

# Financial Results for FY2022

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For the Year ended March 31, 2023

May 10, 2023

Kawasaki Heavy Industries, Ltd.



 **Kawasaki**  
Powering your potential

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### Notice

Figures recorded in the business forecasts are forecasts that reflect the judgment of the Company based on the information available at the time of release and include risks and uncertainties. Accordingly, the Company cautions investors not to make investment decisions solely on the basis of these forecasts. Actual business results may differ materially from these business forecasts due to various important factors resulting from changes in the external environment and internal environment. Important factors that may affect actual business results include, but are not limited to, economic conditions, the yen exchange rate against the U.S. dollar and other currencies, the tax system, and laws and regulations. Our company has adopted IFRS (International Financial Reporting Standards) since the first quarter of FY2022, and its financial information for the comparative fiscal year, FY2021, is also based on IFRS.

# Consolidated Results for FY2022

## -Summary-

-  Revenue and profits grew significantly YoY, and orders received, revenue and profit attributable for owners of parent hit a record high
-  The January-March quarter was largely as planned, with the concentration of provision for bonuses and settlement of various expenses

(Billion Yen)

	FY2021	FY2022					Change		
		Forecast	Apr. to Jun.	Jul. to Sep.	Oct. to Dec.	Jan. to Mar.	Total	YoY	vs. Old FCST
Orders Received	1,602.1	<b>1,950.0</b>	412.0	454.5	609.9	560.9	<b>2,037.4</b>	+ 435.3	+ 87.4
Revenue	1,500.8	<b>1,750.0</b>	350.3	409.4	436.5	529.2	<b>1,725.6</b>	+ 224.7	- 24.4
Operating Profit (Loss)	30.3	<b>86.0</b>	4.5	26.2	50.0	4.4	<b>85.2</b>	+ 54.9	- 0.8
<i>[margin]</i>	<i>[2.0%]</i>	<i>[4.9%]</i>	<i>[1.3%]</i>	<i>[6.4%]</i>	<i>[11.4%]</i>	<i>[0.8%]</i>	<i>[4.9%]</i>	<i>[+ 2.9pt]</i>	<i>[+ 0.0pt]</i>
Recurring Profit (Loss)	27.6	<b>78.0</b>	10.6	25.3	36.1	1.1	<b>73.2</b>	+ 45.6	- 4.8
<i>[margin]</i>	<i>[1.8%]</i>	<i>[4.4%]</i>	<i>[3.0%]</i>	<i>[6.1%]</i>	<i>[8.2%]</i>	<i>[0.2%]</i>	<i>[4.2%]</i>	<i>[+ 2.4pt]</i>	<i>[- 0.2pt]</i>
Profit (Loss) Attributable to Owners of Parent	12.6	<b>54.0</b>	5.4	18.3	28.7	2.5	<b>55.0</b>	+ 42.4	+ 1.0
<i>[margin]</i>	<i>[0.8%]</i>	<i>[3.0%]</i>	<i>[1.5%]</i>	<i>[4.4%]</i>	<i>[6.5%]</i>	<i>[0.4%]</i>	<i>[3.1%]</i>	<i>[+ 2.3pt]</i>	<i>[+ 0.1pt]</i>
(Before-tax ROIC)	(3.3%)	-	-	-	-	-	<b>(8.0%)</b>	+ 4.7pt	-
After-tax ROIC ※1	1.6%	-	-	-	-	-	<b>5.9%</b>	+ 4.3pt	-
Weighted-average exchange rates (USD/JPY)	111.90	-	124.76	135.72	141.37	131.45	<b>133.96</b>	+ 22.06	-
US dollar-based transaction (B\$) ※2	1.76	<b>2.02</b>	0.41	0.45	0.54	0.65	<b>2.05</b>	+ 0.29	+ 0.03

※1 In line with the formula change, we have revised the 2021 before-tax ROIC from 3.0% to 3.3%. See page 43 for formulas for calculating before-tax ROIC and after-tax ROIC.

※2 Amount in foreign currency calculated by deducting dollar-denominated purchases from dollar-denominated revenue of Kawasaki Heavy Industries, Ltd, Kawasaki Railcar manufacturing Co., Ltd., and Kawasaki Motors, Ltd.(to include dollar-denominated revenue of loss provisions). The estimated impact on business profit due to a 1 yen fluctuation in the exchange rate. See page 43 for the breakdown of these figures by segment.

# 1 Consolidated Results for FY2022 -Segment-

- Revenue and Profits significantly improved due to the passenger demand recovery (Aerospace Systems), strong outdoor leisure demand (PS&E), and the depreciation of the yen **①**
- Investment related to DX and IT infrastructure increased, and an impairment loss was recorded in PCR viral testing service business due to downgrading of COVID-19 **②**

(Billion Yen)

	Orders Received			Revenue			Business Profit (Loss)		
	FY2021	FY2022	Change	FY2021	FY2022	Change	FY2021	FY2022	Change
Aerospace Systems	383.3	<b>345.5</b>	- 37.7	298.2	<b>348.8</b>	+ 50.6	- 10.3	<b>17.8</b>	+ 28.1
Rolling Stock	71.5	<b>313.2</b>	+ 241.7	126.6	<b>131.9</b>	+ 5.2	2.2	<b>1.3</b>	- 0.8
Energy Solution & Marine Engineering	343.5	<b>439.0</b>	+ 95.4	297.3	<b>314.5</b>	+ 17.2	- 10.8	<b>3.9</b>	+ 14.7
Precision Machinery & Robot	271.8	<b>262.0</b>	- 9.8	252.6	<b>252.6</b>	+ 0.0	13.9	<b>8.7</b>	- 5.1
Powersports & Engine <sup>※1</sup>	447.9	<b>591.1</b>	+ 143.2	447.9	<b>591.1</b>	+ 143.2	37.5	<b>71.5</b>	+ 34.0
Others	84.0	<b>86.4</b>	+ 2.4	78.0	<b>86.3</b>	+ 8.3	3.1	<b>- 1.8</b>	- 4.9
Eliminations and corporate <sup>※2</sup>	-	-	-	-	-	-	- 5.2	<b>- 16.2</b>	- 10.9
<b>Total</b>	<b>1,602.1</b>	<b>2,037.4</b>	+ 435.3	<b>1,500.8</b>	<b>1,725.6</b>	+ 224.7	<b>30.3</b>	<b>85.2</b>	+ 54.9

※1 From Q3 FY'22, the reportable segment name of 'Motorcycle & Engine' has been changed to 'Powersports & Engine'.

※2 "Eliminations and corporate" includes some expenses incurred at Head Office which were not allocated to each industry segment for internal reporting.

# Consolidated Results for FY2022

## -Statement of comprehensive income-

(Billion Yen)

	FY2021	%	FY2022	%	Change
Revenue	1,500.8	100.0	<b>1,725.6</b>	100.0	+ 224.7
Cost of sales	1,247.6	83.1	<b>1,391.7</b>	80.7	+ 144.1
Gross profit	253.2	16.9	<b>333.8</b>	19.3	+ 80.5
Selling, general and administrative expenses	211.1	14.1	<b>249.3</b>	14.5	+ 38.2
Salaries and allowances	59.8		<b>70.4</b>		+ 10.5
Research and development expenses	45.7		<b>50.7</b>		+ 4.9
Others	105.4		<b>128.1</b>		+ 22.7
Share of profit (loss) of investments accounted for using equity method	- 14.4		<b>3.3</b>		+ 17.7
Other income and other expenses	2.6		- 2.4		- 5.1
Gain on sale of property, plant and equipment	1.6		<b>0.6</b>		- 1.0
Others	0.9		<b>- 3.1</b>		- 4.1
Business Profit (Loss)	30.3	2.0	<b>85.2</b>	4.9	+ 54.9

Details

- ① Improved due to increasing sales amount, price pass-through, and depreciation of the yen, despite the rising raw material prices
- ② Increase in expenses related to DX, hydrogen business and other new businesses
- ③ Improvement in business performance mainly at a joint venture in China (Ship & offshore structure)
- ④ Impairment loss in PCR viral testing service business (¥ -2.4bn) and one-time cost in Aero engine business (¥-1.6bn)

# Consolidated Results for FY2022

## -Statement of comprehensive income-

(Billion Yen)

	FY2021	%	FY2022	%	Change
Finance income and Finance costs	- 2.6		<b>- 12.0</b>		- 9.3
Net Interest expense (incl. dividend income)	- 1.7		<b>- 3.0</b>		- 1.3
Gain and loss on foreign exchange	0.5		<b>⑤ - 4.6</b>		- 5.2
Others	- 1.5		<b>- 4.2</b>		- 2.6
Profit before tax	27.6	1.8	<b>73.2</b>	4.2	+ 45.6
Income tax expense	12.8		<b>15.9</b>		+ 3.1
Profit attributable to Non-controlling interests	2.1		<b>2.2</b>		+ 0.0
Profit attributable to owners of parent	12.6	0.8	<b>55.0</b>	3.2	+ 42.4

Details

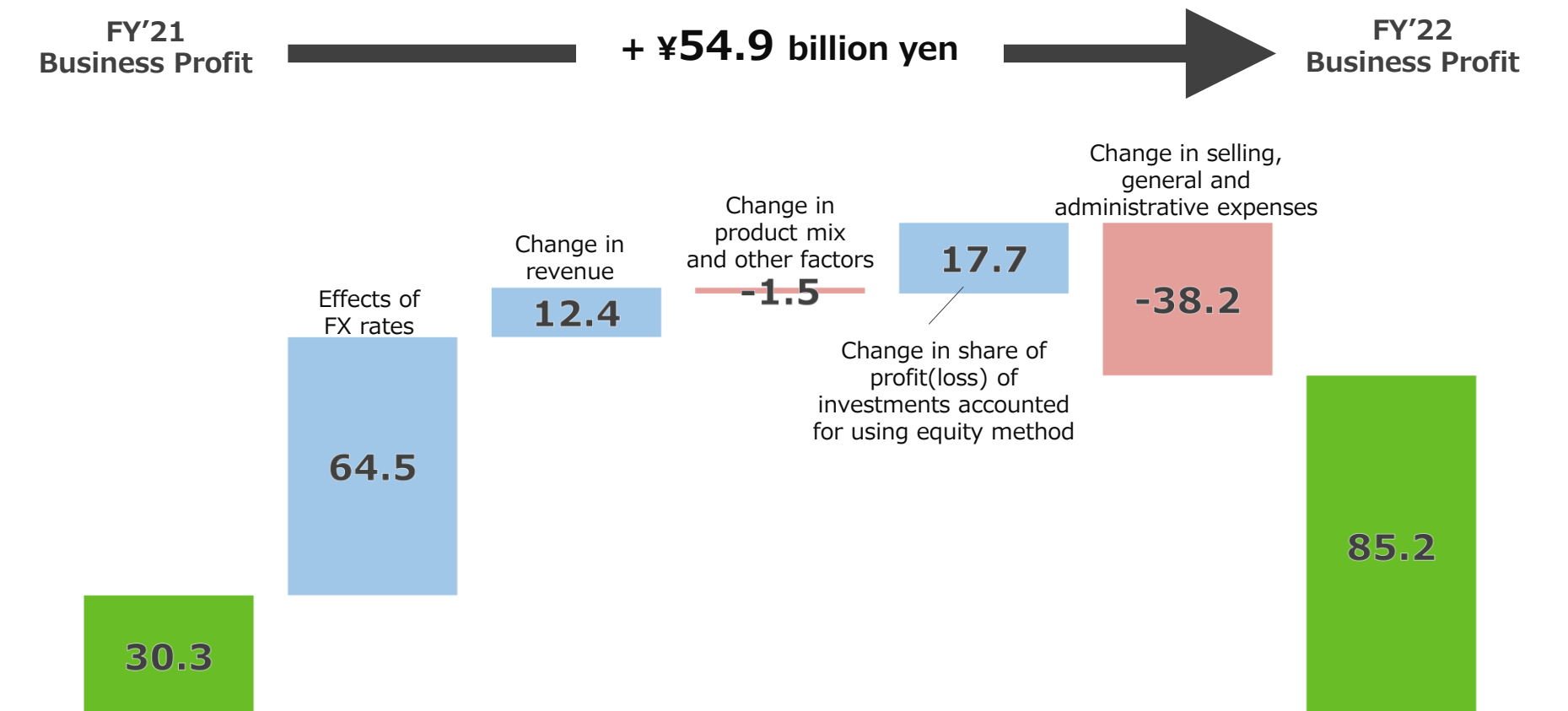
- ⑤ Mainly due to the time difference between deposits and withdrawals

USD/JPY rate  
133.54 Mar. 31,'23

Weighted-average  
exchange rates  
133.96 FY '22

## -Details of change in business profit-

- ✓ The depreciation of the yen and fixed cost reduction covered the rising raw material prices
- ✓ Change in product mix and other factors kept positive in PS&E due to successful price pass-through



※ "Effects of FX rates" indicate the impact on gross profit, not including FX effects on Selling, general and administrative expenses. Also, the impact of price fluctuation due to currency fluctuations is included in "Change in product mix and other factors" and "Changes in Selling, general and administrative expenses".

## -Details of change in business profit-

(Billion Yen)

	FY2021 Business Profit (Loss)	Details of change					Total	FY2022 Business Profit (Loss)
		Effects of FX rates※	Change in sales※	Change in product mix and other factors※	Change in share of profit (loss) of investments accounted for using equity method	Change in SG & A expenses		
Aerospace Systems	- 10.3	15.3	1.1	13.0		- 1.3	28.1	17.8
Rolling Stock	2.2	1.8	0.4	- 2.7	- 0.0	- 0.3	- 0.8	1.3
Energy Solution & Marine Engineering	- 10.8	2.5	2.4	- 0.4	17.2	- 7.0	14.7	3.9
Precision Machinery & Robot	13.9	9.7	- 1.4	- 8.3	0.6	- 5.7	- 5.1	8.7
Powersports & Engine	37.5	34.9	8.2	3.1	- 0.1	- 12.1	34.0	71.5
Others	3.1	0.3	1.7	- 5.2	- 0.0	- 1.7	- 4.9	- 1.8
Eliminations and corporate	- 5.2			- 1.1	- 0.0	- 9.8	- 10.9	- 16.2
<b>Total</b>	<b>30.3</b>	<b>64.5</b>	<b>12.4</b>	<b>- 1.5</b>	<b>17.7</b>	<b>- 38.2</b>	<b>54.9</b>	<b>85.2</b>

※ Effects of foreign exchange rates, change in revenue, and change in product mix are approximate values calculated by our company based on certain criteria. In addition, each factor of change is often indivisible, and in particular, it may be desirable to check the change in revenue and change in product mix.



