

***DENSO***

Crafting the Core

**FY2019 1<sup>st</sup> Half  
Financial Results  
(2018/4-9)**

Oct. 31, 2018

DENSO CORPORATION



# I . Closing results

# Overview of FY2019 1<sup>st</sup> Half Financial Results

1. Despite natural disasters, revenue increased due to the increase in global car production and the subsidiaries DENSO TEN which was consolidated on the last November.

Operating profit decreased due to transient profit in the last fiscal year, variance of periods in collecting expenses and increase in investment for future growth.

2. Upward revision to full-year forecast considering the first-half financial results and the latest movement in the foreign exchange markets.

3. Annual dividend payment will be 140 yen, a 5 yen increase from the previous forecast on each of interim and fiscal year-end payment.

# FY2019 1<sup>st</sup> Half Financial Results (2018/4-9)

		(Ratio to Revenue)		(Unit: Billions of Yen, %)	
		2018/4-9	2017/4-9	Change	
<b>Revenue</b>		<b>2,625.0</b>	2,363.5	+261.5	+11.1%
<b>Operating Profit</b>		<b>152.4</b>	204.4	-52.1	-25.5%
Finance income/ costs & others(*1)		<b>17.8</b>	22.3	-4.5	
<b>Profit before Income Taxes</b>		<b>170.2</b>	226.8	-56.6	-24.9%
<b>Profit (*2)</b>		<b>114.1</b>	154.2	-40.1	-26.0%
		(Unit: Millions of Units)			
<b>Precondition</b>	Foreign Exchange Rate	JPY 110/\$	JPY 111/\$	-1 JPY	
		JPY 130/Euro	JPY 126/Euro	+4 JPY	
	Domestic Car Production	4.47	4.54	-0.07	-1.5%
	Overseas Car Production of Japanese (North America)	10.23 (2.90)	9.89 (3.01)	+0.35 (-0.11)	+3.5% (-3.7%)

※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

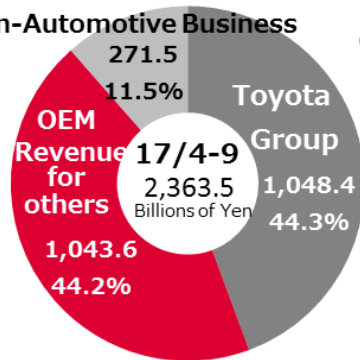
# FY2019 1st Half Consolidated Revenue ( By Customer )

After-market,

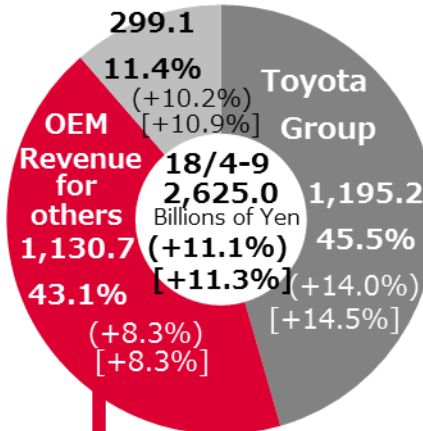
Non-Automotive Business

(Unit: Billions of Yen)

( ): Change from 17/4-9  
 [ ]: Change from 17/4-9  
 excludes FX difference

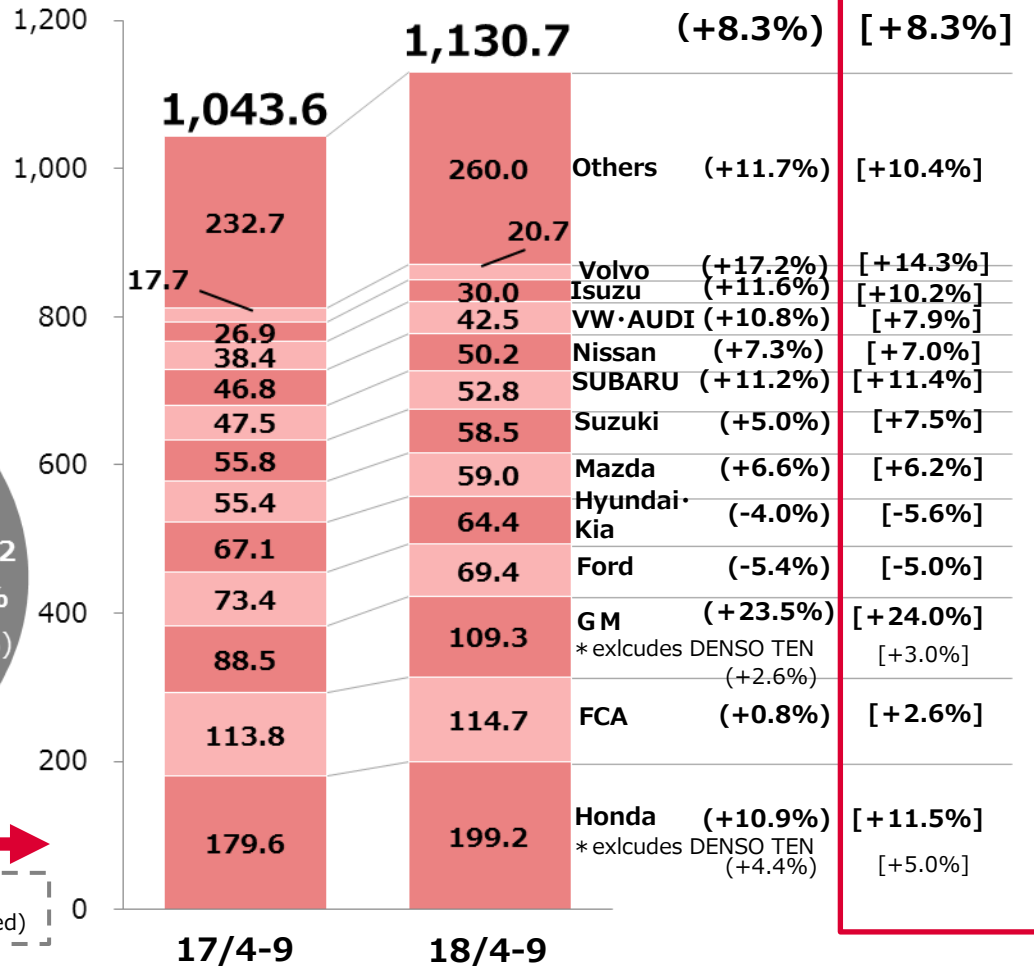


After-market,  
 Non-Automotive Business



DENSO TEN : 166.6  
 (113.0 for Toyota included)

