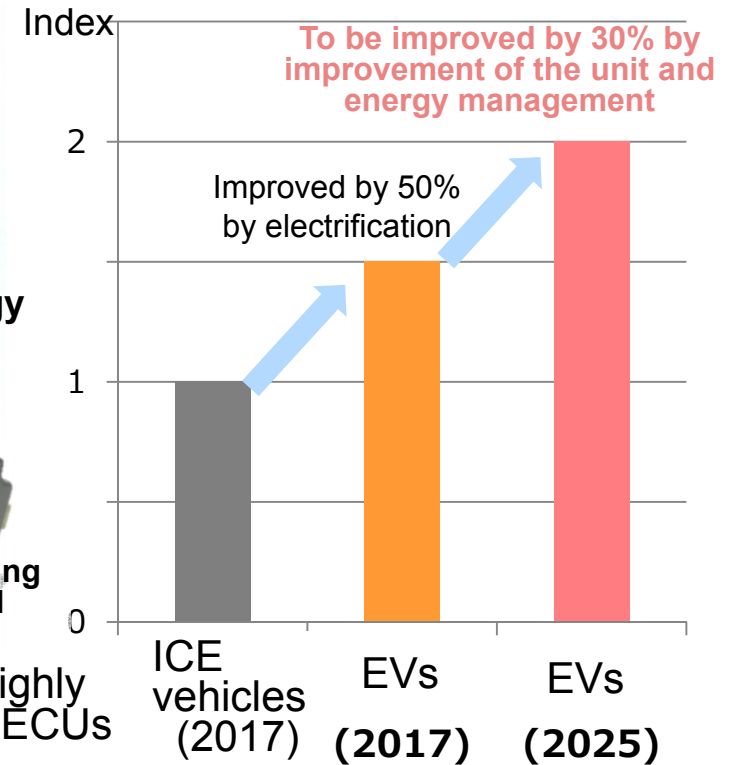
# DENSO's electrification systems that underpin environmental performance

## Energy management system



Efficiently recover and utilize the vehicle energy (heat, electricity, and motion) to reduce power consumption and increase fuel efficiency

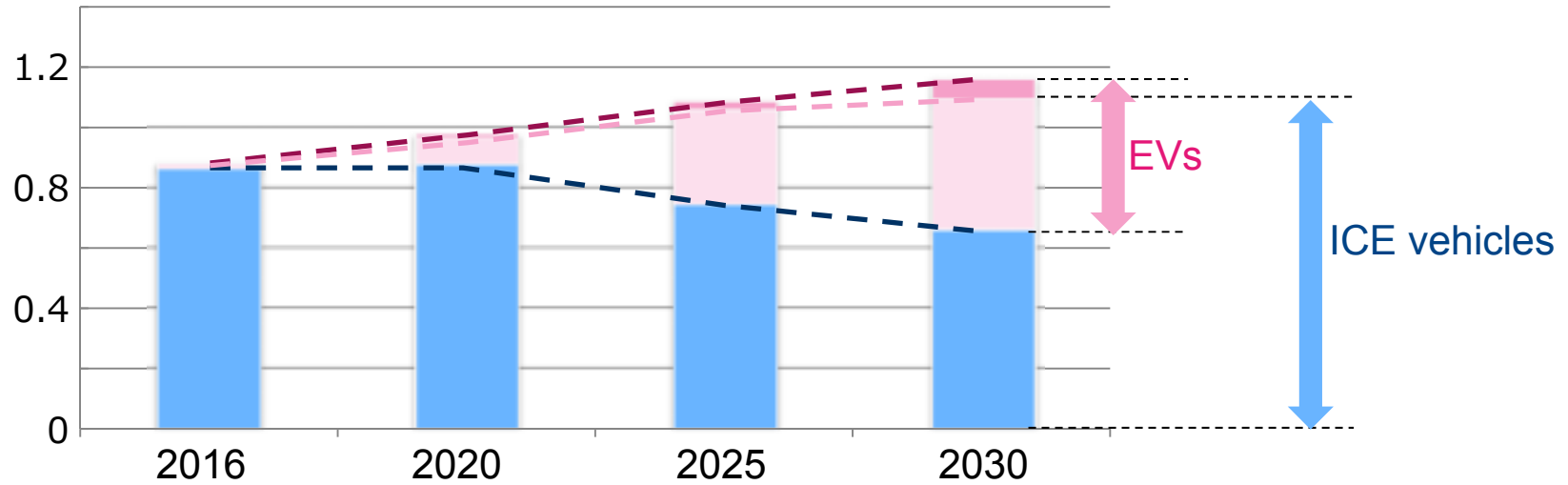
## Fuel efficiency of vehicles



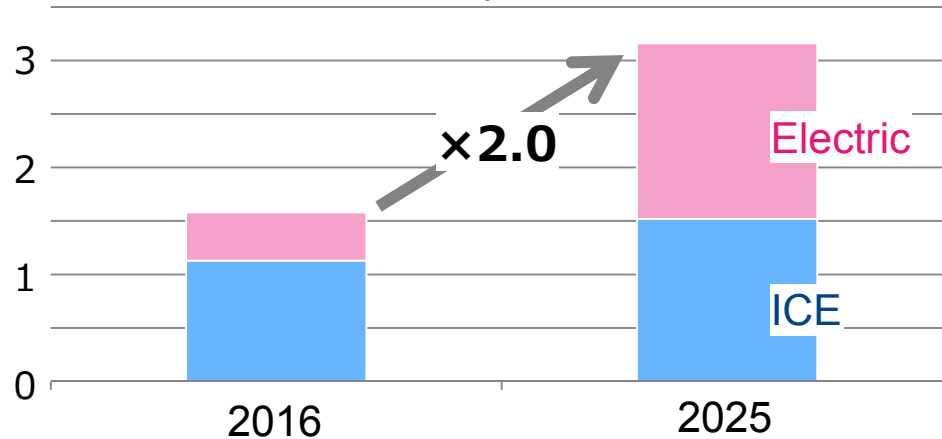
- IGBTs (manufactured in-house)  
• Double-sided cooling  
Compact and low-loss inverters
- SC coils  
Compact and highly efficient motors
- Multi-cell monitoring ICs (manufactured in-house)  
Compact and highly accurate battery ECUs