# Consolidated Results for FY2022

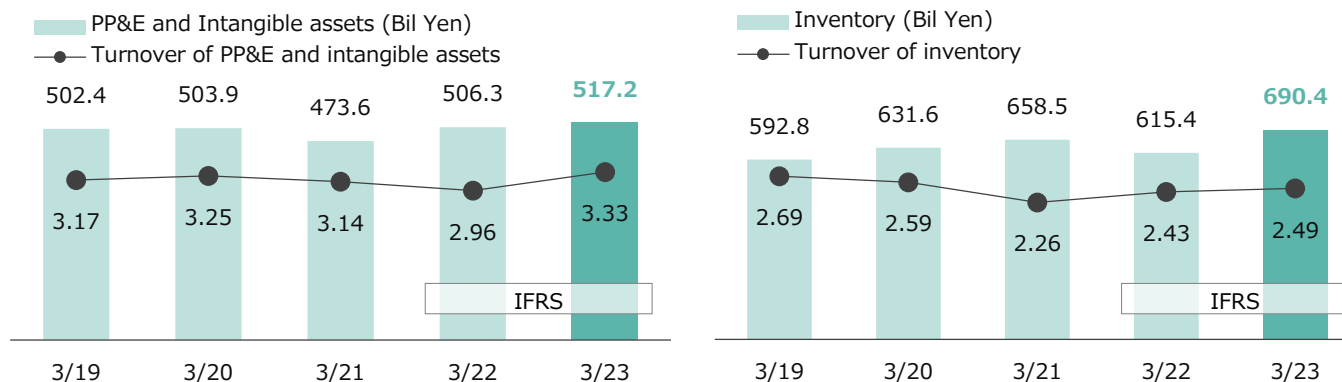
## -Statement of financial position-

(Billion Yen)

	End of Mar. 2022	%	End of Mar. 2023	%	Change
Cash and cash equivalents	108.5		<b>138.4</b>		+ 29.9
Trade receivables (Incl. contract assets)	482.9		<b>592.6</b>		+ 109.7
Inventories	615.4		<b>690.4</b>		+ 74.9
Other current assets	113.2		<b>151.7</b>		+ 38.5
<b>Current assets</b>	<b>1,320.2</b>	<b>60.7</b>	<b>1,573.2</b>	<b>64.0</b>	<b>+ 253.0</b>
PP&E and intangible assets	506.3		<b>517.2</b>		+ 10.9
Right-of-use assets	58.5		<b>68.4</b>		+ 9.8
Deferred tax assets	102.2		<b>109.3</b>		+ 7.1
Other non-current assets	187.3		<b>191.4</b>		+ 4.0
<b>Non-current assets</b>	<b>854.4</b>	<b>39.3</b>	<b>886.4</b>	<b>36.0</b>	<b>+ 32.0</b>
<b>Total assets</b>	<b>2,174.6</b>	<b>100.0</b>	<b>2,459.7</b>	<b>100.0</b>	<b>+ 285.1</b>

Details

- ① Increase in PS&E and Aerospace Systems
- ② Increase in PS&E, Aerospace Systems, and Rolling Stock



# Consolidated Results for FY2022

## -Statement of financial position-

	End of		End of		Change
	Mar. 2022	%	Mar. 2023	%	
Trade payables	344.2		<b>395.1</b>		<b>③</b> + 50.9
Interest-bearing debt	553.9		<b>589.8</b>		+ 35.9
Contract liability (Advances received)	256.1		<b>256.2</b>		+ 0.0
Provision for losses on construction contracts	9.6		<b>4.6</b>		- 4.9
Retirement benefit liability	107.0		<b>91.5</b>		- 15.4
Other liabilities	378.7		<b>523.3</b>		<b>④</b> + 144.5
<b>Total liabilities</b>	<b>1,649.7</b>	<b>75.9</b>	<b>1,860.8</b>	<b>75.7</b>	+ 211.1
Equity attributable to owners of parent	505.4		<b>578.2</b>		+ 72.7
Non-controlling interests	19.4		<b>20.6</b>		+ 1.2
<b>Total equity</b>	<b>524.8</b>	<b>24.1</b>	<b>598.9</b>	<b>24.3</b>	+ 74.0
<b>Total liabilities and equity</b>	<b>2,174.6</b>	<b>100.0</b>	<b>2,459.7</b>	<b>100.0</b>	+ 285.1

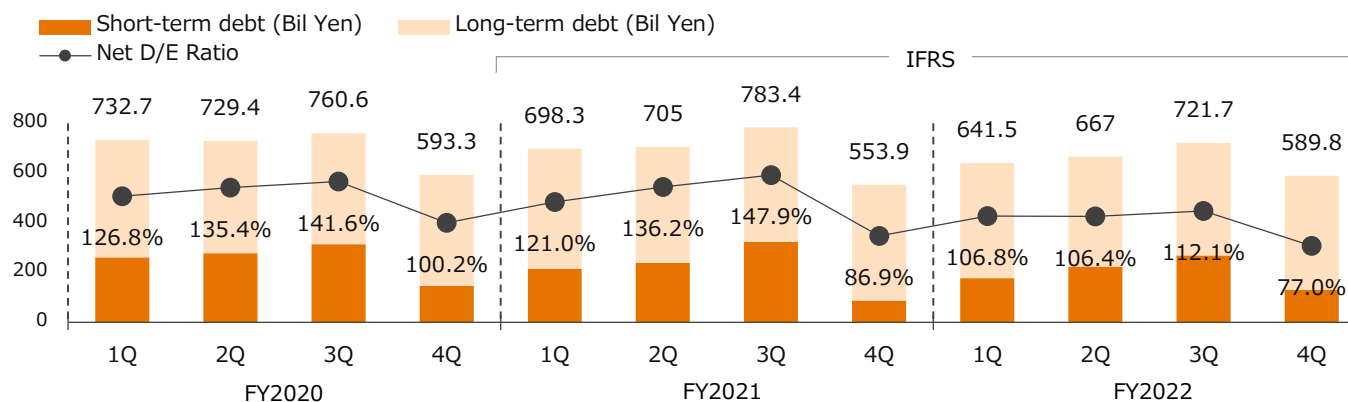
### Details

- ③** Increase in Aerospace Systems
- ④** Increased due to receivables liquidation in Aerospace Systems

### Appendix

### Cash Conversion Cycle (day)

End of FY'18	111
End of FY'19	133
End of FY'20	153
End of FY'21	133
End of FY'22	150



# 1 Consolidated Results for FY2022

## -Cash Flows-

(Billion Yen)

	FY2021	FY2022	Change
Profit before tax	27.6	<b>73.2</b>	+ 45.6
Depreciation and amortization	77.5	<b>77.3</b>	- 0.1
Increase and decrease in working capital	30.4	<b>- 157.2</b>	- 187.6
Trade receivables <sup>**1</sup> (minus notation indicates incr.)	23.2	<b>- 107.1</b>	- 130.3
Inventory (minus notation indicates incr.)	- 37.9	<b>- 64.2</b>	- 26.2
Trade payables (minus notation indicates decr.)	- 15.1	<b>46.3</b>	+ 61.5
Advance payment (minus notation indicates incr.)	- 31.7	<b>- 28.5</b>	+ 3.1
Contract liabilities <sup>**2</sup> (minus notation indicates decr.)	92.0	<b>- 3.7</b>	- 95.8
Other	21.2	<b>30.1</b>	+ 8.9
<b>Cash flows from operating activities</b>	<b>156.8</b>	<b>23.6</b>	<b>- 133.2</b>
Purchase of PP&E and intangible assets	- 67.6	<b>- 69.9</b>	- 2.3
Proceeds from sales of PP&E and intangible assets	4.9	<b>2.2</b>	- 2.7
Other	4.2	<b>- 9.7</b>	- 13.9
<b>Cash flows from investing activities</b>	<b>- 58.3</b>	<b>- 77.4</b>	- 19.0
<b>Free cash flows</b>	<b>98.4</b>	<b>- 53.8</b>	- 152.3
Net increase and decrease in debt and bonds (minus notation indicates decr.)	- 95.7	<b>22.1</b>	<b>+ 117.9</b>
Dividends paid (Except payment to non-controlling interests)	- 3.3	<b>- 8.3</b>	- 4.9
Proceeds from fluidity of lease receivables and Repayment of payables under fluidity lease receivables	6.5	<b>92.8</b>	+ 86.2
Other	- 16.3	<b>- 21.2</b>	- 4.9
<b>Cash flows from financing activities</b>	<b>- 108.9</b>	<b>85.3</b>	+ 194.2

※1,2 Trade receivables include contract assets. The old account name of contract liabilities is advances received

### Details

① FY2021 :  
An increase in advance receipt in Aerospace, and good progress in receivable collection in Plant Engineering and Rolling Stock in working capital components

FY2022 :  
Despite a high level of profit before tax, significant cash outflows in working capital components, including an increase in trade receivables and inventories due to a recovering Aerospace Systems and strong performance in PS&E

② Capital increase to equity-method affiliates (about ¥ 5 bn)

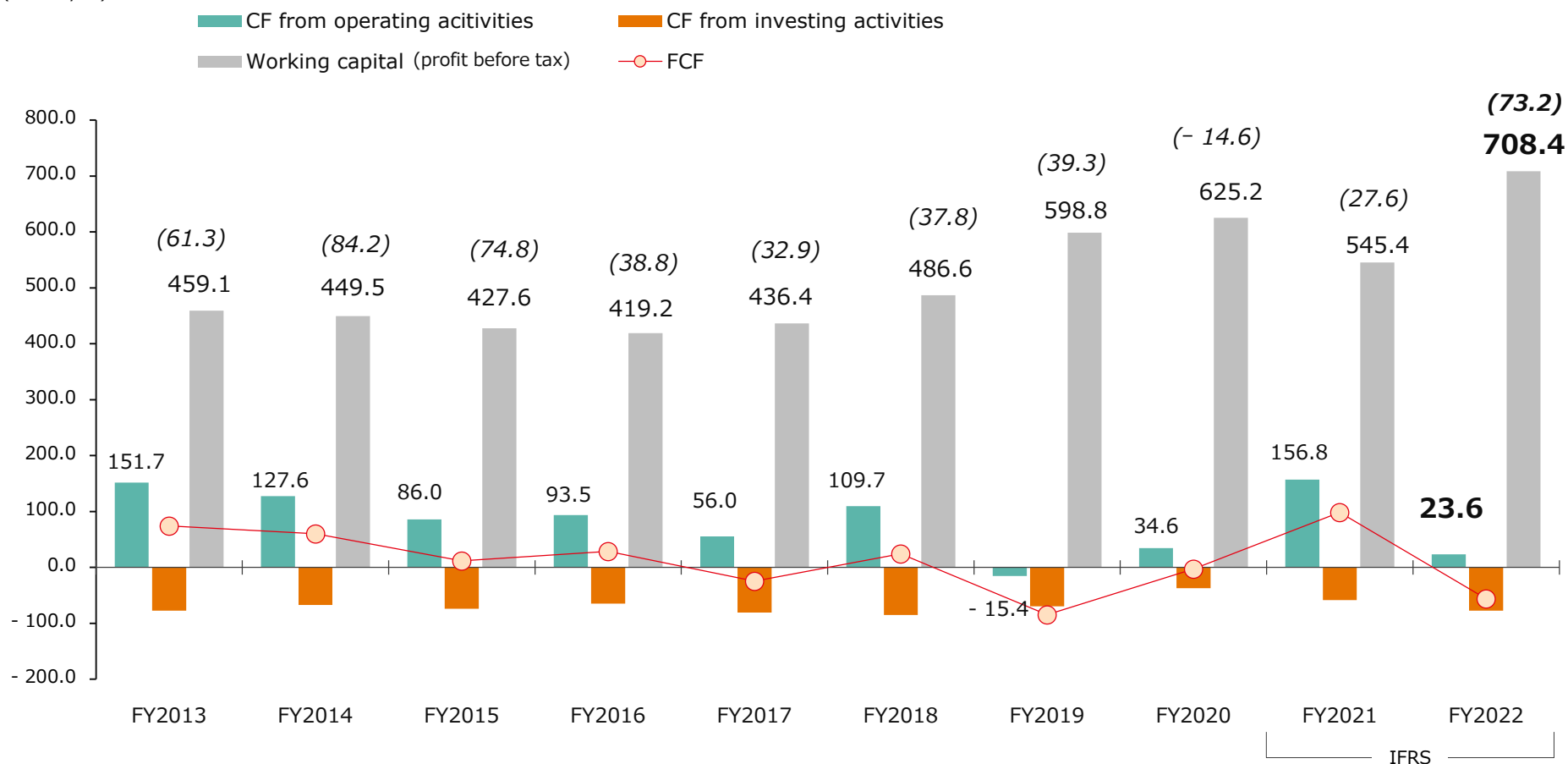
③ FY2021 :  
Repayment of debt increased in line with business recovery  
FY2022 :  
Supplementing working capital through free cash outflows

# Consolidated Results for FY2022

## -Cash Flows-



✓ Operating CF is deteriorated due to temporary increase in working capital, with a sharp recovery in order-based businesses and sales growth in Powersports & Engine, but it is expected to be normalized in FY2023

(Billion yen)



# Forecasts for FY2023

## -Summary-

- 
**Business profit is expected to grow in real terms, excluding the impact of FX, and steady improvement in profitability, though profit is expected to decrease YOY**
- 
**Order-based businesses are on a improvement trend as assumed, resulting in better balanced profit mix**

(Billion Yen)

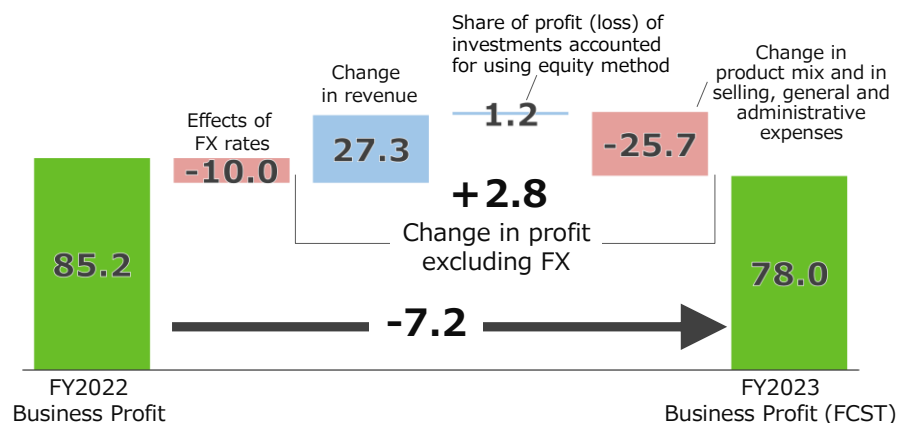
	FY2022 Actual	FY2023 Forecast	Change
Orders Received	2,037.4	<b>1,900.0</b>	- 137.4
Revenue	1,725.6	<b>1,900.0</b>	+ 174.4
Business Profit	85.2	<b>78.0</b>	- 7.2
<i>[Margin]</i>	<i>[4.9%]</i>	<i>[4.1%]</i>	<i>[- 0.8pt]</i>
Profit Before Tax	73.2	<b>70.0</b>	- 3.2
<i>[Margin]</i>	<i>[4.2%]</i>	<i>[3.6%]</i>	<i>[- 0.5pt]</i>
Profit Attributable to Owners of Parent	55.0	<b>47.0</b>	- 8.0
<i>[Margin]</i>	<i>[3.1%]</i>	<i>[2.4%]</i>	<i>[- 0.7pt]</i>
After-tax ROIC	5.9%	<b>4.9%</b>	- 1.0pt
Weighted-average exchange rates (USD/JPY)	133.96	<b>130.00</b>	- 3.96
US dollar-based transaction (B\$)	2.05	<b>2.52</b>	+ 4.70

※Amount in foreign currency calculated by deducting dollar-denominated purchases from dollar-denominated revenue of Kawasaki Heavy Industries, Ltd., Kawasaki Railcar manufacturing Co., Ltd., and Kawasaki Motors, Ltd. (to include dollar-denominated of loss provisions). The estimated impact on business profit due to a 1 yen fluctuation in the exchange rate. See page 43 for the breakdown of these figures by segment.

