



# FY2023 Second Quarter Financial Briefing

**NAGASE&CO.,LTD.**

Stock exchange listing : Tokyo (Prime Market)  
Code number : 8012

**November 27, 2023**






# Delivering next.

**“Next” connects us to the future.**



# Executive Summary

## FY2023 Second Quarter Results and FY2023 Earnings Projections

-  Profitability of the digital print processing materials business deteriorated due to falling unit prices caused by intensifying competition
-  Resin sales were sluggish due to a decline in global demand and weak market conditions
-  Profit contribution by the new Utah plant (Prinova Group) delayed
-  Despite the sluggish overall semiconductor market, our trading company function expanded its product lineup while the manufacturing function enjoyed strong sales for high-end server applications
-  Hayashibara recovered, mainly due to completing the incorporation of utility costs in unit prices, increased demand for cosmetics materials, and the wider adoption of Functional ingredients

## ACE 2.0

- Final-year KGIs and KPIs unchanged under Medium-Term Management Plan **ACE 2.0**
- Steady progress under QUICK WIN as explained at the May 2023 presentation
- Clarification of future growth strategy

# Business Environment by Segment

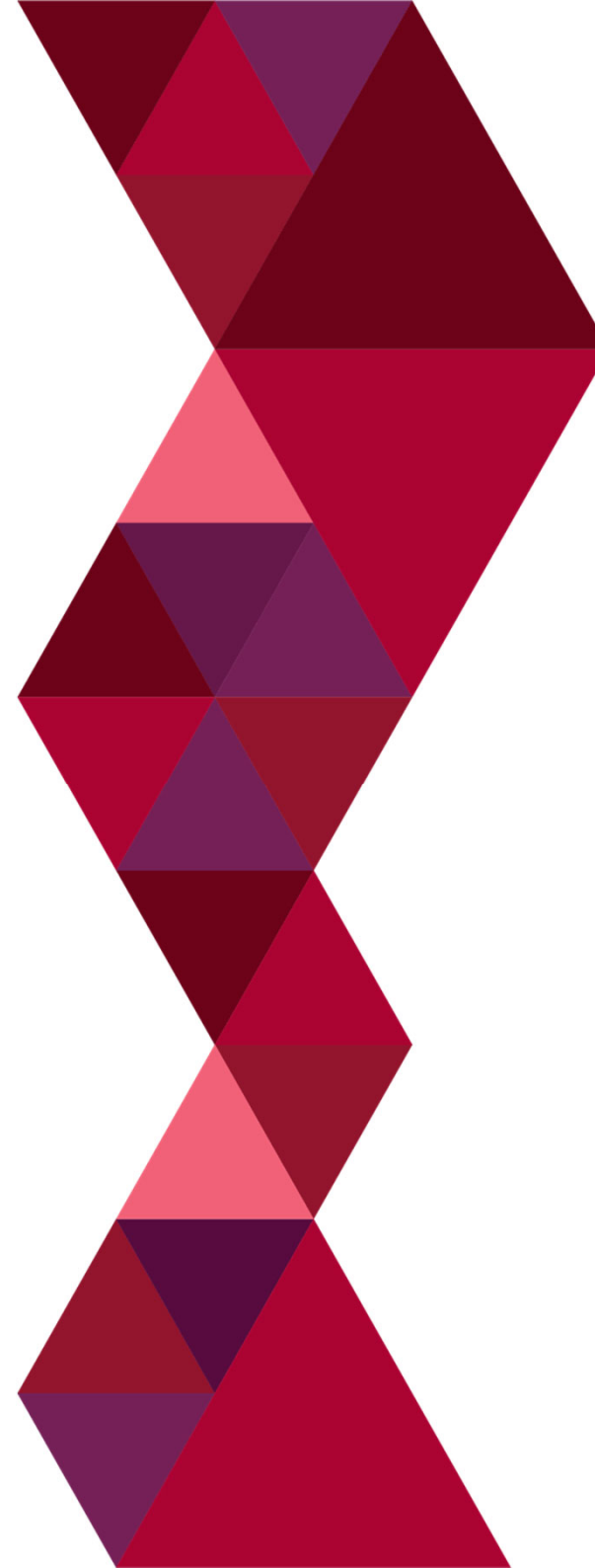
Segment	Dept.	Markets	Initial Assumption	First Half vs. Projections	Second-Half Projections vs. First Half	Full-Year Projections (vs. Initial Projections)		
Functional Materials	Performance Chemicals	Coatings	Supply chain inventory adjustments resolved, automobile production recovered, etc.	Automotive-related recovery, but construction-related slump	Red Down Arrow	Recovery compared to first half	Blue Up Arrow	Red Down Arrow
		Color Formers	Demand remained weak	Demand slumped more than expected, market conditions declined	Red Down Arrow	Same level as the first half	Grey Right Arrow	Red Down Arrow
	Speciality Chemicals	Semiconductors	Weak in the first half; expected recovery in the second half and beyond	In line with projections	Grey Right Arrow	Same level as the first half	Grey Right Arrow	Red Down Arrow
		Epoxy	Logistics inventory adjustments in the first half; recovery beginning in the second half	Remained sluggish	Red Down Arrow	Recovery due to the elimination of logistics inventories	Blue Up Arrow	Red Down Arrow
		Industrial Oil	Steady growth due to recovery in automobile production volume, etc.	Weak performance in China and Japan	Red Down Arrow	Recovery due to the elimination of logistics inventories	Blue Up Arrow	Red Down Arrow
Advanced Materials & Processing	Polymer Global Account	Resin	Recovery in demand for office equipment, appliance, and video game devices	Mainly weak in China	Red Down Arrow	Recovery beginning in the first half	Blue Up Arrow	Red Down Arrow
Electronics & Energy	Electronics	Semiconductors	Weak in the first half; expected recovery in the second half and beyond	Market was worse than expected, but expanded lineup of new commercial products	Grey Right Arrow	No market recovery; we expect a recovery to start in the next fiscal year	Red Down Arrow	Red Down Arrow
		Display	Weak in the first half; expected recovery in the second half and beyond	In line with projections	Grey Right Arrow	Same level as the first half	Grey Right Arrow	Grey Right Arrow
	Advanced Functional Materials	Semiconductors	Weak in the first half; expected recovery in the second half and beyond	Overall market is challenging, but products for high-end applications performed well	Blue Up Arrow	No market recovery, but increase in products for high-end applications	Blue Up Arrow	Blue Up Arrow
		Smartphones	Weak in the first half; expected recovery in the second half and beyond	Slower than projected	Red Down Arrow	Recovery due to the elimination of logistics inventories	Blue Up Arrow	Grey Right Arrow
Mobility	Mobility Solutions	Automobiles	Recovery in automobile production beginning in Q1	In line with projections	Grey Right Arrow	Increase due in part to rising automobile production	Blue Up Arrow	Grey Right Arrow
Life & Healthcare	Life & Healthcare Products	Food	Strong sports nutrition market Europe and the Americas	Decreased demand in the U.S. market, market decline	Red Down Arrow	Gradual recovery in demand in the U.S. market	Blue Up Arrow	Red Down Arrow
		Cosmetics	Increase in demand for cosmetics products with the end of COVID-19, etc.	In line with projections	Grey Right Arrow	Decreased demand for seasonal merchandise	Red Down Arrow	Grey Right Arrow
		Pharmaceutical	Increased demand	High utilization due to inventory buildup, etc.	Grey Right Arrow	Decrease compared to the first half due to rebound in the first half	Red Down Arrow	Grey Right Arrow

\*Business classifications after reorganization effective October 1, 2023

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- Medium-Term Management Plan **ACE 2.0** P23~P40

# FY2023 Second Quarter Results and FY2023 Earnings Projections





# Consolidated statements income

- ▶ Gross profit : Profit decreased mainly due to lower profitability of the resin sales business under Advanced Materials & Processing
- ▶ Operating income : Profit decreased due to lower gross profit and increases in selling, general and administrative expenses in connection with personnel costs, etc.
- ▶ Profit Attributable to owners of the parent : Profit decreased due to lower operating income, as well as a decrease in net income stemming from higher interest expenses, etc.

100 millions of yen

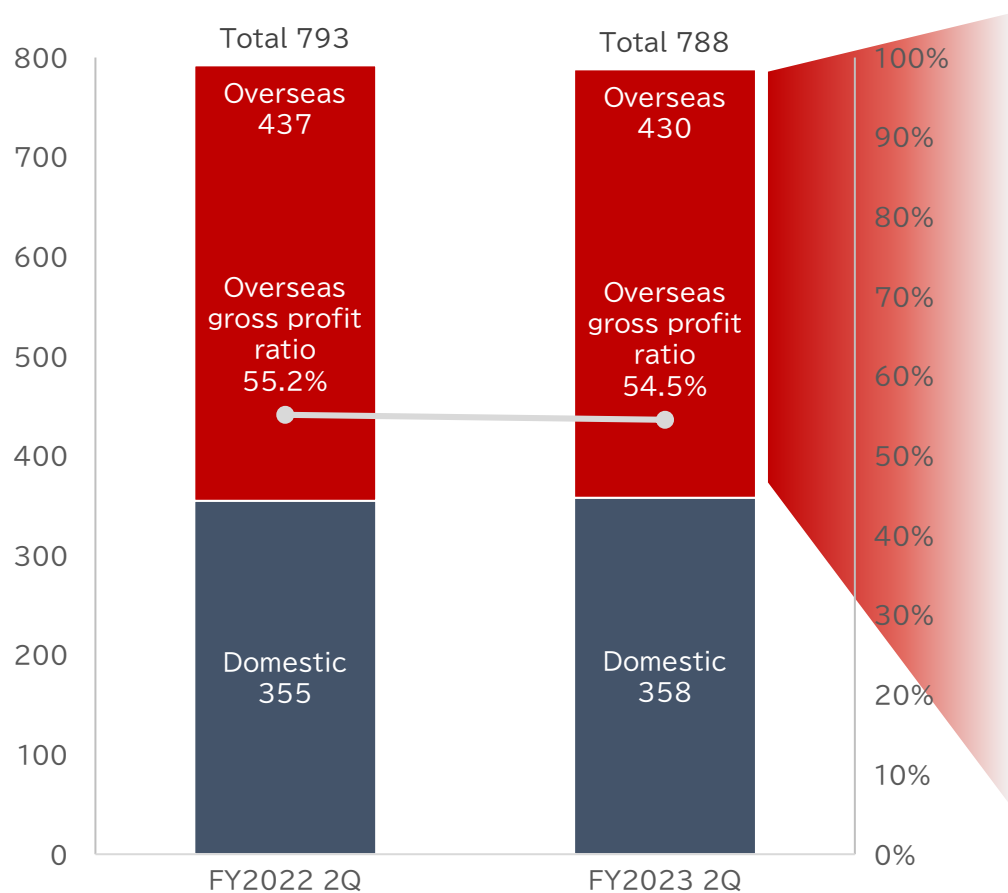
	FY2022 2Q	FY2023 2Q	Change	Vs.PY	Forecast (Original)	Achievement
<b>Sales</b>	4,555	4,501	(53)	99%	9,580	47%
<b>Gross profit</b>	793	788	(4)	99%	1,710	46%
<b>&lt;GP ratio&gt;</b>	17.4%	17.5%	0.1ppt	–	17.8%	–
<b>SG&amp;A expenses</b>	594	644	49	108%	1,365	–
<b>Operating income</b>	198	144	(54)	73%	345	42%
<b>Ordinary income</b>	202	142	(60)	70%	326	44%
<b>Profit Attributable to owners of the parent</b>	155	102	(53)	66%	240	43%
US\$ Exchange rate (period average)	@ 134.0	@ 141.1	@ 7.0	Weak yen	@ 135.0	
RMB Exchange rate (period average)	@ 19.9	@ 19.7	@ 0.2	Strong yen	@ 20.0	

- ※ Offset to sales and cost of sales from revenue recognition standards: FY2022 2Q -¥133 billion, FY2023 2Q -¥132 billion
- ※ Impact from foreign exchange: Gross profit, +¥2.3 billion; Operating income, +¥0.2 billion

