

Construction Machinery Filter Demand Remains Strong

No changes to the disclosed budget!

YAMASHIN-FILTER CORP.
Financial Results for the First Quarter of
the Fiscal Year Ended March 31, 2023

August 3, 2022

Market Environment

Construction machinery filter business

Market

Japan

North America

Europe

Asia

China

Construction machinery operating time and demand for new vehicles is high

Slower

Logistics costs and raw material prices

Currency exchange

Soaring

Yen depreciation



Air filter business

⇒ Replacement demand in areas such as office buildings is on a recovery trend, and based on the Post-COVID-19 era and environmental issues such as climate change; **presenting opportunities to expand our business**

Company Actions for FY2022

Construction machinery filter business

- ◆ Promoting the expansion of high-value-added filter product lineup that leverage new materials and IoT technologies
- ◆ Increasing market share in the North American and Chinese markets
- ◆ Promoting price adjustments
- ◆ Strengthening the value chain and restructuring the supply chain

Air filter business

- ◆ Expansion of nanofiber air filter supply and market share

Other business portfolio

- ◆ Expansion of market area into industrial materials

Business Results for Q1 FY2022

Consolidated sales: **4,169** million yen
YoY: **11.0% decrease**

Consolidated operating income: **94** million yen
YoY: **72.4% decrease**

Significant decrease in revenue and income due to the lockdown in China, rising ocean freight and raw material costs, and the sharp yen depreciation

Construction machinery filter	YoY 5.8% decrease 3,532 million yen	While construction equipment uptime and demand for new vehicles remained strong, lockdowns in the Chinese market had a major impact.
Air filter	YoY 0.2% decrease 636 million yen	Demand for filters for building air-conditioning systems is recovering in line with the recovery in economic activity, and is on a par with the previous year.
*Healthcare	It is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2023, to reflect the degree of impact on YAMASHIN's performance (295 million yen in Q1 FY2021).	

Market Environment and Our Actions for FY2022**Further strengthening of sales capacity****● Construction machinery filter business:****Promoting business by leveraging a solid business environment**

- ◆ YAMASHIN has expanded its high value-added filter product lineup by utilizing new materials and IoT technology.
- ◆ We started promoting filter sales of YAMASHIN Nano Filter® materials from April 2022.
- ◆ We are applying our construction machinery filter technology to other fields.

● Air filter business:

We will capture new market share by NanoWHELP®.

● Balancing SDG initiatives and business portfolio expansion

We have expanded the market area of YAMASHIN Nano Filter® to industrial

Profit improvement initiatives**● Construction machinery filter business:****Promoting price adjustments**

- ◆ Adjusting prices as a way to combat rising raw material and distribution costs

Restructuring and strengthening the value chain

- ◆ To stabilize procurement of key raw materials.
- ◆ We are reviewing our supply chain and reducing logistics costs through the operation of YVC (Vietnam Plant).

Exchange rate fluctuations measures

- ◆ We are strengthening operational hedge-marry and netting measures and actively using derivatives transactions to reduce the impact on business performance.

● Air filter business:

We are improving profitability through increased productivity.

Our Three Business Challenges and Improvement of Earning Power

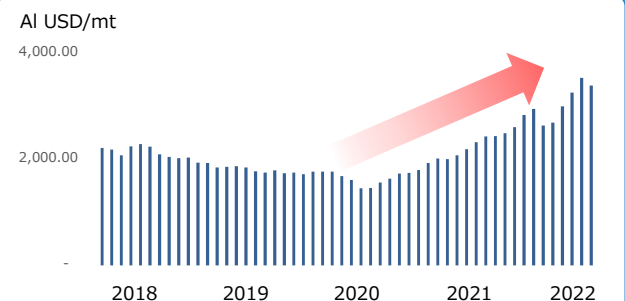
- Operating income is under pressure due to material price hikes, exchange rate fluctuations, and logistics costs.
- We implemented measures to curb losses as much as possible in order to improve earning power.

Soaring material prices

Current conditions:

Prices of materials such as aluminum and steel, which account for 60% of raw materials, soared to **double** the previous year's level.

Aluminum prices trends



Yen depreciation

Current conditions:

Negative impact on operating income due to rapid yen depreciation

Reference data

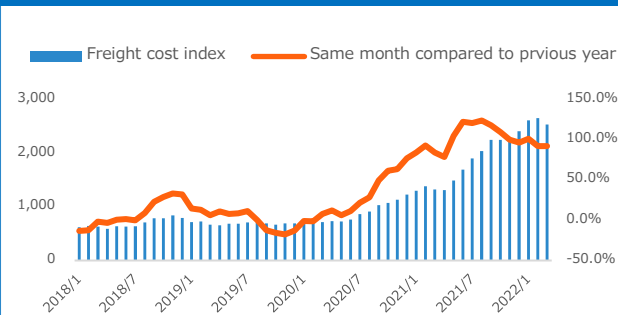
- ◆ Depreciation by 1 yen reduces operating income by approximately 5 million yen

Increase in logistics costs

Current conditions:

Ocean freight costs more than **tripled** from the previous year
Container unit price is approximately **5 times** higher than the previous year

North America Outbound West, Monthly Freight Index Trends



Taken from materials prepared by the Planning and Research Department, Japan Maritime Center

Price adjustments & Stabilize procurement of key raw materials

Adjusting prices, stabilizing procurement prices through implementing derivative transactions

Review of payment currencies

Strengthening of operational hedge-marry and netting measures, mainly with suppliers.
Reducing the negative impact on operating income through the implementation of forward exchange contracts

Price adjustments & Strengthening of supply chain

Adjusting prices and reviewing supply chain and reduced logistics costs by operating YVC (Vietnam Plant).

I

Business Performance Results for Q1 FY2022 and Full-Year Forecasts for FY2022 (Ending March 31, 2023)

P5

II

Market Conditions

P25

III

Future Strategies

P35



I

**BUSINESS PERFORMANCE RESULTS FOR Q1 FY2022 AND
FULL-YEAR FORECASTS FOR FY2022 (ENDING MARCH 31, 2023)**

Business Performance Results for Q1 FY2022 (April to June 2022)

Q1 FY2022 Financial Results (2022 April to June)

(million yen)		Q1 FY2021 Results	Q1 FY2022 Results	Difference	
		Amount	Amount	Amount	%
Net sales		4,685	4,169	△515	△11.0%
	Construction machinery filters, etc. *1	3,752	3,532	△219	△5.8%
	Air filters	637	636	0	△0.2%
	Healthcare*2	295	—	△295	△100.0%
Operating income (segment income)		341	94	△247	△72.4%
	Construction machinery filters, etc. *1	479	93	△386	△80.6%
	Air filters	△26	0	27	—
	Healthcare*2	△111	—	111	—
Operating income margin		7.3%	2.3%	△5.0Pt	
	Ordinary profit	334	57	△277	△82.8%
Ordinary profit margin		7.1%	1.4%	△5.8Pt	
	Net income	208	12	△195	△94.1%
Net income margin		4.4%	0.3%	△4.1Pt	
Exchange rates (ave.)	USD	109.5	129.6	20.0	18.3%
	EUR	132.0	138.1	6.1	4.7%

*1 "Construction machinery filters" includes industrial filters and process filters, in addition to construction machinery filters.

*2 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2023, to reflect the degree of impact on YAMASHIN's performance.

*With the goal of more accurately representing segment results and corporate expenses, general and administrative expenses and other expenses of the administrative divisions of the head office and subsidiaries are separately listed.

Sales Forecast by Product Category (2022 April to June)

(million yen)	Q1 FY2021 Results	Q1 FY2022 Results	Difference	
	Amount	Amount	Amount	%
Construction machinery filters	3,435	3,136	△298	△8.7%
Line parts	1,488	1,299	△189	△12.7%
Service parts	1,946	1,837	△108	△5.6%
Industrial filters	129	185	55	43.3%
Process filters	188	211	23	12.2%
Subtotal	3,752	3,532	△219	△5.8%
Air filters	637	636	0	△0.2%
Healthcare^{*1}	295	—	△295	△100.0%
Total	4,685	4,169	△515	△11.0%

*1 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2023, to reflect the degree of impact on YAMASHIN's performance.

Sales Forecast by Region (2022 April to June)

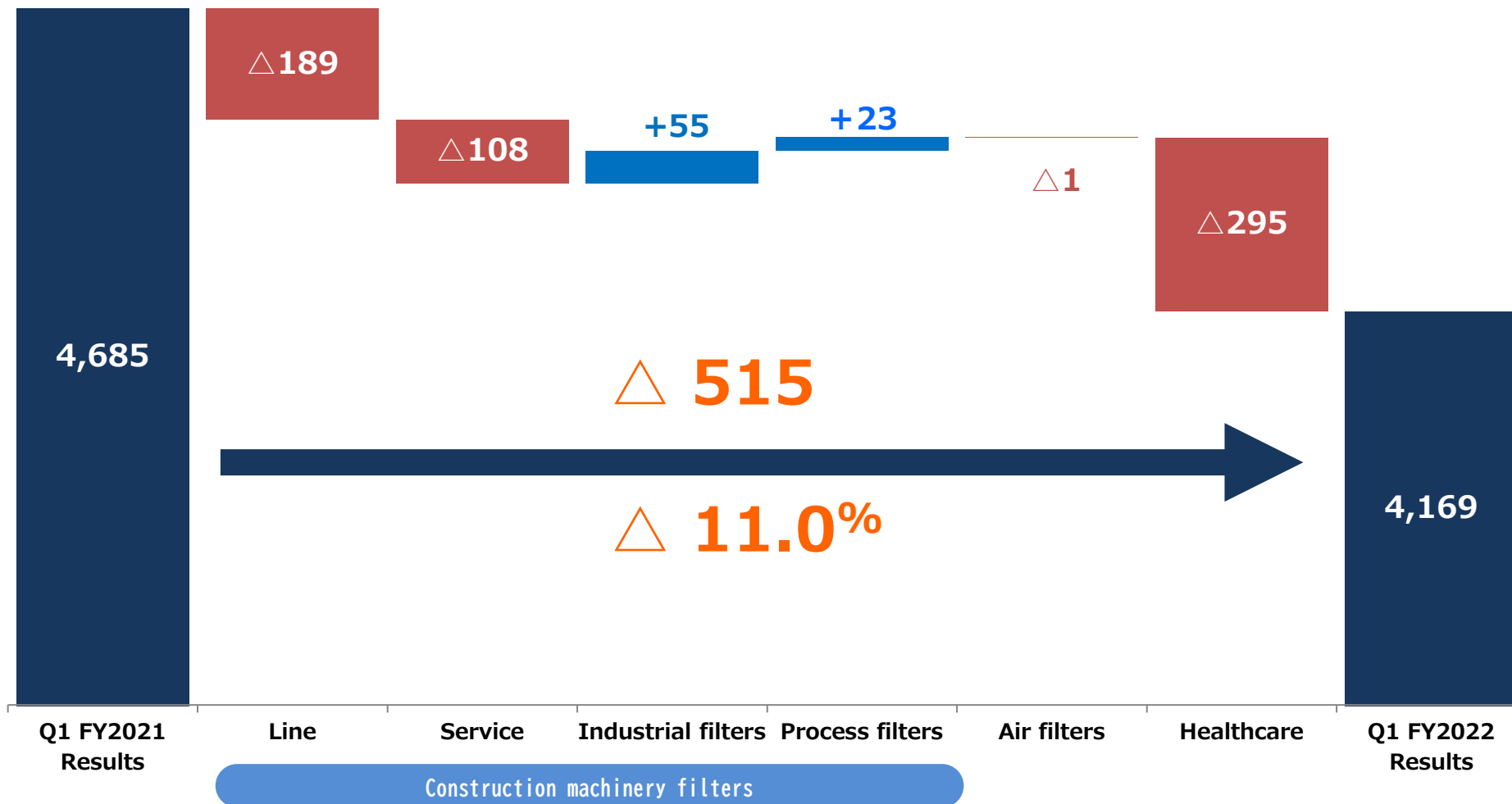
(million yen)	Q1 FY2021 Results		Q1 FY2022 Results		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
Construction machinery filters, etc. *1	3,752	80.1%	3,532	84.7%	△219	△5.8%
Japan	1,729	36.9%	1,840	44.1%	111	6.4%
North America	686	14.7%	660	15.8%	△26	△3.9%
China	564	12.1%	268	6.4%	△295	△52.4%
Other Asian countries	365	7.8%	334	8.0%	△30	△8.3%
Europe	405	8.6%	426	10.2%	21	5.3%
Others (Middle East, etc.)	1	0.0%	2	0.0%	0	75.3%
Air filters (Japan)	637	13.6%	636	15.3%	0	△0.2%
Healthcare*2 (Japan)	295	6.3%	0	0.0%	△295	△100.0%
Total sales*	4,685	100.0%	4,169	100.0%	△515	△11.0%

*1 "Construction machinery filters" includes industrial filters and process filters, in addition to construction machinery filters.

*2 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2023, to reflect the degree of impact on YAMASHIN's performance.

* Sales by region here are calculated based on the locations of corporations to which invoices are sent. Actual regional market trends may be different from the numbers shown above.

