

A background image showing a glowing blue particle stream or data flow against a dark background, with the text "World-Class Manufacturing" overlaid in white.

World-Class Manufacturing

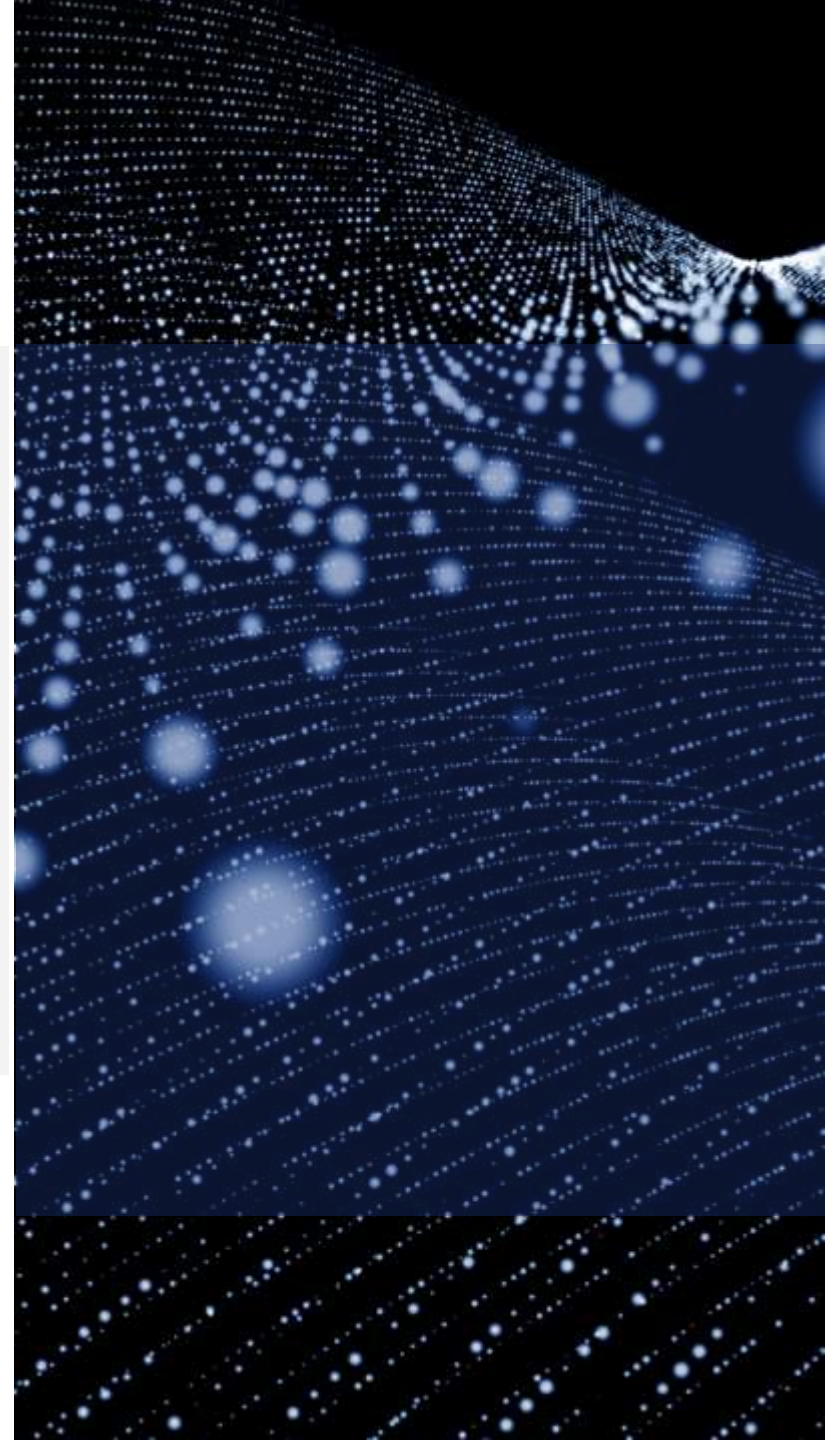
Financial Results Materials
Fiscal Year Ended December 2023

Kohoku Kogyo is a leading manufacturer of lead terminals for aluminum electrolytic capacitors and parts for submarine optical communication.

Kohoku Kogyo Co., Ltd.
February 8, 2024

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**I . Financial summary of FY12/2023
and Financial Forecast for FY12/2024**

Highlights of Fiscal Year Ended December 2023

In the lead terminals business, in addition to the adjustment of inventory for automobiles, sales and profit decreased as demand declined significantly in the ICT and consumer markets

In the optical components and devices business, although sales of core optical isolators remained steady, sales and profits decreased under the impact of partial SCM adjustments

● Macro Environment

- As the global economy moves past COVID-19, some sectors, such as the retail and service industries improved.
- The impact of rising prices such as energy prices, and geographical risks like Russia and Ukraine.
- Economic slowdown due to the slump in consumption and real estate prices in China.
- The domestic economy gradually began to show signs of improvement, including the improvement of the employment environment, a recovery in capital expenditure, and the stock market trending higher.

● Business Environment

- The expansion of the EV market continues, but sales of some electronic components, such as aluminum electrolytic capacitors, were affected by the adjustment of excess inventory in association with the normalization of the supply chain.
- The difficult situation in the information and telecommunications equipment market, including PCs, continued.
- The trend in the submarine cable market was for parts inventory adjustments to occur in association with changes in the schedules of some projects.

● Performance

- Net sales decreased 14.0% (-2,200 million yen) YoY due to worsening market.
- Operating profit decreased 27.6% (-1,071 million yen) YoY as cost reductions could not fully absorb the decrease in sales.

Income Statement Summary

The difficult business environment continued and both sales and profits decreased, falling below the revised forecast of August 2023

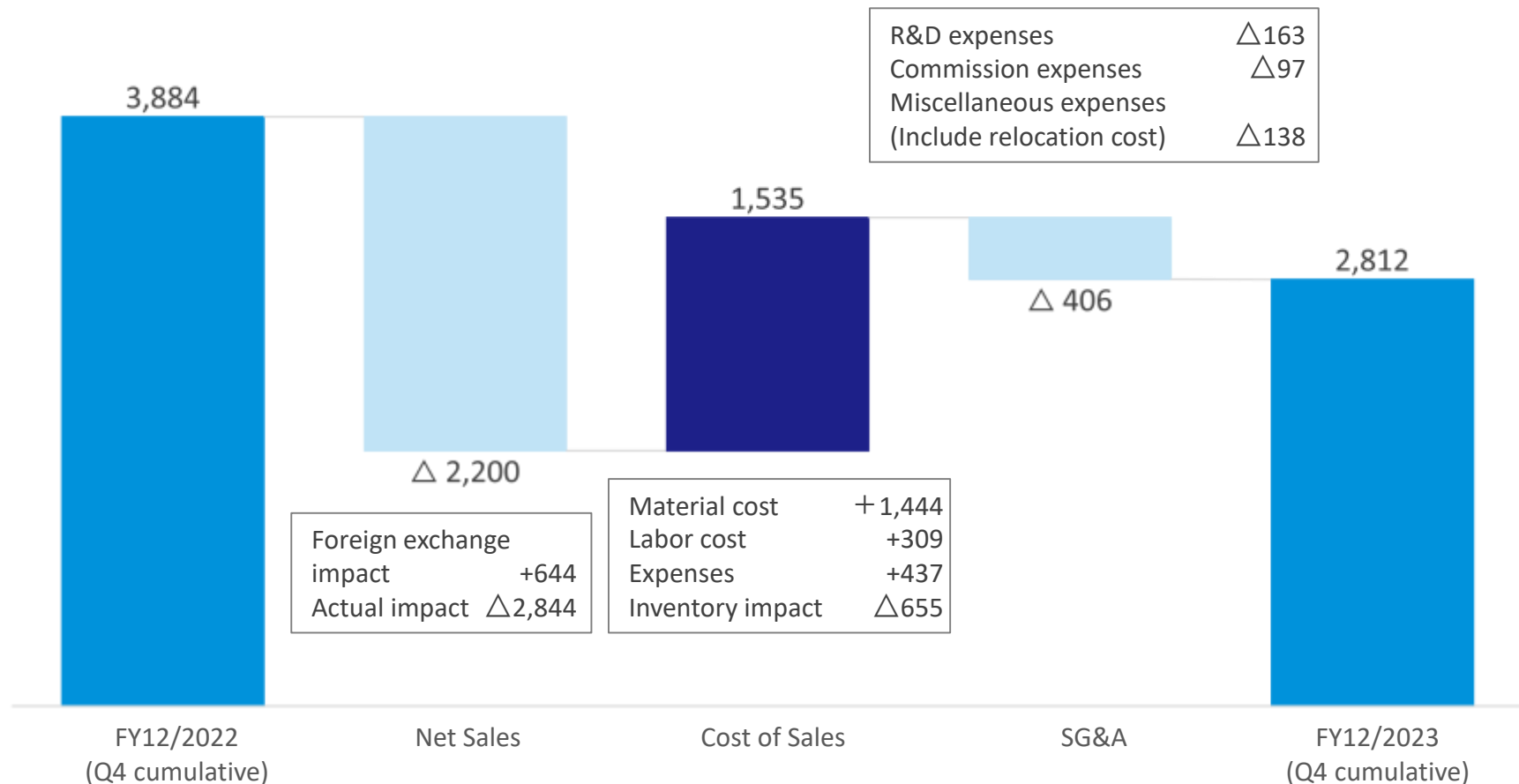
(Millions of yen)	FY12/2022	FY12/2023						
	Q4 cumulative	Q4 cumulative	YoY change		Initial forecast	Revised forecast (As of August)	Revised forecast vs. Actual results	
Net Sales	15,673	13,472	△2,200	△14.0%	16,494	14,490	△1,018	△7.0%
Lead Terminals Business	8,384	7,400	△983	△11.7%	9,162	7,508	△107	△1.4%
Optical Components and Devices Business	7,289	6,071	△1,217	△16.7%	7,331	6,981	△910	△13.0%
Operating profit	3,884	2,812	△1,071	△27.6%	4,121	3,411	△598	△17.6%
<i>Operating profit ratio</i>	24.8%	20.9%	△3.9pt	—	25.0%	23.5%	△2.6pt	—
Ordinary profit	4,443	3,152	△1,291	△29.1%	4,084	3,363	△210	△6.3%
Profit attributable to owners of parent	3,066	1,904	△1,162	△37.9%	2,819	2,157	△253	△11.7%
Exchange rate (average for the period)	131.64 yen/\$	140.66 yen/\$						

Sales of optical devices for submarine cables, which were expected to recover in the fourth quarter, fell unexpectedly. Both sales and profits fell further than expected as of August last year

Factors of Increase/Decrease in Operating profit (YoY)

Although the effect of the weaker yen was apparent, profit decreased as we could not fully absorb the decrease in sales due to the downturn in the market

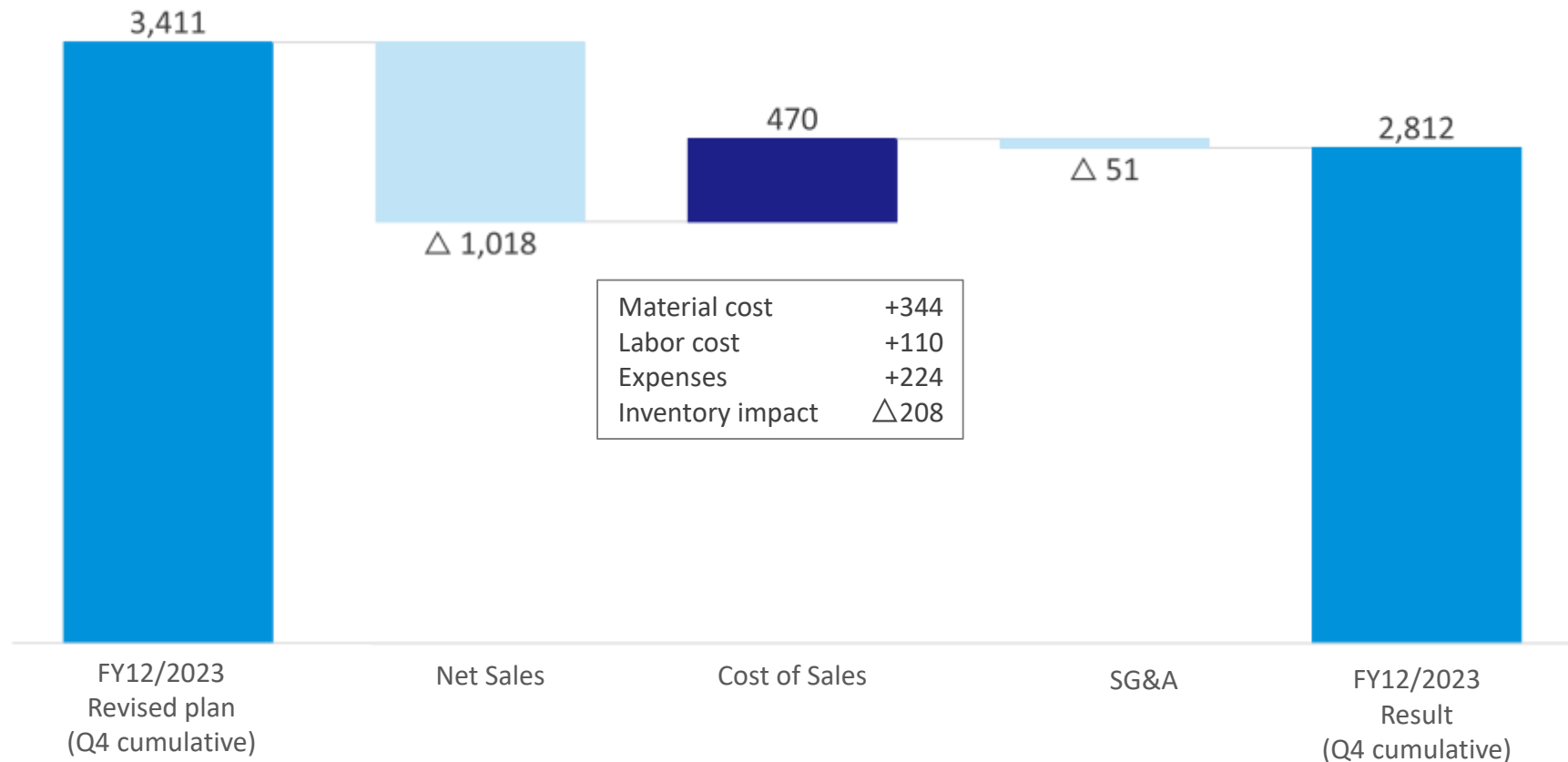
(Millions of yen)



Factors of Increase /Decrease in Operating profit (vs. Revised Plan)

The tendency towards a weaker yen continued, but operating profit fell below the revised plan due to an unexpected decrease in sales in the optical components and devices business

(Millions of yen)



Summary of Balance Sheet/Statement of Cash Flows

Balance Sheet	End of FY12/2022	End of FY12/2023	Major changes
Current assets	17,227	16,735	Cash and deposits +500 Raw materials and supplies Δ 179 Notes and accounts receivable trade Δ 590 etc.
Non-current assets	7,057	8,237	Buildings and structures + 447 Leased assets + 285 Construction in progress + 202 etc.
Total assets	24,285	24,973	
Current liabilities	3,375	2,522	Income taxes payable Δ 213 Accounts payable - trade Δ 207 Short-term borrowings Δ 245 etc.
Non-current liabilities	2,613	2,391	Lease liabilities + 278 Long-term borrowings Δ 517 etc.
Total liabilities	5,988	4,913	
Total net assets	18,296	20,059	Retained earnings + 1,409 Foreign currency translation adjustment + 348 etc.
Total liabilities and net assets	24,285	24,973	
Statement of Cash Flows	FY12/2022	FY12/2023	Details
Operating cash flow	2,755	3,577	
Investing cash flow	Δ 1,949	Δ 1,033	Purchase of property, plant and equipment Δ 1,438 Purchase of intangible assets Δ 170 etc.
Free cash flow	806	2,544	
Financing cash flow	Δ 2,585	Δ 1,577	Repayment of long-term and short-term borrowings Δ 936 etc.
Net increase (decrease) in cash and cash equivalent	Δ1,588	Δ1,076	
Cash and cash equivalent at end of period	9,362	10,439	

Financial Forecast for FY12/2024

Sales are expected to recover, and Sales and profits will increase in both of lead terminals business and optical components and devices business

(Millions of yen)

<Exchange rate sensitivity> Net sales 80 million yen/yen Operating profit 30 million yen/yen	FY12/2023 results	FY12/2024 (Forecast)				
		First-half	Second-half	Full-year	YoY change	YoY
Net Sales	13,472	6,800	7,736	14,536	+1,063	+7.9%
Lead Terminals Business	7,400	3,701	4,166	7,868	+467	+6.3%
Optical Components and Devices Business	6,071	3,098	3,569	6,667	+596	+9.8%
Operating profit	2,812	1,427	1,816	3,243	+431	+15.3%
<i>Operating profit ratio</i>	20.9%	20.9%	23.4%	22.3%	+1.4pt	—
Lead Terminals Business	44	47	210	257	+212	+473.5%
Optical Components and Devices Business	2,767	1,379	1,606	2,986	+218	+7.9%
Ordinary profit	3,152	1,444	1,840	3,284	+132	+4.2%
Profit attributable to owners of parent	1,904	913	1,223	2,136	+232	+11.2%
Net income per share (yen)	211.64	33.84*	45.33*	79.17*		
Exchange rate (average for the period)	140.66 yen/\$	140.00 yen/\$	140.00 yen/\$	140.00 yen/\$	*After consideration of 1:3 stock split	