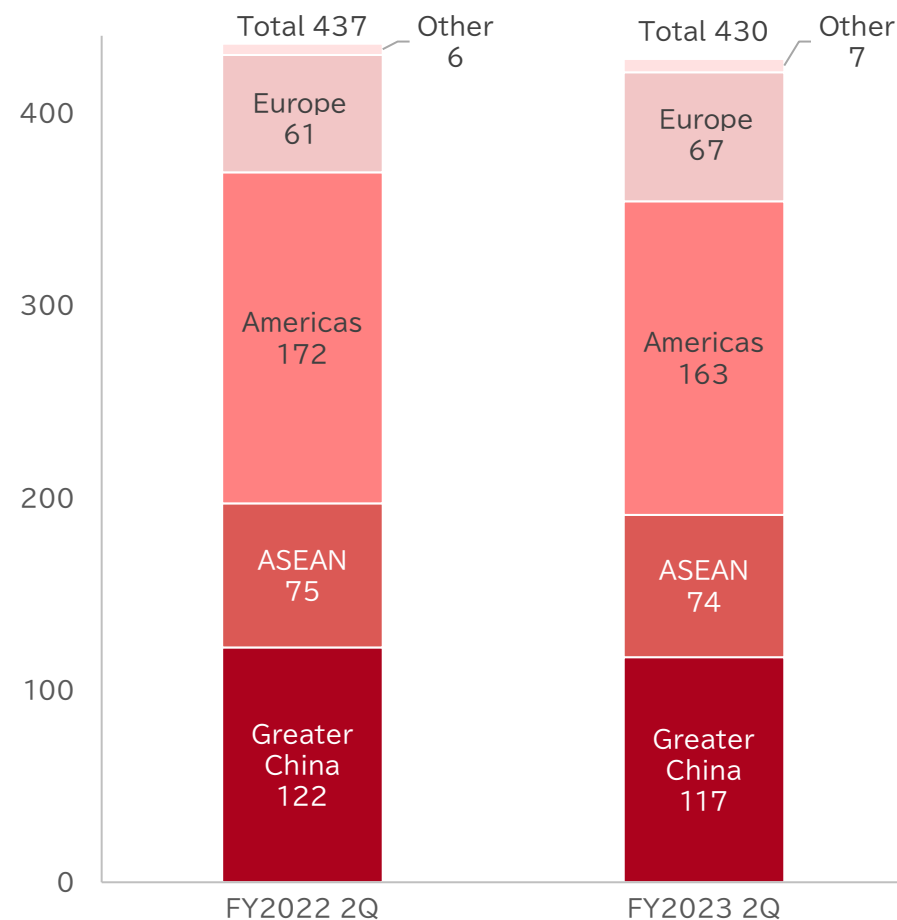
# Gross Profit By Region

- ▶ Domestic business profit increased while overseas business profit declined, resulting in an overall decrease in profit
- ▶ Increase in domestic business sales, mainly due to higher sales of cosmetic materials and formulated epoxy resins
- ▶ Despite higher profits overseas due to the weaker yen, profits decreased due to sluggish resin sales stemming from the impact of the economic slowdown

Domestic & Overseas Gross profit(100 millions of yen)



Overseas gross profit By Region(100 millions of yen)

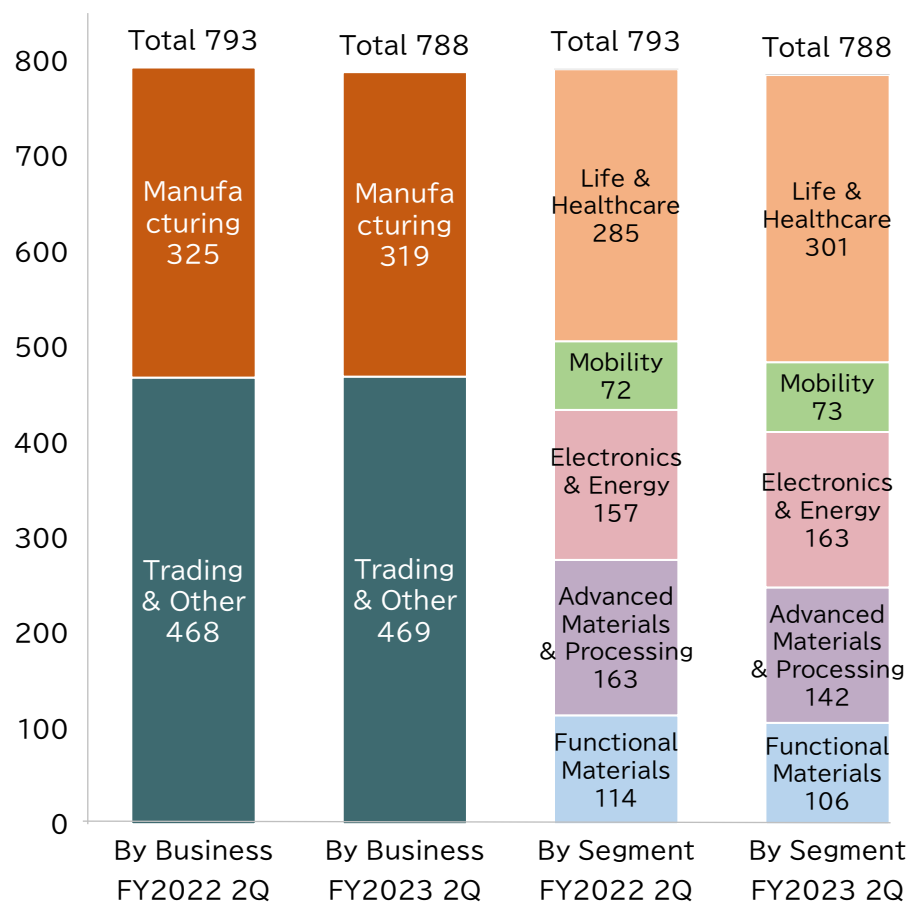


※Domestic figures under Domestic & Overseas Gross Profit include inter-regional adjustments

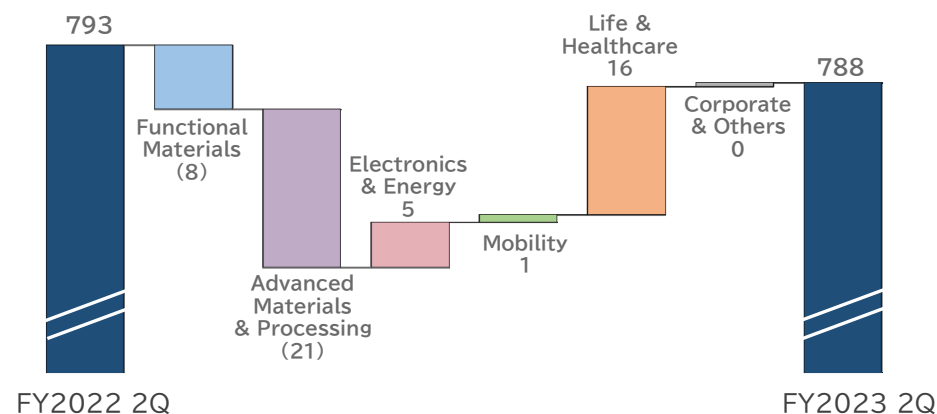
# Gross Profit By Business & Segment

- ▶ Functional Materials posted lower sales of coating raw materials and raw materials for semiconductor-related products and other electronics industry products
- ▶ Advanced Materials & Processing posted lower sales due to decreased demand for resin sales in the office equipment, appliance, and video game device market, as well as the impact of inventory adjustments by customers
- ▶ Despite a decrease in raw materials sales for semiconductor-related products in Electronics & Energy, profits rose overall with an increase in sales of formulated epoxy resins for semiconductor- and electronics-related products
- ▶ Sales of Life & Healthcare-related cosmetic material and pharmaceutical raw materials increased

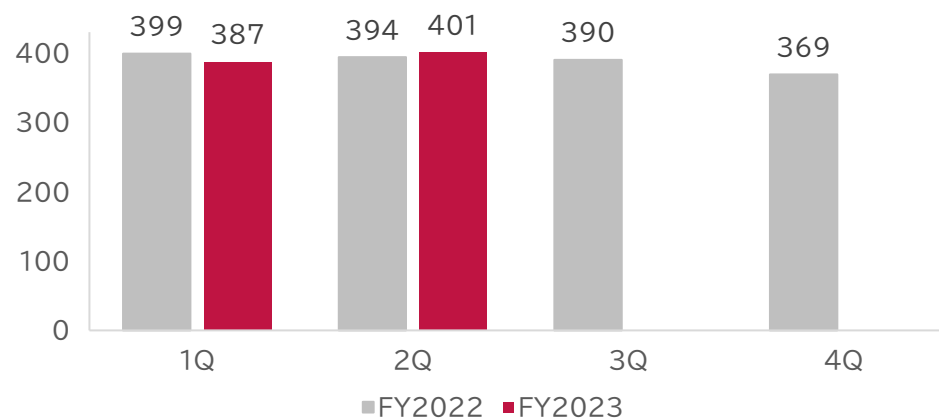
Gross Profit By Business & Segment (100 millions of yen)



Change in Gross Profit By Segment (100 millions of yen)



History of Gross Profit(100 millions of yen)

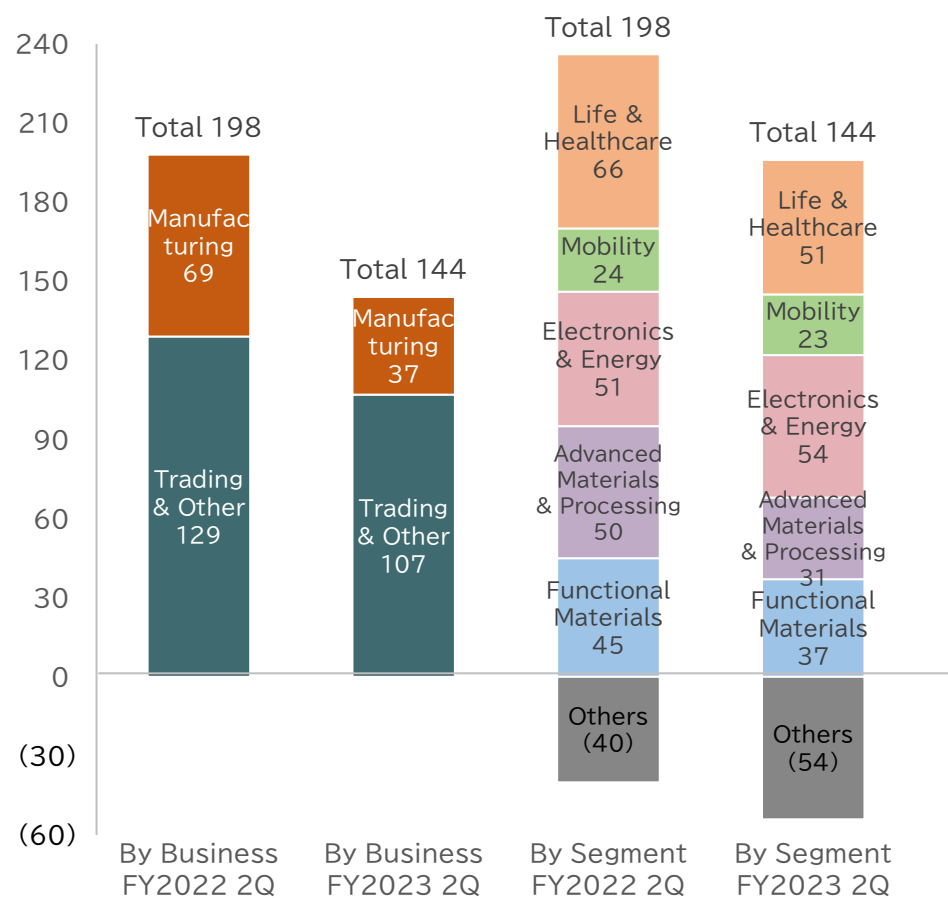




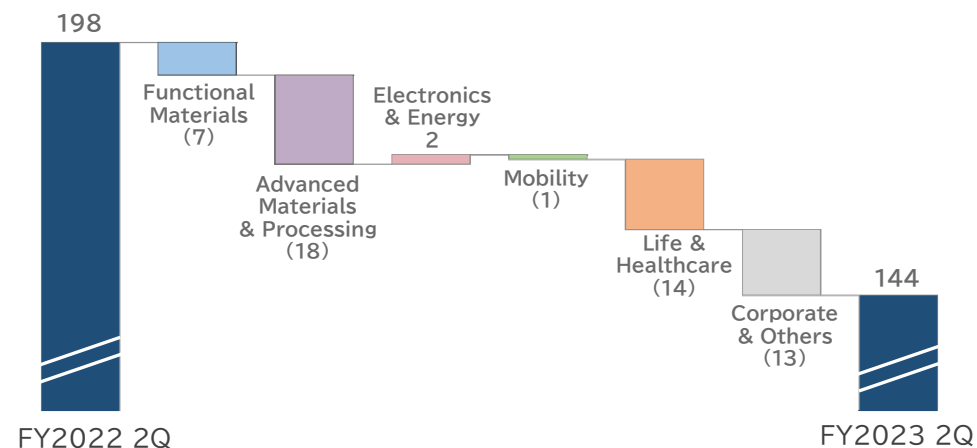
# Operating Income by Business & Segment

- ▶ Functional Materials and Advanced Materials & Processing posted lower operating income due to a decrease in gross profit
- ▶ Electronics & Energy posted higher operating income with increased gross profit
- ▶ Life & Healthcare recorded higher gross profit; however, weaker profitability at the Prinova Group, increased personnel expense, other selling, general and administrative expenses, and a delay in the profit contribution of the new Utah plant caused a decrease in operating income
- ▶ We continue to invest for sustainable future growth, including in DX-related areas