(million yen)



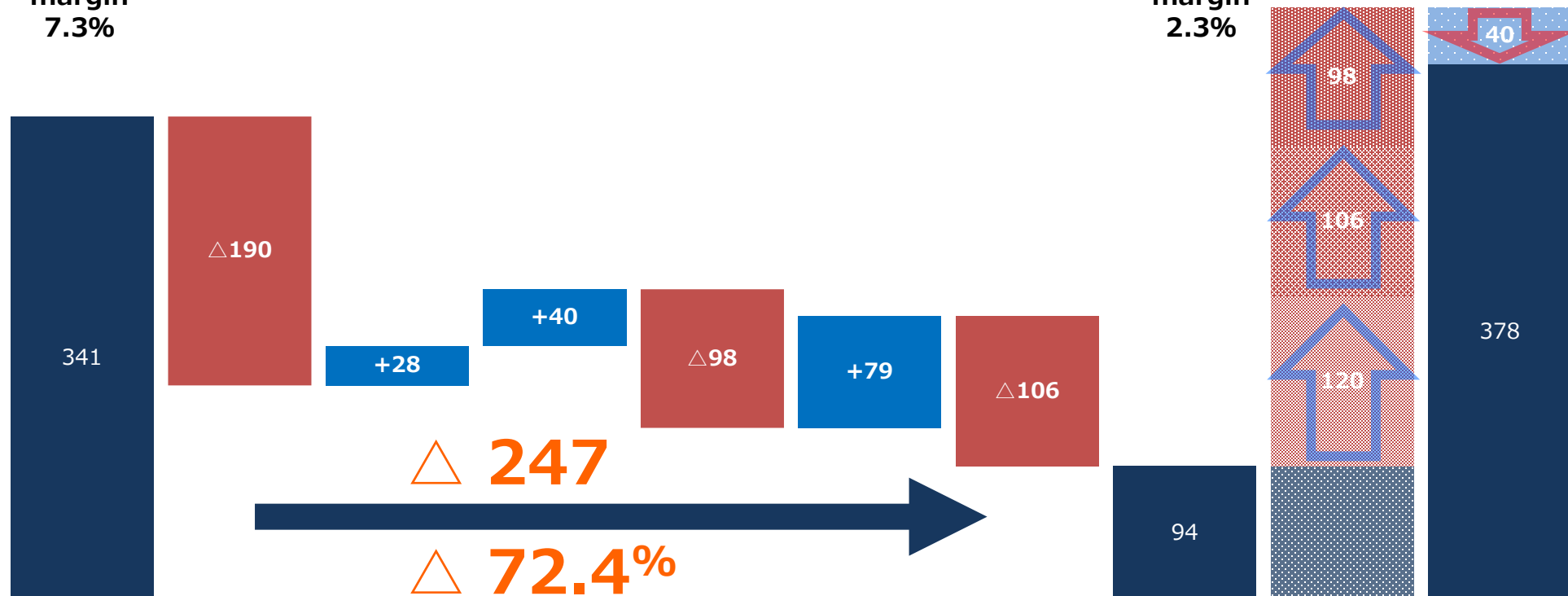
Changes in Operating Income (2022 April to June)

(million yen)

Operating
income
margin
7.3%

Operating
income
margin
2.3%

Operating
income
margin
9.1%



Q1 FY2021
Results

<Construction
machinery>
Increase due to
lower sales

<Air filters>
Increase due to
reduction in
variable
costs such as
outsourced
processing
costs

<Construction
machinery>
Increase due to
price adjustments

<Construction
machinery>
Decrease due to
higher ocean
freight costs

<Construction
machinery>
Increase due to
lower air freight
costs

<Construction
machinery>
Decrease due to
sharp rise in
raw material
costs

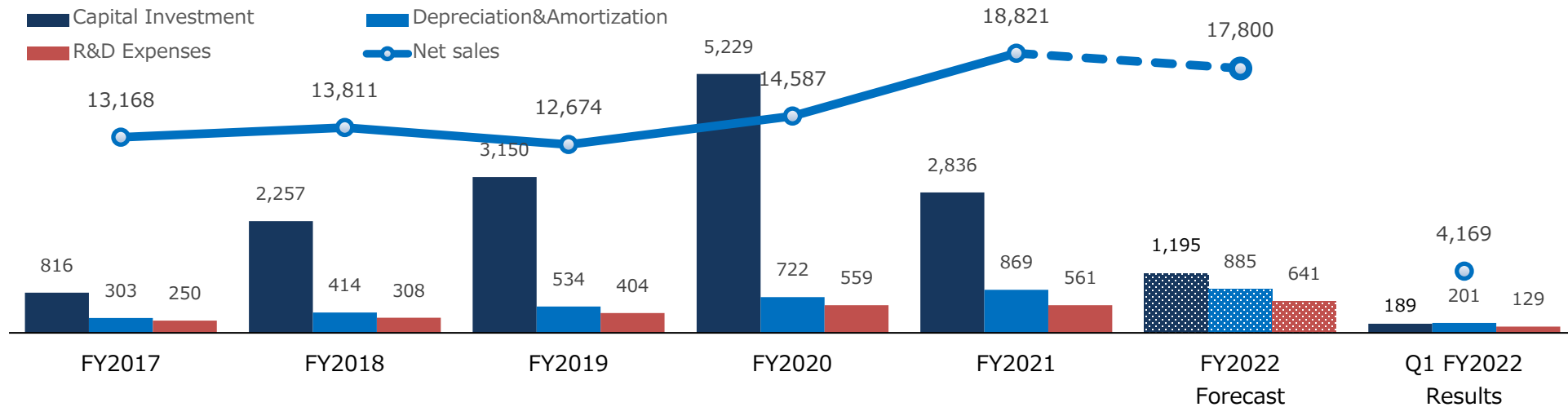
Q1 FY2022
Results

Q1 FY2022
Results
True earnings
potential
(when exceptional
costs associated
with COVID 19
are not incurred)

Capital Investment, Depreciation & Amortization, and R&D Expenses

(million yen)	FY2017 Results	FY2018 Results	FY2019 Results	FY2020 Results	FY2021 Results	FY2022 Forecast	FY2022 Q1 Results
Net sales	13,168	13,811	12,674	14,587	18,821	17,800	4,169
Capital investment	816	2,257	3,150	5,229	2,836	1,195	189
Land and building	—	1,588	2,682	3,194	1,488	124	33
Facilities and others	816	669	468	2,036	1,347	1,070	156
Expense to sales ratio	6.2%	16.3%	24.9%	35.9%	15.1%	6.7%	4.6%
Depreciation and amortization	303	414	534	722	869	885	201
Expense to sales ratio	2.3%	3.0%	4.2%	5.0%	4.6%	5.0%	4.8%
R&D expenses	250	308	404	559	561	613	129
Expense to sales ratio	1.9%	2.2%	3.2%	3.8%	3.0%	3.4%	3.1%

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



Up to FY2021

FY2022

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

PAC22



romptly



ctivated



ost reduction

20



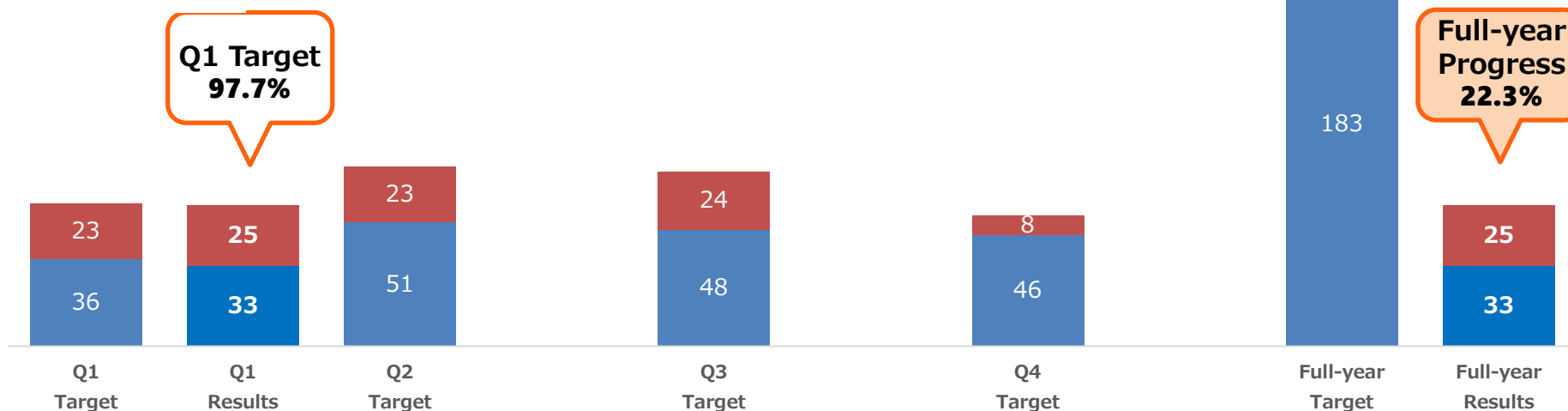
Reduction Targets and Results

(million yen)		Q1 Target	Q1 Results	Q2 Target	Q3 Target	Q4 Target	Full-year Target
PAC22	Mfg. Costs	36	25	51	48	46	183
	SG & A	23	23	23	24	8	80
Total		60	58	75	72	54	263

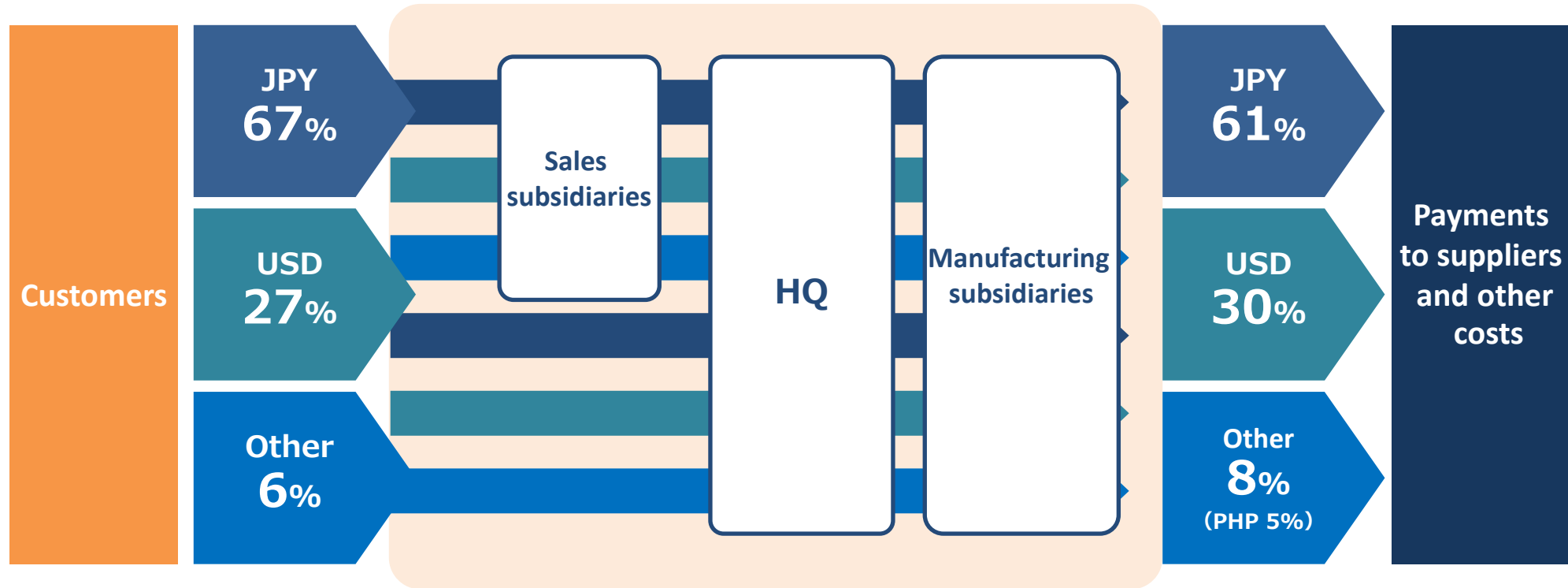
Progress

■ Mfg. Costs ■ SG & A

(million yen)



Negative impact on operating income of approximately 120 million yen due to rapid yen depreciation.



70% of transaction currency is JPY.

USD is overpaid.

- 1-yen depreciation of the yen would decrease operating income by approximately 5 million yen.
- Strengthening exchange rate by reviewing settlement currency, reducing the negative impact on operating income through forward exchange contracts, etc.

Target figures are set at each department (administrative and other operation departments) to achieve the overall company target for MAVYS.

What is MAVYS? (ROIC – WACC)

Maximizing
Added
Value of
Yamashin Filter
Spread

The key goal indicator (KGI), based on which each relevant department sets its KPIs and KSFs, and works on measures to attain targets, with the goal of maximizing return on invested capital.

Meet the expectations of stakeholders by improving MAVYS (key goal indicator).

Assign KPIs to relevant departments who are responsible for target setting and implementing actions for achieving the targets in a company-wide coordinated effort.

MAVYS: The Big Picture and the Department (FY2022)