● Basis for financial forecast

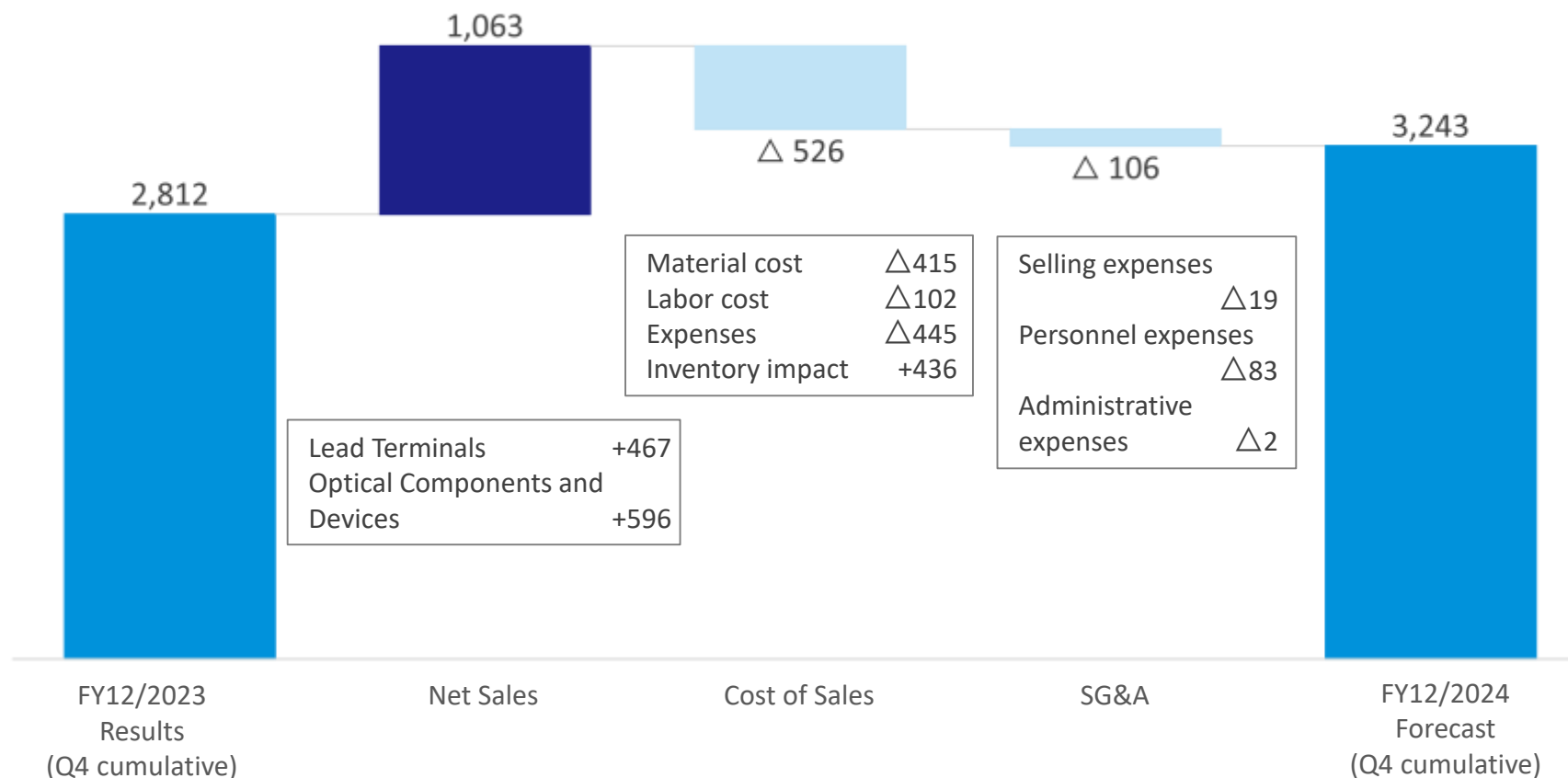
- Lead Terminals Business : Expected gradual recovery as inventory adjustment ends
- Optical Components and Devices Business : Expected sales growth in optical isolators and recovery in optical filters

※ <Exchange rate sensitivity> Estimated value assuming that the fluctuation of 1yen against 1 dollar continues for 1 year

Factors of Increase/Decrease in Operating profit (FY12/2024 Forecast)

Operating profit is expected to increase, due to the contribution of profit recovery in the lead terminals business in the second half of 2024

(Millions of yen)

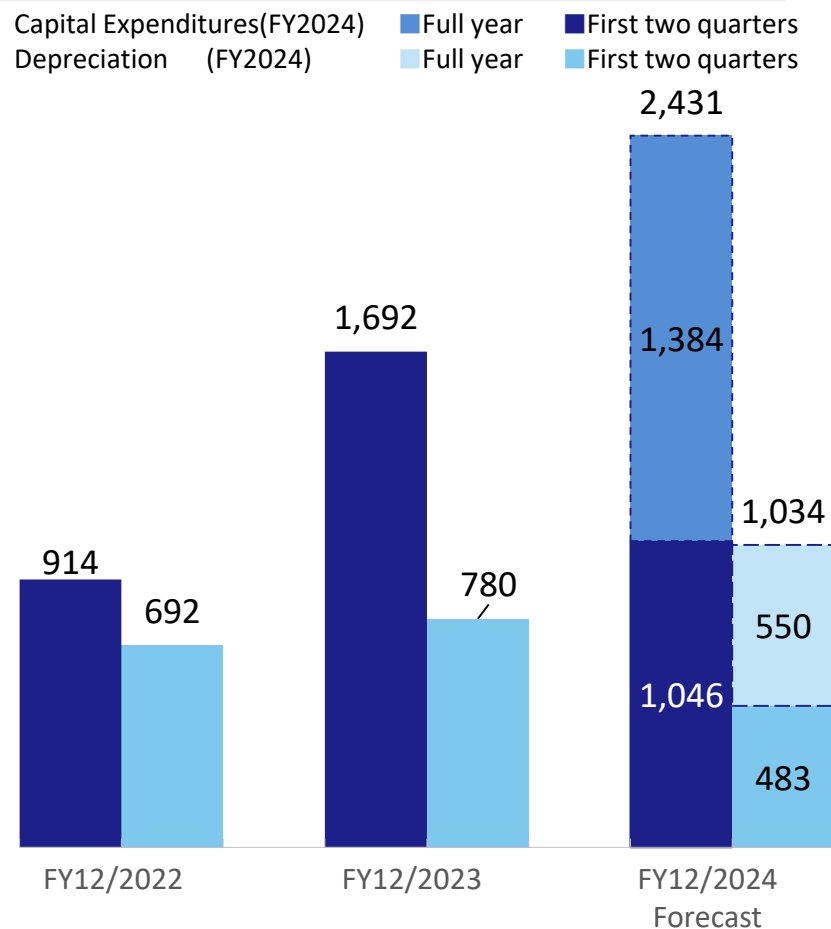


Capital Expenditures and R&D Expenses

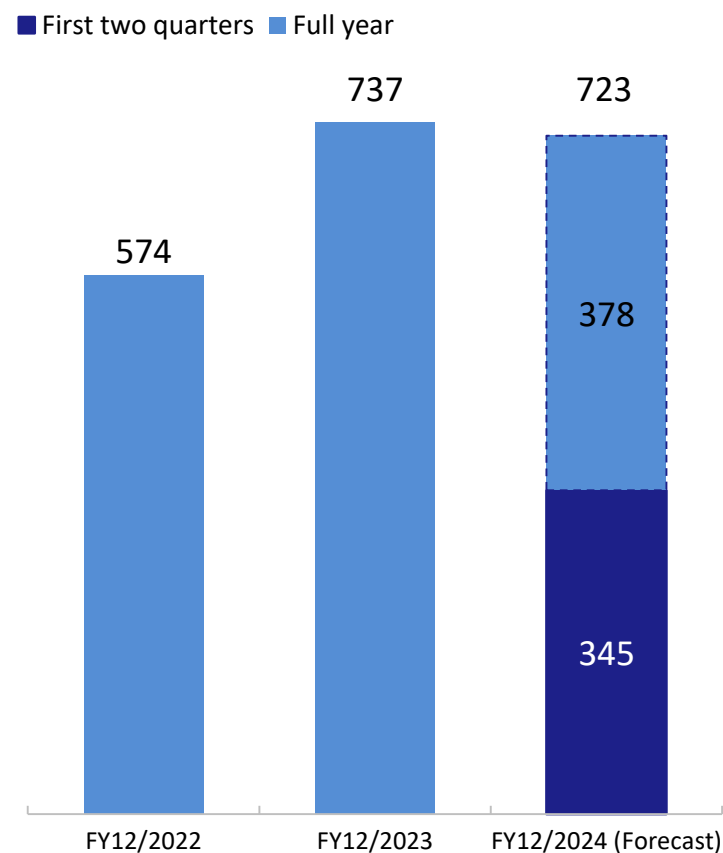
Capital expenditure in FY12/2023 was suppressed against the initial plan (2,281 million yen)
(adjustments matched to market trends)

R&D expenses were above the initial plan (666 million yen)
(high purity silica glass-related expenses increased)

Capital Expenditures and depreciation (Millions of Yen)



R&D expenses (Millions of Yen)





II . Medium-Term Management Plan Growth Strategy

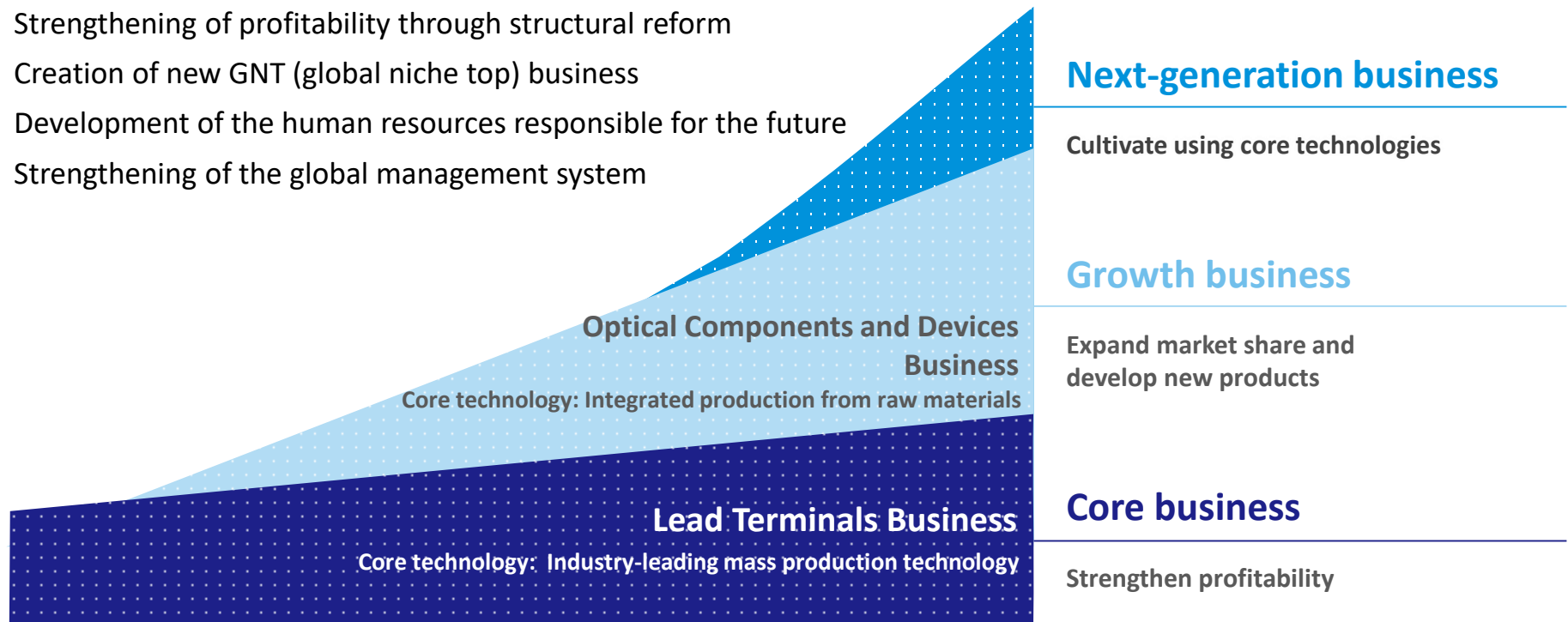
Basic Medium-Term Management Policy

Management Vision

We will carry out research and development, technology development, etc. that contribute to the realization of a one-of-a-kind company and build a highly profitable business.

Basic Medium-Term Management Policy

- Expansion of business scale through market development
- Strengthening of profitability through structural reform
- Creation of new GNT (global niche top) business
- Development of the human resources responsible for the future
- Strengthening of the global management system



Mid-term Management indicators until 2026

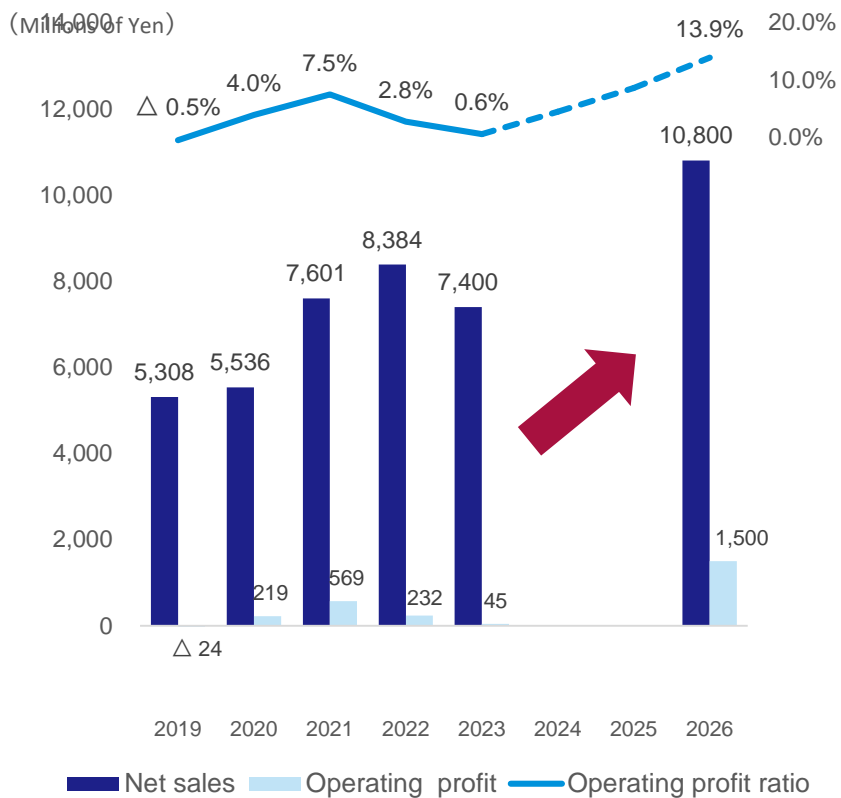
We will further increase the competitiveness of two main businesses and put the third business on a growth path

		FY12/2023	FY12/2026
		Results	Medium-term management plan
Growth	Net Sales	13.4 billion yen	20.9billion yen
Profitability	Operating profit	2.8billion yen	6.3billion yen
Investment	Capital Expenditures	Past three years 3.3billion yen	Next three years 6.6billion yen
Efficiency	ROIC	9.5%	16.0%
	ROE	9.9%	16.4%
Shareholder Return Policy		Goal of Consolidated Dividend payout ratio 30%	Add DOE Guideline

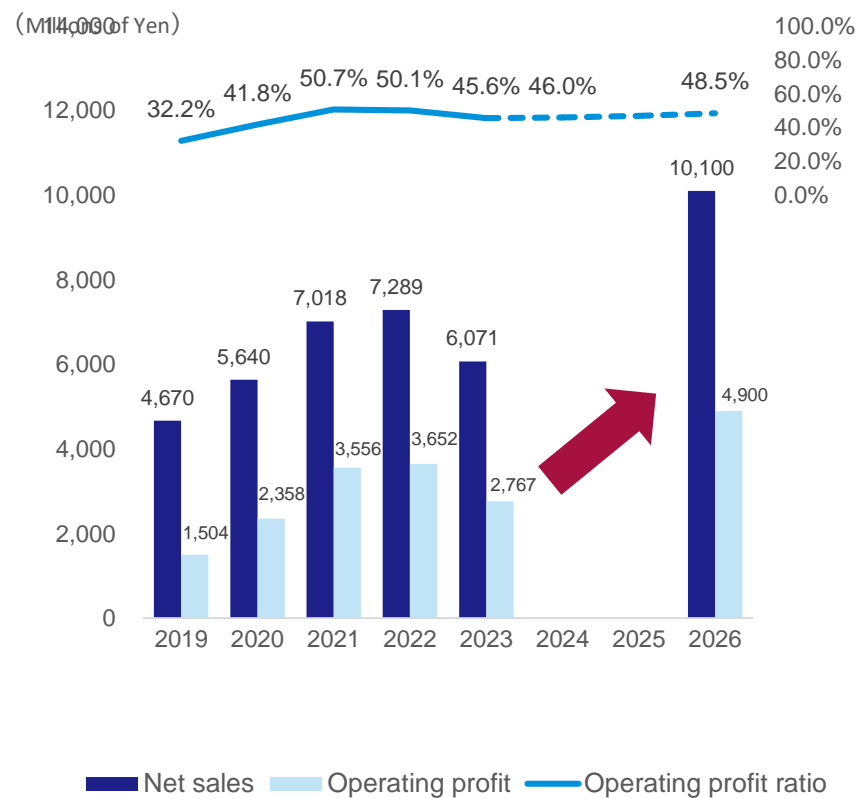
Image of performance of two main business