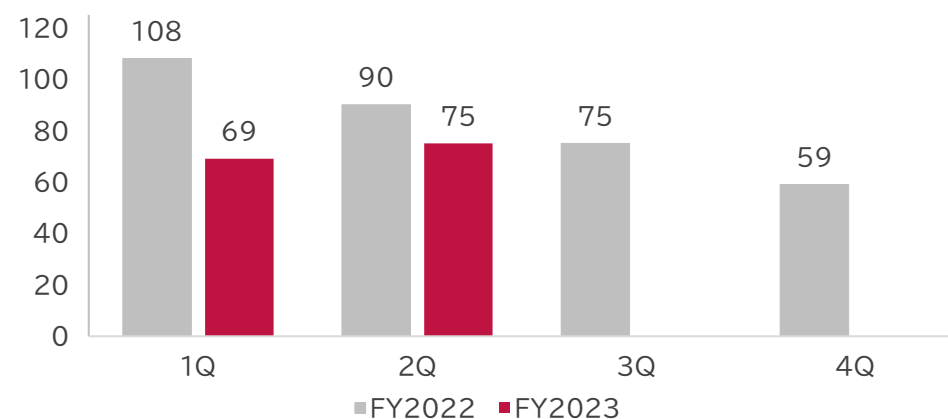
Operating Income by Business & Segment(100 millions of yen)



Change in Operating Income By Segment (100 millions of yen)



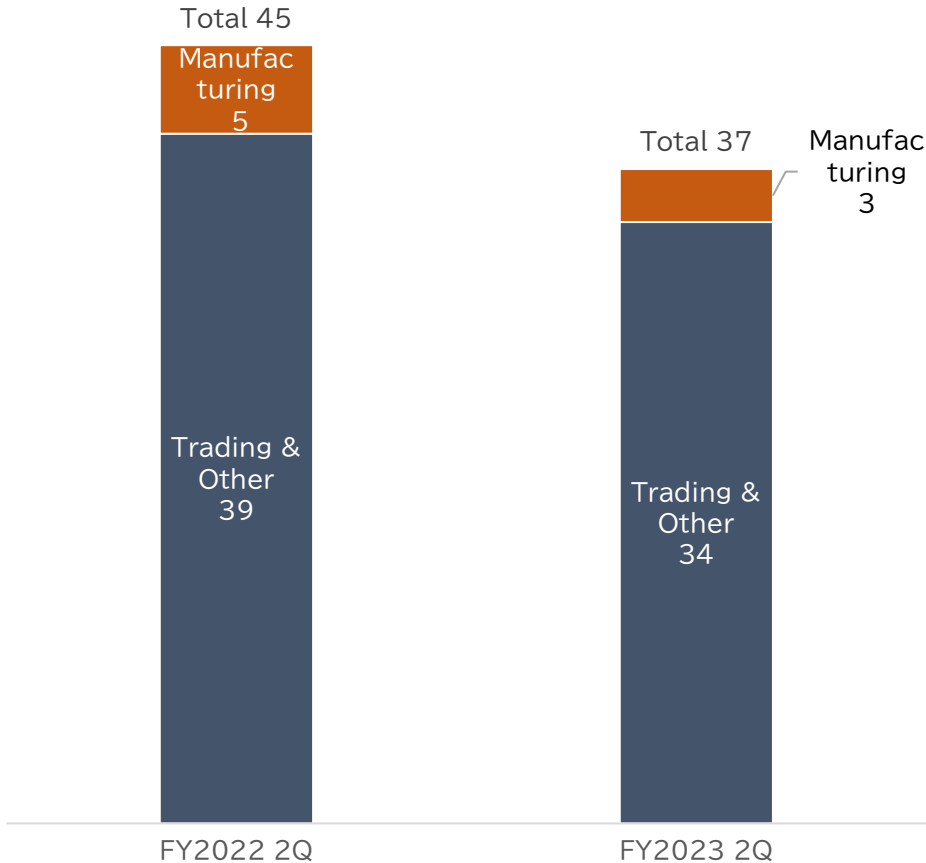
History of Operating Income(100 millions of yen)



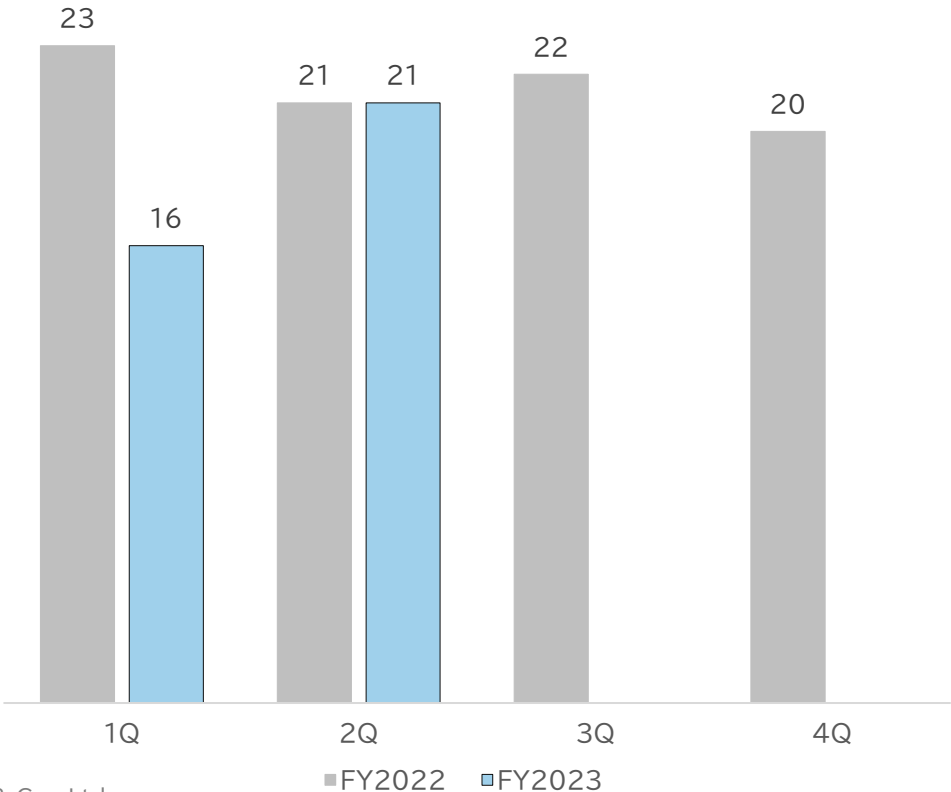
# Functional Materials Segment Operating Income Overview

- ▶ Decrease in sales of coating raw materials due to sluggish sales for architectural applications, despite recovery in sales to the automotive and other industries
- ▶ Sales decreased for raw materials for semiconductor-related products and other electronics industry products, as did sales of raw materials for industrial oil solutions and plastic materials
- ▶ Lower profit year on year as a result of overall weak performance due in part to customer inventory adjustments

Operating income by business(100 millions of yen)



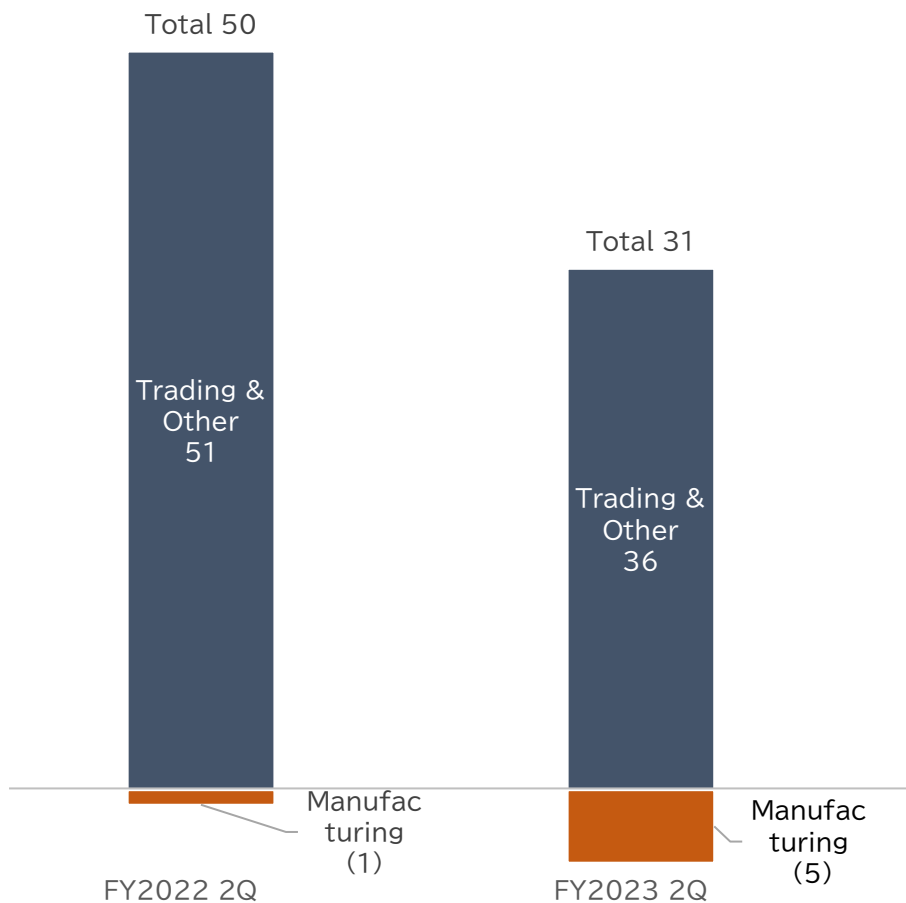
History of operating income (100 millions of yen)



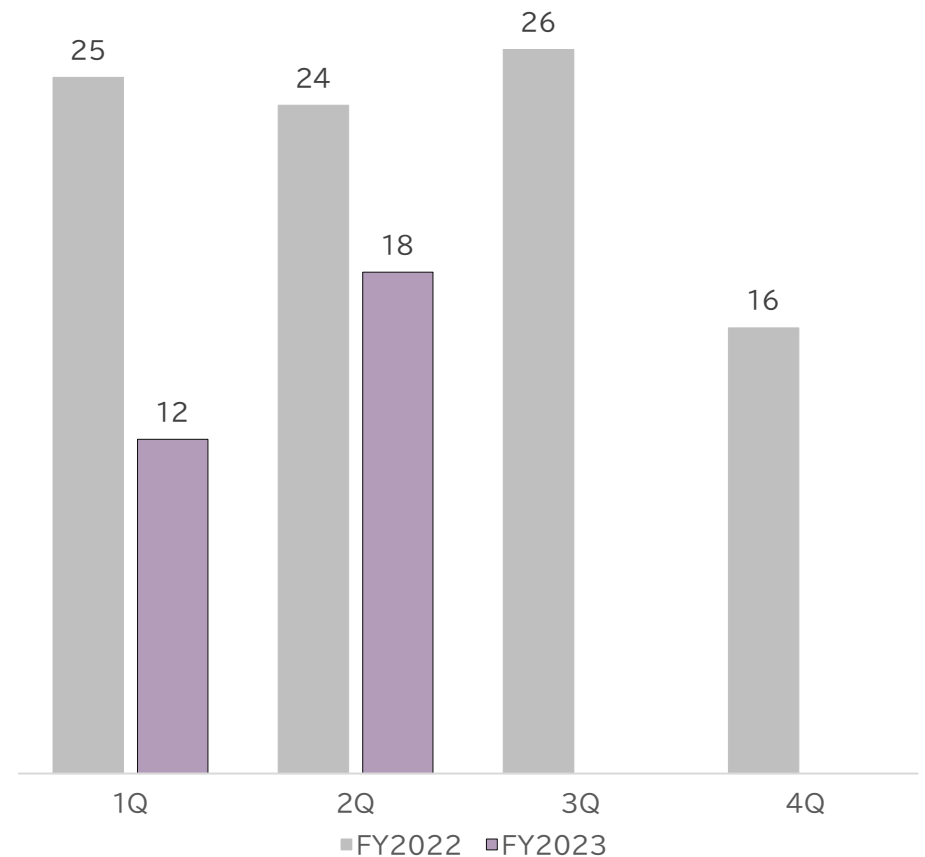
# Advanced Materials & Processing Segment Operating Income Overview

- ▶ Lower profit due to decreased demand for resin sales in the office equipment, appliance, and video game device market, as well as the impact of inventory adjustments by customers
- ▶ Lower digital print processing materials sales due to lower profitability in the manufacturing business
- ▶ Decrease in resin sales and lower profitability in the manufacturing business led to weak performance in trading company and manufacturing businesses and lower profit year on year

Operating income by business(100 millions of yen)



