

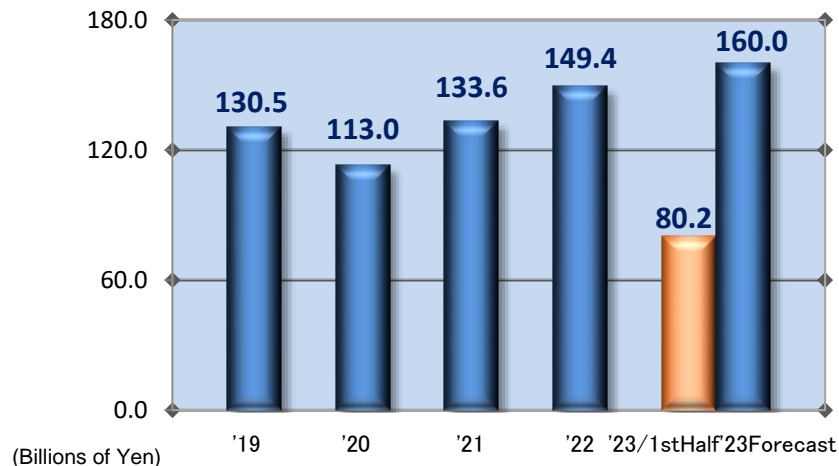


# Results Briefing for 2nd Quarter of FY2023 (November 10, 2023)

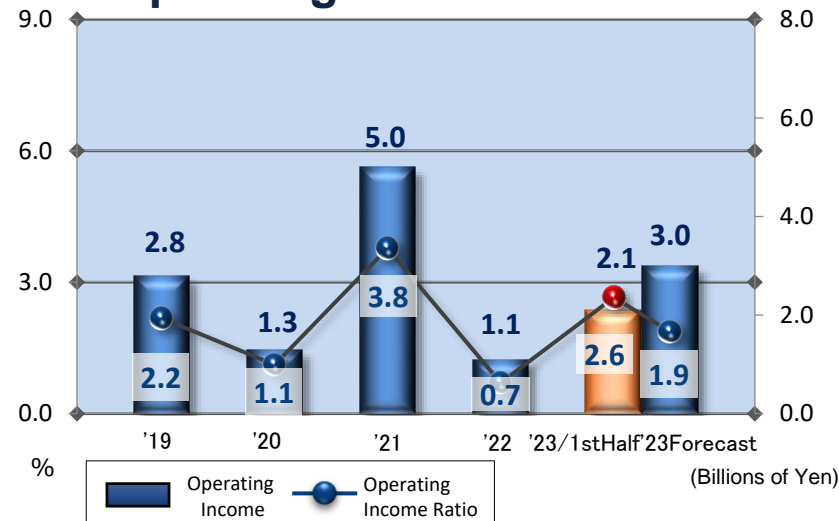
T.RAD Co.,Ltd.

# Financial Results (Consolidated)

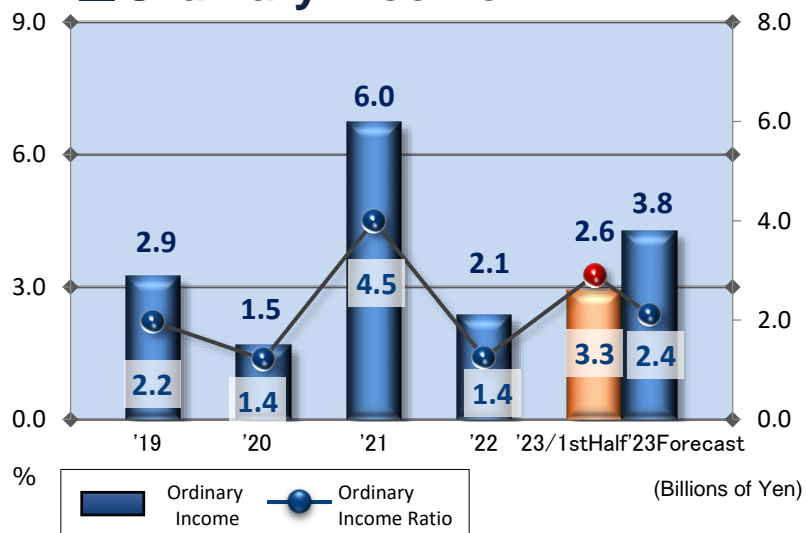
## Net Sales



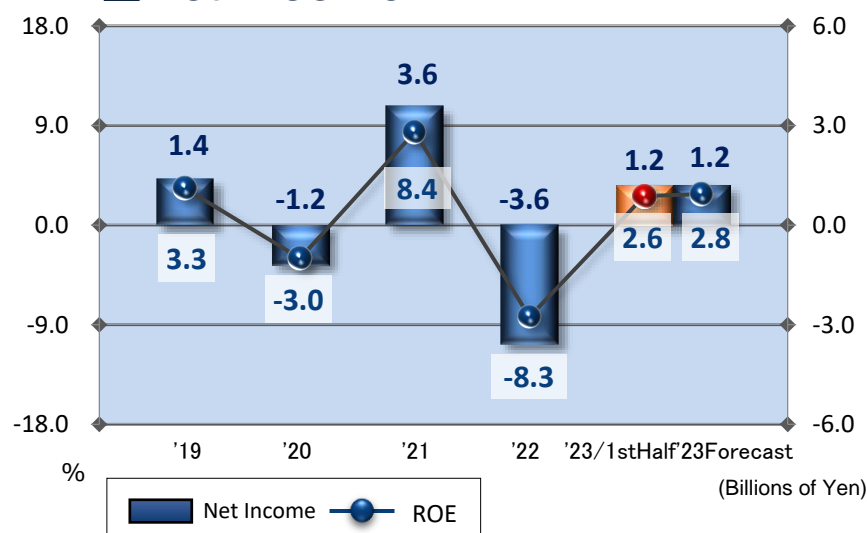
## Operating Income



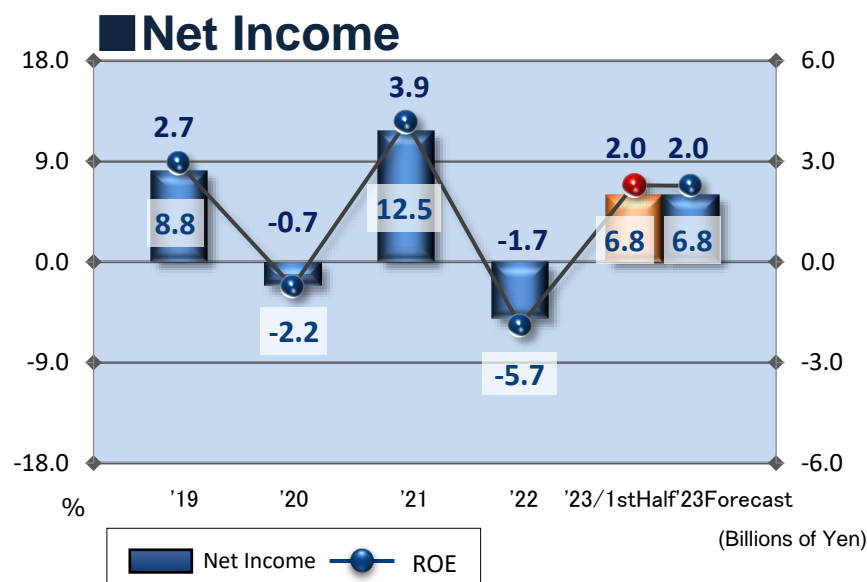
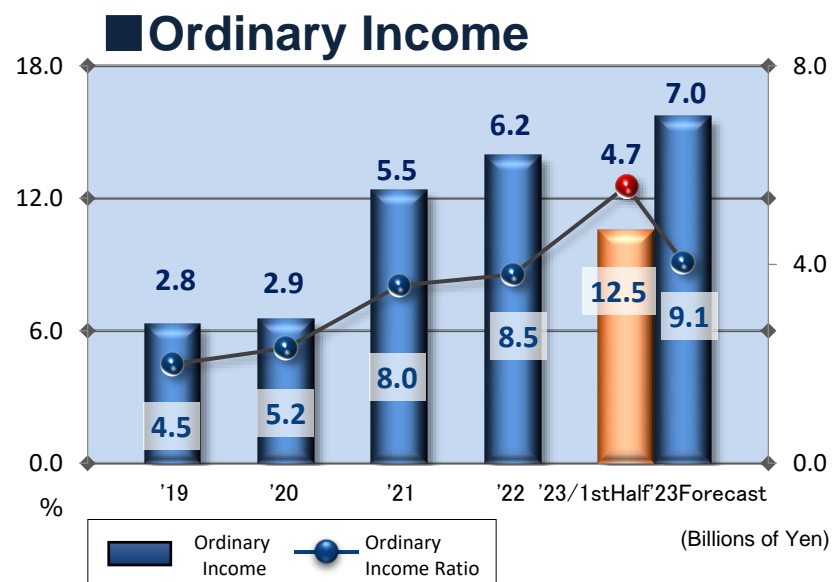
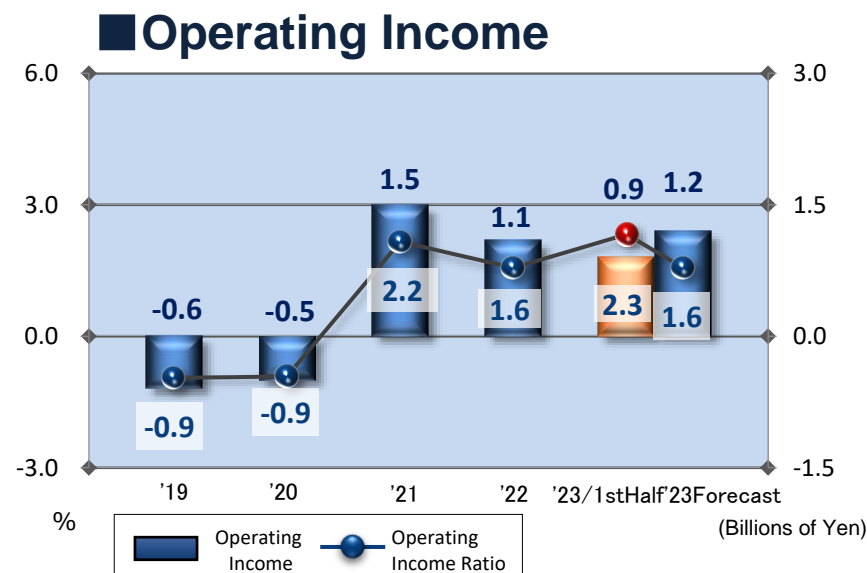
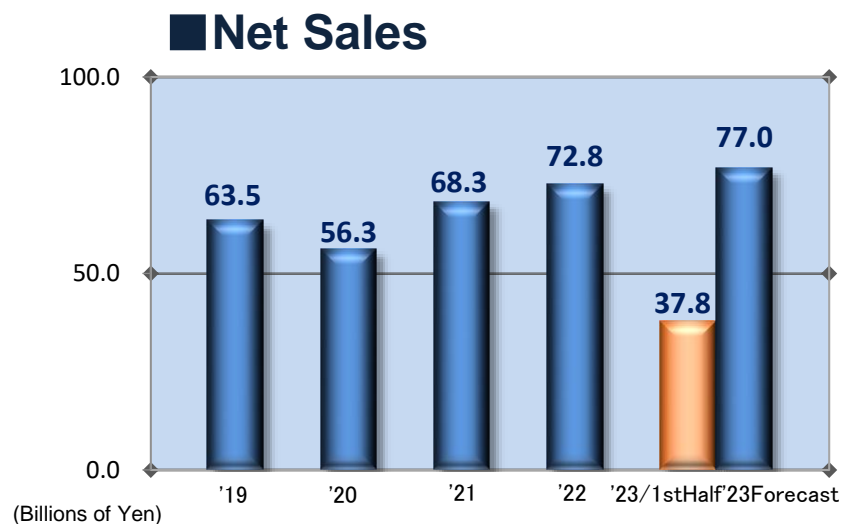
## Ordinary Income