Key Goal Indicator (KGI)	Key Performance Indicator (KPI)	Key Success Factor(KSF)	Relevant departments	Targets for FY2022 (action plan)	FY2022 progress	
<p>*KPI figures are based on the following. Prv : FY2021 (Full-year results) Cur : FY2022 (Forecast)</p> <p>MAVY's Prv: -0.6% Cur: -3.3%</p> <p>ROIC Prv: 4.7% Cur: 2.0%</p> <p>WACC Prv: 5.3% Cur: 5.3%</p> <p>ROE Prv: 0.2% Cur: 2.3%</p> <p>ROA Prv: 0.2% Cur: 1.7%</p>	<p>Operating income Prv: 7.1% Cur: 3.9%</p> <p>Gross profit ratio Prv: 40.4% Cur: 38.1%</p> <p>SG&A ratio Prv: 33.3% Cur: 34.1%</p> <p>Operating capital turnover rate Prv: 3.1 Cur: 2.9</p> <p>Investment capital turnover rate Prv: 0.9 Cur: 0.8</p> <p>FA turnover rate Prv: 1.5 Cur: 1.4</p>	<p>Sales growth ratio Prv: 29.0% Cur: -5.4%</p>	<p>New product development Enhance market share of genuine products</p>	<p>Sales / R&D</p>	<p>Construction machinery: - Expand share of major customers (long-life, sensors), - Expand and accelerate entry into the Chinese market - Air filters: Expand sales through new products (NanoWhelp) (direct sales, domestic and overseas) - Enter new business domains</p>	<ul style="list-style-type: none"> Made progress on proposals involving hybrid filters Improve adoption rates of new models for Chinese construction machinery manufacturers Continued progress in sales for new air filter products Continued progress in supply to the apparel industry (not using down materials)
		<p>Cost to sales ratio Prv: 59.6% Cur: 61.9%</p>	<p>Enhance buying power Improve yield ratio</p>	<p>Production / Procurement</p>	<ul style="list-style-type: none"> PAC22 Reform and improve purchasing methods Improve production management 	<ul style="list-style-type: none"> Revised supplier evaluation standards and completed the consolidation process Reduced procurement costs through joint procurement with AQC Improved yields through planned service and maintenance, progress in manufacturing cost reduction measures
		<p>Depreciation cost ratio Prv: 4.6% Cur: 5.0%</p>	<p>Investment plan</p>	<p>Management planning / Finance and accounting</p>	<ul style="list-style-type: none"> M&A (for revenue expansion and diversification) →Research potential M&A targets →Acquire nonwoven manufacturing entities (downstream) →Acquire new material development entities (upstream) 	<ul style="list-style-type: none"> Exploring opportunities and gathering data for M&A (domestic and overseas) Enhanced communication (through conference calls) with Prv: possible M&A target companies
		<p>R&D cost ratio Prv: 3.0% Cur: 3.4%</p>	<p>Narrowing down themes Prioritization</p>	<p>R&D</p>	<ul style="list-style-type: none"> Develop new materials Actions to achieve IoT Develop aeration and other technologies 	<ul style="list-style-type: none"> Accelerated the commercialization of nanofiber air filters Supplied various trial sensor products to clients Accelerated new materials development through industrial/academic partnerships
		<p>Personnel cost ratio Prv: 13.7% Cur: 15.3%</p>	<p>Optimal staffing</p>	<p>HR and General Affairs</p>	<ul style="list-style-type: none"> Establish and implement the talent management system 	<ul style="list-style-type: none"> Efforts to identify the next generation of management talent Increased R&D staff for product development Hired specialist staff members to assist in company reorganization and growth
		<p>Accounts receivable turnover rate Prv: 4.2 Cur: 4.1</p>	<p>Credit management</p>	<p>Sales / Finance and accounting</p>	<ul style="list-style-type: none"> Further optimize AR collection Promote paperless 	<ul style="list-style-type: none"> Streamlined and optimized AR collection for improving working capital
		<p>Inventory turnover rate Prv: 4.8 Cur: 4.2</p>	<p>Set appropriate inventory level</p>	<p>Production / sales</p>	<ul style="list-style-type: none"> Reduce company-wide inventory asset 	<ul style="list-style-type: none"> Determined suitable inventory levels based on pareto analysis; currently implementing inventory reduction plans
		<p>Accounts payable turnover rate Prv: 4.8 Cur: 4.7</p>	<p>Debt management</p>	<p>Procurement</p>	<ul style="list-style-type: none"> Improve working capital 	<ul style="list-style-type: none"> Optimized AP turnover ratio for improving working capital
		<p>Tangible fixed asset turnover rate Prv: 1.7 Cur: 1.5</p>	<p>Equipment plan (R&D, production)</p>	<p>Management planning Administration / Production / R&D</p>	<ul style="list-style-type: none"> Optimize investment recovery effect 	<ul style="list-style-type: none"> Prioritized R&D and capital investments by analyzing the validity of investment return period
		<p>Intangible fixed asset turnover rate Prv: 66.4 Cur: 78.7</p>	<p>Investment plan</p>	<p>Management planning</p>	<ul style="list-style-type: none"> Formulate IP strategies and action plans 	<ul style="list-style-type: none"> Established strategies, devised action plans, and enhanced training for targeted group Actively applied for patents in Chinese market

Full-year Forecasts for FY2022 (Ending March 31, 2023)

Construction machinery filters

- While new vehicle sales volume is expected to be lower than the previous year due to the slowing down Chinese market, demand in the construction machinery market in Japan, North America, Europe, and Asian markets is expected to remain strong.
- Policy to implement price adjustments due to the outlook for logistics costs and material prices hikes remains uncertain.
- YAMASHIN will strive to improve profitability by constructing a stable production and supply system through supply chain reviews and production site transfers, as well as by stabilizing foreign exchange rates and raw material procurement.

Air filters

- YAMASHIN will recover replacement demand for existing products and develop nanofiber air filters and other high-value-added products for use in office buildings, factories, railroad cars, and other applications.
- Improving profitability by increasing production efficiency and cutting costs thoroughly.

Healthcare:

Establish a structure that will enable us to secure operating income despite anticipated decline in sales volume in the household mask market



Since the impact on consolidated earnings is extremely small, **YAMASHIN will disclose the information for the fiscal year ending March 31, 2023 by including it in the product lineup of the construction machinery filter business.**

(million yen)		FY2020 Results	FY 2021 Results	FY 2022 Forecast	Difference
		Amount	Amount	Amount	Amount
Net sales		14,587	18,821	17,800	△1,021
	Construction machinery filters, etc.*	10,970	15,592	15,000	△592
	Air filters	2,607	2,577	2,800	222
	Healthcare	1,009	651	—	△651
Operating income		△145	1,344	700	△644
	Construction machinery filters, etc.*	22	1,797	660	△1,137
	Air filters	△18	△123	40	163
	Healthcare	△150	△329	—	329
Operating income margin		△1.0%	7.1%	3.9%	△3.2Pt
	Ordinary profit	△135	1,317	650	△667
Ordinary profit margin		△0.9%	7.0%	3.7%	△3.3Pt
	Net income	750	47	458	410
Net income margin		5.1%	0.3%	2.6%	2.3Pt
Exchange rate (JPY)	USD	106.1	112.4	122.0	8.6%
	EUR	123.7	130.6	137.0	4.9%

*"Construction machinery filters" includes industrial filters and process filters, in addition to construction machinery filters.

*The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2023, to reflect the degree of impact on YAMASHIN's performance.

*With respect to operating income for the fiscal years ending March 31, 2021 and 2022, general and administrative expenses and other expenses of the administrative divisions of the head office and subsidiaries, which were separately listed as corporate expenses, are included in the operating income of each segment.

(million yen)	FY2020 Results		FY2021 Results		FY2022 Forecast		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
Construction machinery filters	9,713	66.6%	14,169	75.3%	13,273	74.6%	△896	△6.3%
Line parts	4,178	28.6%	5,633	29.9%	5,733	32.2%	100	1.8%
Service parts	5,534	37.9%	8,536	45.4%	7,539	42.4%	△996	△11.7%
Industrial filters	470	3.2%	522	2.8%	653	3.7%	130	25.0%
Process filters	786	5.4%	900	4.8%	1,072	6.0%	172	19.1%
Subtotal	10,970	75.2%	15,592	82.8%	15,000	84.3%	△592	△3.8%
Air filters	2,607	17.9%	2,577	13.7%	2,800	15.7%	222	8.6%
Healthcare*¹	1,009	6.9%	651	3.5%	-	-	△651	△100.0%
Total	14,587	100.0%	18,821	100.0%	17,800	100.0%	△1,021	△5.4%

*1 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2023, to reflect the degree of impact on YAMASHIN's performance.

Sales Forecast by Region

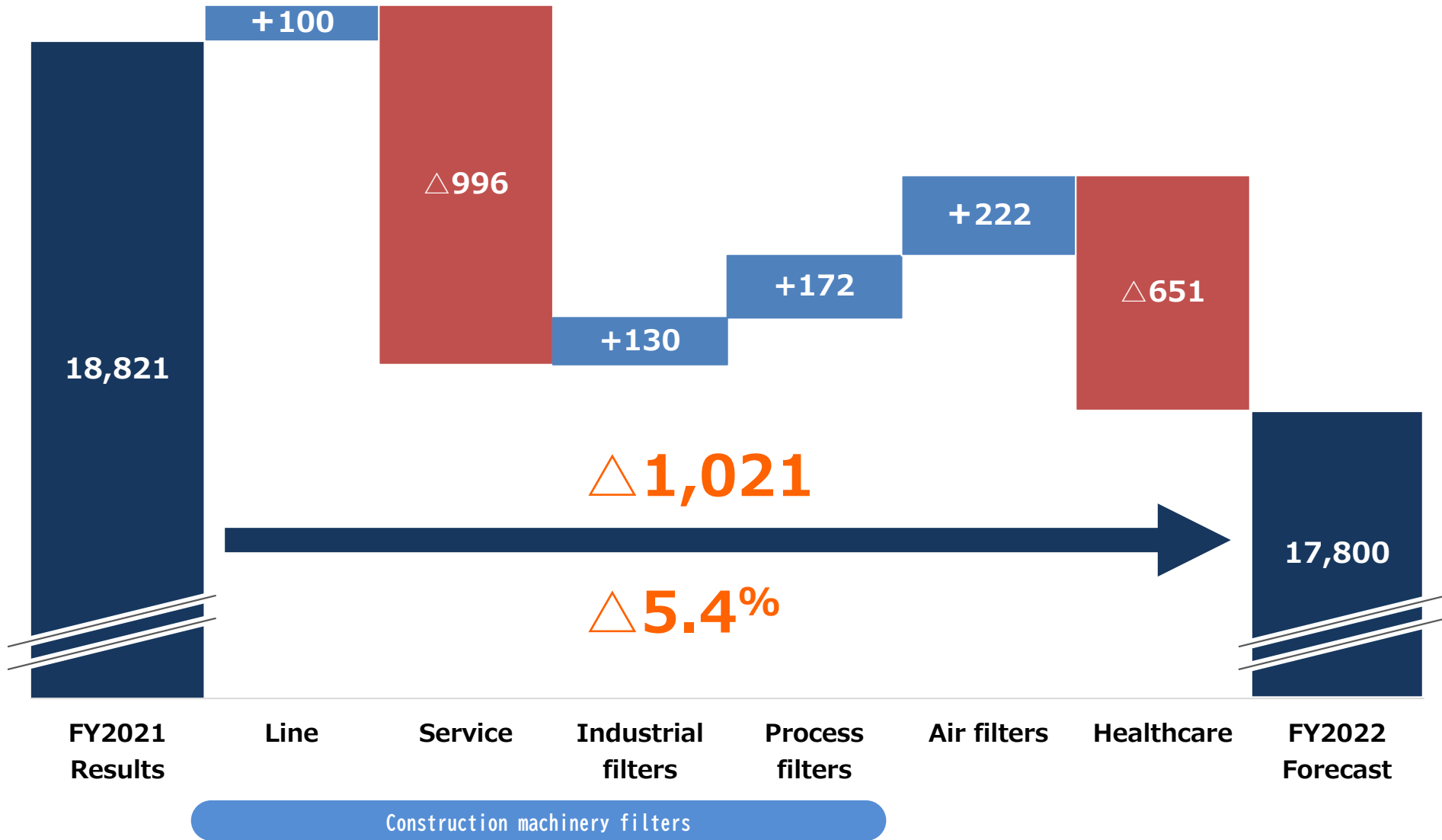
(million yen)	FY2020 Results		FY2021 Results		FY2022 Forecast		Difference	
	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	Composition Ratio (%)	Amount	%
Construction machinery filters, etc. *1	10,970	75.2%	15,592	82.8%	15,000	84.3%	△592	△3.8%
Japan	5,019	34.4%	7,294	38.8%	7,079	39.8%	△215	△3.0%
North America	1,915	13.1%	2,939	15.6%	3,135	17.6%	196	6.7%
China	1,552	10.6%	1,711	9.1%	1,507	8.5%	△204	△11.9%
Other Asian countries	1,235	8.5%	1,889	10.0%	1,902	10.7%	12	0.6%
Europe	1,243	8.5%	1,755	9.3%	1,371	7.7%	△384	△21.9%
Others (Middle East, etc.)	3	0.0%	2	0.0%	5	0.0%	2	122.3%
Air filters (Japan) *2	2,607	17.9%	2,577	13.7%	2,800	15.2%	222	8.6%
Healthcare (Japan)	1,009	6.9%	651	3.5%	—	—	△651	△100.0%
Total sales*	14,587	100.0%	18,821	100.0%	17,800	100.0%	△1,021	△5.4%

*1 "Construction machinery filters" includes industrial filters and process filters, in addition to construction machinery filters.

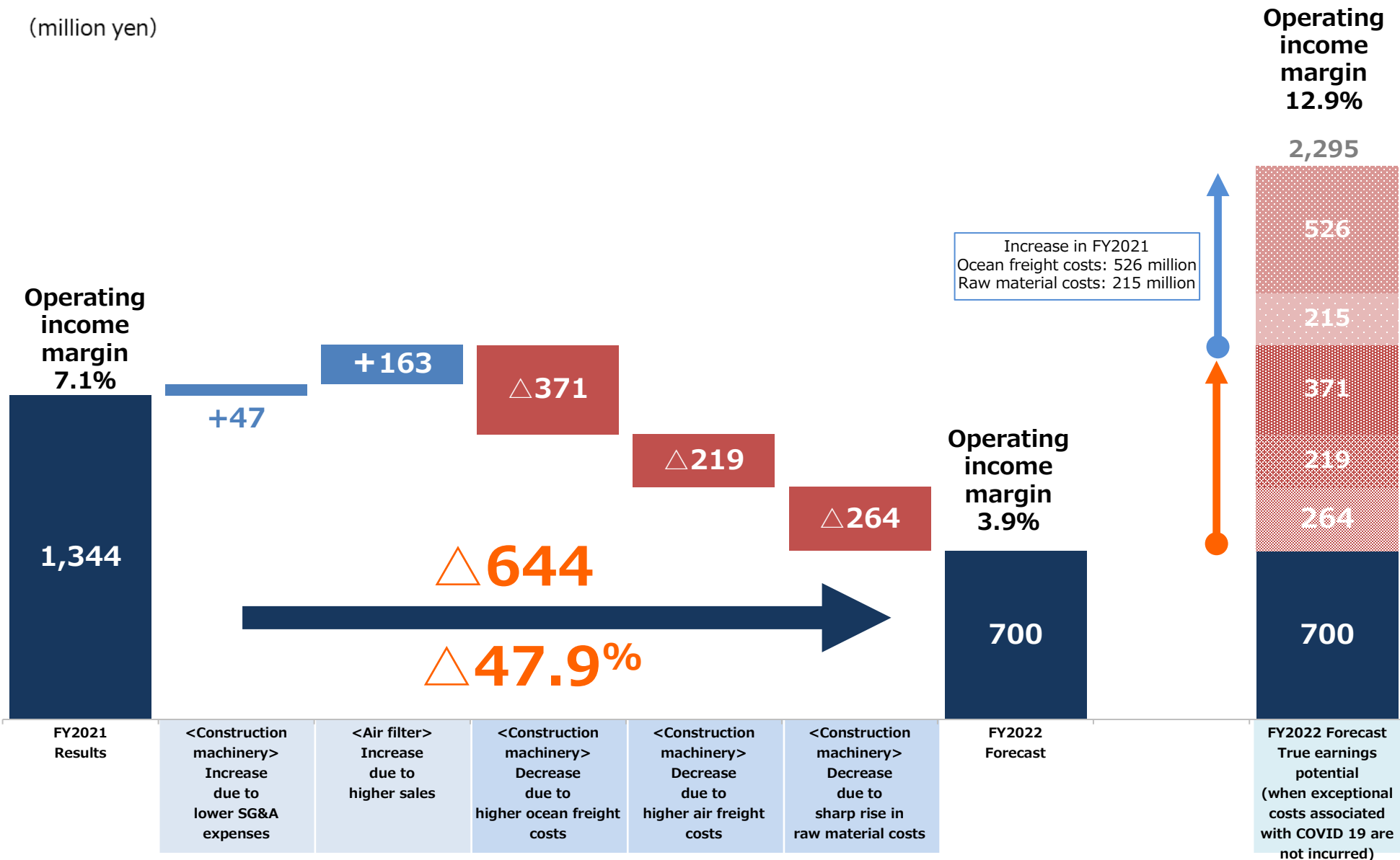
*2 The healthcare business is included in the product lineup of the construction machinery filter business from the fiscal year ending March 31, 2023, to reflect the degree of impact on YAMASHIN's performance.