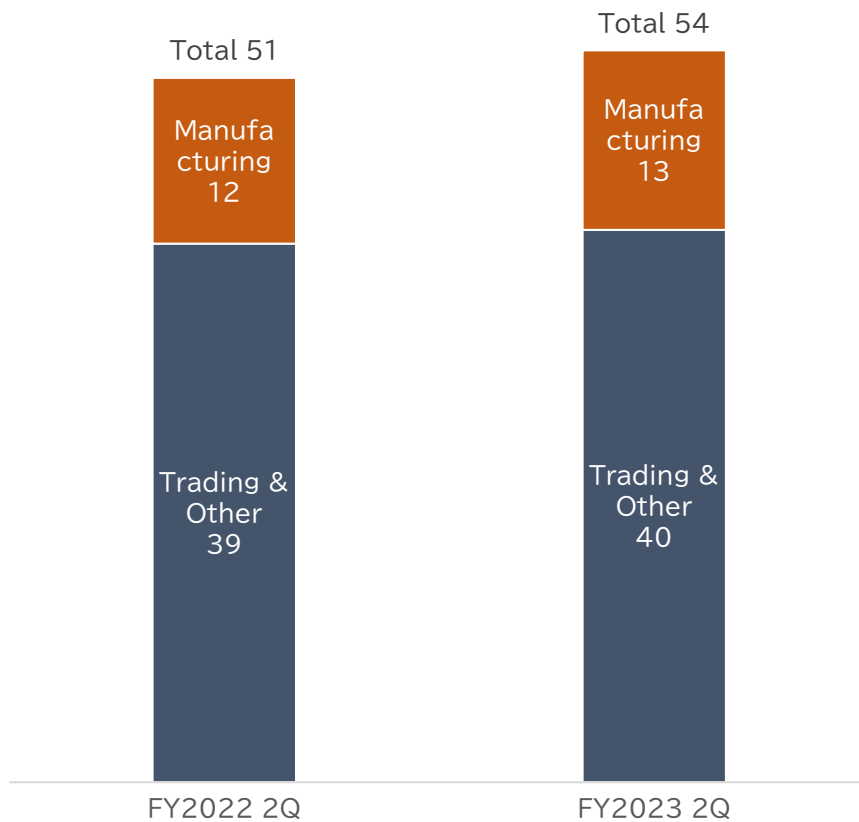
History of operating income (100 millions of yen)



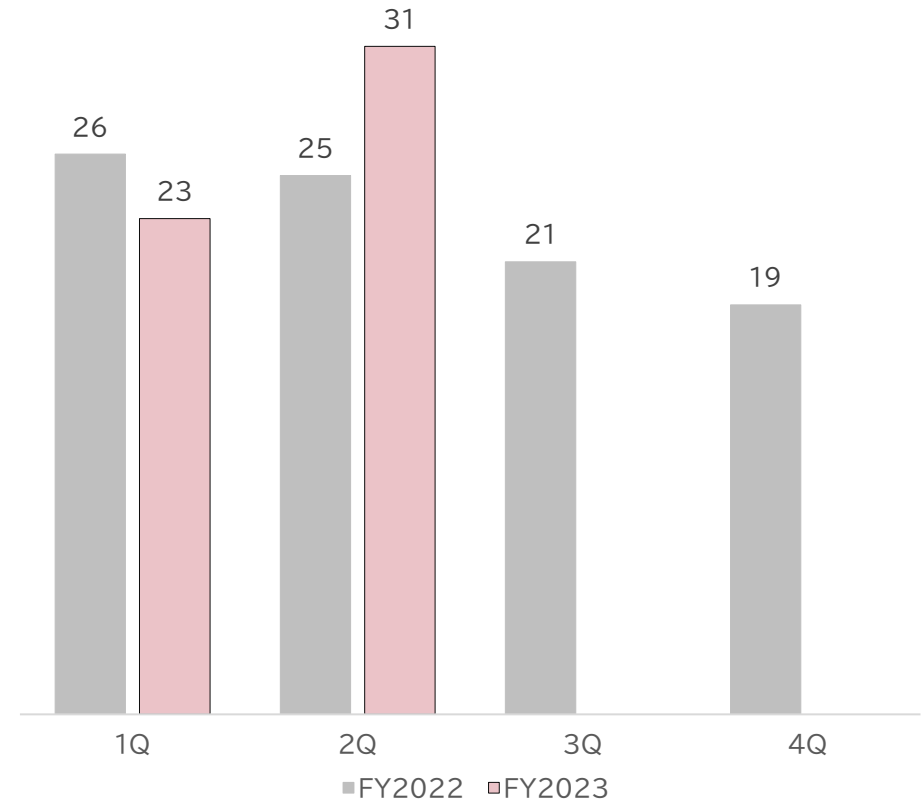
# Electronics & Energy Segment Operating Income Overview

- ▶ Despite weakening semiconductor market conditions, sales of materials to the semiconductor industry increased due to growth in product sales
- ▶ Sales of formulated epoxy resins increased mainly for server applications and mobile device applications
- ▶ Profit rose overall year on year with strong sales of formulated epoxy resins

Operating income by business(100 millions of yen)



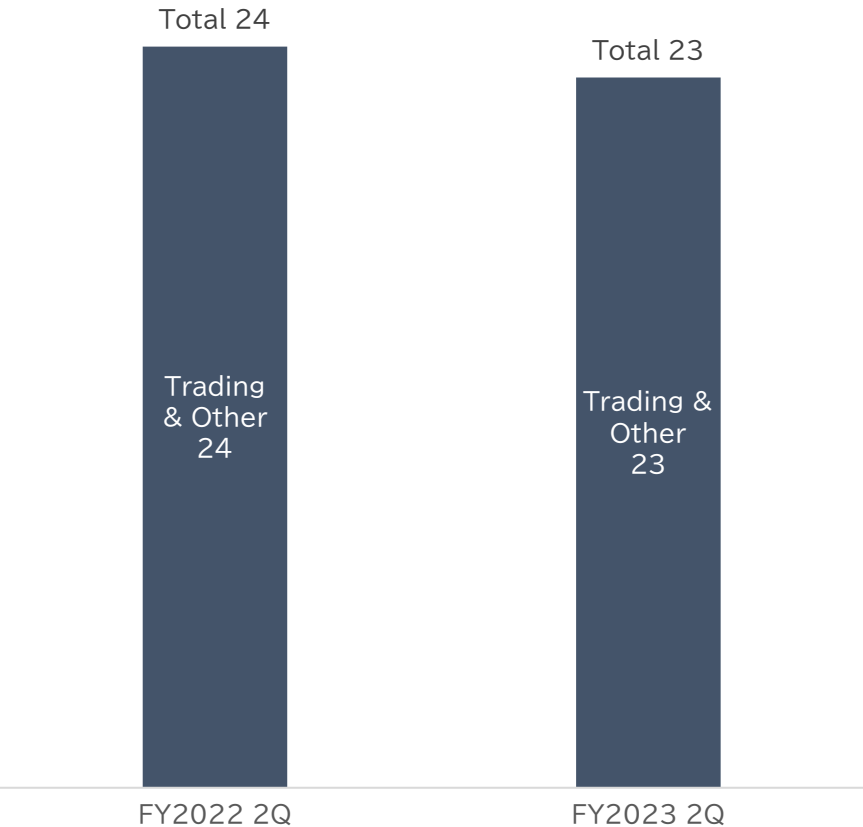
History of operating income (100 millions of yen)



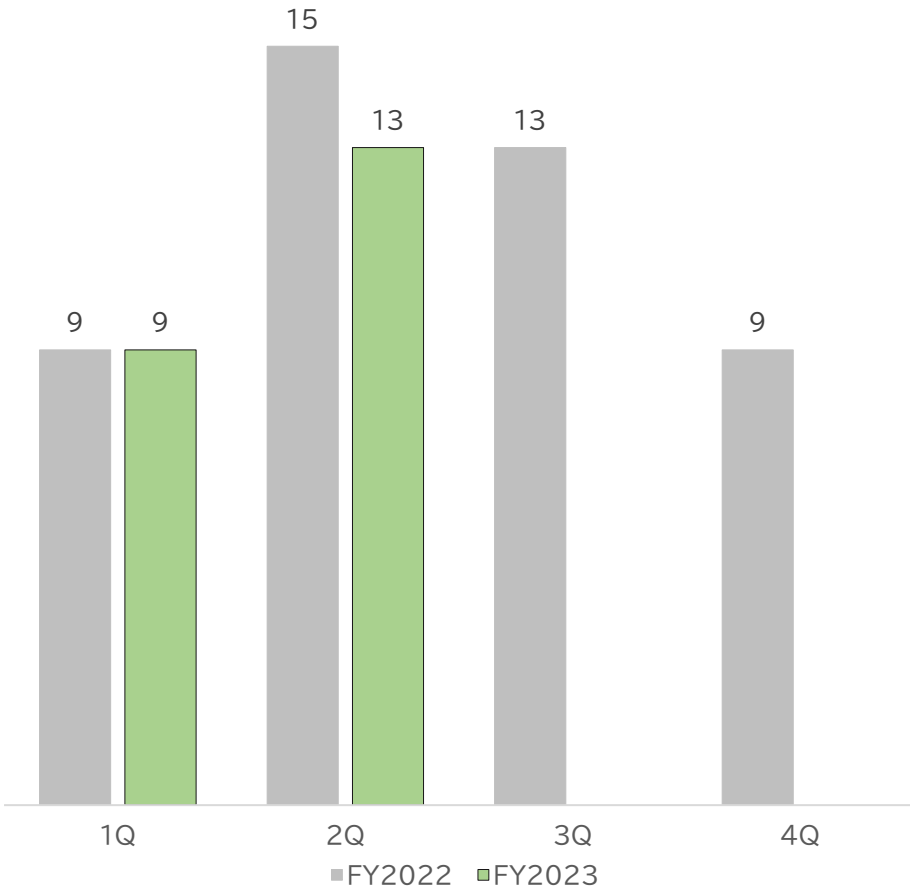
# Mobility Segment Operating Income Overview

- ▶ Sales increased for resins, mainly due to an increase in automobile production and expanded market share to existing customers
- ▶ Sales increased in functional materials and functional components for interior and exterior fittings and electrification
- ▶ Operating income decreased year on year due to an increase in selling, general and administrative expenses associated with higher activity volume, etc.

Operating income by business(100 millions of yen)



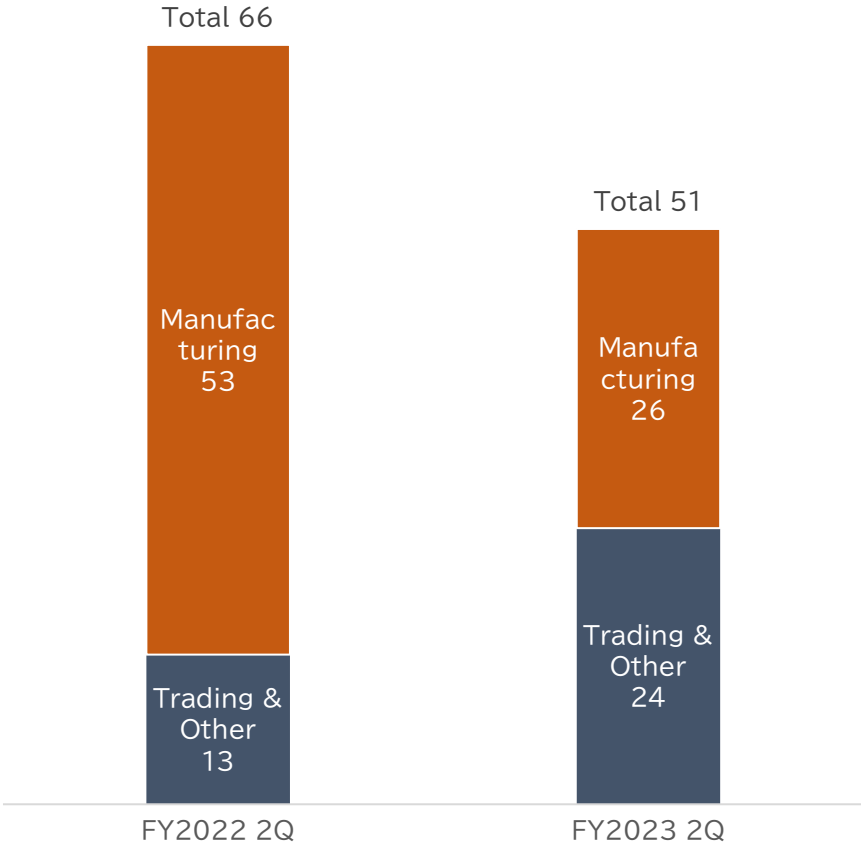
History of operating income (100 millions of yen)



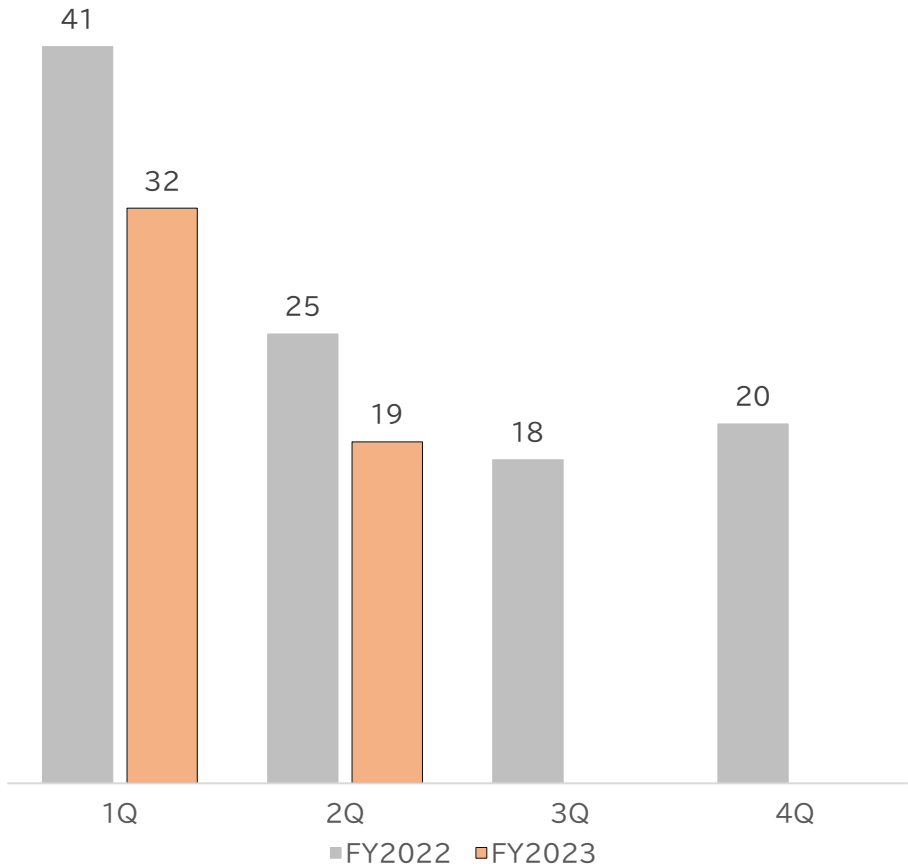
# Life & Healthcare Segment Operating Income Overview

