

Medium-term Management Plan ACE 2.0

**“Pursuit of Quality” for becoming a “Business Designer
that Creates a Sustainable Future”**

▶ **Review of Previous Medium-term Management Plan *ACE-2020***

■ **Conditions Surrounding the NAGASE Group and Ideal NAGASE**

■ **New Medium-term Management Plan ACE 2.0**

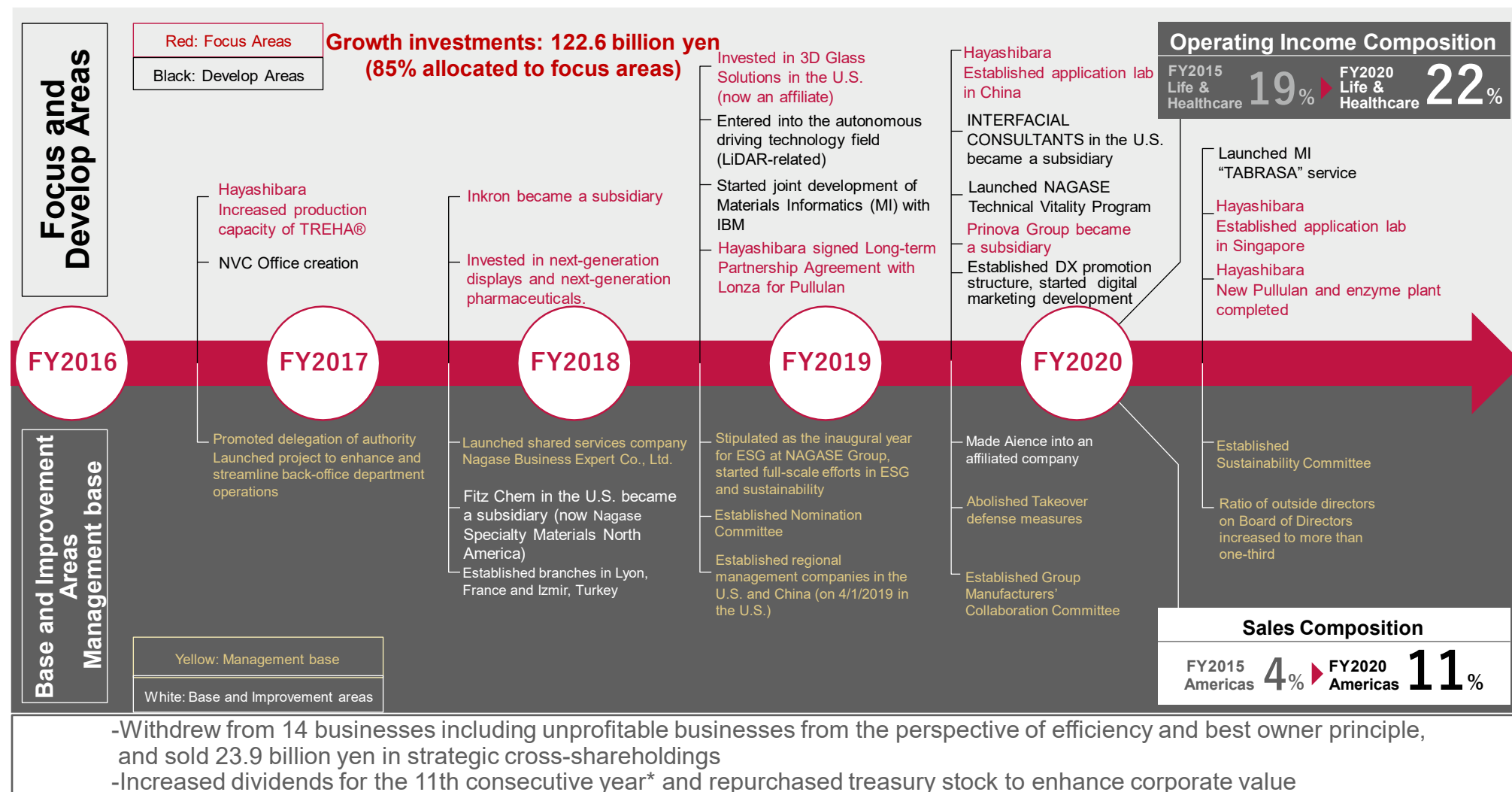
ACE-2020 Results and Issues

- Some improvements were seen, including progress with portfolio optimization, but efforts to reform a profit structure dependent on external conditions are still underway.
- Execution of a highly feasible strategy for sustainable growth, including improving capital efficiency, is an issue