### Supplemental Information on FY2023 Forecast

- Business profit is at the level announced in the Group Vision 2030 progress report meeting in December 2022 ※2  
※2 FY2023 BP (FCST) : ¥76.0 bn+a
- In particular, the profitability of order-based businesses, such as Aerospace Systems, Rolling Stock, and ES&M, are improved as expected, and our company will be more resilient to changes in the external environment

➔ The strong performance of PS&E exceeded our expectations in FY22, resulting in a companywide business profit of ¥85.2bn, significantly exceeding expectations at the time



※ Figures are approximate values calculated by our company based on certain criteria. Effects of FX rates are calculated for USD and EUR, while the affects of other currencies are included in Change in product mix and in selling, general and administrative expenses

# Forecasts for FY2023 -Segment-



Aerospace Systems will enjoy further recovery in passenger demand ①



PS&E sales are expected to remain strong, but increased sales promotion costs will deteriorate both revenue and profit ②

(Billion Yen)


	Orders Received			Revenue			Business Profit (Loss)		
	FY2022	FY2023	Change	FY2022	FY2023	Change	FY2022	FY2023	Change
Aerospace Systems	345.5	<b>540.0</b>	+ 194.5	348.8	<b>440.0</b>	+ 91.2	17.8	<b>24.0</b>	+ 6.2
Rolling Stock	313.2	<b>80.0</b>	- 233.2	131.9	<b>190.0</b>	+ 58.1	1.3	<b>4.0</b>	+ 2.7
Energy Solution & Marine Engineering	439.0	<b>330.0</b>	- 109.0	314.5	<b>340.0</b>	+ 25.5	3.9	<b>9.0</b>	+ 5.1
Precision Machinery & Robot	262.0	<b>270.0</b>	+ 8.0	252.6	<b>260.0</b>	+ 7.4	8.7	<b>10.0</b>	+ 1.3
Powersports & Engine	591.1	<b>580.0</b>	- 11.1	591.1	<b>580.0</b>	- 11.1	71.5	<b>47.0</b>	- 24.5
Ohters	86.4	<b>100.0</b>	+ 13.6	86.3	<b>90.0</b>	+ 3.7	- 1.8	<b>2.0</b>	+ 3.8
Eliminations and corporate*	-	-	-	-	-	-	- 16.2	<b>- 18.0</b>	- 1.8
<b>Total</b>	<b>2,037.4</b>	<b>1,900.0</b>	- 137.4	<b>1,725.6</b>	<b>1,900.0</b>	+ 174.4	<b>85.2</b>	<b>78.0</b>	- 7.2

※ "Eliminations and corporate" includes some expenses incurred at Head Office which were not allocated to each industry segment for internal reporting.


# Details by Segment

## -Aerospace systems-


### FY2022 (vs. FY2021)

**Orders received**   
-¥37.7 bil.

Decreased compared to the previous fiscal year when major orders were received from MOD despite an increase in component parts for commercial aero engines


**Revenue**   
+¥50.6 bil.

Increased due to an increase in component parts for commercial aero engines and Boeing


**Business profit**   
+¥28.1 bil.

Improved due to revenue increase and an profitability improvement in component parts for commercial aero engines


### FY2023 forecast (vs. FY2022)

**Orders received**   
+¥194.5 bil.

Expected to increase due to an increase for MOD, Boeing and component parts for commercial aero engines

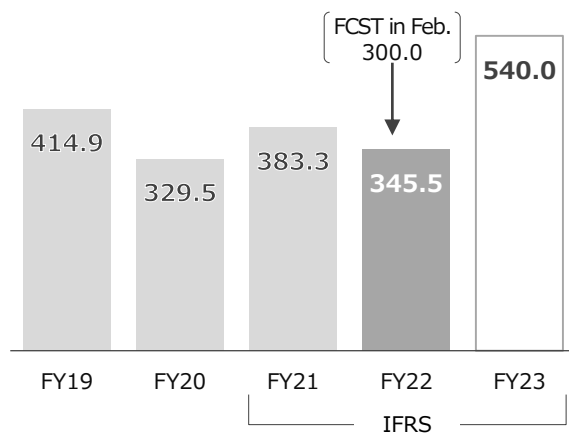
**Revenue**   
+¥91.2 bil.

Same as above

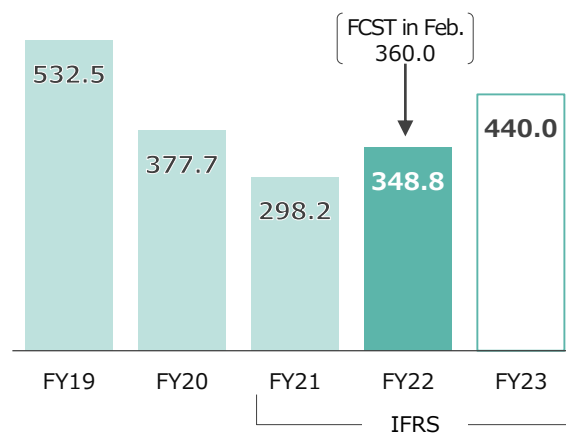
**Business profit**   
+¥6.2 bil.

Expected to increase due to a revenue increase

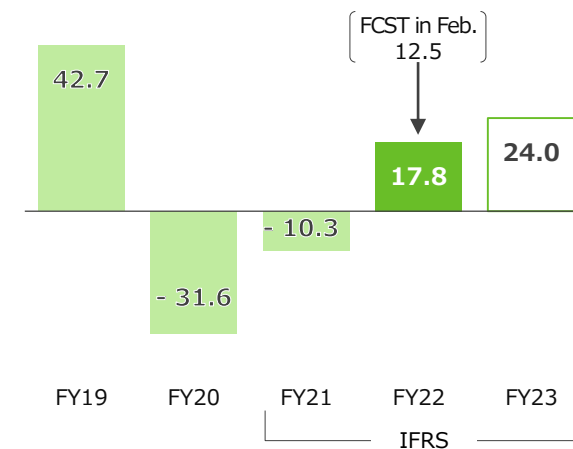
/ Orders received (billion yen)



/ Net Sales or Revenue (billion yen)



/ Operating Profit or Business Profit (billion yen)



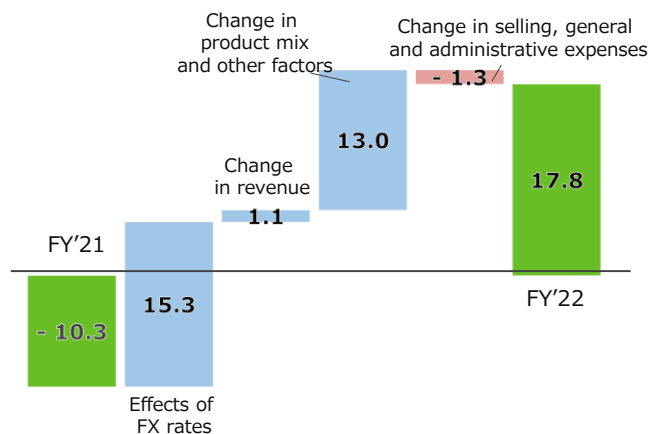
# Details by Segment -Aerospace systems-

(Billion Yen)

	FY2021	FY2022				FY2023	
	Actual	FCST in Feb.	Actual	Chg. Vs. FY21	Chg. Vs. FCST	Forecast	Chg. Vs. FY22
Orders Received	383.3	300.0	<b>345.5</b>	- 37.7	+ 45.5	<b>540.0</b>	+ 194.5
<i>Aerospace</i>	329.5	225.0	<b>253.9</b>	- 75.5	+ 28.9	<b>410.0</b>	+ 156.1
<i>Aero Engine</i>	53.8	75.0	<b>91.5</b>	+ 37.7	+ 16.5	<b>130.0</b>	+ 38.5
Revenue	298.2	360.0	<b>348.8</b>	+ 50.6	- 11.2	<b>440.0</b>	+ 91.2
<i>Aerospace</i>	232.0	255.0	<b>249.3</b>	+ 17.3	- 5.7	<b>320.0</b>	+ 70.7
<i>Aero Engine</i>	66.1	105.0	<b>99.5</b>	+ 33.3	- 5.5	<b>120.0</b>	+ 20.5
Business Profit (Loss)	- 10.3	12.5	<b>17.8</b>	+ 28.1	+ 5.3	<b>24.0</b>	+ 6.2
<i>[Margin]</i>	<i>[- 3.4%]</i>	<i>[3.4%]</i>	<i>[5.1%]</i>	<i>[+ 8.5pt]</i>	<i>[+ 1.6pt]</i>	<i>[5.4%]</i>	<i>[+ 0.3pt]</i>

## Details of change in Business Profit(Loss)

(billion yen)



## Appendix

### Number of aircraft component parts sold to Boeing

	FY'21	FY'22	Change
767	34	31	-3
777	21	28	+7
777X	4	0	-4
787	35	20	-15

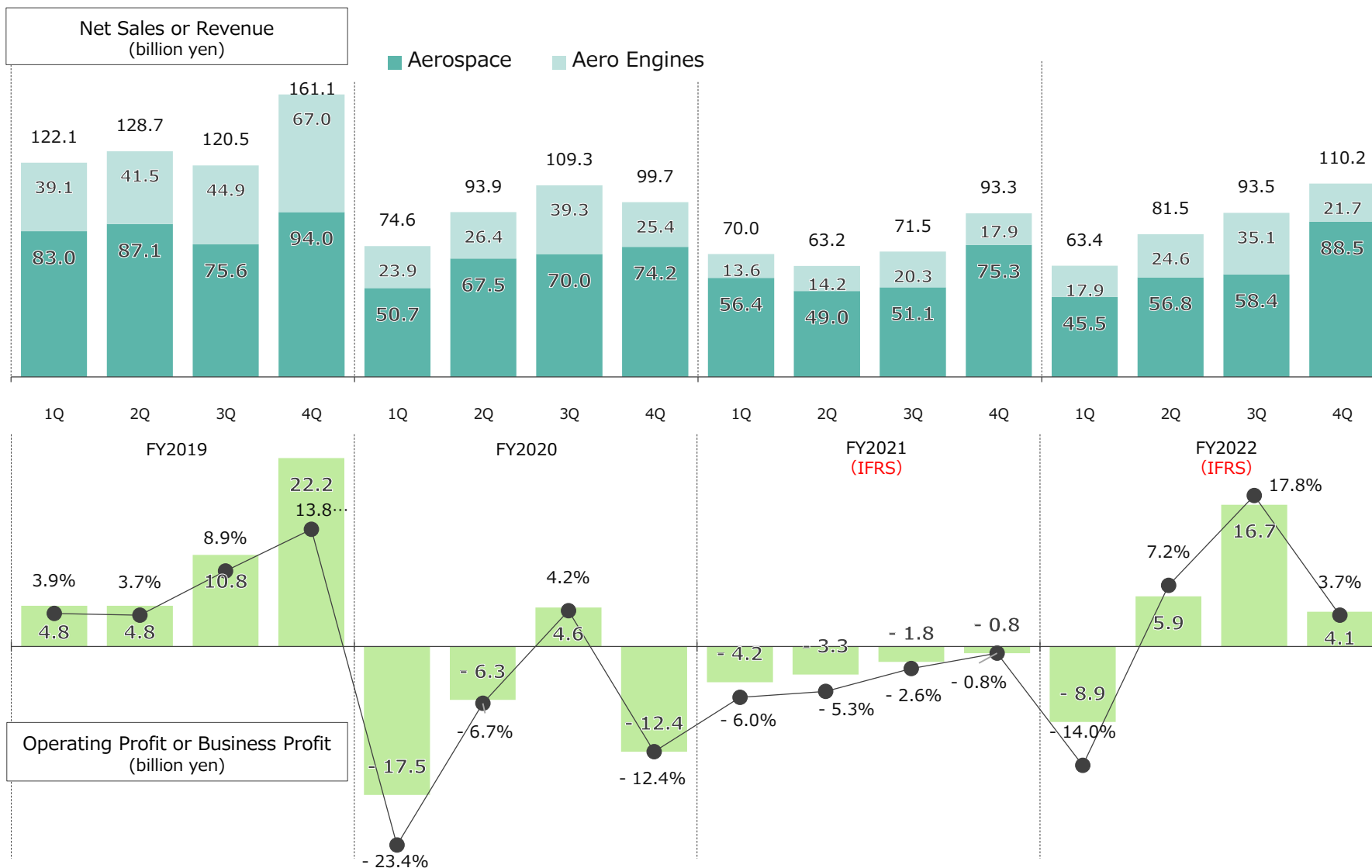
### Number of jet engine component parts sold

	FY'21	FY'22	Change
V2500	16	20	+4
PW1100G	437	564	+127

※Number of jet engine component parts sold to Rolls-Royce is not disclosed



# Details by Segment -Aerospace systems-



### Market Overview

- Commercial business
  - Air passenger demand is recovering from the great impact of COVID-19, with the end of zero-COVID policy in China and an increase in the number of countries prioritizing the resumption of economic activities especially in Europe and North America
  - Boeing resumed delivery of 787 to airlines. Higher production rates are expected.
- MOD business
  - Demand growth and profitability improvement are expected due to Japan's defense reinforcement policy

### Specific Efforts

#### ✓ Securing stable revenue in core business

- Cost reductions in existing orders of aircrafts for Boeing and commercial aircrafts jet engines
- Arranging supply chain and production system to prepare for increased production
- Steady promotion of existing projects of development and mass production for MOD aircrafts and helicopters

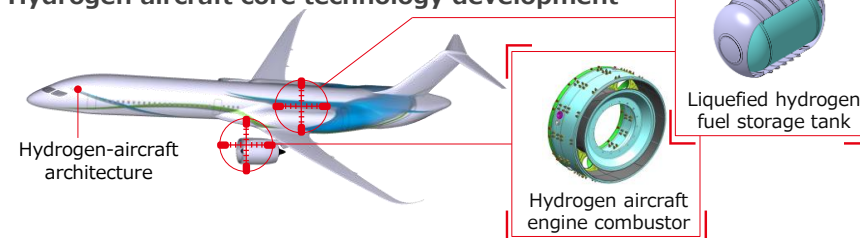


787 component parts deliveries is to increase as demand recovers

#### ✓ Technology strategy in accordance with the change in market trends

- R&D, including the use of civilian technology in defense fields
- Utilization of *Green Innovation fund* of government for development of carbon-free technology

#### Hydrogen aircraft core technology development




#### ✓ Improving financial foundation


- Review of fixed cost structure
- Reduction of inventories through production innovation activities

# Details by Segment - Rolling Stock -


## FY2022 (vs. FY2021)

**Orders received**   
+¥241.7 bil.

Increased due to major orders such as optional subway cars for New York City Transit


**Revenue**   
+¥5.2 bil.

Increased due to an increase in the U.S. and Japan


**Business profit**   
-¥0.8 bil.

Deteriorated due to the impact of delays in Long Island Rail Road project in the U.S., despite an increase in revenue


## FY2023 forecast (vs. FY2022)

**Orders received**   
-¥233.2 bil.

Expected to decrease compared to the previous fiscal year when the major orders were received in the U.S. despite an increase in Japan

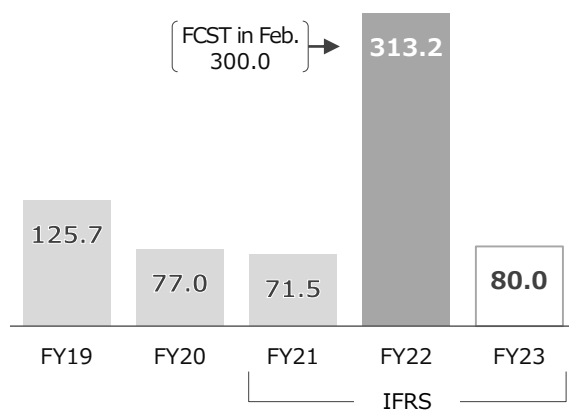
**Revenue**   
+¥58.1 bil.

