

# The Counteroffensive Stage



**YAMASHIN-FILTER CORP.**  
**Financial Results for the Second Quarter of  
the Fiscal Year Ended March 31, 2024**

**November 24, 2023**

- Although the growth of the construction machinery market remained strong mainly in North America, the sales decreased due to the impact of COVID-19 recovery demand in the previous fiscal year. Despite passing on prices in an effort to achieve adequate prices, income decreased due to high raw material prices and sales mix.

### Construction machinery filter business (Market Environment)



### Air Filter Business (Market Environment)

Demand for filter replacement of office buildings, etc. is recovering  
Under the environmental issues such as CO2 reduction and reduction of industrial waste

Expand business by utilizing the high competitiveness and reliability of our products

Business Performance for Q2 FY2023

**Consolidated sales: 879 million yen**  
YoY: **4.5% decrease in sales**

**Consolidated operating income: 420 million yen**  
YoY: **19.3% decrease in profit**  
**\*Shareholders' equity ratio: 81.2%**

Construction machinery filter

Sales decreased 5.6% YoY to 7,410 million yen

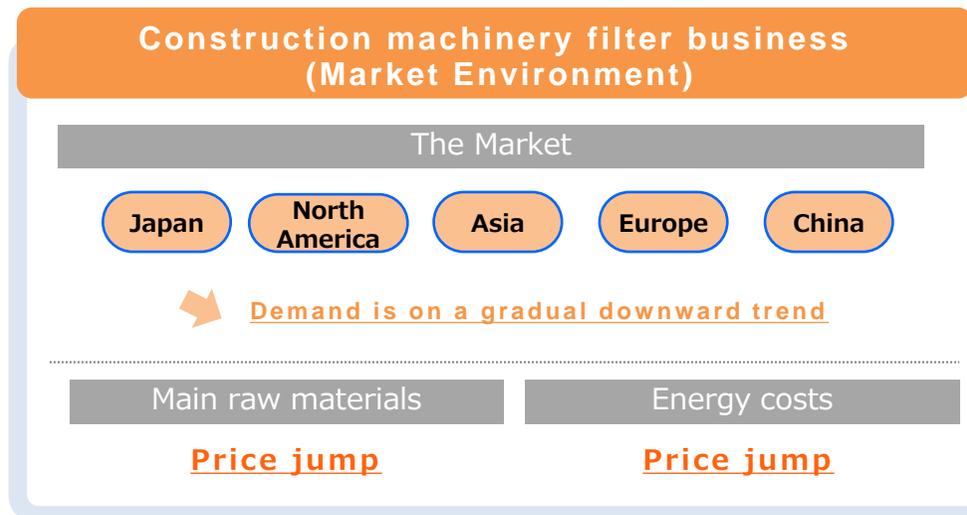
The main markets except China, operating hours and demand for new construction equipment remain strong

Air filter

Sales increased 2.3% YoY to 1,298 million yen

Increased demand for replacement filters for building HVAC

- Compared to the previously announced forecast, sales are expected to decrease due to a gradual downward trend in demand from the third quarter onward. Profit is expected to increase due to price pass-through and cost reduction activities, and an upward revision has been made



**Business Performance for Q2 FY2023**

**Consolidated sales: 17,390 million yen**  
**Change from previous announcement: 1.3% decrease in sales**

**Consolidated operating income: 820 million yen**  
**Change from previous announcement: 36.7% increase in profit**  
**Note: EPS 7.3 (+1.0), ROE 2.5% (+0.3 Pt)**

<b>Construction machinery filter</b>	Change from previous announcement: Sales decreased by 0.7%, 14,710 million yen	Uncertainty in external environment including Russia and Middle East; demand for construction equipment on a downward trend. Sales are expected to decrease, but profit is expected to increase due to price pass-through and cost improvement.
<b>Air filter</b>	Change from previous announcement: Sales decreased by 4.3%, 2,680 million yen	Decreased revenue due to factors such as sales mix, but profit remains unchanged for the full year.

**I**

**Business Performance Results for Q2 FY2023 and Full-Year Forecasts for FY2023 (Ending March 31, 2024)**

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**Market Conditions**

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## I BUSINESS PERFORMANCE RESULTS FOR Q2 FY2023 AND FULL-YEAR FORECASTS FOR FY2023 (ENDING MARCH 31, 2024)

# **Business Performance Results for Q2 FY2023 (July to September 2023)**

(million yen)		Q2 FY2022 Results	Q2 FY2023 Results	Difference	
		Amount	Amount	Amount	%
<b>Net sales</b>		4,953	4,406	△546	△11.0%
	Construction machinery filters*	4,319	3,800	△519	△12.0%
	Air filters	633	606	△26	△4.3%
<b>Operating income (segment income)</b>		427	307	△119	△27.9%
	Construction machinery filters	423	318	△105	△24.9%
	Air filters	3	△10	△14	△362.1%
<b>Operating income margin</b>		<b>8.6%</b>	<b>7.0%</b>	<b>△1.6Pt</b>	
	Ordinary profit	400	322	△78	△19.6%
<b>Ordinary profit margin</b>		<b>8.1%</b>	<b>7.3%</b>	<b>△0.8Pt</b>	
	Net income	259	206	△53	△20.5%
<b>Net income margin</b>		<b>5.2%</b>	<b>4.7%</b>	<b>△0.6Pt</b>	
Exchange rates (Yen) (ave.)	USD	134.0	141.0	7.0	5.2%
	EUR	138.7	153.4	14.7	10.6%

\* "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

(million yen)	FY2022	Q2 FY2023	Change (Amount)	Change (%)
<b>Current assets</b>	12,923	13,697	773	6.0%
Cash and deposits	4,113	5,119	1,005	24.4%
Notes and accounts receivable-trade	4,446	4,535	88	2.0%
Merchandise and finished goods, Raw materials and Supplies	4,141	3,818	△323	△7.8%
Other	221	224	3	1.4%
<b>Fixed assets</b>	12,658	12,630	△27	△0.2%
Tangible fixed assets	11,683	11,503	△180	△1.5%
Intangible fixed assets	172	209	36	21.4%
Investments and other assets	801	917	115	14.4%
<b>Total assets</b>	25,581	26,327	746	2.9%

	FY2022	Q2 FY2023	Change (Amount)	Change (%)
<b>Current liabilities</b>	3,343	3,887	544	16.3%
Notes and accounts payable-trade	1,453	1,642	189	13.1%
Corporate bonds payable within one year and short-term loans payable	683	1,003	320	46.8%
Other	1,206	1,241	34	2.9%
<b>Fixed liabilities</b>	1,260	1,073	△186	△14.8%
Corporate bonds and long-term debt	722	521	△201	△27.9%
Net defined benefits Liability	257	268	11	4.4%
Other	280	283	3	1.2%
<b>Total net assets</b>	20,977	21,366	388	1.9%
<b>Total of liabilities and net assets</b>	25,581	26,327	746	2.9%
<b>*Shareholders' equity ratio</b>	82.0%	81.2%		

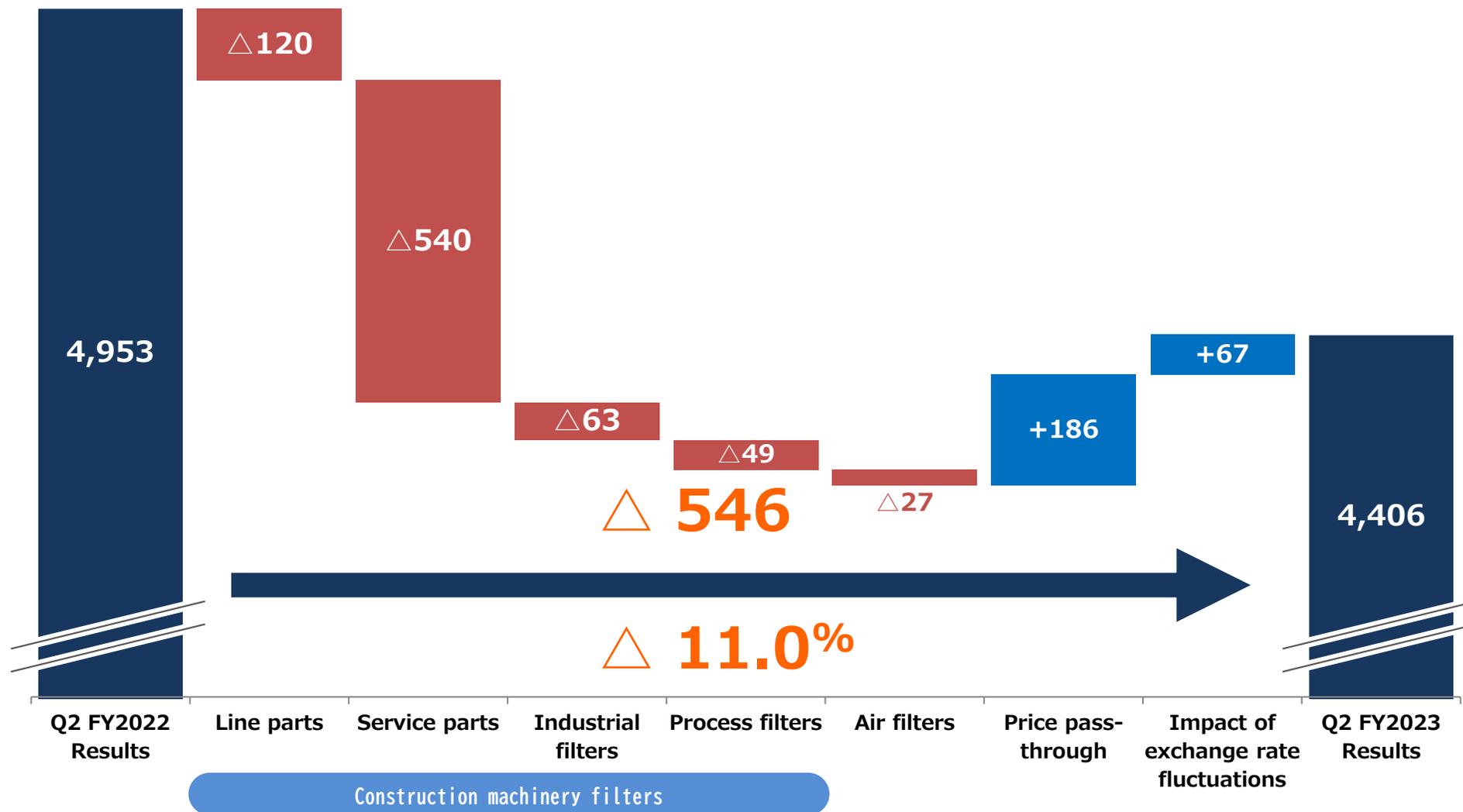
(million yen)	Q2 FY2022 Results	Q2 FY2023 Results	Difference	
	Amount	Amount	Amount	%
<b>Construction machinery filters</b>	3,895	3,471	△423	△10.9%
Line parts	1,463	1,424	△39	△2.7%
Service parts	2,431	2,047	△384	△15.8%
<b>Industrial filters</b>	198	143	△54	△27.6%
<b>Process filters</b>	226	185	△41	△18.2%
<b>Subtotal (Construction machinery filters, etc.)</b>	4,319	3,800	△519	△12.0%
<b>Air filters</b>	633	606	△26	△4.3%
<b>Total</b>	4,953	4,406	△546	△11.0%

(million yen)	Q2 FY2022 Results		Q2 FY2023 Results		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
<b>Construction machinery filters*</b>	4,319	87.2%	3,800	86.2%	△519	△12.0%
Japan	2,123	42.9%	1,691	38.4%	△432	△20.4%
North America	980	19.8%	704	16.0%	△275	△28.1%
China	356	7.2%	269	6.1%	△86	△24.3%
Other Asian countries	408	8.2%	635	14.4%	226	55.5%
Europe	449	9.1%	499	11.3%	49	11.1%
Others (Middle East, etc.)	1	0.0%	0	0.0%	△1	△73.8%
<b>Air filters (Japan)</b>	633	12.8%	606	13.8%	△26	△4.3%
<b>Total sales</b>	4,953	100.0%	4,406	100.0%	△546	△11.0%

\* "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

Note: The above figures by region are based on the billing address.

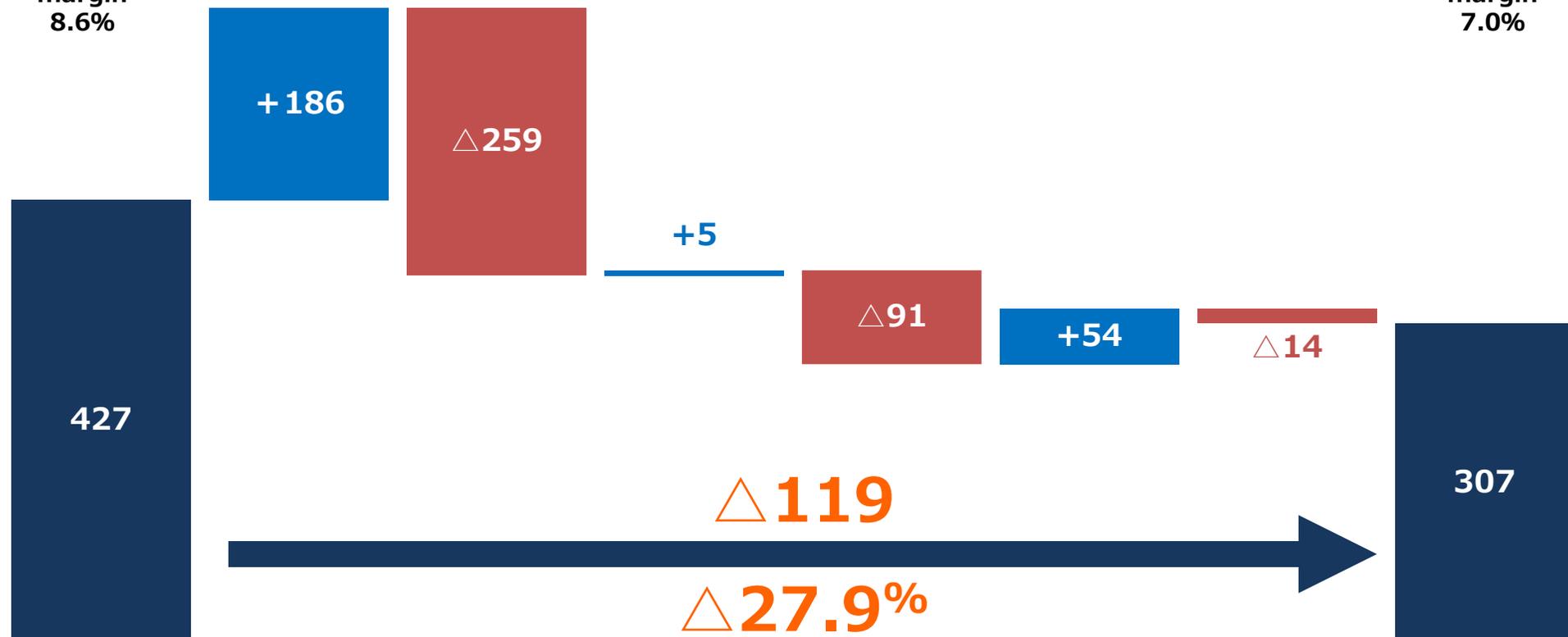
(million yen)



(million yen)

Operating income margin  
8.6%

Operating income margin  
7.0%



Q2 FY2022 Results

[Construction machinery]  
Increase in profit due to price pass-through

[Construction machinery]  
Decrease in profit due to reduction in sales volume

[Construction machinery]  
Increase in profit due to exchange impact

[Construction machinery]  
Decrease in profit due to increase in personnel cost

[Construction machinery]  
Increase in profit due to cost reduction

[Air filters]  
Decrease in profit due to reduction in sales

Q2 FY2023 Results

# **Business Performance Results for FY2023 YTD (April to September 2023)**

		Q2 FY2022 YTD Results	Q2 FY2023 YTD Results	Difference	
		Amount	Amount	Amount	%
<b>Net sales</b>		9,123	8,709	△413	△4.5%
	Construction machinery filters*	7,852	7,410	△442	△5.6%
	Air filters	1,270	1,298	28	2.3%
<b>Operating income (segment income)</b>		521	420	△100	△19.3%
	Construction machinery filters	516	381	△135	△26.2%
	Air filters	4	39	34	730.0%
<b>Operating income margin</b>		<b>5.7%</b>	<b>4.8%</b>	<b>△0.9Pt</b>	
	Ordinary profit	458	417	△40	△8.9%
<b>Ordinary profit margin</b>		<b>5.0%</b>	<b>4.8%</b>	<b>△0.2Pt</b>	
	Net income	271	226	△45	△16.7%
<b>Net income margin</b>		<b>3.0%</b>	<b>2.6%</b>	<b>△0.4Pt</b>	
Exchange rates (Yen) (ave.)	USD	134.0	141.0	7.0	5.2%
	EUR	138.7	153.4	14.7	10.6%

\*"Construction machinery filters" includes filters for construction machinery, industrial use and process use.