Basic Policy		Results and Issues	
Reform of Our Profit Structure	Portfolio Optimization <p>Categorize businesses and implement strategies in each domain Replace assets and redistribute resources Accelerate Company-wide investment</p>	<ul style="list-style-type: none"> ● Divided portfolio into four domains—Focus, Growth, Base and Improvement—and steadily executed strategies ● Executed growth investments centered around Life & Healthcare and Electronics that are in focus domains ● Withdrew from 14 unprofitable businesses and sold off 23.9 billion-yen-worth of strategic cross-shareholdings ● Portfolio optimization progressed as a result ● On the other hand, improving capital efficiency remains an issue 	
	Expand and Strengthen the Revenue Base <p>Accelerate globalization “G6000” Increase Manufacturing Profitability</p>	<ul style="list-style-type: none"> ● Established regional management companies in the U.S. and China to build a foundation for governance ● Efforts to advance development of new overseas markets and create new “out-out” business did not progress ● The profit contribution from gap-filling-measures (inorganic growth) was delayed ● While profitability and efficiency improved in the manufacturing business, the amount of profits failed to increase 	
Reform of Our Corporate Culture	Mindset <p>Foster Accountability and Responsibility Share Management’s Message Thorough Monitoring and PDCA</p>	<ul style="list-style-type: none"> ● Company-wide permeation of the medium-term management plan, including the sharing of top management messages, and the fostering of accountability and responsibility have progressed, but issues remain in monitoring and PDCA. 	
	Expand and Strengthen Revenue Base <p>Pursue Efficiency HR Development</p>	<ul style="list-style-type: none"> ● Improvement in efficiency is behind schedule although overall optimization of corporate functions has been implemented, and infrastructure—including establishing a shared services company in pursuit of greater efficiencies—was established. ● Improvements were made in terms of corporate governance, including establishment of a Nomination Committee and delegation of authority. 	

ACE-2020 Trajectory

- Solid execution toward strengthening focus areas and sowing seeds in develop areas
- Made progress in promoting efficiency, fostering accountability, promoting sustainability, and strengthening corporate governance



* The year-end dividend for FY2020, the 11th year in a row the dividend has increased, is scheduled to be discussed at the Regular General Meeting of Shareholders scheduled for June 2021.

ACE-2020 Quantitative Goals KGI, KPI

KGI (Key Goal Indicator) : Goal and index

KGI	FY2015 Actual	FY2020 Goal	FY2020 Actual	Degree achieved	Versus FY2015
Consolidated Sales Amount	742.1 billion yen	1.0 trillion yen or more	830.2 billion yen	83%	112%
Consolidated Operating Income	18.0 billion yen	30.0 billion yen or more	21.9 billion yen	73%	122%
ROE	4.4%	6.0% or more	5.9%	(0.1)pt	+1.5pt