* Sales by region here are calculated based on the locations of corporations to which invoices are sent.

(million yen)



(million yen)



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.

	FY2019	FY2020	FY2021	FY2022 Forecast
Dividend per share	¥ 6.0	¥ 6.0	¥ 6.0	¥ 6.0
DOE^{*1}	2.3%	2.2%	2.1%	2.1%
Total return ratio^{*2}	72.3%	59.3%	960.4%	97.7%

*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



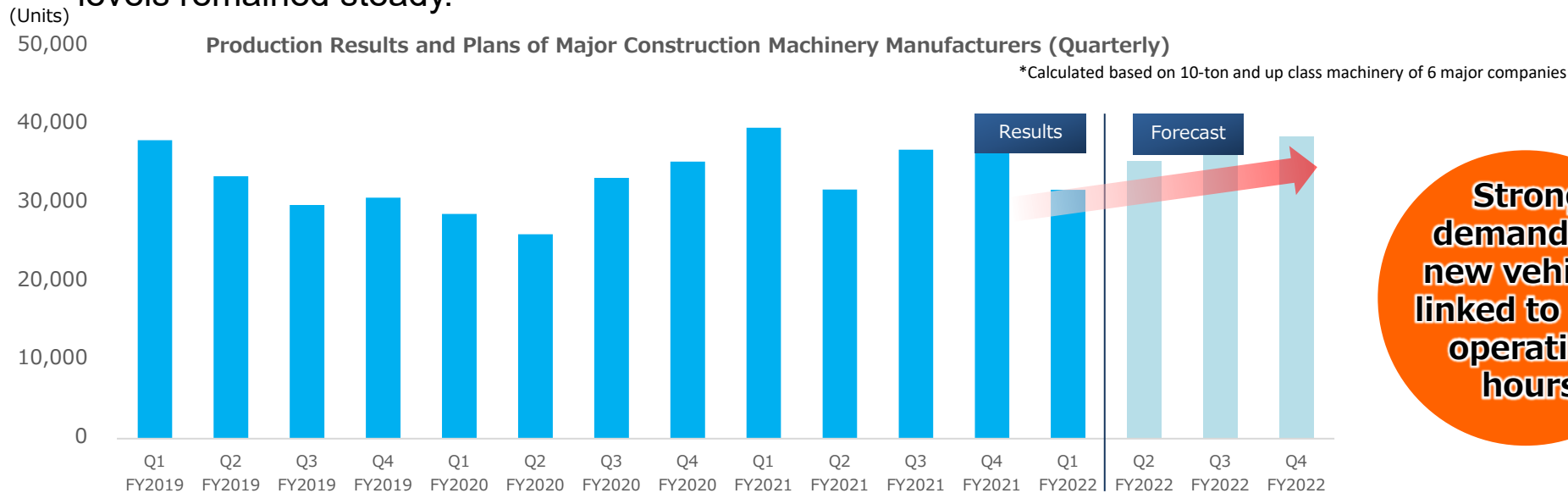
II Market Conditions

Conditions in the Construction Machinery Market

- There is strong demand for new vehicles with high level of operating hours, including North American and Southeast Asian markets.
- There is uncertainty in Chinese and European markets due to the Shanghai lockdown and Russia-Ukraine situation.
- Supply issues still exist for semiconductors and other components, but the market is strong.

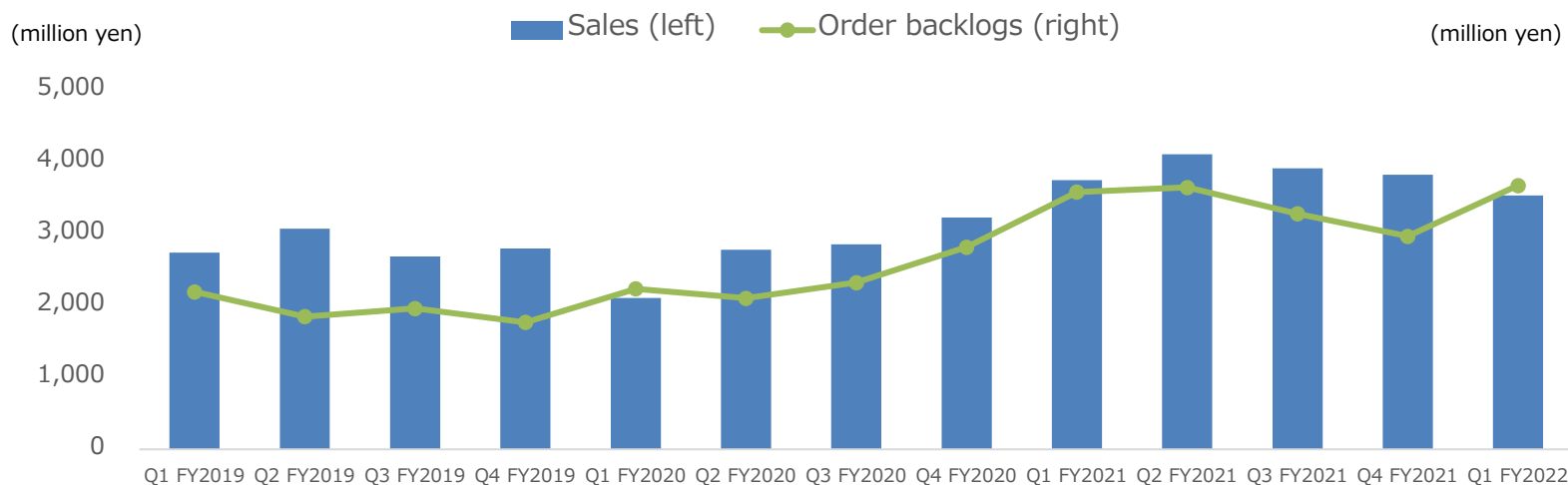
	Q4 FY2021	Q1 FY2022	Future outlook
Japan	The operating hours of construction machinery and demand for new vehicles remain high. Ocean freight costs and prices of key raw materials have risen.	The operating hours of construction machinery and demand for new vehicles remain high. Ocean freight costs and prices of key raw materials have risen.	Demand for construction machinery remains firm. Energy and raw material prices, soaring logistic costs and rapid yen depreciation.
North America	The operating hours of construction machinery and demand for new vehicles remain high. Ocean freight costs and prices of key raw materials have risen.	The operating hours of construction machinery and demand for new vehicles remain high. Ocean freight costs and prices of key raw materials have risen.	The operating hours of construction machinery and demand for new vehicles remain high. The impact of rising ocean freight costs and prices of key raw materials will continue.
Europe	Demand for construction machinery has grown in both the new and rental markets. Demand for construction machinery remains high. Ocean freight costs and prices of key raw materials has soared.	The operating hours of construction machinery and demand for new vehicles remain high. Ocean freight costs and prices of key raw materials have risen.	Demand outlooks are uncertain due to the escalating situation in Russia and Ukraine. The impact of rising ocean freight costs and prices of key raw materials will continue.
Southeast Asia	The recovery from COVID-19 has become clearer, the operating hours of construction machinery remains high.	The recovery from COVID-19 has become clearer, the operating hours of construction machinery remains high.	Demand for construction machinery remains firm mainly in India and Indonesia. The impact of rising ocean freight costs and prices of key raw materials will continue.
China	There is a slump mainly due to tighter government restrictions on activities in response to the spread of the Omicron strain.	Sluggish due to lockdowns following spread of COVID-19	New vehicle sales are expected to fall below the previous year's level due to sluggish market conditions.

- Despite some uncertainties in the market environment, projected production volume and order levels remained steady.



Strong demand for new vehicles linked to high operating hours

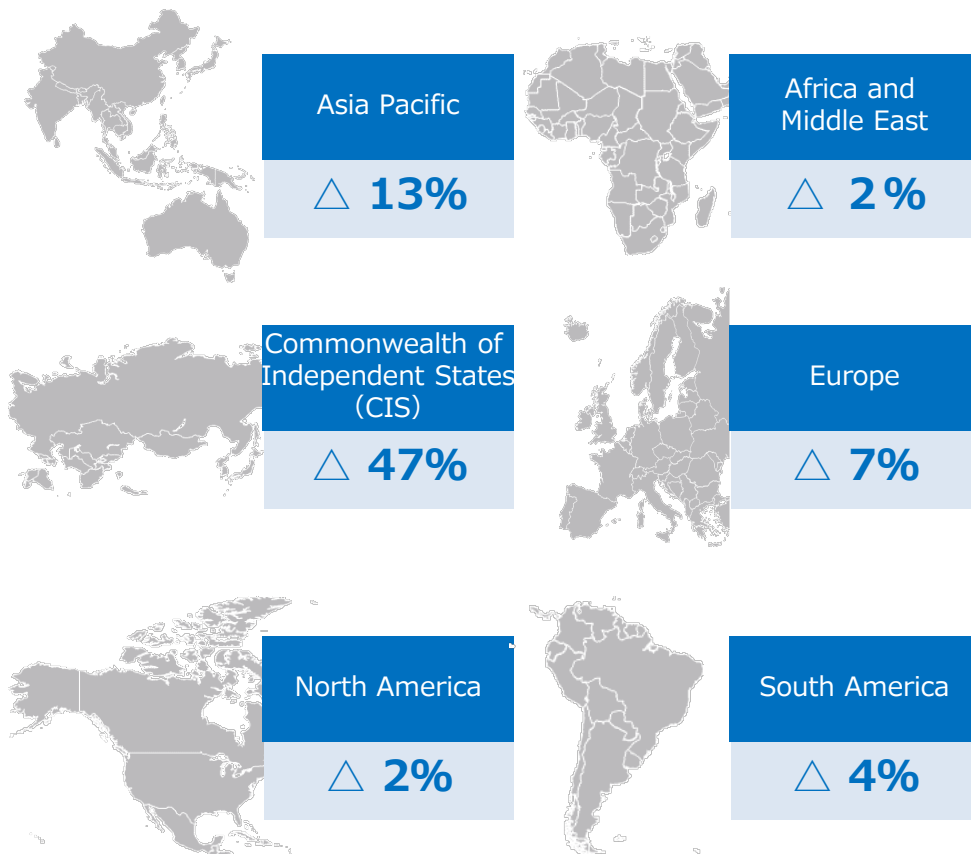
Sales and Backlog Orders: YAMASHIN Construction Machinery Filters (Quarterly)



Orders for supply parts are being exhausted, but order backlogs remain high

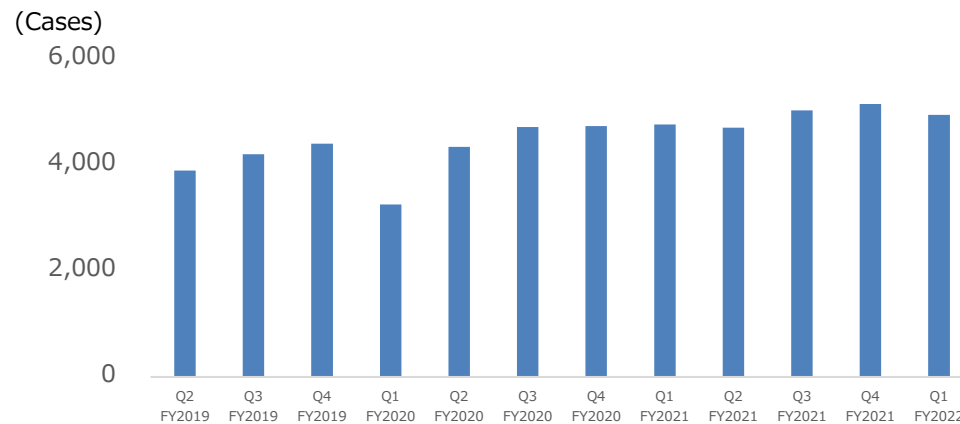
- Demand remains high, although some regions are prominently down year-on-year.
- The issue is whether the supply is sufficient to meet the strong demand.
- Although impact of rate hikes is uncertain, North American housing inventories remain low.