- ▶ Overall, the Prinova Group recorded higher sales due to the impact of the weaker yen and operations at the new plant in Utah; however, food ingredient sales profitability declined due to falling market prices
- ▶ Hayashibara posted increased sales, mainly in cosmetic material
- ▶ Despite strong performance at Hayashibara, profit decreased overall year on year due to weaker in the Prinova Group and a delay in the profit contribution of the new Utah plant

Operating income by business(100 millions of yen)



History of operating income (100 millions of yen)





# State of Major Manufacturing Subsidiaries

- ▶ Nagase ChemteX : Despite the transfer of the biochemicals business, profit rose due to increased sales of highly profitable formulated epoxy resins
- ▶ Hayashibara : Higher profit due to the wider advancement of price increases and strong sales of cosmetic material stemming from a recovery in demand
- ▶ Prinova Group : Despite increased sales in our manufacturing and processing business, profit declined due to the impact of weaker profitability in food ingredient sales stemming from deteriorating market conditions, increased personnel expense and other selling, general and administrative expenses, and a delay in the profit contribution of the new Utah plant

100 millions of yen

		FY2022 2Q	FY2023 2Q	Change	Vs.PY	Forecast (Original)	Achievement
Nagase ChemteX Corporation	Sales	135	122	(12)	90%	252	49%
	Gross profit	38	37	(1)	97%	71	52%
	Operating income	11	13	1	112%	20	66%
Hayashibara Co.,Ltd.	Sales	138	170	31	122%	367	46%
	Gross profit	53	62	9	118%	131	48%
	Operating income	20	26	6	133%	50	53%
	Goodwill amortization etc.	15	15	-	100%	30	50%
	Operating income after amortization burden	4	11	6	239%	19	58%
Prinova Group	Sales	950	968	18	102%	2,035	48%
	Gross profit	166	164	(2)	98%	367	45%
	Operating income	57	26	(30)	47%	84	32%
	Goodwill amortization etc.	11	12	1	110%	24	50%
	Operating income after amortization burden	46	14	(31)	32%	59	24%

# Consolidated Balance Sheets

- ▶ Current assets : Decrease due to reduced inventories
- ▶ Net assets : Increase, despite dividend payments and share buybacks, as we posted a profit for the period, as well as increases in net unrealized holding gain on securities and translation adjustments due to the weaker yen

100 millions of yen

	23/03	23/09	Change	Details
Total Current Assets	5,301	5,388	87	
(Cash&deposits)	408	408	(0)	
(Trade account receivable)	3,021	3,245	224	
(Inventories)	1,697	1,542	(155)	
Total non-current assets	2,325	2,458	132	
(Investments in security)	697	752	55	
Total assets	7,626	7,847	220	
Current Liab.	2,862	2,906	44	Short-term loans·CP(121)
(Trade account payable)	1,404	1,567	163	
Non-current Liab.	980	1,018	37	Lease Obligation+35, Non-Current Loan (12)
Total Liab.	3,843	3,924	81	
Shareholders' equity	3,090	3,066	(24)	Treasury Stock(66)
Accum. Other Comprehensive Income	586	785	199	Translation Adjustment+154, Net unrealized holding gain on securities+38
Non-controlling interest	107	70	(36)	
Total net assets	3,783	3,922	138	
Working capital	3,313	3,220	(93)	
Shareholders' equity ratio	48.2%	49.1%	0.9ppt	
NET D/E ratio	0.38	0.34	(0.04)	

# Consolidated Cash Flows

- ▶ Operating CF : Net operating cash flow of ¥38.2 billion, mainly due to a decrease in working capital
- ▶ Investing CF : Net cash used of ¥6.4 billion, mainly due to purchase of property, plant and equipment and intangible assets, offset in part by proceeds from the sales of investment securities, etc.
- ▶ Financing CF : Net cash used of ¥36.6 billion, mainly due to a decrease in short-term loans and commercial paper, dividend payments, and share buybacks

100 millions of yen

	FY2022 2Q	FY2023 2Q
Operating CF	(179)	382
Investing CF	(59)	(64)
Free CF	(239)	318
Financing CF	115	(366)
Effects of exchange rate	47	50
Net increase / decrease in cash and cash equivalents	(76)	2
Depreciation of tangible and intangible assets	71	79
Fixed asset investment	(83)	(82)
Increase / decrease in working capital	(295)	233

# FY2023 Earnings Projection(Changed)

- ▶ While certain businesses, such as the automobile-related, semiconductor-related, and Life & Healthcare have been performing solidly, we lowered our full-year earnings forecast in light of the following conditions
- ▶ Resin sales declined due to lower demand for electronic and electrical projects caused by global inflation; profitability declined due to falling market prices
- ▶ The food-related business experienced a delay in profit contribution of the Prinova Group's new Utah plant, while food ingredient sales profits declined due to falling market prices
- ▶ Smartphone demand has yet to see a full-fledged recovery in demand, which we expected to begin in the second half of the fiscal year; profits from sales of related materials and raw materials may be lower than initial forecast

100 millions of yen

	FY2022 Actual	FY2023 Previous forecast	FY2023 Revised forecast	Change	Percent Change
<b>Sales</b>	9,128	9,580	9,000	(580)	(6%)
<b>Gross profit</b>	1,554	1,710	1,630	(80)	(5%)
<GP ratio>	17.0%	17.8%	18.1%	0.3ppt	-
<b>SG&amp;A expenses</b>	1,220	1,365	1,330	(35)	(3%)
<b>Operating income</b>	333	345	300	(45)	(13%)
<b>Ordinary income</b>	325	326	290	(36)	(11%)
<b>Profit attributable to owners of the parent</b>	236	240	225	(15)	(6%)
US\$ Exchange rate (period average)	@ 135.5	@ 135.0	@ 143.0	@ 8.0	Weak yen
RMB Exchange rate (period average)	@ 19.7	@ 20.0	@ 20.0	-	

# FY2023 Earnings Projection By segment(Changed)

- ▶ Sales of Functional Materials should increase due to a transfer of business from the Advanced Materials & Processing segment; however, we revised our forecast for operating income downward due to the negative impact of the digital print processing business, which is experiencing a decline in profitability
  - ▶ While we expect sales in the Electronics & Energy business to decrease, the decline in gross profit should be minor due to the increase in sales of high-profit products; therefore, we made an upward revision in operating income
  - ▶ We made a downward revision in operating income due to the delayed contribution of Prinova Group's new plant in Utah, despite the strong performance of Hayashibara in the Life & Healthcare-related business
  - ▶ We reduced Corporate & Others after reviewing cost effectiveness
- \*Figures for FY2023 prior to revision represent business segments before reclassification; FY2022 actual and FY2023 revised forecasts represent business segments after reclassification

100 millions of yen

		FY2022 Actual	FY2023 Previous forecast	FY2023 Revised forecast	Change	Percent Change
Functional Materials	Sales	1,561	1,150	1,540	390	34%
	Gross profit	298	229	275	46	20%
	Operating income	104	89	83	(6)	(7%)
Advanced Materials & Processing	Sales	2,209	2,700	1,970	(730)	(27%)
	Gross profit	242	343	236	(107)	(31%)
	Operating income	76	110	69	(41)	(37%)
Electronics & Energy	Sales	1,369	1,500	1,390	(110)	(7%)
	Gross profit	307	338	335	(3)	(1%)
	Operating income	92	106	111	5	5%
Mobility	Sales	1,255	1,356	1,299	(57)	(4%)
	Gross profit	144	156	149	(7)	(5%)
	Operating income	47	51	48	(3)	(6%)
Life & Healthcare	Sales	2,731	2,873	2,800	(73)	(3%)
	Gross profit	559	643	634	(9)	(1%)
	Operating income	105	113	108	(5)	(4%)
Corporate&Others	Sales	0	1	1	—	—
	Gross profit	1	1	1	—	—
	Operating income	(94)	(124)	(119)	5	4%
Total	Sales	9,128	9,580	9,000	(580)	(6%)
	Gross profit	1,554	1,710	1,630	(80)	(5%)
	Operating income	333	345	300	(45)	(13%)

\*Effective from October 1, 2023, NAGASE has changed the method of classifying its business segments, and the figures for the previous fiscal year have been reclassified to reflect this change

# FY2023 Earnings Projections by Segment (1st half Actual, 2nd half forecast)

- ▶ All figures below reflect organizational changes effective October 1, 2023
- ▶ We expect operating income overall to increase versus the first half in respect to a certain degree of easing in inventory adjustments by customers, which occurred during the first half. We also expect a recovery in profitability due to the sell-down of inventory for high-unit-price resin and food ingredients, which are in a declining market
- ▶ We expect Electronics & Energy sales to decrease; however, operating income should increase compared to the first half owing to strong sales, etc., of high-profit Nagase ChemteX products
- ▶ Corporate & Others: We expect expenses to decrease overall compared to initial projections; however, expenses will likely be higher in the second half compared with the first half, as there are more expense items budgeted for the second half

100 millions of yen

		FY2023 1st half Actual	FY2023 2nd half forecast	FY2023 Revised forecast	Achievement
Functional Materials	Sales	721	818	1,540	47%
	Gross profit	132	142	275	48%
	Operating income	36	46	83	44%
Advanced Materials & Processing	Sales	1,022	947	1,970	52%
	Gross profit	116	119	236	49%
	Operating income	32	36	69	48%
Electronics & Energy	Sales	712	677	1,390	51%
	Gross profit	163	171	335	49%
	Operating income	54	56	111	49%
Mobility	Sales	649	649	1,299	50%
	Gross profit	73	75	149	50%
	Operating income	23	24	48	49%
Life & Healthcare	Sales	1,396	1,403	2,800	50%
	Gross profit	301	332	634	48%
	Operating income	51	56	108	48%
Corporate&Others	Sales	—	1	1	—
	Gross profit	0	0	1	59%
	Operating income	(54)	(64)	(119)	46%
Total	Sales	4,501	4,498	9,000	50%
	Gross profit	788	841	1,630	48%
	Operating income	144	155	300	48%

\*We changed segment classifications on October 1, 2023. The figures above have been reclassified to reflect these changes.