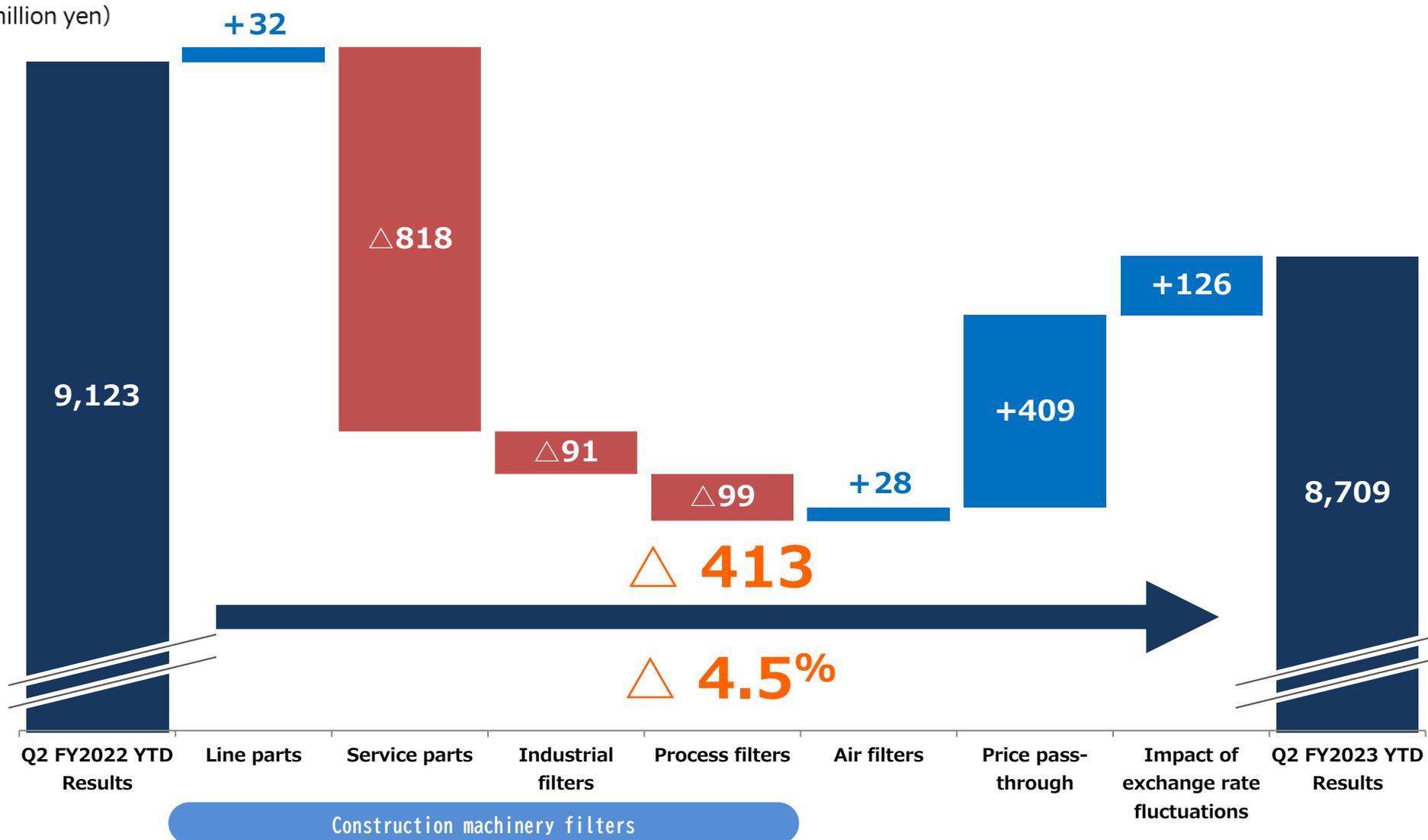
	Q2 FY2022 YTD Results	Q2 FY2023 YTD Results	Difference	
	Amount	Amount	Amount	%
<b>Construction machinery filters</b>	7,032	6,739	△292	△4.2%
Line parts	2,763	2,970	206	7.5%
Service parts	4,268	3,769	△499	△11.7%
<b>Industrial filters</b>	383	312	△70	△18.4%
<b>Process filters</b>	437	358	△78	△18.0%
<b>Subtotal (Construction machinery filters, etc.*)</b>	7,852	7,410	△442	△5.6%
<b>Air filters</b>	1,270	1,298	28	2.3%
<b>Total</b>	9,123	8,709	△413	△4.5%

	Q2 FY2022 YTD Results		Q2 FY2023 YTD Results		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
<b>Construction machinery filters*</b>	7,852	86.1%	7,410	85.1%	△442	△5.6%
Japan	3,964	43.5%	3,403	39.1%	△561	△14.2%
North America	1,640	18.0%	1,290	14.8%	△350	△21.3%
China	624	6.9%	674	7.7%	49	8.0%
Other Asian countries	743	8.1%	1,110	12.8%	367	49.4%
Europe	875	9.6%	930	10.7%	54	6.2%
Others (Middle East, etc.)	3	0.0%	0	0.0%	△3	△79.9%
<b>Air filters (Japan)</b>	1,270	13.9%	1,298	14.9%	28	2.3%
<b>Total sales</b>	9,123	100.0%	8,709	100.0%	△413	△4.5%

\* "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

Note: The above figures by region are based on the billing address.

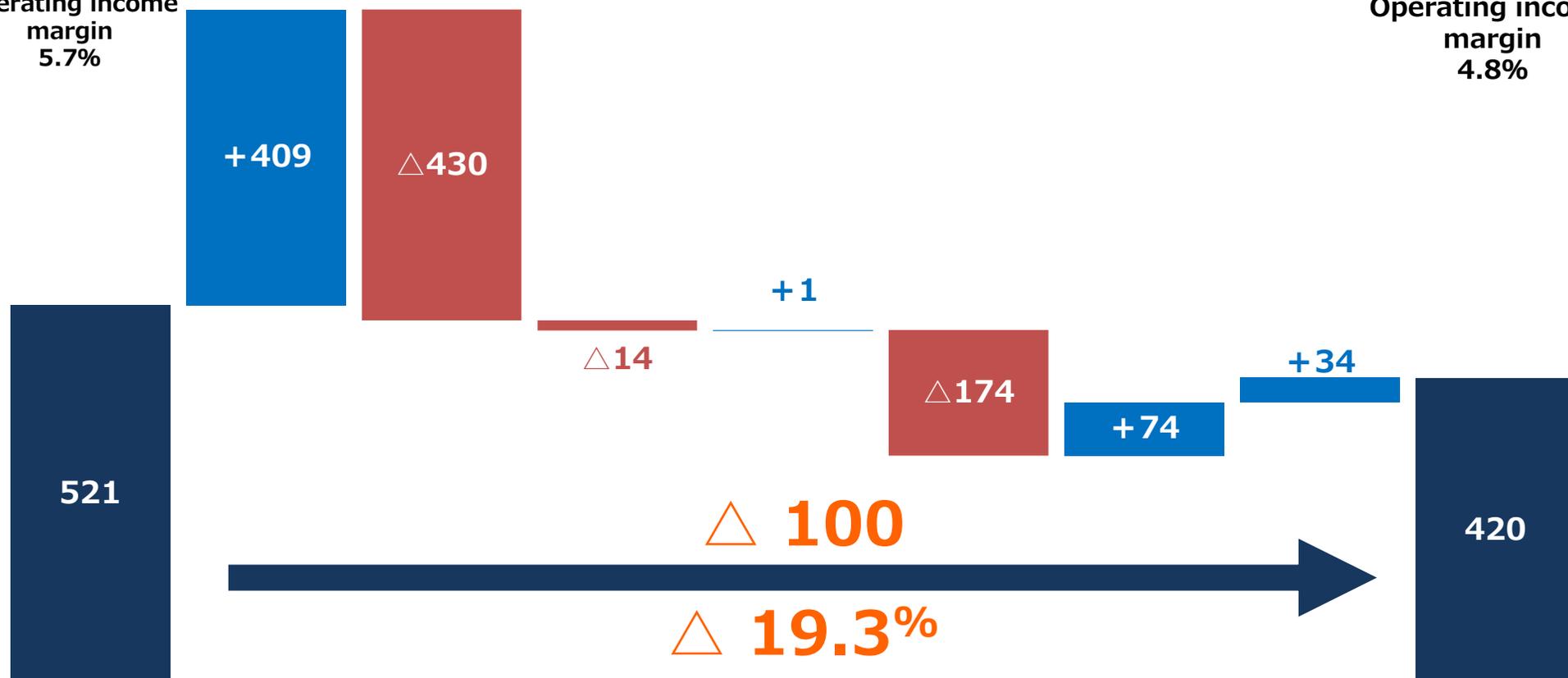
(million yen)



(million yen)

Operating income margin  
5.7%

Operating income margin  
4.8%



Q2 FY2022 YTD Results

[Construction machinery] Increase in profit due to price pass-through

[Construction machinery] Decrease in profit due to reduction in sales volume

[Construction machinery] Decrease in profit due to soaring raw materials costs

[Construction machinery] Increase in profit due to exchange impact

[Construction machinery] Decrease in profit due to increase in personnel cost

[Construction machinery] Increase in profit due to cost reduction

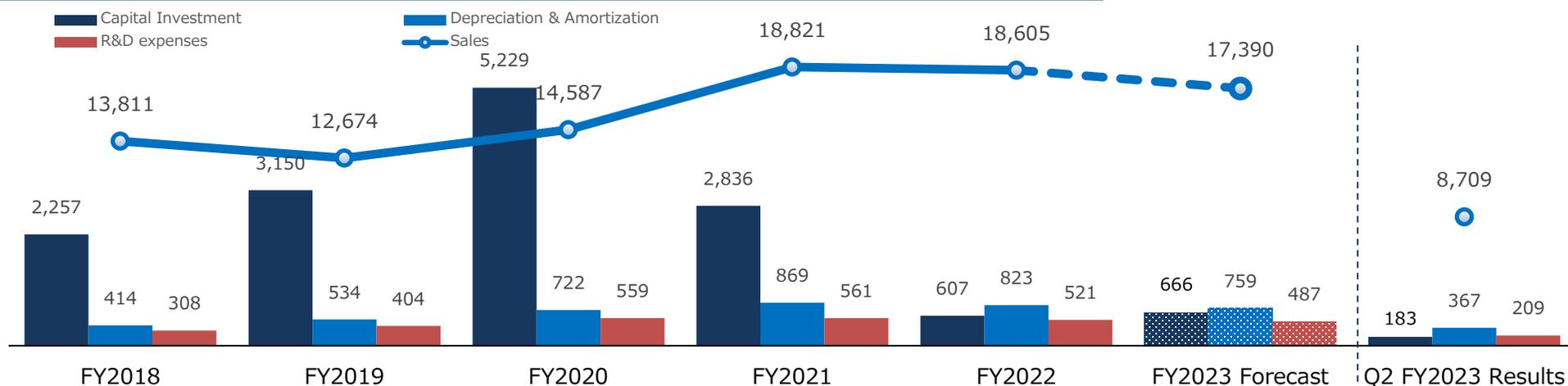
[Air filters] Increase in profit due to improving profitability

Q2 FY2023 YTD Results

(million yen)

	FY2018 Results	FY2019 Results	FY2020 Results	FY2021 Results	FY2022 Results	FY2023 Forecast	FY2023 Q2 Results
<b>Net sales</b>	13,811	12,674	14,587	18,821	18,605	17,390	8,709
Capital investment	2,257	3,150	5,229	2,836	607	666	183
Land and building	1,587	2,682	3,193	1,488	34	24	14
Facilities and others	669	467	2,036	1,347	573	642	168
<b>Expense to sales ratio</b>	<b>16.3%</b>	<b>24.9%</b>	<b>35.9%</b>	<b>15.1%</b>	<b>3.3%</b>	<b>3.8%</b>	<b>2.1%</b>
Depreciation and amortization	414	534	722	869	823	759	367
<b>Expense to sales ratio</b>	<b>3.0%</b>	<b>4.2%</b>	<b>5.0%</b>	<b>4.6%</b>	<b>4.4%</b>	<b>4.4%</b>	<b>4.2%</b>
R&D expenses	308	404	559	561	521	487	209
<b>Expense to sales ratio</b>	<b>2.2%</b>	<b>3.2%</b>	<b>3.8%</b>	<b>3.0%</b>	<b>2.8%</b>	<b>2.8%</b>	<b>2.4%</b>

### Change in net sales and capital investment and depreciation & amortization & R&D expenses



Up to FY2022

FY2023

Implement comprehensive improvements in production technology, management and systems to strengthen the profit structure

**PAC23**



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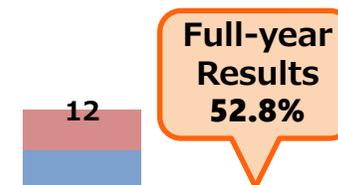
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## Reduction Targets and Results

(million yen)