# Revenue target by 2025 in the environment area by spreading electrification

Projection of the powertrain market (passenger cars + pickup trucks)  
(Unit: 100 million vehicles/year)



Revenue (Unit: 1 trillion yen)



**2.**

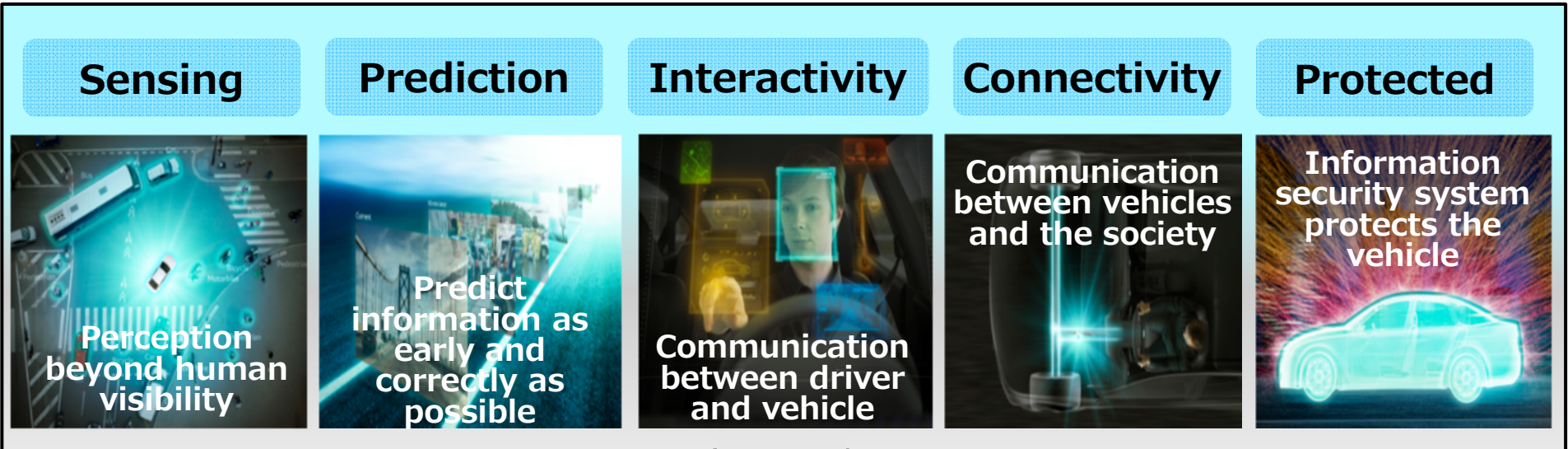
**Priority areas**

**2) ADAS/AD**

# Concept of initiatives in Security & Safety

## Value to offer

Flexible mobility with security and safety ensured  
- reliable ADAS/automated driving systems-  
technologies



## Denso's strengths

Various underlying technologies

Quality & reliability

Capability To meet customers' needs

strengthen cooperation with partners

**Realize Flexible mobility with security and safety,  
based on engineering capabilities that achieve high quality and reliability**



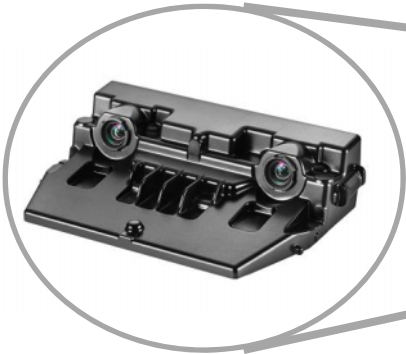
# Track record in Security & Safety

Developed the world's smallest\* stereo vision sensor

\* As of November 2016 (according to a survey conducted by DENSO)

The sensor can be installed on the back side of the rearview mirror in light motor vehicles (in which there is limited installation space).

- Main functions**
- Autonomous Emergency Braking (AEB) (for vehicles and pedestrians)
  - Lane Departure Alert
  - Automatic High Beam



## Products for recognizing the driving environment



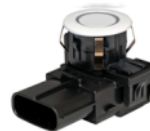
Vision sensors (stereo cameras)



Vision sensors (monocular cameras)



Millimeter-wave radar sensors



Sonars



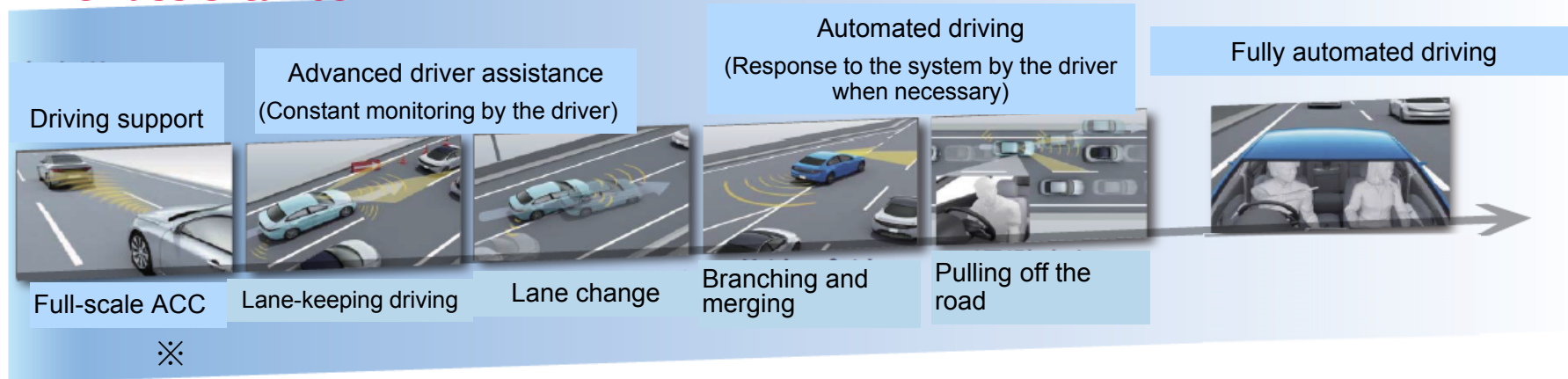
LIDAR

Contribute to the spread of active safety products with an extensive product lineup and combinations