## Net Income



# Financial Results (Non-Consolidated)



# Financial Results and Forecast

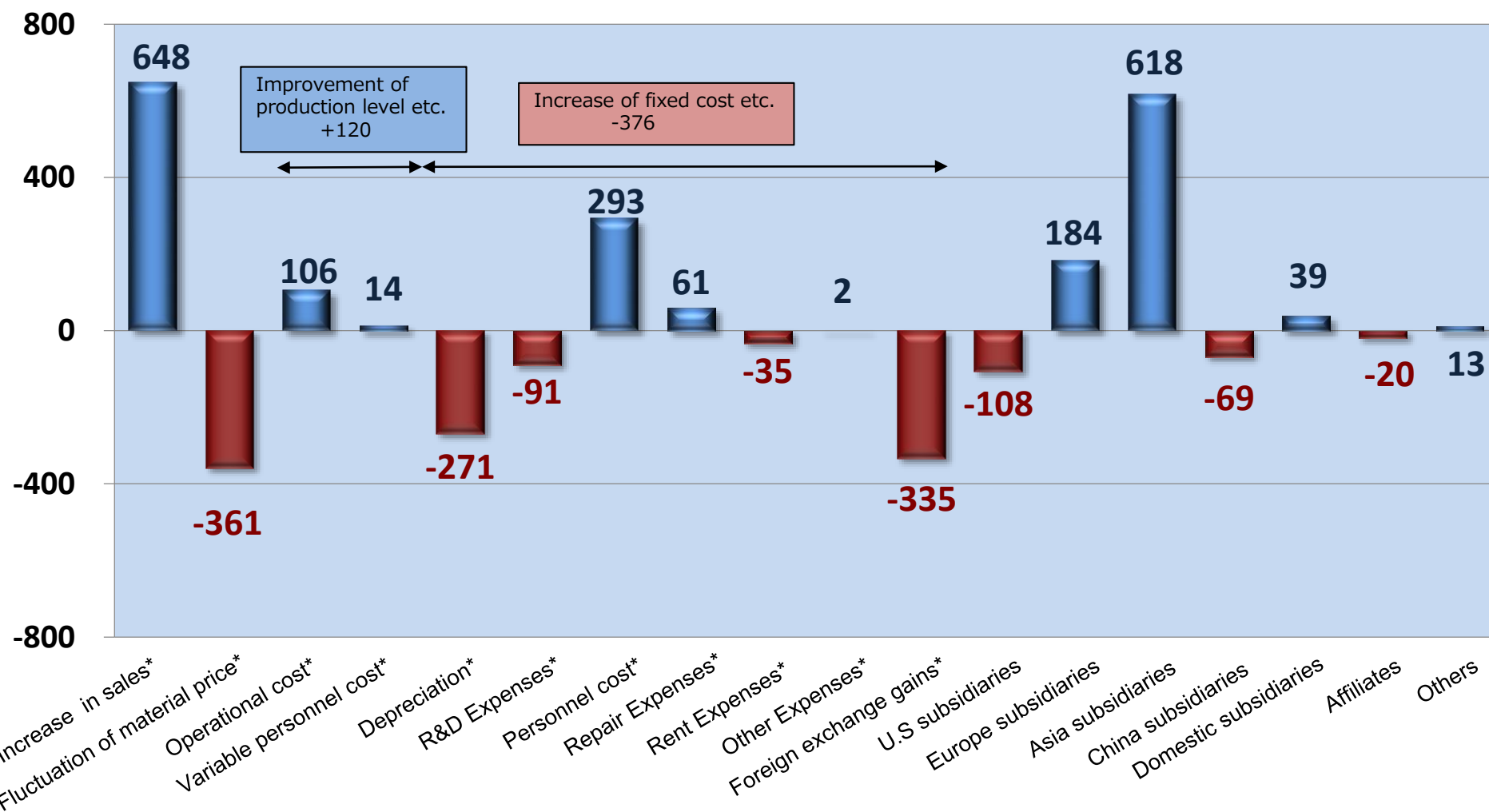
(Billions of Yen)

		FY2022				FY2023				Increase, Decrease (-)			
		1st Half Results		FY2022 Results		1st Half Results		FY2023 Forecast		'23/1st Half-'22/1st Half		'23Forecast-'22Results	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Net Sales	Consolidated	74.0	100.0	149.4	100.0	80.2	100.0	160.0	100.0	6.2	8.4	10.6	7.1
	Non-Consolidated	35.5	100.0	72.8	100.0	37.8	100.0	77.0	100.0	2.3	6.5	4.2	5.8
Operating Income	Consolidated	0.8	1.1	1.1	0.7	2.1	2.6	3.0	1.9	1.3	158.6	1.9	185.6
	Non-Consolidated	0.5	1.5	1.1	1.6	0.9	2.3	1.2	1.6	0.4	70.6	0.1	5.6
Ordinary Income	Consolidated	1.9	2.6	2.1	1.4	2.6	3.3	3.8	2.4	0.7	35.7	1.7	82.4
	Non-Consolidated	3.1	8.9	6.2	8.5	4.7	12.5	7.0	9.1	1.6	50.7	0.8	12.5
Profit attributable to owners of parent	Consolidated	0.3	0.4	(3.6)	-2.4	1.2	1.4	1.2	0.8	0.8	276.2	4.8	-
	Non-Consolidated	2.6	7.4	(1.7)	-2.4	2.0	5.4	2.0	2.6	-0.6	-22.5	3.7	-

