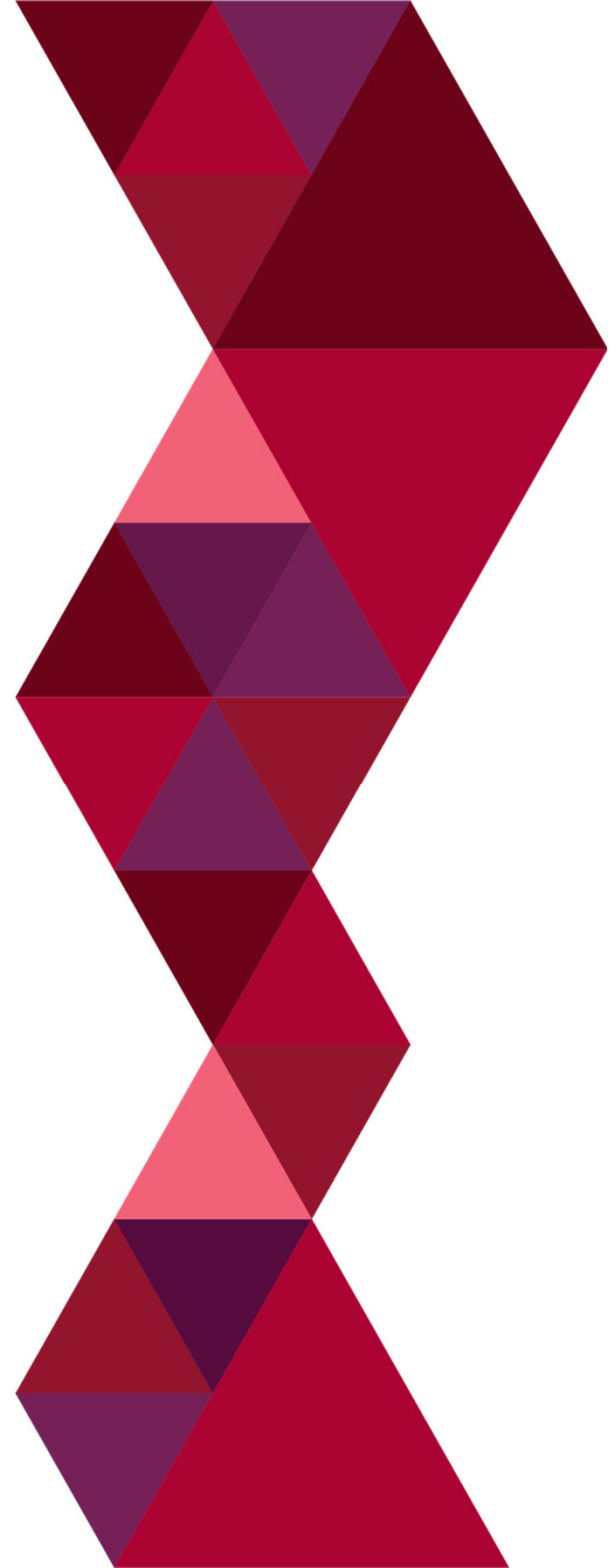


Medium-Term Management Plan **ACE 2.0**



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

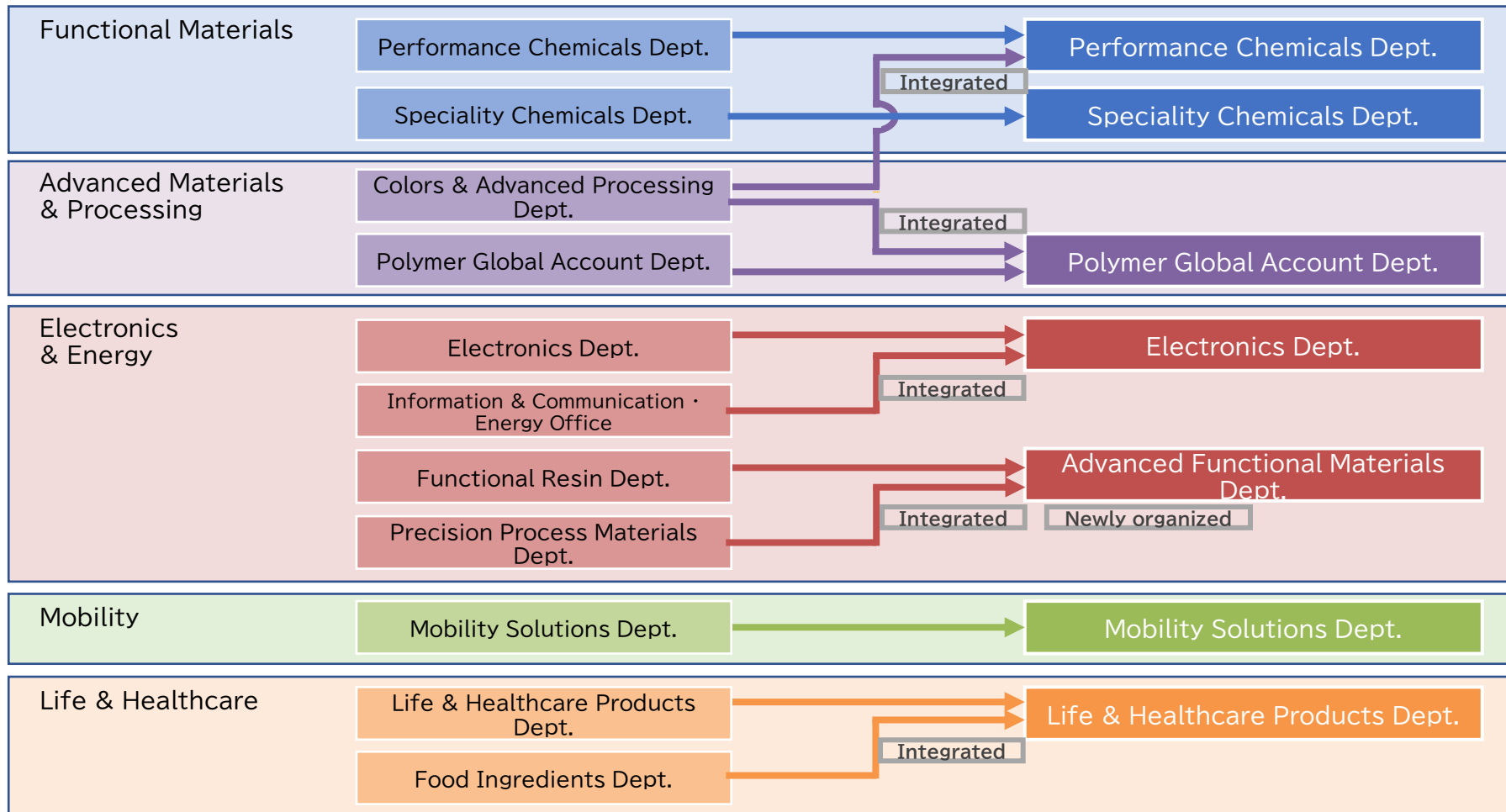
- Consolidated business Dept. from 11 to 7 to speed up decision making
- Reviewed meeting bodies to streamline business operations
- Delegated authority