		Q1 Target	Q1 Results	Q2 Targets	Q2 Results	Q3 Targets	Q3 Results	Q4 Targets	Q4 Results	Full-year Targets	Full-year Results
PAC23	Mfg. Costs	46	51	54	55	54		44		200	107
	SG & A	3	2	3	2	3		3		12	5
Total		49	54	57	58	57		48		212	112

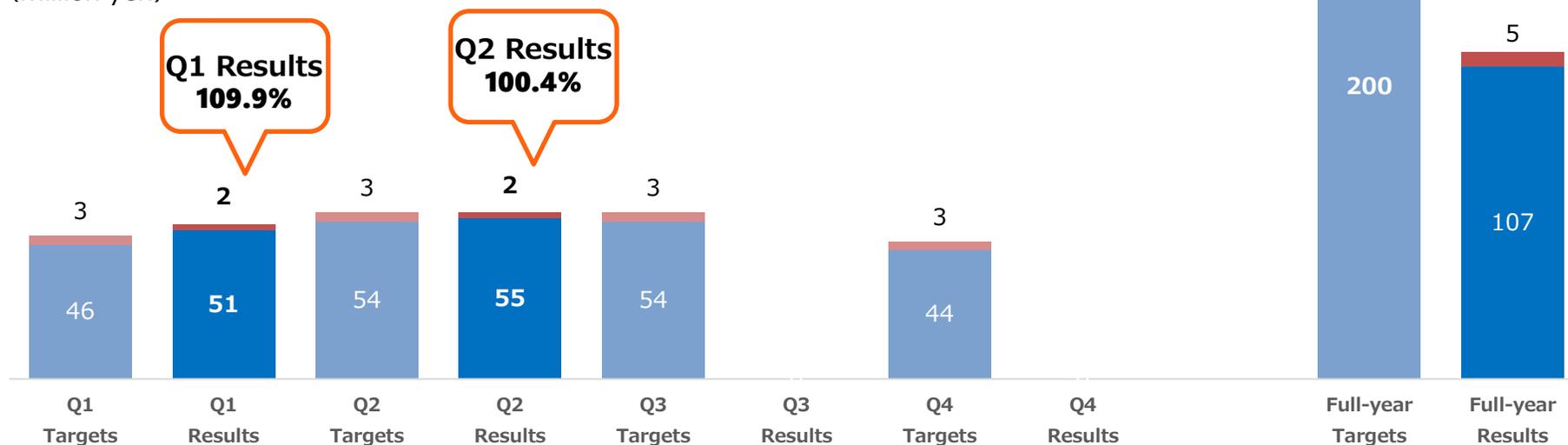


## Progress

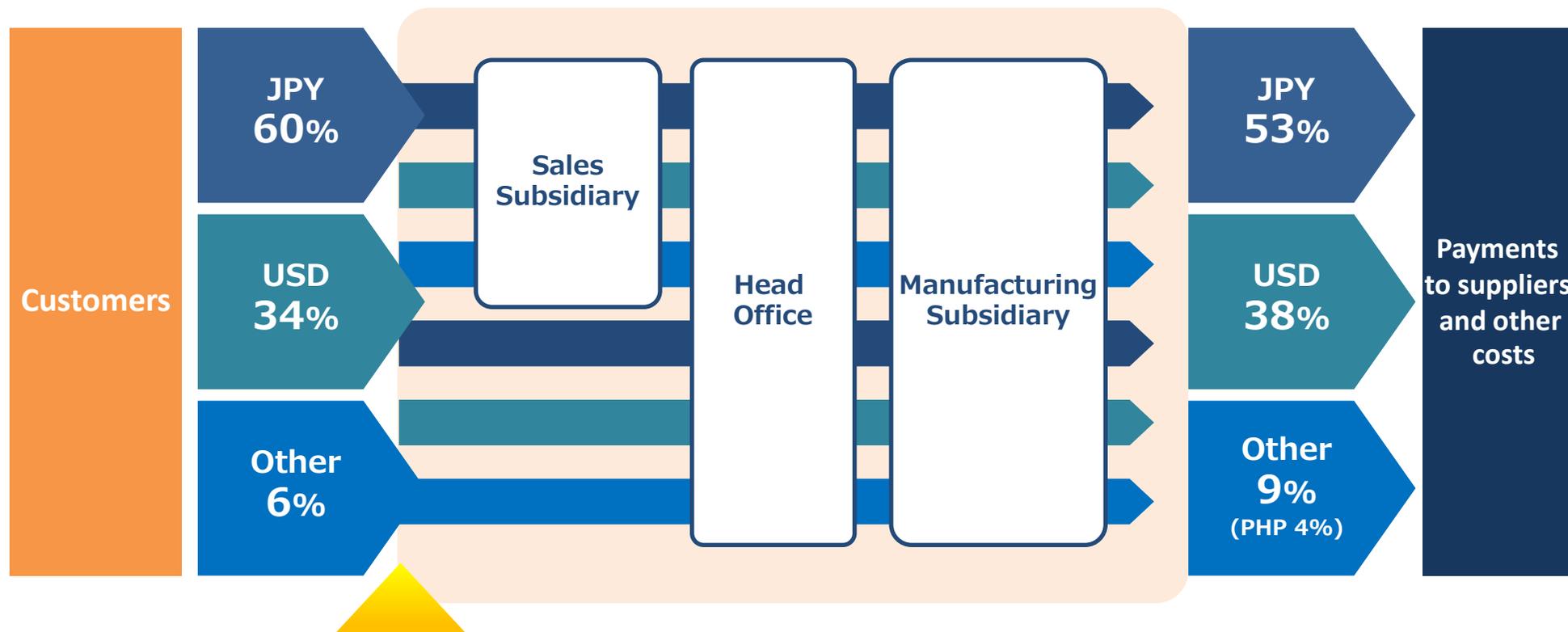
(million yen)

■ Mfg. Costs

■ SG & A



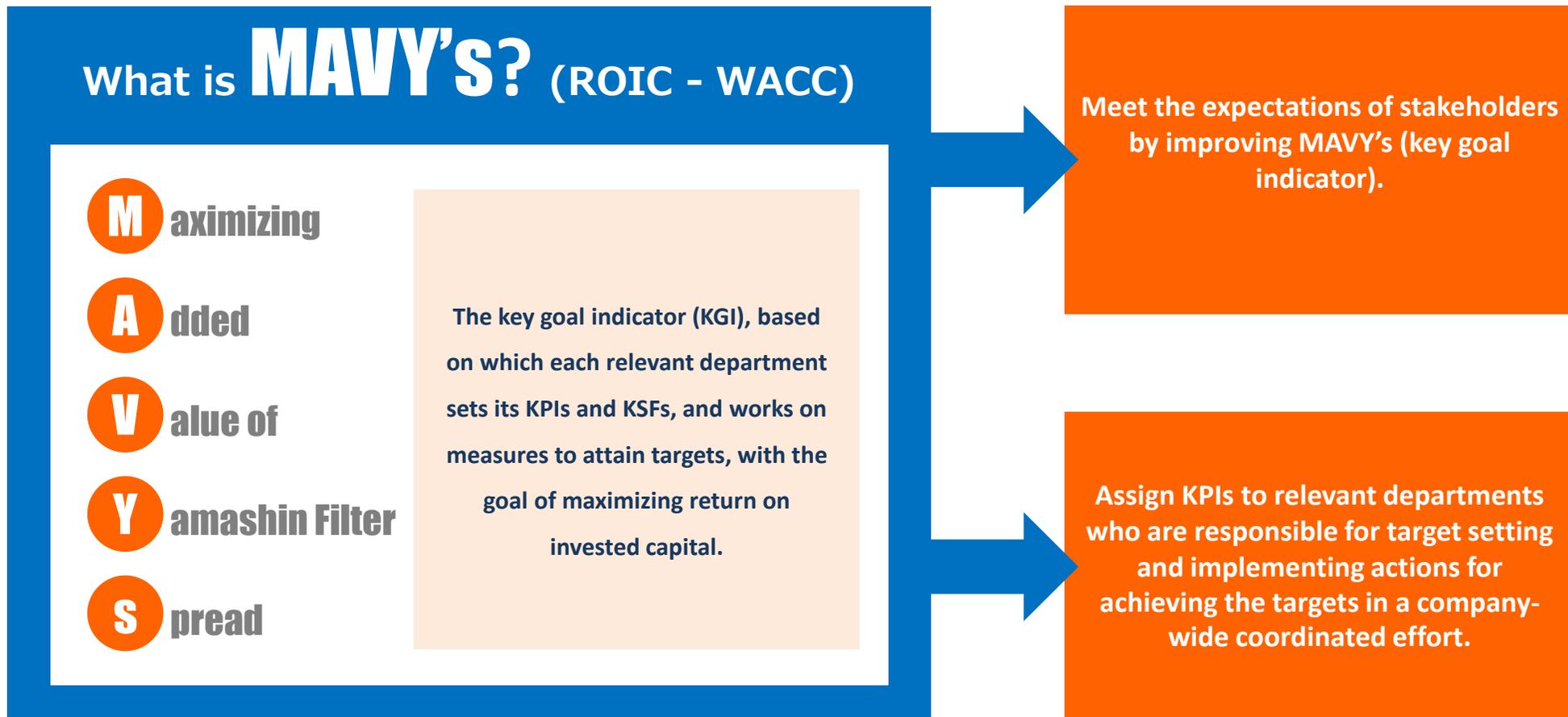
Positive impact on operating income of approx. 1 million yen due to the ongoing depreciation of the EUR/JPY and increase in USD-denominated sales in Southeast Asia region



### 60% of transaction currency is JPY.

- If the exchange rate were to depreciate by 1-yen, the impact on operating income would be minor (April to September 2023)
- Strengthening of operational hedge-marry and netting

Target figures for corporate value improvement are incorporated not only in the administrative department but also on-site



Key Goal Indicator (KGI)	Key Performance Indicator (KPI)	Key Success Factor (KSF)	Relevant Departments	Targets for FY2023 (Action plan)	FY2023 Progress		
<b>MAVY's</b> Prv: -4.4% Cur: -4.7%	<b>Operating income</b> Prv: 6.6% Cur: 4.7%	<b>Gross profit ratio</b> Prv: 39.3% Cur: 40.3%	<b>Sales growth ratio</b> Prv: -1.1% Cur: -6.5%	<b>New product development Enhance market share of genuine products</b>	<b>Sales / R&amp;D</b>	<ul style="list-style-type: none"> <li>Promoting price pass-through Construction machinery.</li> <li>Expand share of major customers (long-life, sensors).</li> <li>Expand and accelerate entry into the Chinese market</li> <li>Air filters: Expand sales through new products (NanoWheel) (direct sales, domestic and overseas)</li> <li>Enter new business domains</li> </ul>	<ul style="list-style-type: none"> <li>Continued price pass-through negotiations with customers</li> <li>Made progress on proposals involving hybrid filters</li> <li>Improve adoption rates of new models for Chinese construction machinery manufacturers</li> <li>Continued progress in sales for new air filter products</li> <li>Continued progress in supply to the apparel industry (not using down materials)</li> </ul>
			<b>Cost to sales ratio</b> Prv: 60.7% Cur: 59.7%	<b>Enhance buying power Improve yield ratio</b>	<b>Production</b>	<ul style="list-style-type: none"> <li>PAC23</li> <li>Reform and improve purchasing power and reduce logistics costs</li> <li>Improve production management</li> </ul>	<ul style="list-style-type: none"> <li>Revised supplier evaluation standards and completed the consolidation process</li> <li>Reduced procurement costs through joint procurement with AQC</li> <li>Improved yields through planned service and maintenance, progress in manufacturing cost reduction measures</li> </ul>
			<b>Depreciation cost ratio</b> Prv: 4.4% Cur: 4.4%	<b>Investment plan</b>	<b>Management Planning / Finance and accounting</b>	<ul style="list-style-type: none"> <li>M&amp;A (for revenue expansion stabilizing management)</li> <li>Research potential M&amp;A targets</li> <li>Acquire nonwoven fabrics manufacturing entities (downstream)</li> <li>Acquire new material development entities (upstream)</li> </ul>	<ul style="list-style-type: none"> <li>Exploring opportunities and gathering data for M&amp;A (domestic and overseas), enhanced communication (through conference calls) with possible M&amp;A target companies</li> </ul>
		<b>SG&amp;A ratio</b> Prv: 32.7% Cur: 35.6%	<b>R&amp;D cost ratio</b> Prv: 2.8% Cur: 2.8%	<b>Narrowing down themes Prioritization</b>	<b>R&amp;D</b>	<ul style="list-style-type: none"> <li>Develop new materials (Recycling, Biomass, etc.)</li> <li>Actions to achieve IoT</li> <li>Develop aeration and other technologies</li> <li>Cost reduction from the development stage</li> </ul>	<ul style="list-style-type: none"> <li>Accelerated the commercialization of nanofiber air filters</li> <li>Supplied various trial sensor products to clients</li> <li>Accelerated new materials development through industrial/academic collaborations</li> <li>Implementation of VA/VE activities by Cost Planning Committee</li> </ul>
			<b>Personnel cost ratio</b> Prv: 14.7% Cur: 17.7%	<b>Optimal staffing</b>	<b>HR and General Affairs</b>	<ul style="list-style-type: none"> <li>Establish and implement the talent management system</li> </ul>	<ul style="list-style-type: none"> <li>Efforts to identify the next generation of management talent</li> <li>Increased R&amp;D staff for product development</li> <li>Hired specialist staff members to assist in company reorganization and growth</li> </ul>
			<b>Accounts receivable turnover rate</b> Prv: 4.1 Cur: 3.9	<b>Credit management</b>	<b>Sales / Finance and accounting</b>	<ul style="list-style-type: none"> <li>Further optimize AR debt collection</li> <li>Promote paperless systems</li> </ul>	<ul style="list-style-type: none"> <li>Streamlined and optimized AR debt collection for improving working capital</li> </ul>
		<b>Operating capital turnover rate</b> Prv: 2.7 Cur: 2.5	<b>Inventory turnover rate</b> Prv: 4.2 Cur: 4.4	<b>Set appropriate inventory level</b>	<b>Production / Sales</b>	<ul style="list-style-type: none"> <li>Reduce company-wide inventory assets</li> </ul>	<ul style="list-style-type: none"> <li>Determined suitable inventory levels based on pareto analysis; currently implementing inventory reduction plans</li> </ul>
			<b>Accounts payable turnover rate</b> Prv: 5.4 Cur: 6.7	<b>Debt management</b>	<b>Production</b>	<ul style="list-style-type: none"> <li>Improve working capital</li> <li>Promote paperless systems</li> </ul>	<ul style="list-style-type: none"> <li>Optimized AP debt turnover ratio for improving working capital</li> </ul>
			<b>Tangible fixed asset turnover rate</b> Prv: 1.6 Cur: 1.5	<b>Facilities planning (R&amp;D, production)</b>	<b>Management Planning Administration / Production / R&amp;D</b>	<ul style="list-style-type: none"> <li>Optimize investment recovery effect (Return on Investment)</li> </ul>	<ul style="list-style-type: none"> <li>Prioritized R&amp;D and capital investments by analyzing the validity of investment return period</li> </ul>
		<b>Investment capital turnover rate</b> Prv: 0.8 Cur: 0.8	<b>FA turnover</b> Prv: 1.5 Cur: 1.4	<b>Investment plan</b>	<b>Management Planning / Finance and Accounting</b>	<ul style="list-style-type: none"> <li>Formulate IP strategies and action plans</li> </ul>	<ul style="list-style-type: none"> <li>Established strategies, devised action plans, and enhanced training for targeted group, stakeholders</li> <li>Actively applied for patents in Chinese market</li> </ul>
			<b>Intangible fixed asset turnover rate</b> Prv: 90.8 Cur: 90.9				
		<b>ROIC</b> Prv: 3.1% Cur: 2.8%					
		<b>WACC</b> Prv: 7.5% Cur: 7.5%					
		<b>ROE</b> Prv: 3.1% Cur: 2.5%					
		<b>ROA</b> Prv: 2.5% Cur: 2.0%					

\*KPI figures are based on the following.