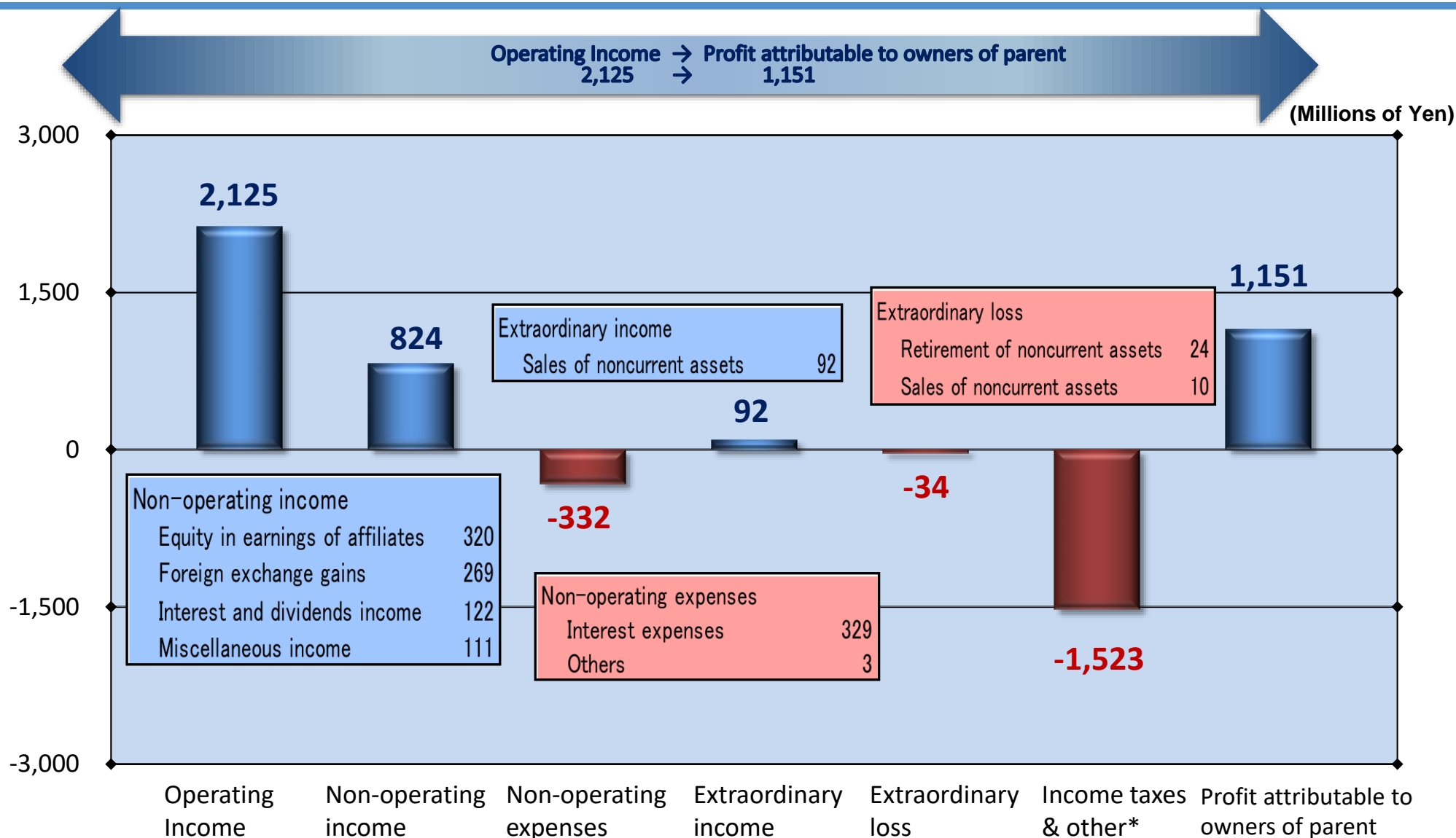
# Analysis of Increase Factor of the Consolidated Ordinary Income (FY2023 1st Half vs. FY2022 1st Half)

(Millions of Yen)

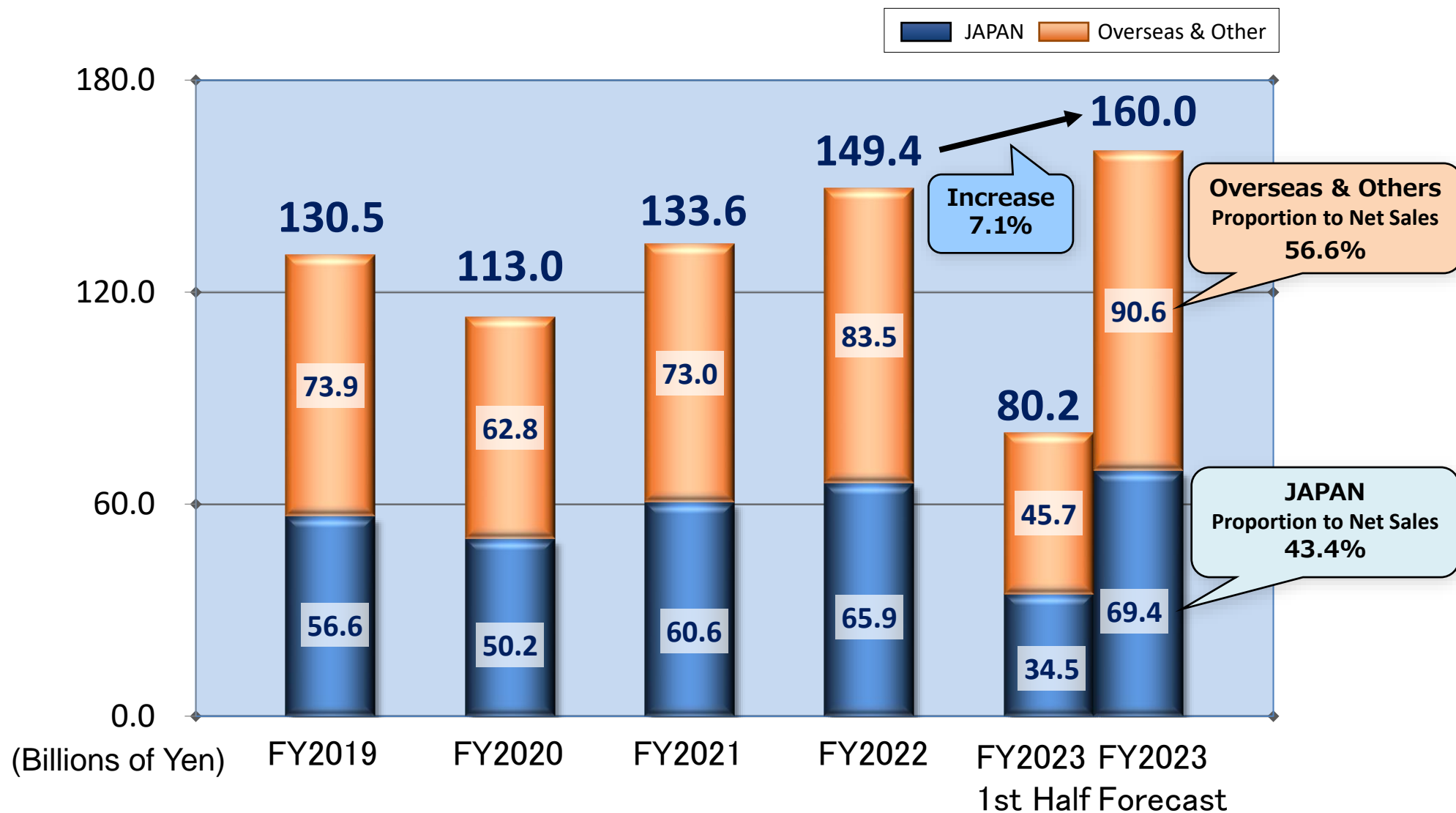
**Increase in the consolidated ordinary income by ¥688 million**