Growth in demand for construction machinery by region



Demand trend index (2021 vs. 2022 forecast)

North American market: Trends in housing starts



(Created from Bureau of the Census)

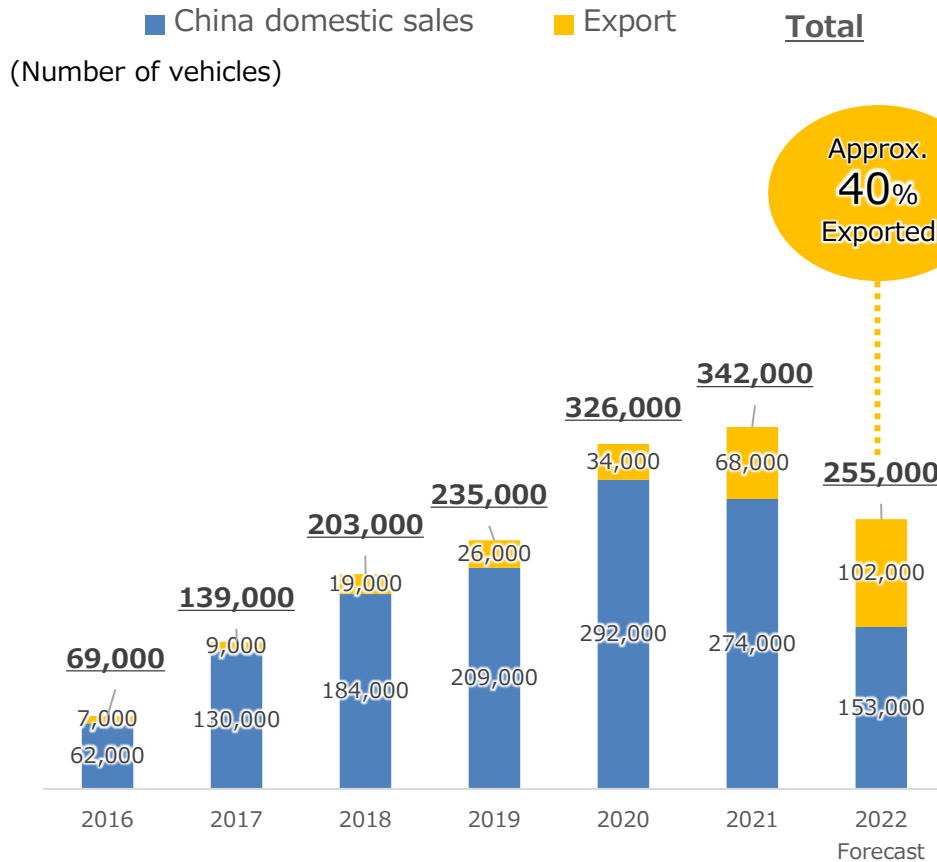
North American market: Trends in gross housing inventories



(Reference: TRADINGECONOMICS)

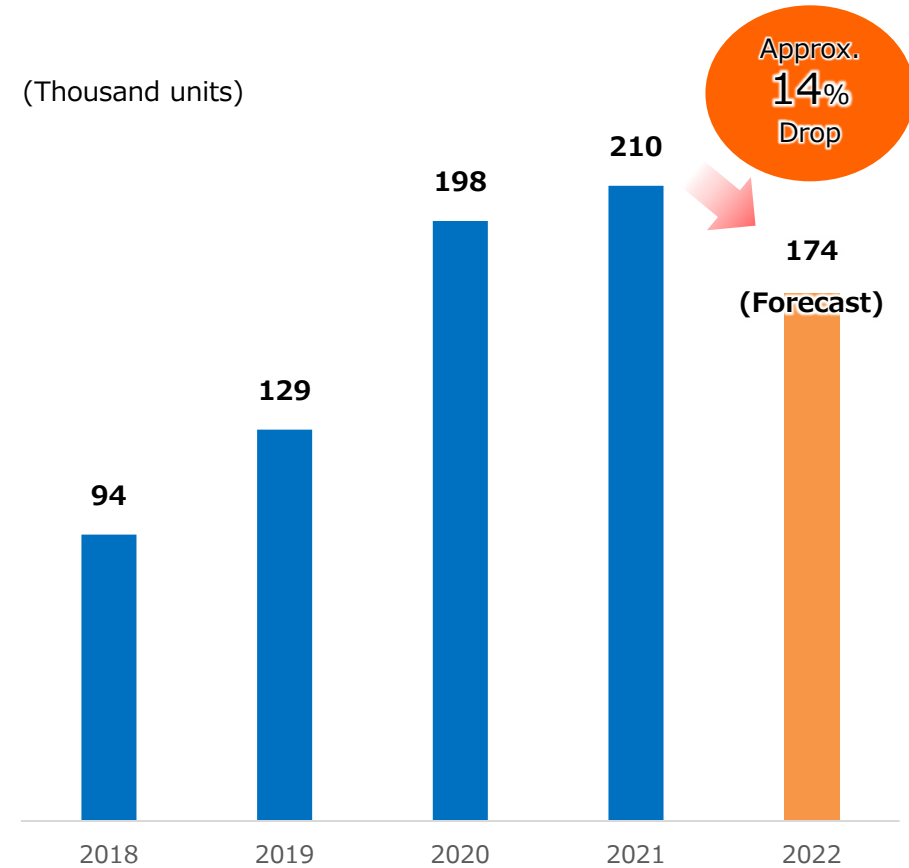
- The strong impact of the Shanghai lockdown is expected to reduce demand by more than 20% in 2022 compared to last year.
- Export share is expected to continue to increase as growth opportunities are being sought in overseas markets.

Trends in annual sales



Production volume of 5 major Chinese construction machinery manufacturers

(Thousand units)

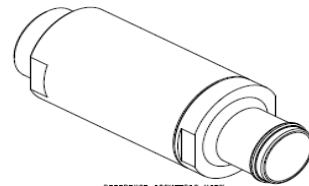


- The first agricultural machinery (combine harvester) filter adoption in the North American market.
- We are developing a proposal for a Chinese construction equipment manufacturer for its dump trucks used in mines for the Chinese market.

Initiative in North American market

Major agricultural machinery (combine harvesters) company will adopt our products

First entry into the agricultural machinery filter field



On-board filter shape

European market

2023/2Q



Actual equipment testing in the U.S. and Canada



2023/1Q



Actual equipment testing in Belgium and Germany



2024/2Q

Mass production scheduled to start

We will continue to leverage our expertise in construction machinery to aggressively expand horizontally into other markets.

Initiative in Chinese market

Utilizing our track record in hydraulic excavators
Launched proposal activities for other machinery

A variety of construction equipment in operation at construction sites

Mining site



Urban construction



Sales activities targeted at vehicles active in mining sites and urban construction

Vehicle construction machinery



High area work vehicles



Conditions in the Air Filter Market

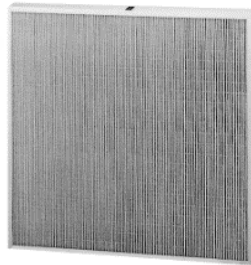
- The building is our main market, impact of COVID-19 is limited, and demand is expected to remain unchanged from the previous fiscal year.
- The need to curb maintenance costs is increasing in response to various cost hikes.

	Market overview	Market environment	
		Previous period	Forecast for the current term
Buildings	Air filters for outdoor air intake units and indoor air conditioning systems installed in offices, commercial buildings, etc.	Repeat orders in urban areas are stable, but new projects are sluggish.	Even with the impact of the 7th wave of COVID-19, no impact has been seen yet as building management mainly consists of annual contracts.
General factories	Air filters for outdoor air intake units and indoor air conditioning systems installed in factories	Activity for major renovations is sluggish but activity is positive for necessary capital investment.	There are no major negative factors, but there are concerns about reduced capital investment and supplies purchases due to soaring material costs at production sites.
Semiconductor factories	Replacement market for chemical filters	Continued strong capital investment.	Capital investment remains favorable. Meanwhile, there are also glimpses of instability, such as business consolidation within the industry.
Environmental equipment	Air filters for residential air conditioning and air purifiers used in general households	Housing-related sectors continue to be affected by the Wood Shock, but are recovering.	The impact of the Wood Shock has almost vanished. Recovery is underway with an increase in orders in the second half of the 3Q.
Vehicles	Air filters for air conditioning of railroads, etc. Air filters for protecting construction machinery from dust	Orders for filters for construction machinery are firm. Orders for filters for railroads are as projected.	Sales for railroads are expected to remain unchanged. Filters for construction machinery are expected to increase from last year, although there was a revision of the projection due to order adjustments.

- YAMASHIN has earned a high reputation for filter performance and environmental friendliness.
- We will be highly competitive due to the reliability of the MERV14 standard and the scarcity of acquiring Japanese manufacturers.

New Product NanoWHELP®

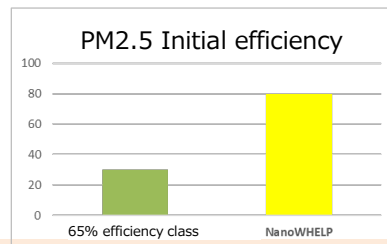
The world's first nanofiber air filter



Product Features

- The performance inherent to YAMASHIN NANO FILTER® **keeps pressure loss consistently low**
- Among medium-to-high performance filters, NanoWHELP® is the only Japan-made filter to achieve **MERV 14 certification**
- In addition to its high-performance, **effectively reduces CO2 emissions**

96% collection efficiency for PM2.5
Initial effectiveness of at least 80%



Target Markets

Data centers, server rooms, IT-enabled factories, public facilities, medical facilities, etc. Even general buildings due to a growing interest in air quality.

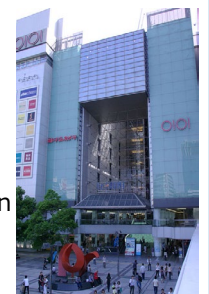
New Introduction

One of the world's largest distribution centers



One of the world's largest, ultra-large-scale distribution projects developed by a major integrated distribution company. It boasts an area equivalent to 14 times the size of the Tokyo Dome.

Kawasaki area commercial complex



Renovated as a commercial complex with various tenants in a major renovation starting around 2020.

Shibuya area commercial complex



A commercial complex that is the core of the Shibuya Station South Urban Area Redevelopment Project. It consists of a high-rise hotel building and a low-rise specialty store district.

Minatomirai area commercial complex



A commercial facility located in Minatomirai. Mainly large specialty stores with showrooms.



III Future Strategies

The switchover to YAMASHIN Nano Filter® for construction machinery filters will begin gradually from FY2023, and we are expecting a significant increase in sales.

YAMASHIN Nano Filter®

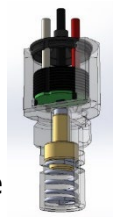
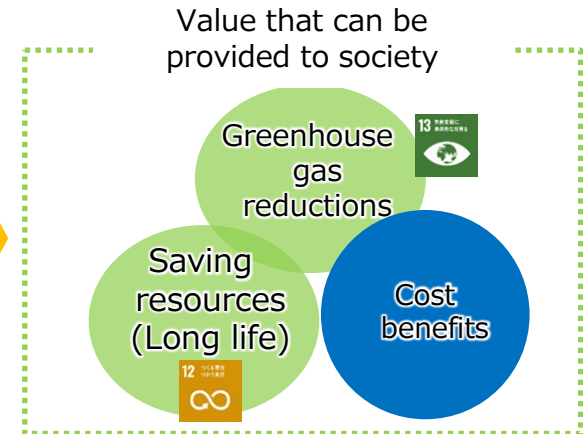


Price is approximately **2** times that of the existing product
Growing into a medium- to long-term earnings



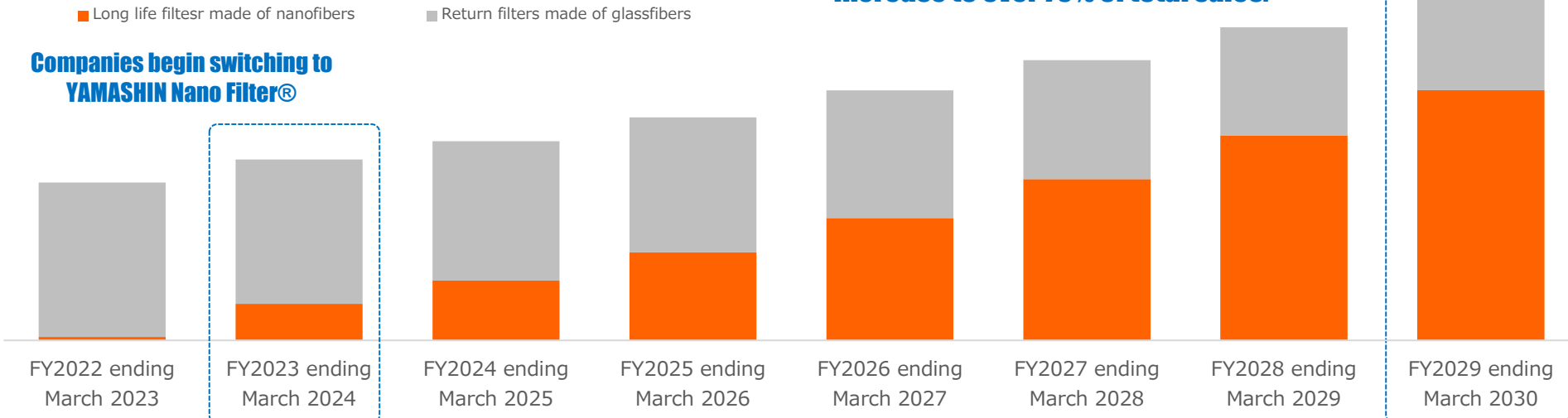

IoT sensor

Sensors measure filter life and hydraulic oil contamination which further increases the value of the filter.

Sales forecast of filters made of nanofiber filters

Sales of long life filters are expected to increase to over 70% of total sales.



Companies begin switching to YAMASHIN Nano Filter®

Improving the value chain

True earnings potential by strengthening the value chain

Aiming to achieve an operating margin of 20% over the medium term.

Strengthening measures

1

Construction machinery filter business

Improvements to profitability through PAC21, airfare control, fixed cost reduction, and cost cutting

3

Healthcare business

Automation of production lines and reduction of fixed costs by investment in mask production facilities, reduction of production costs, efficient management of sales promotion and advertising expenses, etc.

2

Air filter business

Reduction of manufacturing costs PAC21 through transfer to YCF production and introduction of SAP (strengthening of cost management system), improvement of profitability through reduction of fixed costs, and reduction of defects

4

Strengthening the supply chain

Reorganization of production bases (New Saga Plant, New Vietnam Plant, North America Plant), significantly increased production capacity and reduced manufacturing costs

Strengthening the supply chain

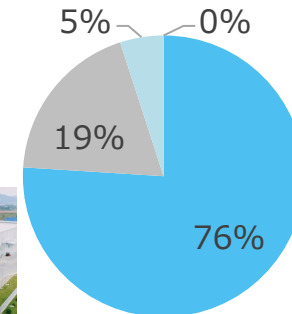
Main Topic of supply chain enhancement: Completion of new plant in Vietnam

YAMASHIN will hedge risks by shifting from a centralized production system to a multiple production system, and will be able to respond more flexibly to customer requests by increasing the local procurement rate of materials.