We will aim for 1.5 times sales in 3 years through the growth of our two main businesses

Lead Terminals Business



Optical Components and Devices Business



Achievement – Progress in Mid – Term Management Policy announced last year

- **Strengthen profitability of core business (lead terminals)**

- Revised prices for unprofitable products from April 2023
- The ratio of new product sales was 14.9% at the end of FY2023 (12.0% annually). Although the adoption of burr-free type products was slow, sales of high-performance products for EDLC increased

- **Increase market share in growth businesses and develop new products (optical components and devices)**

- Development for increasing the number of fibers in submarine cables accelerated, we shipped design samples in 2023 and plan to ship samples for mass production in mid-2024
- Developed optical isolators for multicore fiber jointly with KDDI Research and started shipping samples

- **Develop next-generation businesses utilizing core technologies**

- Started mass production of aspheric lenses for ultraviolet applications in July 2023
- Samples have shipped for semiconductor manufacturing equipment and fiber laser customers, and evaluation has started for mass production
- Business inquiries from customers provided samples increased. We will aim for sales of 700 million yen or more in the final fiscal year of the medium-term plan

- **Strengthen corporate governance and build a strong profit structure**

- Established a Sustainability Committee and enhanced non-financial activities
- Bolster internal control systems, including reconfiguration of core IT systems and response to cyber attacks

Strategy and Action plan (Lead Terminals)

Work focused on the development of new products and technologies and cost reductions

Basic Medium-Term Management Policy	Specific measures in lead terminals business	Action plan, KPI
Expansion of business scale through market development	<ul style="list-style-type: none"> ● New products(include Barr-Free type) adoption increase 	<ul style="list-style-type: none"> ● Goal of sales ratio of new products 30% in FY12/2026
	<ul style="list-style-type: none"> ● Deepen in Chinese market and enhancing sales ● Focusing on Hybrid type, EDLC 	<ul style="list-style-type: none"> ● Maintain 95% market share for Automotive and increase global sales
Strengthen of profitability structural reforms	<ul style="list-style-type: none"> ● Optimizing global production system (Optimization in term of supply chain, production in consumption areas, prices, and costs) 	<ul style="list-style-type: none"> ● Capacity increase and improve production efficiency in overseas production site (Head office factory specialize in high – performance products) ● Responding to increase production of hybrid capacitors by Japanese customers
	<ul style="list-style-type: none"> ● New products using laser welding technology 	<ul style="list-style-type: none"> ● Development in 2024, Start mass production in 2026
	<ul style="list-style-type: none"> ● Development of high – performance lead terminals(Contribute to improvement in characteristics and yield improvement) 	<ul style="list-style-type: none"> ● OEE (Overall Equipment Efficiency) 85%

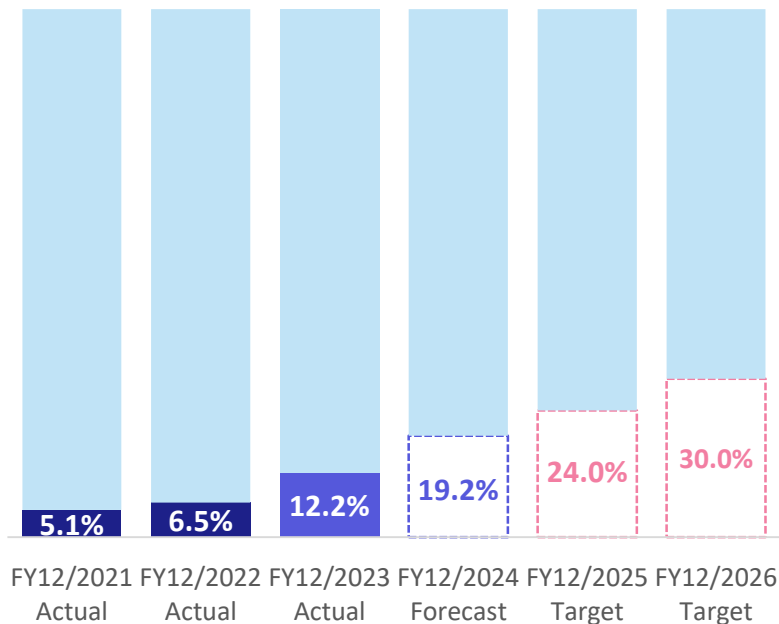
Expansion of business scale through market development

Improve the sales ratio of new products and strengthen sales to the automobile market

Sales Ratio of New Products

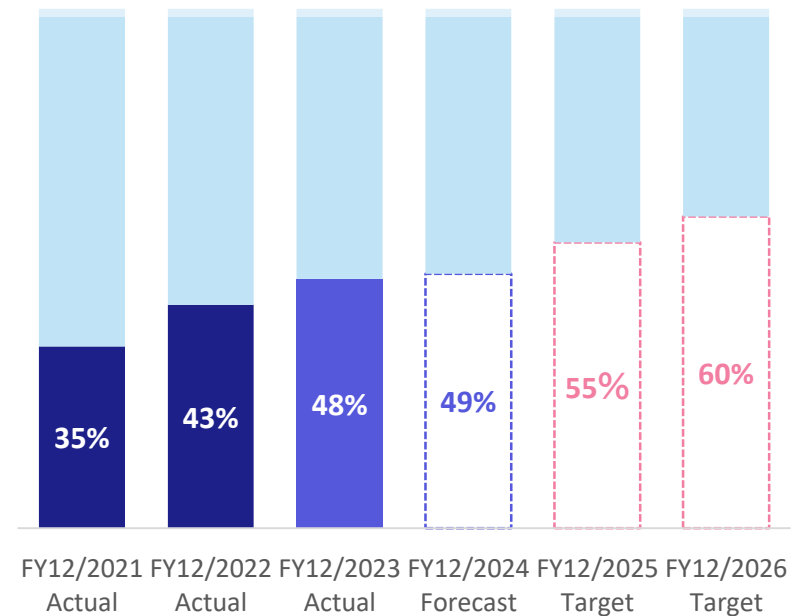


- Enhancing sales promotion for “Barr-free”
- Strengthening the lineup of high – performance new products



Ratio of Sales to the Automotive Market (Estimation)

- Maintain 95% global market share of 95% for Automotive market
- Sales expansion in overseas Automotive market



Strategy and Action plan(Optical Components and Devices)

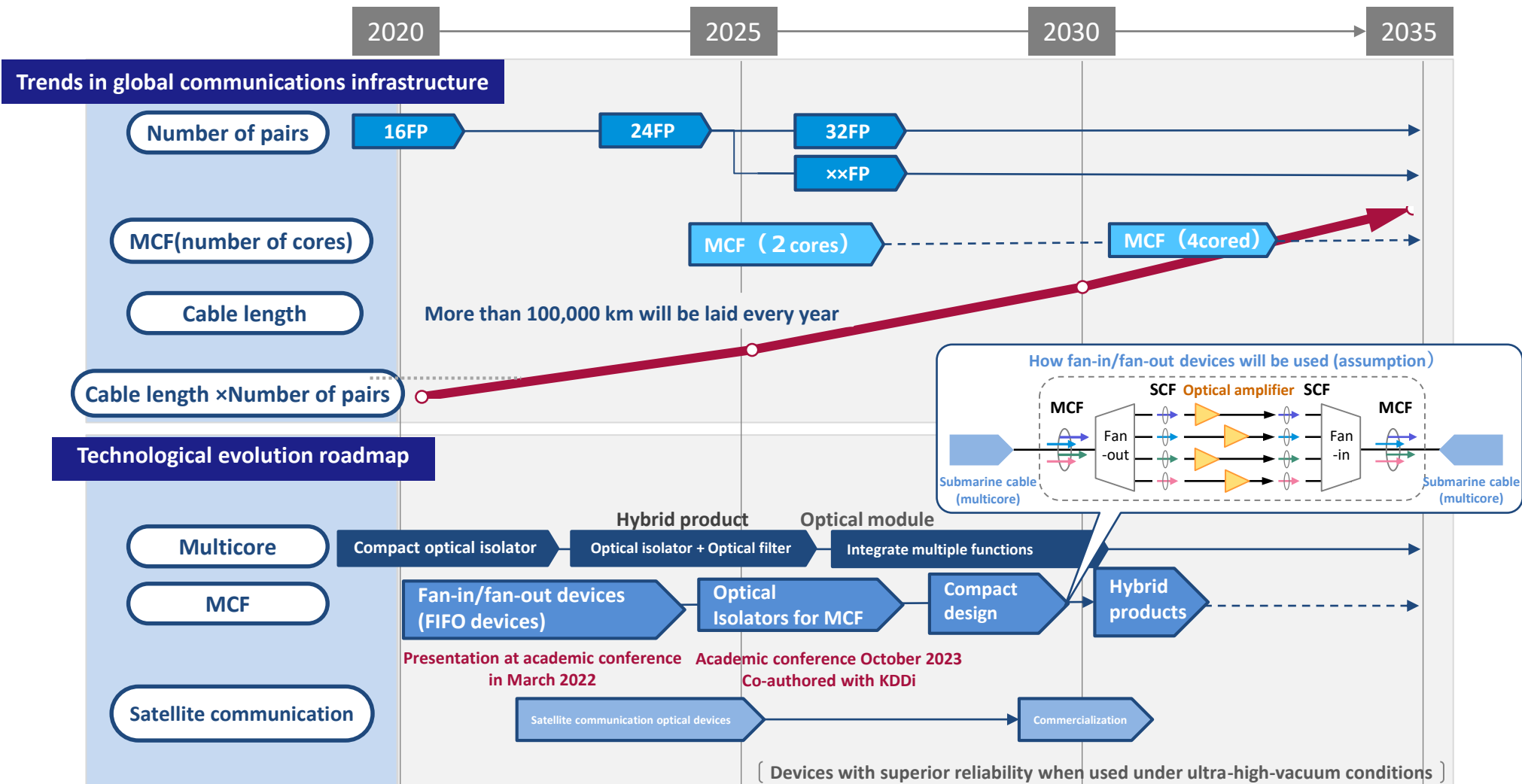
Strengthen sales and revenue further through the strengthening of partnerships with customers, automating, and multi-lining

Basic Medium-Term Management Policy	Specific measures in Optical Components and devices	Action plan, KPI
Expansion of business scale through market development	<ul style="list-style-type: none"> ● Sales expansion through the provision of one-stop solutions related to the development of a platform for next-generation submarine cables 	<ul style="list-style-type: none"> ● Sales ratio of new products such as composition and modularization: 20% in FY12/2026
	<ul style="list-style-type: none"> ● Research and development of new core technologies and applications 	<ul style="list-style-type: none"> ● R&D expenses: 650 million yen in FY12/2026
Strengthen of profitability structural reforms	<ul style="list-style-type: none"> ● Improvement of productivity by automating production 	<ul style="list-style-type: none"> ● 2024: Stage 2 investment for automation ● 2025: Automate 80% of optical isolator assembly process
	<ul style="list-style-type: none"> ● Strengthening based on multi-lining of production 	<ul style="list-style-type: none"> ● 2024: Consideration of concept ● 2026: Start of second base

Expansion of business scale through market development

(Optical Components and Devices)

Strengthen support for the technological evolution of customers and incorporate peripheral technologies in the development process



Creation of new GNT (Global Niche Top) business

< Third pillar > High purity silica glass “SSG®” business [1] The business environment

Expansion into semiconductor manufacturing equipment and other areas is expected due to manufacturing technology breakthroughs

<Features of high purity silica glass>

- High transmittance: Transmits infrared and ultraviolet rays
- High heat and shock resistance: Can be used above 1,000°C
- High chemical stability
- High light resistance

<Applications>

Applications that require high purity silica glass of five to six nines or more

- Semiconductor manufacturing equipment (chemical stability, heat resistance)
- Optical fiber (high transmittance)
- Laser equipment (high transmittance, heat resistance, light resistance)

General manufacturing method for high purity silica glass

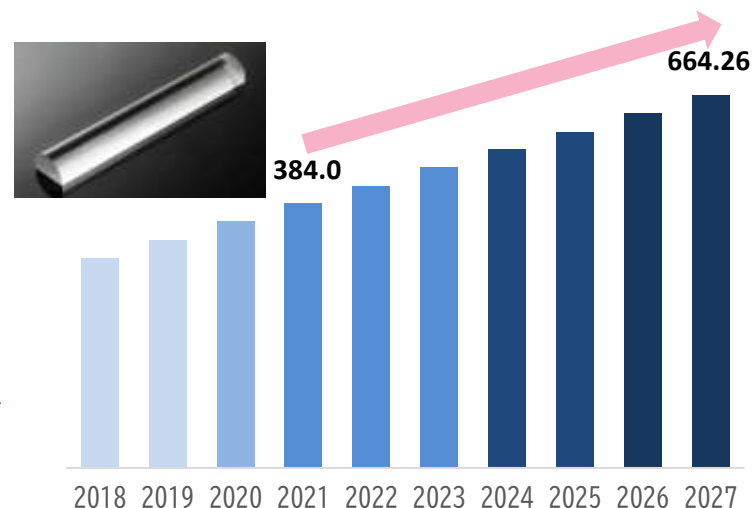
- Direct method: The raw material (SiCl_4) is deposited at high temperature to form ingots
- Soot method: The raw material (SiCl_4) is deposited at low temperature to form ingots, which are sintered at high temperature

※The company estimated the general manufacturing method of high purity silica glass from various literature

The issue SSG® aims to solve

Previously, as processing and the formation of fine or complicated shapes was difficult, application was limited

<Forecast of the high purity silica glass market> (Millions of dollar)



As formation at a high temperature is required by all methods and the end product is shaped by cutting or polishing a glass ingot (large lump), a lot of energy is required to process the silica glass into the required shape

Creation of new GNT (Global Niche Top) business

< Third pillar > High purity silica glass “SSG®” business [2] The business environment

What is the slurry casting method?

< Manufacturing method based on slurry casting >

- ✓ The process from slurry to molding is carried out at room temperature, and after that, the ingots are finally sintered to complete (cutting and polishing after sintering are reduced significantly)
- ✓ Processes such as cutting and polishing when processing into various lenses, nozzles, and other shapes are reduced significantly

Because it is possible to process SSG® into shapes with a high degree of freedom, cutting and polishing processes during shaping can be reduced significantly

< Examples of silica parts produced using SSG® >



Fine lens



Glass preforms



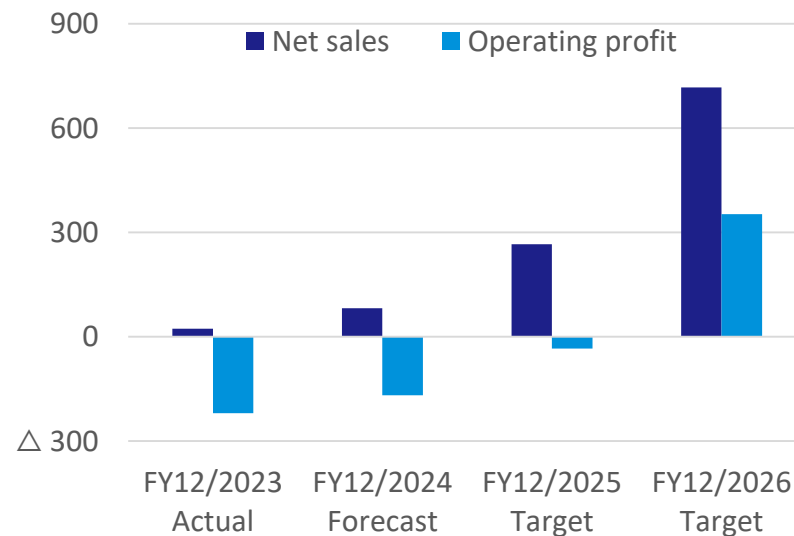
Large molded article for semiconductor manufacturing equipment

「Development into cutting-edge niche markets」

< Business strategy >

- Enter the high purity silica glass market, where the expansion of demand is expected
- Target the markets for condensing lenses for heat rays, ultraviolet rays, etc., fiber preforms, semiconductor manufacturing equipment, laser-related equipment, optical communications, etc.