## OEM Revenue for others

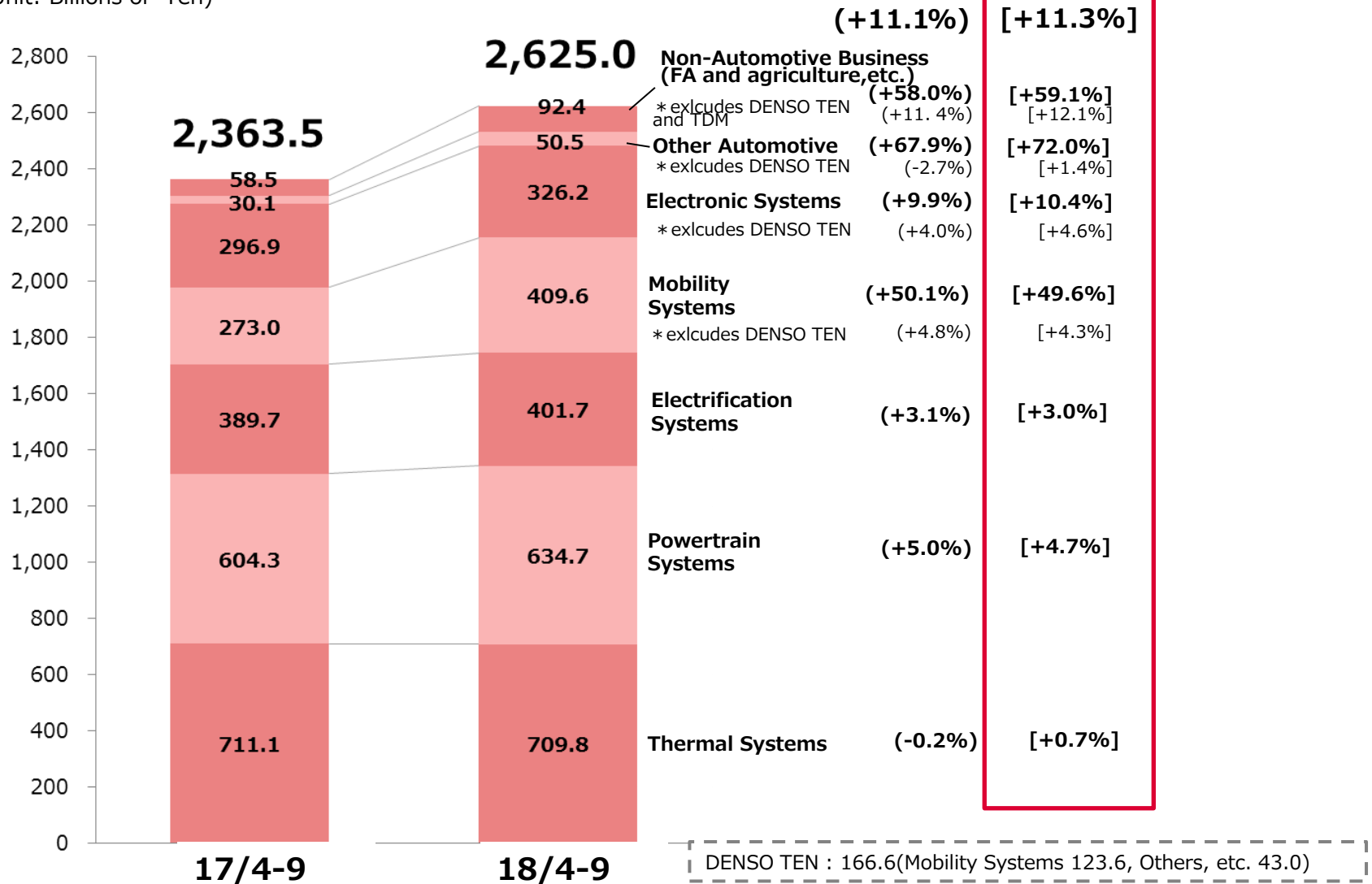


# FY2019 1st Half Consolidated Revenue ( By Product)

( ): Change from 17/4-9

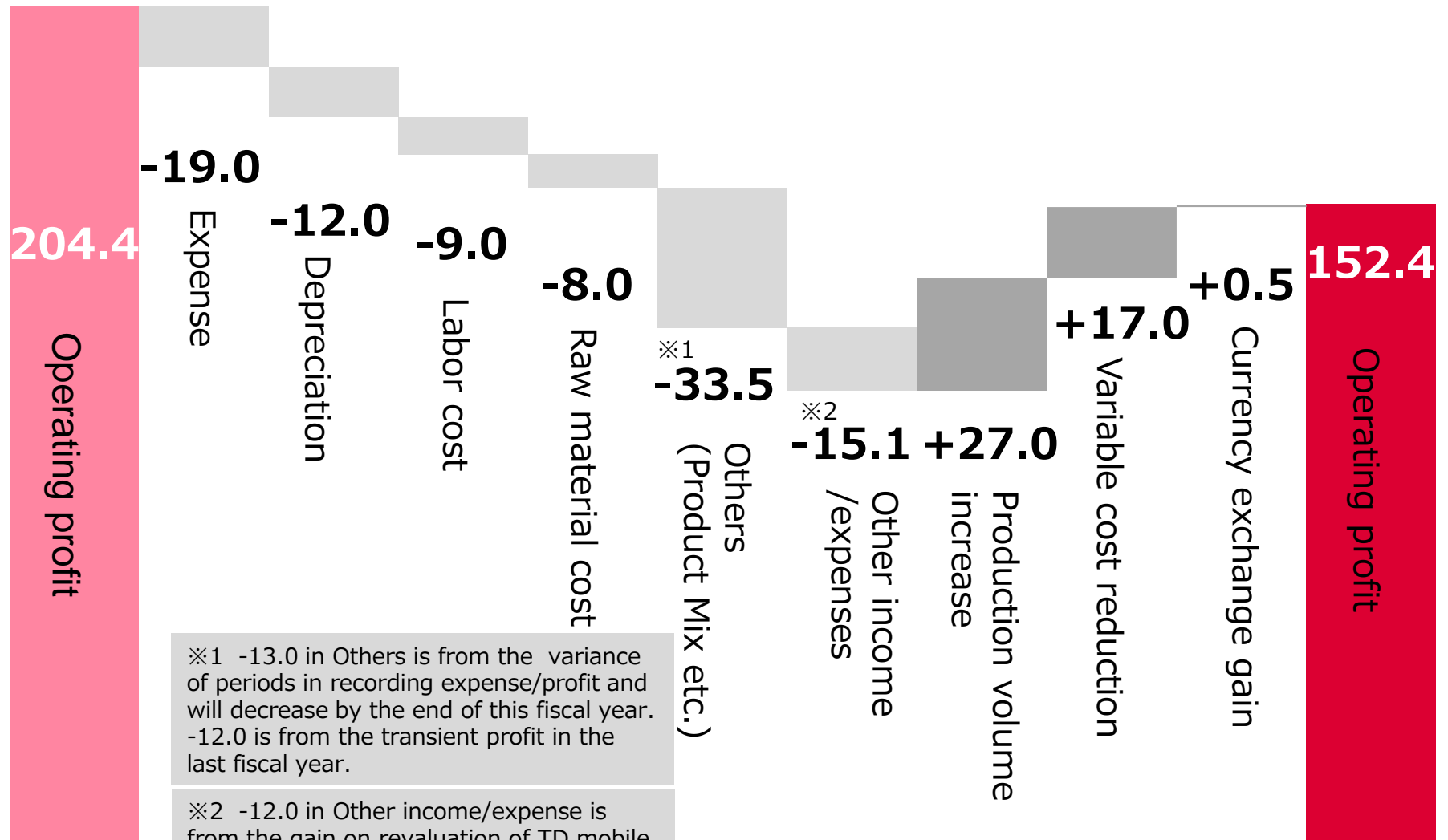
[ ]: Change from 17/4-9 excludes FX difference

(Unit: Billions of Yen)



# Change in FY2019 1st Half Operating Profit

(Unit: Billion of Yen)



※1 -13.0 in Others is from the variance of periods in recording expense/profit and will decrease by the end of this fiscal year. -12.0 is from the transient profit in the last fiscal year.

※2 -12.0 in Other income/expense is from the gain on revaluation of TD mobile securities which was consolidated in the last fiscal year.

17/4-9

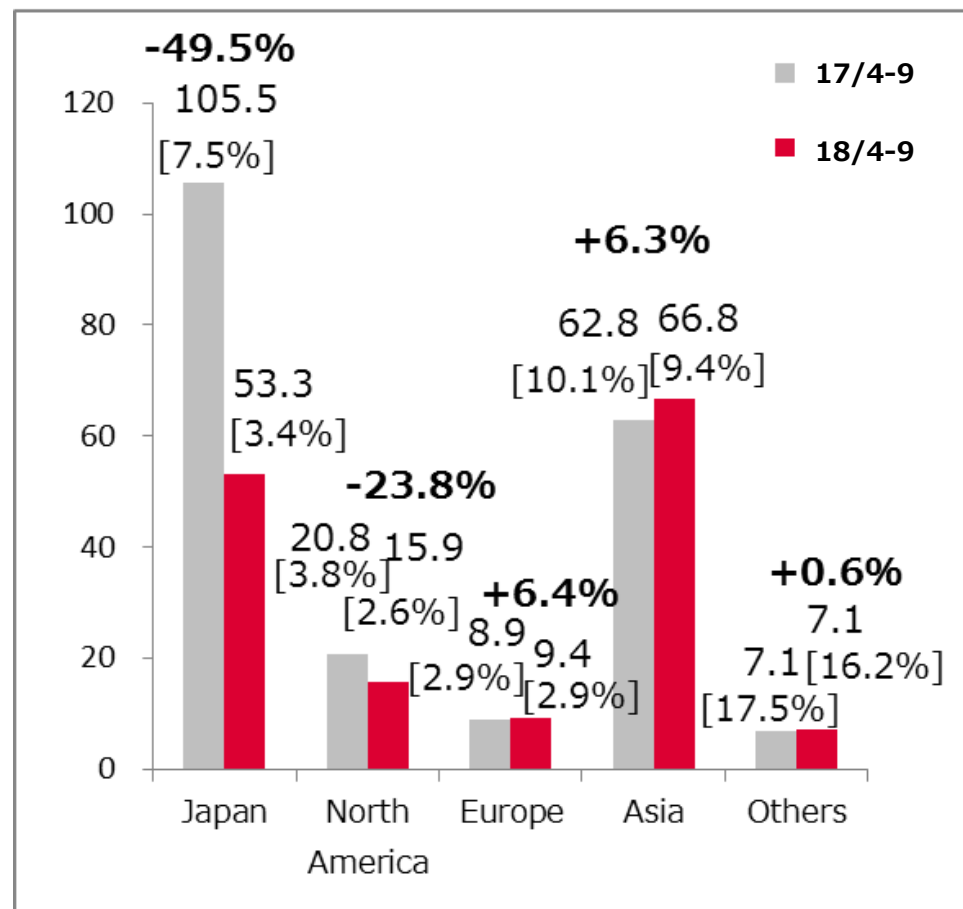
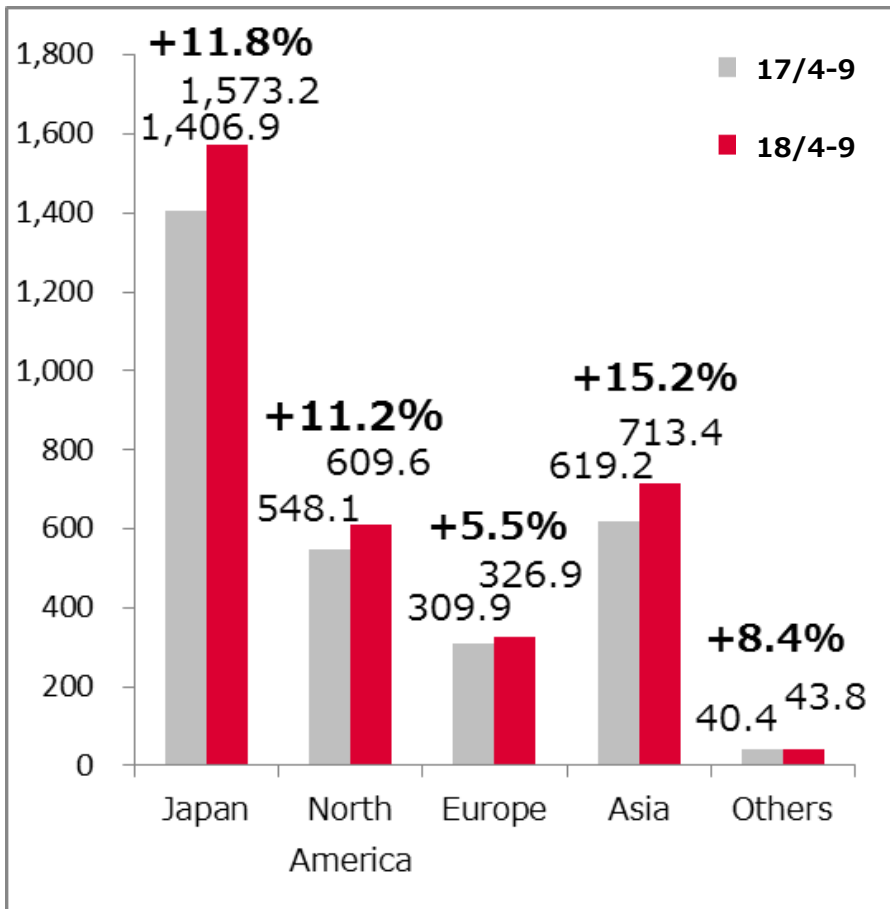
18/4-9



# 1<sup>st</sup> Half Geographical Segments by Company Location (Local Currency Base)

## Revenue

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





# FY2019 Financial Forecast

(Ratio to Revenue)

(Unit: Billions of Yen, %)

	As of		19/3 Revised		Change from June 2018		18/3 Actual		Change from March 2018	
	June 2018				Amount	Ratio			Amount	Ratio
<b>Revenue</b>	5,400.0		<b>5,400.0</b>		-	-	5,108.3		+291.7	+5.7%
<b>Operating Profit</b>	(7.2%) 390.0		<b>(7.3%) 393.0</b>		+3.0	+0.8%	<b>(8.1%) 412.7</b>		-19.7	-4.8%
Finance income/ costs & others(※1)	37.0		<b>37.0</b>		0.0		37.2		-0.2	
<b>Profit before Income Taxes</b>	(7.9%) 427.0		<b>(8.0%) 430.0</b>		+3.0	+0.7%	<b>(8.8%) 449.9</b>		-19.9	-4.4%
<b>Profit</b> (※2)	(5.6%) 303.0		<b>(5.6%) 305.0</b>		+2.0	+0.7%	<b>(6.3%) 320.6</b>		-15.6	-4.9%