# FY2023 Earnings Projection By Major Manufacturing Subsidiaries (Changed)

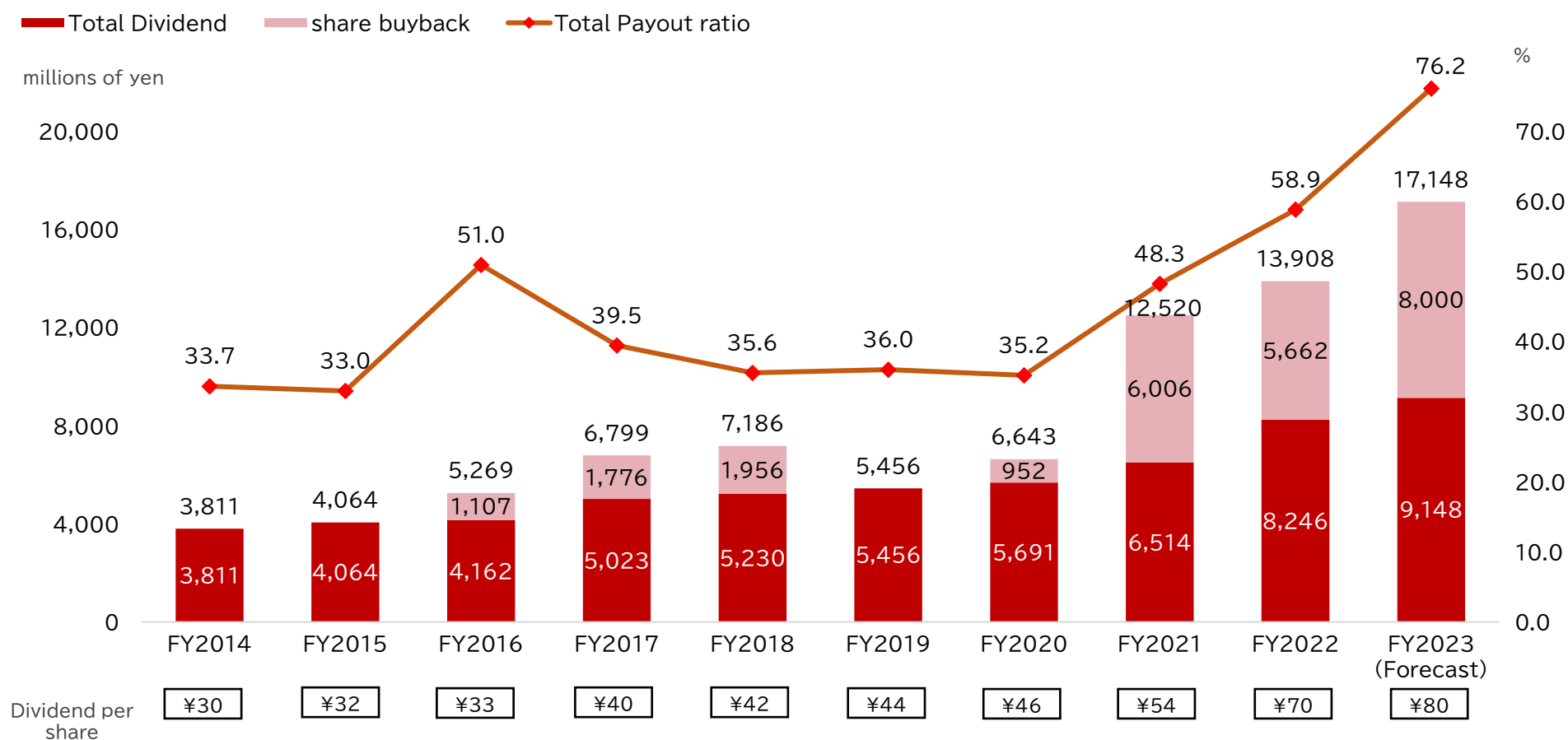
- ▶ Nagase ChemteX : While we expect overall sales to decrease, we made an upward revision to operating income due to strong sales of high-profit products
- ▶ Hayashibara : We made an upward revision to operating income, mainly due to strong sales of cosmetic material, reflecting the wider advancement of price increases and recovery in demand
- ▶ Prinova Group : We made a downward revision of operating income due to the delay in profit contribution from the new Utah plant and the impact of lower profitability in food ingredient sales due to falling market prices

100 millions of yen

		FY2022 Actual	FY2023 Previous forecast	FY2023 Revised forecast	Change	Percent Change
Nagase ChemteX Corporation	Sales	253	252	247	(4)	(2%)
	Gross profit	68	71	77	5	8%
	Operating income	18	20	24	4	23%
Hayashibara Co.,Ltd.	Sales	281	367	347	(19)	(5%)
	Gross profit	103	131	128	(2)	(2%)
	Operating income	37	50	52	1	3%
	Goodwill amortization etc.	30	30	30	—	—
	Operating income after amortization burden	7	19	21	1	8%
Prinova Group	Sales	1,927	2,035	1,943	(91)	(5%)
	Gross profit	312	367	355	(12)	(3%)
	Operating income	80	84	62	(22)	(27%)
	Goodwill amortization etc.	24	24	25	0	4%
	Operating income after amortization burden	56	59	36	(23)	(39%)

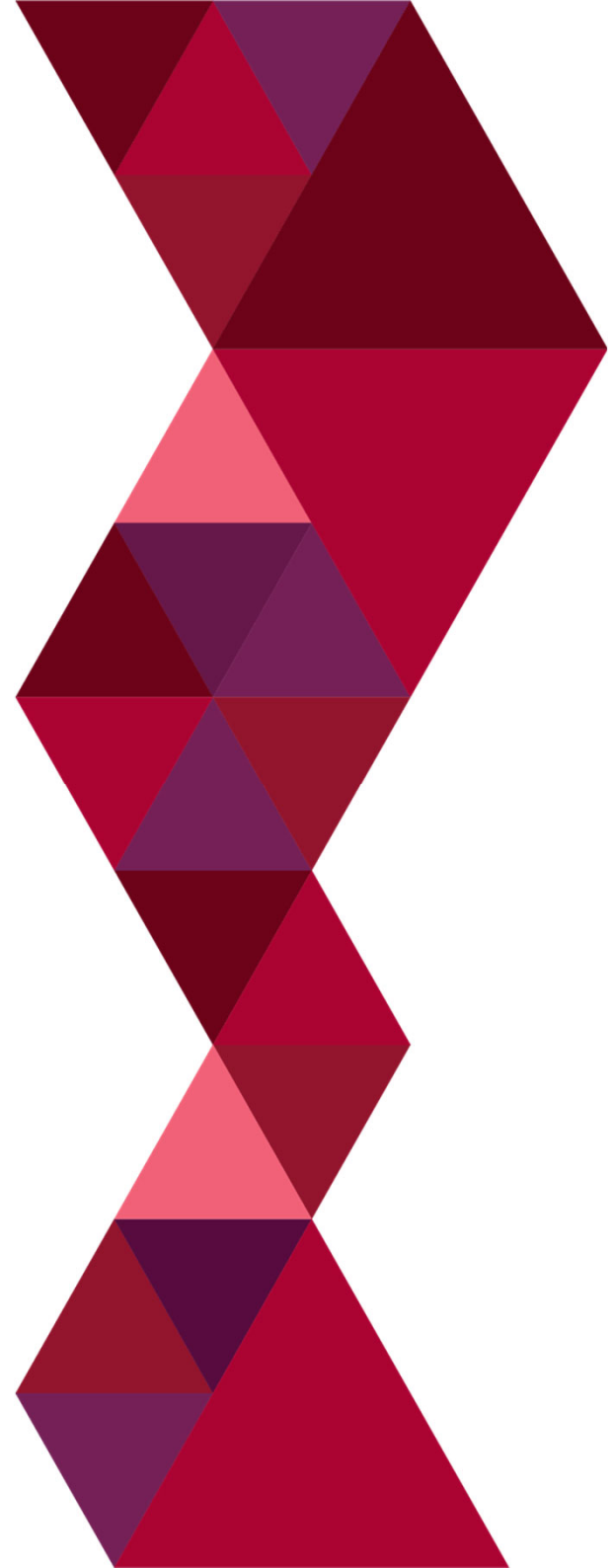
# Shareholder Returns

- ▶ We plan to pay an interim dividend of ¥40 per share and a year-end dividend of ¥40 per share for an annual dividend of ¥80 per share for fiscal 2023 (expected 14th consecutive fiscal year of dividend increases)
- ▶ We are proceeding as planned with the repurchase of ¥8 billion in treasury stock, as resolved in May 2023 (repurchase period: May 2023 to December 2023), reaching cumulative purchases of ¥7.1 billion as of the end of October 2023
- ▶ We expect the total payout ratio for fiscal 2023 to be 76%, including greater shareholder returns through increased dividends and share buybacks



※ FY2023 year-end dividend to be submitted for approval to the 109th general meeting of shareholders scheduled for June 2024.

# Medium-Term Management Plan **ACE 2.0**



# Contents

- Medium-Term Management Plan **ACE 2.0** Progress
- Growth Strategies for the Future

# Medium-Term Management Plan **ACE 2.0** Progress

# Medium-Term Management Plan **ACE 2.0** Quantitative Targets (No Changes)

## We made certain revisions in the third year of ACE 2.0 based on progress

- ✓ We made no changes to quantitative targets, aiming to build a structure for growth with an ROE of 8.0% or more and operating income of 35 billion yen as the baseline for profitability
- ✓ We are leaving the basic policy unchanged and clarifying strategies for the value we offer over the medium to long term

## Key Goal Indicators (KGIs): Pursuit of Quality

Measures	Indicators	FY2020	FY2021	FY2022	FY2025
Improvement in capital efficiency	ROE	5.9%	7.7%	6.6%	8.0% or higher
Increased profitability	Operating income	¥21.9 billion	¥35.2 billion	¥33.3 billion	¥35.0 billion



# ACE 2.0 Basic Policies (No Changes)

Become a true “Business designer”

## ACE 2.0 “Pursuit of Quality”

With a mindset focused on Accountability (A), Commitment (C) and Efficiency (E), and to enable its sustained growth,

NAGASE will work to give concrete shape (business, mechanisms, culture)

(Pursuit)

to the aspirations expected by all of its stakeholders.

(Quality)

### Reform of Profit Structure

Create a profit base toward the Ideal NAGASE

- (1) Pursuit of profitability and efficiency
  - Implement a company-wide asset replacement and reallocation of resources
- (2) Strengthen existing businesses
  - Expand business opportunities through globalization
  - Improve productivity of manufacturing businesses and expand value-added through technical innovation
- (3) Create sustainable businesses (N-Sustainable business)

### Reform of Corporate Culture

Mindset toward the Ideal NAGASE

- (1) Pursuit of economic and social value
  - Fostering a sustainability mindset, and rigorous monitoring of financial and non-financial indicators
- (2) Pursue efficiency
  - Deepen awareness of capital efficiency
  - Improve productivity of core operations
- (3) Strengthen human resources to drive reforms

### Functions supporting reforms

- (1) Accelerate DX further      (2) Promote sustainability      (3) Strengthen corporate functions

# Medium-Term Management Plan ACE 2.0 Progress

## ACE 2.0 Pursuit of Quality

### Results to Date (Through March 2023)

#### Reform of Profit Structure

- Invested capital in Focus Areas (food and semiconductors) to **expand earnings**
- Developed and began marketing new **Bio-Related** materials
- **Sold unprofitable businesses** and consolidated overseas locations

#### Reform of Corporate Culture

- **Work-style innovations** in connection with office relocation
- **Increased diversity** through mid-career hires
- **Reduced strategic cross-shareholdings**

#### Functions Supporting Reforms

- **Improved employee engagement** through more opportunities for dialogue
- **Pursued carbon neutrality** in coordination with Zeroboard
- **Improved ESG scores** from external evaluation organizations

### Issues as of April 2023

- **Need for partial or complete revision of the plan** (plan assumptions have changed beyond a certain scope)
- **Bold growth strategy** to raise our stage to a new level
- **Decision-making and mechanisms** that respond to the speed of environmental change
- **Not making the most or best use of finite resources** (foster a mentality of innovation)
- **Eliminate waste**
- **Increase awareness of sustainability**

Launch of  
QUICK WIN

# QUICK WIN Status

Maximize the Use of Resources (People, Money, and Time) and Generate Greater Efficiencies

## QUICK WIN

### Evolve Our Business and Financial Portfolios

- Manage and execute business portfolio based on ROIC
- Rebuild or liquidate unprofitable businesses (including businesses at risk of impairment)
- Execute a corporate-led growth strategy
- Strengthen search and development (S&D) function
- Engage in digital marketing

### Strengthen Management Governance

- Consolidate and operate our organization in pursuit of rationality and efficiency
- Revise and systematize decision-making structures
- Delegate authority

### Restructure Our Human Resources Portfolio

- Train the next generation of human resources
- Conduct talent management (reallocate human resources)
- Establish an environment for D&I implementation; revise systems and mechanisms

## Measures Initiated Over the Past Six Months

- Established WACC for each business division to improve ROIC
- Developed action plans/made decisions on whether to withdraw
- Shifted resources (facilities, etc.) from mature markets to growth markets
- **Formulated growth strategies for the future (see P31 and later)**
- Decided to form a CVC to create new businesses