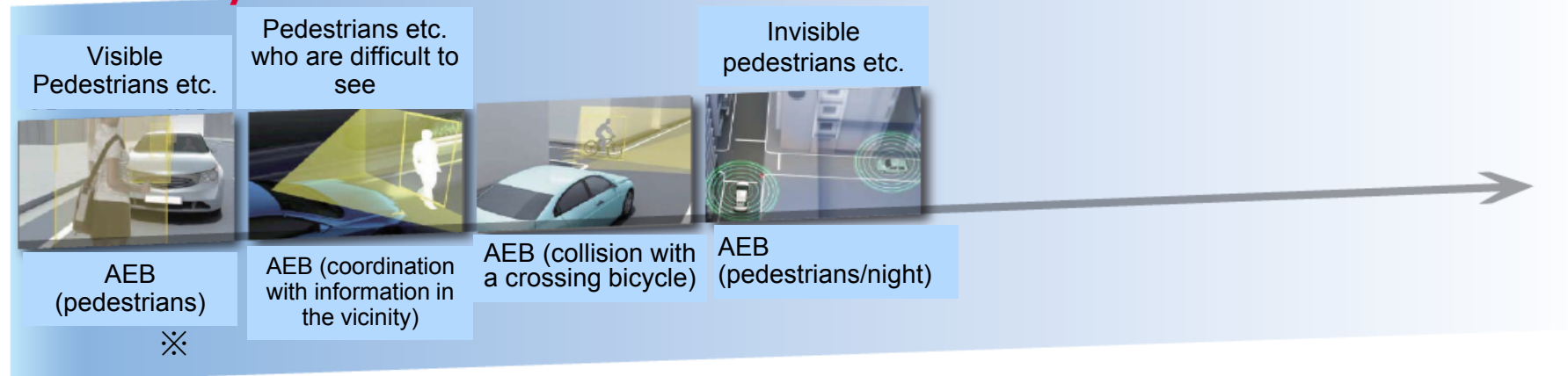
2015

202X

## Driver assistance



## Active safety

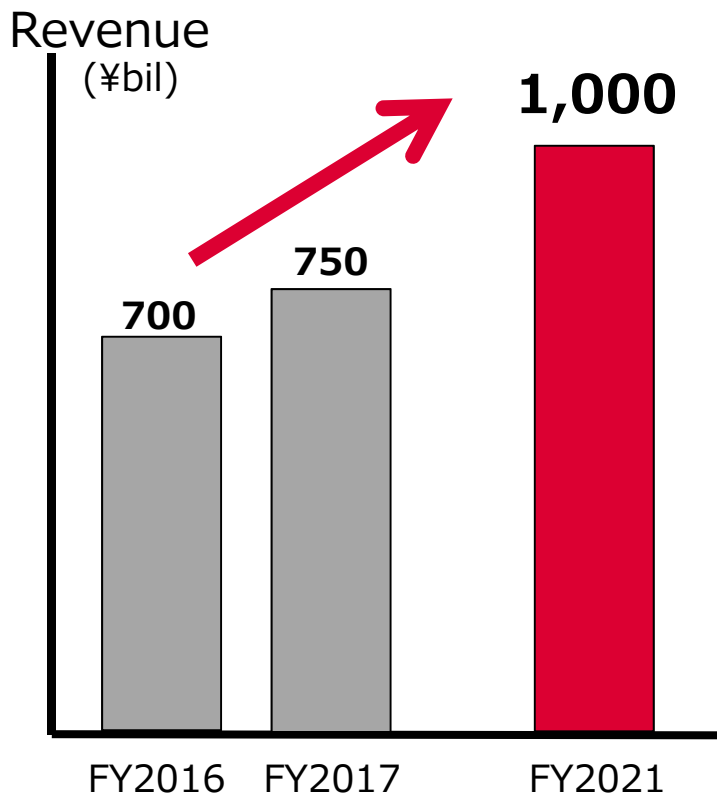


※ Built in Toyota Safety Sense P

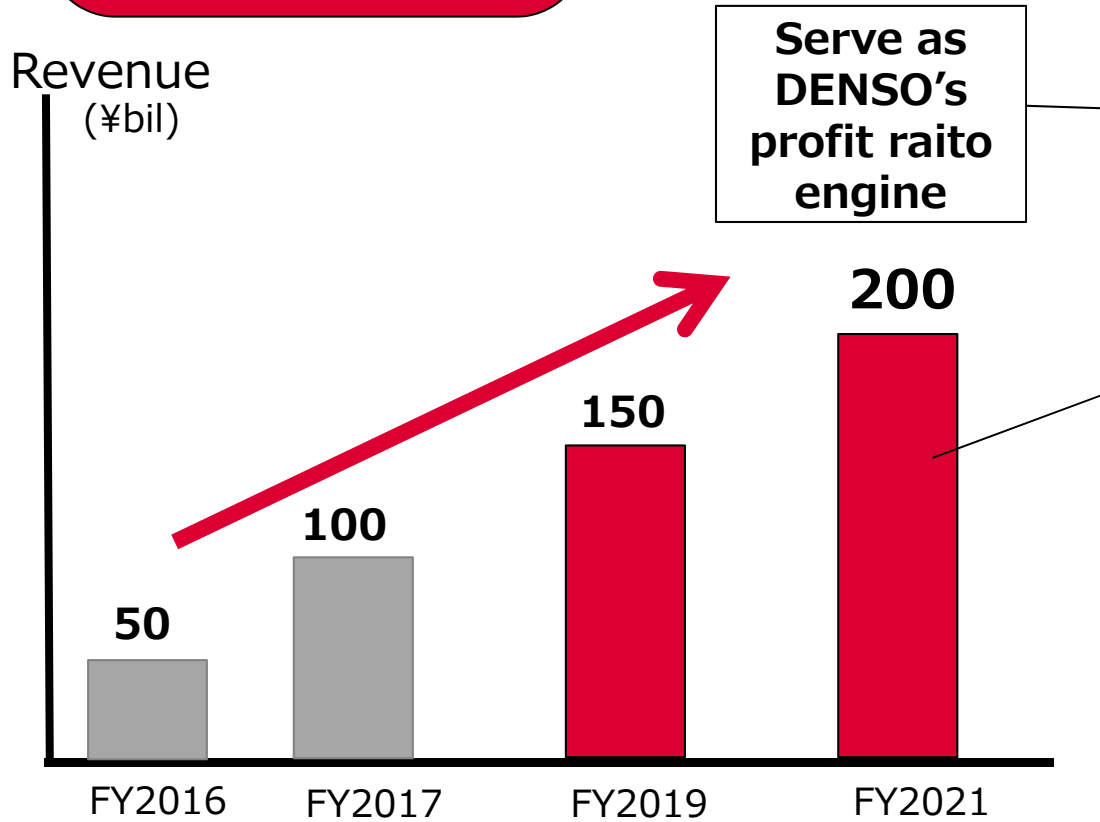
Help eliminate traffic accidents to achieve an advanced safe mobility society