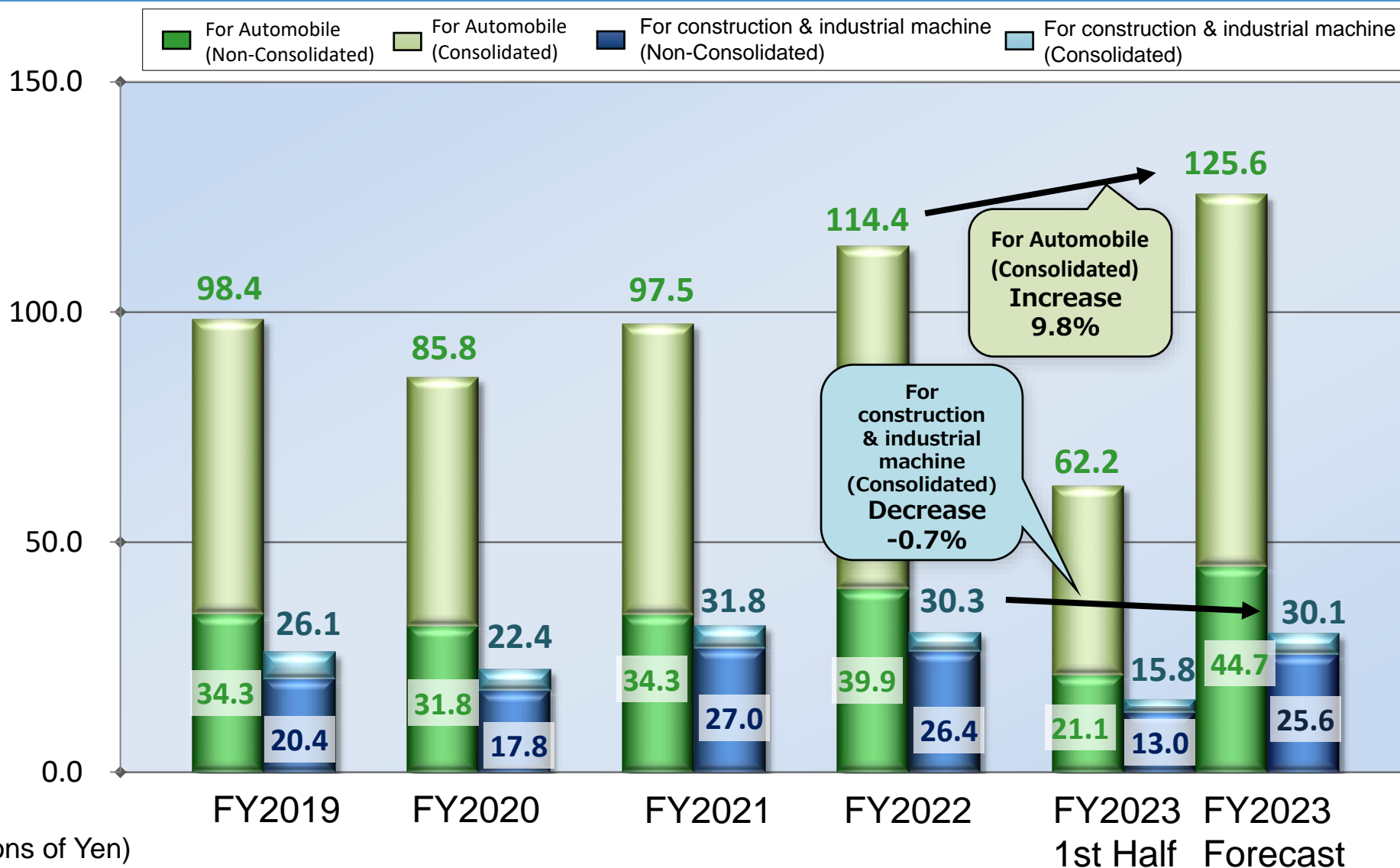
# Non-operating Income/Expenses and Extraordinary Income / Loss for 1st Half of FY2023(Consolidated)