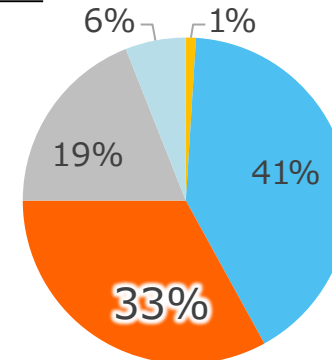


Before construction

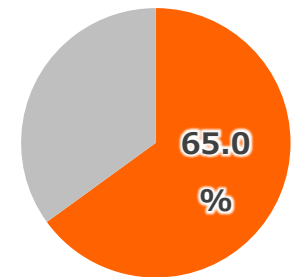
■ YAI ■ Philippines ■ Vietnam ■ Saga ■ China



Goal



Parts procurement rate in Vietnam



FY2022
(ending March 31, 2023)

- We are aggressively developing environmentally friendly products by leveraging the amazing capabilities of YAMASHIN NANO FILTER®.

Goal of 5 billion yen in sales over the medium term.

Target markets for future development

Technology master

(Product appeal)

NanoWHELP

World's first air filter made of nano filters




Production capacity

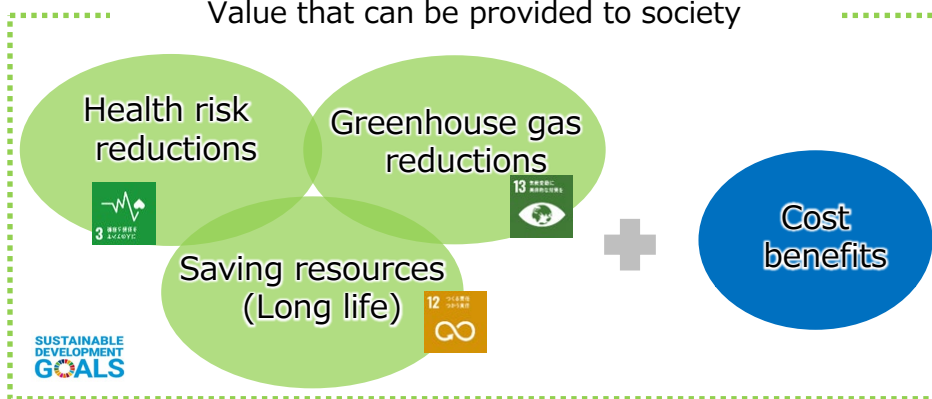
(capabilities)

Strengthening of internal systems

- SAP implementation
- Optimization of workforce
- Optimization of sales network



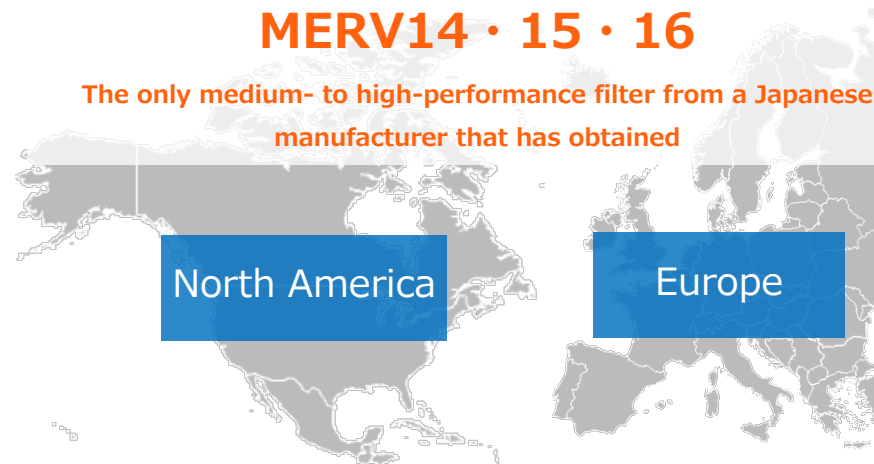
Value that can be provided to society



The highest level of air filter performance standards

MERV14 · 15 · 16

The only medium- to high-performance filter from a Japanese manufacturer that has obtained



Goals of achieving sales of 5 billion yen in the medium term

SUSTAINABLE DEVELOPMENT GOALS

Achieving SDGs through our business activities

ESG management implementation

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Support for recommendations

Environment

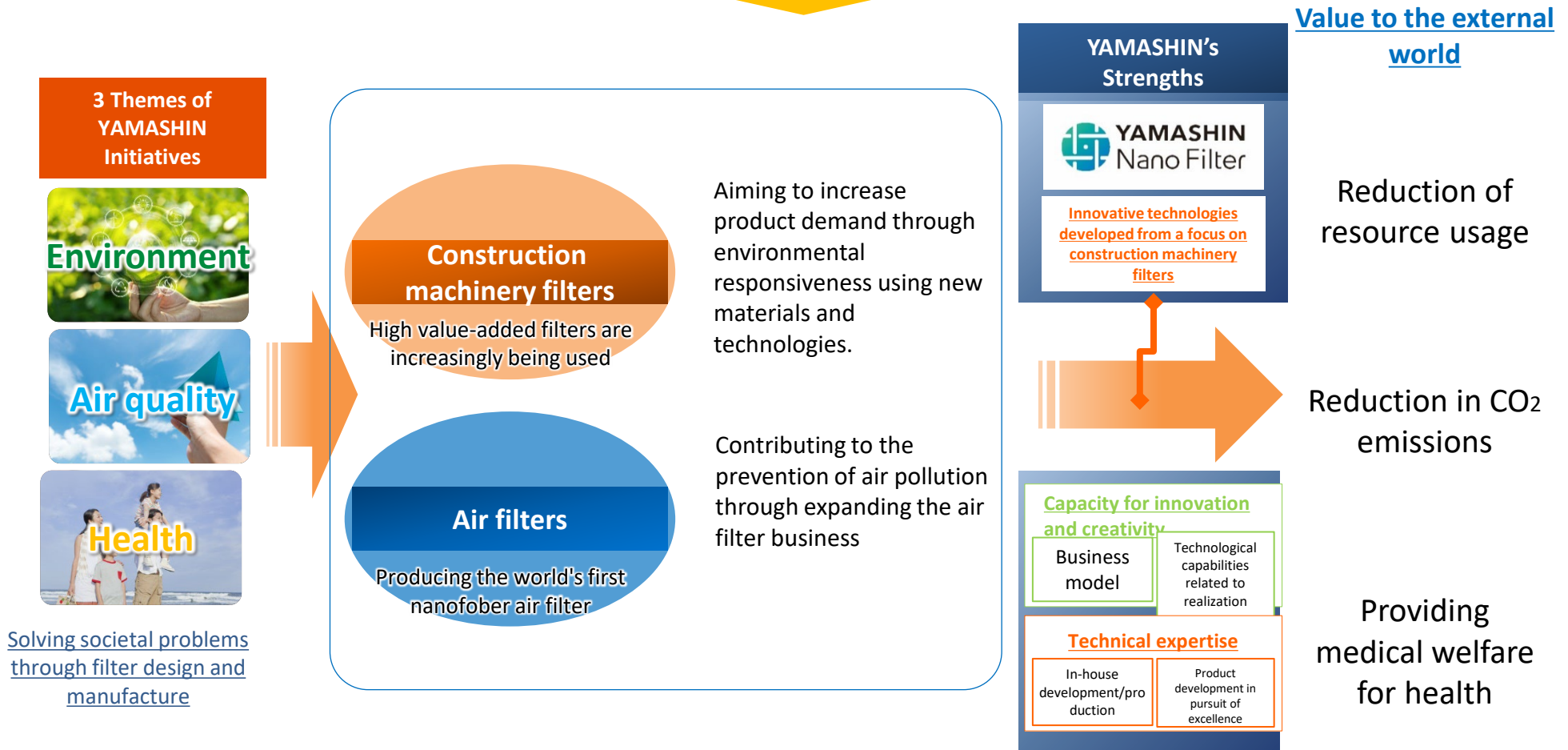
Air quality

Health

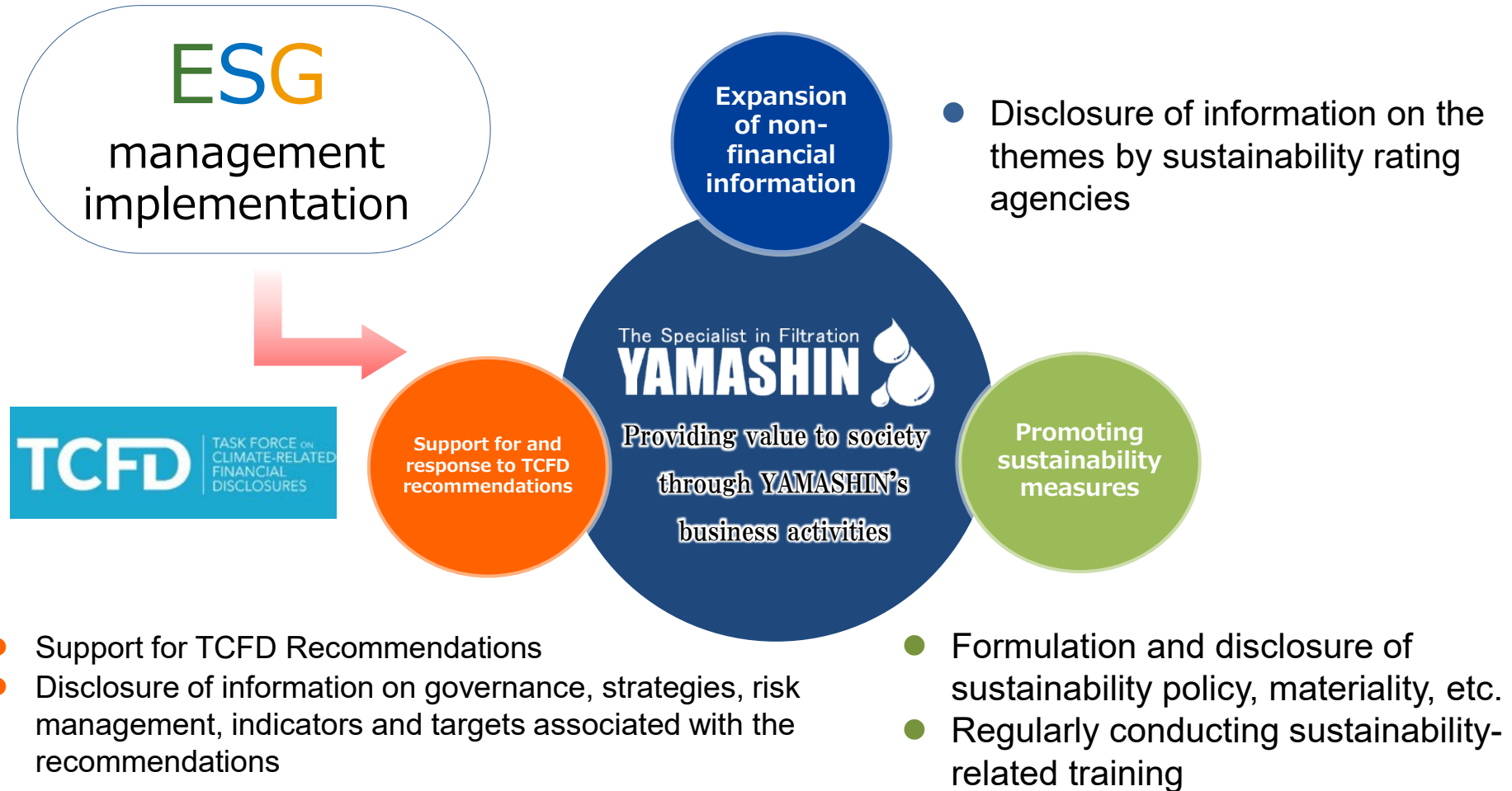
Rokajini tsukafuru

Contribute to society through filtration business

Realizing corporate philosophy : 仕濾過事 (*Rokajini tsukafuru*) or “Contribute to society through filtration business”



- YAMASHIN will promote group-wide projects and measures to put ESG management into practice.



- YSS was launched as part of its sustainability initiatives and has identified materiality in response to social issues.

YSS

Yamashin Sustainable Solutions

(Theme at time of launch)
Solving societal issues and creating business opportunities :

(Direction)

- In order to solve societal issues such as the environment and climate change, we will examine measures to contribute to areas such as the reduction of CO₂ emissions and industrial waste by utilizing YAMASHIN's technologies and products.
- Calculation of quantitative KPIs, etc. in the future.

【Major products】

Construction machinery filters	: Return filters made with nanofiber filter
Air filters	: Air filters made with nanofiber filter (NanoWHELP®)
Healthcare	: Masks made with nanofiber filter

Identifying materiality		
Environment	Climate change	<p style="color: #76c73a; margin: 0;">Contributing to climate change prevention and a decarbonized society</p> <ul style="list-style-type: none"> ■ We will achieve a business model that contributes to climate change prevention in terms of both products and production in order to achieve the carbon neutrality required throughout the world.
	Recycling	<p style="color: #76c73a; margin: 0;">Reducing environmental impact and contributing to a recycling-oriented society through filter technology</p> <ul style="list-style-type: none"> ■ We will focus on resource recycling to achieve a business model with high economic and environmental efficiency through the value chain.
Air and health	Air quality and health	<p style="color: #46a0c9; margin: 0;">Reducing health hazards caused by air pollution - Contributing to a safe and secure lifestyle</p> <ul style="list-style-type: none"> ■ Our filter technology protects people from the health hazards of air pollution and PM. ■ Our filter technology improves indoor air quality.
	Infection prevention measures	<p style="color: #46a0c9; margin: 0;">Preventing infectious diseases - The power of filters contributing to the fight against infectious diseases</p> <ul style="list-style-type: none"> ■ We are protecting people from infectious diseases through advanced and sophisticated filter technology.
People and work	Technology innovations	<p style="color: #e67e22; margin: 0;">Technical training and application - Pursuit of filter technology demanded by society</p> <ul style="list-style-type: none"> ■ We are refining our unique technology to create filters that do not exist anywhere else in the world. ■ We are creating new value by applying our original technology.
	Rewarding work	<p style="color: #e67e22; margin: 0;">Rewarding work and active human resources - Contribute to Society through filtration business</p> <ul style="list-style-type: none"> ■ We provide rewarding work to show appreciation and be appreciated by our customers, colleagues, and family members. ■ We will innovate working styles and promote a diverse workforce.
	Respecting human rights	<p style="color: #e67e22; margin: 0;">Promoting human rights due diligence - Becoming a company trusted by society</p> <ul style="list-style-type: none"> ■ We respect human rights throughout the value chain and fulfill our responsibilities as a company.