# Revenue target in Security & Safety for FY2021

## Information & safety Group



## ADAS



**Proceeding in line with target of FY2021 Revenue**

**2.**

**Priority areas**

**3) Connected**

# Connected

Value to offer

Create new value in mobility society where vehicles, people, roads, goods, services, etc. are connected

Contribution to society

Reduce CO<sub>2</sub> emissions and prevent traffic accidents



Energy-efficient driving assist services (suggest driving methods & routes to help reduce fuel and electricity consumption)

Safety improvement systems and services (manage the information about the vehicle and driver's physical condition)

**Establish the Connected Service Business Promotion Div. to pool the internal resources for connected services**

**2.**

**Priority areas**

**4) FA business**

**(Non-automotive business)**

# Commitment to the FA (Factory Automation) business <sup>24/29</sup>

**Value to offer** Help improve productivity in society and industry

## DANTOTSU plants activity



## Built-up electrification technology & Knowledge

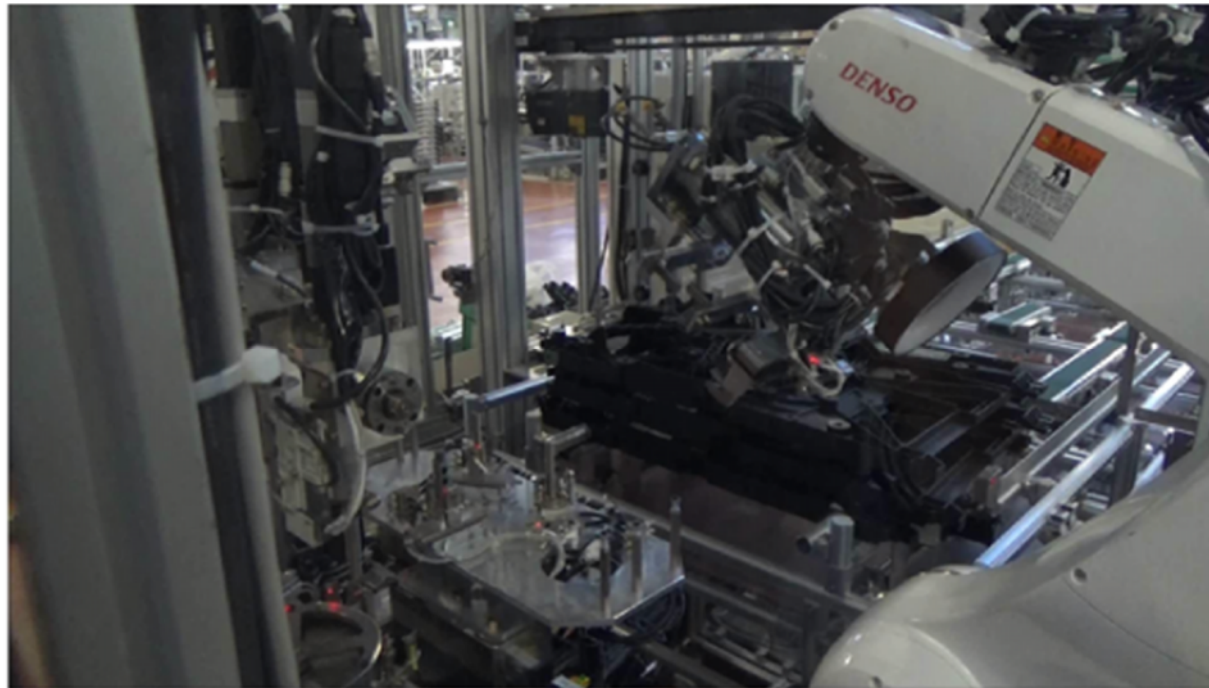


Easy-to-introduce packaging that reflects the knowledge and expertise of plant workers

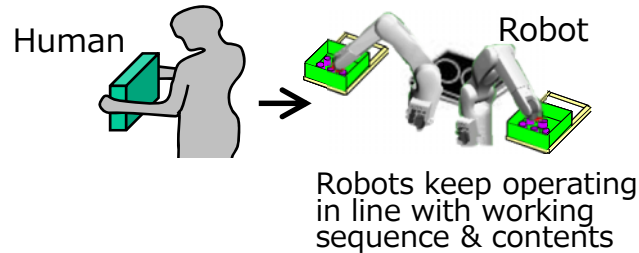
Propose and offer optimal FA system solutions to customers

# Case 1: Expand the scope of automation using robots (video)

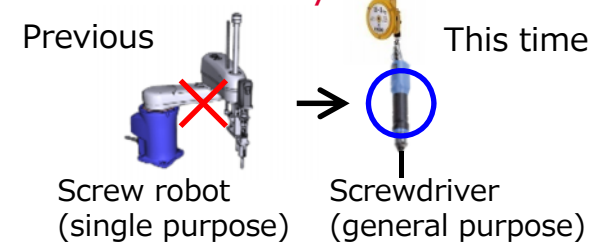
## Reproduce human versatility using robots