# Net Sales(Consolidated)



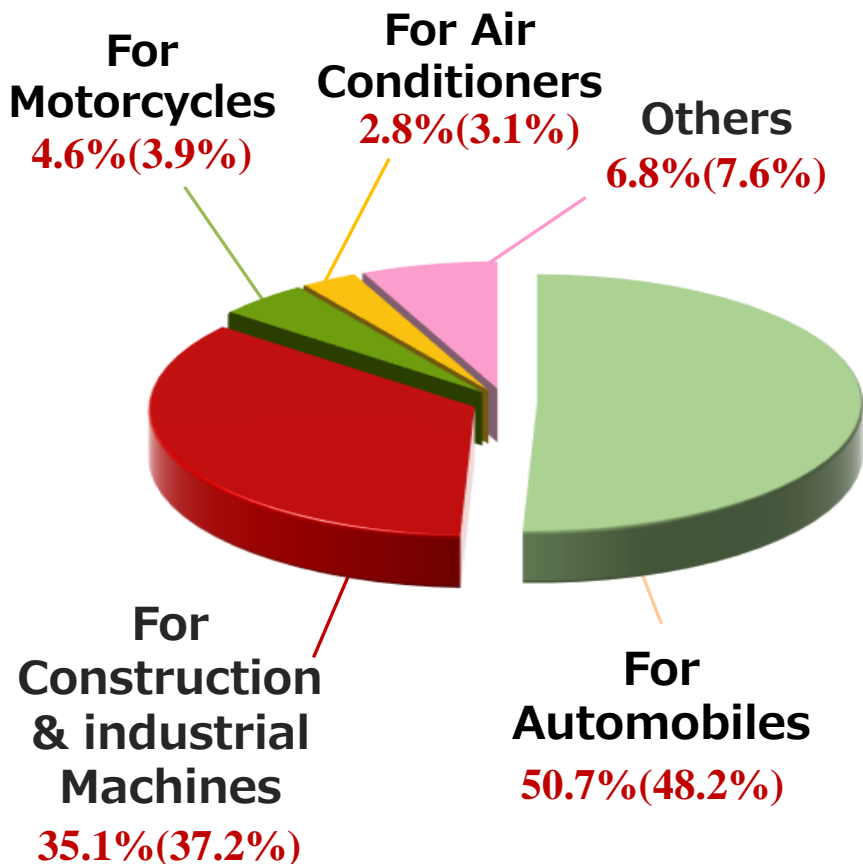
# Sales by Application



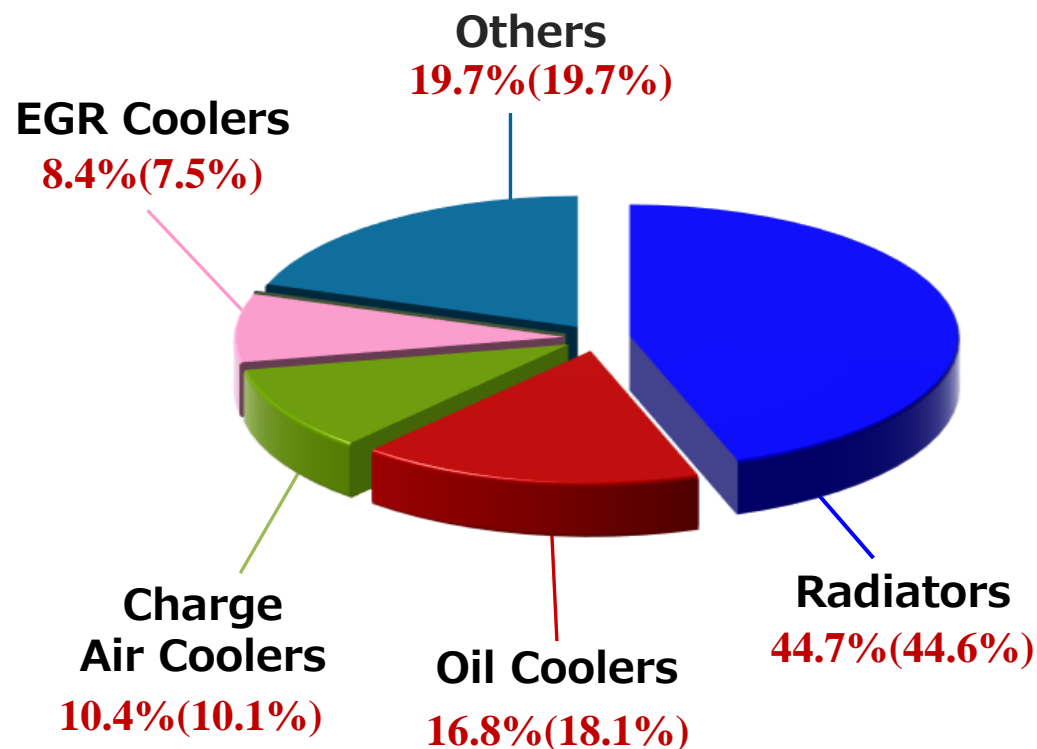


# Sales by Applications & Products in 1st Half of FY2023(Non-Consolidated)

Sales by applications

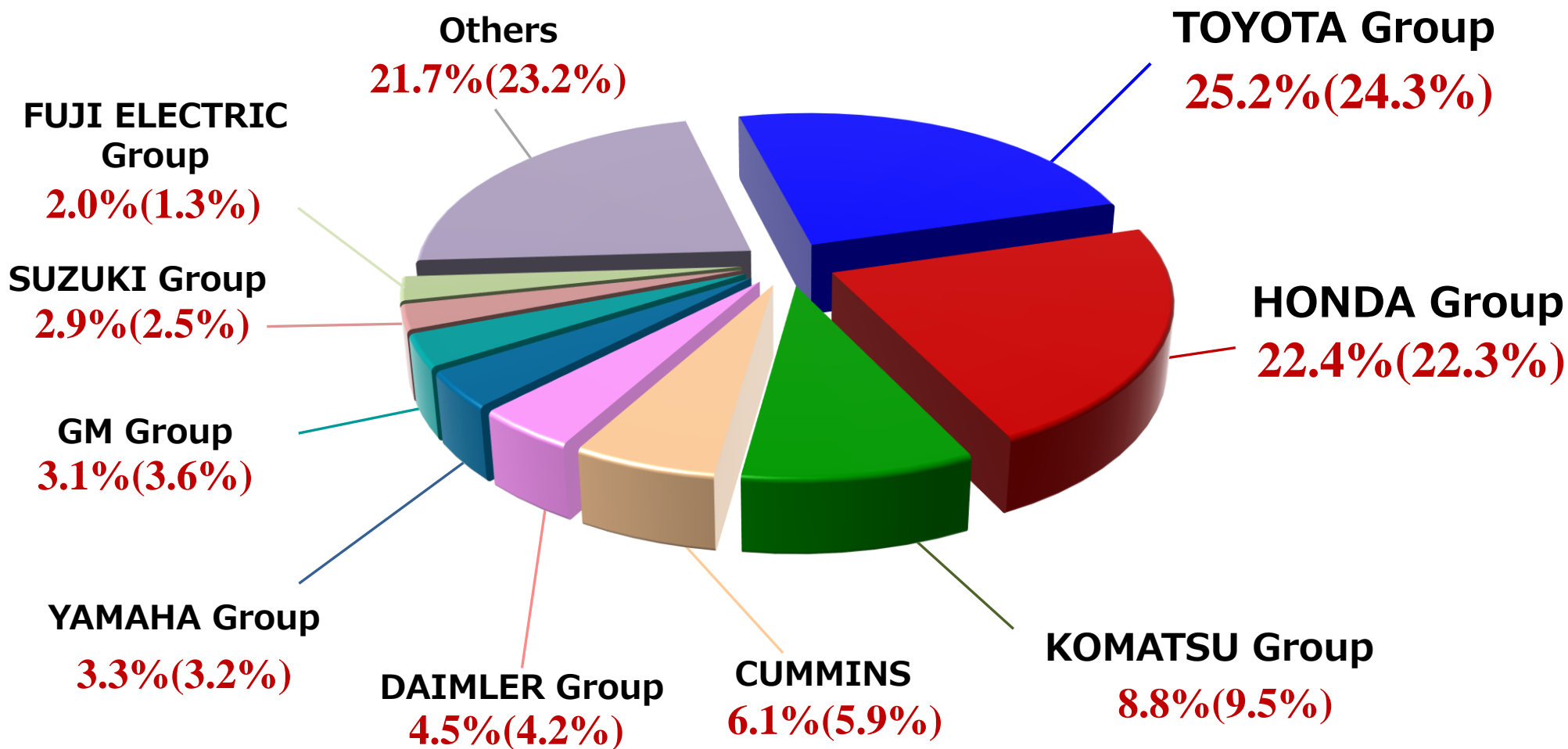


Sales by Product types



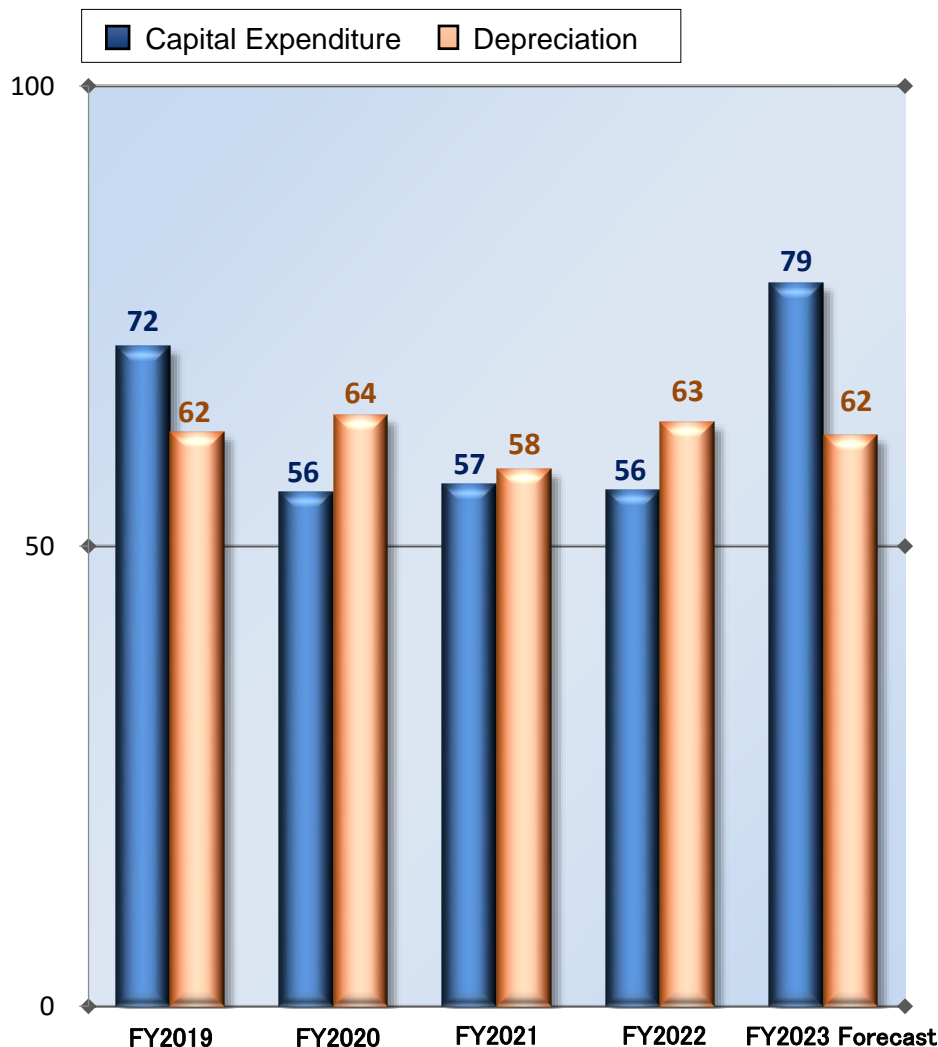
**The stability that is not biased to a specific industry or product**

# Sales by Customer Groups in 1st Half of FY2023(Consolidated)



**Independent mobility**  
**⇒ Adopted by industry-leading enterprises**

# Capital Expenditure & Depreciation(Consolidated)



(100 Millions of Yen)

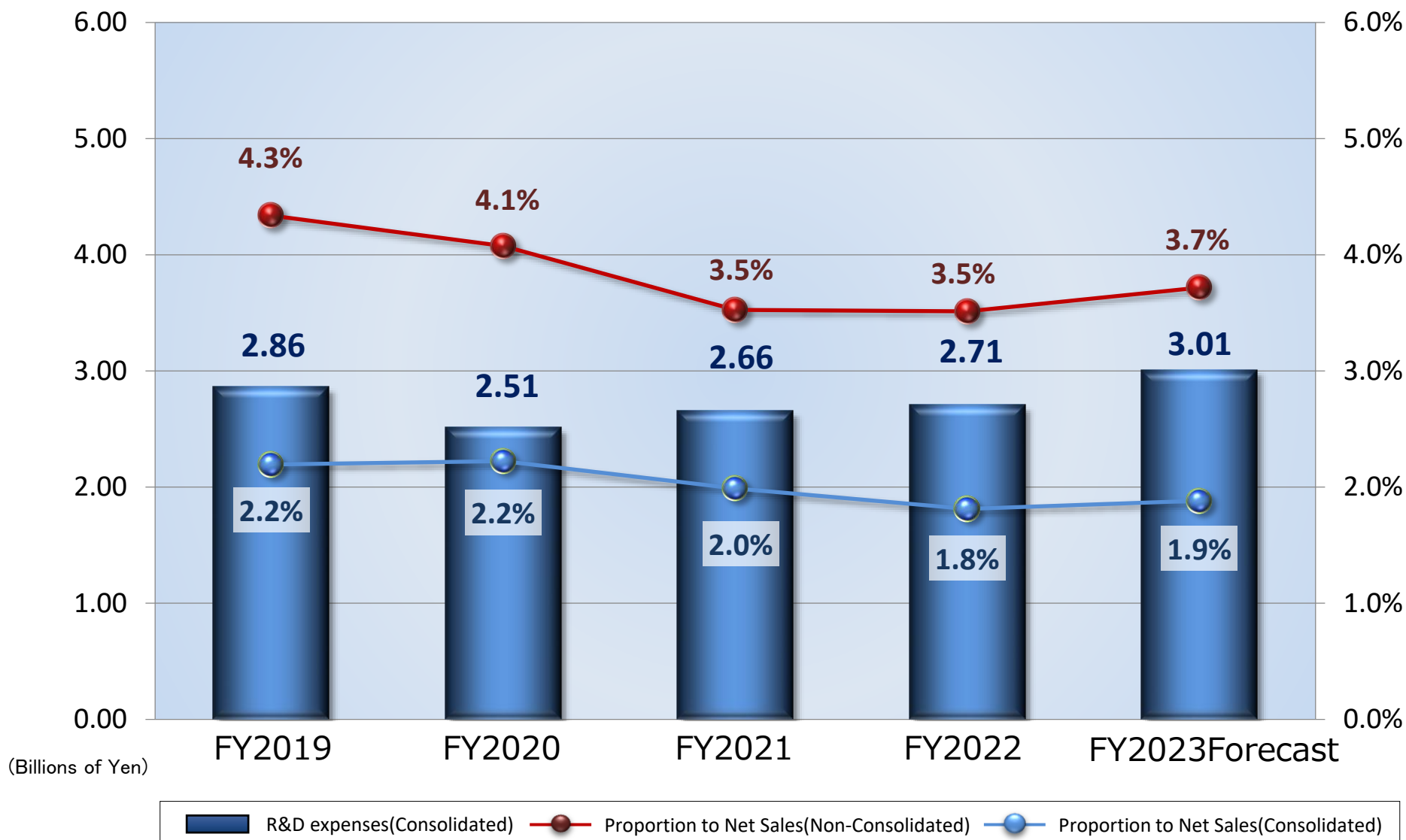
## Capital Expenditure by region (100 millions of Yen)