- YAMASHIN will strengthen its response to rating agencies etc., and will respond to the CDP Climate Change Questionnaire for the first time.
- We will begin disclosing information in line with the TCFD recommendations in our Sustainability Report 2022.
- We will promote initiatives in line with the recommendations over the next few years.
- We aim to improve the quality of non-financial figures by ensuring the accuracy and comprehensiveness of performance data by a third-party assurance organization.

Category	2022/1Q			2022/2Q			2022/3Q			2022/4Q		
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
● Response to ESG rating agencies, etc.												
• CDP	-----> Deadline: 7/27											
• MSCI • FTSE	-----> Response as necessary											
● Sustainability Report 2022 (Japanese*)												
• TCFD response (initial disclosure)	----->											
• Third party assurance (Scope 1, 2)					----->							
● Other measures												
• YSS Committee management	-----> Held monthly											

* English version to be published at the end of December

Construction machinery filters

YCF (Production)

YST (Sales/R&D)

YAI
(Sales/production)

YTL (Sales)

YEB (Sales)

YVC (Production)

The Specialist in Filtration
YAMASHIN
Accelerating the leap from a specialized manufacturer of construction machinery filters to a
Comprehensive Filter Manufacturer



YAMASHIN Nano Filter® Industrial Materials

Third portfolio

Apparel

Consumables

Renewable energy materials

Everyday supplies



Air filters

(Sales/production)

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 FY2022)
Construction machinery filters	A construction machinery filter is used to filter the fluid running in the hydraulic components of construction machinery, which is the key to the operation of such machinery. Applications : Various types of construction machinery		
Healthcare	High performance masks and replacement inner sheets that feature high filtration performance (one of the characteristics of our nanofiber filtration material), excellent sealing performance, and high air permeability. Applications: For general consumers in Japan and around the world		
Industrial filters	An industrial filter is a filter used for filtrating operating fluid and lubricants of hydraulic units applied in various industries other than the construction machinery industry. Applications : machine tools, refrigerating compressors, agricultural machinery, vessels, railway vehicles, airplanes, and helicopters		
Filters for process lines	A process filter is used for filtration and separation in processes for manufacturing customer products Applications : Production lines for electronic parts, precision parts, liquid crystal displays, and food.		
Air filters	Air filters used for dust removal and medium-to-high performance air filters Applications: general buildings, hotels and factories.		

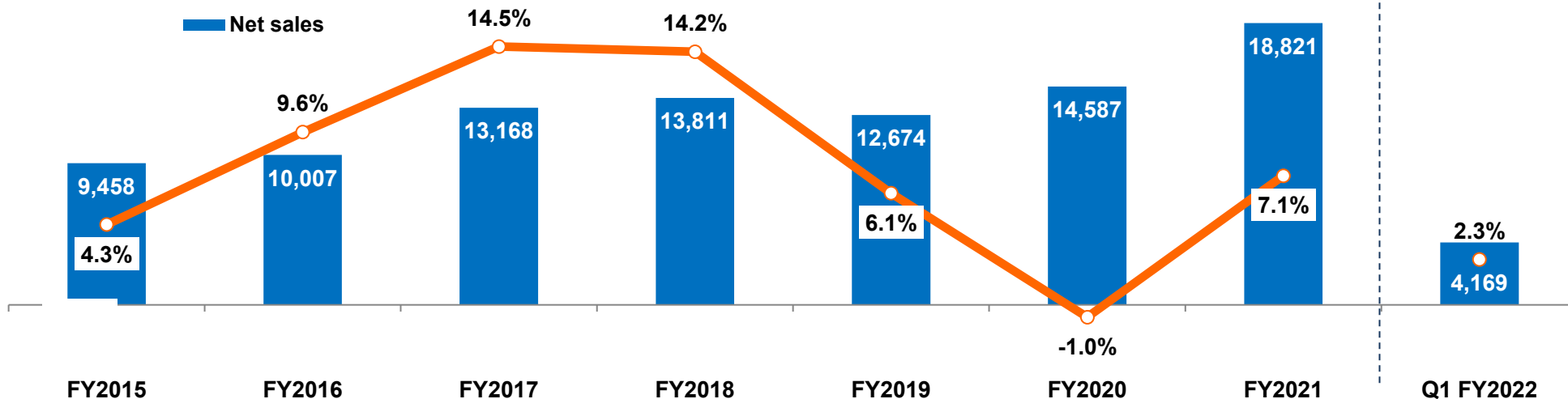
目次

REFERENCE MATERIALSDD

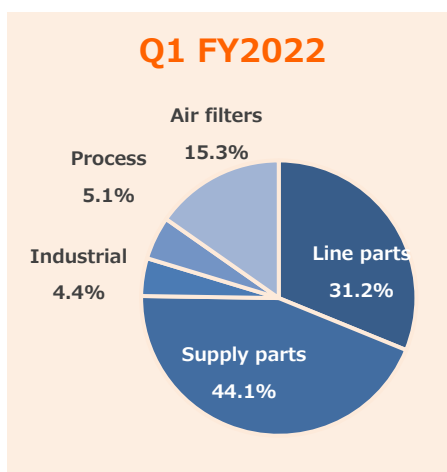
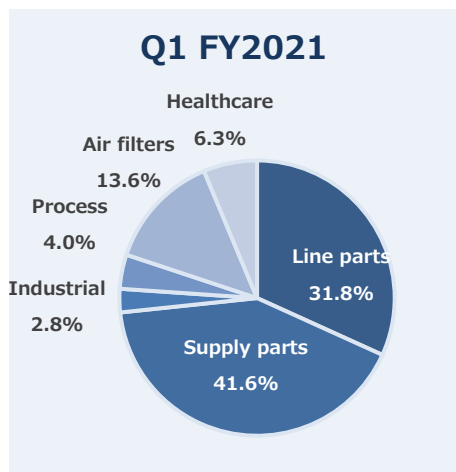
② FINANCIAL HIGHLIGHTS

Net sales, Operating income

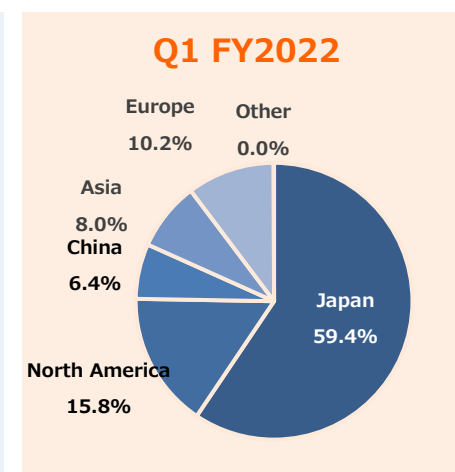
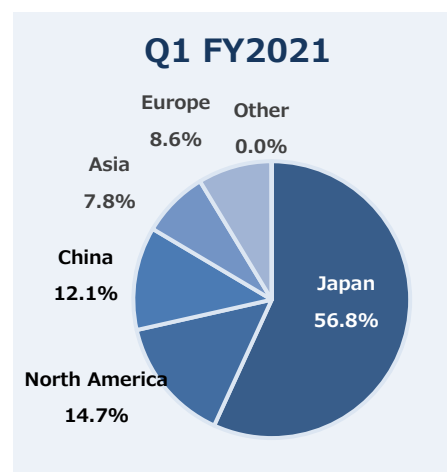
(Unit: million yen)



Sales breakdown by product category

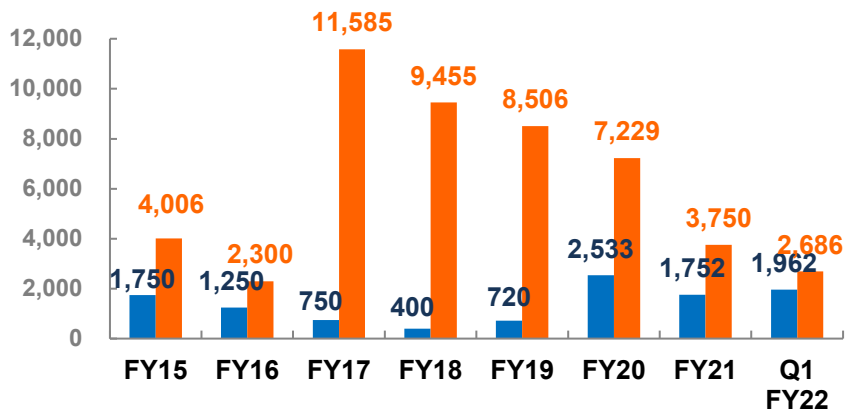


Sales breakdown by region

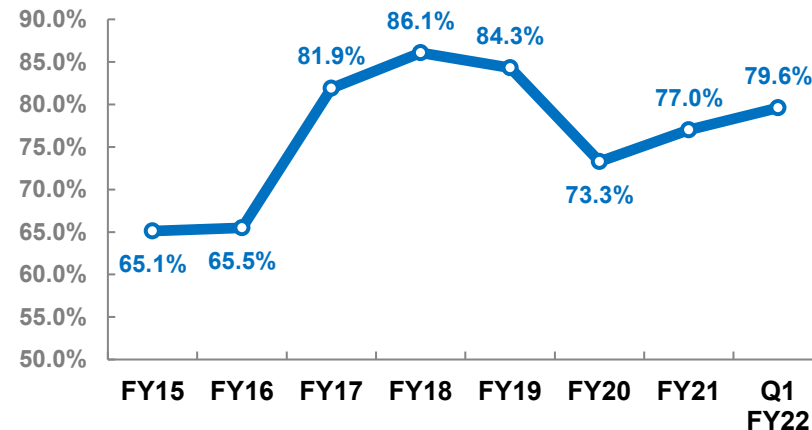


Interest-bearing debt, Cash equivalents, Short-term securities, etc.

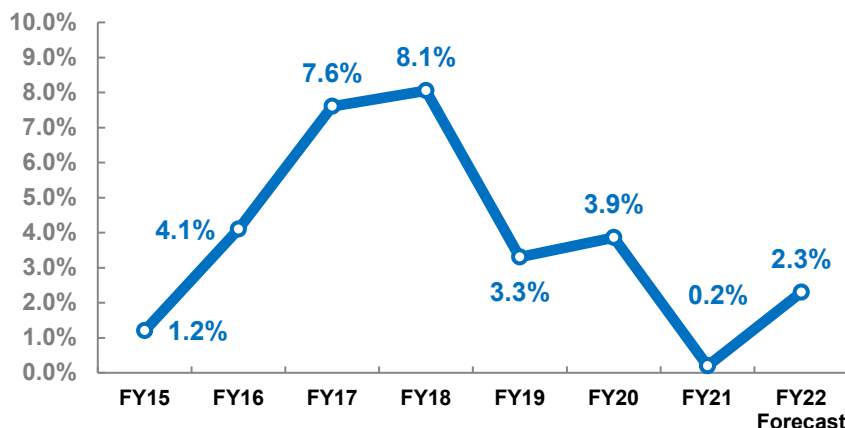
(Unit: million yen) ■ Interest-bearing debt ■ Cash equivalents and short-term securities, etc



Shareholders' equity ratio

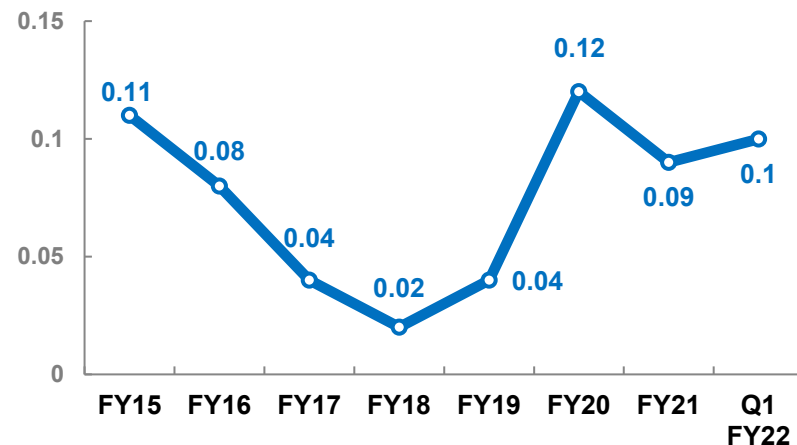


ROE



- Calculated based on the assumption that the capital increase through third-party allotment in FY2017 was implemented in FY15.

D/E ratio



- Calculated based on the assumption that the capital increase through third-party allotment in FY2017 was implemented in FY15.