- 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

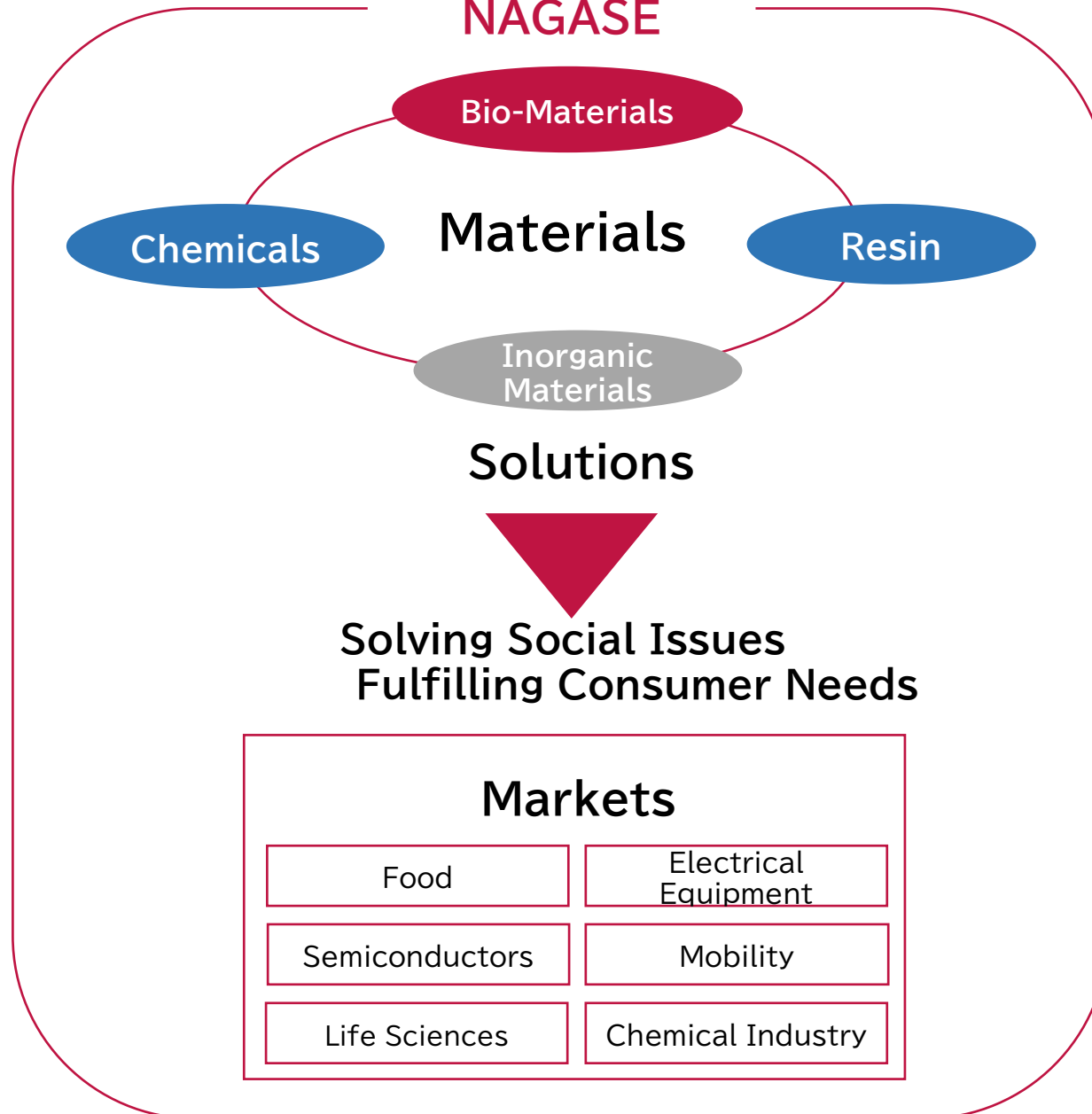


Growth Strategies for the Future

Who is NAGASE?