	FY2022		FY2023 Forecast	
	Capital Expenditure	Share	Capital Expenditure	Share
Japan	34.6	61.7%	51.5	65.5%
North America	4.4	7.8%	10.1	12.9%
Europe	3.9	7.0%	1.9	2.4%
China	9.4	16.8%	6.5	8.3%
Thailand	0.8	1.4%	2.8	3.6%
Indonesia	2.6	4.7%	4.7	5.9%
Vietnam	0.4	0.7%	1.2	1.4%
<b>Total</b>	<b>56.1</b>	<b>100.0%</b>	<b>78.6</b>	<b>100.0%</b>

## Depreciation by region (100 millions of Yen)

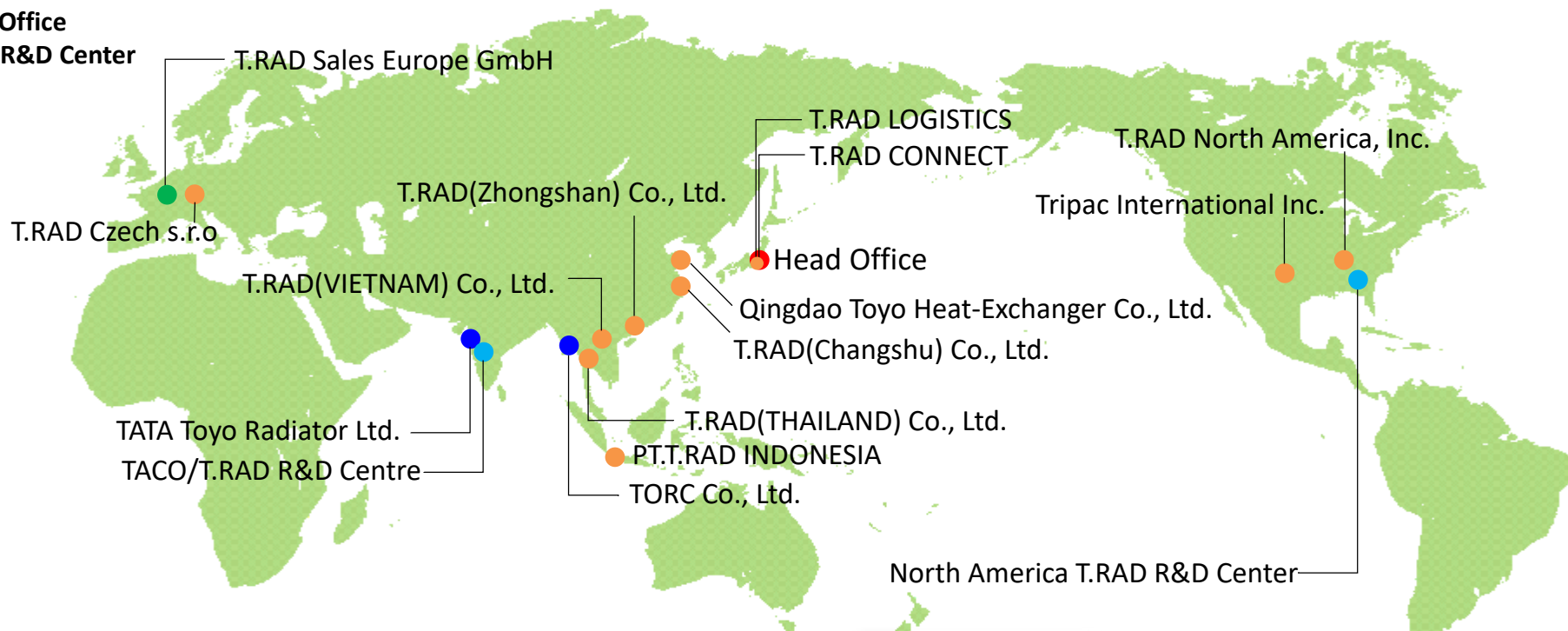
	FY2022		FY2023 Forecast	
	Depreciation	Share	Depreciation	Share
Japan	28.4	44.7%	34.7	55.9%
North America	16.7	26.4%	10.0	16.0%
Europe	1.3	2.1%	1.3	2.2%
China	9.4	14.8%	8.2	13.3%
Thailand	3.6	5.7%	3.4	5.5%
Indonesia	2.7	4.3%	3.0	4.8%
Vietnam	1.4	2.2%	1.5	2.3%
<b>Total</b>	<b>63.5</b>	<b>100.0%</b>	<b>62.1</b>	<b>100.0%</b>