Prv : Full-year results for FY2022

Cur : Revised budgets for FY2023 (disclosed on November 6, 2023)

# Full-year Forecasts for FY2023 (Ending March 31, 2024)

## Construction machinery filters

- Uncertainty continues in foreign affairs, including the situation in Russia and the Middle East, and demand for construction equipment is expected to decline in the second half of the year and beyond
- Prices will continue to rise for key raw materials, particularly aluminum and steel, and fixed costs will increase due to higher salaries as part of investments in human capital
- We will carry out cost reduction through further price pass-through, cost reduction at the design and development stage, reduction of raw material costs, improvement of manufacturing processes, and further enhancement of quality control

## Air filters

- Demand for replacement of existing products remains steady.
- Progress in efforts to adopt our products in office buildings, commercial facilities, factories, etc. through development of high-value-added products such as nanofiber air filters.
- Expect to improve profitability by increasing production efficiency and reducing expenses

(million yen)		FY2022	FY2023	FY2023	Difference
		Results	Initial Budget	Revised Budget	
<b>Net sales</b>		18,605	17,620	17,390	△230
	Construction machinery filters*	15,945	14,820	14,710	△110
	Air filters	2,659	2,800	2,680	△120
<b>Operating income (segment income)</b>		1,235	600	820	220
	Construction machinery filters	1,150	510	730	220
	Air filters	84	90	90	0
<b>Operating income margin</b>		6.6%	3.4%	4.7%	1.3Pt
Ordinary profit		915	650	860	210
<b>Ordinary profit margin</b>		4.9%	3.7%	4.9%	1.3Pt
Net income		645	450	520	70
<b>Net income margin</b>		3.5%	2.6%	3.0%	0.4Pt
Exchange rates (Yen) (ave.)	USD	135.5	130.0	145.0	11.5%
	EUR	141.0	140.0	155.0	10.7%

\* "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

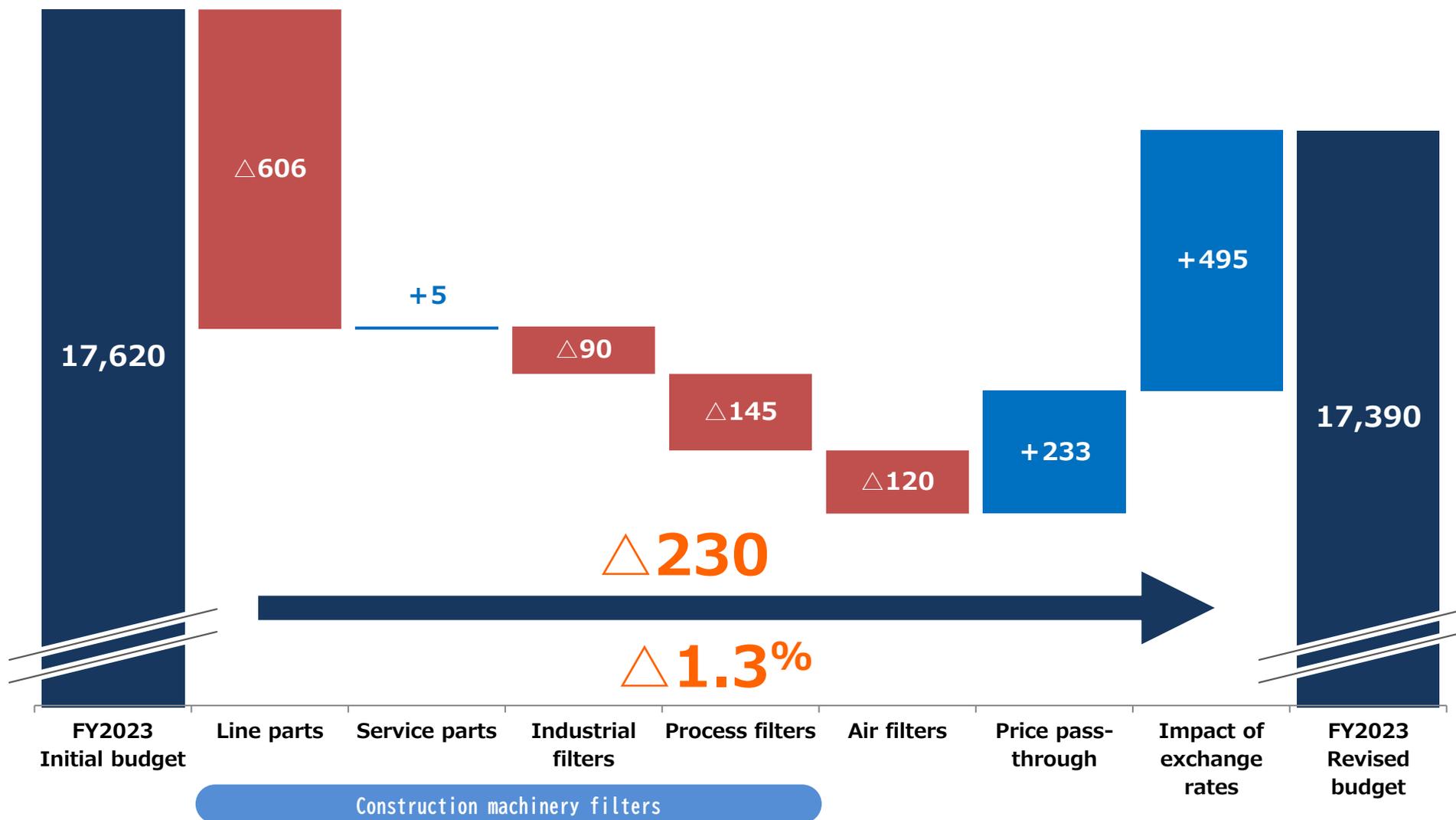
(million yen)	FY2022 Results		FY2023 Initial Budget		FY2023 Revised Budget		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
<b>Construction machinery filters</b>	14,328	77.0%	13,304	75.5%	13,390	77.0%	86	0.6%
Line parts	5,911	31.8%	6,190	35.1%	5,865	33.7%	△324	△5.2%
Service parts	8,417	45.2%	7,114	40.4%	7,525	43.3%	411	5.8%
<b>Industrial filters*</b>	749	4.0%	703	4.0%	640	3.7%	△62	△8.9%
<b>Process filters</b>	867	4.7%	812	4.6%	678	3.9%	△133	△16.4%
<b>Subtotal (Construction machinery filters)</b>	15,945	85.7%	14,820	84.1%	14,710	84.6%	△110	△0.7%
<b>Air filters</b>	2,659	14.3%	2,800	15.9%	2,680	15.4%	△120	△4.3%
<b>Total</b>	18,605	100.0%	17,620	100.0%	17,390	100.0%	△230	△1.3%

(million yen)	FY2022 Results		FY2023 Initial Budget		FY2023 Revised Budget		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
<b>Construction machinery filters*</b>	15,945	85.7%	14,820	84.1%	14,710	84.6%	△110	△0.7%
Japan	7,980	42.9%	6,932	39.3%	6,887	39.6%	△45	△0.7%
North America	3,150	16.9%	3,172	18.0%	2,844	16.4%	△327	△10.3%
China	1,380	7.4%	1,252	7.1%	1,258	7.2%	5	0.5%
Other Asian countries	1,698	9.1%	1,617	9.2%	1,899	10.9%	281	17.4%
Europe	1,729	9.3%	1,700	9.7%	1,817	10.5%	117	6.9%
Others (Middle East, etc.)	6	0.0%	143	0.8%	2	0.0%	△141	△98.0%
<b>Air filters (Japan)</b>	2,659	14.3%	2,800	15.9%	2,680	15.4%	△120	△4.3%
<b>Total sales</b>	18,605	100.0%	17,620	100.0%	17,390	100.0%	△230	△1.3%

\* "Construction machinery filters" includes filters for construction machinery, industrial use and process use.

Note: The above figures by region are based on the billing address.

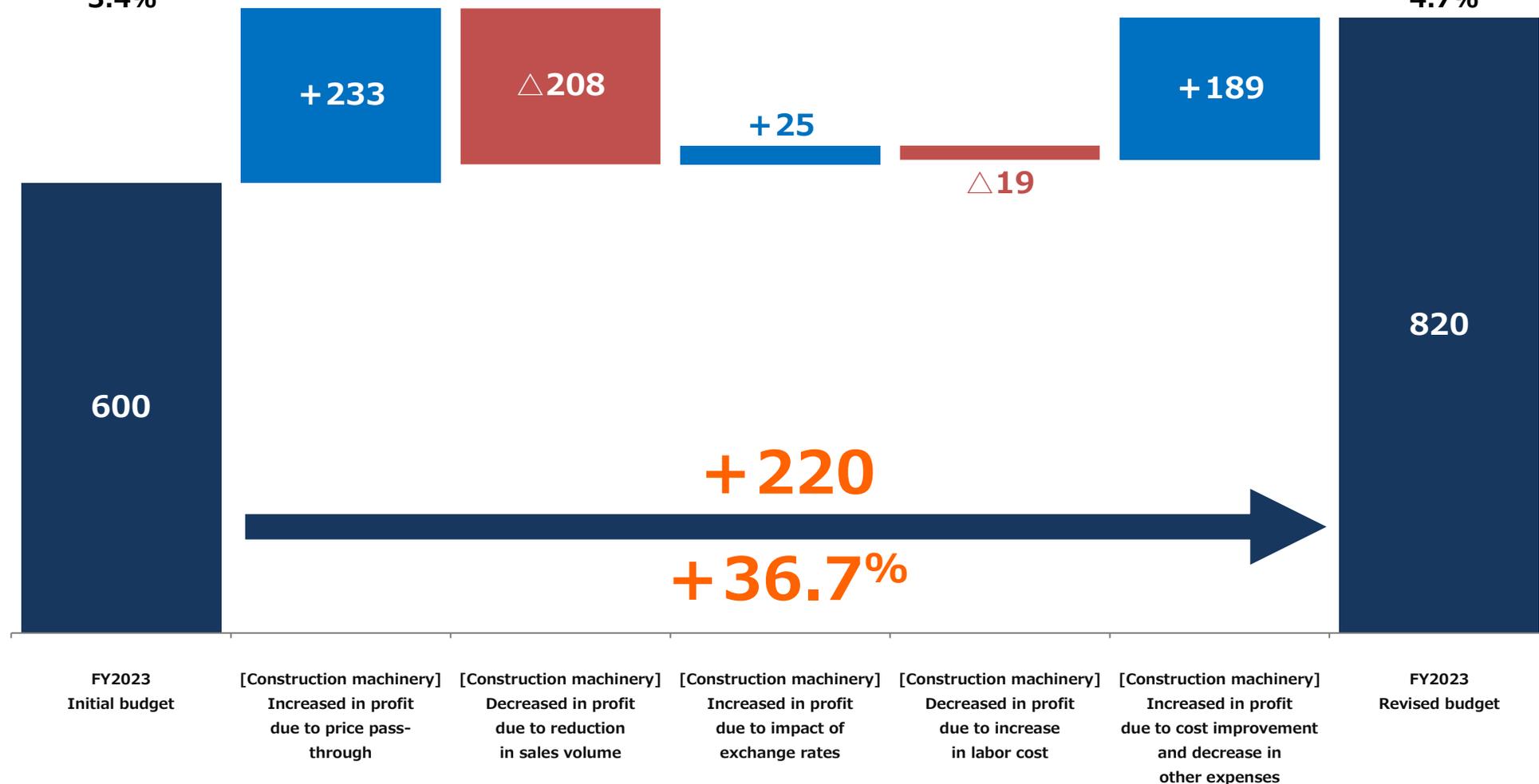
(million yen)



(million yen)

**Operating income margin**  
3.4%

**Operating income margin**  
4.7%



The annual dividend, consisting of the interim dividend of 3.0 yen and the year-end dividend of 3.0 yen, will remain unchanged at 6.0 yen per share

	FY2020	FY2021	FY2022	FY2023 Forecast
<b>Dividend per share</b>	¥ 6.0	¥ 6.0	¥ 6.0	¥ 6.0
<b>DOE<sup>*1</sup></b>	2.2%	2.1%	2.1%	2.1%
<b>Total return ratio<sup>*2</sup></b>	59.3%	960.4%	75.6%	205.3%

\*1 DOE (Dividend on equity) = (Annual dividend ÷ Shareholders' equity) × 100 = (ROE × Dividend payout ratio)

\*2 Total return ratio = {(Total dividend + Treasury stock acquired + Shareholder benefit) ÷ Net income attributable to shareholders of the parent company} × 100



市場

## II Market Conditions

# Conditions in the Construction Machinery Market

- Overall uncertainty due to escalating Middle East conflicts in addition to the situation in Russia
- Demand for new vehicles is slowing in all major regions, including Europe
- Demand for parts is stable as operating hours in North America and Asia remain strong

	Q1 FY2023	Q2 FY2023	Future Outlook
Japan	Raw material prices continue to rise and the yen continues to weaken Logistics costs are improving Demand for construction equipment remains firm	Energy, raw material costs and logistic costs continue to rise but demand for construction equipment is firm	Energy, raw material costs and logistic costs continue to rise, demand for construction equipment remains firm
North America	Energy and raw material costs soaring The yen continues to depreciate and logistics costs are improving Demand for construction equipment remains firm	Continued impact of price hikes in key raw materials but construction equipment uptime and demand for new vehicles steady	Continued impact of price hikes in key raw materials. Construction equipment operating hours and demand for new vehicles on a downward trend
Europe	Continued impact of energy and raw material price hikes and logistics costs are improving Demand is on a downward trend	Steady, although demand is expected to decline due to soaring prices of key raw materials	Demand expected to decline due to escalation of situation in Russia and Ukraine. Continued impact of price hikes in key raw materials
Asia	Continued impact of energy and raw material price hikes and demand is on a downward trend	Demand remains strong despite expected economic slowdown	Demand will soften due to expected economic slowdown. Continued impact of price hikes in key raw materials
China	Continued weak demand due to sluggish economic activity	Continued weak demand due to sluggish economic activity	New vehicle sales are expected to fall below the previous year's level due to the sluggish economy