(Millions of Yen) Mid-term plan for high purity silica glass business



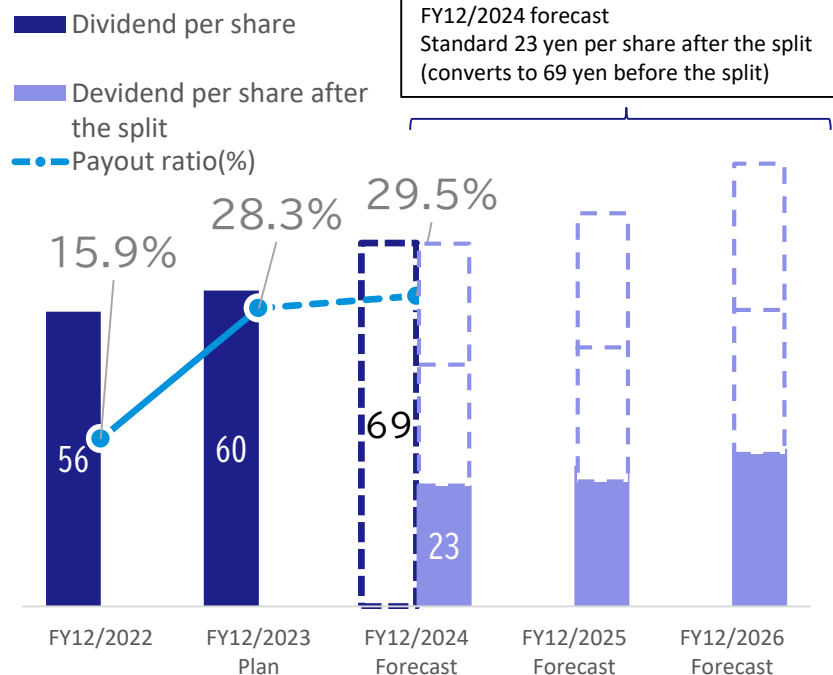
Shareholder Return Policy

- ① Continue to aim for consolidated dividend payout ratio of 30%
- ② In addition, DOE is set at 3% based on the need for stable dividends

Trend of Dividend

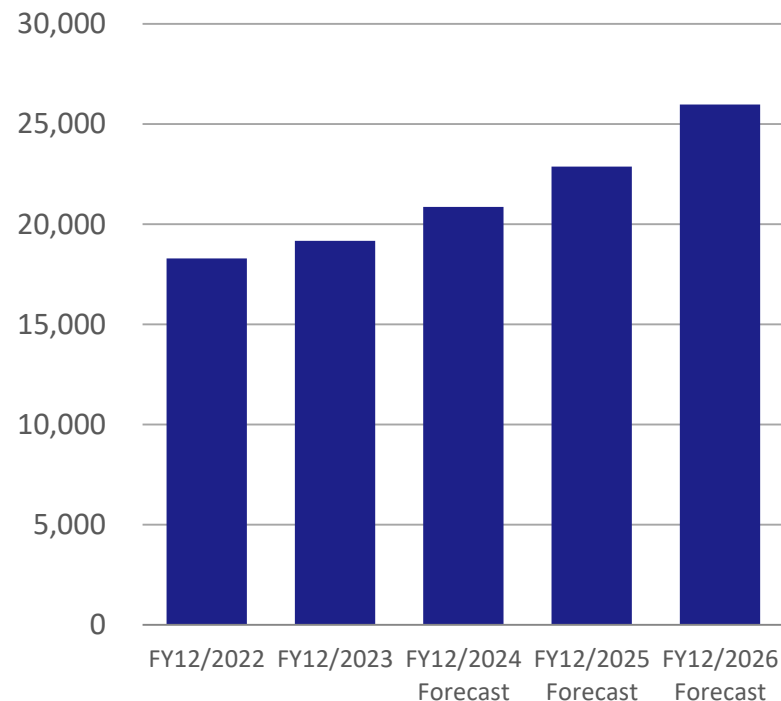
[About the stock split]

Implementation of a stock split at a ratio of 1:3 is scheduled, with March 31, 2024 as the reference date, aimed at improving stock liquidity and expanding our investor base



Trend of Equity

(Millions of yen)



Sustainability

Establishment of a Sustainability Committee, review of future themes and KPIs, and strengthening of progress management

Item	Important issues (Materiality)	Specific Themes of Initiatives	Examples of Key Performance Indicators (KPIs)			
E Environment	Global environmental conservation and reduction of environmental load	<ul style="list-style-type: none"> Introduction of equipment that contributes to CO₂ reduction Increasing the utilization ratio of renewable energy such as solar power Efforts to reduce CO₂ emissions by introducing power-saving devices/adjusting with demand devices Collaboration with “Conservation of Forest of Yamakado Water Source” activities Promotion of paperless practice (reduce paper use) Improving the productivity of optical communication parts and devices and effectively using resources Energy saving in crystal growth process/KECS/KLA Reducing the number of defects Promoting the reuse of water globally 	<ul style="list-style-type: none"> Headquarters: Reduction of CO₂ emissions derived from electricity and fuel by 50% or more in 2030 (compared to 2013 levels) (emissions reduction target in 2030 of 750 tons/year or more) Maintain and strengthen relationship Lead terminals: Reduce by 99% by 2024 (compared with 2021) at headquarters manufacturing department Productivity (yield, person-hours, etc.): Improve 5% YoY starting in 2022 Electricity consumption (per intensity): Reduce by 5% YoY starting in 2022 Defect rate: Reduce by 38.3% by 2024 (compared with 2021) Lead terminals: Reduce water consumption by 6% by 2024 (compared with 2021) 			
		S Society	Development of global human resources	<ul style="list-style-type: none"> Headquarters: Promoting guidance on and development of specialized knowledge and management skills Overseas: Promoting OJT in operations and OFF JT for the surrounding business environment 	<ul style="list-style-type: none"> Acquisition of specialized knowledge necessary for headquarters operations: 2 cases/year starting in 2022 Acquisition of specialized knowledge necessary for overseas operations: 3 cases/year starting in 2022 	
			Creating a workplace that respects diverse individuals and making the most of their abilities	<ul style="list-style-type: none"> Promotion of diversity and inclusion Carrying out awareness-raising activities for respecting human rights 	<ul style="list-style-type: none"> Obtain Certification as Outstanding Organization in Health & Productivity Management in 2023 	
			Realization of safe and rewarding workplaces	<ul style="list-style-type: none"> Promotion of safety and health measures 	<ul style="list-style-type: none"> Survey of current paid leave usage rate: Increase 5 percentage points YoY starting in 2022 	
			Respect for human rights and diversity	<ul style="list-style-type: none"> Appropriate evaluation of part-time employees Headquarters: Human resource development that makes the most of the abilities of female and foreign employees Overseas: Increasing the ratio of female and foreign employees in supervisory and managerial positions 	<ul style="list-style-type: none"> Utilization of employee satisfaction survey: Conduct survey and make improvements once a year Introduce evaluation system for part-time employees Percentage of female and foreign employees in supervisory (leader) and managerial positions: Increase 5% YoY starting in 2022 Career advancement training participation rate: Increase 15% via 2022–2023 plan 	
			Development and provision of new products yet to exist in the world	<ul style="list-style-type: none"> Realization of new optical communication parts and devices that contribute to technological innovation Realization of optical communication parts and devices that contribute to energy saving 	<ul style="list-style-type: none"> New product ratio (net sales): 15% or more by 2024 Energy-saving product ratio (net sales): 15% or more by 2024 	
			Strengthening manufacturing technology	<ul style="list-style-type: none"> Achieving productivity and quality improvement with advanced technology 	<ul style="list-style-type: none"> OEE (Overall Equipment Effectiveness): 88% by 2024 (90% including new welding technology) 	
			Coexistence and common benefit with local communities	<ul style="list-style-type: none"> Promoting social contribution initiatives Collaboration with “Conservation of Forest of Yamakado Water Source” activities Promoting scholarship program to Nagahama Agricultural High School Continuing to donate educational art materials to Nagahama City Promoting activities to clean up traffic mirrors and trash in the neighborhood 	<ul style="list-style-type: none"> Basic funding policy for social contribution activities: 0.5%–1% of consolidated ordinary income (average for the past three fiscal years) 	
			G Governance	Partnerships with suppliers	<ul style="list-style-type: none"> Promoting fair trade practices (stakeholder management) 	<ul style="list-style-type: none"> Consider and implement evaluation score system Evaluation score: Increase 5% YoY starting in 2023
				Thorough corporate governance	<ul style="list-style-type: none"> Strengthening compliance education and training Utilization of whistleblowing system Appropriate management and utilization of owned information and intellectual property Taking appropriate measures for information system security Formulation of basic sustainability policy (CG Code 3.1.3, 4.2.2) Information disclosure in English (3.1.2) Creating business portfolio policy (5.2.1) Other 	<ul style="list-style-type: none"> Ensure compliance with the corporate governance code on an ongoing basis

III. Situation by segment

Results by Segment - Lead Terminals

In addition to the adjustment of inventory for automobiles, sales and profit decreased as demand declined significantly in the ICT and consumer markets

(Millions of yen)	FY12/2022	FY12/2023			FY12/2023					
	Q4 cumulative	Q4 cumulative	YoY change		Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)	QoQ change	
Net Sales	8,384	7,400	△983	△11.7%	1,864	1,924	1,791	1,819	+28	+1.6%
Operating profit	232	44	△187	△80.7%	28	128	△95	△16	+79	—
<i>Operating profit ratio</i>	2.8%	0.6%	△2.2pt	—	1.5%	6.7%	△5.4%	△0.9%	+4.4pt	—

Overview of FY12/2023

● Market conditions did not recover and the business environment was difficult

- The expansion of the EV market continues, but sales of some electronic components, such as aluminum electrolytic capacitors, were affected by the adjustment of excess inventory in association with the normalization of the supply chain
- The difficult situation in the information and telecommunications equipment market, including PCs, and the consumer equipment markets continues

● Our status and efforts to improve profits

- Expanded sales of burr-free type products with significantly improved vibrational and insulation characteristics, and new products for EDLC (electric double layer capacitors)
- Efforts have been made to develop new welding technology to achieve high efficiency and precision
- Transferred the main factory in Suzhou, China, and advanced the optimization of the global production system, and the improvement of the technological capabilities of the plants in Dongguan and Malaysia

Situation changes in the last year and the current – Lead Terminals

1. Perception based on information from customers, market research firms, and other sources

	FY12/2023 forecast(Initial comments)	FY12/2023 Results	FY12/2024 Forecast
(1) Overall aluminum electrolytic capacitor market (mainly Japanese customers)	<ul style="list-style-type: none"> ● In 2023, automotive application sales are expected to increase slightly during the first half of the year and recover in the second half compared with 2022 as the shortage of semiconductors is likely to continue while on-automotive sales are expected to decrease slightly. ● The telecommunications equipment sector is expected to remain in a severe situation in the first half of 2023 due to the delayed recovery of the Chinese market but should gradually recover in the second half. 	<ul style="list-style-type: none"> ➤ Sales to the automobile market did not recover due to the prolonged adjustment of excess inventories caused by the COVID-19 pandemic, and in addition, sales to non-automobile sectors decreased significantly due partly to the slump in demand arising from inventory adjustments ➤ Difficult conditions continued due to the slump in the smartphone market and the suppression of data center investment 	<ul style="list-style-type: none"> ➤ Inventory adjustments are expected to be completed by spring, followed by a recovery ➤ While the continued spread of EVs is expected, the automobile market is expected to recover gradually due to concerns of a recession in China and elsewhere ➤ A recovery from the inventory adjustments is expected in the ICT equipment and consumer markets, but the slump in demand is expected to continue
(2) Trends by application	<ul style="list-style-type: none"> ● Sales of hybrid capacitors for the automotive market increased approximately 30% (replacing some existing markets). ● The overall automobile market will grow only slightly, but the EV market is expected to grow significantly. ● Regarding the ICT market, the PC/server/smartphone market will continue to be sluggish during the first half of this year. 	<ul style="list-style-type: none"> ➤ Demand in the Chinese and European automobile markets did not increase ➤ The EV market expanded, but the adjustment of excess inventories was prolonged in the aluminum electrolytic capacitor market ➤ The suppression of investment in the data center market and the downturn in the PC and smartphone markets continued 	<ul style="list-style-type: none"> ➤ Sales of lead terminals for hybrid capacitors for automobiles are expected to triple year on year ➤ Inventory adjustments were virtually complete at the beginning of the period. A recovery is expected from spring ➤ The market is expected to head towards recovery in the second half of the year, driven by the generative AI market etc.

Situation changes in the last year and the current – Lead Terminals

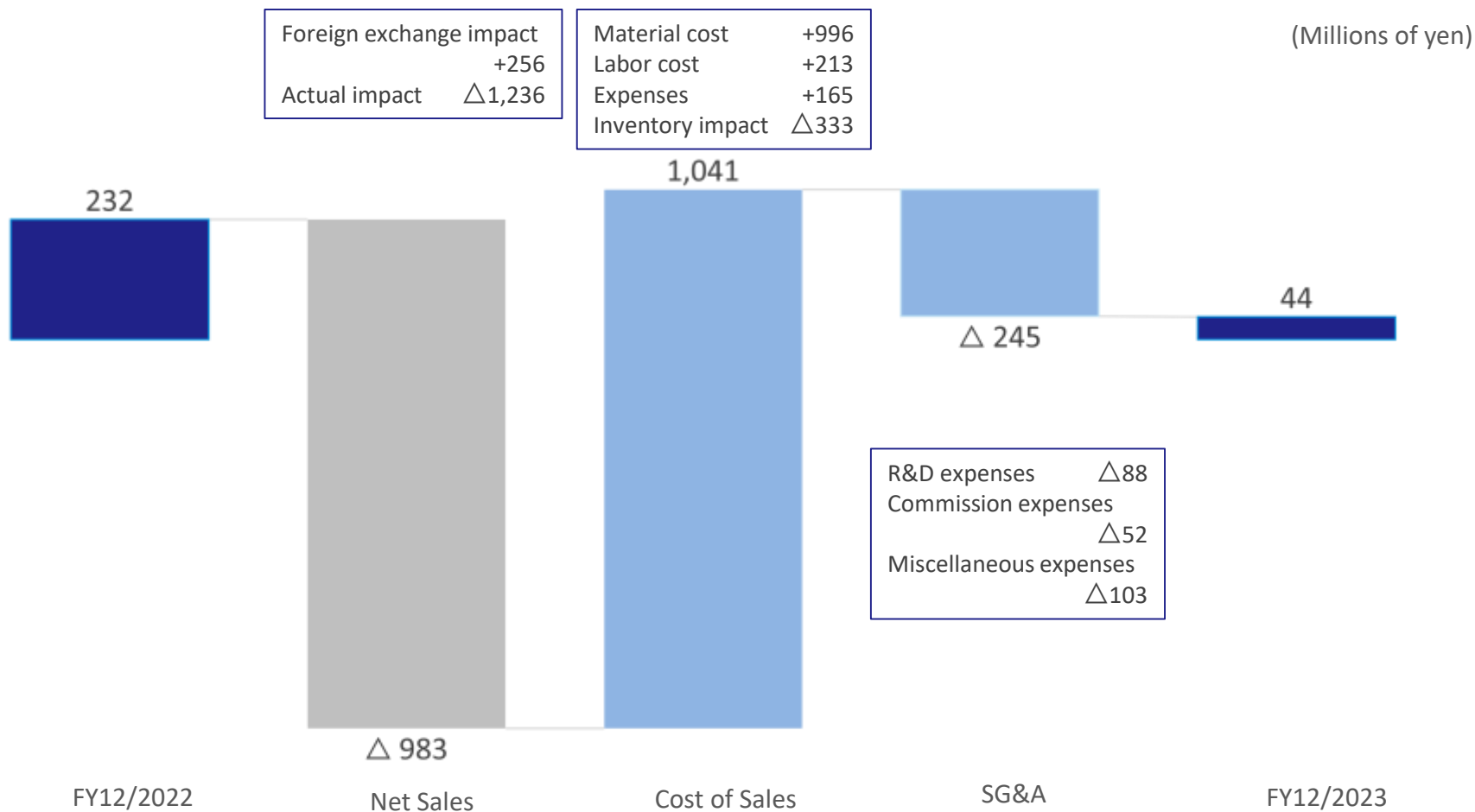
2. Business environment surrounding the company

	FY12/2023 forecast(Initial comments)	FY12/2023 Result	FY12/2024 Forecast															
(1) Production	<ul style="list-style-type: none"> ● Production will be suspended at the Suzhou factory from July to September 2023. It is expected to resume in October. ● Inventory accumulation and inventory sales at the Suzhou factory until June, equipment transfer to the Dongguan/Malaysia factories, and production increase. ● Due to the relocation of the Suzhou factory, the overseas production ratio will change from 5:2:2 to 3:3:3 (Suzhou: Dongguan: Malaysia). 	<ul style="list-style-type: none"> ➢ Transition to full production was completed from October 2023 ➢ Normalization of inventory was completed by September 2023 as planned ➢ Transition completed in combination with the relocation of the Suzhou factory 	<ul style="list-style-type: none"> ➢ Strengthen profitability and improve quality by improving production efficiency at the Suzhou, Dongguan and Malaysia bases ➢ Target of OEE 85% 															
(2) Sales	<ul style="list-style-type: none"> ● In line with the growth of hybrid capacitors, we will significantly increase the production of a new burr-free type (at all bases) and raise sales of high-performance products to 20% at once. ● Sales of new products other than burr-free type are expected to increase in the second half of the year in line with the growth of the automotive application market. ● Gradual expansion of automotive EDLC (Electric Double Layer Capacitor) 	<ul style="list-style-type: none"> ➢ Significant non-achievement as evaluation of the new burr-free type took time. Evaluations progressed gradually in the second half of the year. (About 2/3 of major customers decided on adoption) ➢ Significant increase in sales for EDLC 	<p>➢ Sales forecast of Lead Terminals for High - performance capacitors</p> <p>(100 million Yen) 1.6 times</p> <table border="1"> <caption>Sales Forecast (100 million Yen)</caption> <thead> <tr> <th>Year</th> <th>Solid Capacitors</th> <th>Hybrid type</th> <th>EDLC Capacitors</th> <th>liquid Capacitors</th> </tr> </thead> <tbody> <tr> <td>2023</td> <td>~3.5</td> <td>~2.5</td> <td>~2.5</td> <td>~1.5</td> </tr> <tr> <td>2024</td> <td>~4.5</td> <td>~3.5</td> <td>~3.5</td> <td>~2.5</td> </tr> </tbody> </table>	Year	Solid Capacitors	Hybrid type	EDLC Capacitors	liquid Capacitors	2023	~3.5	~2.5	~2.5	~1.5	2024	~4.5	~3.5	~3.5	~2.5
Year	Solid Capacitors	Hybrid type	EDLC Capacitors	liquid Capacitors														
2023	~3.5	~2.5	~2.5	~1.5														
2024	~4.5	~3.5	~3.5	~2.5														
(3) Technology	<ul style="list-style-type: none"> ● Started development of new welding technology that will be the cornerstone of lead terminals technology (targeting practical application in 2024) ● Higher speed rotation (300 rpm → 350 rpm), operational availability (85% → 90%), OEE (overall equipment effectiveness) (83% → 90%). 	<ul style="list-style-type: none"> ➢ Continuous development ➢ Continuous development 	<ul style="list-style-type: none"> ➢ Target of OEE 85% ➢ Start of shipments sample products using laser welding machine 															