# R&D Expenses



# Global Network

- Head Office
- Main Subsidiaries
- Main Joint Ventures
- Office
- R&D Center



**T.RAD Czech s.r.o.**



**T.RAD(THAILAND)Co.,Ltd.**

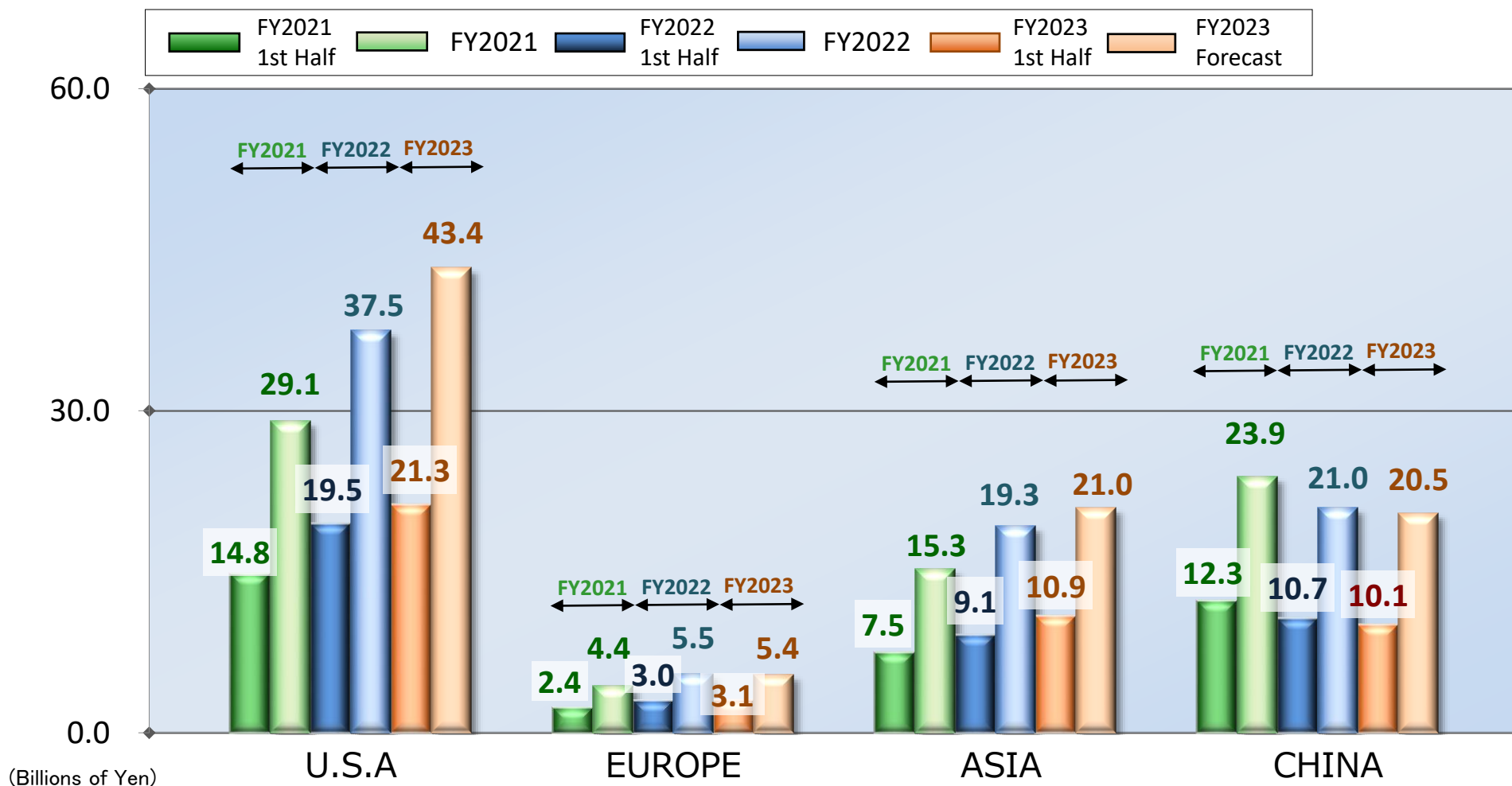


**T.RAD(Zhongshan)Co.,Ltd.**



**T.RAD North America,Inc.**

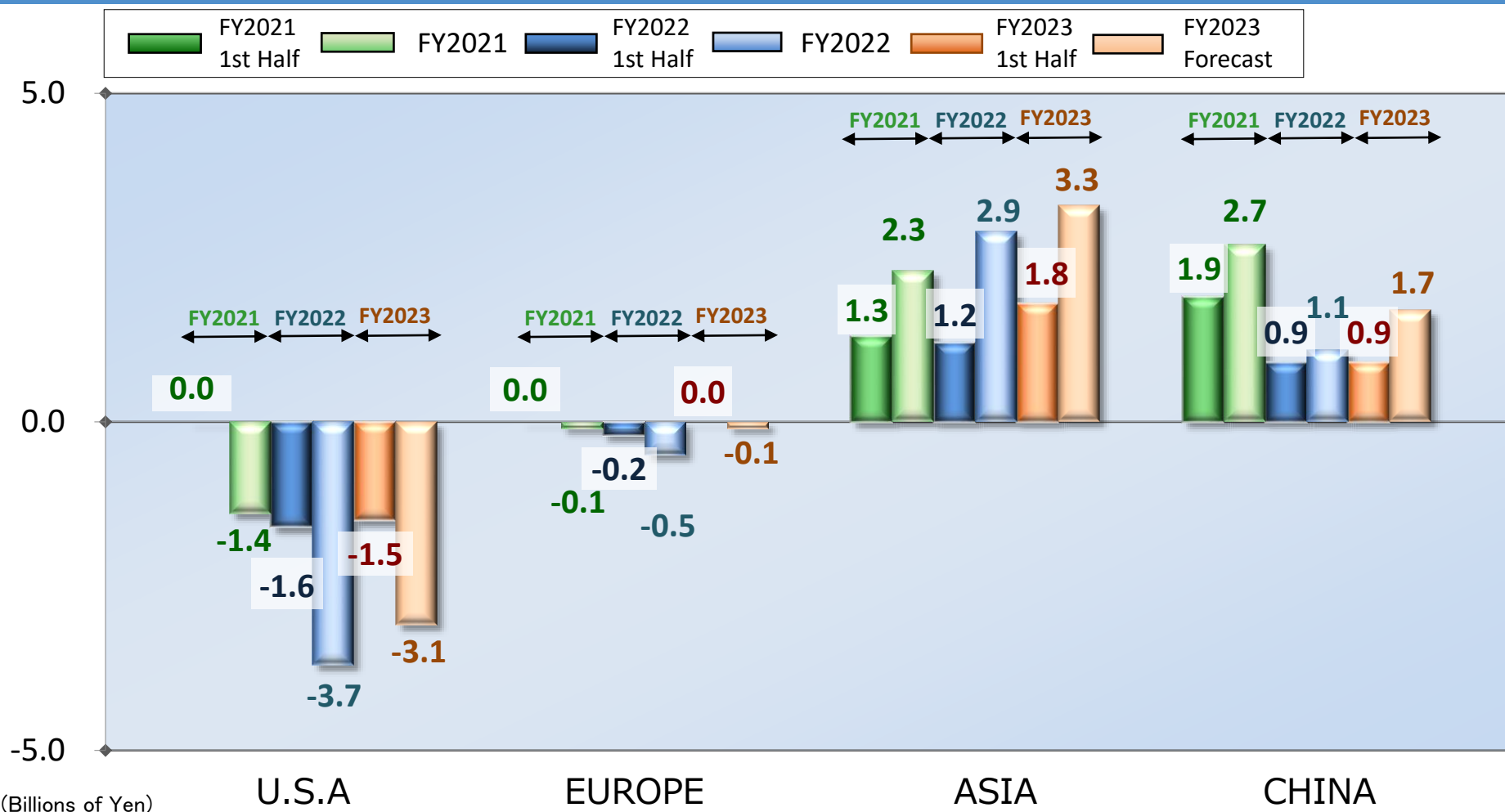
# Sales by Region



Exchange Rate (June.2022⇒June.2023) USD: 136.69⇒144.99, THB: 3.87⇒4.06, CNY: 20.39⇒19.95, CZK: 5.77⇒6.64, IDR: 0.0092⇒0.0097, VND: 0.0059⇒0.0062, EUR: 142.65⇒157.56

Exchange Rate (Dec.2022⇒Dec.2023 Forecast) USD: 132.7⇒147.74, THB: 3.82⇒4.13, CNY: 19.02⇒20.23, CZK: 5.85⇒6.48, IDR: 0.0085⇒0.0096, VND: 0.0056⇒0.0061, EUR: 141.44⇒157.83

# Operating Income by Region



Exchange Rate (June.2022⇒June.2023) USD: 136.69⇒144.99, THB: 3.87⇒4.06, CNY: 20.39⇒19.95, CZK: 5.77⇒6.64, IDR: 0.0092⇒0.0097, VND: 0.0059⇒0.0062, EUR: 142.65⇒157.56

Exchange Rate (Dec.2022⇒Dec.2023 Forecast) USD: 132.7⇒147.74, THB: 3.82⇒4.13, CNY: 19.02⇒20.23, CZK: 5.85⇒6.48, IDR: 0.0085⇒0.0096, VND: 0.0056⇒0.0061, EUR: 141.44⇒157.83

# Financial Results by Region

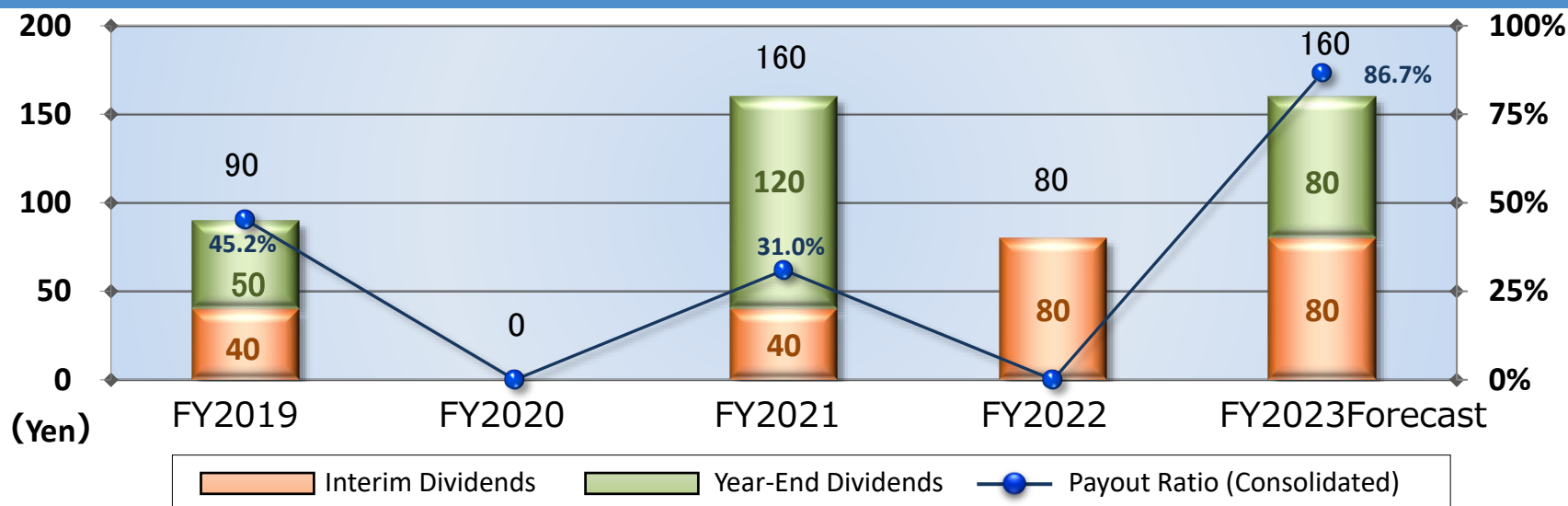
(Billions of Yen)