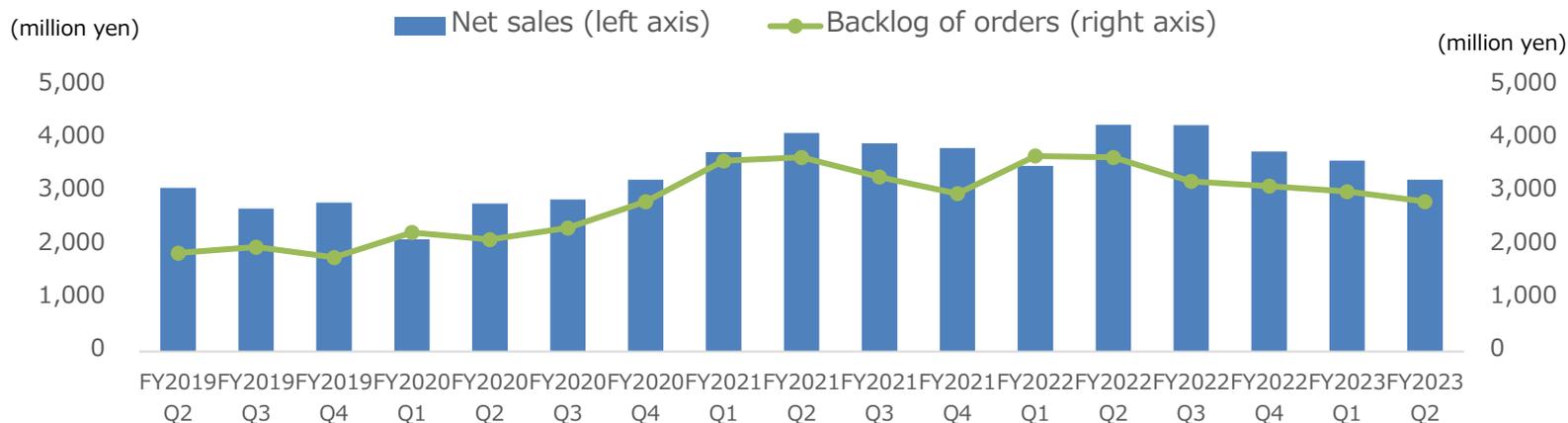
- Planned production volume (new vehicle demand) is expected to continue a gradual downward trend
- Demand for mining equipment and maintenance demand continues to maintain a firm demand environment
- Due to the effect of price adjustments, order backlogs are expected to remain at the same level

Production Results and Plans of Major Construction Machinery Manufacturers (Quarterly)



**Demand for new vehicles declined moderately on a physical quantity basis**

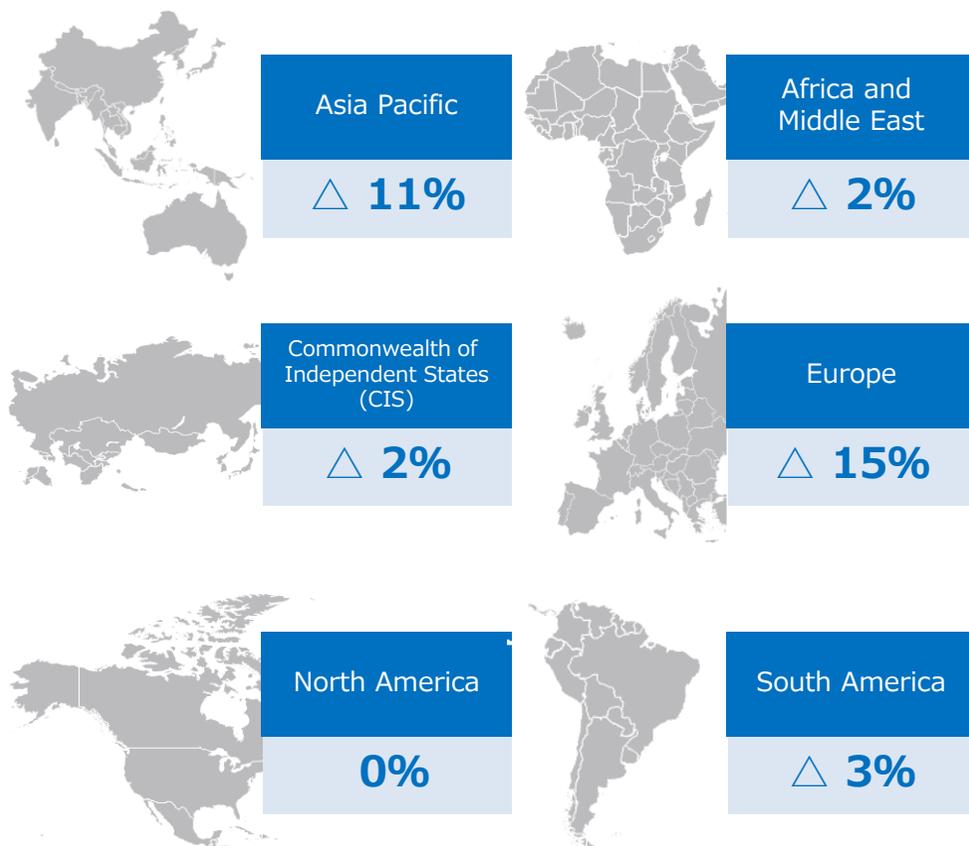
Sales and Backlog Orders: YAMASHIN Construction Machinery Filters (Quarterly)



**Orders remained at the same level due to firm demand for service parts**

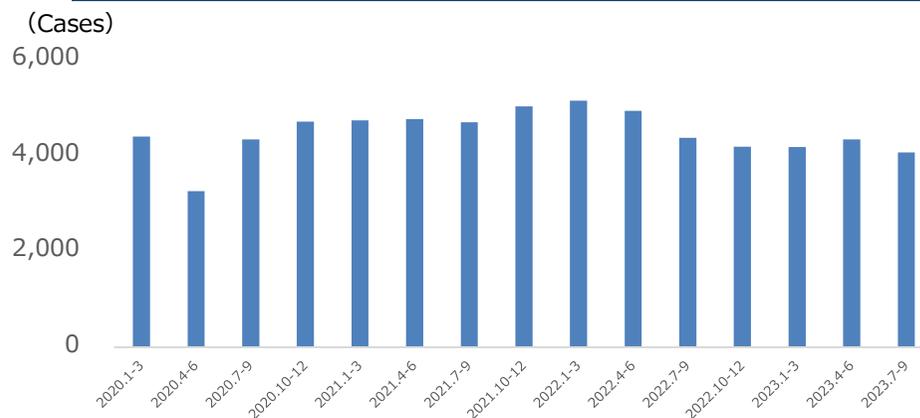
- Although regions with year-on-year declines are prominent, demand in North America remains on par with the previous year, albeit with some uncertainty
- North American housing starts remain flat despite supply-demand imbalance
- Non-residential demand such as infrastructure investment and mining demand is strong

### Growth in demand for construction machinery by region



Demand trend index (2022 vs. 2023 forecast)

### North American market: Trends in housing starts



(Compiled by the Company from Bureau of the Census)

### North American market: Trends in gross housing inventories

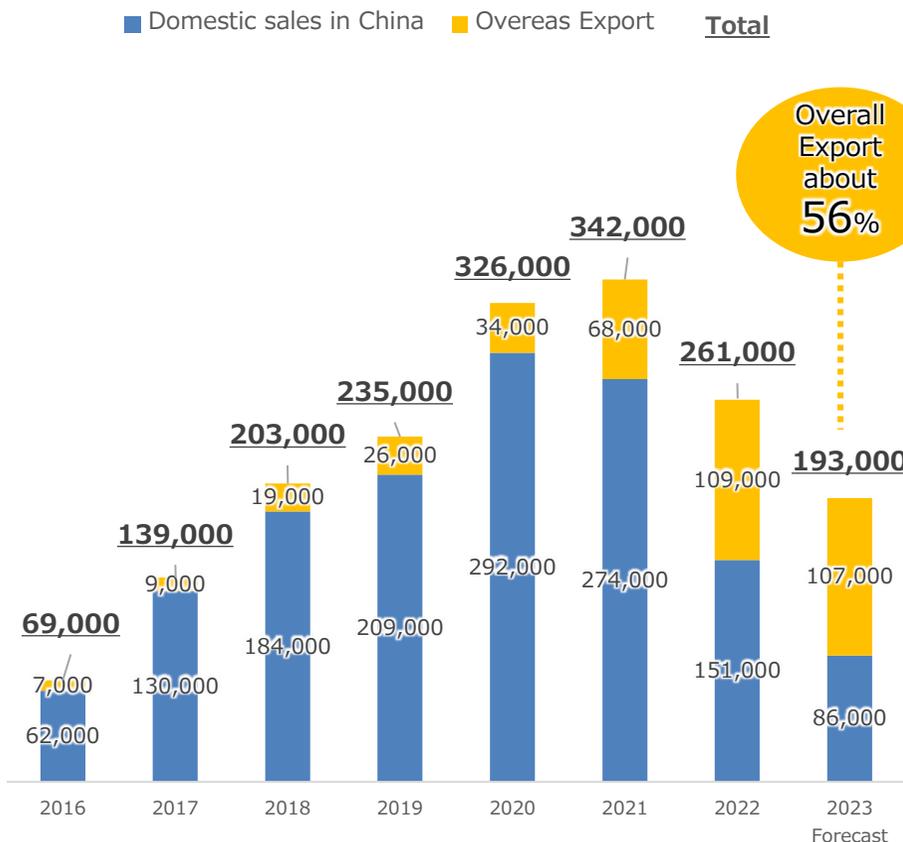


(Adapted from TRADINGECONOMICS)

- Due to the sluggish market and slow recovery, the number of units in 2023 is expected to decrease by about 26% from last year
- Export ratio is high at approximately 56%, but the future is uncertain due to the government's import/export policy

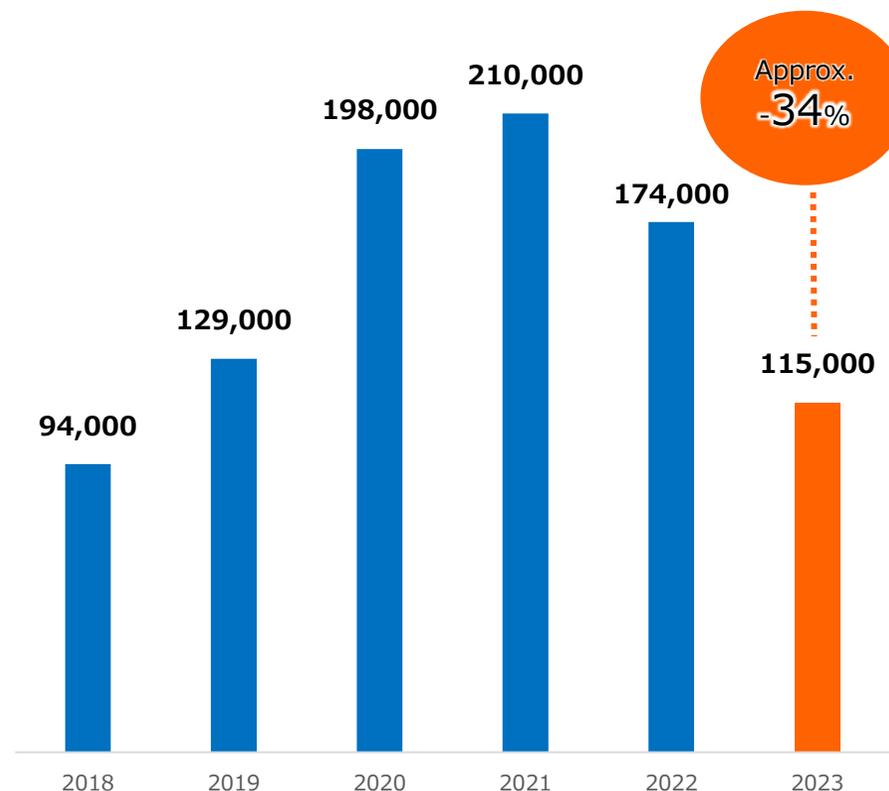
## Annual sales volume in China

(Number of vehicles)



## Production volume (forecasts) of five major Chinese construction equipment manufacturers

(Number of vehicles)



- We will strengthen cost improvement efforts to counter commodity price fluctuations
- We will promote environmentally friendly materials, construction methods, and systems, rather than mere cost reductions

**Development Design**

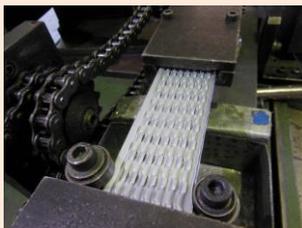
**Production**

**Distribution**

**VA・VE activity**

**Improving productivity**

**Supply chain optimization**



Considering changes in materials and construction methods

**Review of manufacturing costs**

- ◆ Review of raw materials and production processes at the design and development stage
- ◆ Acceptance and implementation of VE proposals from suppliers



**Automation Promotion**

- ◆ Productivity improvement in manufacturing process improvement
- ◆ Manpower saving through the introduction of cooperative robots to prepare for future manpower shortages

**Environmentally friendly production system**

- ◆ 100% recycling of tap water for manufacturing processes
- ◆ Cost reduction and problem solving



**Promotion of cross-sourcing**

- ◆ Established a global production and supply system in Japan, Vietnam, and the Philippines, Cebu, reviewing supply chain and reducing costs

- At the exhibition, machine warranties are trending toward extension, while counterfeiters are also becoming more active
- We are working to improve the capture rate of genuine parts, both in terms of products and user mindset

## Trends in filters for construction equipment

Eliminating imitations  
The flow of implementing a long-term warranty with authorized products

China

Southeast Asia



Imitation



## YAMASHIN initiatives

Promote seminar activities to  
**eliminate imitations**

Introduction of new  
products  
**to detect imitations**

## Seminars

Seminars are held from time to time together with construction equipment manufacturers to highlight the risks of installing counterfeit products and the performance of genuine products. Inquiries are strong due to the growing demand for service parts.