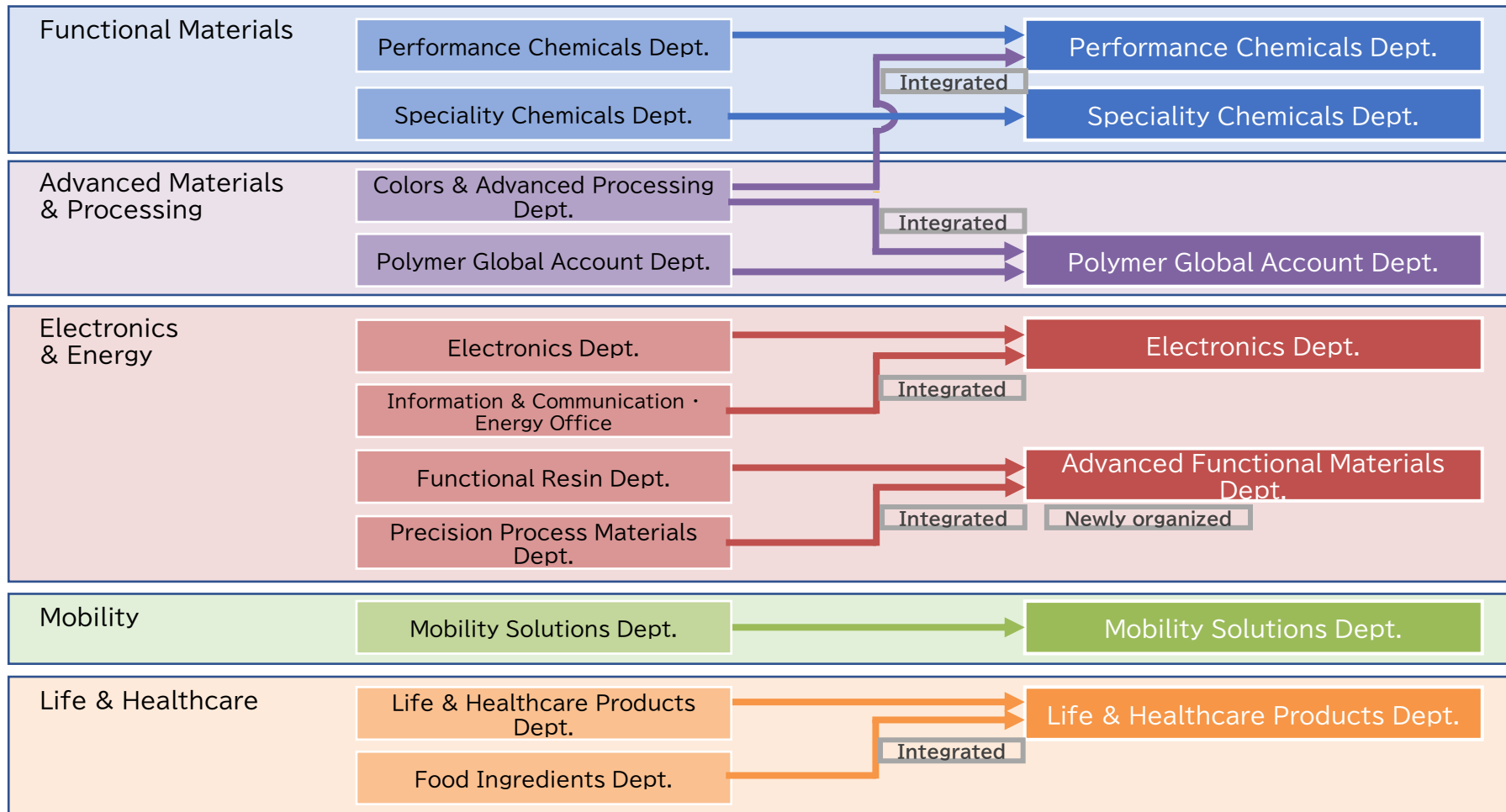
- Consolidated business Dept. from 11 to 7 to speed up decision making
- Reviewed meeting bodies to streamline business operations
- Delegated authority

- Introduced HRBP system (strengthened collaboration between business divisions and corporate)
- Reallocated human capital through the integration of business divisions
- Encouraged dialogue between management and employees
- Established women's employment ratio target of 30% or more for career-track positions and 6% or more for management positions (by fiscal 2025)

# Strengthen Management Governance

- Launched new organization in October (consolidated 11 Dept. to 7 Dept.).
- Improved decision-making speed and business productivity by streamlining organizational operations

## Creating an Organizational Structure for Rationality and Efficiency

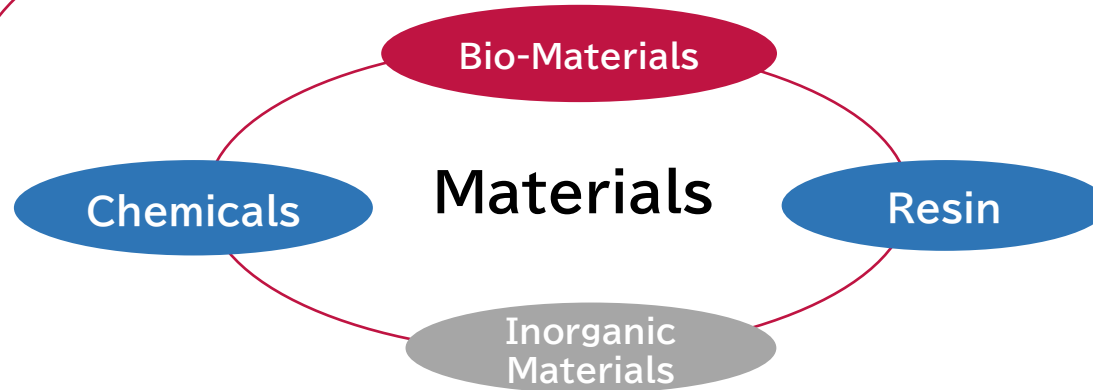


# Growth Strategies for the Future

# Who is NAGASE?

A Company Whose Mission is to Solve Manufacturing Issues Through Materials

**NAGASE**



**Solutions**

Solving Social Issues  
Fulfilling Consumer Needs

**Markets**

Food

Electrical  
Equipment

Semiconductors

Mobility

Life Sciences

Chemical Industry

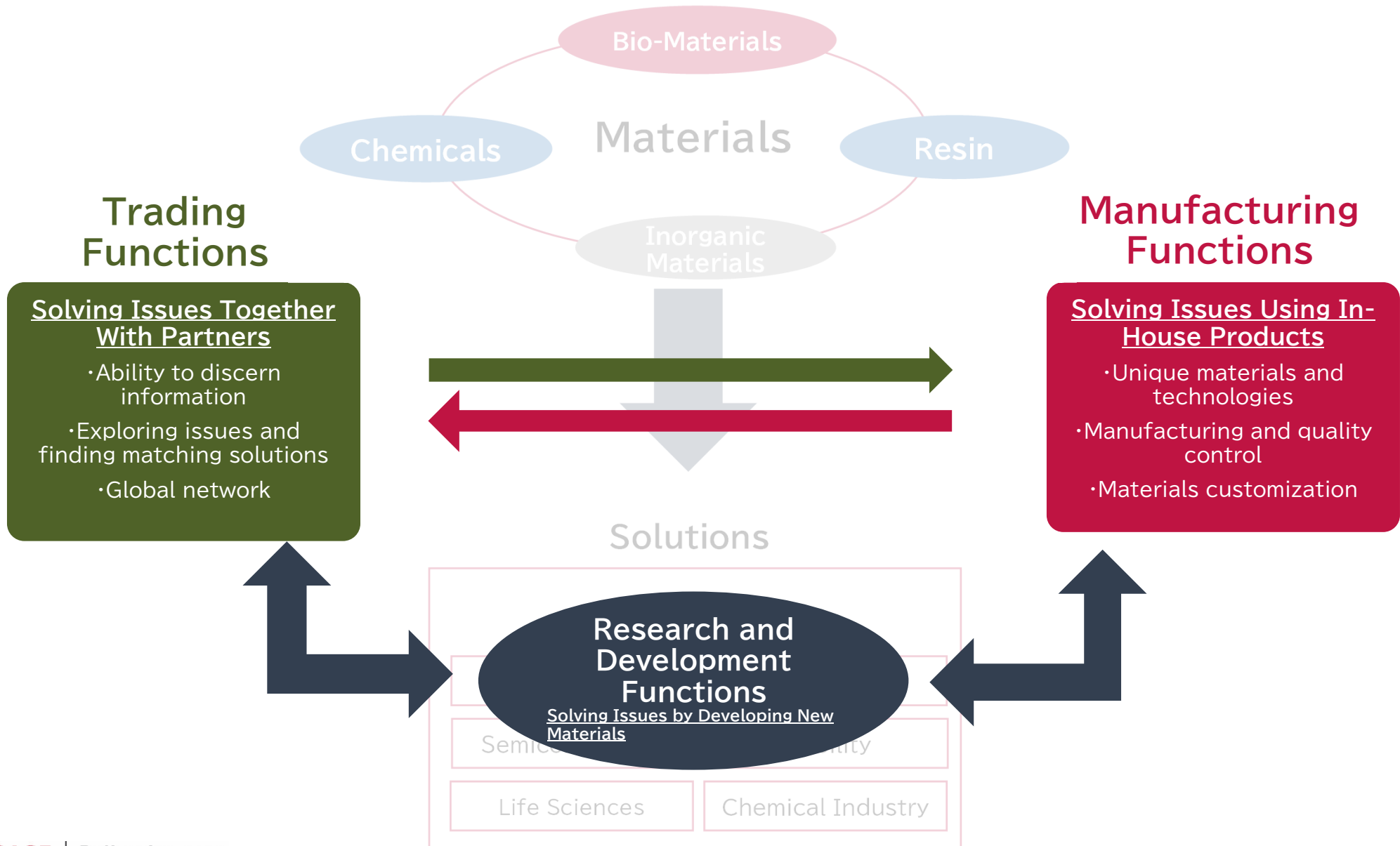
Social and  
Environmental  
Issues

Consumer  
Needs

Creating  
Sustainable  
Societies

# NAGASE Group Strengths

## A Company Whose Mission is to Solve Manufacturing Issues Through Materials



# Growth Strategies for the Future

Reorganize every Area based on the functional axis between trading company, manufacturing, and R&D functions.

## (1) Base Area

Obtain cash and information to enhance manufacturing functions in Focus and Develop Businesses

## (2) Focus Area

Concentrate investments in food, semiconductor, and life science manufacturing functions to make high-growth and high-profit products in-house

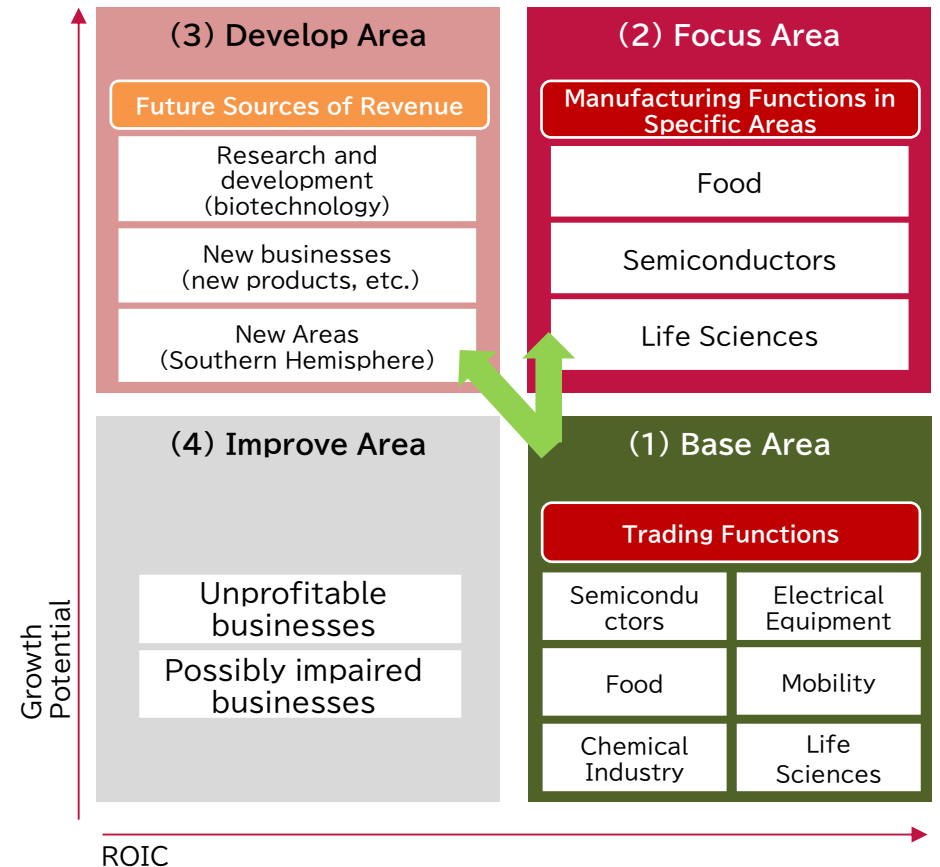
## (3) Develop Area

Accelerate R&D, increase in-house products  
Expand into the Southern Hemisphere

## (4) Improve Area

- Improve unprofitable businesses, etc. (see next page)

Potential investments (Approximately 80 billion yen) in Focus and Develop businesses after 2023



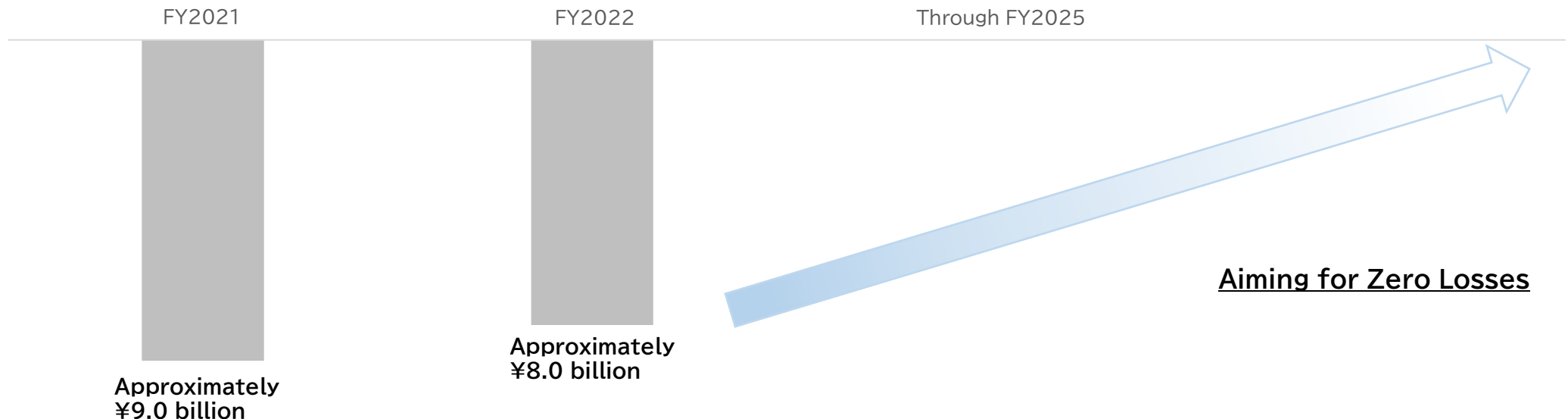


## Reduce unprofitable and impaired businesses

### Improvement Targets

- (1) Operating loss among subsidiaries and equity in losses of affiliates  
Develop and implement improvement plans as early as possible. Study withdrawing from businesses not expected to improve.
- (2) Impairment losses  
Strengthen monitoring of assets at risk of future impairment; minimize impairments
- (3) Unprofitable transactions  
Strengthen monitoring to improve unprofitable transactions or consider withdrawing