	Item	FY2021					FY2022					FY2023 Forecast				
		1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	1st Half	2nd Half	Total
JAPAN	Sales	14.6	13.9	16.0	16.0	60.6	15.1	16.7	17.3	16.9	65.9	16.8	17.8	34.5	34.9	69.4
	Operating Income	0.5	-0.3	0.9	0.5	1.5	0.4	0.1	0.5	0.2	1.2	0.3	0.6	0.9	0.4	1.3
	Operating income Ratio (%)	3.2	-2.4	5.7	2.8	2.5	2.6	0.9	2.7	1.1	1.8	1.6	3.7	2.7	1.0	1.8
U.S.A	Sales	7.4	7.3	6.9	7.4	29.1	8.7	10.8	11.6	6.5	37.5	9.7	11.6	21.3	22.1	43.4
	Operating Income	-0.1	0.0	-0.4	-1.0	-1.4	-0.4	-1.2	-1.4	-0.7	-3.7	-0.7	-0.8	-1.5	-1.6	-3.1
	Operating income Ratio (%)	-0.7	0.5	-5.6	-13.5	-4.8	-4.6	-11.3	-12.0	-10.0	-9.8	-7.0	-7.3	-7.2	-7.2	-7.2
EUROPE	Sales	1.1	1.3	0.9	1.2	4.4	1.2	1.8	1.3	1.2	5.5	1.4	1.7	3.1	2.3	5.4
	Operating Income	0.1	-0.0	-0.1	0.0	-0.1	-0.2	0.0	-0.2	-0.1	-0.5	0.1	-0.0	0.0	-0.1	-0.1
	Operating income Ratio (%)	5.0	-2.1	-16.9	1.4	-2.3	-20.8	0.6	-16.7	-7.9	-9.8	5.1	-2.5	0.9	-4.9	-1.5
ASIA	Sales	4.0	3.5	3.3	4.6	15.3	4.7	4.4	5.4	4.8	19.3	5.6	5.3	10.9	10.0	21.0
	Operating Income	0.8	0.5	0.5	0.6	2.3	0.7	0.6	0.9	0.9	2.9	1.0	0.8	1.8	1.5	3.3
	Operating income Ratio (%)	18.8	15.1	13.9	12.5	15.0	14.6	12.6	16.0	17.7	15.3	17.0	15.1	16.1	15.0	15.6
CHINA	Sales	5.7	6.7	5.2	6.3	23.9	5.9	4.8	6.8	3.5	21.0	5.0	5.2	10.1	10.3	20.5
	Operating Income	0.9	0.9	0.3	0.5	2.7	0.6	0.3	-0.0	0.3	1.1	0.4	0.4	0.9	0.8	1.7
	Operating income Ratio (%)	16.4	14.0	6.1	8.2	11.3	10.0	5.9	-0.4	7.4	5.3	8.7	8.5	8.6	7.6	8.1
OTHER	Sales	0.0	0.1	0.1	0.1	0.3	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2
	Operating Income	0.1	0.0	-0.1	-0.1	-0.0	-0.0	0.0	0.2	-0.2	0.0	0.0	0.1	0.1	-0.1	0.0
	Operating income Ratio (%)	155.3	67.7	-91.0	-54.5	-3.3	-55.3	75.4	223.9	-261.9	8.2	33.8	64.6	50.0	-74.7	1.6
TOTAL	Sales	32.9	32.7	32.3	35.7	133.6	35.6	38.5	42.3	33.0	149.4	38.6	41.7	80.2	79.8	160.0
	Operating Income	2.2	1.2	1.1	0.5	5.0	1.0	-0.2	-0.1	0.4	1.1	1.1	1.1	2.1	0.9	3.0
	Operating income Ratio (%)	6.8	3.6	3.4	1.4	3.8	2.8	-0.5	-0.3	1.1	0.7	2.8	2.5	2.6	1.1	1.9



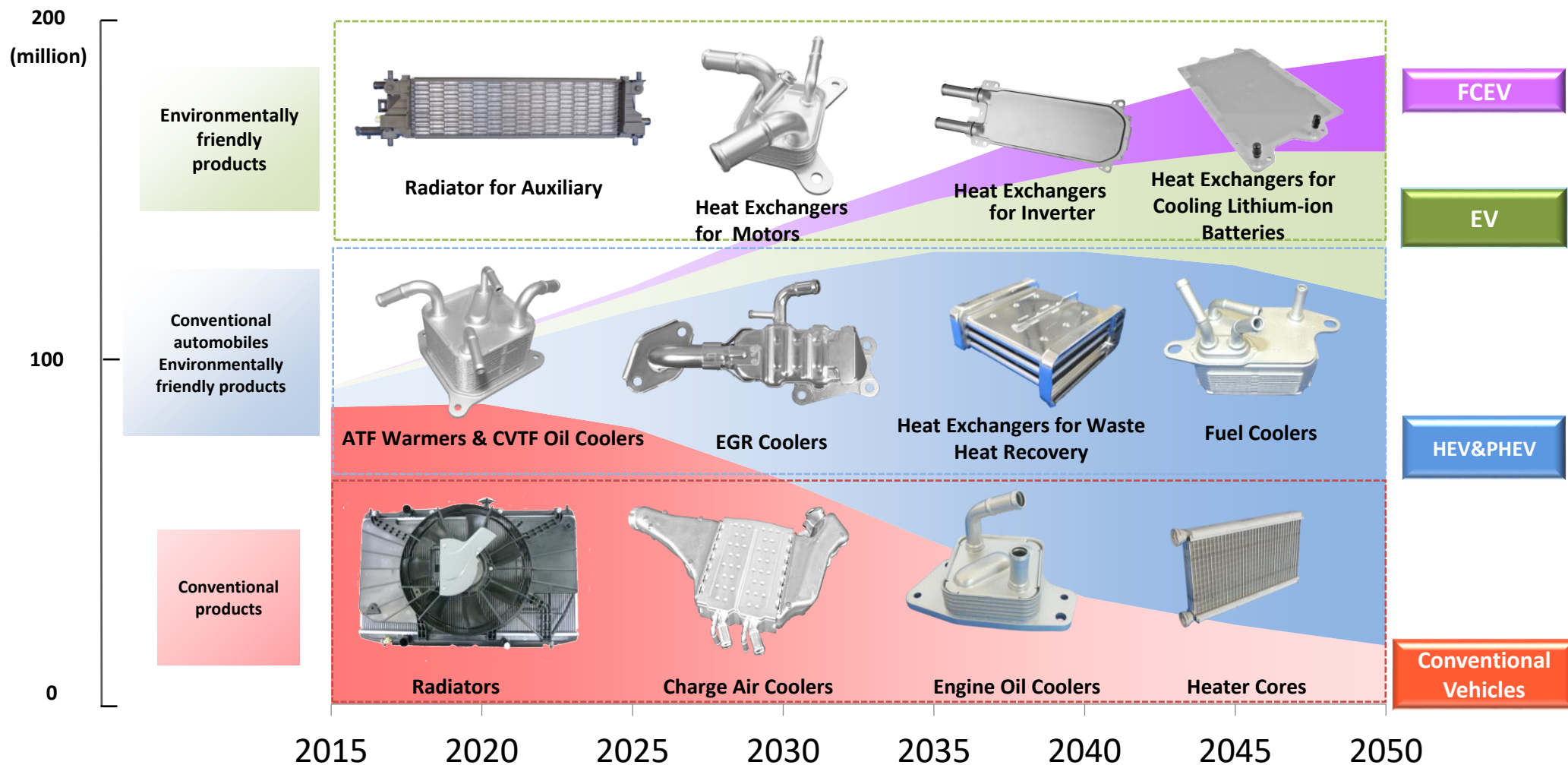
# Reference Materials

# Dividends Per Share



	FY2019	FY2020	FY2021	FY2022	FY2023 Forecast
<b>Dividends Per Share(Yen)</b>	<b>90</b>	<b>-</b>	<b>160</b>	<b>80</b>	<b>160</b>
<b>(Year-End Dividends)(Yen)</b>	<b>50</b>	<b>-</b>	<b>120</b>	<b>0</b>	<b>80</b>
<b>(Interim Dividends) (Yen)</b>	<b>40</b>	<b>-</b>	<b>40</b>	<b>80</b>	<b>80</b>
<b>Payout Ratio(Consolidated)</b>	<b>45.2%</b>	<b>-%</b>	<b>31.0%</b>	<b>-%</b>	<b>86.7%</b>
<b>1)Purchase of Treasury Stock (Millions of Yen)</b>	<b>1,356</b>	<b>0</b>	<b>2,160</b>	<b>67</b>	<b>0</b>
<b>2)Total dividends amount (Millions of Yen)</b>	<b>647</b>	<b>0</b>	<b>1,066</b>	<b>523</b>	<b>1,041</b>
<b>1) + 2) Total Shareholder Return Amount (Millions of Yen)</b>	<b>2,004</b>	<b>0</b>	<b>3,226</b>	<b>590</b>	<b>1,041</b>
<b>Total Shareholder Return Ratio(Consolidated)</b>	<b>139.6%</b>	<b>-%</b>	<b>89.6%</b>	<b>-%</b>	<b>86.7%</b>
<b>PBR</b>	<b>0.2</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>-</b>
<b>ROE</b>	<b>3.3%</b>	<b>▲3.0%</b>	<b>8.4%</b>	<b>▲8.3%</b>	<b>2.8%</b>

# Automobile Components



**Development of exchangers corresponding to the change of the markets and customers' needs**

# Automobile Components

Name	Function
Radiators	To cool cooling water increased in temperature by the engine.
Charge Air Coolers	To cool intake air increased in temperature by being pressurized by a supercharger such as a turbocharger.
Engine Oil Coolers	To cool engine oil increased in temperature by the engine
Heater Cores	To heat indoors by allowing a part of cool cooling water increased in temperature to flow.
ATF Warmers & CVTF Oil Coolers	To heat lubricants for AT and CVT during warming-up and cool down at high temperatures.
EGR Coolers	To cool high-temperature exhaust gas when re-circulating a part of exhaust gas.
Heat Exchangers for Waste Heat Recovery	To recover heat within exhaust gas in HEV and reuse for heating and quick warming of the engine.
Fuel Coolers	To cool fuel increased in temperature by being pressurized by the fuel injection pump.
Radiator for Auxiliary	To cool cooling water increased in temperature by the heat exchanger for auxiliary equipment such as an inverter.
Heat Exchangers for Motors	To cool circulating oil for cooling the motor.
Heat Exchangers for Inverter	To cool inverters used in HEV and EV.
Heat Exchangers for Cooling Lithium-ion Batteries	To cool lithium ion batteries used in HEV and EV.