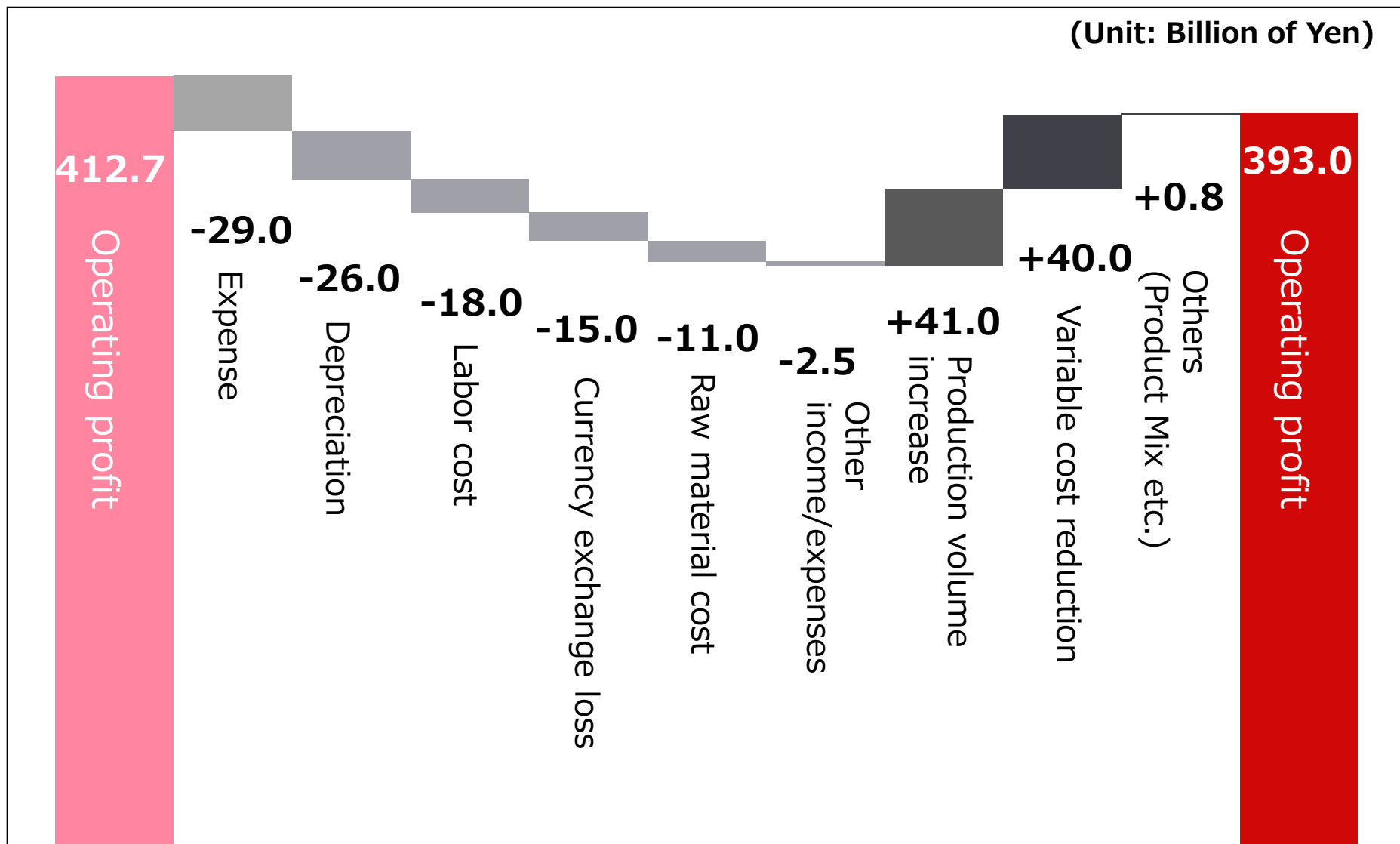
Precondition	As of		19/3 Revised		Change from June 2018		18/3 Actual		Change from March 2018	
	June 2018				Amount	Ratio			Amount	Ratio
Foreign Exchange Rate	JPY 106/\$		JPY 110/\$		+4 JPY		JPY 111/\$		-1 JPY	
	JPY 130/Euro		JPY 130/Euro		-		JPY 130/Euro		+0 JPY	
Domestic Car Production	9.58		9.57		-0.01	-0.1%	9.37		+0.20	+2.1%
Overseas Car Production of Japanese Manufacturers (North America)	20.95 (5.94)		20.69 (5.92)		-0.26 (-0.02)	-1.2% (-0.3%)	20.15 (6.03)		+0.54 (-0.11)	+2.7% (-1.8%)

※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 FY2019 Operating Profit

(Unit: Billion of Yen)



17/4-18/3

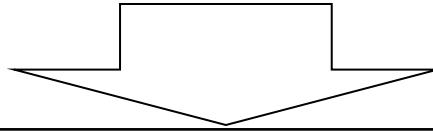
18/4-19/3

# Return to Shareholders

## ■ Policy of shareholders return

DENSO intends to allocate retained earnings not only to the capital investment, R&D investment and M&A required to maintain Long-term business development but also to,

1. We will continue to pay dividends sustainably with taking into accounts our consolidated results, consolidated dividend payout ratio, and dividend amount.
2. We continue to repurchase our own shares adapting flexibly to environmental changes and considering finance status.



A resolution was adopted at the board of directors meeting held today, October 31<sup>st</sup> to **acquire own shares**.

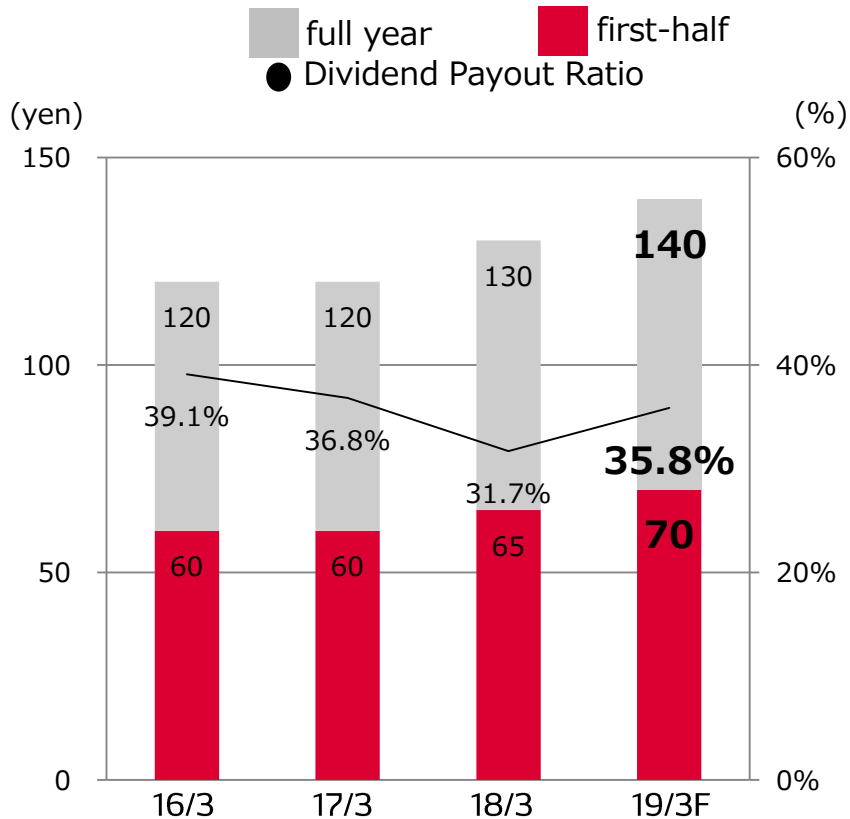
- Purpose of the stock purchase:  
To increase returns to shareholders and improve capital efficiency.
- Total number of shares to be purchased:  
Up to 6 million shares or 30 billion yen

• Resolution was adopted to cancel 6.12 million of its own shares.

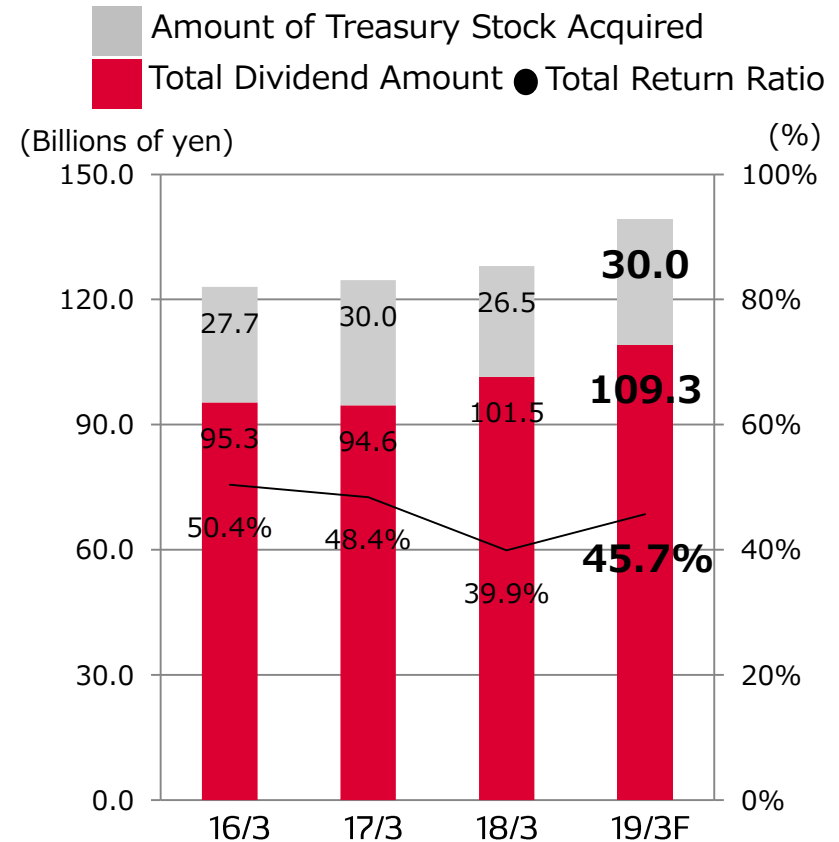
# Return to Shareholders

FY19 Annual Dividend per Share: 140 yen

## Cash Dividends per Share and Dividend Payout Ratio



## Total Dividend Amount and Total Return Ratio



# II. Progress

# (1) DENSO Group Long Term Policy 2030

Bringing hope for the future for our planet, society and all people

## Our Goal for 2030

A company that continuously generates value to enrich mobility that achieves sustainability, happiness and peace of mind for everyone