Number of participants for all of last year  
**105**

Number of participants for 1<sup>st</sup> half of this year  
**134**

## Eliminate imitations from the market with developed products

Decrease in opportunities to incorporate imitations

**YAMASHIN Nano Filter**®



**YAMASHIN**  
Nano Filter

Unit sales price is approx. **2 times** that of existing products, contributing to longer product life

Monitoring of Incorporated imitations

**Detects 100% imitations with IC**



**FILTER SAVER™**



**SWIFTROCK™**

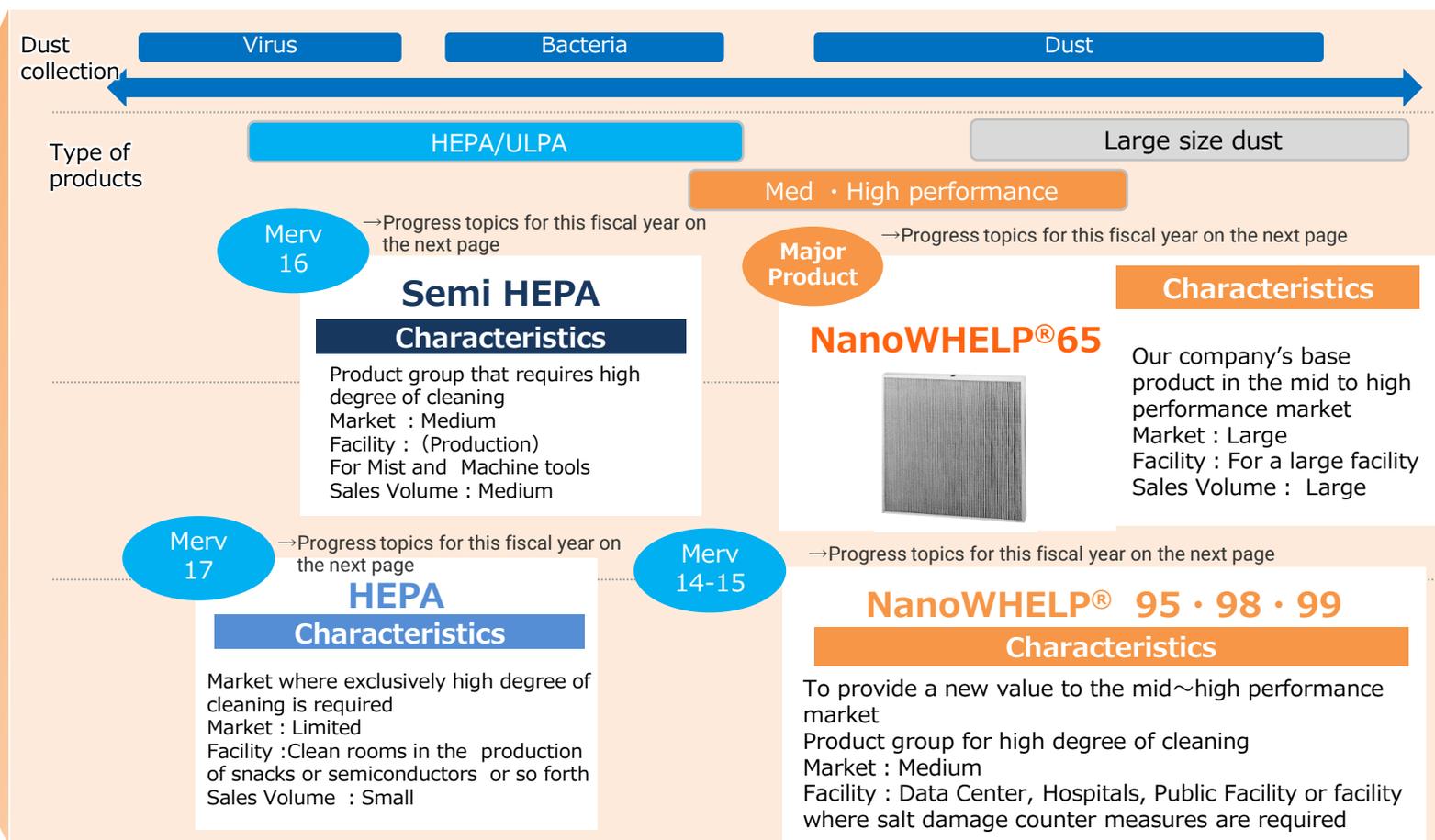


# Conditions in the Air Filter Market

- Maintaining a stable demand environment in each segment
- In buildings, repeat demand for offices and other buildings is recovering moderately
- Maintenance demand for general factories remained strong as equipment utilization rates rose

		Market environment	
Market overview		Previous year	Forecast for the current year
<b>Buildings</b>	Air filters for outdoor air intake units, indoor air conditioning, etc. installed in offices, commercial buildings, etc.	Repeat projects in urban areas are firm. Although there is a trend of local buyers being reluctant to buy, the impact is minimal	Repeat demand is strong for large properties in Tokyo and similarly, demand for small properties is also recovering nationwide
<b>General factories</b>	Air filters for outdoor air intake units, indoor air conditioning, etc. installed in factories	There are signs of recovery in large-scale projects. Inquiries for capital investment are also on the rise	Demand is recovering, especially for large-scale properties and renovation work continues to be firm
<b>Semiconductor factories</b>	Chemical filter replacement market	Demand is flat due to a lull in capital investment	Capital investment expected to remain strong
<b>Environmental equipment</b>	Air filters for residential air conditioning and air purifiers used in homes	The downward trend in housing starts has subsided and is recovering	Housing starts are on a gradual recovery trend. New housing starts expected to decline steadily over the long term
<b>Vehicles</b>	Air filters for air conditioning of railways, etc. Air filters for construction machinery dust	The Covid outbreak has settled down and public transportation replacement demand is recovering	Replacement demand remained strong due to the recovery in the number of rail passengers

- Sales expansion of the NanoWHELP® series using the market's only proprietary nanofiber filter media
- Developing the market with its features of long life and low aerodynamic drag

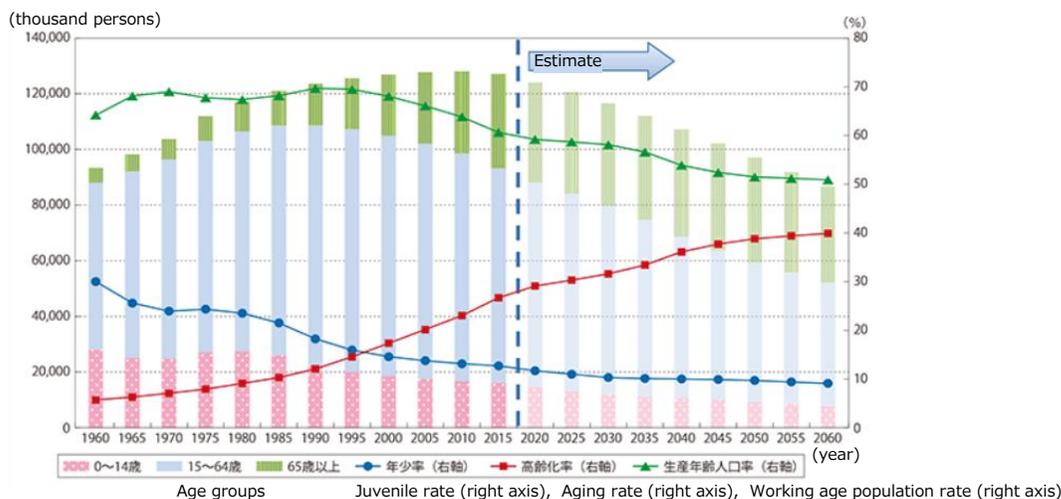


A uniquely developed material  
**YAMASHIN NANO FILTER®** is the base of development of each backbone product line

- The working population is steadily declining and labor shortages are becoming apparent
- Office demand is expected to remain strong, especially for redevelopment projects in urban areas

## Chronic labor shortage due to decline in working-age population

Diagram 1-1-1: Changes in Japan's demographic structure

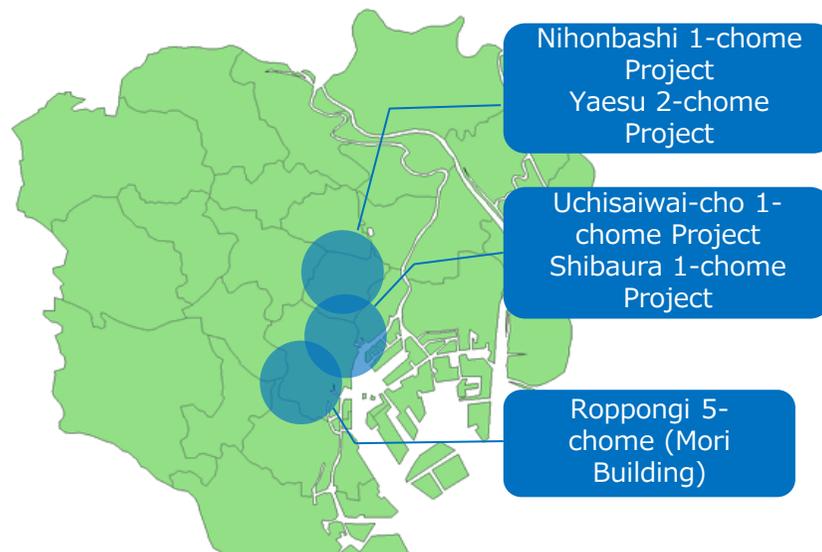


Source: Ministry of Economy, Trade and Industry, "Diversity 2.0: One Step Ahead to Competitive Strategies", June, 2017

The working-age population has declined from 87 million at its peak (1995) to 75 million, a decrease of more than 13% which will lead to a chronic shortage of labor

Longer replacement frequencies, etc., are forcing responses through reductions in man-hours required for labor.

## Tokyo 23 wards: Redevelopment plan by 2030 (total floor area of 300,000 m<sup>2</sup> or more)



- Large-scale redevelopment plans that have already been commercialized will continue until 2030
- Vacancy rate averaging around 3% for large, relatively new buildings with high demand for medium- to high-performance filters

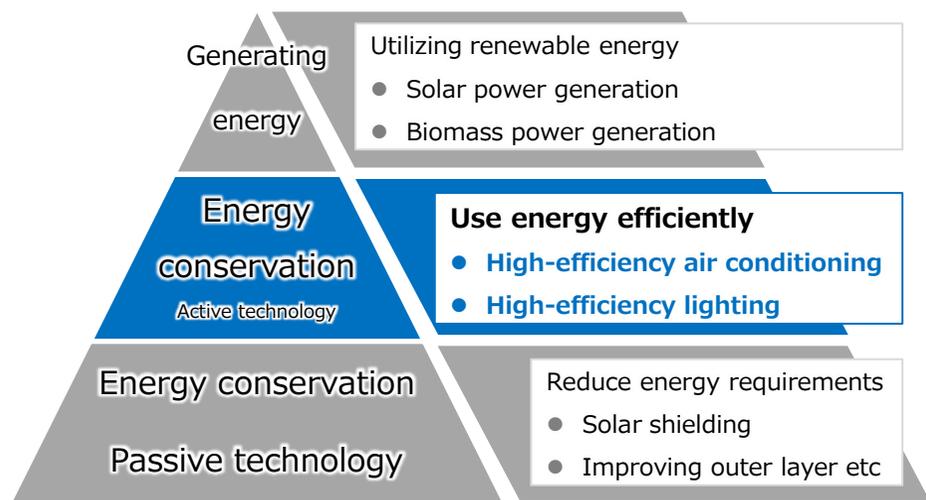
Medium to high performance filter market centered on the Tokyo metropolitan area is expected to remain unchanged until 2030.

- Ministry of the Environment promotes buildings with energy-creating and energy-saving functions for efficient operation
- Developing new markets with our flagship product, NanoWHELP®

## Environmentally Friendly Buildings (ZEB Certification)

### What is an eco-friendly building (ZEB certification)?

Net Zero Energy Building (ZEB) is a building that aims to achieve a comfortable indoor environment while reducing the annual primary energy balance consumed by the building to zero



The axis of energy conservation is the air conditioning system. Air filter is the main item

World's first nanofilter air filter

# NanoWHELP®



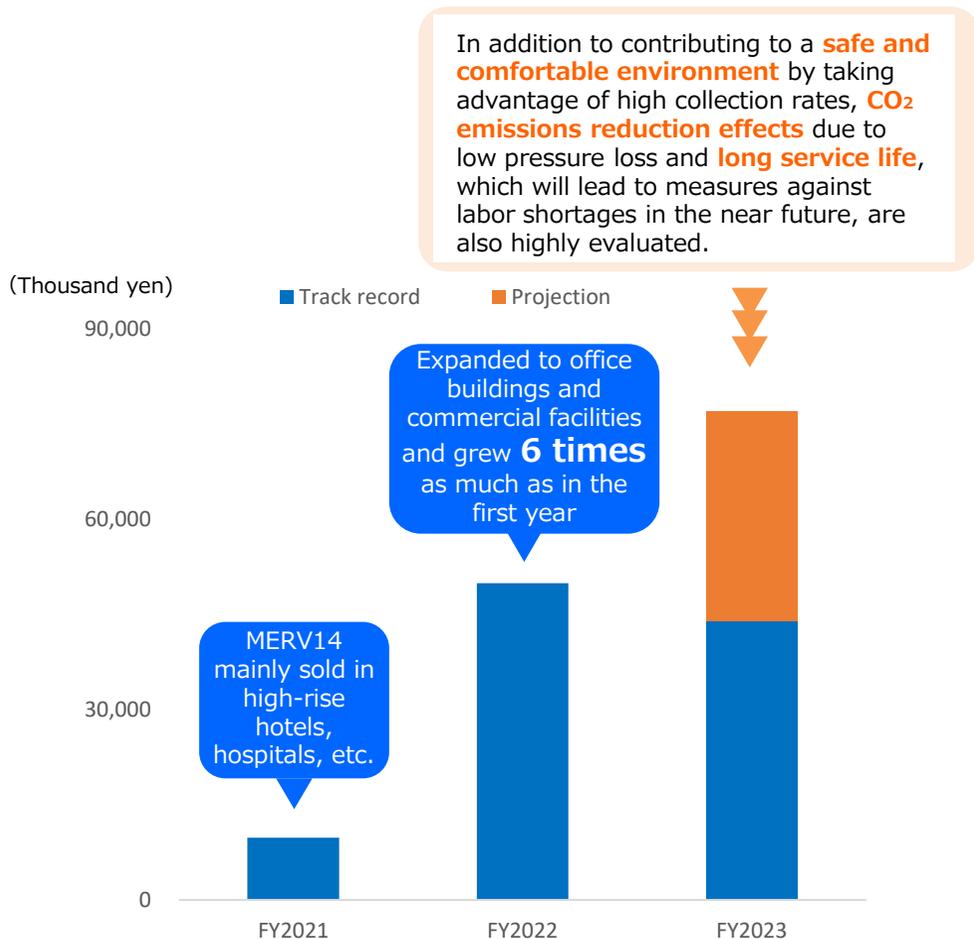
### Product Features

- YANAMSHIN NANO FILTER® performance and **sustained low pressure drop**
- The only medium to high performance filter from a Japanese manufacturer obtained **MERV14 certification**, the highest level for building air conditioning
- In addition to high performance, it is also **effective in reducing CO<sub>2</sub> emissions.**

**Collection efficiency of 96% for PM2.5  
Initial efficiency 80% or more**

- Sales are steadily increasing based on NanoWHELP's high appeal
- Develop cross-industry sales channels by building a track record of adoption in a wide variety of buildings

### NanoWHELP sales volume and sales performance trends



### Status of Introduction

Expansion from general air conditioning to the field of **environmental contribution to large-scale properties in various fields such as data centers, hospitals, offices, etc.**

#### Regional Core Hospital



One of the largest regional core hospitals in the Tama area of Tokyo. It was also the center of Covid control in the region. Due to the scale of the facility, maintenance is performed throughout the year by a resident facilities maintenance company, and it is essential to reduce man-hours. Therefore, long life, at least 2 years, was a condition for adoption.

#### Data center



Data center for a major IT solutions provider. The decision was made to adopt an existing manufacturer's product as an upgrade. The long life of the NanoWHELP was a factor in its adoption, contributing to its cost performance as well as its compliance with the MERV13 certification.