(Laser welding machine currently under development)

Factors of Increase/Decrease in Operating profit by Segment (YoY) - Lead Terminals

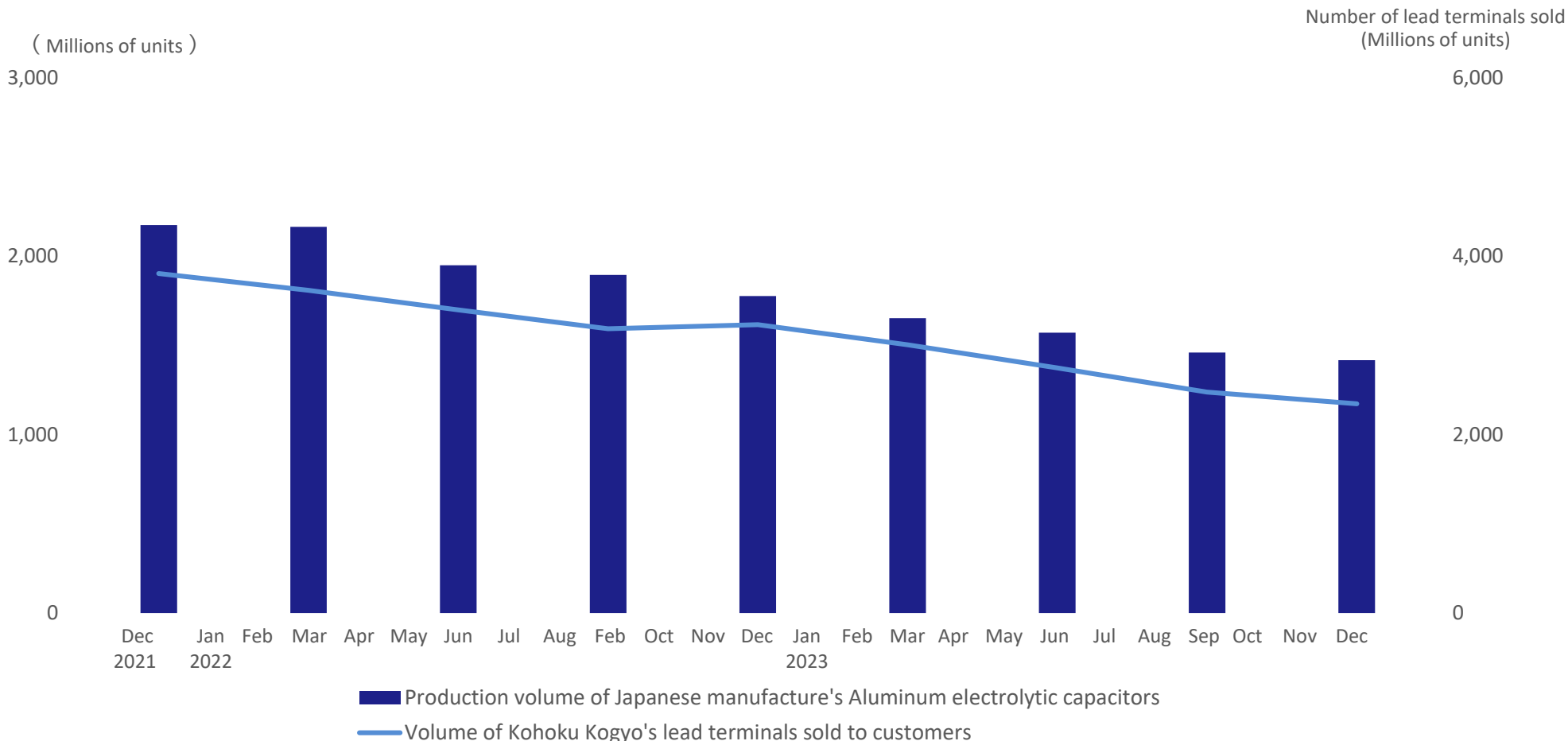
The decrease in sales due to market deterioration was covered to some extent by cost reductions and other initiatives



Business Environment in FY12/2023

The adjustment of aluminum electrolytic capacitor production volumes by Japanese companies since the summer of the year before last has been prolonged

Miniature Aluminum Electrolytic Capacitors Market Production (Japanese Manufacturers) (Including Overseas Production)

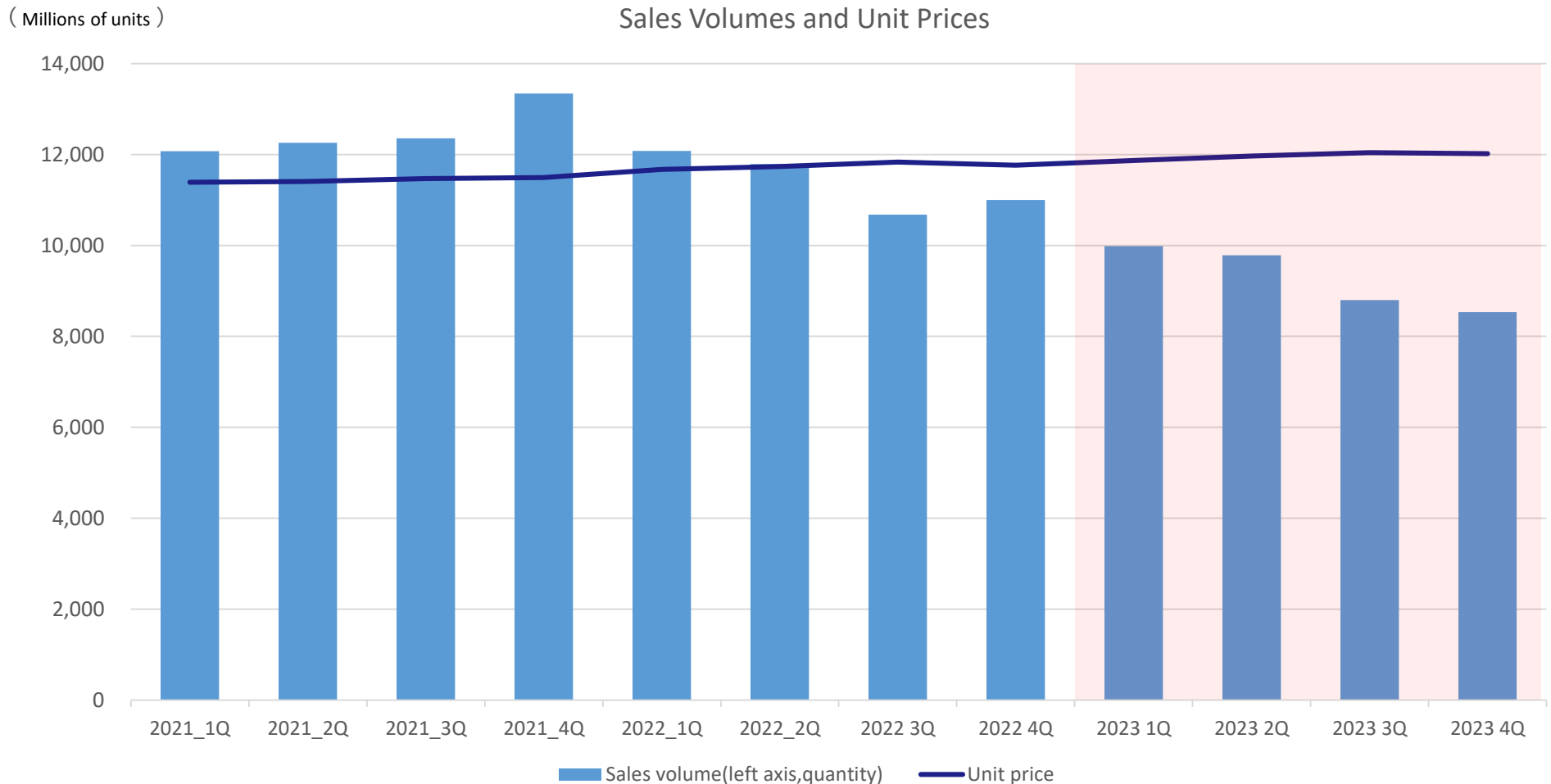


*Figures are monthly.

(Source: Kohoku Kogyo)

Trends in Sales Volumes and Unit Prices

The market environment continued to be difficult, but it is estimated adjustments are at the final stage



Financial Forecast for FY12/2024 - Lead Terminals

Second half revenue is expected to recover due to a market recovery and improvement of the product mix

(Millions of yen)	FY12/2023	2024年12月期(計画)				YoY change	YoY
	Actual	First-half forecast	Second-half forecast	Full-year forecast			
Net Sales	7,400	3,701	4,166	7,868	+467	+6.3%	
Operating profit	44	47	210	257	+212	+473.5%	
<i>Operating profit ratio</i>	<i>0.6%</i>	<i>1.3%</i>	<i>5.0%</i>	<i>3.3%</i>	<i>+2.6pt</i>	—	

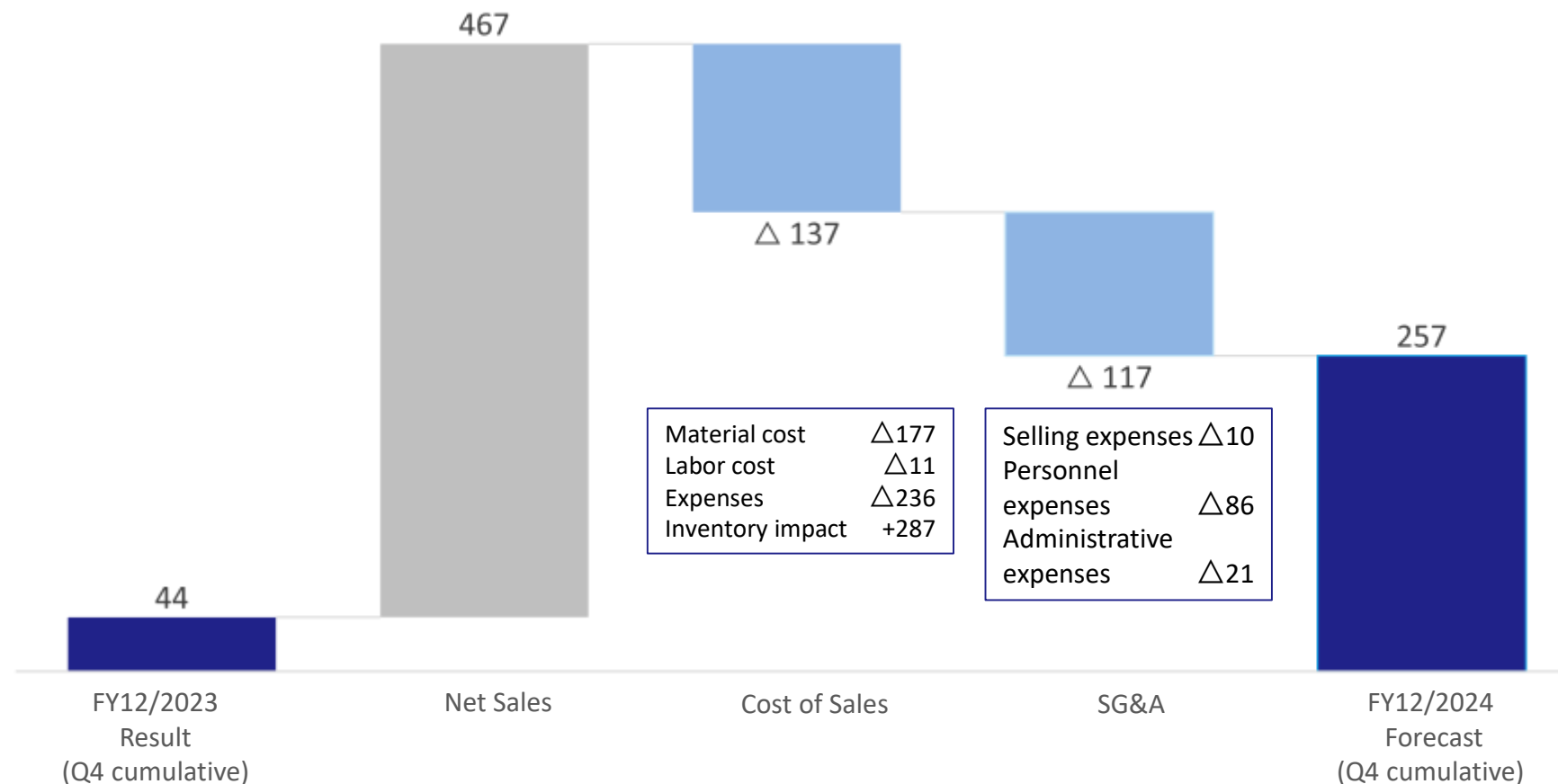
Outlook for FY12/2024

- Market adjustments are viewed to have bottomed out from October to December 2023, but a rapid recovery cannot be expected in the first half of the year. Recovery is expected from mid-year on
- Production capacity to be increased in Dongguan and Malaysia, and improvements in production efficiency to be promoted
- We will aim to increase sales of hybrid capacitors by 2.8 times YoY by expanding sales of burr-free type and other new products

Factors of Increase/Decrease in Operating profit by Segment (Forecast for FY12/2024) – Lead Terminals

Increased sales and profits are expected due to a market recovery and the expansion of new product sales

(Millions of yen)



Results by Segment- Optical Components and Devices

Optical filters and optical fiber array products slumped and both sales and profits declined

(Millions of yen)	FY12/2022	FY12/2023			FY12/2023					
	Q4 cumulative	Q4 cumulative	YoY change		Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)	QoQ change	
Net Sales	7,289	6,071	△1,217	△16.7%	1,656	1,577	1,539	1,297	△242	△15.7%
Operating profit	3,652	2,767	△884	△24.2%	817	711	704	534	△170	△24.2%
Operating profit ratio	50.1%	45.6%	△4.5pt	—	49.3%	45.1%	45.8%	41.2%	△4.6pt	—

Overview of FY12/2023

● Industry/market trends

- In optical devices, long-term bulk orders for optical isolators were received against the backdrop of the expansion of demand in association with the strengthening of global communications infrastructure
- Sales of optical filters in the submarine cable market were down as parts inventory adjustments occurred in association with changes in the schedules of some projects
- Sales of optical fiber arrays for land-based optical communication declined due to factors including adjustments in the data center market

● Changes in the external environment and responses

- In order to strengthen the stable supply system, the company automated production at the post-process sites and strengthened natural disaster countermeasures such as water stop measures at the pre-process bases
- The company developed small and multi-core composite products in line with technological progress toward further growth of information and communications traffic
- The company has strengthened its R&D activities for the evolution of next-generation communications technologies, such as a four-core MCF switching module for future multi-core fiber technologies, and an optical isolator for four-core fiber for long-distance communication such as submarine cables

Situation changes in the last year and the current

- Optical Components and Devices

1. Market environment and order trends

	FY12/2023 forecast(Initial Comments)	FY12/2023 Result	FY12/2024 Forecast
(1)Market trends	<ul style="list-style-type: none"> ● Steady market growth is expected to continue in the submarine cable market as the trend toward higher speeds and longer capacities continues 	<ul style="list-style-type: none"> ➤ Sales of submarine cables to customers, which were expected to recover in the second half, did not recover, and sales targets were not achieved ➤ Land-based products for China and other markets also underachieved significantly 	<ul style="list-style-type: none"> ➤ Optical isolators are expected to remain strong ➤ Optical filters are expected to recover from mid-year ➤ A recovery is expected in the second half due to long-term perspective submarine cable projects