### Green

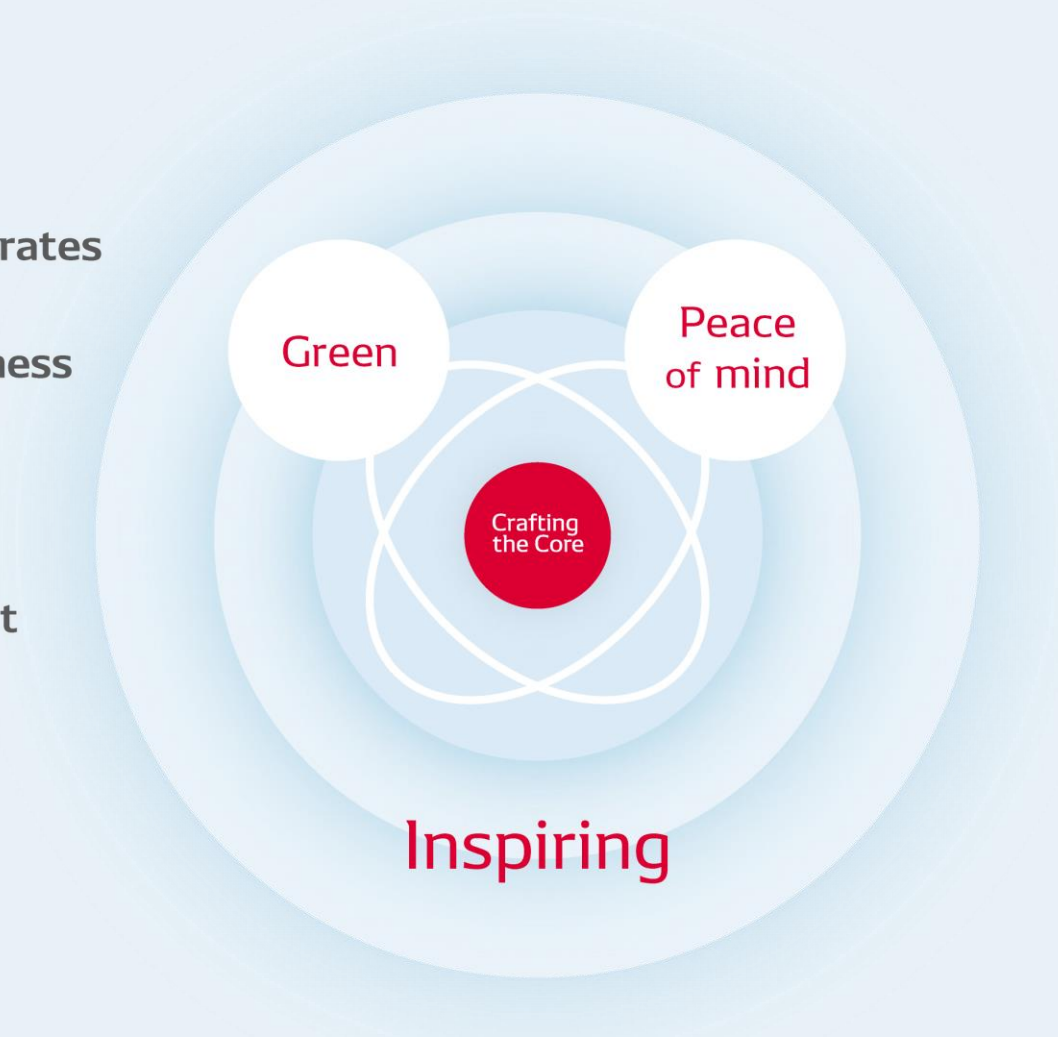
Lasting vitality for the environment

### Peace of mind

Providing a sense of well-being

### Inspiring

Making a difference



# (2) DENSO Group Mid-term Policy 2021

## 1. Creating new kinds of value

- (1) Assert leadership in electrification and in automated driving by establishing de facto standards that straddle product sectors in integrated vehicle platforms.
- (2) Create and propagate business models for spawning new value in mobility services and leaps in convenience.
- (3) Position factory automation and agriculture as pillars of new-business development and work through strategic alliances and other bold measures to assert a strong presence in those sectors.
- (4) Connect with brilliant minds at centers of innovation worldwide to increase our agility in nurturing a continuing stream of new products.

## 2. Strengthening profitability in support of future growth

- (1) Increase our management agility globally by reworking our organization on the lines of a downsized headquarters and performance-oriented business units and subsidiaries worldwide.
- (2) Advance the performance of key products, such as motors, ECU, semiconductor devices, and sensors, with leading-edge technology, and reinforce the basis of our competitiveness through a commitment to asserting key product standards.
- (3) In our core product sectors, generate unprecedented workplace performance by pressing ahead with measures for achieving further advances in *dantotsu* (“best by far”) plants and for animating our plants through the Factory Internet of Things.
- (4) Accelerate product development and achieve high profitability by working with partners and independently to revolutionize processes.



# (2) DENSO Group Mid-term Policy 2021

## 3. Transforming Our Business Foundation

- (1) Honor the spirit of the DENSO Creed in laying a foundation of uncompromising safety and quality that will support peace of mind for customers in traditional sectors and in new sectors, such as intelligent and information-based functions.
- (2) Tap the full potential of each team member and maximize our workplace vitality and our responsiveness to challenges and opportunities by nurturing a motivational workplace and by making the most of advanced information technology.
- (3) Shape a lean production system throughout our supply chain and maximize our *monozukuri* competitiveness.
- (4) Contribute to social sustainability by devoting rigorous attention to sustainable development goals and to the threefold sustainability priorities of environment, society, and governance, as detailed in DENSO EcoVision 2025 and in our guidelines for health management.

# (3) Field of "Inspiring" Toyota group collaboration

## ■ Environmental change

A once-in-a-century revolution

Fast, severe competition in diverse business fields



**We will survive or die.**

### Social issue

Global warming  
Air pollution  
Resource/Energy problems



To contribute to a sustainable society,  
**Electrification must grow**

Estimated number of traffic accident fatalities worldwide in 2020

**1.90 million people\***

Safe and secure transportation



**Automated driving must grow**

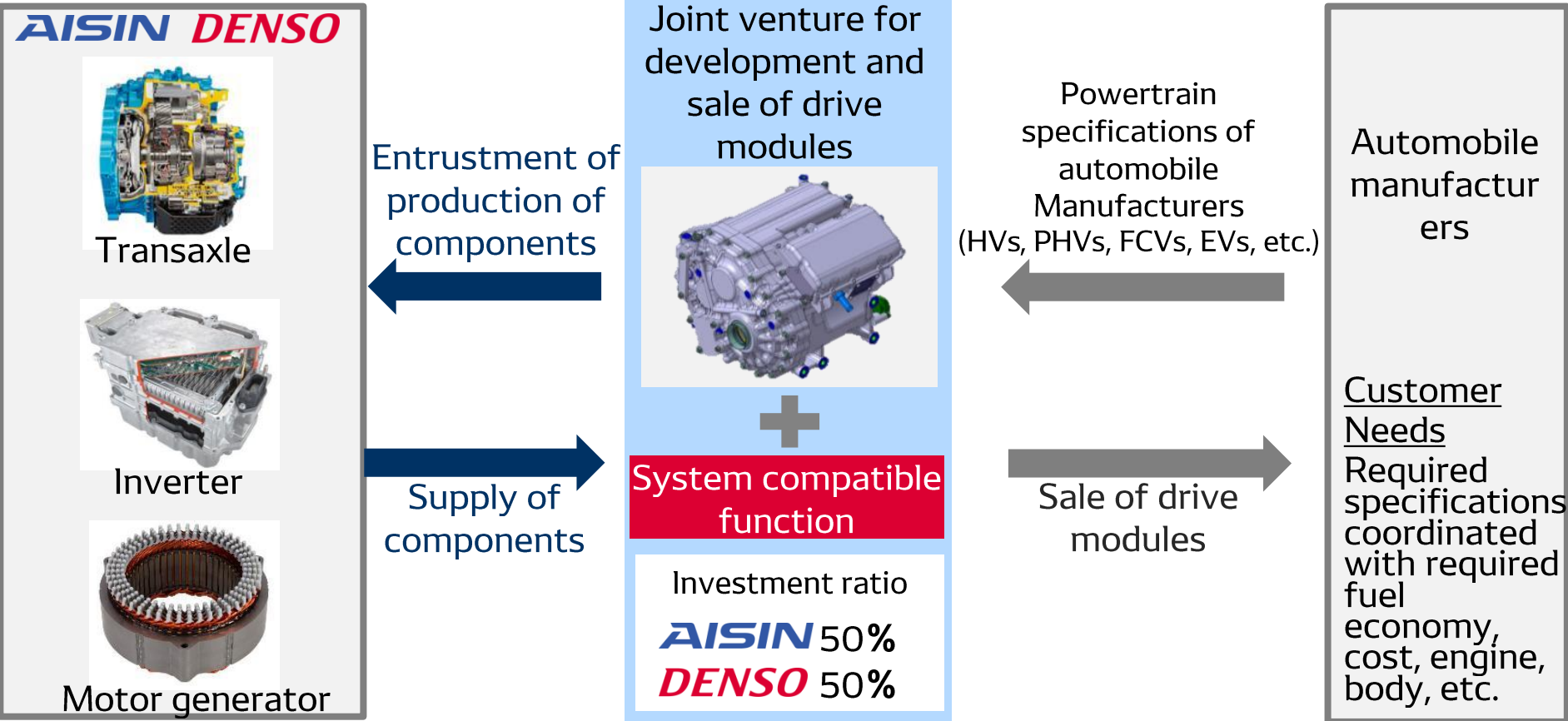


- Everyone can travel easily and safely
- Effective use of travel time

**Combining the forces of Toyota group companies, we will help to create the future mobility by growing automated driving and electrification.**