### Dual-arm collaboration



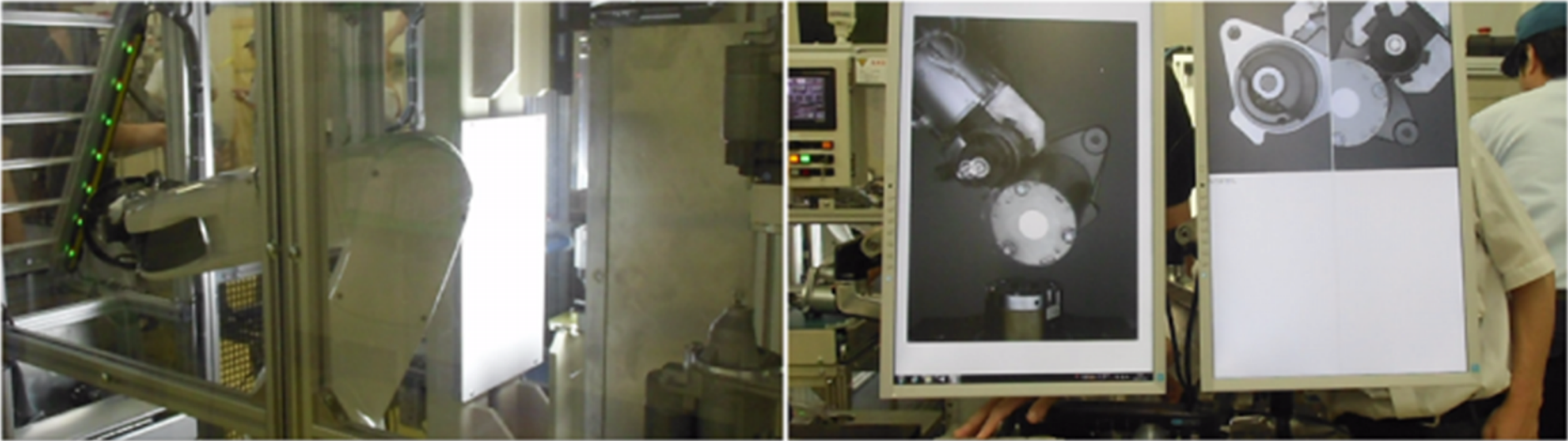
### Decent Versatility





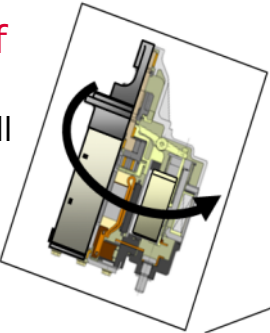
# Case 2: Development of inspection packages (video)

Reproduce the sophisticated thinking and motion of experienced workers with machine learning



Recognition of overall

Inspect overall by rotational moving of work

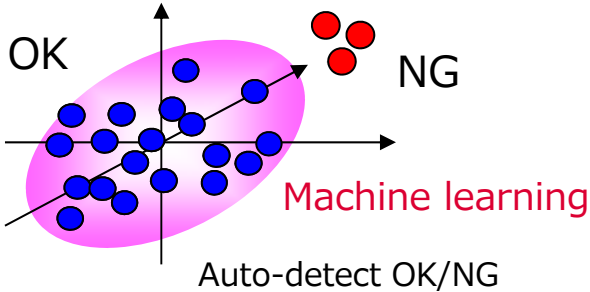


Movie



Recognition of moving object

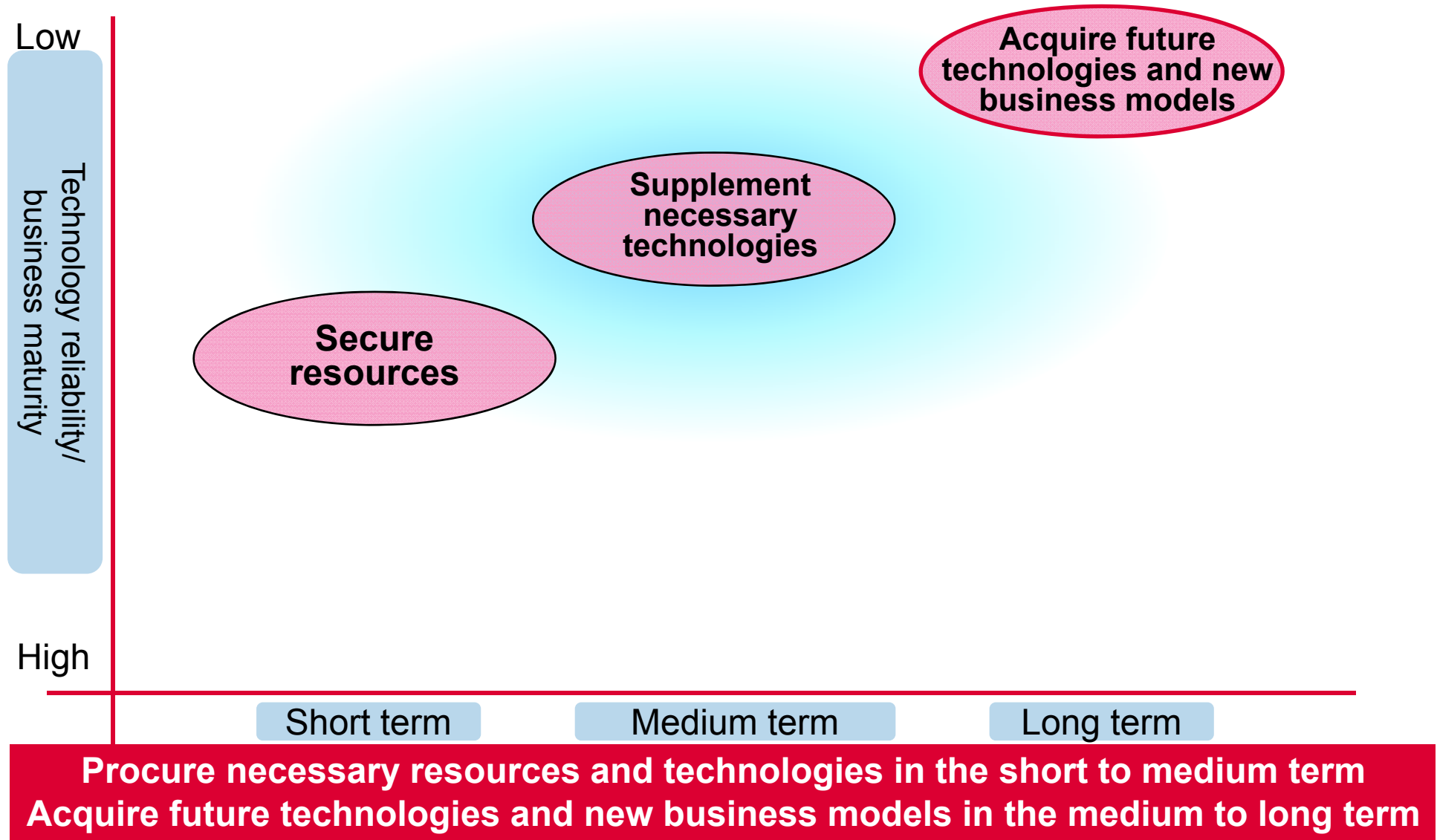
Inspect without stopping operation by skilled examiner