A Company Whose Mission is to Solve Manufacturing Issues Through Materials

NAGASE



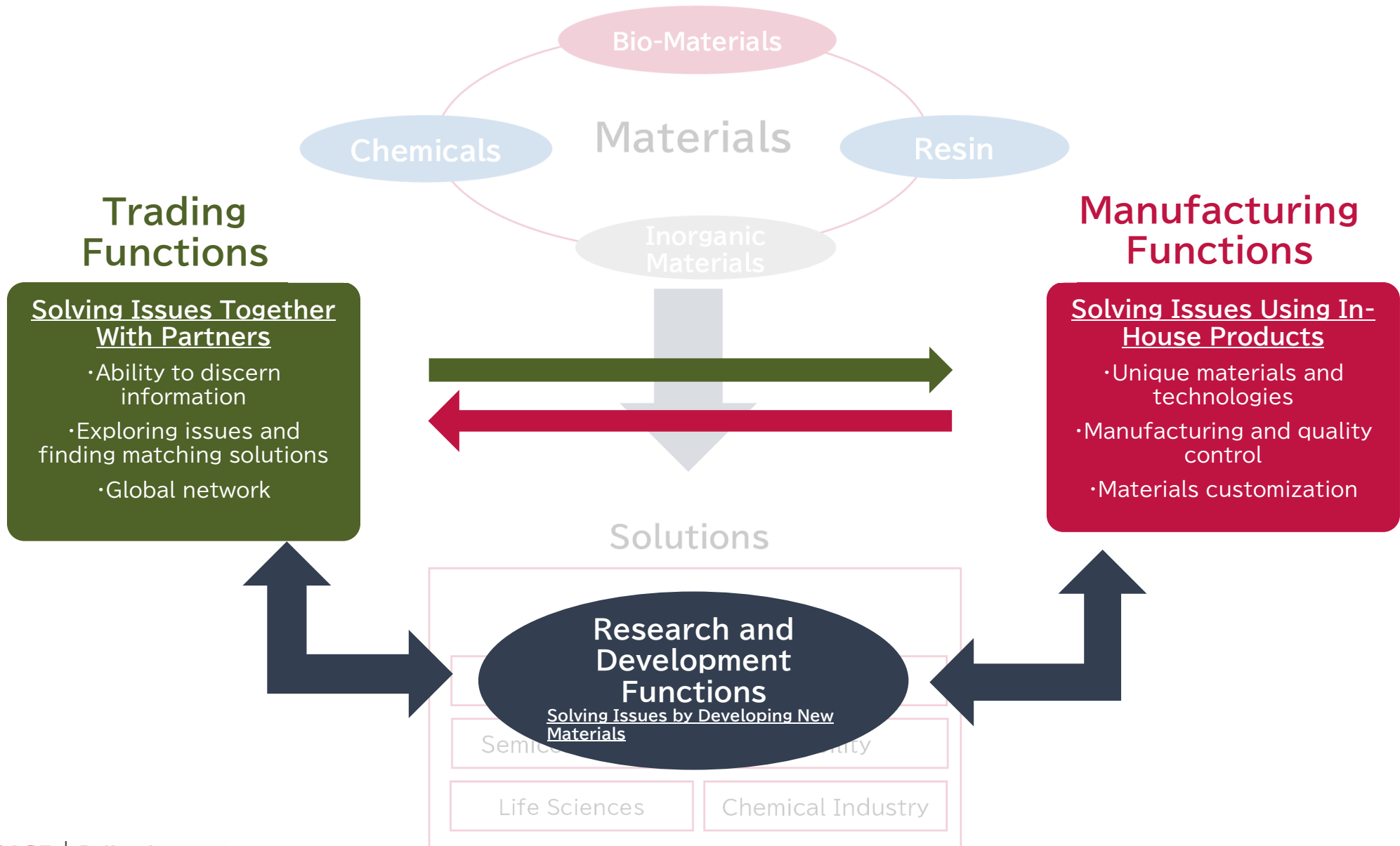
Social and Environmental Issues

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

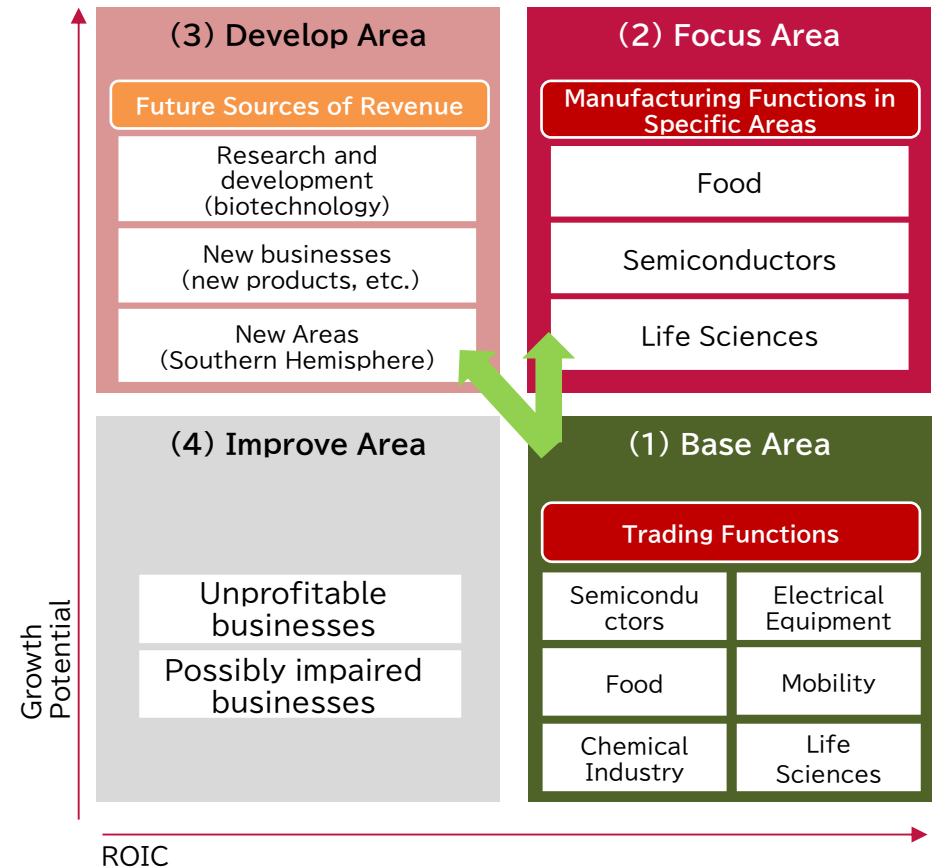
(3) Develop Area

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