Expected to increase due to an increase in the U.S. despite a decrease in Asia

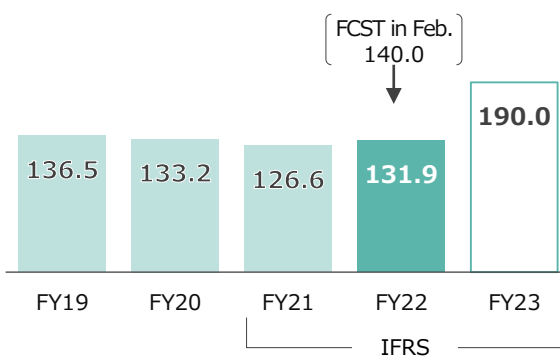
**Business profit**   
+¥2.7 bil.

Expected to increase due to a revenue increase

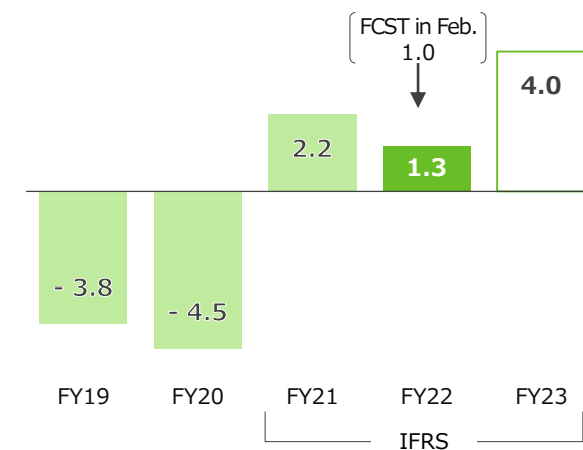
Orders received (billion yen)



Net Sales or Revenue (billion yen)



Operating Profit or Business Profit (billion yen)



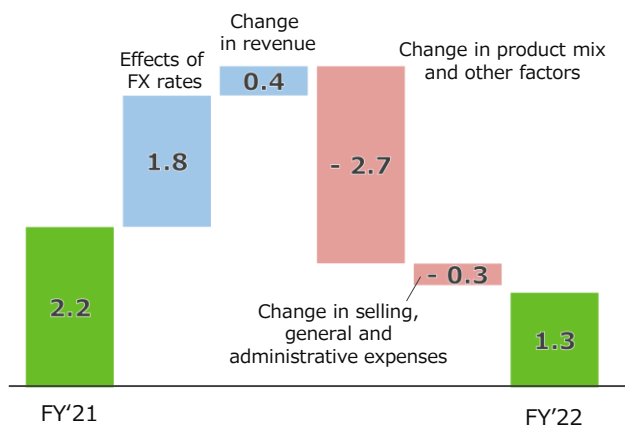
# Details by Segment - Rolling Stock -

(Billion Yen)

	FY2021	FY2022				FY2023	
	Actual	FCST in Feb.	Actual	Chg. Vs. FY21	Chg. Vs. FCST	Forecast	Chg. Vs. FY22
Orders Received	71.5	300.0	<b>313.2</b>	+ 241.7	+ 13.2	<b>80.0</b>	- 233.2
<i>Domestic &amp; Asia</i>	65.1	47.0	<b>58.1</b>	- 6.9	+ 11.1	<b>76.0</b>	+ 17.9
<i>North America</i>	6.4	253.0	<b>255.1</b>	+ 248.7	+ 2.1	<b>4.0</b>	- 251.1
Revenue	126.6	140.0	<b>131.9</b>	+ 5.2	- 8.1	<b>190.0</b>	+ 58.1
<i>Domestic &amp; Asia</i>	92.2	99.5	<b>94.8</b>	+ 2.5	- 4.7	<b>80.0</b>	- 14.8
<i>North America</i>	34.4	40.5	<b>37.1</b>	+ 2.7	- 3.4	<b>110.0</b>	+ 72.9
Business Profit	2.2	1.0	<b>1.3</b>	- 0.8	+ 0.3	<b>4.0</b>	+ 2.7
<i>[Margin]</i>	<i>[1.7%]</i>	<i>[0.7%]</i>	<i>[1.0%]</i>	<i>[- 0.7pt]</i>	<i>[+ 0.2pt]</i>	<i>[2.1%]</i>	<i>[+ 1.0pt]</i>

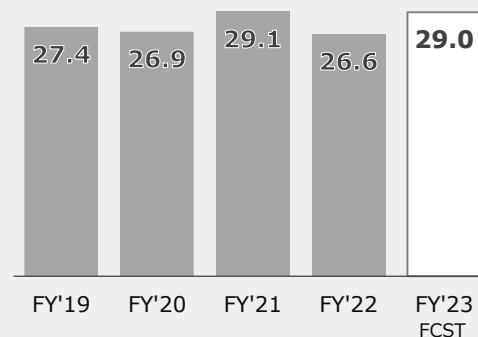
## Details of change in Business Profit

(billion yen)



## Appendix

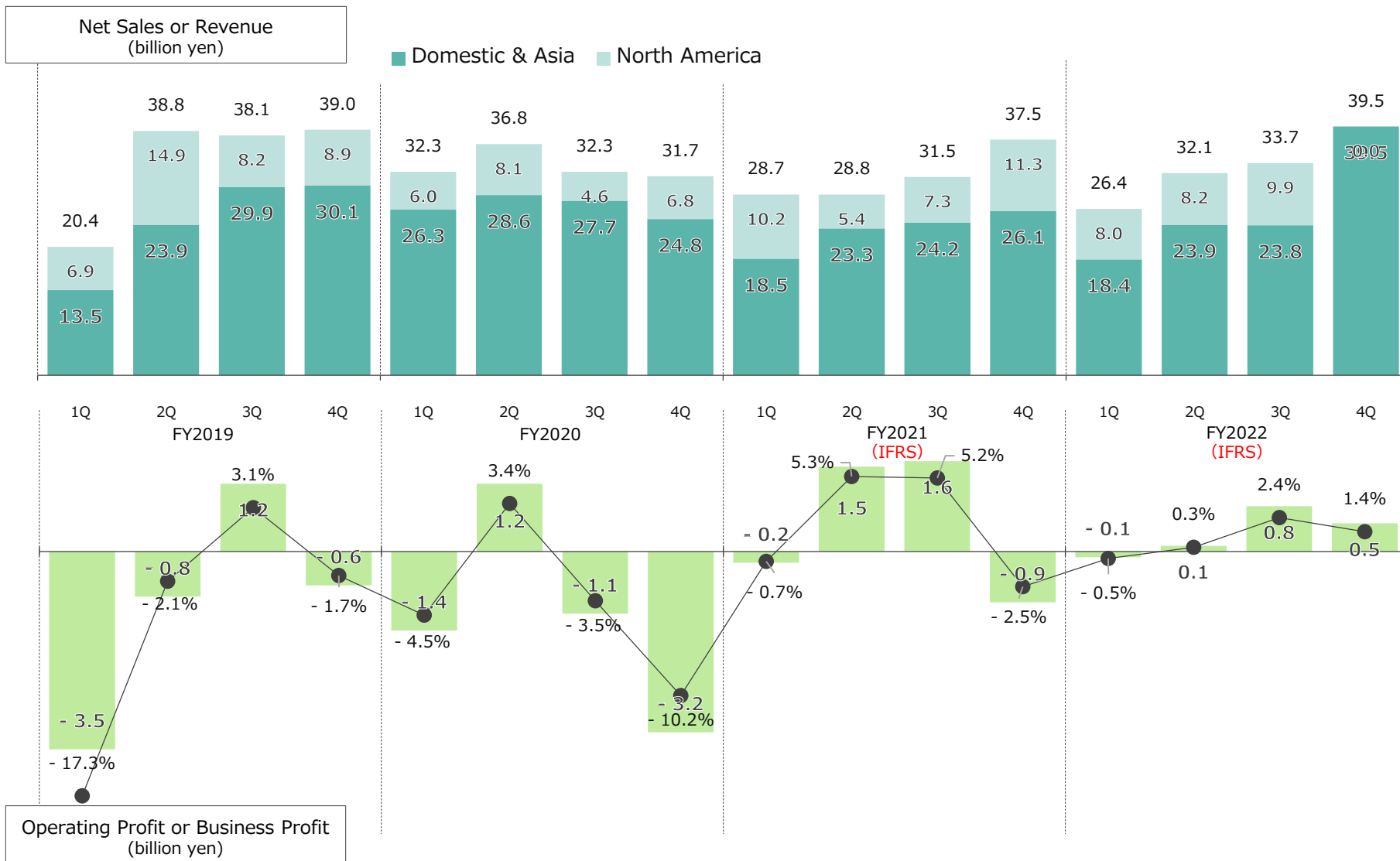
### Revenue in components, overhaul and after-sales service (billion yen)



### Progress of the M9 Project for Long Island Rail Road in the U.S. (End of Mar. '23)

- 154 cars out of 202 were delivered
- KMM, the North American works, has started production of the last unit, and its delivery is scheduled for Q2 FY'23

# Details by Segment - Rolling Stock -



## Market Overview

- The impact of COVID-19
  - Railway relate investment is resuming in both domestic and foreign markets as the impact of COVID-19 subsides
- Supply chain Risk
  - The impact of shortage of electronic components, logistics disruption, and rising raw material prices is limited, but still caution should be exercised
- Medium and long term forecast
  - The overseas railway market is expected to grow steadily due to the need for railway infrastructure in emerging countries and environmental measures in urban areas.



Rolling stock for Dhaka Mass Transit Company Limited

## Specific Efforts



### Compliance with delivery schedules for overseas projects

#### Dhaka **MRT** **Line-6**

- ▶ The first and second trains are undergoing functional tests
- ▶ All the 24 trains(144cars) have been shipped and 6 trains out of them have been delivered to the customer

▶ **The last car and facilities will be delivered in FY'23 Q3**

#### U.S. **R211**

- ▶ Proto-trains for R211A are undergoing verification test in operation line
- ▶ Mass production trains(20 cars) for R211A were delivered
- ▶ The production of trains(640 cars) for the option1 contract will start in FY'24

▶ **Verification test of proto-trains will be completed in FY'23 Q1**  
 ▶ **The last car for the base contract will be delivered in FY'24 Q4**  
 ▶ **The delivery of cars for the option1 contract will start in FY'25**

#### U.S. **M-9**

- ▶ All trains (92 cars) under the base contract were delivered by Q1 FY'21
- ▶ Option cars are being produced

▶ **The last car will be delivered in FY'23 Q2**



### Achieving quality levels trusted by customers

- Reduction of spoilage and repair costs
- Further promotion of Kawasaki Production System, and installation to the U.S. works




### Expansion of components sales, after-sales service, and maintenance business

- Promotion of remote track monitoring service for North American market
- Promotion of train condition monitoring equipment for domestic market


# Details by Segment

## - Energy Solution & Marine Engineering -


### FY2022 (vs. FY2021)

**Orders received**   
+¥95.4 bil.

Increased due to an increase in submarine, LPG/LAG carriers, and power generation facilities


**Revenue**   
+¥17.2 bil.

Increased due to an increase in Energy business and construction work for submarines, despite a decrease in construction work for domestic municipal waste incineration plants


**Business profit**   
+¥14.7 bil.

Improved due to revenue increase and an improved equity in gains, despite a deterioration in some projects


### FY2023 forecast (vs. FY2022)

**Orders received**   
-¥109.0 bil.

Expected to decrease compared to the previous fiscal year when the orders for submarine and LPG/LAG carriers were received

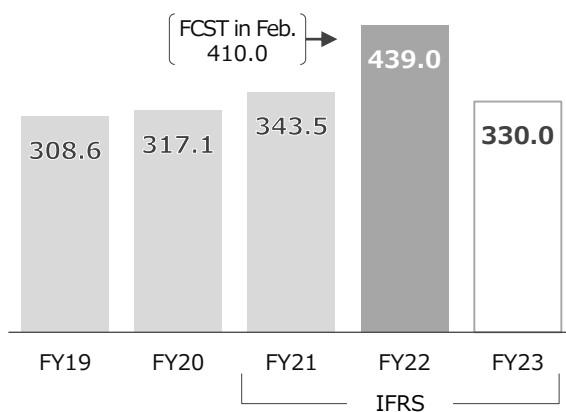
**Revenue**   
+¥25.5 bil.

Increased due to an increase power generation facilities in energy business

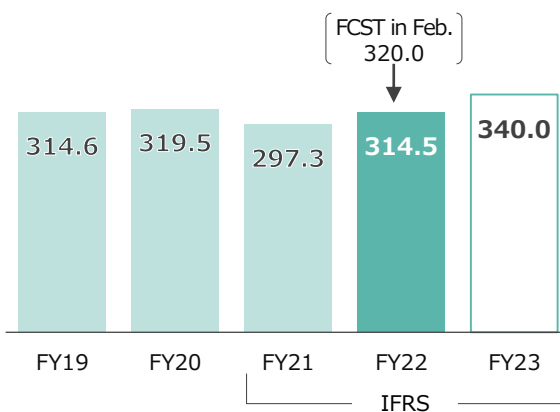
**Business profit**   
+¥5.1 bil.