未来

# III Future Strategies



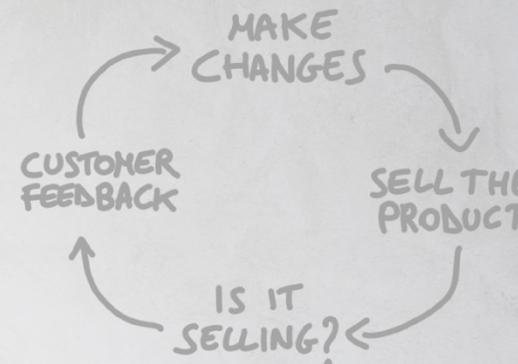
Improve earning power of core businesses and rebuild management base

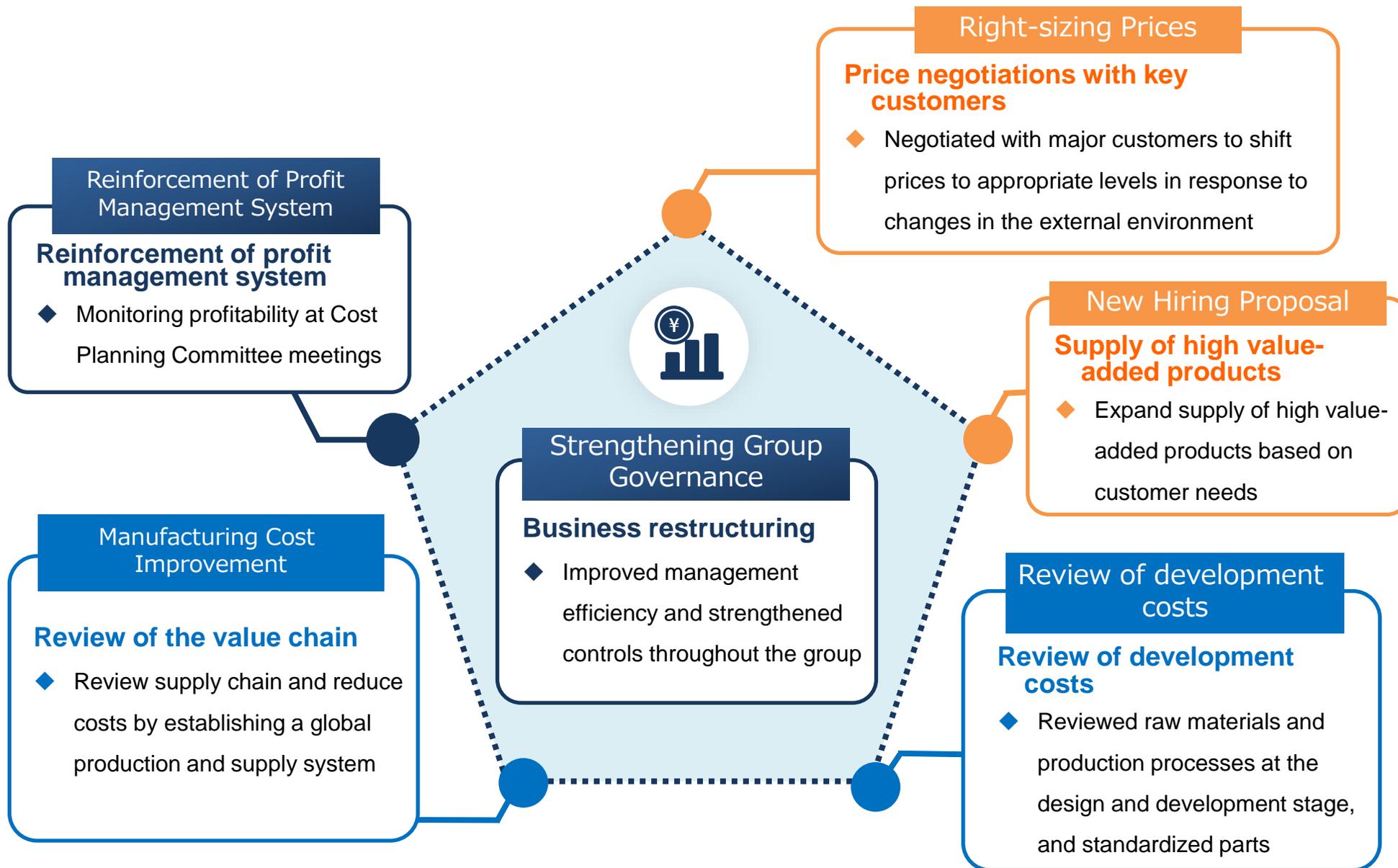


ESG management implementation



Realization of management with awareness toward cost of capital and stock price





# What to aim for Achieving Sustainable Society

Our themes

Health



Air  
Quality



Environ  
ment



Demonstrating our strengths through business

The Specialist in Filtration  
**YAMASHIN**

**ESG** management practices

Technical Meister to master the art of manufacturing  
Ability to create innovation

Construction  
machinery

Air filters

*Rokajinitsukafuru*

- Sustainability Report 2023 (in Japanese) is now published, summarizing our ESG initiatives



## Sustainability Report 2023

Main contents

### Top Message

President &  
Vice President  
dialogue



Special feature on  
Environmentally friendly  
products

Establishment of mid- to long-  
term non-financial KPIs

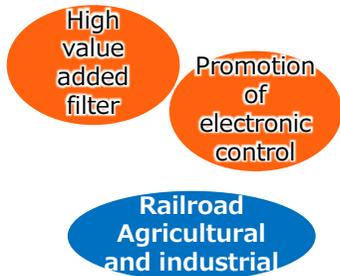
Achieving Carbon Neutrality,  
Scope 1, 2, 3 disclosure begins

Outside director  
interview

Note: English version will be published at the end of December 2023

## Construction machinery filters

Deepening of existing business areas



Exploration of new areas

Filter business for construction machinery  
High value-added filter product development

- For hydraulic
- For transmission
- For fuel

Focusing on next-generation hydraulic systems electronic control by sensors

Development of new business areas

- For freight railway
- For agricultural and industrial machinery

## Filtration media development

### Long Life/ Development of eco-friendly materials

- Petroleum-derived PET resin
- Development of Biomass PET filter media
- Development of biodegradable materials recycling circulation

# Filter media

## New business domain

### Entering the new materials field by applying YAMASHIN NANO FILTER®



Conductive material	Biomass raw materials
Sheet material	New Heat-Resistant Material

Mergers and acquisitions

## Air filters

### Sales strategy enhancement



Distributor business (product diversity /small lot)

- For building air conditioning (Pre-filter, medium-high performance filter)
- Direct sales (high cleanliness HAPA/ULPA)

**NanoWHELP®**



**In FY2023, focusing on improving earning power of core businesses, implementing ESG management, and strengthening management foundation**

**Announcement of full-year financial results for the fiscal year ending March 31, 2024 in mid-May 2024**

**Planning to announce new Medium-term Management Plan**

# 目次

REFERENCE MATERIALS

## ① BASIC COMPANY INFORMATION

YAMASHIN Group purchases glass fibers and non-woven fabrics, which are the main materials to manufacture filter media (the key parts of filters). Our Group also purchases metal processed products and resin processed products used in filter components to manufacture construction machinery filters, industrial filters, process filters and air filters. From May 2020, we started to sell filter masks and mask inner sheets made from our proprietary synthetic polymer nanofibers.

Field	Products	Product Image	Composition ratio (Forecast of FY2023)
Construction Machinery Filters	Filters used for filtering hydraulic oil in hydraulic circuits, diesel oil for fuel, and lubricating oil for engine drive, which are indispensable for driving construction machinery. Applications: Various types of construction equipment		
Healthcare	Highly performance masks and replacement inner sheets that utilize the characteristics of synthetic polymer-based nanofibers, such as high filtration performance, excellent sealing performance, and high air permeability. Applications: For general consumers in Japan and around the world		
Industrial Filters	Filters used for filtration of hydraulic oil and lubricating oil in hydraulic units applied in various industries. Applications: Machine tools, refrigeration compressors, agricultural machinery, ships, railway vehicles, aircraft, and helicopters		
Process line Filters	Filters required for filtration and separation in the manufacturing process of customer products Applications: Electronic components, precision components, liquid crystal displays and food industries, etc.		
Air filters	Coarse dust removal air filters, medium- to high-performance air filters Applications: Dust removal, deodorization, etc. for general buildings, hotels, various factories, etc.		

# 目次

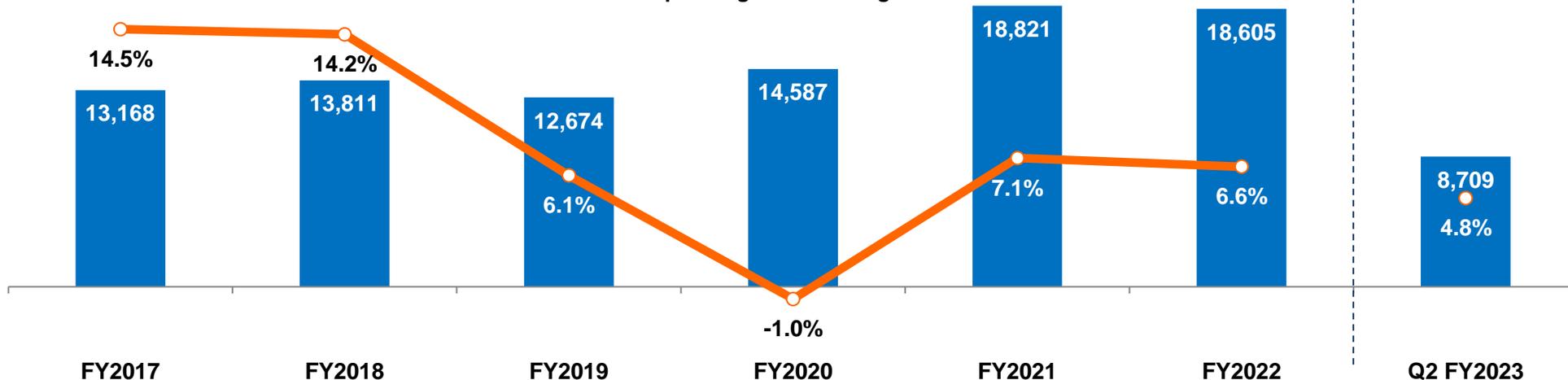
REFERENCE MATERIALS

② FINANCIAL HIGHLIGHTS

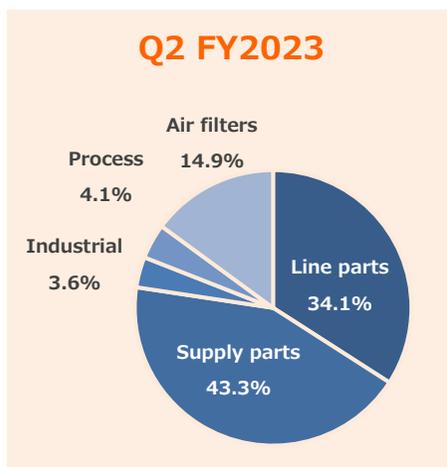
## Net sales, Operating income margin

(million yen)

■ Sales    ○—○ Operating income margin



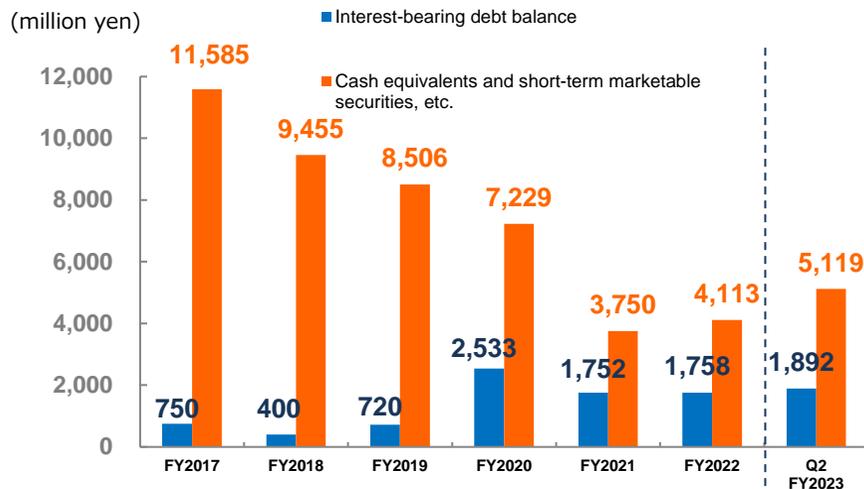
## Sales breakdown by product category



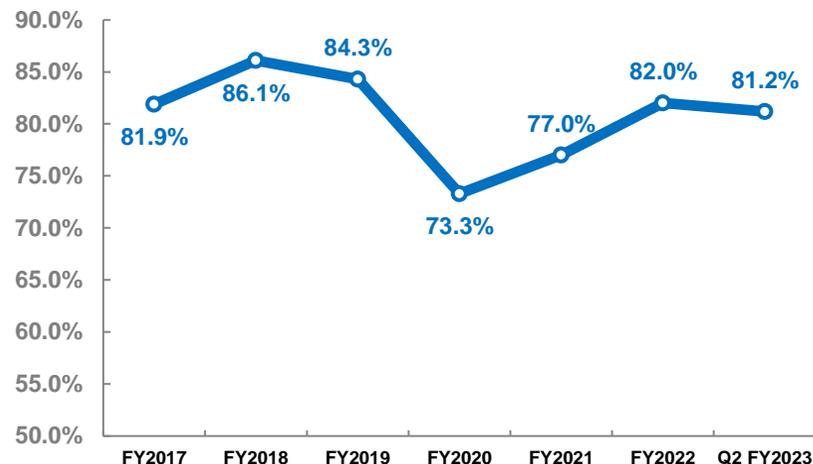
## Sales breakdown by region



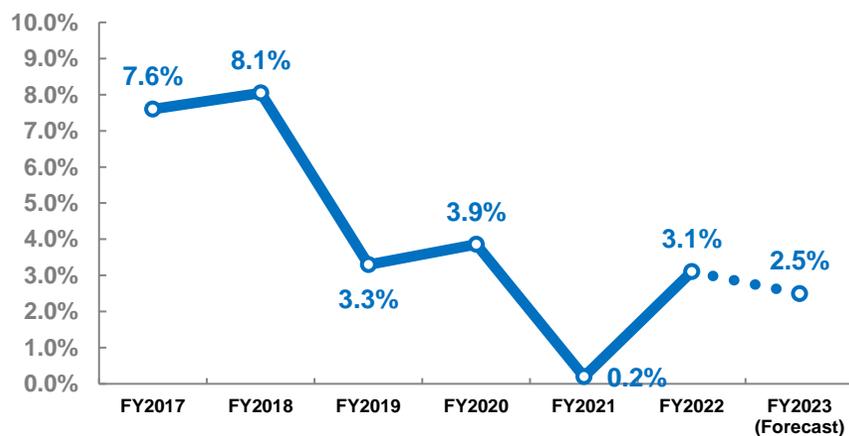
### Interest-bearing debt, cash equivalents short-term investment securities, etc.