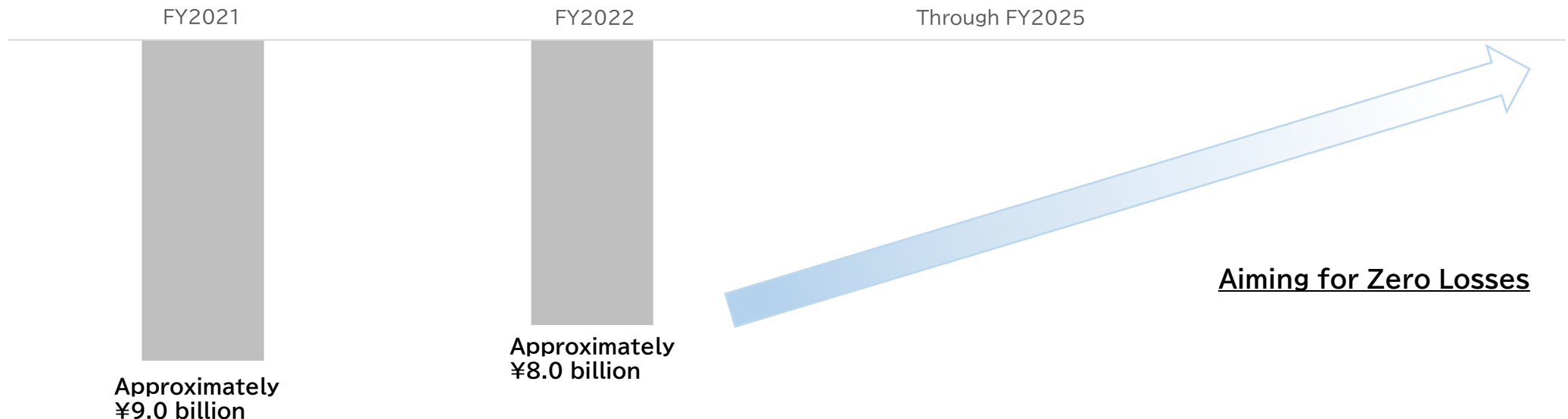


Reduce unprofitable and impaired businesses

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]

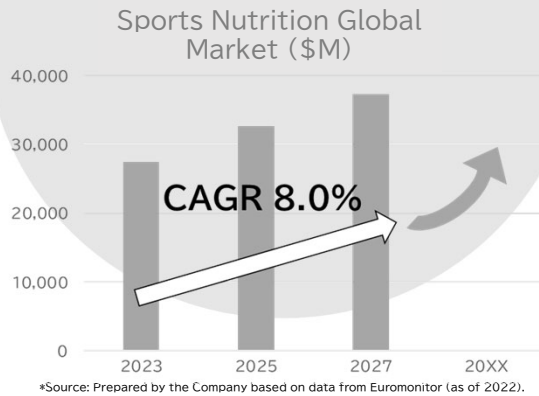


Manufacturing Functions in the Food Area

Expand the High-Profit Manufacturing and Processing Business

[Social Issues]