# (3) Field of "Inspiring" Electrification

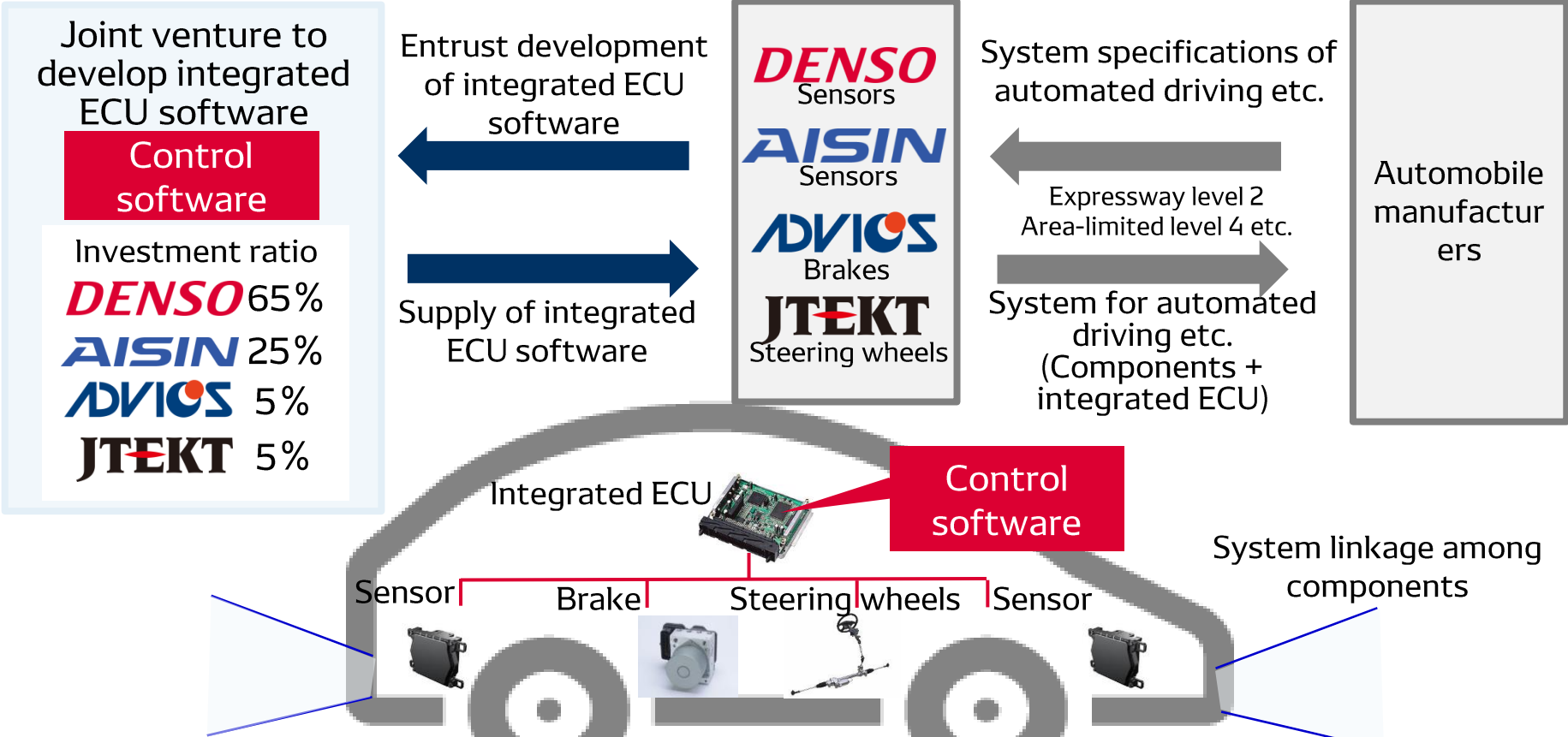
Overview of the joint venture for the development and sale of drive modules



The joint venture will help accelerate electrification and the creation of a sustainable society.

# (3) Field of "Inspiring" Automated Driving

Overview of the joint venture for the development of integrated ECU software

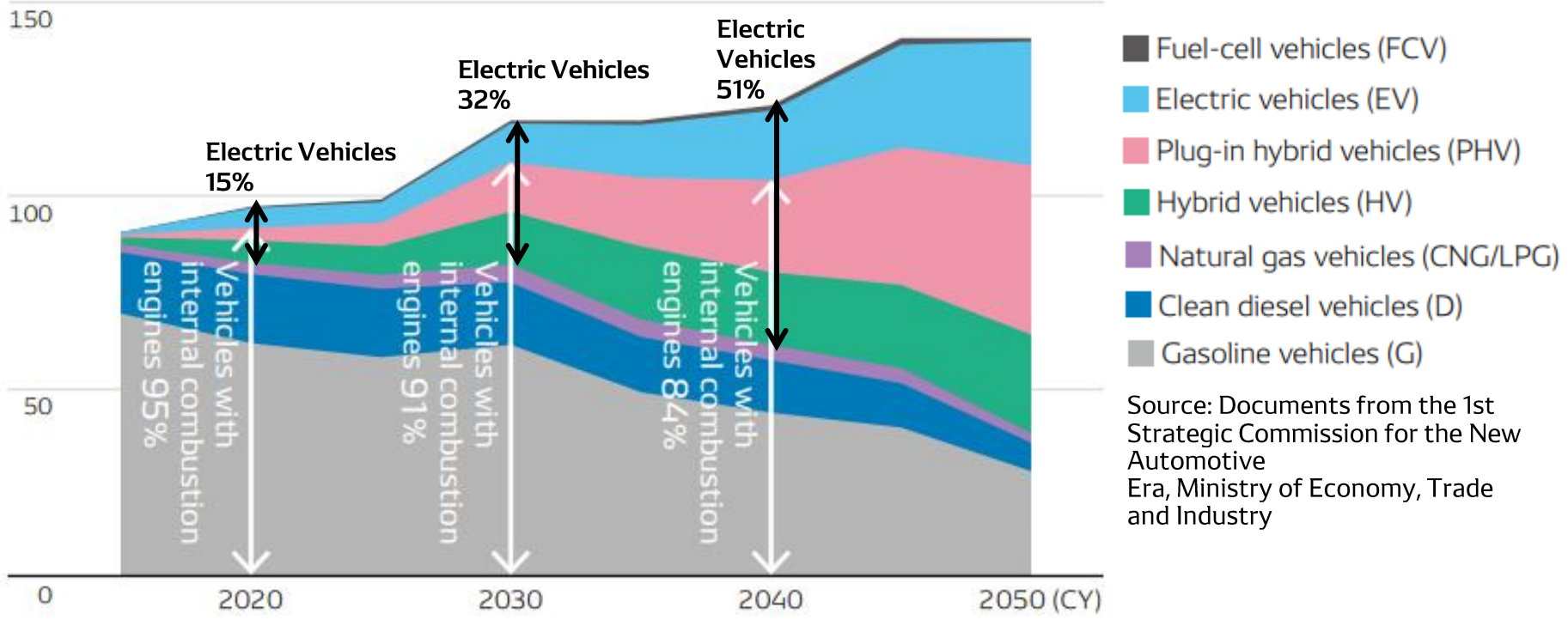


Contribute to realize automated driving that ensures safe and secure travel for everyone.

# (4) Field of "Green" Market Trend

## Market forecast by each powertrain

(Millions of vehicles)



Source: Documents from the 1st Strategic Commission for the New Automotive Era, Ministry of Economy, Trade and Industry

### Business environment

Electrification has been promoted steadily due to stricter regulations in respective countries.

While progress in electrification has been made, development needs have diversified for each OEM.

Demand for internal combustion engines will continue for inexpensive eco-friendly cars in emerging countries.

# (4) Field of “Green” Electrification

## Initiative in Focus Fields

Value

Reduction of environmental loading and realization of high efficiency transportation (Economical Driving)

### 1. Lead of electrification by technology acquired over the years and supply achievement

- Technological evolution (High-power, SiC etc.)
- Standardization (MG, Inverter)
- Global supply capability (Supply in Japan, US and China)

### 2. Development of internal combustion engine technology corresponding to the electrification

- Heating efficiency improvement (Lean burn, low cooling loss, optimization with electric system)
- Exhaust gas purification system (catalyst base material, system simplification)

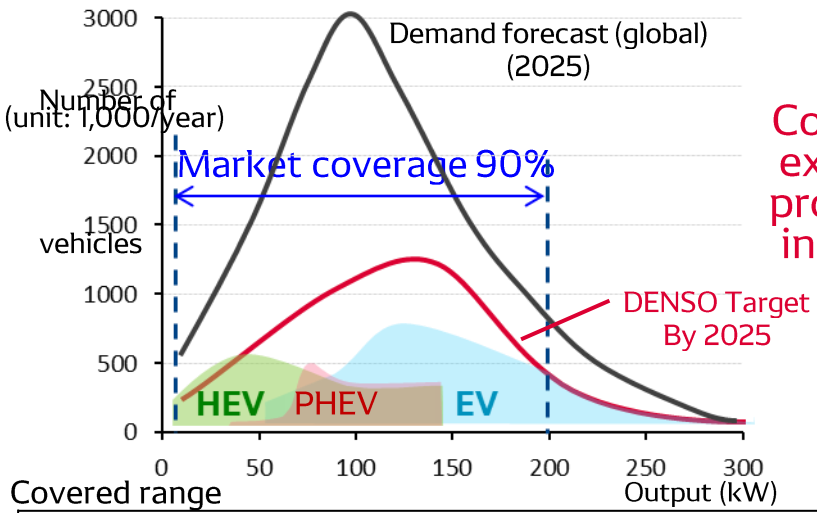
### 3. Development of total energy management technology for vehicles

- Thermal management (air conditioning, waste heat utilization)
- Power management (charging, regeneration)

# (4) Field of "Green"

Improve development efficiency by using common parts

Performance requirements in the market

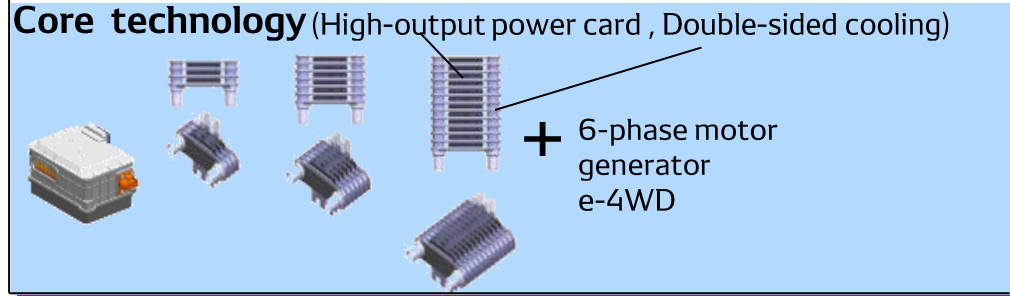
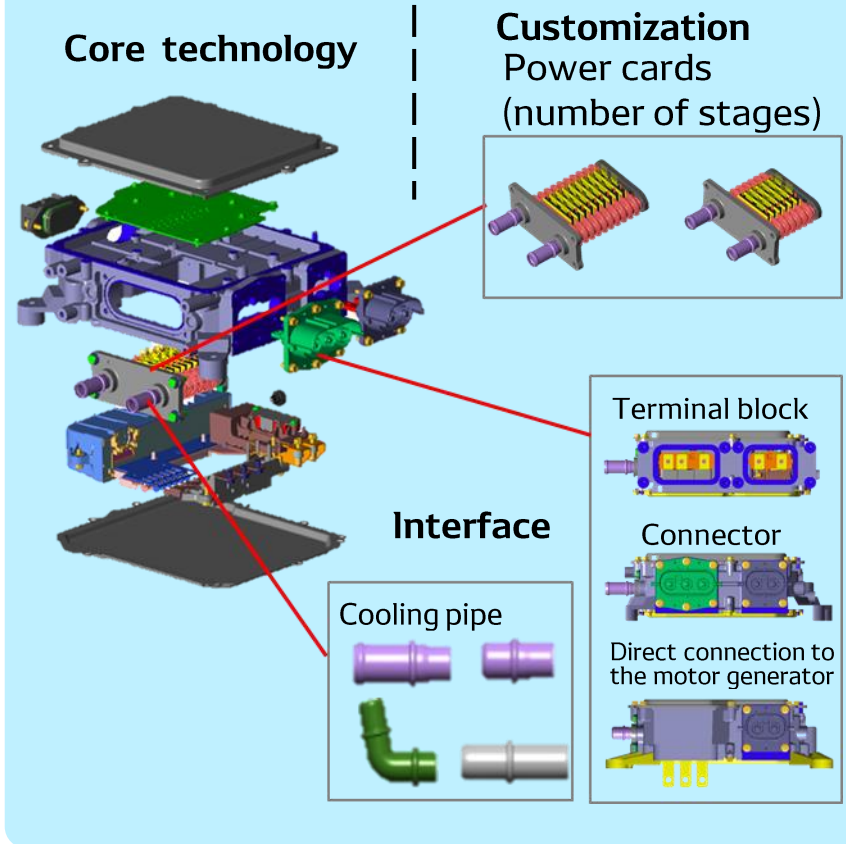