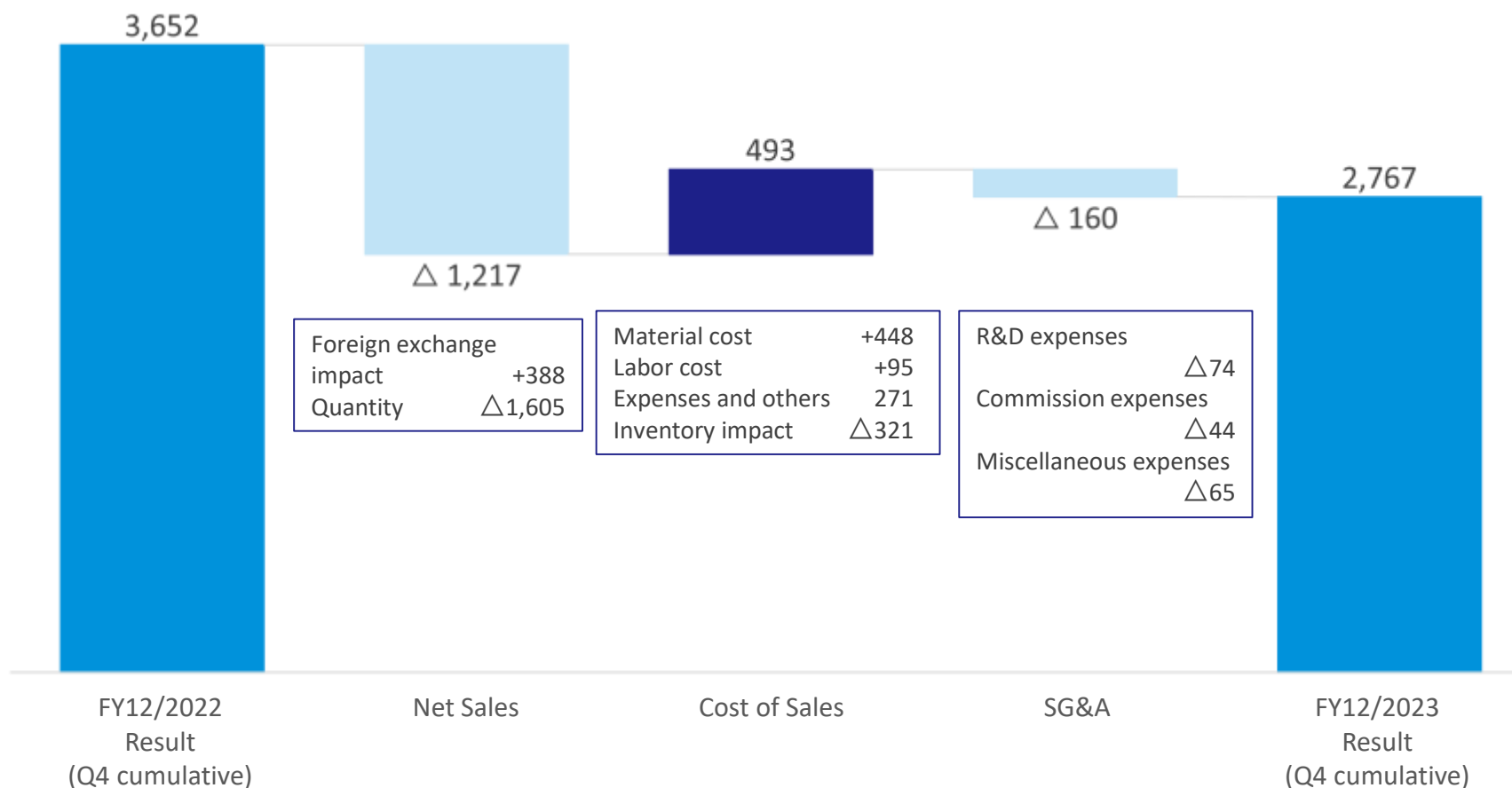
2. Business Environment surrounding the company

	FY12/2023 forecast(Initial Comments)	FY12/2023 Result	FY12/2024 Forecast
(1) Product development	<ul style="list-style-type: none"> ● Develop new products with 32 FP or more ● Develop technologies for multicore fiber and satellite communication optical devices with an eye to 2030 and beyond 	<ul style="list-style-type: none"> ➤ The development of new composite devices and modules for submarine cables progressed ➤ Shipments of sample optical devices for multicore fiber started 	<ul style="list-style-type: none"> ➤ New composite device products. Shipments of mass production samples in the second half of 2024. These are expected to contribute to sales in 2025 ➤ Transition from conventional seed development to next-generation technology and platform development
(2) Productivity, etc.	<ul style="list-style-type: none"> ● Introduce semi-automatic production equipment ● Strengthening the BCP system 	<ul style="list-style-type: none"> ➤ A mass production trial with semi-automated equipment started at the Sri Lanka factory ➤ Completed flood control measures at the pre-processing base (headquarters factory) for optical devices. Strengthened the headquarters BCP system 	<ul style="list-style-type: none"> ➤ Expand semi-automated production equipment and production capacity in Sri Lanka

Factors of Increase/Decrease in Operating profit (YoY change)- Optical components and devices

Sales of optical filter devices decreased due to factors including adjustments to delivery schedules that continued until around summer and delays to some submarine cable construction projects

(Millions of yen)

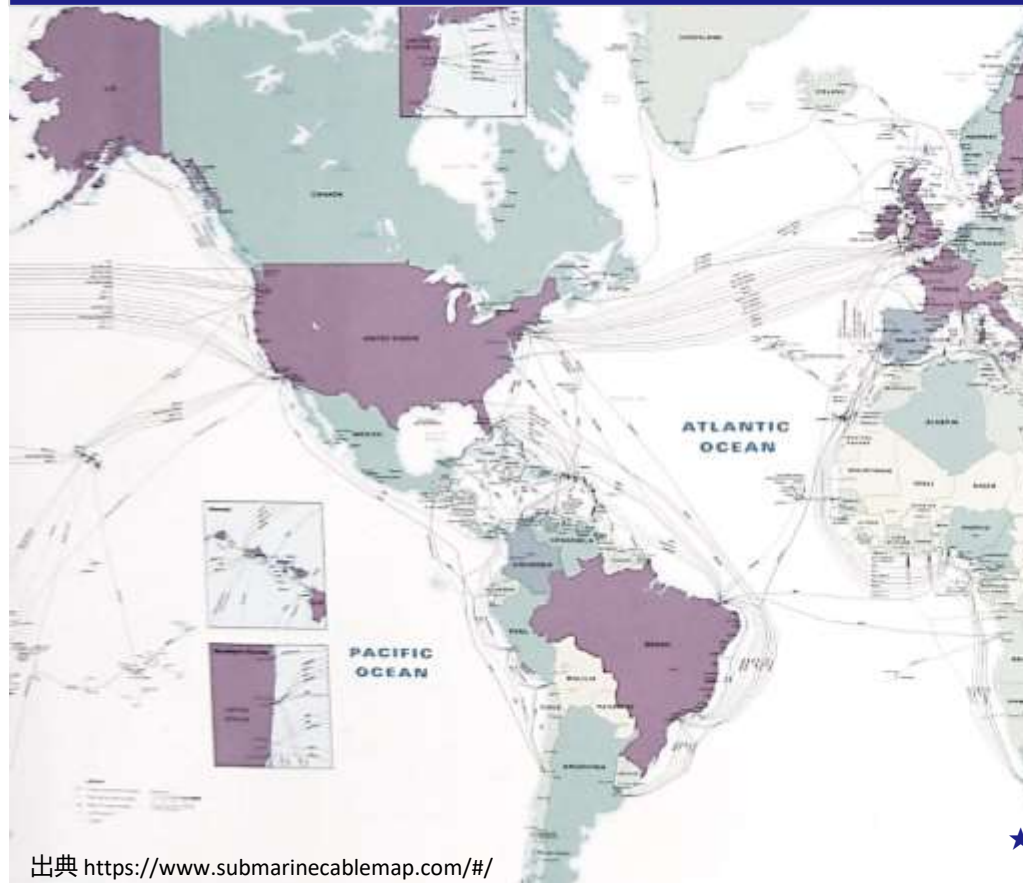


New submarine cable networks will continue to be laid After 2024

In addition to communications carriers and GAFAM, long-distance projects from data centers are expected to increase in future

*Lines in the map are undersea cables Overall diagram of long – distance submarine cable

As of January 2024



20 Long-distance submarine cable projects announced from 2022 to 2023				
Project name	Year of announcement	Start of service	Owner	Distance
SeaMeWe-6	2022	2025	Microsoft etc. 15 companies	19,200 km
Asia Connect Cable-1 (ACC-1)	2022	2025	Inligo Networks	18,000 km ★
JUNO	2022	2024	Seren Juno Network Co., Ltd.	10,000 km
Medusa Submarine Cable System	2022	2024	AFRIX Telecom	8,760 km
Asia Link Cable (ALC)	2022	2025	China Telecom etc. 5 companies	6,000 km
SEA-H2X	2022	2024	China Mobile etc. 4 companies	10,000 km
Hawaiki Nui	2023	2026	Hawaiki Submarine Cable LP	25,000 km ★
Echo	2023	2025	Google, Meta	17,184 km ★
TPU	2023	2025	Google	13,470 km
Anjana	2023	2024	Meta	7,121 km
TAM-1	2023	2025	Trans Americas Fiber	7,000 km
Sydney-Melbourne-Adelaide-Perth (SMAP)	2023	2026	SUBCO	5,000 km

★ indicates projects the start of service was delayed

出典 <https://www.submarinecablemap.com/#/>

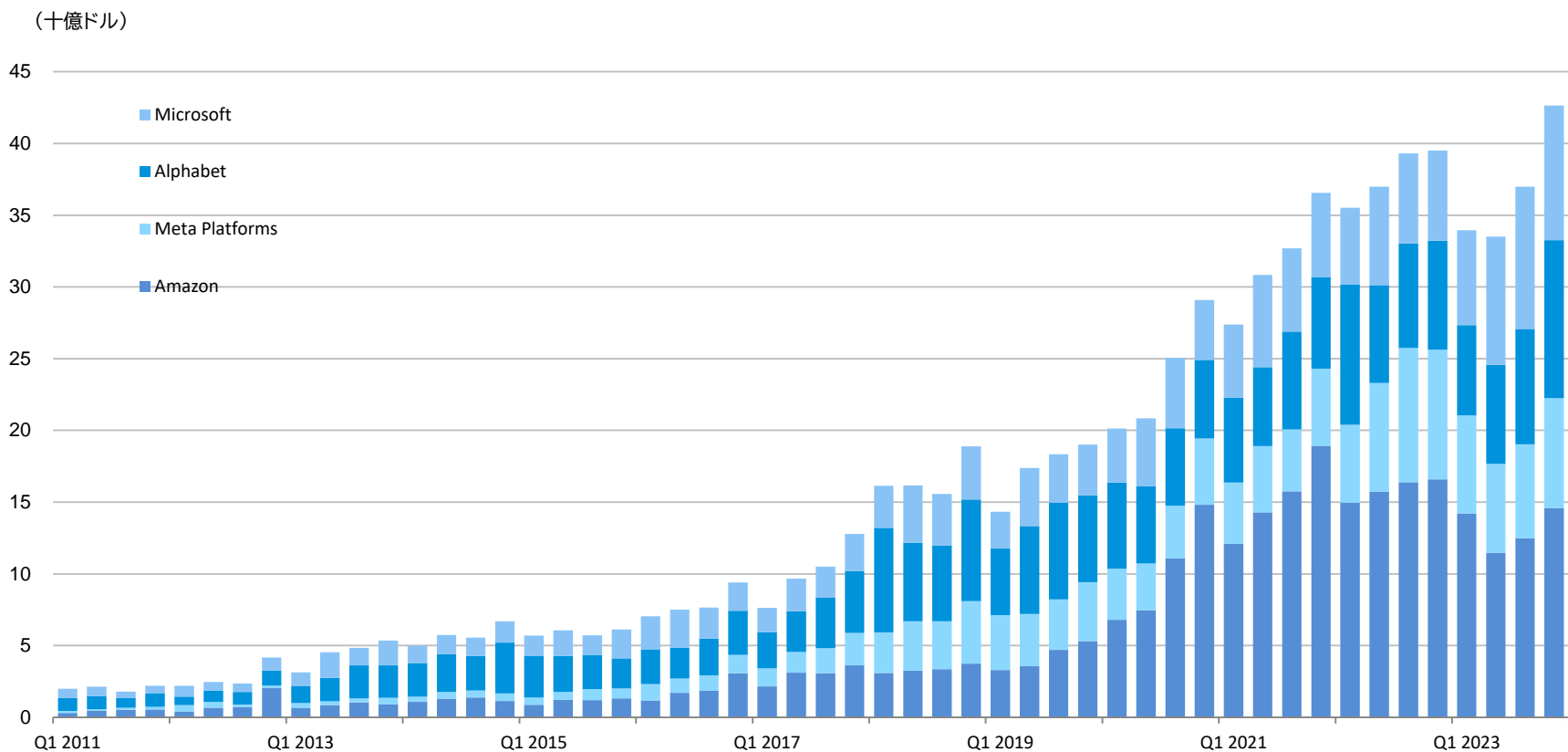
※Source) TeleGeography 「Submarine Cable Map」

※Project updates are extrapolated from announced data

Business Environment until FY12/2023

GAF A investment restraint bottomed out and turned to a recovery trend

Capital Expenditures by U.S. Tech Giants (Excluding Apple)

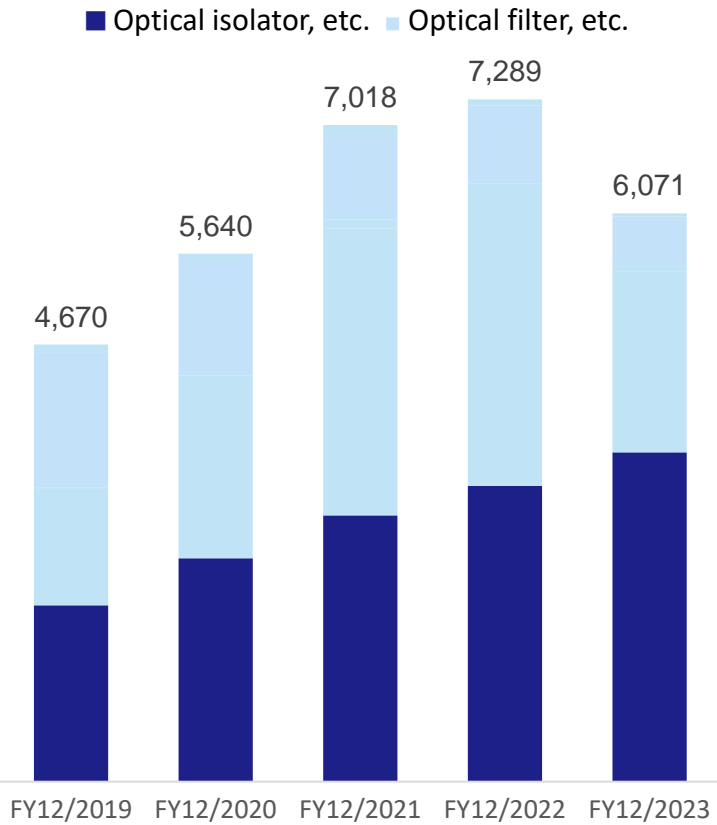


(Source: Company data)

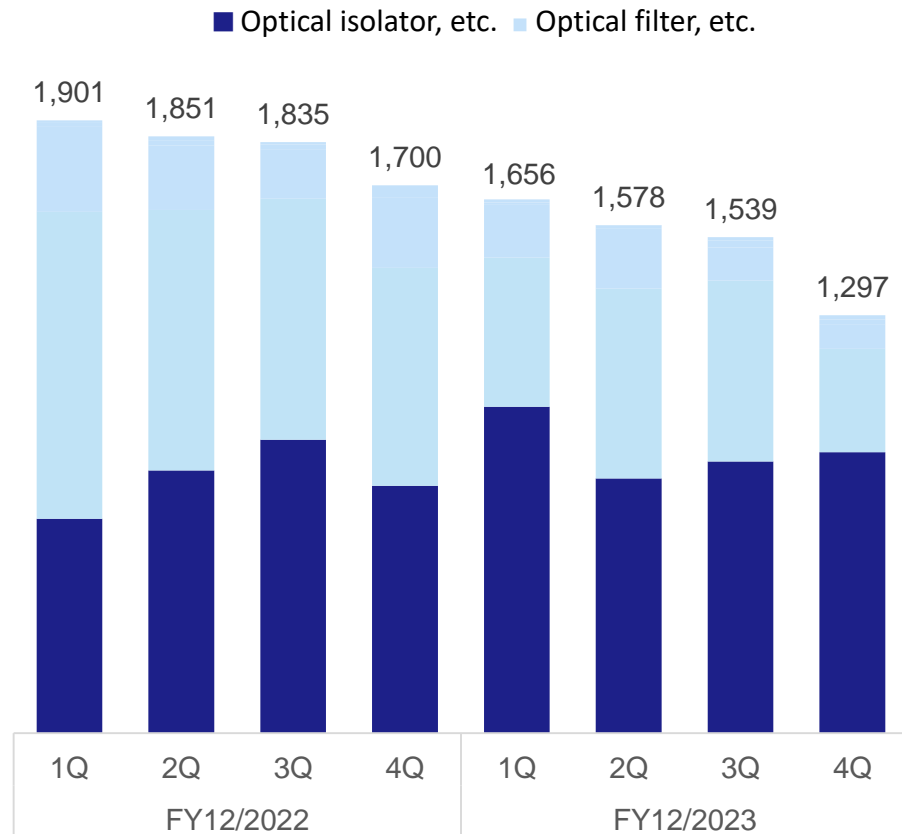
Sales by product - Optical Components and Devices

Sales of core optical isolators remained strong, but sales of optical filter and optical fiber array products decreased

Annual Sales (Millions of Yen)



Quarterly Sales (Millions of Yen)



Financial forecast for FY12/2024

– Optical Components and Devices

A recovery in the submarine cable market is expected from the second half against the backdrop of the expansion of telecommunications including generative AI

(Millions of yen)	FY12/2023	FY12/2024 (Forecast)			YoY change	YoY
	result	First-half forecast	Second-half forecast	Full year forecast		
Net Sales	6,071	3,098	3,569	6,667	+596	+9.8%
Operating profit	2,767	1,379	1,606	2,986	+218	+7.9%
<i>Operating profit ratio</i>	45.6%	44.5%	45.0%	44.8%	$\Delta 0.8pt$	—