**3.**

# **Alliance policy and status**

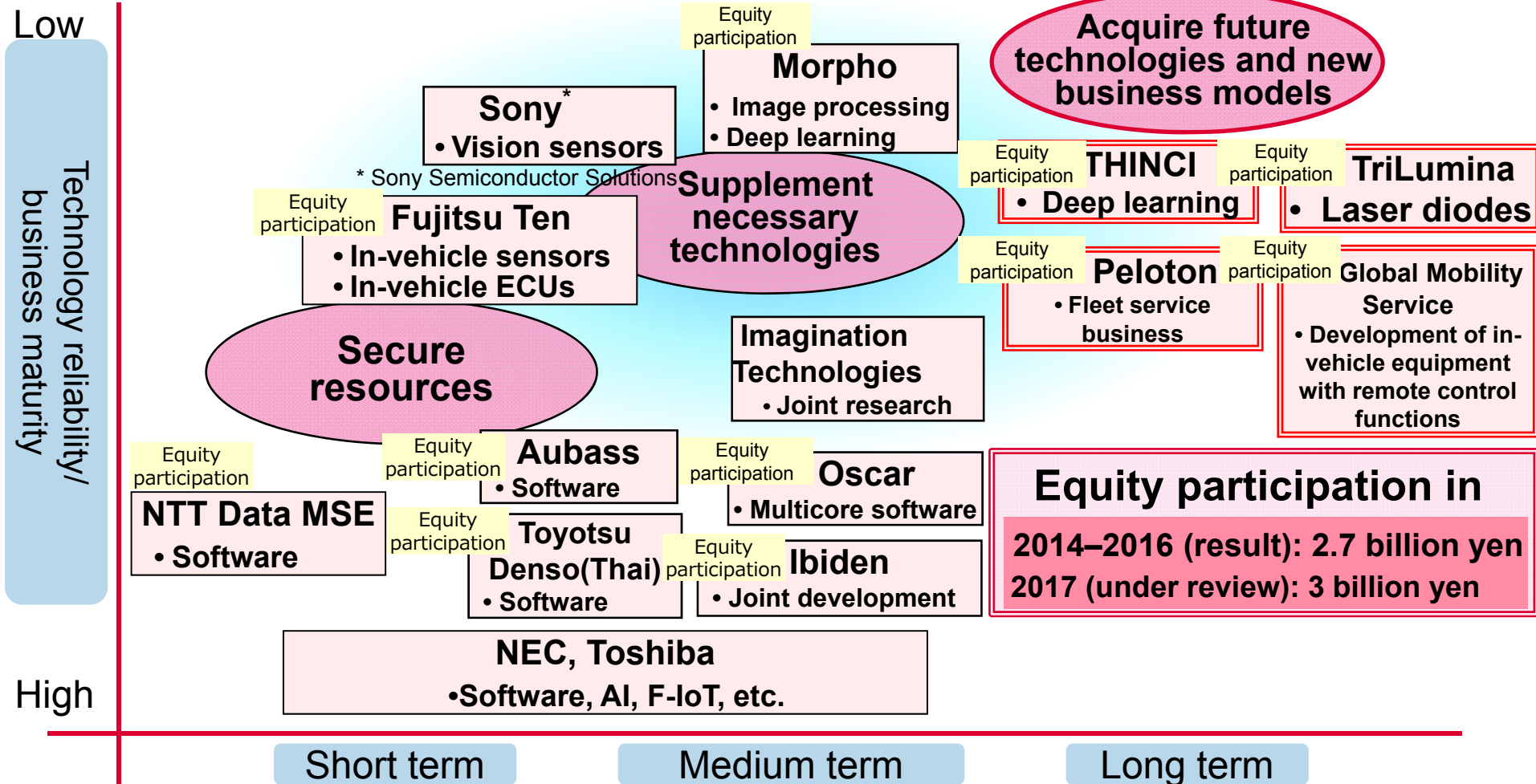
# Policy and status of alliances



# Policy and status of alliances

Professor Takeo Kanade\*  
 • Technical advisory contract  
 \* Carnegie Mellon University

University of Michigan  
 • Opened a lab



Acquire future technologies and new business models

Secure resources

Supplement necessary technologies

Equity participation in  
 2014–2016 (result): 2.7 billion yen  
 2017 (under review): 3 billion yen

Procure necessary resources and technologies in the short to medium term  
 Acquire future technologies and new business models in the medium to long term

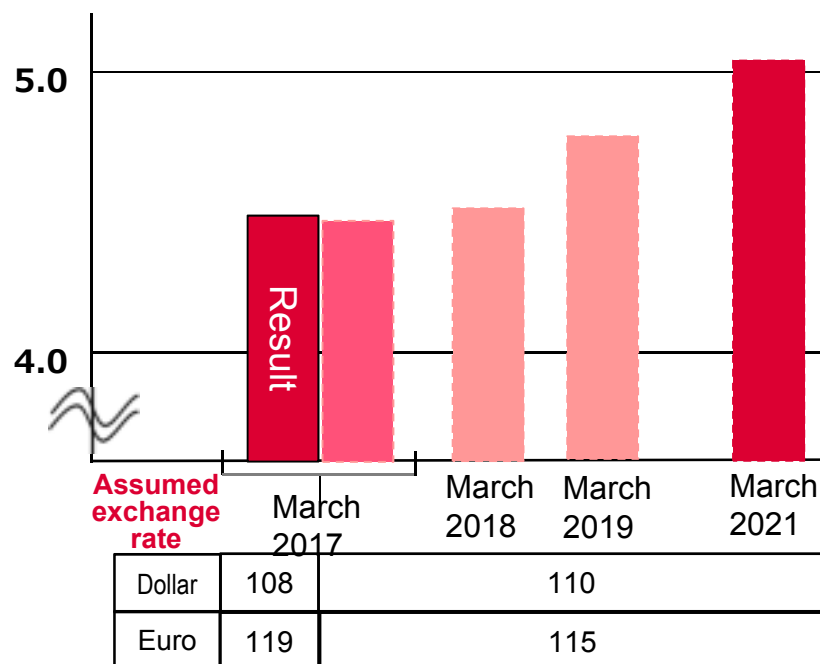
4.