- Growing global health consciousness
- Awareness of food loss issues

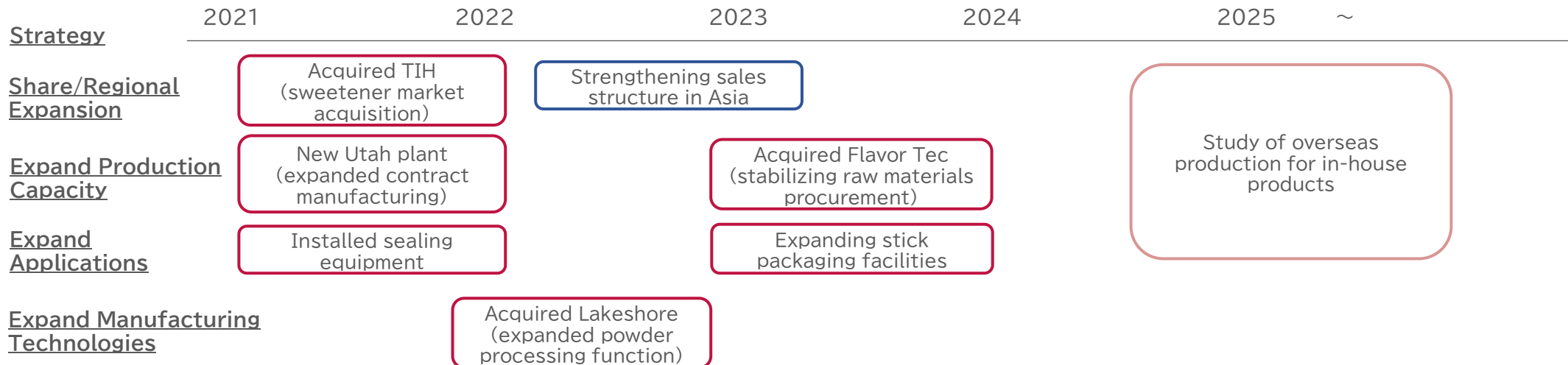


NAGASE × Prinova × Hayashibara

- 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

- Pre-process
- Post-process

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

Notes

Designated as a materials transportation consolidator by Rapidus Corporation

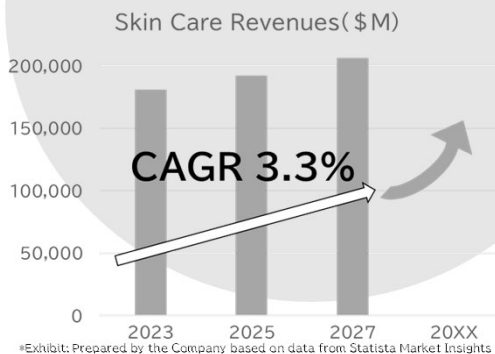
Contributing to the domestic production of advanced semiconductors

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 32nd IFSCC Congress London 19-22 September 2022

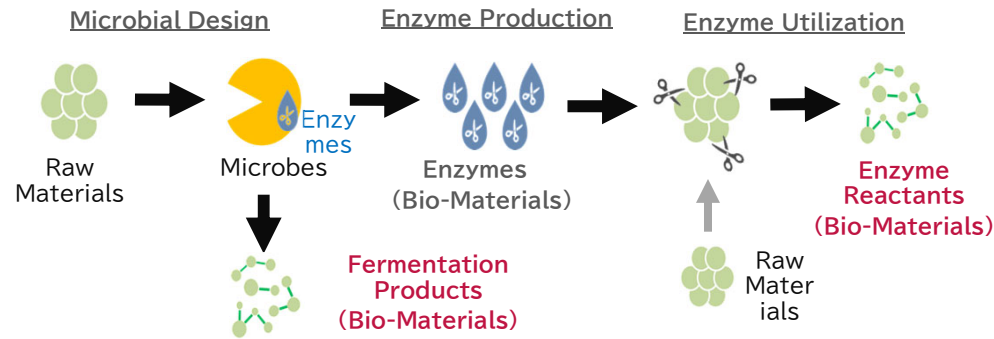
COP28 UAE

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



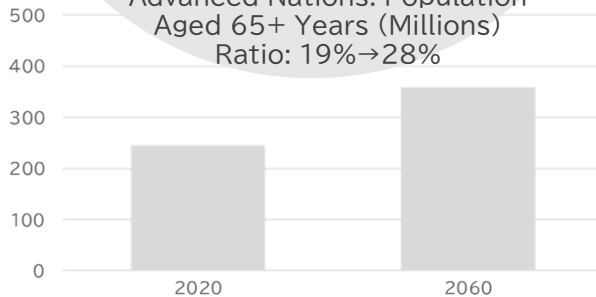
Realize a sustainable world where people live with peace of mind

[Social Issues]

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

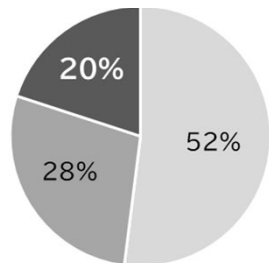
Expanding Needs for Presymptomatic, Disease Prevention

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**^{*1}。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CO₂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**^{*2}。

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.

① NAGASEの技術を動画で紹介！
長瀬産業株式会社

*1 2022年 紙おむつの統計データ *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