### [Operating Loss, Loss in Equity, Impairment Loss, and Unprofitable Transactions With Operating Subsidiaries]

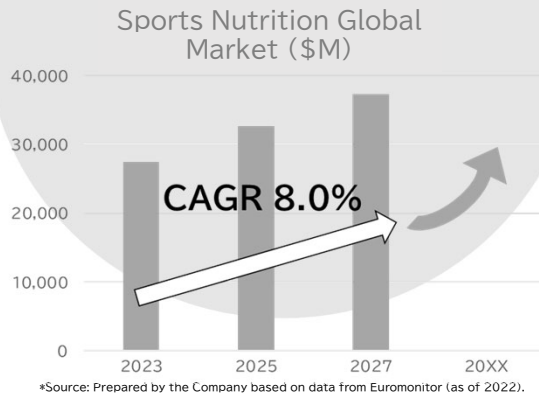


# Manufacturing Functions in the Food Area

## Expand the High-Profit Manufacturing and Processing Business

### [Social Issues]

- Growing global health consciousness
- Awareness of food loss issues

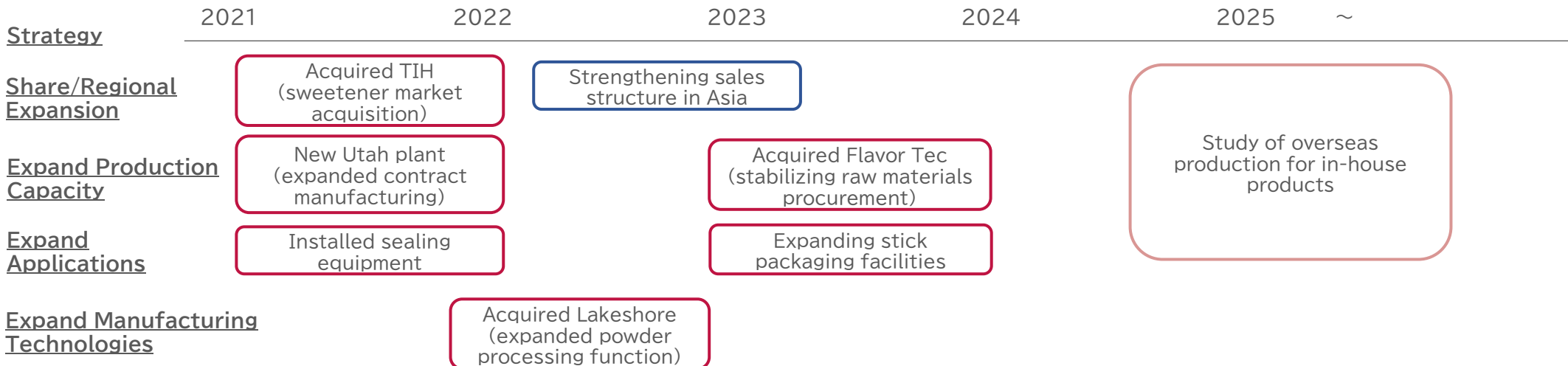


### NAGASE × Prinova × Hayashibara

- Contact points with the high-growth sports nutrition market
- Diverse lineup of materials, including functional food ingredients manufactured in-house  
(In-house materials: TREHA™, Fibryxa™, HAYASHIBARA HESPERIDIN S, etc.)
- Sales network covering the globe
- M&A experience and expertise
- One-stop business model that encompasses everything from procurement to manufacturing

Longer Healthy Life Expectancy  
Food Loss Reduction

### <Growth Strategies and Initiatives>



\*TIH: The Ingredient House, LLC  
 \*Lakeshore: Lakeshore Technologies, LLC  
 \*Flavor Tec: Flavor Tec - Aromas De Frutas Ltda

# Manufacturing Functions in the Semiconductor Area

**Expand Sales of High-Value-Added Products in the Advanced Semiconductor Market**

## [Social Issues]

- Increasing demand for advanced semiconductors
- Multipolarization of production bases necessitated for reasons of economic security

Overall Semiconductor Materials Market Size (\$M)



\*Source: Prepared by the Company based on data from Fuji Keizai

## **NAGASE × Nagase ChemteX**

- Spec-in results in the advanced semiconductor market  
⇒\*Holds the No.1 share of liquid sealants for semiconductors for FOWLP devices
  - Planning, design, and manufacturing capabilities based on diverse elemental technologies
- \* FOWLP: Fan out wafer level package

**Establishing a Presence as an Indispensable Company in the Semiconductor Industry**

**Notes**

Designated as a materials transportation consolidator by Rapidus Corporation

Contributing to the domestic production of advanced semiconductors

**Expanded use of sealants**  
Expand business in advanced semiconductors for high-end servers

**New plant built to manufacture release agents and expand business**  
Increasing production for the domestic market, entering and expanding in the Taiwanese market, developing a supply system including the construction of a new plant

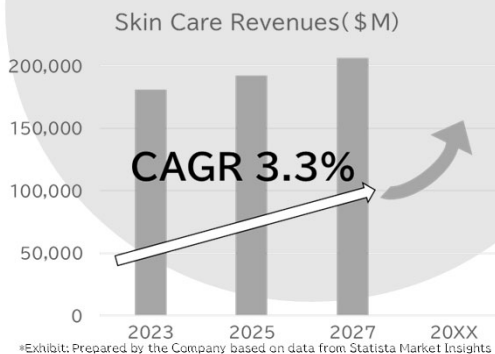
**Commercialize recovery and recycling of developer solution at the time of production**  
Established a new plant in Higashi Osaka using electrolysis and refining technology (NAGASE investment: ¥2 billion)  
Most advanced example of the recovery and recycling of used developer solution in Japan

# Manufacturing Functions in the Life Sciences Area

Provide in-house materials that meet market trends and customer needs in the life sciences market, where concerns about sustainability are rising

## [Social Issues]

- Aging society and growing health consciousness
- Rising concerns about sustainability



## NAGASE × Hayashibara × Nagase ChemteX

- Sugar stabilization technology for more stable pharmaceuticals
- Prescription suggestion, analysis, and evaluation functions
- Country-specific regulatory compliance function
- Precision organic synthesis technology
- Global presence related to sustainability

Provide Safe, Secure Bio-Derived Materials

### Pharmaceutical Materials

**PULLULAN:** Bio-derived pullulan of particularly high quality. Expansion into the capsule market.

**TREHALOSE SG:** Low endotoxin-type trehalose. Expansion into the pharmaceuticals market.

### Personal Care Materials

**AA2G™:** Stable vitamin C, a naturally derived cosmetics material. Accelerate overseas expansion based on a growing awareness of beauty and health.

**Glucosyl naringin:** Highly water-soluble naringin. Highly effective anti-aging introduced in the cosmetics market.

### Precision Organic Synthesis Technology

**Endotoxin removal:** Removal services and other solutions. Propose and provide solutions to the medical devices industry, etc.

2023 ecovadis Sustainability Rating (Silver)

UNITED NATIONS FOOD SYSTEMS SUMMIT 2021

TOKYO NUTRITION FOR GROWTH SUMMIT 2021

Proud to Support 32<sup>nd</sup> IFSCC Congress London 19-22 September 2022

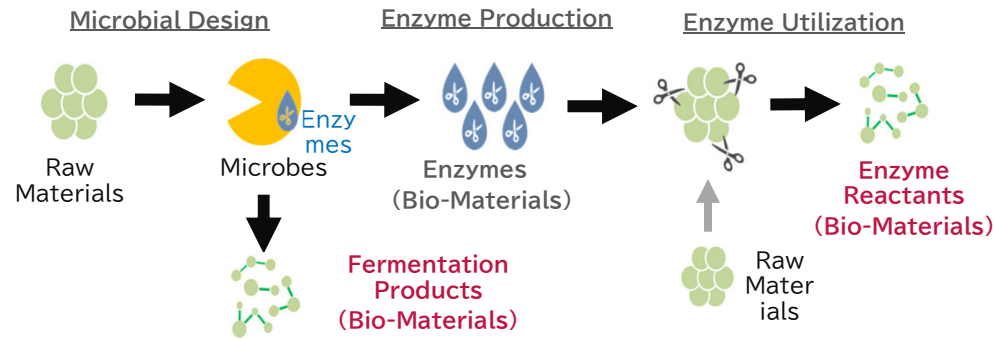
COP28 UAE

# Research and Development (Biotechnology)

**Strengthen R&D to develop new core bio-materials**

## NAGASE (Nagase Bio Innovation Center) × Hayashibara

### Bioprocesses Serving as the Foundation of NAGASE



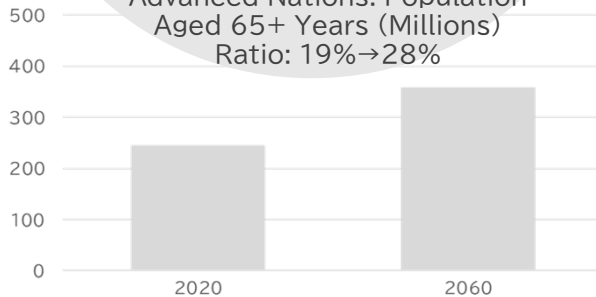
Realize a sustainable world where people live with peace of mind

### [Social Issues]

- Climate change
- Resource circulation
- Healthy life expectancy (cognitive function, sleep quality, etc.)

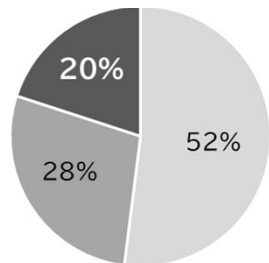
Expanding Needs for Presymptomatic, Disease Prevention

Advanced Nations: Population Aged 65+ Years (Millions)  
Ratio: 19%→28%



\*Source: Annual Report on the Ageing of Society (Summary) FY2022, Cabinet Office, Government of Japan; prepared by the Company based on international aging trends

Approximately 19.3 billion disposable diapers/year  
Approximately 20% of the material is high-polymer absorbent



■ High-quality pulp ■ Resin ■ High-polymer absorbent

\*Source: Prepared by the Company based Guidelines for Recycling Used Disposable Diapers, Ministry of the Environment, and statistical data from the Japan Hygiene Products Industry Association

#### Well-being:

Advancement in mass production of ergothioneine via fermentation, expected to have the following effects:

- Positive effects on cognition
- Improved skin wrinkles and spots
- Comfortable sleep

Cosmetics

Functional Foods

#### Green:

Development of bio-based biodegradable SAP

- Reduced diaper waste (see next page)
- Greening of drought-stricken areas

Medical

Chemical Industry

# Leveraging Materials to Take on the Social Issue of Diaper Disposal



**ナガセをサガセ。**  ① ナガセがてん

**おむつ問題は、  
水に流そう。**

年間約**193億枚**<sup>\*1</sup>。乳幼児用と大人用あわせて膨大な量が生産されている紙おむつは、使用后ほとんどが焼却処分されています。その際にCO<sub>2</sub>を大量に排出することから、環境への影響が懸念されてきました。

そこでNAGASEは、**でんぶん**を原料に使った「**生分解性SAP**（高吸水性ポリマー）」を開発。従来と同等以上の吸水性能を実現しながら、**土壌や海水での分解を可能に**<sup>\*2</sup>。

実用化すれば焼却処理の量を大幅に減らせるため、環境負荷も削減できます。社会の課題をマテリアルで解決し、世界のパートナーと温もりのある未来を創造する。私たちはNAGASEです。

 高吸収  バイオ由来  生分解性

 **NAGASE**  
Delivering next.

 NAGASEの技術を動画で紹介!  
長瀬産業株式会社

\*1 2022年 紙おむつの総生産データ \*2 グレードによって生分解の速度が異なります

\*Appeared in the *Culture* section of the Nihon Keizai Shimbun, October 31, 2023

# **NAGASE** | **Delivering next.**

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<https://www.nagase.co.jp/english/contact/ir/>

## ■NAGASE Group Investor Relations Website:

<https://www.nagase.co.jp/english/ir/>

These presentation materials contain projections based on forward-looking assumptions, forecasts, and plans as of November 27, 2023. Actual earnings may differ from projections due to risks and uncertainties in the future global economy, competitive landscape, currency exchange rates, etc.