## Revenue and profit goals for FY2021

# Growth target toward FY2021

## Revenue

(Unit: 1 trillion yen)



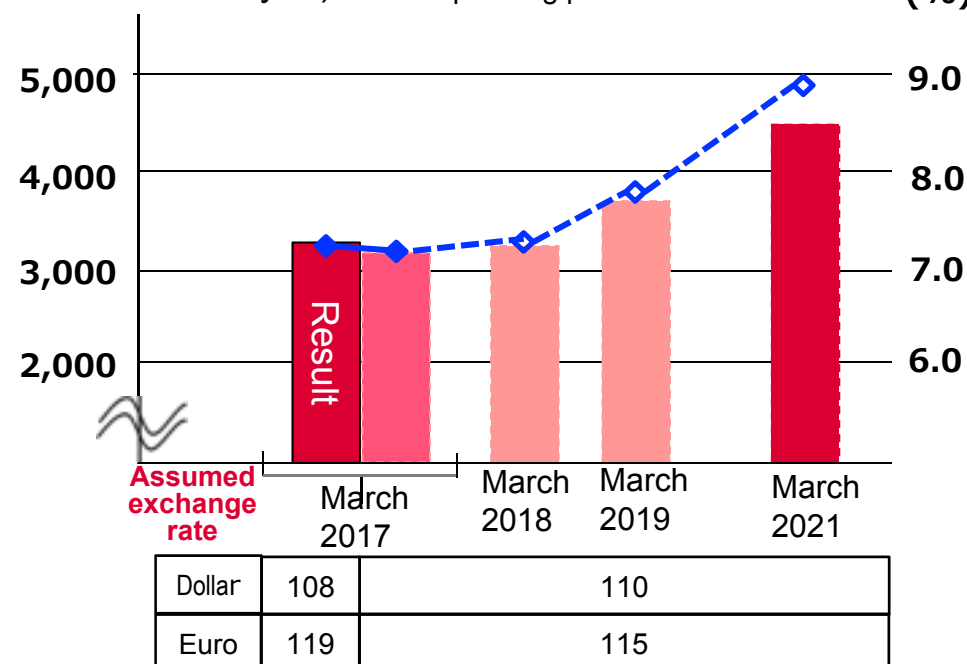
## Operating profit

(Excludes other income/expenses)

(Unit: 100 million yen)

— Operating profit ratio

(%)



- The profit hit the bottom in FY2017.
- The operating profit ratio will be stable at 8% level by FY2021.

***DENSO***

Crafting the Core

# Appendix

- Non-Consolidated Financial Results
- Pre-Conditions (Foreign Exchange Rate/Car Production)
- Consolidated Revenue by Customer
- Consolidated Revenue by Product
- Capital Expenditures, Depreciation, and R&D Expenditures



# Non-Consolidated Financial Results

## Income Statements(Japanese accounting standards)

(Ratio to Sales)

(Unit: Billions of Yen,%)

Account	FY17		FY16		Change	
	Ratio	Amount	Ratio	Amount	Amount	%
Net Sales	( 100.0 )	2,472.8	( 100.0 )	2,425.0	47.9	2.0
Operating Income	( 2.0 )	49.6	( 5.9 )	142.2	-92.6	-65.1
Income Before Income Taxes	( 5.5 )	134.9	( 7.8 )	189.6	-54.7	-28.9
Net Income	( 4.8 )	117.6	( 6.5 )	156.9	-39.3	-25.1

# Pre-Conditions (Foreign Exchange Rate/Car Production)

		FY2017 Full Year									FY2018 Full Year	
		FY2017 First-Half			FY2017 Second-Half							
		Prior Year	Actual	Change	Prior Year	Actual	Change	Prior Year	Actual	Change	Forecast	Change
Foreign Exchange Rate (Yen)	USD	122	105	-17	118	111	-7	120	108	-12	110	2
	EUR	135	118	-17	130	119	-11	133	119	-14	115	-4
Forex Impact on Operating Income per Yen (Billions of Yen)	USD	-			-			2.0	2.5	0.5	2.5	0
	EUR	-			-			0.7	1.0	0.3	1.0	0
Car Production of Japanese Manufacturers (Millions of Units)	Domestic	4.32	4.30	- 0%	4.61	4.80	+ 4%	8.93	9.10	+ 2%	9.18	+ 1%
	North America	3.13	3.18	+ 2%	3.13	3.20	+ 2%	6.26	6.38	+ 2%	6.54	+ 3%
	Overseas	9.27	9.68	+ 4%	9.48	9.98	+ 5%	18.75	19.67	+ 5%	20.02	+ 2%

# Consolidated Revenue (By Customer)

(Unit: Billions of Yen, %)