**Core technology**



Contribute to expansion of product fields in the future

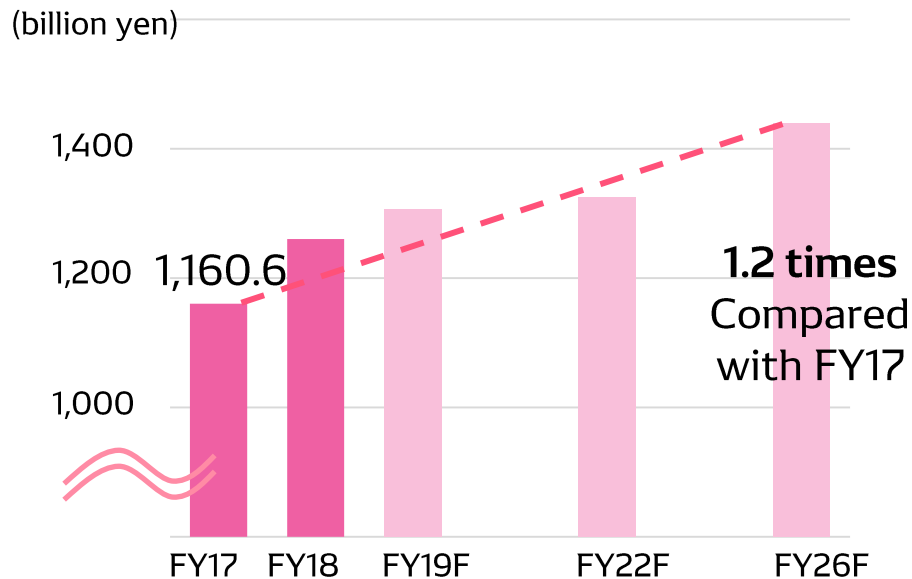
Core & customization



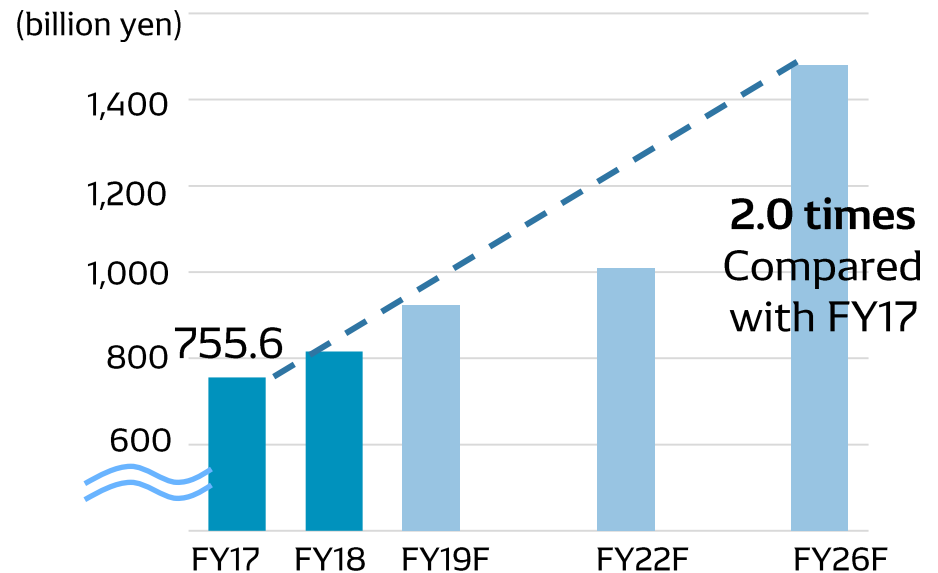
Maximize development efficiency by using common parts and contribute to customers.



We will pursue advances not only in electric vehicle systems but also in gasoline and diesel vehicle systems.



Powertrain System



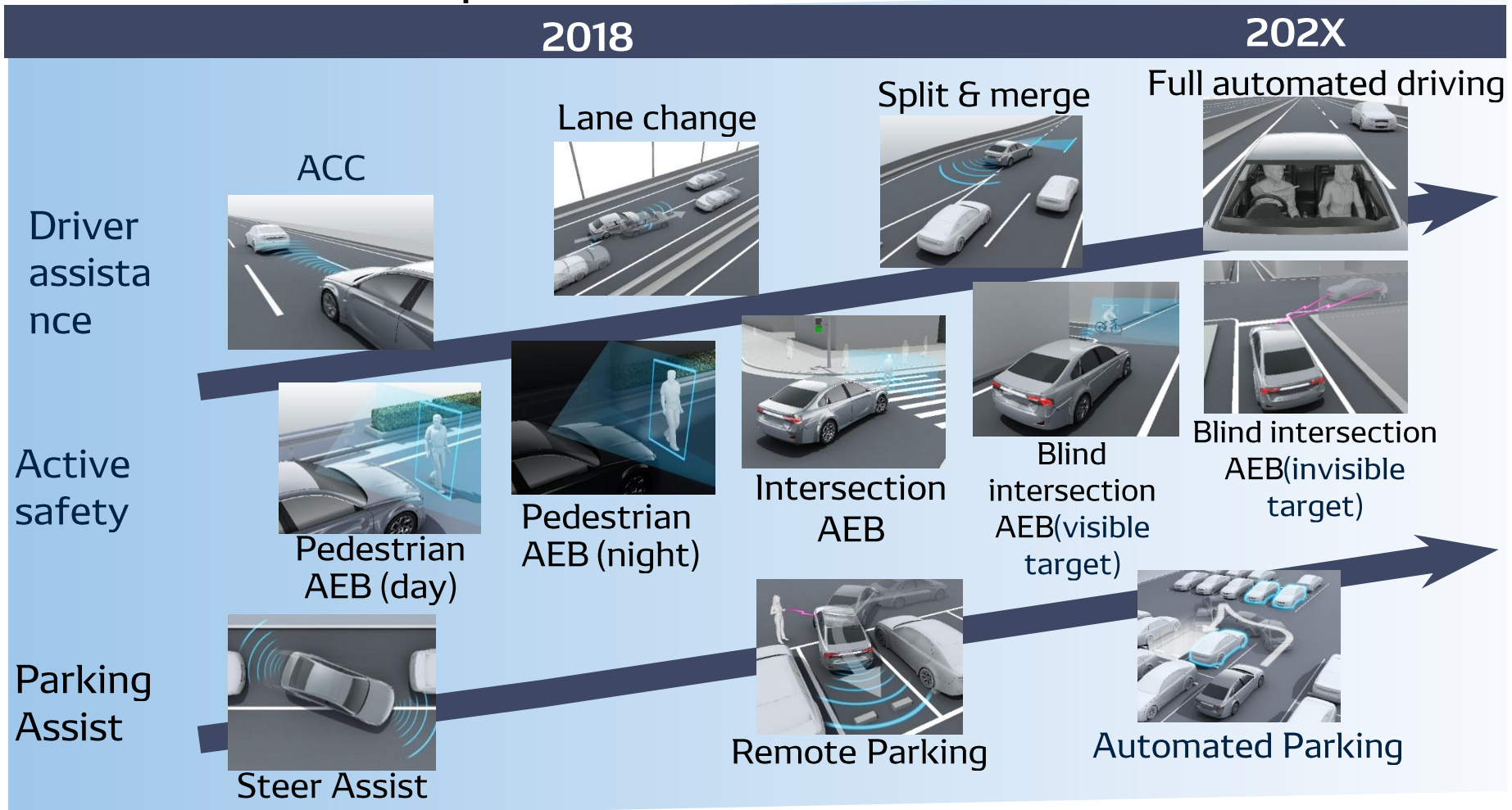
Electrification System

Improve efficiency of ICE + Accelerate electrification

Expand our business combining both solutions.

# (5) Field of "Peace of mind" Business environment

## DENSO'S roadmap



Realize a move in safe/secure manner without traffic accidents

# (5) Field of “Peace of mind” Advanced Safety and Automated Driving

## Initiative in Focus Fields

**Value** Realize a move in a safe and secure manner without traffic accidents

### 1. Initiative at the system, strengthening of proposal capability

- Advanced Driver Assistance Systems and Automated Driving
- Cockpit system

### 2. Development by open innovation







- Strengthen alliances of industry, government and academia
- Sensors and Algorithm development for recognition and judgment
- High performance semiconductor development

### 3. Enhancement of AI research

- Algorithm development for onboard
- Quality assurance

# (5) Field of "Peace of mind" Approaches to R&D

DENSO conducts in-vehicle tests

Expressway	Public road	Operational Design Domain Lv4
<p>2014 Minamichita Road, Nagoya Expressway</p> 	<p>2017 Abashiri</p> 	<p>2014 Kume island</p> 
<p>2017 Michigan 2018 Munich</p> 	<p>2018 Kariya, Tokyo</p> 	<p>2018 Narrow parking</p> 

Feedback tasks to R&D after in-vehicle tests in various fields

# (5) Field of "Peace of mind"

## To Achieve Next-generation Mobility



### Step 1

Planning, development, and demonstration of advanced technologies and advanced mobility systems will be accelerated through collaboration with customers and partners to release advanced mobility systems early in the market.



### **April 2018**

Global R&D Tokyo opened

### Step 2

Mobility systems will be developed and demonstrated (on public roads as well) in the Tokyo area.