Expected to increase due to a revenue increase and profitability improvement

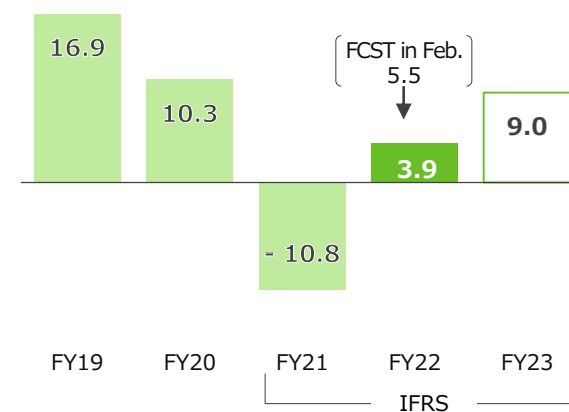
Orders received (billion yen)



Net Sales or Revenue (billion yen)



Operating Profit or Business Profit (billion yen)

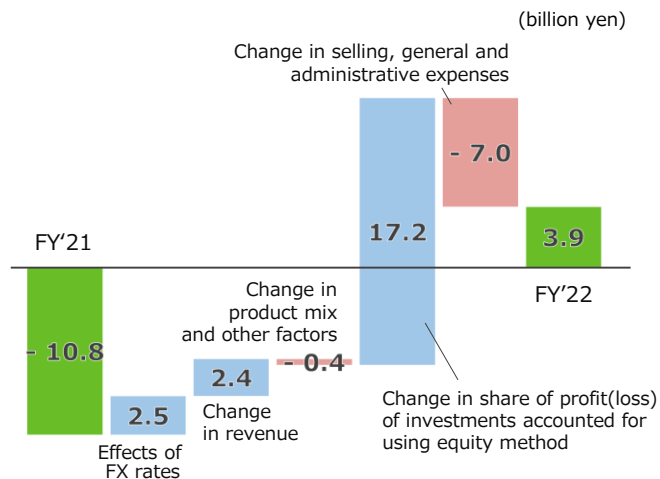


# Details by Segment - Energy Solution & Marine Engineering -

(Billion Yen)

	FY2021	FY2022				FY2023	
	Actual	FCST in Feb.	Actual	Chg. Vs. FY21	Chg. Vs. FCST	Forecast	Chg. Vs. FY22
Orders Received	343.5	410.0	<b>439.0</b>	+ 95.4	+ 29.0	<b>330.0</b>	- 109.0
<i>Energy, Plant &amp; Marine Machinery</i>	272.7	280.0	<b>292.6</b>	+ 19.9	+ 12.6	<b>290.0</b>	- 2.6
<i>Ship &amp; Offshore Structure</i>	70.8	130.0	<b>146.3</b>	+ 75.5	+ 16.3	<b>40.0</b>	- 106.3
Revenue	297.3	320.0	<b>314.5</b>	+ 17.2	- 5.5	<b>340.0</b>	+ 25.5
<i>Energy, Plant &amp; Marine Machinery</i>	232.3	240.0	<b>234.4</b>	+ 2.1	- 5.6	<b>255.0</b>	+ 20.6
<i>Ship &amp; Offshore Structure</i>	64.9	80.0	<b>80.0</b>	+ 15.1	0.0	<b>85.0</b>	+ 5.0
Business Profit (Loss)	- 10.8	5.5	<b>3.9</b>	+ 14.7	- 1.6	<b>9.0</b>	+ 5.1
<i>[Margin]</i>	<i>[- 3.6%]</i>	<i>[1.7%]</i>	<i>[1.2%]</i>	<i>[+ 4.9pt]</i>	<i>[- 0.5pt]</i>	<i>[2.6%]</i>	<i>[+ 1.4pt]</i>
Share of profit (loss) of investments accounted for using equity method	- 11.2	4.0	<b>6.0</b>	+ 17.2	+ 2.0	<b>5.5</b>	- 0.5

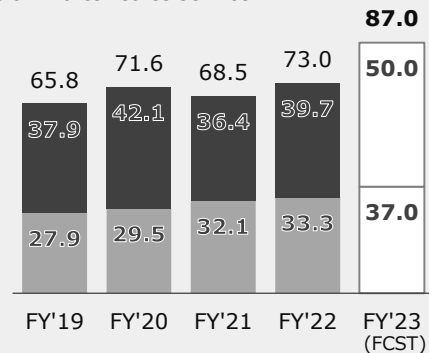
## Details of change in Business Profit(Loss)



## Appendix

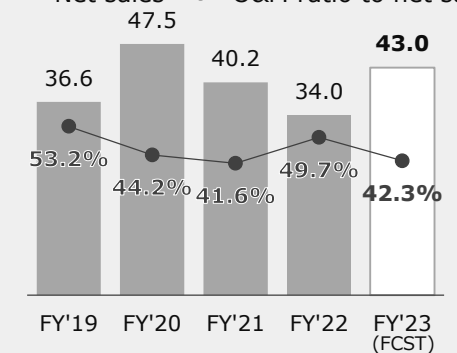
### Revenue of major products in the energy business

above : components  
below : after-sales service



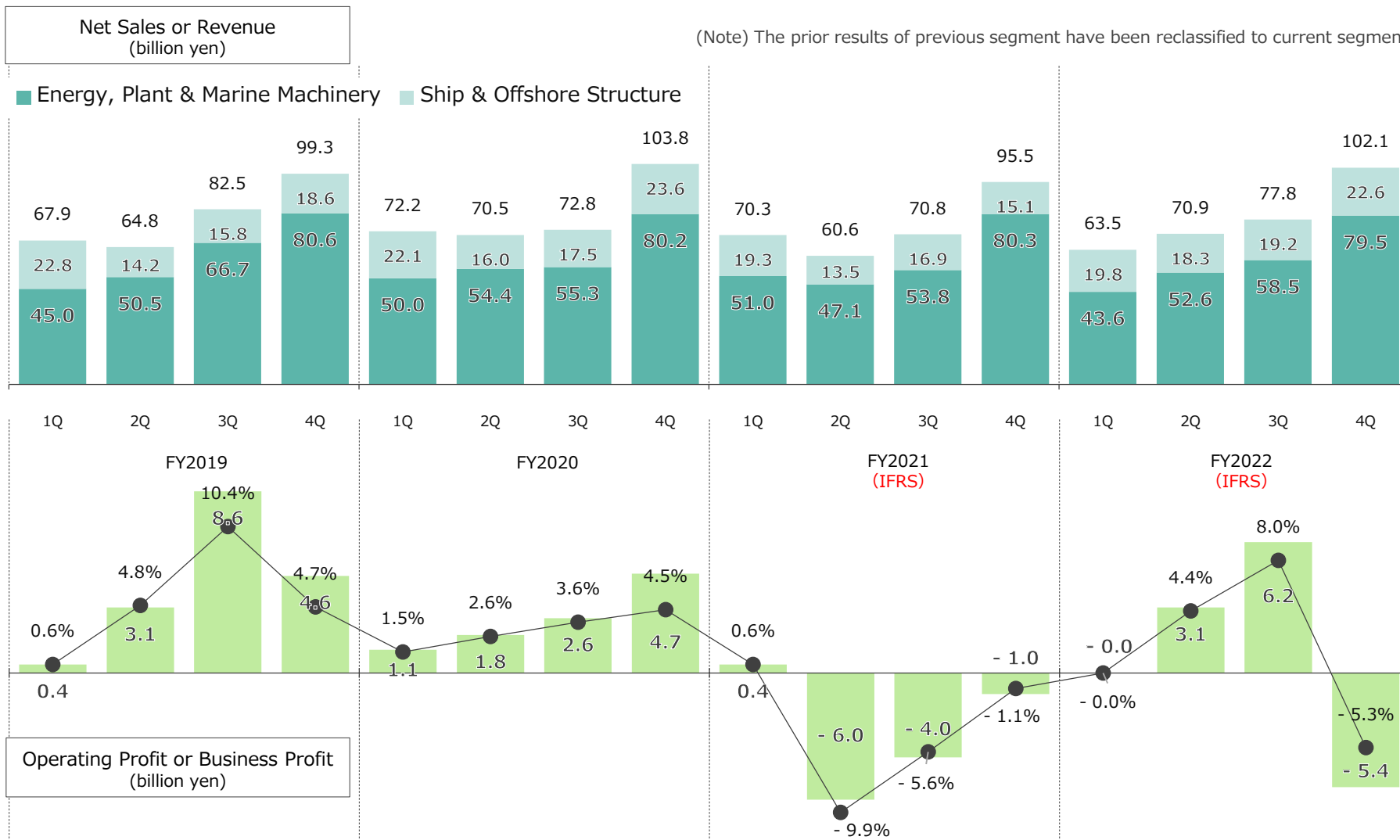
### Revenue of municipal waste incineration plants

■ Net sales ● O&M ratio to net sales





# Details by Segment - Energy Solution & Marine Engineering -



## Market Overview

### ● Energy system & Plant Engineering

Domestic	Emerging Markets
Steady demand for distributed power plants and municipal waste incineration plants is expected to continue	Steady demand for distributed power plants and other energy infrastructure is expected to remain solid

### ● Ship & Offshore Structure

Commercial ships	Submarines and others
Solid demand for LPG/LAG carriers is expected due to higher ammonia demand	Stable orders for submarines are expected

### ● Entire segment

COVID-19 and other risks	Carbon neutrality
<ul style="list-style-type: none"> <li>- Demand is recovering</li> <li>- Gas fuel supply for power plants is in short</li> <li>- Rising raw materials prices and logistics costs, and parts supply shortage are concerned</li> </ul>	Inquiries and requests for cooperation are increasing regarding decarbonization solutions, including hydrogen products

## Specific Efforts

### ✓ Providing of products and services for a low-carbon and decarbonized society

#### Topic

- ✓ Seven orders received for LPG/LAG Carrier in FY'22
- ✓ Have been received **12 consecutive orders** since Aug.'21

#### Reasons why we are chosen

- 1 Our track record of building LPG carriers
- 2 Able to meet future demand for ammonia
- 3 Ships that can dock at major LPG terminals with sufficient capacity

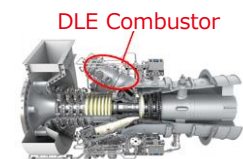


### ✓ Developing products for the transition to decarbonized energy

#### Topic

Market launch of hydrogen co-firing Dry Low Emission combustors for all our gas turbines from 1 MW to 30 MW

- Hydrogen co-fired at a rate of up to 30% to achieve stable low-NOx operation
- Installation on existing equipment is possible through minor modifications



#### Topic


Agreed with Koriyama City for a joint research for CO<sub>2</sub> Capture from waste incinerator emissions with solid sorbent (Feb.'23)

- The **Japan's first use** of solid sorbent for waste incinerators
- An energy saving Kawasaki CO<sub>2</sub> Capture (KCC) system will be installed at an existing waste incineration facility
- Aim to **halve energy consumption and cost** by using cooler steam than conventional methods


# Details by Segment

## - Precision Machinery & Robot -


### FY2022 (vs. FY2021)

**Orders received**   
-¥9.8 bil.

Decreased due to a decrease in hydraulic components for construction machinery market in China despite an increase in Robotics


**Revenue**   
+¥0.0 bil.

Remained at the same level due to an increase in Robotics despite a decrease in hydraulic components for construction machinery market in China


**Business profit**   
-¥5.1 bil.

Decreased due to higher prices of raw materials and electrical components, temporarily reduced operations due to the China's lockdown, and decrease in hydraulic components for construction machinery market in China


### FY2023 forecast (vs. FY2022)

**Orders received**   
+¥8.0 bil.

Expected to increase due to an increase in construction machinery market in developed countries

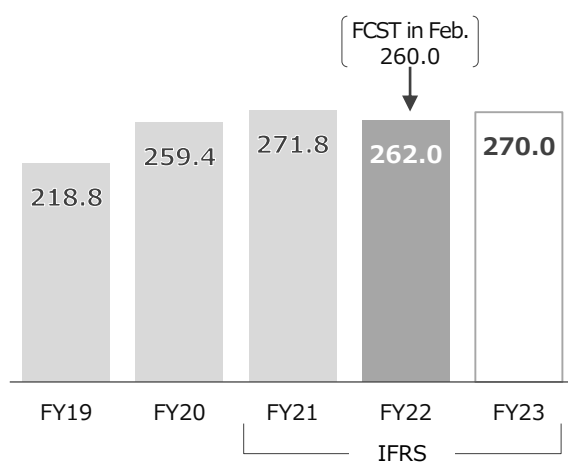
**Revenue**   
+¥7.4 bil.

Same as above

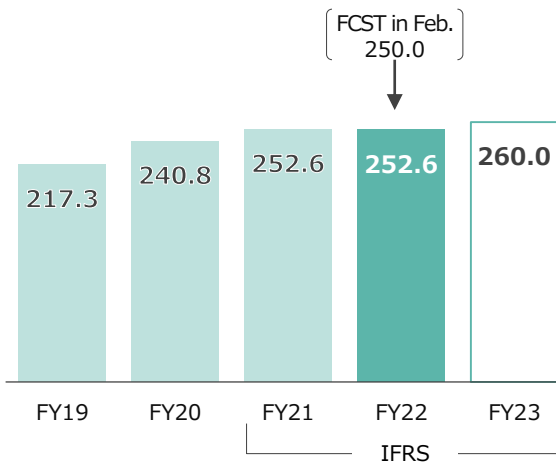
**Business profit**   
+¥1.3 bil.