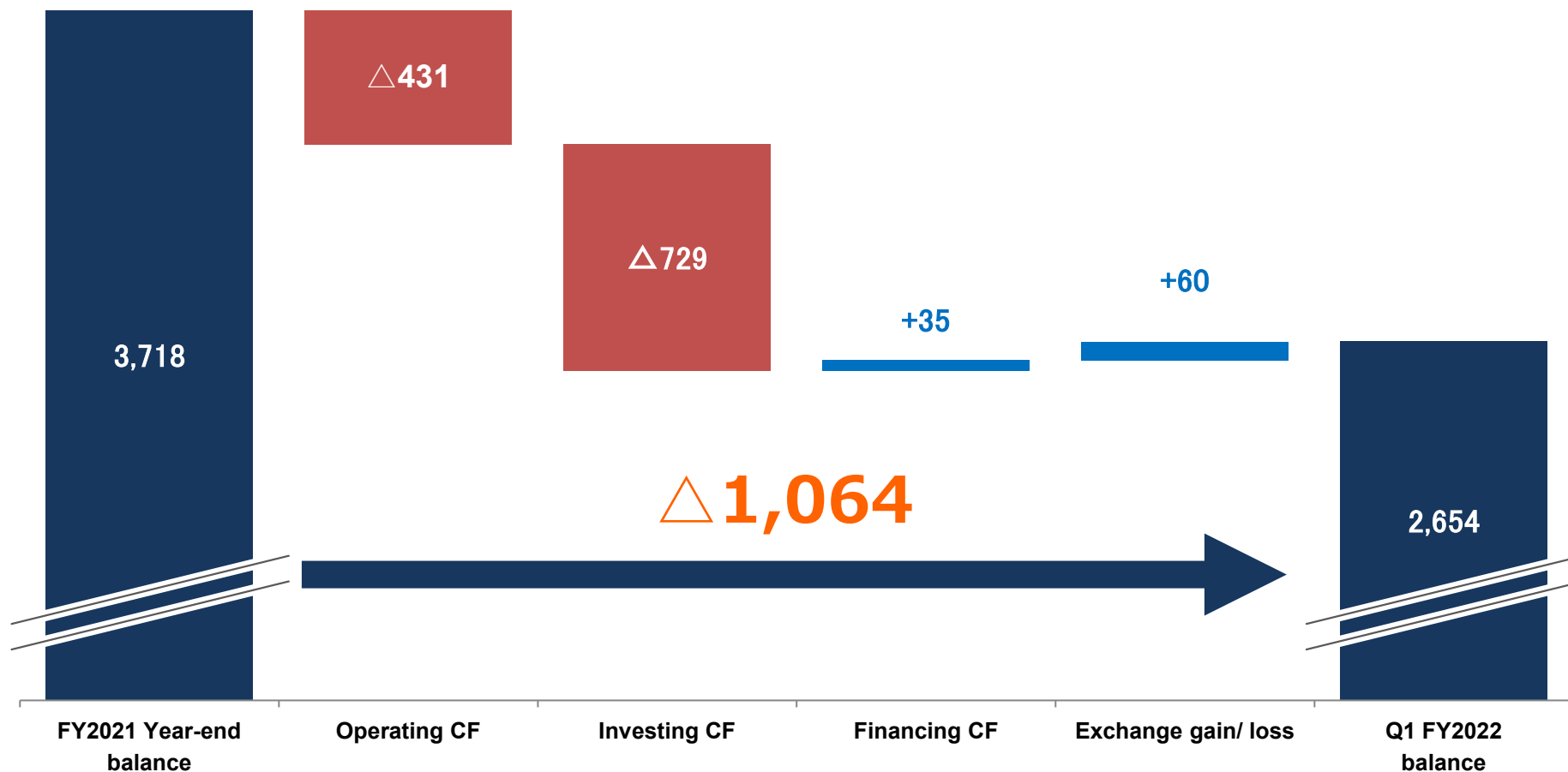
(Unit: million yen)

	FY2021	Q1 FY2022	Change (Amount)	Change (%)
Current assets	13,964	13,118	△ 845	△6.1%
Cash and deposits	3,750	2,686	△ 1,063	△28.4%
Notes and accounts receivable-trade	4,696	4,310	△ 385	△8.2%
Merchandise and finished goods, Raw materials and Supplies	4,775	5,308	532	11.2%
Other	742	813	71	9.6%
Fixed assets	12,747	12,735	△ 12	△0.1%
Tangible fixed assets	11,609	11,671	62	0.5%
Intangible fixed assets	236	208	△ 27	△11.8%
Investments and other assets	901	855	△ 46	△5.2%
Total assets	26,712	25,854	△ 858	△3.2%

	FY2021	Q1 FY2022	Change (Amount)	Change (%)
Current liabilities	4,634	3,907	△ 726	△15.7%
Notes and accounts payable-trade	2,213	1,943	△ 270	△12.2%
Corporate bonds payable within one year and short-term loans payable	403	723	320	79.3%
Other	2,016	1,241	△ 775	△38.5%
Fixed liabilities	1,506	1,378	△ 128	△8.5%
Corporate bonds and long-term debt	1,126	1,025	△ 100	△9.0%
Net defined benefits Liability	232	226	△ 6	△2.8%
Other	147	126	△ 21	△14.4%
Total net assets	20,571	20,568	△ 2	0.0%
Total of liabilities and net assets	26,712	25,854	△ 858	△3.2%

*Shareholders' equity ratio 77.0% 79.6%

(Unit: million yen)



*Long-term deposits maturing in less than one year (32 million yen at the end of fiscal year ending March 31, 2022 and 32 million yen in Q1 of fiscal year ending March 31, 2023) are not included in the ending balance of cash and cash equivalents.

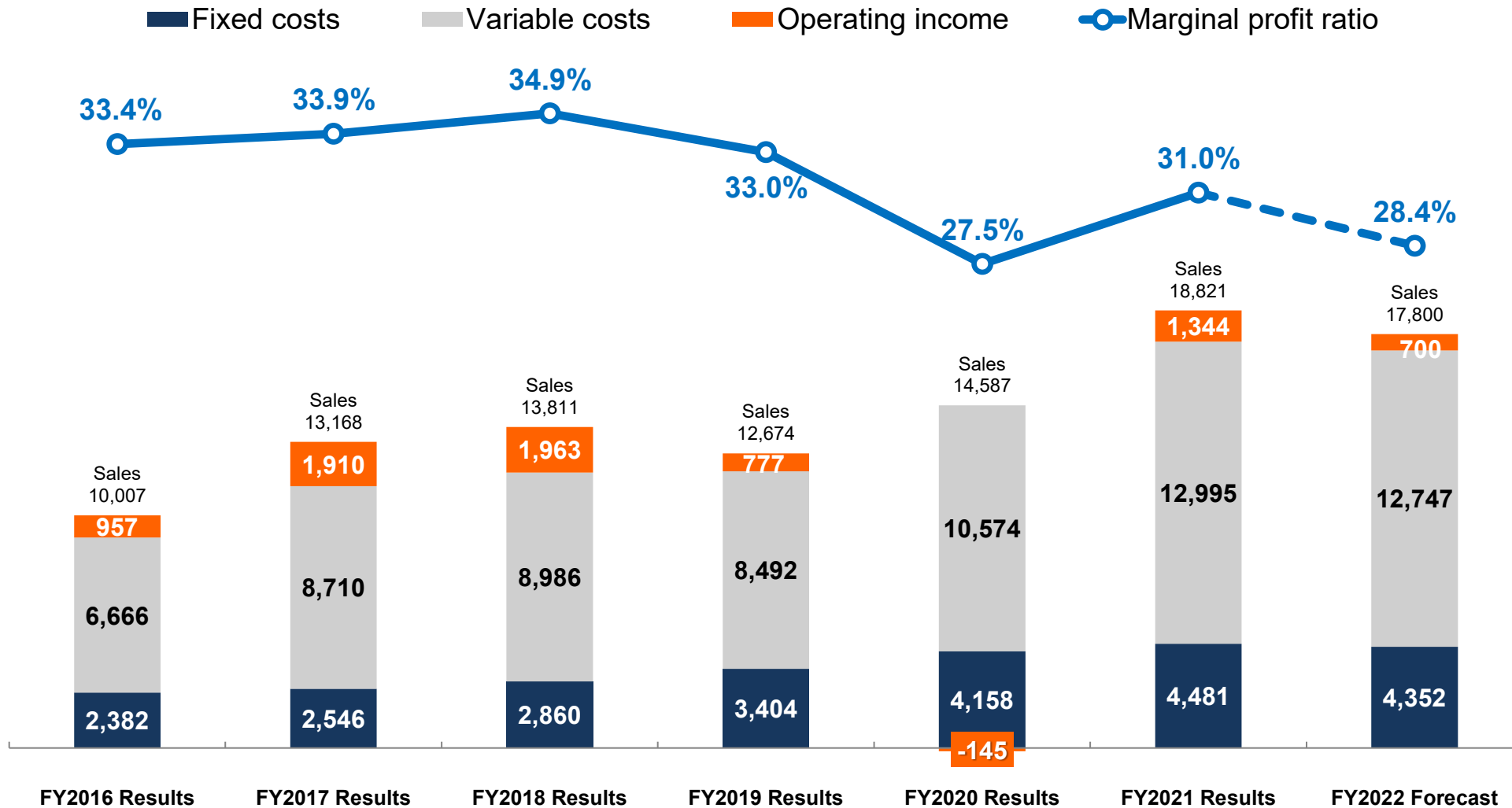
Conditions of Operational Hedge – “Marry and Netting” and Foreign Exchange Sensitivity (2022 April to June)

(Unit: million yen)

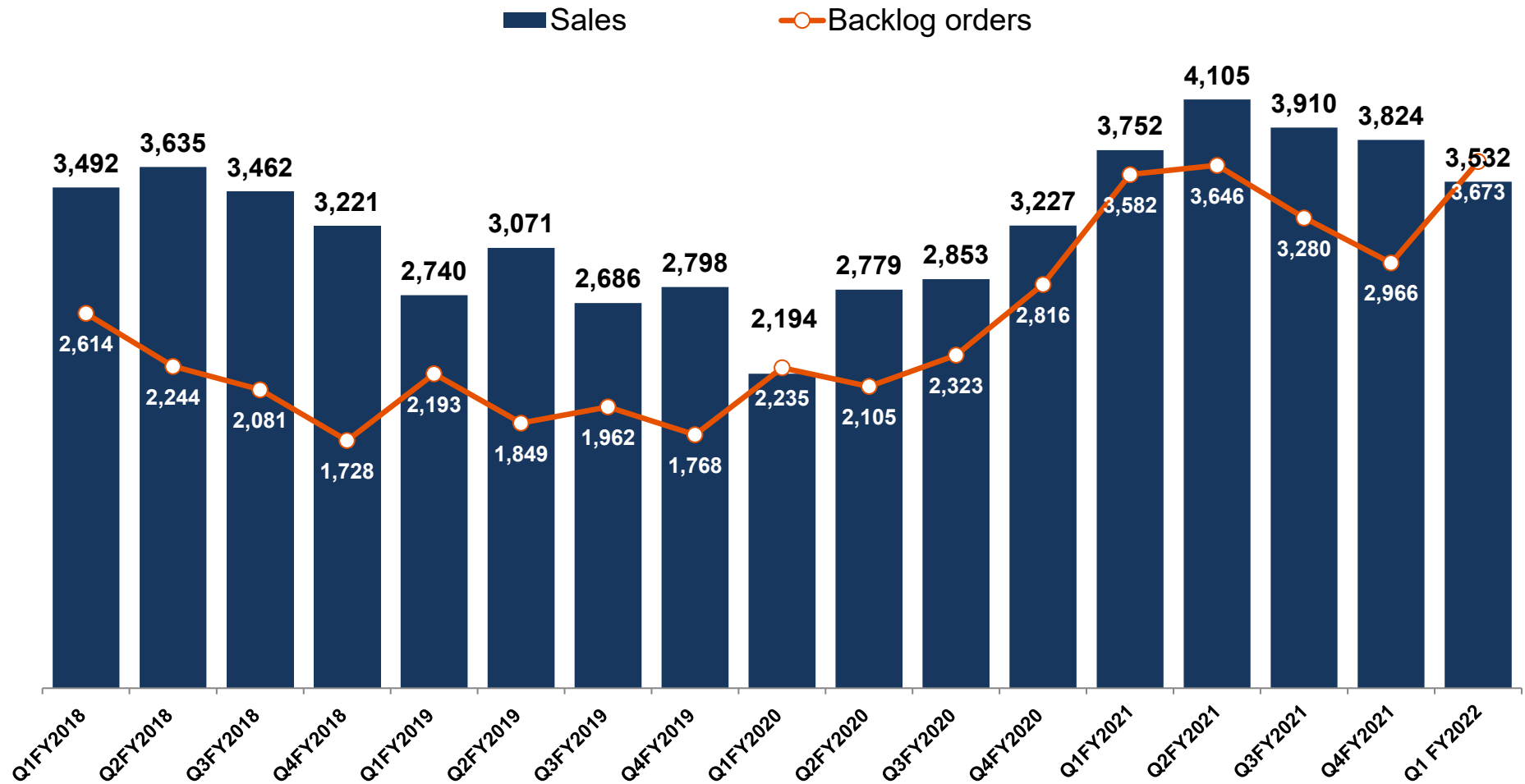
Currency	Incoming		Outgoing		Net	Average rate during the term (JPY)	In case of yen appreciation (10%)			In case of yen depreciation (10%)		
	Amount by currency	Composition ratio	Amount by currency	Composition ratio	Amount by currency		If yen is appreciated ▲10% (JPY)	Difference	Affected amount (YTD)	If yen is depreciated +10% (JPY)	Difference	Affected amount (YTD)
JPY	¥4,900.0	67%	¥5,100.0	61%	△¥200.0	-	-	-	-	-	-	-
USD	\$15.2	27%	\$19.1	30%	△\$3.9	¥129.6	¥116.62	△¥12.96	¥50.54	¥142.54	¥12.96	△¥50.54
EUR	€ 2.0	4%	€ 1.4	2%	€ 0.6	¥138.1	¥124.31	△¥13.8	△¥8.29	¥151.93	¥13.81	¥8.29
PHP	PP0.0	0%	PP166.0	5%	△PP166.0	¥2.5	¥2.21	△¥0.2	¥40.84	¥2.71	¥0.25	△¥40.84
THB	฿33.50	2%	฿7.80	0%	฿25.70	¥3.8	¥3.39	△¥0.4	△¥9.69	¥4.15	¥0.38	¥9.69
VND	฿0.00	0%	฿202.60	1%	△฿202.60	¥0.6	¥0.50	△¥0.1	¥11.35	¥0.62	¥0.06	△¥11.35
Total	-	100%	-	100%	-	-	-	-	¥84.75	-	-	△¥84.75

Variation in Marginal Profit Ratio

(Unit: million yen)



(Unit: million yen)



The Specialist in Filtration
YAMASHIN 



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

TEL 045-680-1680

E-mail ir@yamashin-filter.co.jp