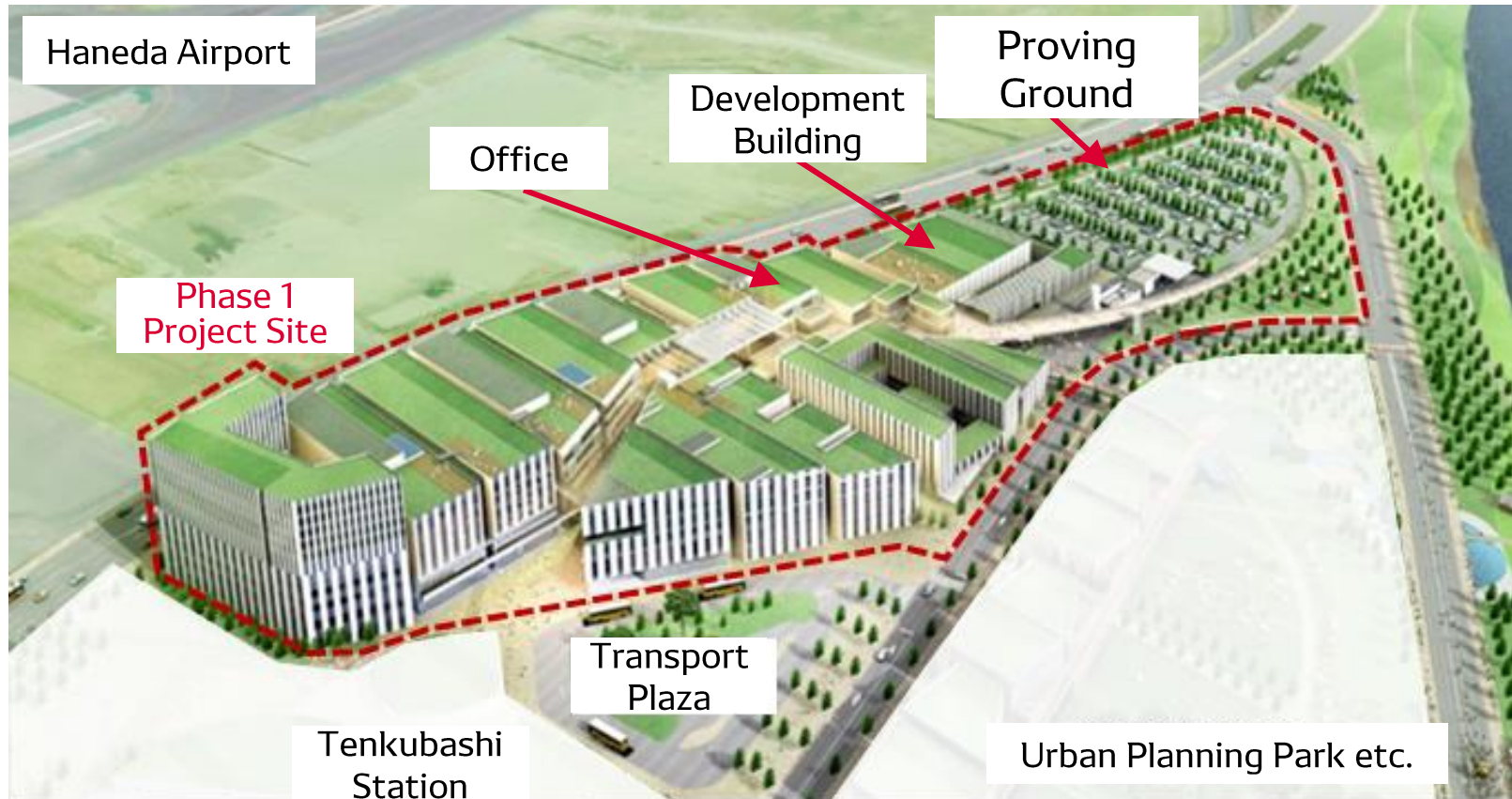
### **June 2020**

A mobility systems development building and office (with a test course) will be opened in the No. 1 zone of the unused land of Haneda Airport.



# (5) Field of "Peace of mind"

Conceptual drawing of new facility



Source: Kajima Corporation's website

Develop prototype automated driving technologies and conduct in-vehicle tests by collaborating with manufacturers in Ota City

# (6) Sustainability Management

**The Environment**      Goals and materiality

Reduce environmental impact, achieve highly efficient mobility, and thereby help create an eco-friendly and sustainable society


- Prevention of global warming
- Prevention of air pollution/reduction of environmental burden
- Effective utilization of resources
- Conservation of water resources



**Peace of Mind**      Goals and materiality

Realize a safe society free from traffic accidents and achieve comfortable and flexible mobility, and thereby help create a society where all people can live safely

- Development of safety-related products
- Reduction of traffic accidents
- Coping with the declining birth rate and aging population



**Inspiring (Corporate foundation)**      Goals and materiality

- Fair and faithful conduct with the highest ethical standards
- Promotion of *hitozukuri* (human resource development), development of our organization, and creation of a positive environment so that employees can stay healthy and work actively and safely
- Business operations respecting the human rights of all stakeholders

- Compliance
- Enhancement of information security
- Sustainable procurement
- Promotion of diversity
- Industrial health and safety
- Workstyle reforms
- Protection of human rights



Enrich mobility that achieves sustainability, happiness and peace of mind for everyone.



***DENSO***

Crafting the Core

# Appendix

- Pre-Conditions (Foreign Exchange Rate/Car Production)
- Consolidated Revenue by Customer
- Consolidated Revenue by Product
- 1<sup>st</sup> Half Geographical Segments by Company Location
- Trend of Capital Expenditures, Depreciation and R&D Expenditures
- Capital Expenditures, Depreciation, and R&D Expenditures

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

		FY2019 Full Year														
		FY2019 First-Half					FY2019 Second-Half									
		Prior Year	Forecast (Original)	Forecast as of July 28	Actual	Change	Prior Year	Forecast (Original)	Forecast as of July 31	Forecast (Revised)	Change	Prior Year	Forecast (Original)	Forecast as of July 31	Forecast (Revised)	Change
Foreign Exchange Rate (Yen)	USD	111	105	107	110	- 1	111	105	105	110	-1	111	105	106	110	- 1
	EUR	126	130	130	130	+4	133	130	130	130	-3	130	130	130	130	+ 0
Forex Impact on Operating Income per Yen (Billions of Yen)	USD	-					-					2.5	2.5	2.5	2.5	0.0
	EUR	-					-					1.0	1.0	1.0	1.0	0.0
Car Production of Japanese Manufacturers (Millions of Units)	Domestic	4.54	4.50	4.57	4.47	- 1%	4.84	5.00	5.00	5.10	+ 5%	9.37	9.51	9.58	9.57	+ 2%
	North America	3.01	3.01	2.91	2.90	- 4%	3.02	3.03	3.03	3.02	- 0%	6.03	6.04	5.94	5.92	- 2%
	Overseas	9.89	10.34	10.43	10.23	+ 3%	10.26	10.52	10.52	10.46	+ 2%	20.15	20.87	20.95	20.69	+ 3%

# Consolidated Revenue (By Customer)

(Unit: Billions of Yen)

	18/4-9		17/4-9		Change		Change excludes FX difference
	Amount	% to Total	Amount	% to Total	Amount	%	%
Toyota	1,103.6	42.0	967.3	40.9	136.3	14.1	14.6
Daihatsu	59.3	2.3	53.0	2.2	6.3	11.9	13.7
Hino	32.3	1.2	28.1	1.2	4.2	15.0	15.0
<b>Toyota Group</b>	<b>1,195.2</b>	<b>45.5</b>	<b>1,048.4</b>	<b>44.3</b>	<b>146.7</b>	<b>14.0</b>	<b>14.5</b>
Honda	199.2	7.7	179.6	7.6	19.5	10.9	11.5
FCA	114.7	4.4	113.8	4.8	0.9	0.8	2.6
GM	109.3	4.2	88.5	3.8	20.8	23.5	24.0
Ford	69.4	2.6	73.4	3.1	-3.9	-5.4	-5.0
Hyundai/Kia	64.4	2.5	67.1	2.8	-2.7	-4.0	-5.6
Mazda	59.0	2.2	55.4	2.4	3.6	6.6	6.2
Suzuki	58.5	2.2	55.8	2.4	2.8	5.0	7.5
SUBARU	52.8	2.0	47.5	2.0	5.3	11.2	11.4
Nissan	50.2	1.9	46.8	2.0	3.4	7.3	7.0
VW/AUDI	42.5	1.6	38.4	1.6	4.1	10.8	7.9
Mitsubishi	30.6	1.2	24.2	1.0	6.4	26.7	25.8
Isuzu	30.0	1.1	26.9	1.1	3.1	11.6	10.2
BMW	21.9	0.8	20.5	0.9	1.3	6.4	4.0
Volvo	20.7	0.8	17.7	0.8	3.0	17.2	14.3
PSA	16.3	0.6	14.4	0.6	1.9	13.2	9.7
Benz	15.6	0.6	17.5	0.7	-1.9	-10.7	-12.9
OE Sales for others	175.6	6.7	156.3	6.6	19.3	12.4	11.6
<b>OEM Total</b>	<b>2,325.8</b>	<b>88.6</b>	<b>2,092.0</b>	<b>88.5</b>	<b>233.9</b>	<b>11.2</b>	<b>11.4</b>
<b>After-market, Non-Automotive Business(*)</b>	<b>299.1</b>	<b>11.4</b>	<b>271.5</b>	<b>11.5</b>	<b>27.6</b>	<b>10.2</b>	<b>10.9</b>
<b>Total</b>	<b>2,625.0</b>	<b>100.0</b>	<b>2,363.5</b>	<b>100.0</b>	<b>261.5</b>	<b>11.1</b>	<b>11.3</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,%)

	18/4-9		17/4-9		Change		Change excludes FX difference
	Amount	% to Total	Amount	% to Total	Amount	%	%
Thermal Systems	709.8	27.0	711.1	30.1	-1.3	-0.2	0.7
Powertrain Systems	634.7	24.2	604.3	25.5	30.5	5.0	4.7
Electrification Systems	401.7	15.3	389.7	16.5	12.0	3.1	3.0
Mobility Systems	409.6	15.6	273.0	11.5	136.7	50.1	49.6
Electronic Systems	326.2	12.5	296.9	12.6	29.3	9.9	10.4
Others(*)	50.5	1.9	30.1	1.3	20.4	67.9	72.0
<b>Automotive Total</b>	<b>2,532.5</b>	<b>96.5</b>	<b>2,305.0</b>	<b>97.5</b>	<b>227.6</b>	<b>9.9</b>	<b>10.1</b>
<b>Non-Automotive Business(FA and agriculture, etc.) Total</b>	<b>92.4</b>	<b>3.5</b>	<b>58.5</b>	<b>2.5</b>	<b>34.0</b>	<b>58.0</b>	<b>59.1</b>
<b>Total</b>	<b>2,625.0</b>	<b>100.0</b>	<b>2,363.5</b>	<b>100.0</b>	<b>261.5</b>	<b>11.1</b>	<b>11.3</b>