Expected to improve due to a revenue increase and an increased equity in gains

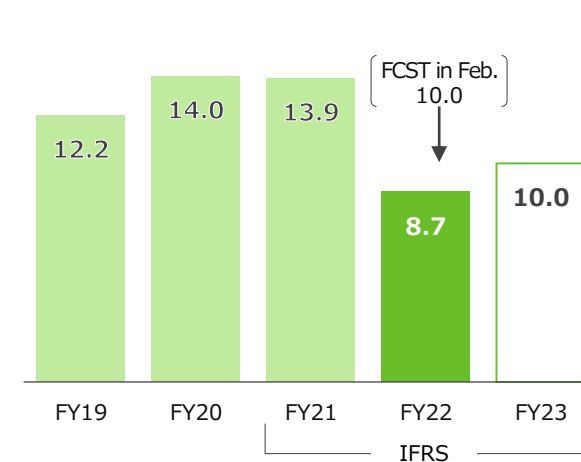
/ Orders received (billion yen)



/ Net Sales or Revenue (billion yen)



/ Operating Profit or Business Profit (billion yen)



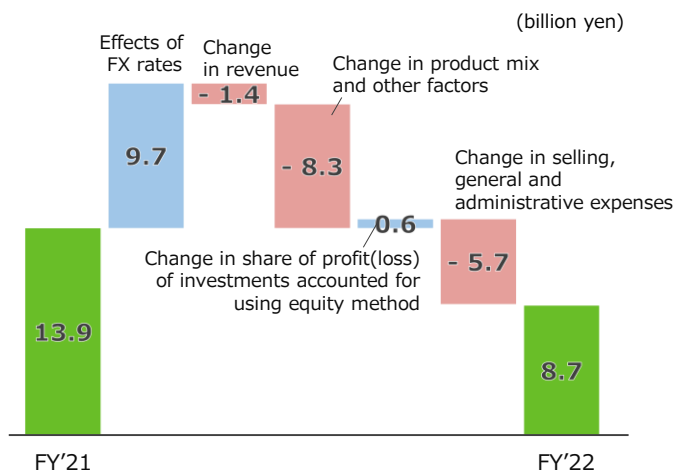
# Details by Segment - Precision Machinery & Robot -

(Billion Yen)

	FY2021	FY2022				FY2023	
	Actual	FCST in Feb.	Actual	Chg. Vs. FY21	Chg. Vs. FCST	Forecast	Chg. Vs. FY22
Orders Received	271.8	260.0	<b>262.0</b>	- 9.8	+ 2.0	<b>270.0</b>	+ 8.0
Hydraulic Components & Systems	171.6	155.0	<b>154.6</b>	- 17.0	- 0.4	<b>160.0</b>	+ 5.4
Robotics	100.1	105.0	<b>107.4</b>	+ 7.2	+ 2.4	<b>110.0</b>	+ 2.6
Revenue	252.6	250.0	<b>252.6</b>	+ 0.0	+ 2.6	<b>260.0</b>	+ 7.4
Hydraulic Components & Systems	163.1	150.0	<b>153.0</b>	- 10.0	+ 3.0	<b>160.0</b>	+ 7.0
Robotics	89.5	100.0	<b>99.6</b>	+ 10.1	- 0.4	<b>100.0</b>	+ 0.4
Business Profit	13.9	10.0	<b>8.7</b>	- 5.1	- 1.3	<b>10.0</b>	+ 1.3
[Margin]	[5.5%]	[4.0%]	[3.4%]	[- 2.0pt]	[- 0.6pt]	[3.8%]	[+ 0.3pt]
Share of profit (loss) of investments accounted for using equity method	※ - 3.4	- 2.5	<b>- 2.7</b>	+ 0.6	- 0.2	<b>- 2.0</b>	+ 0.7

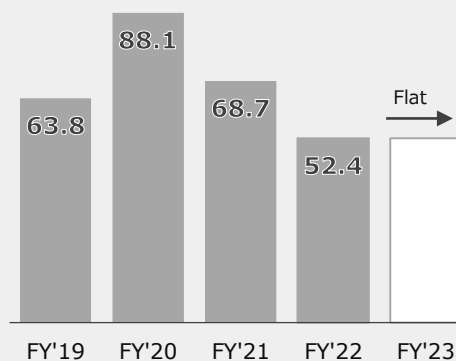
※Equity in earnings of affiliates for FY2021 was revised from -2.5 billion yen to -3.4 billion yen

## Details of change in Business Profit



## Appendix

### Revenue of hydraulic components to China (billion yen)

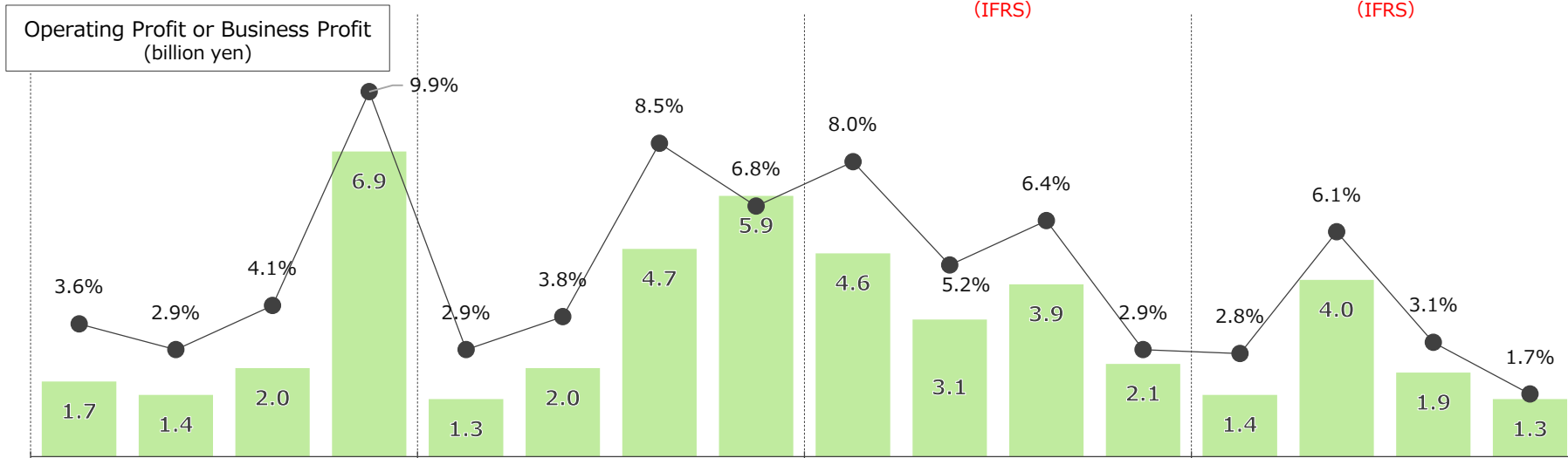


### Revenue of robots by segment (billion yen)

	FY'21	FY'22 (Change)	FY'23 FCST (Change)
Automobile assembly and painting	35.7	34.5 (-1.2)	38.0 (+3.5)
Semiconductor	36.3	43.7 (+7.4)	39.0 (-4.7)
General robots for industrial use and others	29.0	32.4 (+3.4)	38.0 (+5.6)
<b>Total</b>	<b>101.1</b>	<b>110.6 (+9.5)</b>	<b>115.40 (+4.4)</b>

※Including intercompany revenue

# Details by Segment - Precision Machinery & Robot -



### Market Overview

- Construction machinery
  - China's lockdown under the zero-COVID policy depressed demand
  - Demand outside China was recovered from the impact of COVID-19 and remains solid
  - Electrification will be promoted due to the environmental regulations
  - Automation and autonomy will be promoted due to a shortage of skilled workers
  
- Robots
  - General purpose robots  
Demand for capital investment in automation remains strong globally
  - Robots for semiconductors  
Demand has been stagnating at this moment due to the decline in the semiconductor memory market and the U.S.-China economic friction.
  - Supply chain risk  
Electronic components shortage and logistics disruption are improving

### Specific Efforts

#### ✓ Developing electrification and automation technology for construction machinery

- Developing "**K-Axle**", a small, high-performance electro-hydraulic system

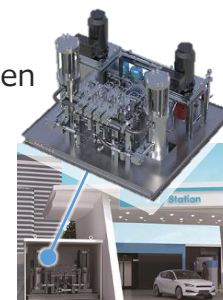
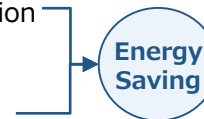
Hydraulic system downsized by 50% by volume in preparation for large capacity battery installation



Concept model exhibited in CONEXPO (Mar. '23)

#### ✓ Developing hydrogen-related products for decarbonization

- Launch of energy-saving hydraulic hydrogen compressors for hydrogen stations
  - Hydrogen gas compression control technology
  - Rotation control pumps system "ECO SERVO"



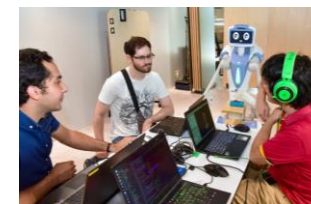
Hydrogen Station image

#### ✓ Open innovation

- Open innovation facility "**YouComeLab**" opened in "Future Lab HANEDA"※

※Kawasaki's robot demonstration facility


Startups and research institutes can demonstrate their programs with our robots such as service robot platform 'Nyokkey'




▶ Accelerating the social installation of robots


# 3 Details by Segment - Powersports & Engine -


## FY2022 (vs. FY2021)

**Revenue**  Increased due to an increase in motorcycles for North America and Southeast Asia, four-wheelers for North America, and general-purpose gasoline engines, in addition to the impact from the depreciation of the yen and price pass-through  
+¥143.2 bil.

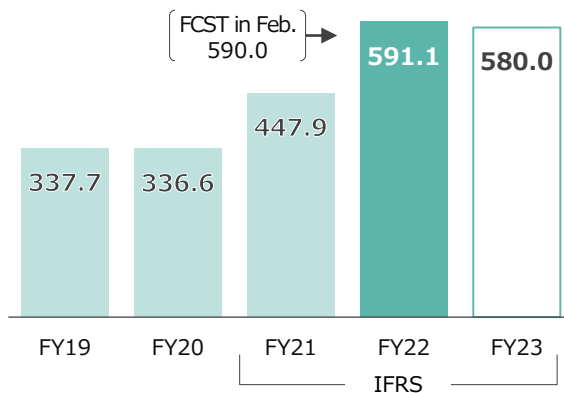
**Business profit**  Improved due to an revenue increase, despite rising raw material prices and logistics costs  
+¥34.0 bil.

## FY2023 forecast (vs. FY2022)

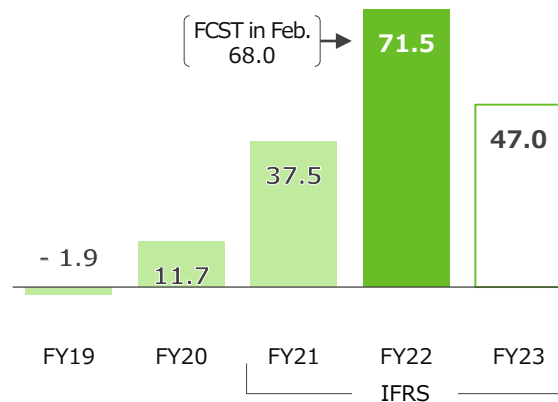
**Revenue**  Expected to decrease due to a decline in motorcycles for developed countries and assumption of strong yen in exchange rates, despite an increase in motorcycles for emerging countries  
-¥11.1 bil.

**Business profit**  Expected to decrease due to a revenue decrease and an increase in sales promotion cost  
-¥24.5 bil.

/ Net Sales or Revenue (billion yen)



/ Operating Profit or Business Profit (billion yen)



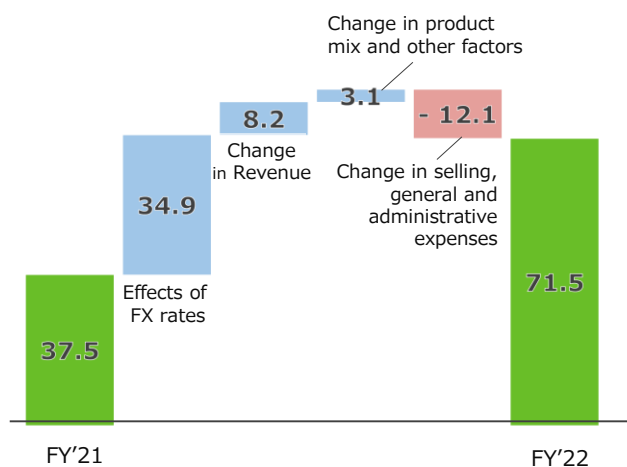
# Details by Segment - Powersports & Engine -

(Billion Yen)

	FY2021	FY2022				FY2023	
	Actual	FCST in Feb.	Actual	Chg. Vs. FY21	Chg. Vs. FCST	Forecast	Chg. Vs. FY22
Revenue	447.9	590.0	<b>591.1</b>	+ 143.2	+ 1.1	<b>580.0</b>	- 11.1
<i>Motorcycles for developed countries</i>	169.9	215.0	<b>211.2</b>	+ 41.3	- 3.8	<b>185.0</b>	- 26.2
<i>Motorcycles for emerging market</i>	100.8	112.0	<b>115.8</b>	+ 15.0	+ 3.8	<b>125.0</b>	+ 9.2
<i>Utility Vehicles, ATVs &amp; PWC</i>	108.8	162.0	<b>160.4</b>	+ 51.5	- 1.6	<b>165.0</b>	+ 4.6
<i>General-purpose gasoline engines</i>	68.2	101.0	<b>103.5</b>	+ 35.3	+ 2.5	<b>105.0</b>	+ 1.5
Business Profit	37.5	68.0	<b>71.5</b>	+ 34.0	+ 3.5	<b>47.0</b>	- 24.5
<i>[Margin]</i>	<i>[8.3%]</i>	<i>[11.5%]</i>	<i>[12.1%]</i>	<i>[+ 3.7pt]</i>	<i>[+ 0.5pt]</i>	<i>[8.1%]</i>	<i>[- 3.9pt]</i>

## Details of change in Business Profit

(billion yen)



## Appendix

### Wholesales of motorcycles by country (thousand units)

#### Developed countries

	FY'21	FY'22	Change
Japan	31	27	-4
U.S.	86	119	+33
Canada	6	10	+3
Europe	71	67	-3
Australia	12	11	-1
<b>Total</b>	<b>208</b>	<b>237</b>	<b>+28</b>

#### Wholesale plan of motorcycles for FY'23

Developed countries : 220 thousand units  
Emerging countries : 360 thousand units