	FY2017		FY2016		Change		Change excludes
	Amount	% to Total	Amount	% to Total	Amount	%	%
Toyota	1,926.3	42.5	1,907.2	42.2	19.1	1.0	6.9
Daihatsu	95.9	2.1	87.9	1.9	8.0	9.1	13.3
Hino	52.8	1.2	52.3	1.2	0.5	0.9	1.3
<b>Toyota Group</b>	<b>2,075.0</b>	<b>45.8</b>	<b>2,047.5</b>	<b>45.3</b>	<b>27.6</b>	<b>1.3</b>	<b>7.0</b>
Honda	334.7	7.4	359.2	7.9	-24.5	-6.8	3.4
FCA	208.1	4.6	220.5	4.9	-12.4	-5.6	5.9
GM	171.9	3.8	150.8	3.3	21.0	13.9	26.2
Ford	147.6	3.3	155.8	3.4	-8.2	-5.3	7.0
Hyundai/Kia	139.1	3.1	148.5	3.3	-9.4	-6.3	4.1
Mazda	111.8	2.5	114.0	2.5	-2.2	-1.9	0.0
Suzuki	101.2	2.2	101.5	2.2	-0.3	-0.3	6.3
SUBARU	90.9	2.0	80.9	1.8	10.1	12.4	16.1
Nissan	86.4	1.9	75.0	1.7	11.4	15.1	21.1
VW/AUDI	77.2	1.7	81.2	1.8	-4.0	-4.9	7.6
Isuzu	50.4	1.1	52.7	1.2	-2.3	-4.4	-0.4
Mitsubishi	45.0	1.0	48.8	1.1	-3.8	-7.9	-1.7
BMW	43.4	1.0	46.4	1.0	-3.0	-6.4	4.3
Benz	33.5	0.7	36.2	0.8	-2.7	-7.6	3.2
Volvo	30.3	0.7	26.1	0.6	4.2	16.1	29.9
PSA	24.6	0.5	26.7	0.6	-2.1	-7.9	2.9
Jaguar/Land Rover	13.3	0.3	19.4	0.4	-6.1	-31.6	-25.4
OE Sales for others	277.3	6.1	256.8	5.7	20.6	8.0	16.0
<b>OEM Total</b>	<b>4,061.8</b>	<b>89.7</b>	<b>4,048.2</b>	<b>89.5</b>	<b>13.6</b>	<b>0.3</b>	<b>7.7</b>
<b>After-market, New business &amp; Others(*)</b>	465.3	10.3	476.3	10.5	-11.0	-2.3	3.5
<b>Total</b>	<b>4,527.1</b>	<b>100.0</b>	<b>4,524.5</b>	<b>100.0</b>	<b>2.6</b>	<b>0.1</b>	<b>7.3</b>

\* Sales of industrial systems and consumer products, Sales for After Market, and Sales of property/equipment are included.

# Consolidated Revenue (By Product)

(Unit: Billions of Yen,%)

	FY2017		FY2016		Change		Change excludes
	Amount	% to Total	Amount	% to Total	Amount	%	%
Thermal Systems	1,356.6	30.0	1,409.9	31.3	-53.3	-3.8	5.1
Powertrain Systems	1,160.6	25.7	1,174.0	25.9	-13.4	-1.1	6.2
Information & Safety System	753.0	16.6	689.3	15.2	63.7	9.2	15.3
Electrification Systems	452.0	10.0	445.6	9.8	6.4	1.4	8.7
Electronic Systems	377.2	8.3	372.2	8.2	5.0	1.3	6.5
Small Motors	303.7	6.7	306.6	6.8	-3.0	-1.0	5.4
Others(*)	59.6	1.3	64.5	1.4	-4.9	-7.6	-3.6
<b>Automotive Total</b>	<b>4,462.6</b>	<b>98.6</b>	<b>4,462.2</b>	<b>98.6</b>	<b>0.5</b>	<b>0.0</b>	<b>7.3</b>
<b>New Business Total</b>	<b>64.5</b>	<b>1.4</b>	<b>62.4</b>	<b>1.4</b>	<b>2.2</b>	<b>3.5</b>	<b>5.6</b>
<b>Total</b>	<b>4,527.1</b>	<b>100.0</b>	<b>4,524.5</b>	<b>100.0</b>	<b>2.6</b>	<b>0.1</b>	<b>7.3</b>

\* Revenue of equipment, Repair parts, original brand products of subsidiaries

# Appendix.

## Revenue by Product (Previous Category)

<Unit: Billions of Yen, %>

	FY17		FY16		Change	
	Amount	% to Total	Amount	% to Total	Amount	%
Powertrain Control	1,612.6	35.7	1,619.7	35.8	-7.1	-0.4
Thermal	1,356.6	30.0	1,409.9	31.2	-53.3	-3.8
Information & Safety Systems	753.0	16.6	689.3	15.2	63.7	9.2
Electronic	377.2	8.3	372.2	8.2	5.0	1.3
Small Motors	303.7	6.7	306.6	6.8	-3.0	-1.0
Others(*)	59.6	1.3	64.5	1.4	-4.9	-7.6
<b>Automotive Total</b>	<b>4,462.6</b>	<b>98.6</b>	<b>4,462.2</b>	<b>98.6</b>	<b>0.5</b>	<b>0.0</b>
<b>New Business Total</b>	<b>64.5</b>	<b>1.4</b>	<b>62.4</b>	<b>1.4</b>	<b>2.2</b>	<b>3.5</b>
<b>Total</b>	<b>4,527.1</b>	<b>100.0</b>	<b>4,524.5</b>	<b>100.0</b>	<b>2.6</b>	<b>0.1</b>

\* Sales of property/equipment, original brand products of subsidiaries are included.

# Capital Expenditures, Depreciation and R&D Expenditures

(Unit: Billions of Yen)

		FY16	FY17	Change Percent	FY18F	Change Percent
Capital Expenditures	Japan	191.0	215.7	12.9%	211.0	-2.2%
	North America	45.6	51.8	13.6%	57.0	10.0%
	Europe	30.9	23.6	-23.6%	20.0	-15.3%
	Asia	64.9	44.1	-32.0%	55.0	24.7%
	Others	1.7	2.2	29.4%	2.0	-9.1%
	<b>Capital Expenditures</b>	<b>334.1</b>	<b>337.4</b>	<b>1.0%</b>	<b>345.0</b>	<b>2.3%</b>
Depreciation	Japan	134.6	140.1	4.1%	153.0	9.2%
	North America	28.0	27.0	-3.6%	30.0	11.1%
	Europe	19.1	19.0	-0.5%	20.5	7.9%
	Asia	52.0	52.1	0.2%	54.0	3.6%
	Others	3.1	2.9	-6.5%	2.5	-13.8%
	<b>Depreciation</b>	<b>236.8</b>	<b>241.1</b>	<b>1.8%</b>	<b>260.0</b>	<b>7.8%</b>
R&D Expenditure (Ratio to Sales)		399.3 (8.8%)	409.2 (9.0%)	2.5%	425.0 (9.2%)	3.9%