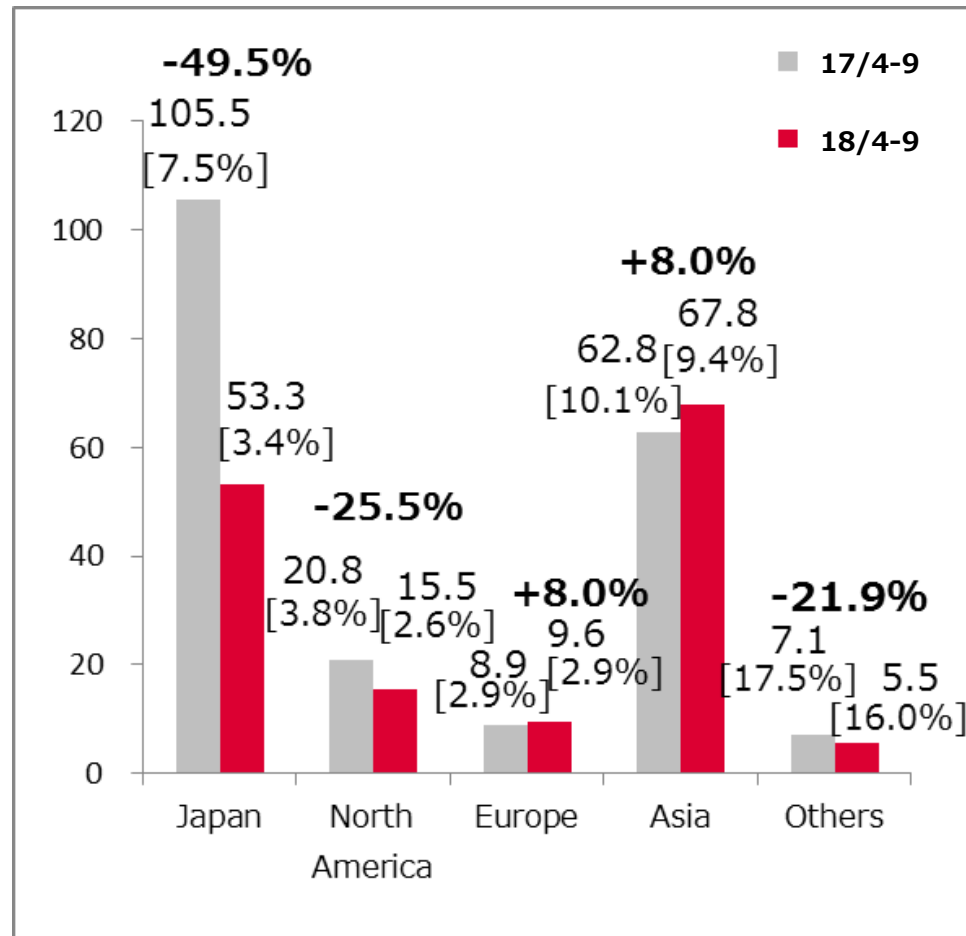
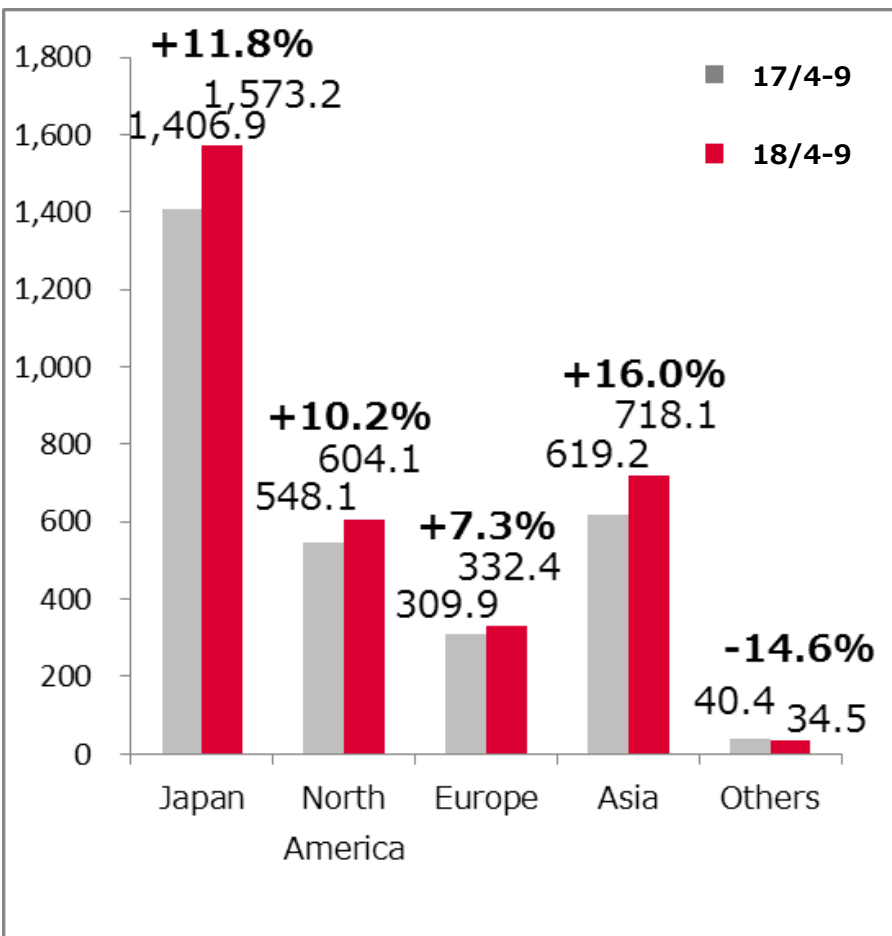
\* Revenue of equipment, Repair parts, original brand products of subsidiaries

# 1<sup>st</sup> Half Geographical Segments by Company Location

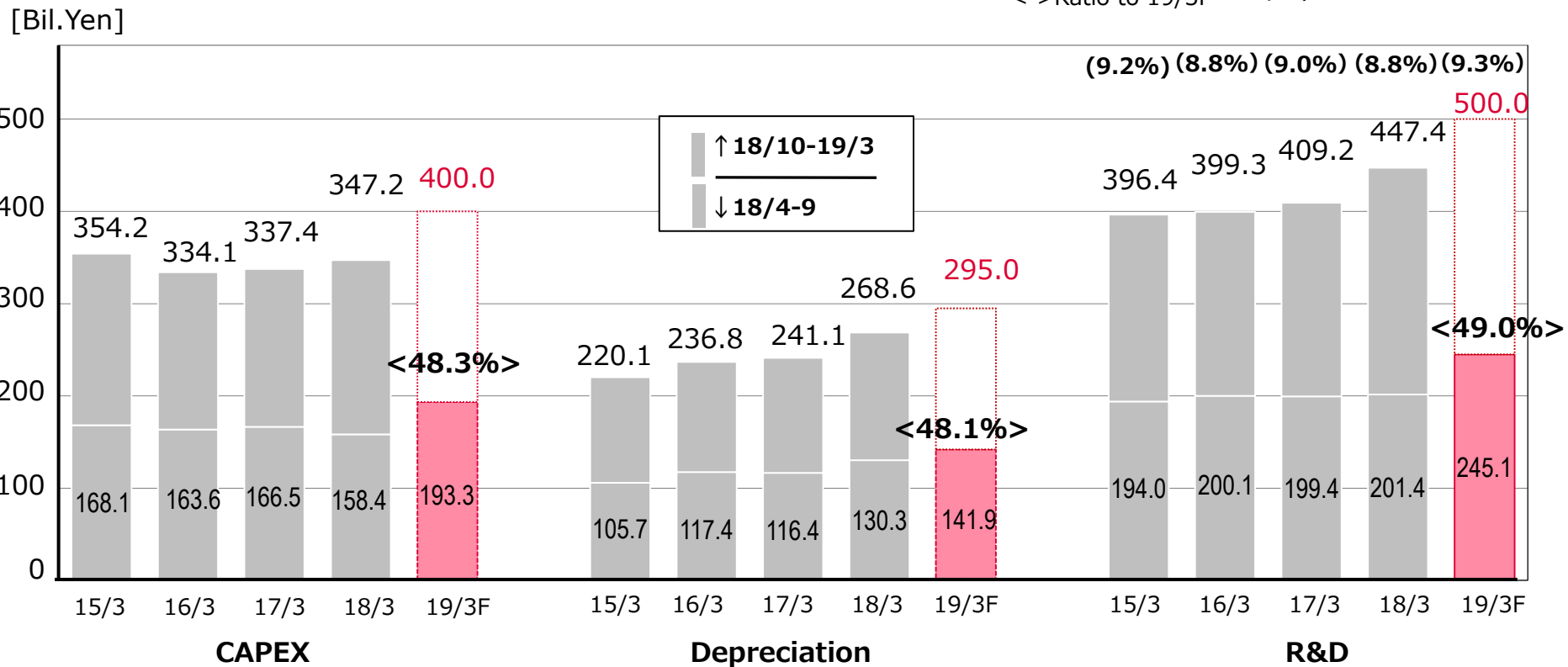
## Revenue

## Operating Profit

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



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





# Capital Expenditures, Depreciation and R&D Expenditures

(Unit: Billions of Yen)

	18/3		19/3F		Change(%)	Progress to 19/3 Forecast
	17/9		18/9			
Japan	106.3	217.7	116.9	240.0	10.0%	48.7%
North America	16.2	43.8	32.0	62.5	97.5%	51.2%
Europe	13.8	30.8	11.4	32.0	-17.4%	35.6%
Asia	21.3	52.7	31.7	63.0	48.8%	50.3%
Others	0.8	2.2	1.3	2.5	62.5%	52.0%
Capital Exp.	158.4	347.2	193.3	400.0	22.0%	48.3%
Japan	75.2	154.7	82.6	172.5	9.8%	47.9%
North America	15.9	32.4	18.1	35.5	13.8%	51.0%
Europe	10.4	22.2	11.8	26.0	13.5%	45.4%
Asia	27.4	56.4	28.3	58.5	3.3%	48.4%
Others	1.5	2.8	1.0	2.5	-33.3%	40.0%
Depreciation	130.3	268.6	141.9	295.0	8.9%	48.1%
R&D Expenditure (Ratio to Revenue)	201.4 (8.5%)	447.4 (8.8%)	245.1 (9.3%)	500.0 (9.3%)	21.7%	49.0%