#### Emerging countries

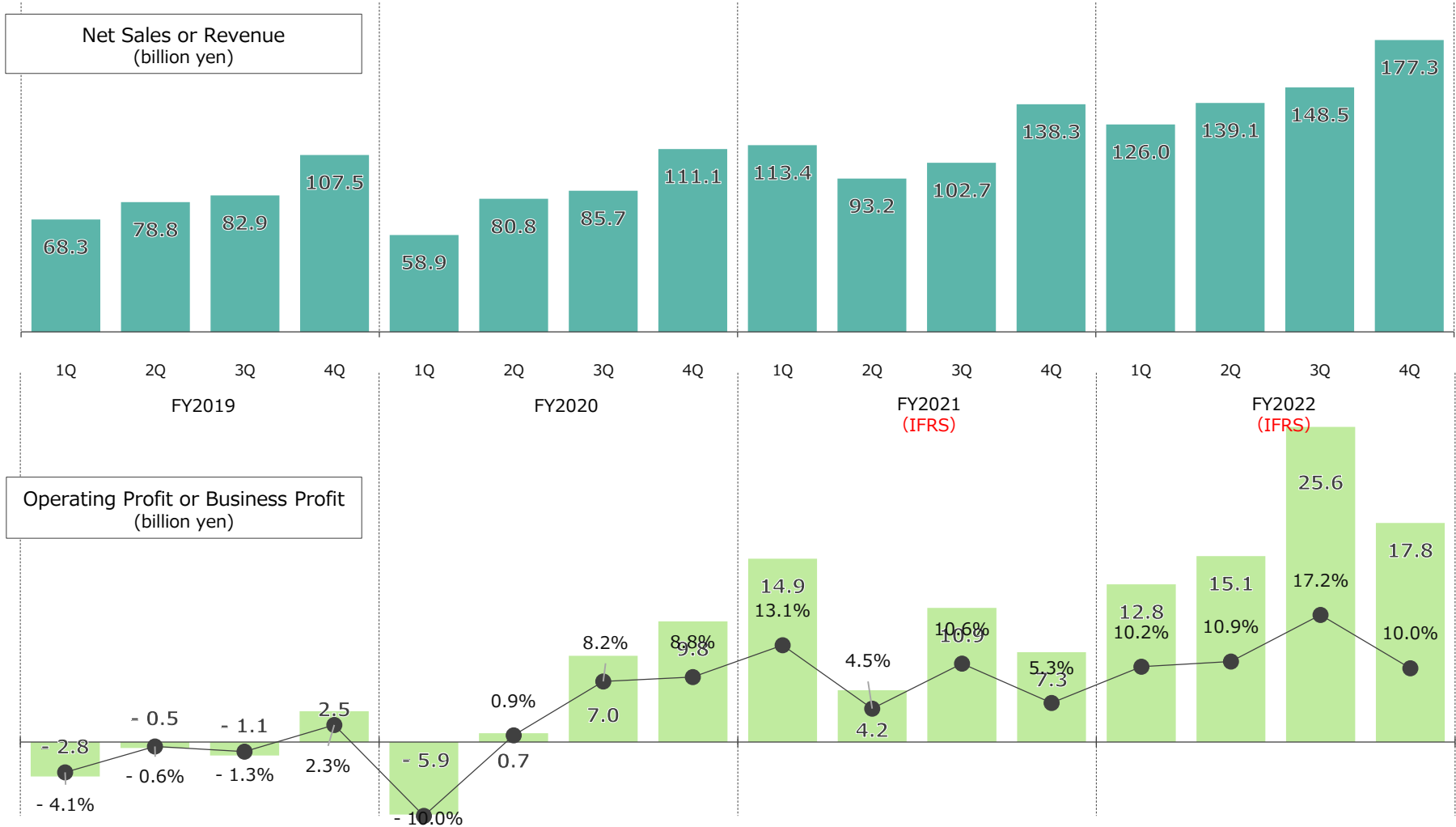
	FY'21	FY'22	Change
Brazil	10	10	-0
Thailand	7	3	-4
Philippines	161	209	+48
Indonesia	45	43	-1
China	37	30	-6
Others	21	20	-0
<b>Total</b>	<b>283</b>	<b>318</b>	<b>+34</b>

#### Wholesales of four-wheeler and PWC

FY'21 : 81 thousand units  
FY'22 : 87 thousand units  
FY'23 : 90 thousand units (plan)



# Details by Segment - Powersports & Engine -



### Market Overview

- U.S. Europe
  - Retail market remains strong despite a slight slowdown
- Europe
  - Retail market is on a recovery and expansion trend as product supply shortage is being resolved
- Southeast Asia
  - Demand is recovering, although it varies by country
- Supply Chain risks
  - Shortage of semiconductors still affect our product supply
  - Logistics disruption calmed down

### Specific Efforts

- ✓ **Supplying products as much as demanded**
  - All efforts to achieve production plans
  - Flexibly change production and sales plans according to sales conditions
  - Continuously introduce new models
- ✓ **Expansion of the four wheeler business and electrification**
  - Investment in development to enhance product competitiveness
  - Preparation of the U.S. Plant and Mexico Plant to expand production capacity
  - Accelerating development of BEVs and HEVs
  - Joint research on hydrogen engine by Toyota, DENSO and four motorcycle manufacturing companies
- ✓ **Promoting business process re-engineering through DX**
  - Achieving agile management through digitalization
  - Shortened development time and reduced development costs through the use of digital technology
- ✓ **Securing Free Cash Flows**
  - Aiming to secure stable FCF for future investment



Proto HEV  
on display at EICMA  
(Nov. 22)



TERYX4 KRX 1000  
popular in the U.S.

## Dividend Policy

The medium- to long-term consolidated dividend payout ratio **30%**

- 1 Comprehensively considering the following points - future business forecasts, financial conditions such as free cash flow and debt-to-equity ratio, and other factors
- 2 Stable dividends

## Dividend for FY2022

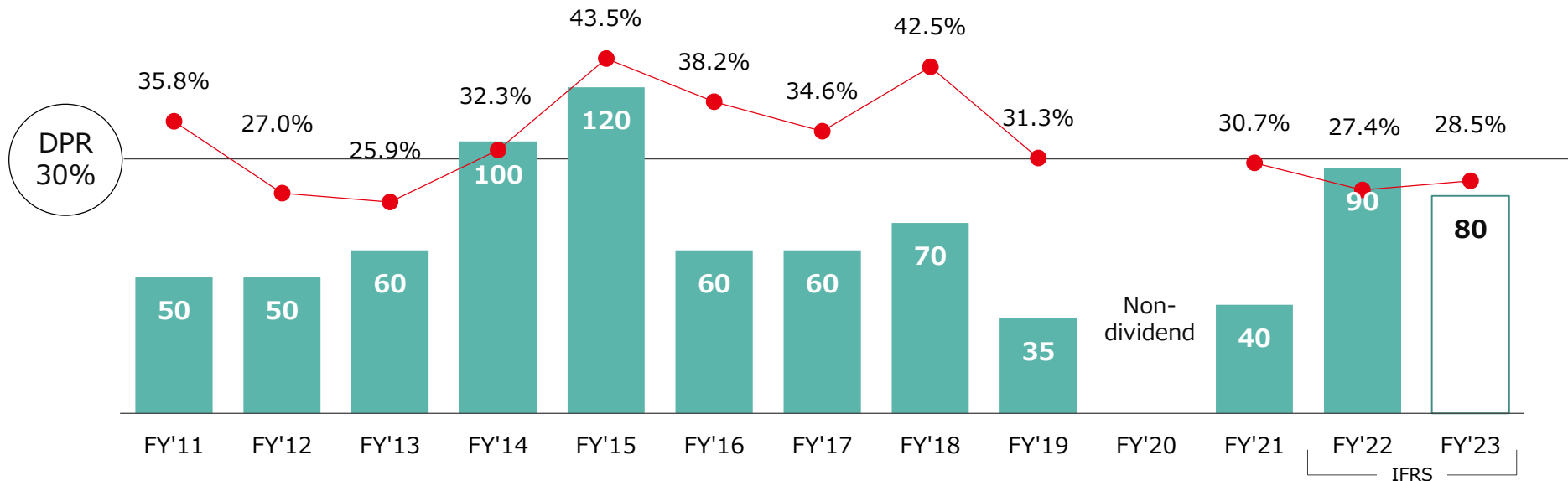
Profit attributable to owners of the parent reached a record high as a result of the recovery from the pandemic in Aerospace Systems and the strong performance of PS&E, as well as the depreciation of the yen



**Plan to increase the year-end dividend** from 40yen to 60yen and plan to pay full year dividend of **90yen** per share (dividend payout ratio of 27.4%)

## Dividend for FY2023

Plan full year dividend of **80yen** per share (dividend payout ratio of 28.5%)

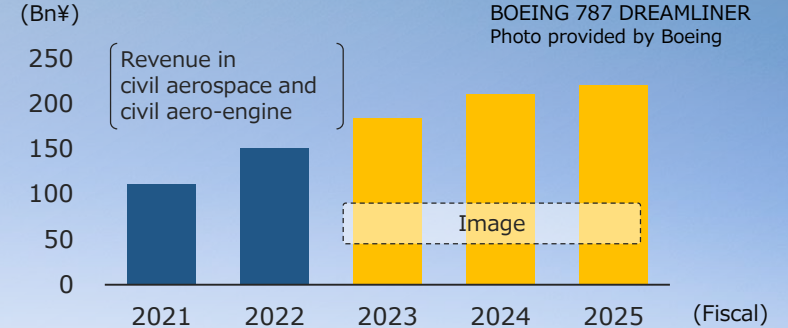


**Resuming civil Aerospace & Aero-engine business and re-expansion of the market**

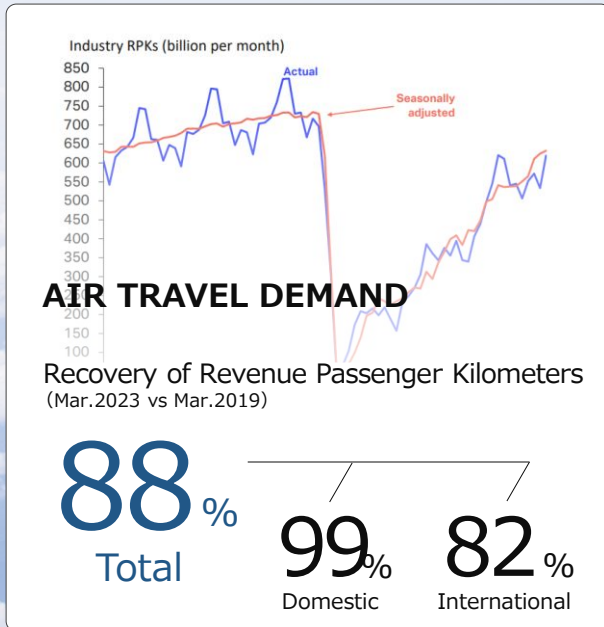
- Aviation market recovers strongly from pandemic for re-expansion
- Boeing has a large backlog of 787 orders and plans to raise production rates gradually in the future



BOEING 787 DREAMLINER  
Photo provided by Boeing



## Good News



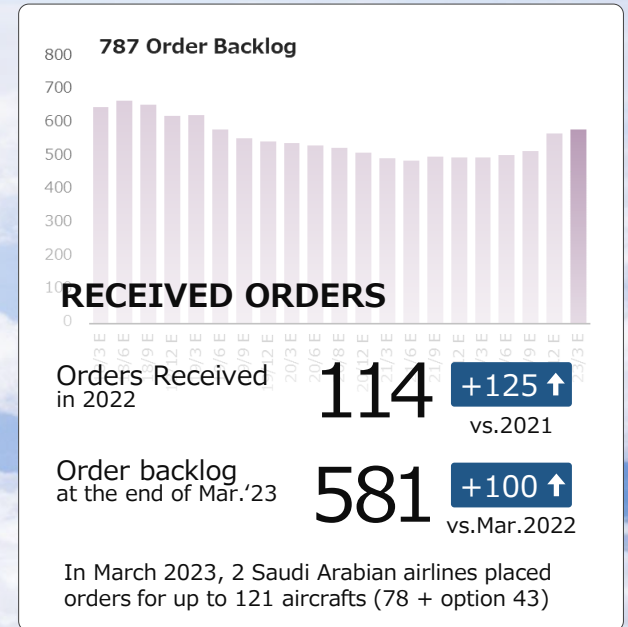
Reference: International Air Transport Association (IATA)

**BOEING'S ANNOUNCEMENT**

“Plan to deliver 70-80 787s to airlines in 2023

Production rate is planned to return to 5 / month by late 2023 and to be gradually raised to 10 / month in 2025 or 2026”

Reference: The Boeing Company



Reference: The Boeing Company

- ✓ **Doors open for healthcare business**  
**-Review of PCR inspection service business and future prospects-**

Background & Significance	Results & Achievements	Acquired Knowledge & Expertise	
<ul style="list-style-type: none"> <li>✓ <b>Social significance</b> <ul style="list-style-type: none"> <li>- Ensure safety for medical personnel</li> <li>- Contribute to a speedy recovery in economic activity (+ to recovery of air passenger demand)</li> </ul> </li> <li>✓ <b>For revenue growth</b> <ul style="list-style-type: none"> <li>- Entry into market-in service business</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Number of samples handled</b>  <b>850,000</b> samples (2 years)</li> <li>✓ <b>Business results</b> <ul style="list-style-type: none"> <li>- Recorded loss for FY2022 (including impacts by downgrade to "Class 5")</li> <li>- <b>Contributed to fixed cost recovery as a company</b></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Acquisition of service business base</b> <ul style="list-style-type: none"> <li>- Spread the mindset of market-in services within the company</li> </ul> </li> <li>✓ <b>Establishment of high inspection accuracy</b> <ul style="list-style-type: none"> <li>- Tenkubashi Inspection Office at Haneda receives high rating (<b>rating A</b>) in external accuracy assessment</li> </ul> </li> <li>✓ <b>Building relationships with ministries and hospitals</b> <div style="float: right; border: 1px solid orange; padding: 5px; margin-top: 10px;">Essential for success in healthcare field</div> </li> </ul>	

**Develop new businesses in the healthcare area** by utilizing acquired knowledge and expertise

Toward the realization of a society with a healthy life expectancy of 100 years

<p><b>Medical examination</b></p> <p>Genome analysis Drug discovery support</p> 	<p><b>In-hospital delivery</b></p> <p>In-hospital delivery Human flow management</p> 	<p><b>Telemedicine</b></p> <p>Remote surgery, Remote diagnosis</p> 	<p><b>Others</b></p> <p>In-hospital inspection Medic tourism Pain-free/Palliative Care Nursing care Rehabilitation</p> <p style="text-align: right;">etc.</p>
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✓ **A hydrogen society is just around the corner**  
 ~ Sites for shipping and receiving for liquefied hydrogen supply chain commercialization project selected ~

2019.12

- The world's first liquefied hydrogen carrier, SUIISO Frontier, launched



tank capacity : 1,250m<sup>3</sup>

Capacity  
×128



tank capacity : 40,000m<sup>3</sup> × 4 tanks

Work on more detailed designs for **practical use in the mid-2020s**

2022.4

- Japan-Australia Hydrogen Supply Chain Demonstration Test Completed

- Obtained approval in principle (AiP) for a large, 160,000 m<sup>3</sup> liquefied hydrogen carrier

- Completed basic design of marine hydrogen boiler to be installed on large liquefied hydrogen carrier

Current Position

**NEW!**

- Selected Sites for shipping and receiving liquefied clean hydrogen**

Receiving at Kawasaki City, Kanagawa, Japan

Shipping at Port of Hastings, Victoria, Australia

Accelerate cooperation with potential customers, who are conducting hydrogen power generation demonstrations, and local governments



Receiving



URL to our press release  
[https://global.kawasaki.com/news\\_230308-2e.pdf](https://global.kawasaki.com/news_230308-2e.pdf)



Shipping

2025

¥52bn~

2026

Demonstration for commercialization



×1ship

¥130bn~

2030

Start commercializing



×2ships~

¥400bn~

Image of expanding our hydrogen business

[including supplying and licensing key parts to other companies]

## ✓ Initiatives to reduce CO<sub>2</sub> emissions

-To archive **Net zero** CO<sub>2</sub> emissions in 2050 including SCOPE3 in whole Kawasaki group

### SCOPE 1,2

In-house fuel and power use

About **0.3** Mil. ton in FY2021

→ **0**ton in 2030 (Japan)

- Achieving in-house zero-emission plant based on **65%** reduction in CO<sub>2</sub> emissions from in-house hydrogen power generation