### Shareholders' Equity Ratio

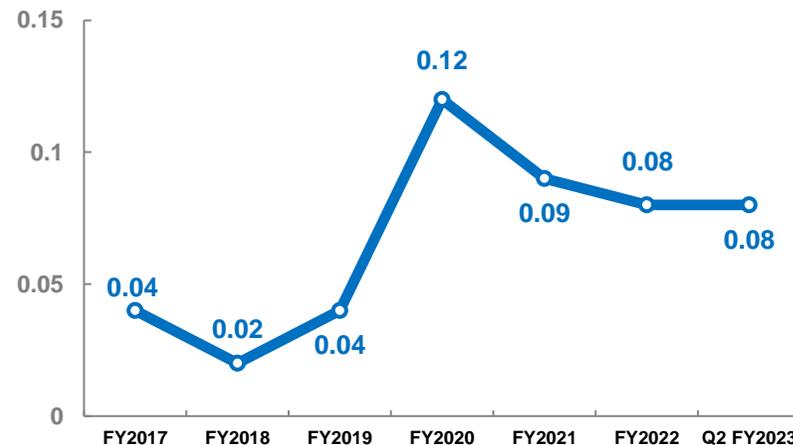


### ROE



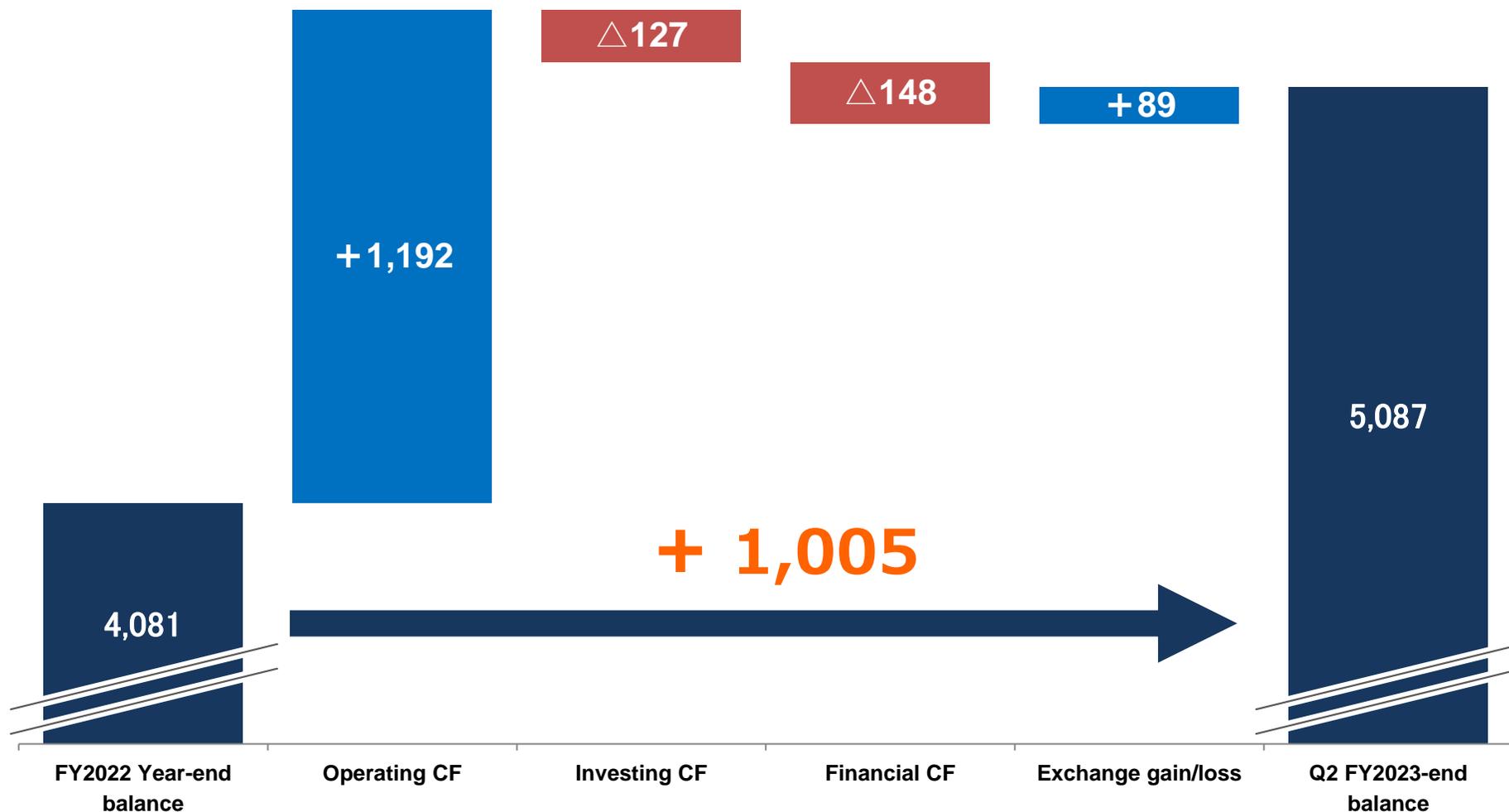
- Calculations are based on the assumption that the third-party allotment of new shares conducted in FY2017 was conducted from prior periods.

### D/E Ratio



- Calculations are based on the assumption that the third-party allotment of new shares conducted in FY2017 was conducted from prior periods.

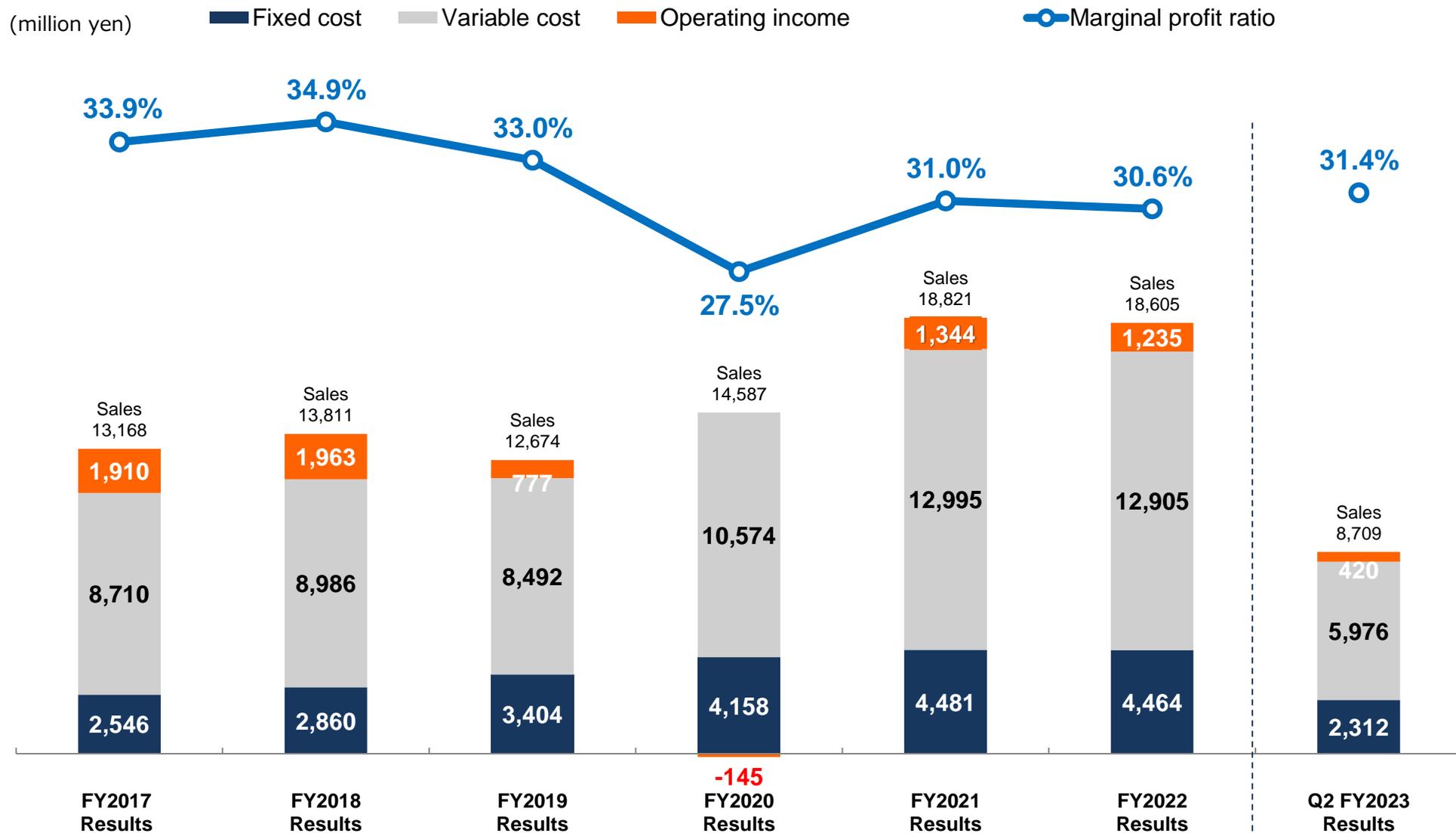
(million yen)



\*For long-term deposits with maturities of less than one year (¥32 million at the end of FY2022 and ¥32 million at the end of Q2 FY2023), cash and cash equivalents are not included in the ending balance of cash and cash equivalents.

(million yen)

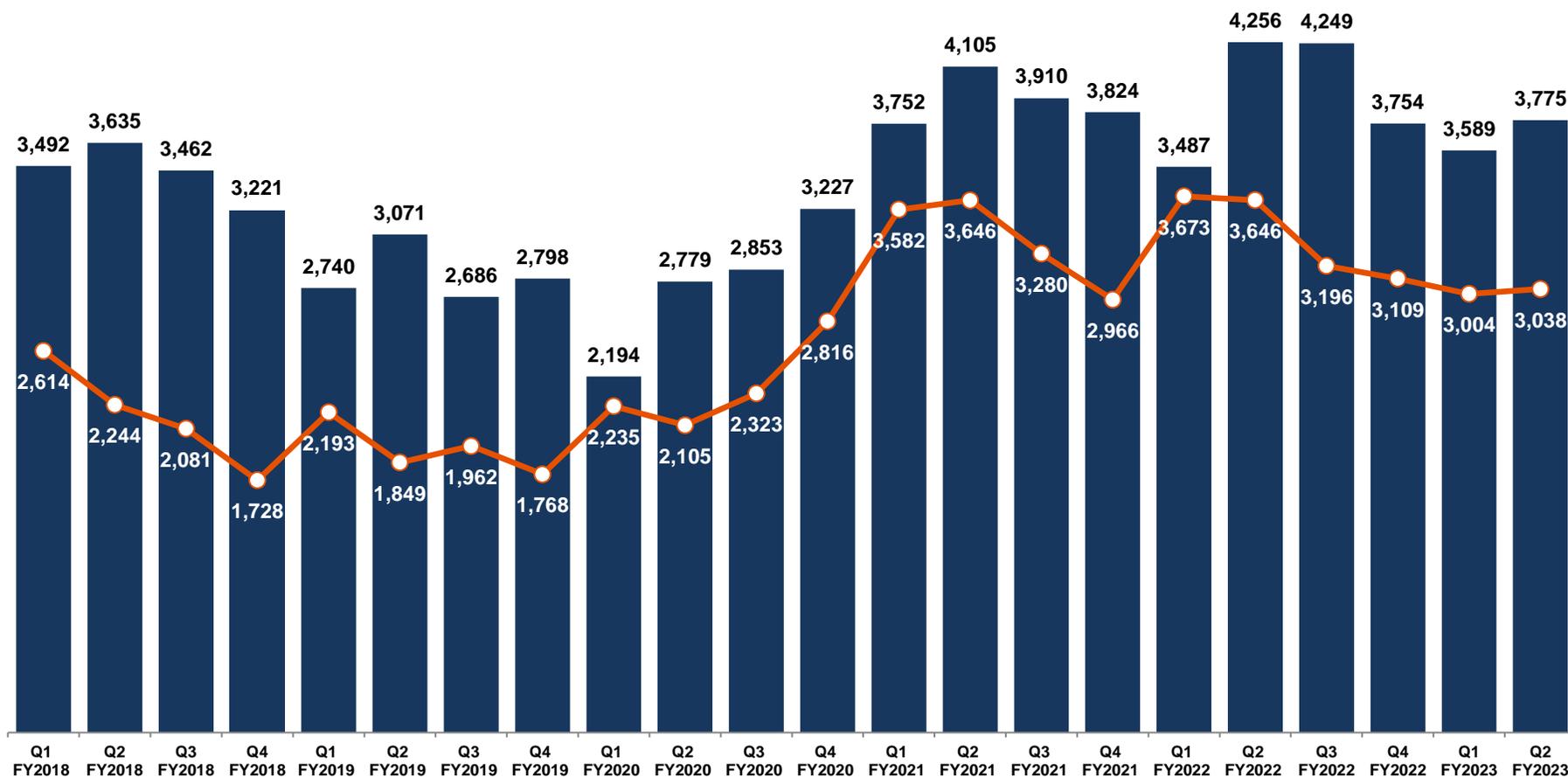
Currency	Incoming		Outgoing		Net	Average rate during the term (JPY)	In case of yen appreciation (10%)			In case of yen depreciation (10%)		
	Amount by currency	Composition ratio	Amount by currency	Composition ratio	Amount by currency		If yen is appreciated ▲10% (JPY)	Difference	Affected amount (YTD)	If yen is depreciated +10% (JPY)	Difference	Affected amount (YTD)
JPY	¥7,800	60%	¥6,300	53%	¥1,500	-	-	-	-	-	-	-
USD	\$31.7	34%	\$32.8	38%	\$-1.1	¥141.0	¥126.90	¥-14.10	¥15.51	¥155.10	¥14.10	¥-15.51
EUR	€4.2	5%	€2.3	3%	€1.9	¥153.4	¥138.05	¥-15.34	¥-29.14	¥168.73	¥15.34	¥29.14
PHP	PP1.4	0%	PP209.2	4%	PP-207.8	¥2.5	¥2.28	¥-0.25	¥52.57	¥2.78	¥0.25	¥-52.57
THB	฿41.0	1%	฿17.5	1%	฿23.50	¥4.1	¥3.65	¥-0.41	¥-9.52	¥4.46	¥0.41	¥9.52
VND	0.0 đ	0%	254.3 đ	1%	-254.30 đ	¥0.6	¥0.54	¥-0.06	¥15.12	¥0.65	¥0.06	¥-15.12
<b>Total</b>	-	100%	-	100%	-	-	-	-	¥44.54	-	-	¥-44.54



(million yen)

■ Sales

○ Backlog orders



\*Sales do not include healthcare sales.



The forward-looking statements in this document, including the forecast of results of operations, are based on information currently available to YAMASHIN. Actual results may differ from these forecasts due to a variety of factors, including market trends and business conditions.

For inquiries regarding these materials, please contact our Public Relations & Investor Relations manager

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