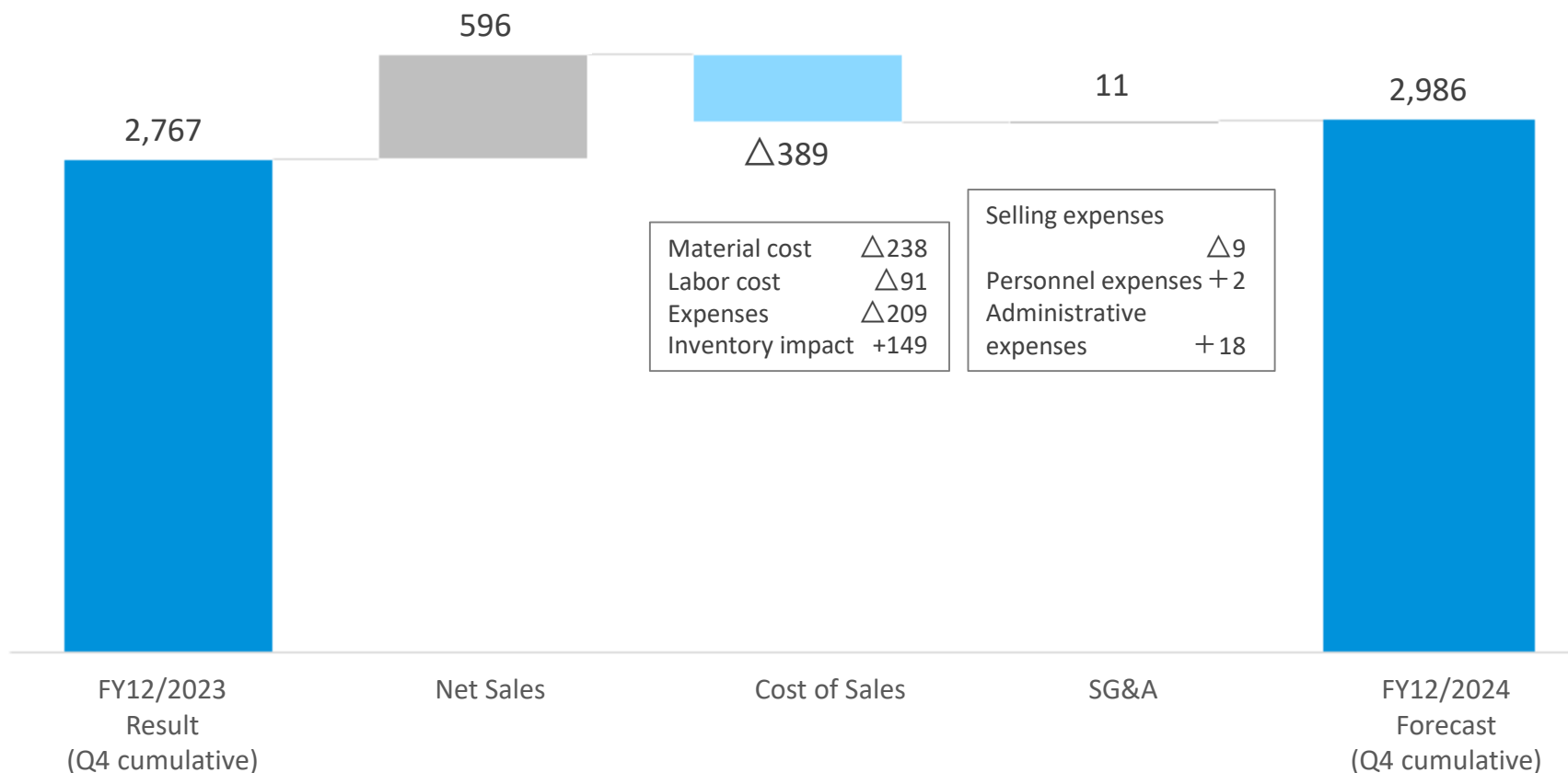
Outlook for FY12/2024

- The impact of adjustments will remain through the first half, but results are expected to return to a growth trajectory in the second half
- Sample shipments of new products for composition and modularization are scheduled to start in the second half of this year

Factors of Increase/Decrease in Operating profit by Segment (Forecast for FY12/2024) - Optical components and Devices

Plan for the recovery of sales and securing of increased sales and profits from mid-year

(Millions of yen)



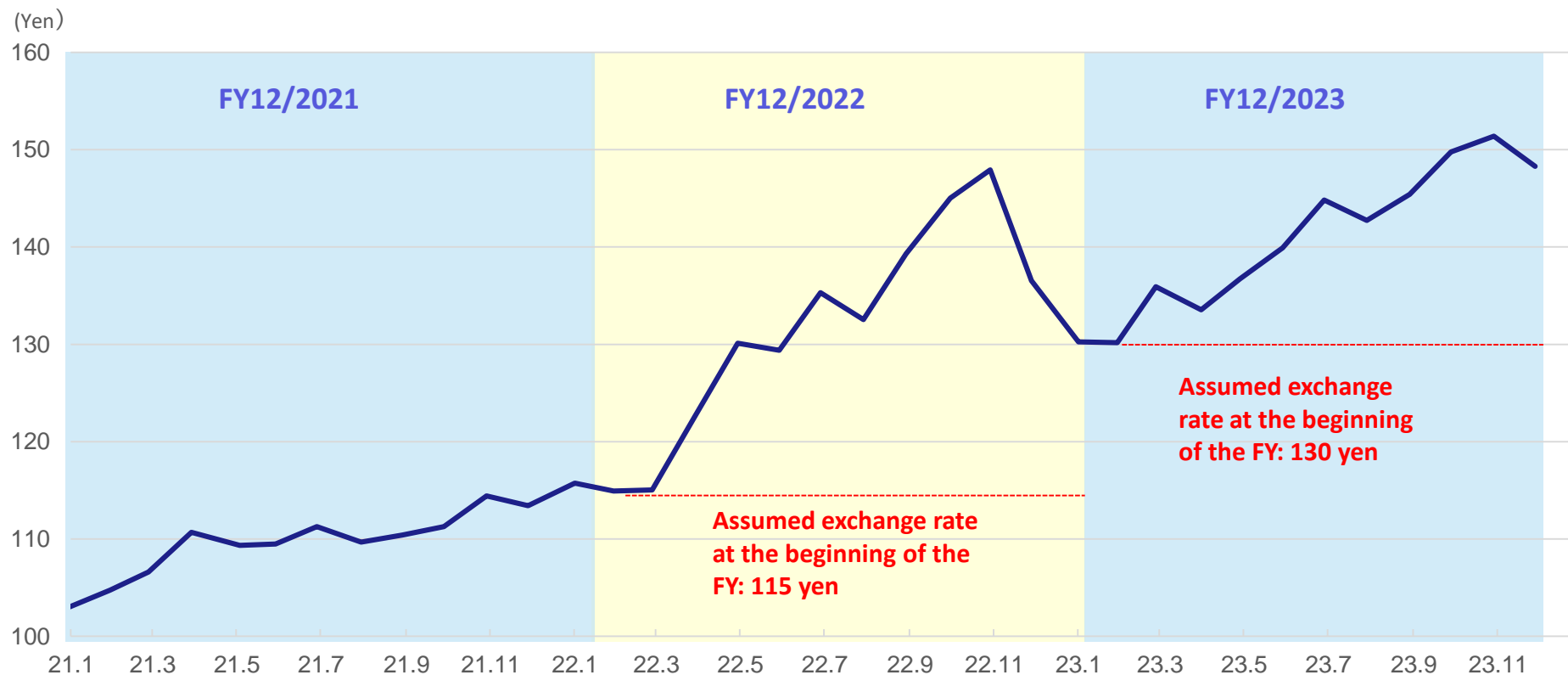


IV. Reference information

Business Environment for FY12/2023

The average exchange rate during the period from January to December was 140.66 yen/USD, weaker than projected

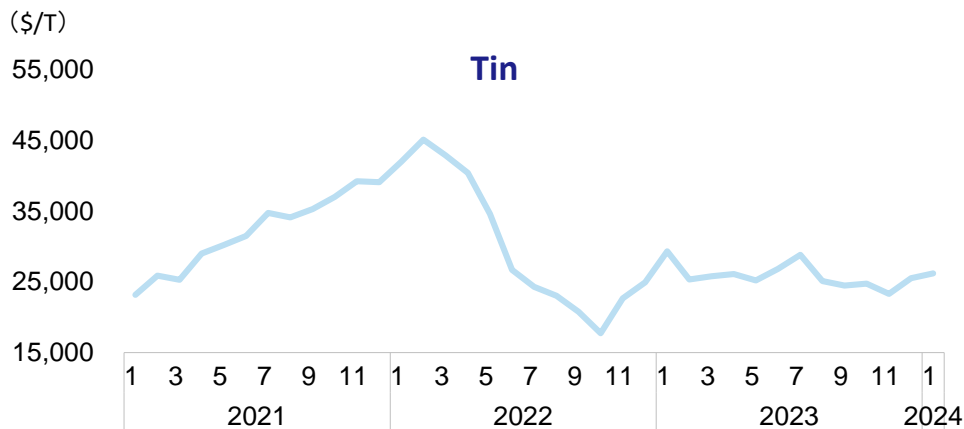
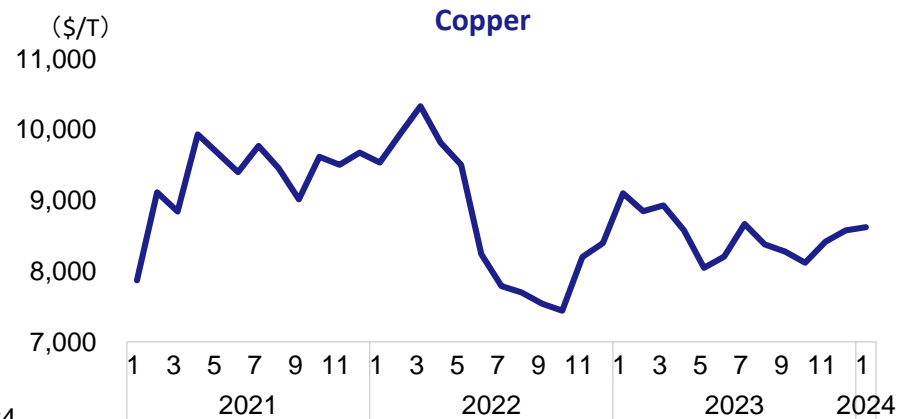
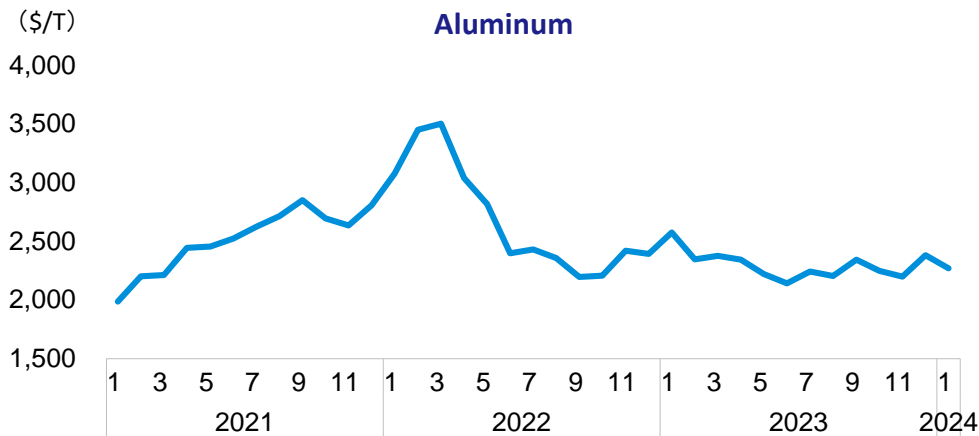
USD/JPY trend graph



External Environment – Non-Ferrous Metals Market Trends

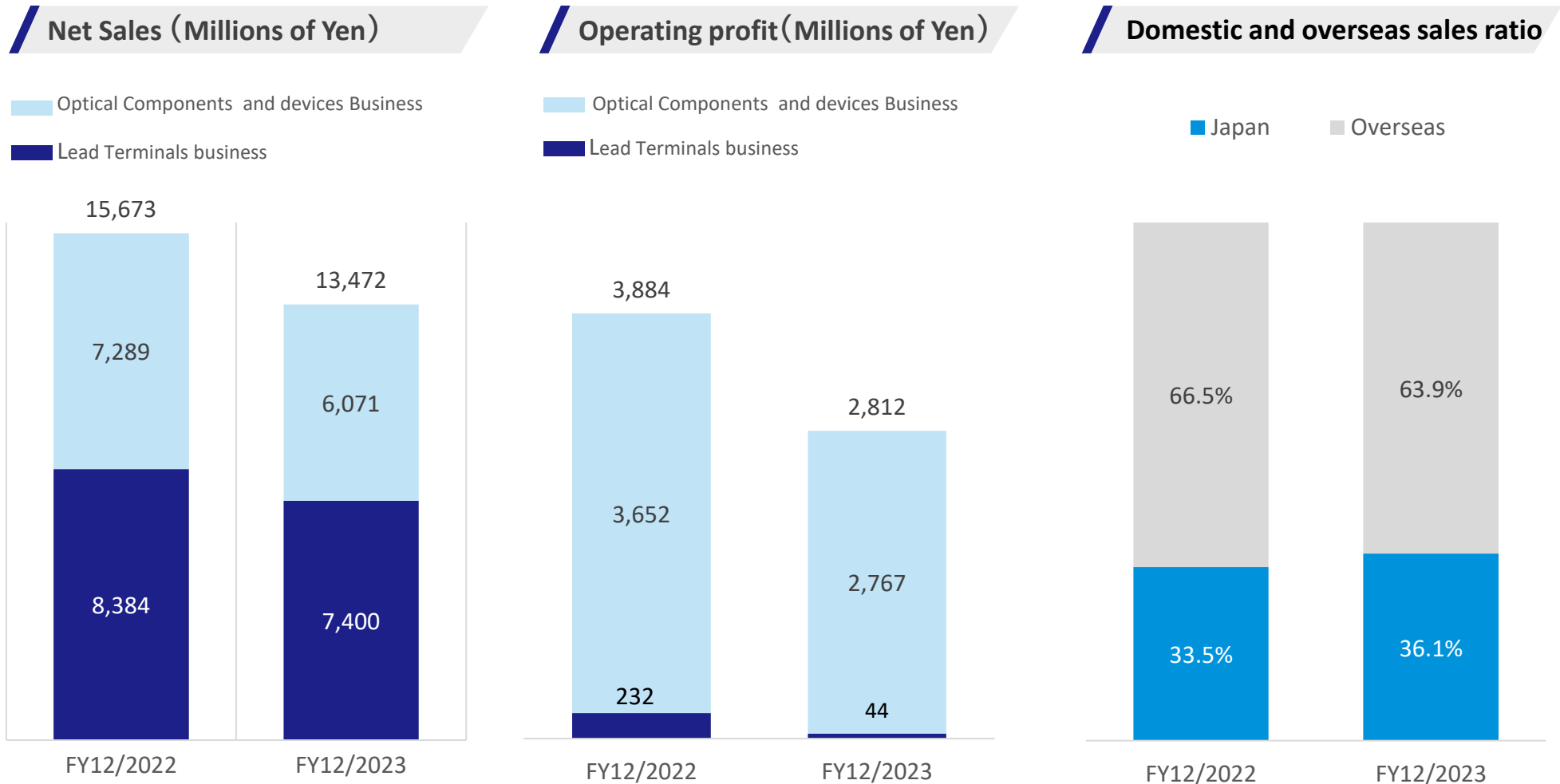
Market prices of non-ferrous metals reversed from the downward trend in 2022 and remained without a big change

Non-Ferrous Metals Market (LME)



Results by Segment and Ratio of Domestic and Overseas Sales

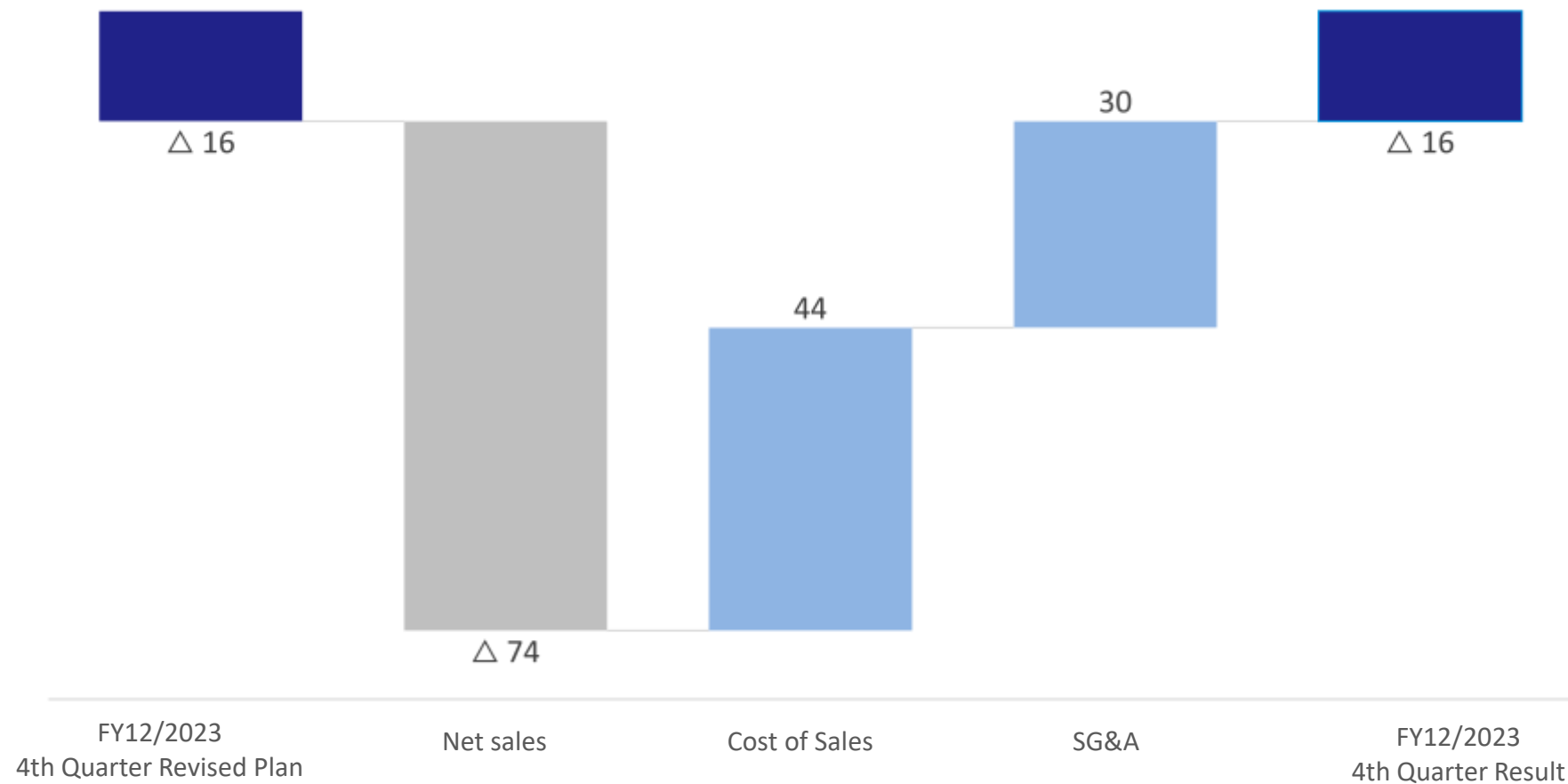
Sales of lead terminals and optical components and devices both saw double-digit decreases YoY