### SCOPE 3 Category(1)

Target  
Set in '22

Companies supplying materials and part

About **2.4** Mil. ton in FY2021

→ **0**ton in 2050

- Providing CO<sub>2</sub>-free solutions to suppliers
- **80%** emissions reduction will be archived in **2040**

### SCOPE 3 Category(11)

Target  
Set in '22

Providing customer solutions

About **200** Mil. ton in FY2021

→ **0**ton in 2050

- Providing customers with **CO<sub>2</sub>-free solutions** consisting of (1) Shift to hydrogen, (2) CCUS and alternative fuels, and (3) Electrification and green power grids
- All solutions will be CO<sub>2</sub> free in 2050

\*Excludes defense and emergency products

### \ Good Example / for TCFD Guidance 3.0

The easy-to-understand information of Scope 1 - 3 emissions, broken down by major categories and including targets, were highly regarded and included as good examples in the TCFD Guidance 3.0 Case Examples (published by the TCFD Consortium in 2022)

[https://tcfd-consortium.jp/pdf/en/news/22100501/TCFD\\_Guidance\\_3.0\\_Case\\_Examples\\_e.pdf](https://tcfd-consortium.jp/pdf/en/news/22100501/TCFD_Guidance_3.0_Case_Examples_e.pdf)

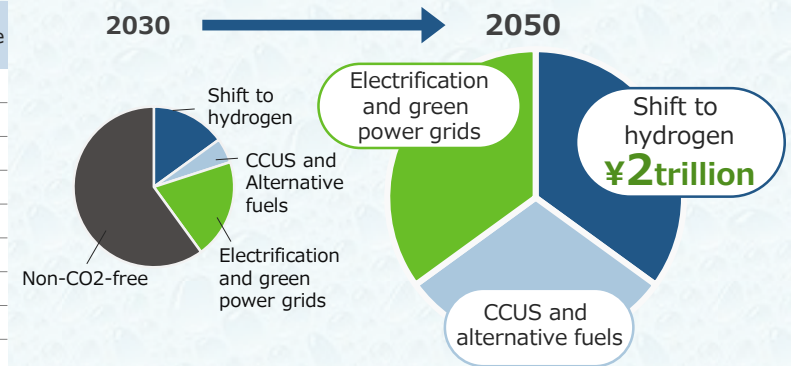


### Company's shift toward CO<sub>2</sub>-free solutions

#### Direction of Transitions by Business

Business	Shift to hydrogen	Electrification and green power grids	CCUS and alternative fuels
Aerospace Systems	○	○	○
Rolling Stock	○	○	○
Hydraulic Machinery	○	○	○
Robotics		○	
PS&E	○	○	○
Energy	○	○	○
Marine Machinery	○	○	○
Plant	○	○	○
Ship & Offshore	○	○	○

#### Envisioned Scale of Business by Future Solution



# 4 ESG Topics

## ✓ Selected as an **A List Company, the Highest Rating**, in the CDP Climate Change Survey

- The 2022 Climate Change Survey conducted by CDP<sup>※1</sup> evaluated the results of our efforts in corporate sustainability for climate change
- We are **the first A-list company in the heavy industry sector**

[https://global.kawasaki.com/en/corp/newsroom/news/detail/?f=20221213\\_8967](https://global.kawasaki.com/en/corp/newsroom/news/detail/?f=20221213_8967)

※1 CDP is a UK charity based NGO that operates a global disclosure system for investors, businesses, nations, regions and cities to manage their environmental impact.



President Message



\*Only in Japanese



## ✓ Endorsement to the GX League Basic Concept

We endorsed the GX League, which aims to transform the overall economic and social system and create new markets, with companies actively working on accordingly through cooperation in the government, academic, and economic spheres, considering the concept to be in alignment with the objectives of its business plans to create a hydrogen supply chain aimed at realizing a decarbonized society, and to achieve carbon neutrality of its domestic plants in 2030 by utilizing its hydrogen power generation technology

[https://global.kawasaki.com/en/corp/newsroom/news/detail/?f=20220405\\_7766](https://global.kawasaki.com/en/corp/newsroom/news/detail/?f=20220405_7766)

※green transformation

## ✓ Sustainable Finance

The ratio of sustainable finance procurement in FY2022 reached approx. **90%**.

This is about **11%** of the balance.

<https://global.kawasaki.com/en/corp/ir/finance/index.html>

### Sustainable Finance issued in FY2022

Jul.'22	Green Bond (SDGs Bond)	SDGs bond to follow sustainability bond issued in Jul.'21
Nov.'22	Establishment of Sustainability Linked Loan (SLL) Framework Template	KHI has signed loan agreements with several lenders by utilizing the template (FY'22: 5 lenders)
Dec.'22	Establishment of Positive Impact Evaluation Framework	KHI has signed loan agreements with several lenders by utilizing the template (FY'22: 3 lenders)

## ✓ Increased the Ratio of Outside Directors

The ratio of outside directors was increased to 50% to strengthen corporate governance

[https://global.kawasaki.com/en/corp/sustainability/report/2022/pdf/22\\_houkokusyo.pdf](https://global.kawasaki.com/en/corp/sustainability/report/2022/pdf/22_houkokusyo.pdf)

At the Annual General Meeting of Shareholders to be held in June 2023, 1 new outside director is scheduled to be elected, and as a result, the outside director will have a majority.

## ✓ Review of Risk Management System

In addition to management by the department in charge according to the type of risk, an integrated risk monitoring system has been established to comprehensively monitor the effectiveness of the management system and to consult with the Board of Directors on reports and policy decisions.

▼Please refer to page 60 of Kawasaki Report for details

[https://www.khi.co.jp/sustainability/library/report/2022/pdf/22\\_houkokusyo.pdf](https://www.khi.co.jp/sustainability/library/report/2022/pdf/22_houkokusyo.pdf)

## ✓ Selected as a Most-improved Integrated Report

Kawasaki Report issued on Oct. '22, was selected as one of the 95 companies selected from all listed companies in the GPIF Asset Managers Entrusted with Domestic Equity Investment 'Most-improved Integrated Report'.

[https://www.gpif.go.jp/en/investment/excellent.most-improved-integrated-reports\\_2023\\_03.pdf](https://www.gpif.go.jp/en/investment/excellent.most-improved-integrated-reports_2023_03.pdf)



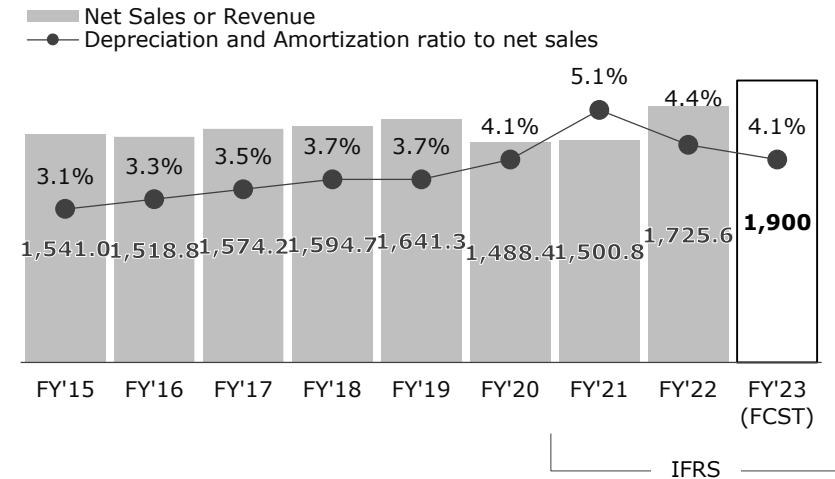
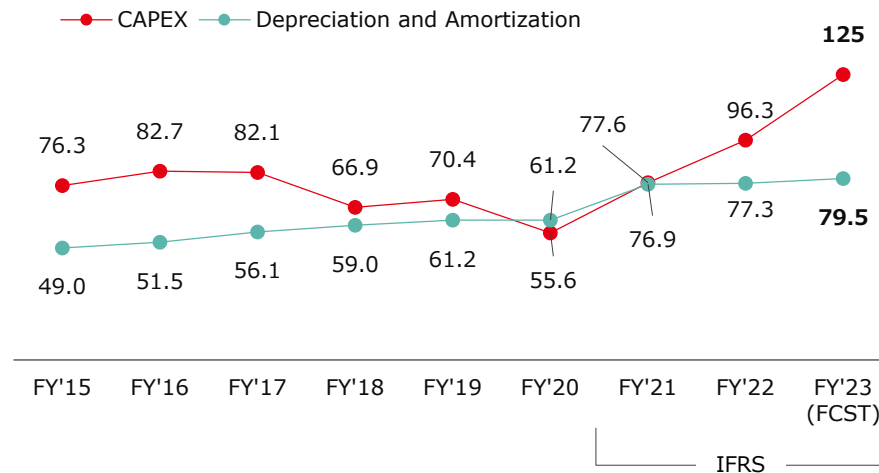
## Appendix

- CAPEX, Depreciation and Amortization, R&amp;D Expenses, Number of employees -

(Billion Yen, Persons)

	FY2021	FY2022		FY2023 Forecast	
	Actual	Actual	Chg. Vs. FY21	JGAAP	Chg. Vs. FY22(JGAAP)
CAPEX	77.6	<b>96.3</b>	+ 18.7	<b>125.0</b>	+ 28.7
Depreciation and amortization	76.9	<b>77.3</b>	+ 0.3	<b>79.5</b>	+ 2.2
R & D expenses	45.7	<b>50.7</b>	+ 4.9	<b>55.0</b>	+ 4.3
Number of Employees	36,587	<b>38,254</b>	+ 1,667	<b>40,460</b>	+ 2,206
Domestic	26,596	<b>27,583</b>	+ 987	<b>28,720</b>	+ 1,137
Overseas	9,991	<b>10,671</b>	+ 680	<b>11,740</b>	+ 1,069

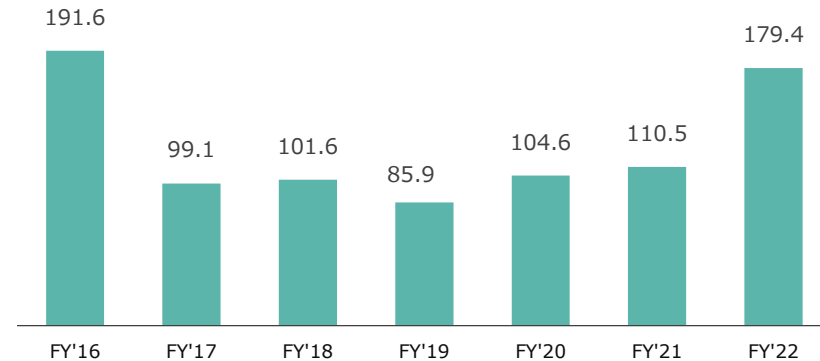
※ Depreciation for FY '21 has been revised from 77.3 billion yen to 76.9 billion yen.



## ● Order Backlog (billion yen)

	FY2021	FY2022	
	Actual	Actual	Change
Aerospace Systems	619.8	<b>670.6</b>	+ 50.8
Rolling Stock	388.1	<b>570.5</b>	+ 182.3
Energy Solution & Marine Engineering	507.1	<b>629.0</b>	+ 121.8
Precision Machinery & Robot	88.4	<b>97.8</b>	+ 9.4
Powersports & Engine	-	-	-
Others	27.7	<b>27.7</b>	+ -
<b>Total</b>	<b>1,631.3</b>	<b>1,995.9</b>	+ 364.5

## ● Order Backlog in Ship & Offshore (billion yen)



## ● Revenue by Region (billion yen)

	FY2021	FY2022	
	Actual	Actual	Change
Japan	664.4	<b>682.9</b>	+ 18.5
USA	357.9	<b>499.4</b>	+ 141.4
Europe	122.9	<b>154.9</b>	+ 31.9
Asia	277.5	<b>275.5</b>	- 2.0
Other	77.8	<b>112.6</b>	+ 34.8
<b>Total</b>	<b>1,500.8</b>	<b>1,725.6</b>	+ 224.7

※ classified by country or region based on the customer's location.

## ● Ship Orders Received and Delivery Year (number of ships)

	FY'22 Received Orders	Delivery Year				Order Backlog
		FY'22 Actual	FY'23	FY'24	FY'25~	
			Plan			
LPG Carrier	7	4	4	3	5	12
Submarine	1	1		1	1	2
Others						
<b>Total</b>	※1 8	※2 5	4	4	6	※3 14

※ 1 Orders received in FY'22 : 352,800GT

※ 2 Delivered in FY'22 : 202,800GT

※ 3 Order Backlog : 604,800GT

\*Submarines are excluded

### ● Revenue in Foreign Currencies by Segment (USD)

	(billion USD)		
	FY2021 Actual	FY2022 Actual	FY2023 Forecast
Aerospace Systems	0.57	<b>0.69</b>	1.11
Rolling Stock	0.06	<b>0.05</b>	0.08
Energy Solution & Marine Engineering	0.28	<b>0.30</b>	0.33
Precision Machinery & Robot	0.23	<b>0.24</b>	0.18
Powersports & Engine	0.62	<b>0.77</b>	0.82
<b>Total</b>	<b>1.76</b>	<b>2.05</b>	2.52

※ Impact on business profit by FX fluctuation of 1 yen

### ● Weighted-average Exchange Rates

	(EUR/JPY)
FY2020 actual	124.61
FY2021 actual	130.47
FY2022 actual	141.38
FY2023 forecast	140.00

### ● Revenue in Foreign Currencies(EUR)

	(billion EUR)
FY2020 actual	0.32
FY2021 actual	0.44
FY2022 actual	0.57
FY2023 forecast	0.55

※ Impact on business profit by FX fluctuation of 1 yen

### <Formulas for Calculating Before-tax ROIC and After-tax ROIC>

Before-tax ROIC = ( Profit before tax + Interest expenses ) ÷ Invested capital<sup>※2</sup>

After-tax ROIC = { Profit attributable for owners of parent + Interest expenses × (1 – Tax rate) } ÷ Invested capital<sup>※2</sup>

※2 Invested Capital = Net debt+Equity

Kawasaki, working as one for the good of the planet  
“Global Kawasaki”

カワる、  
サキへ。  
Changing forward

# Growth Scenario & Future Outlook

Kawasaki Heavy Industries, Ltd.

May 10, 2023

# Growth Scenario

"The scenario we set up two years ago becomes a reality"

3

Hydrogen and other **new businesses will also become a pillar of earnings** and a stable growth path

- A Safe and Secure Remotely-Connected Society
- Near-Future Mobility
- Energy and Environmental Solutions

Further increase in social needs

2

**Aerospace business** recovers and market grows steadily

Full-scale recovery of aviation demand to recover earnings

1

- Mass production businesses such as **motorcycles, precision machinery and robots** support earnings
- Early launch of PCR testing business contributes to recovery of aviation demand

Generates 80% of profits

From the presentation material of 'Group Vision 2030 Progress Report Meeting (December 6, 2022)'