Factors of Increase/Decrease in Operating profit for the 4th Quarter (Oct - Dec) (vs. Revised plan as of Aug.2023) - Lead Terminals

Sales decreased, but profit remained flat due to cost reductions and improvement of the product mix

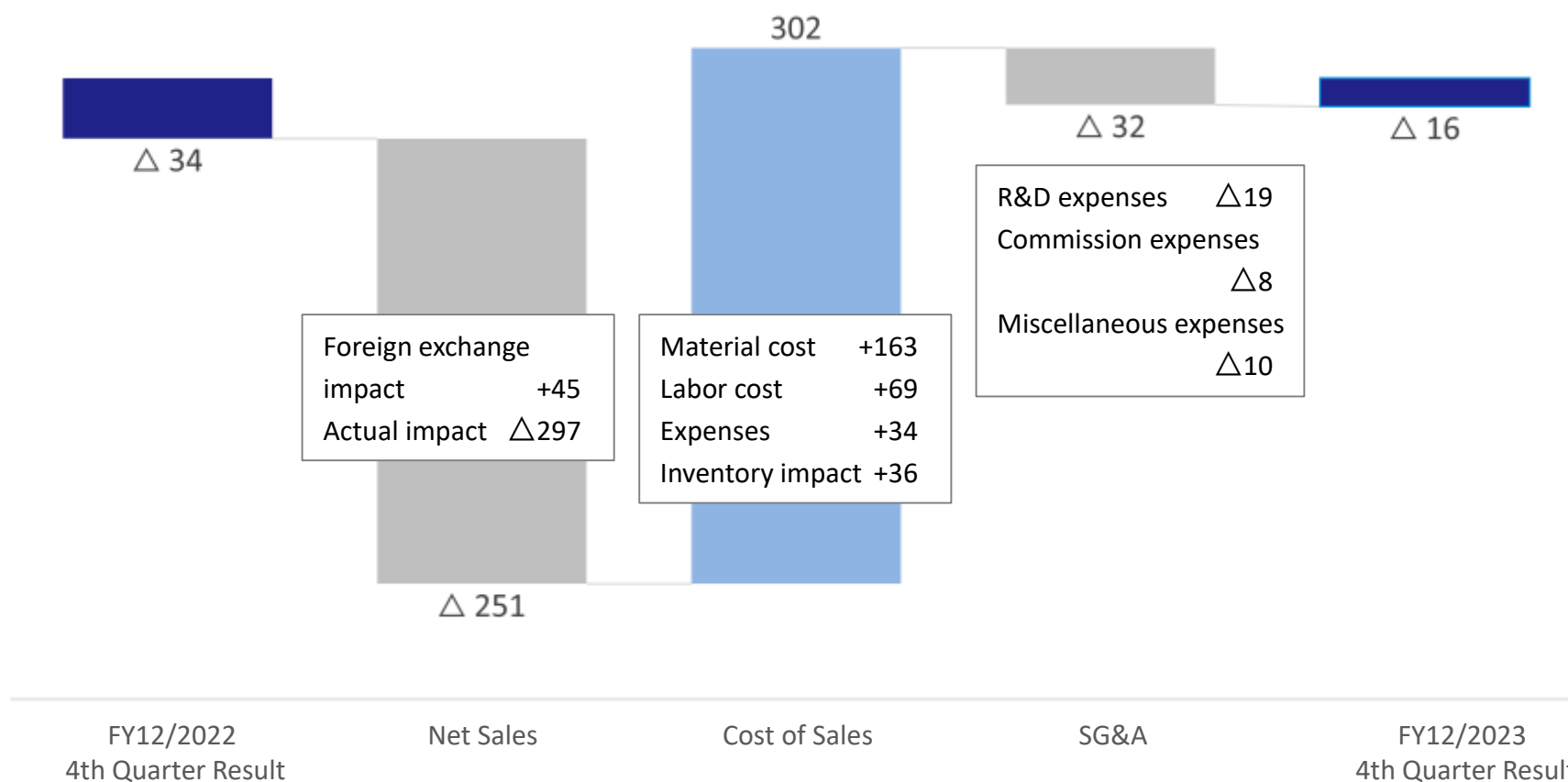
(Millions of yen)



Factors of Increase/Decrease in Operating profit for the 4th Quarter (Oct-Dec) (YoY) - Lead Terminals

Sales decreased, but operating loss slightly decreased due to cost down and improvement of product mix

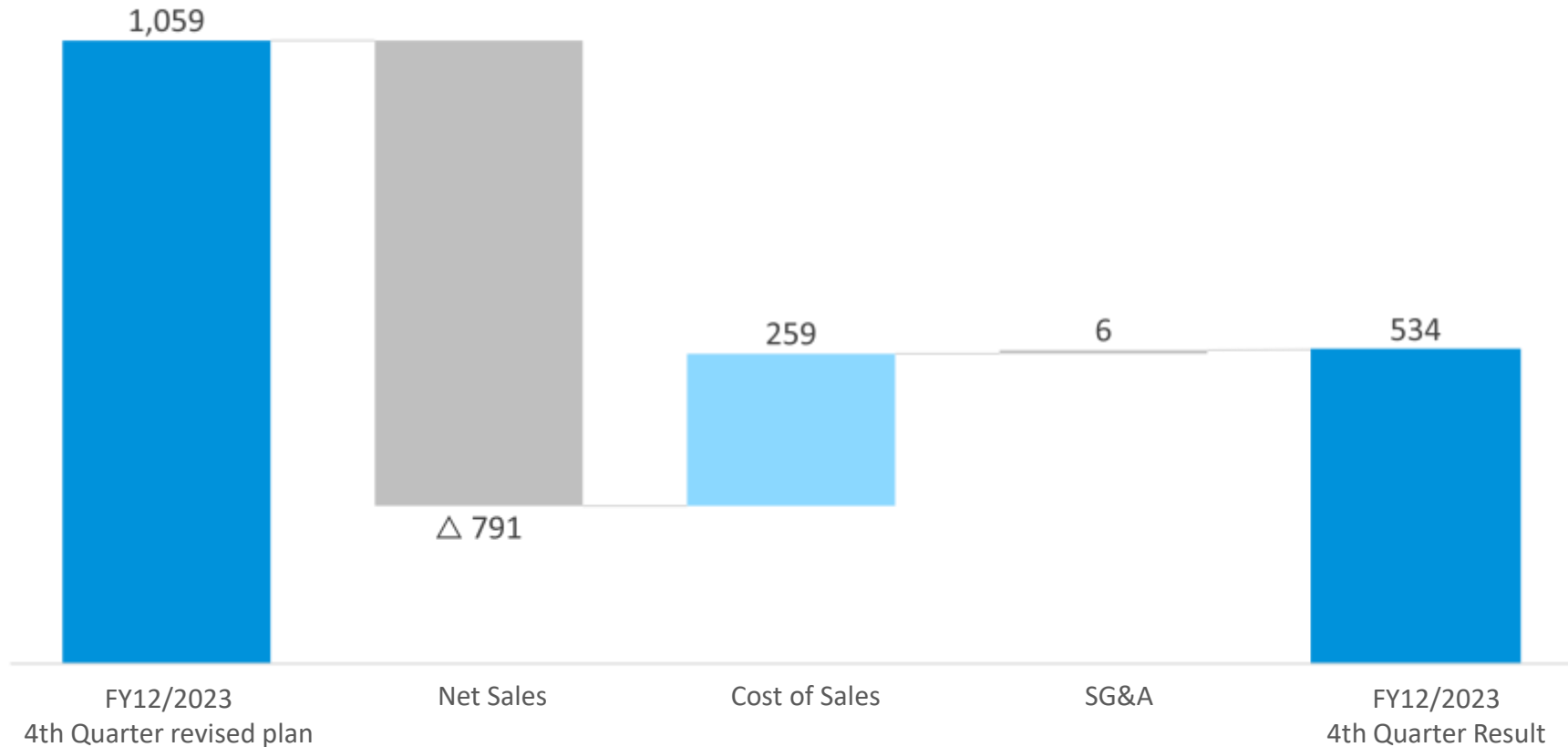
(Millions of yen)



Factors of Increase/Decrease in Operating profit for the 4th Quarter (Oct - Dec)(vs. Revised plan as of Aug.2023) - Optical Components and devices

Sales of optical devices to some customers decreased unexpectedly and profit also decreased significantly

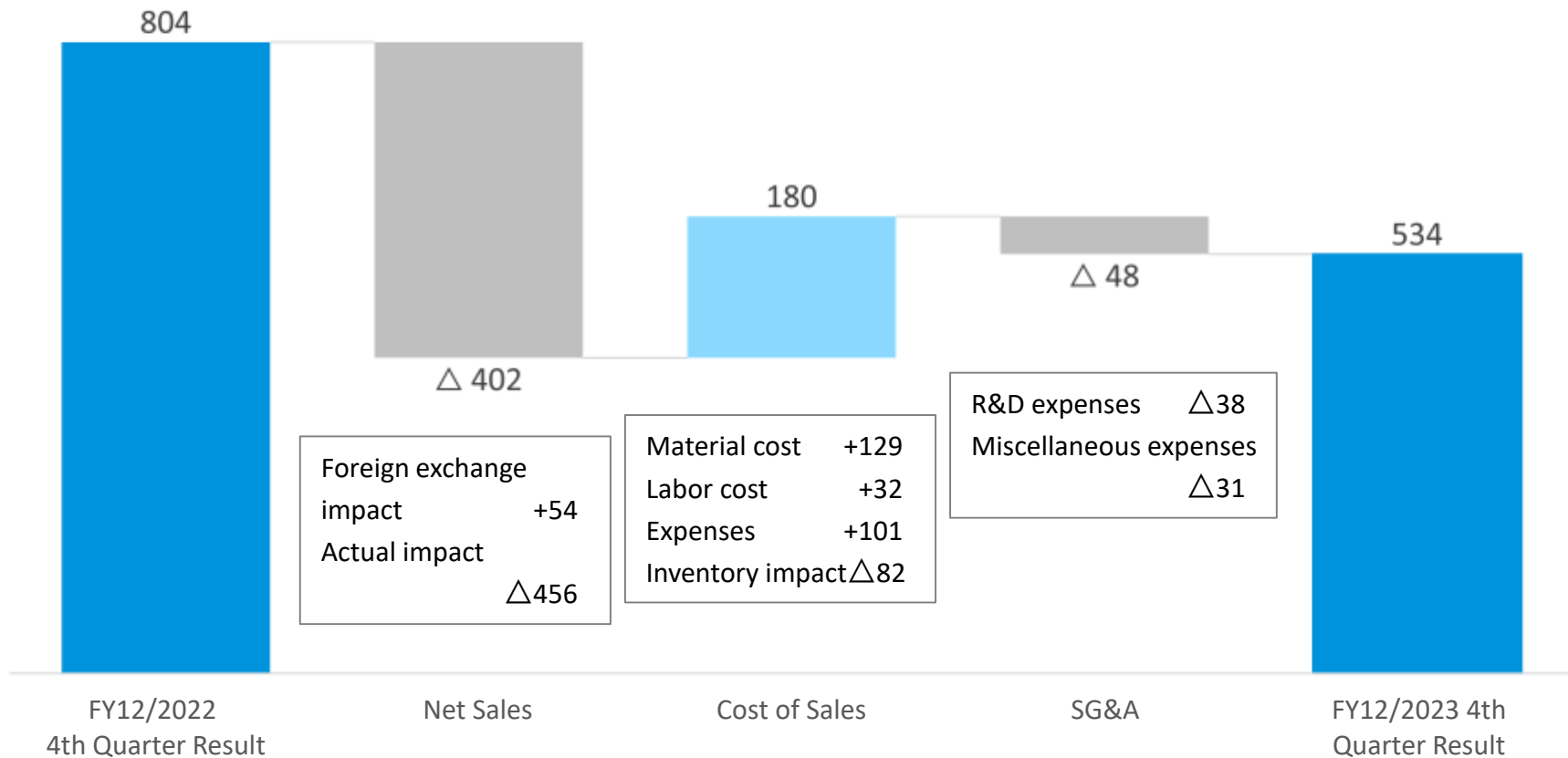
(Millions of yen)



Factors of Increase/Decrease in Operating profit for the 4th Quarter (Oct-Dec) (YoY) - Optical components and devices

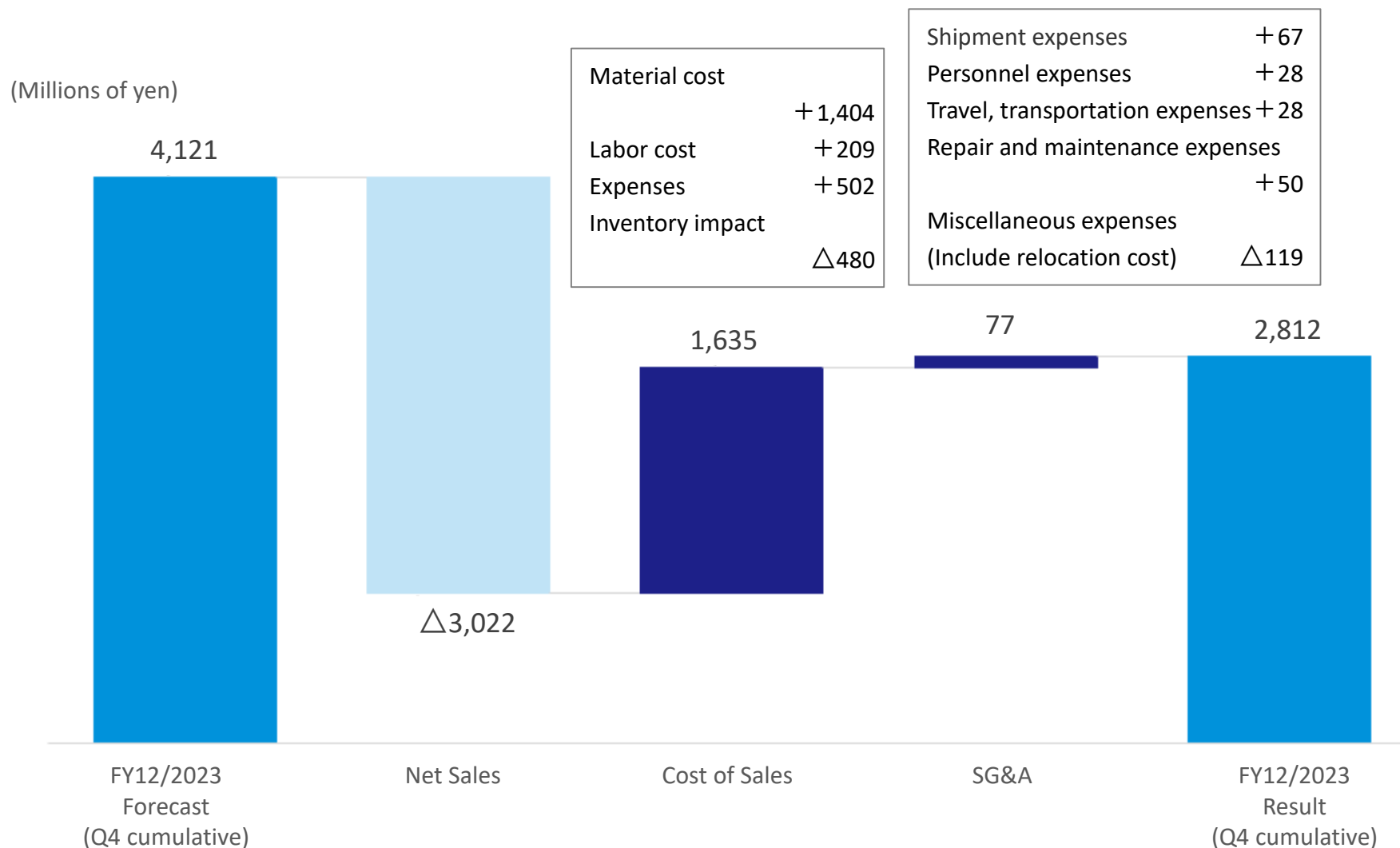
Compared to the same quarter of the previous year, the situation was difficult for both land-based and submarine products

(Millions of yen)



Factors of Increase/Decrease in Operating profit (Q4 cumulative) (vs. Initial Forecast)

Despite favorable winds for optical components and devices, such as the weaker yen, profit decreased by more than 30% compared to the original plan due to the impact of economic deterioration since summer last year



**This document contains our current plans and performance forecasts.
These future plans and forecast figures are plans and projections made
by us based on available information. Actual results may differ from
these plans and forecast figures due to various conditions and factors.**

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