KPI (Key Performance Indicator) :Factor index to achieve KGI

Reform/Strategy	Measures	KPI	FY2015 Actual	FY2020 Goal	FY2020 Actual	Degree achieved	Versus FY2015
Profit Structure Reform Indicator	Increase Focused Business (Portfolio Optimization)	Operating Income in Focus Area ^{*1}	10.3 billion yen	16.9 billion yen	18.2 billion yen	108%	177%
		Growing Investment Distribution Ratio in Focus Area	To be determined	35% or more	85%	+50pt	-
	Accelerate Globalization (Expand and Strengthen Profit Structure)	Overseas Group Sales ^{*1}	424.7 billion yen	600.0 billion yen	482.0 billion yen	80%	113%
		Sales Growth Rate in the Americas	To be determined	170%	332%	+162pt	-
	Increase Manufacturing Profitability (Expand and Strengthen Profit Structure)	Operating Income from Manufacturing ^{*1}	8.3 billion yen	14.4 billion yen	8.6 billion yen	60%	104%
		Break-Even Point Sales Ratio ^{*1}	82%	73%	77%	(4)pt	+ 5pt
Corporate Culture Reform Indicator	Pursue Efficiency (Strengthen Management Platform)	Consolidated Selling, General and Administrative Ratio	9.9%	9.4%	11.2%	(1.8)pt	(1.3)pt
Financial Strategy Indicator	Investment	Growth Investment	To be determined	100 billion yen ^{*2}	122.6 billion yen ^{*2}	123%	-
	Financial Structure	Rating (R&I)	「A」	「A」 or more	「A」	100%	100%

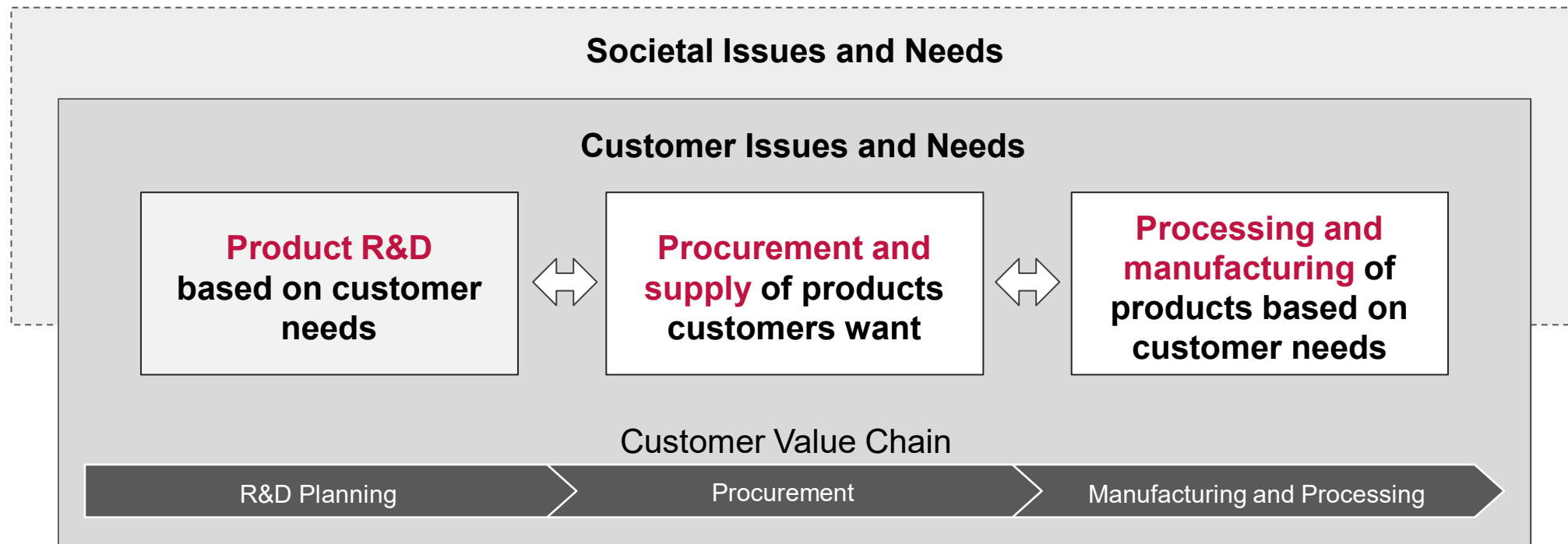
^{*1} The figures in this chart are all simple management accounting data, which is different from the figures disclosed on the consolidated financial statements.

^{*2} Total over five years

- Review of Previous Medium-term Management Plan *ACE-2020*
- ▶ **Conditions Surrounding the NAGASE Group and Ideal NAGASE**
- New Medium-term Management Plan ACE 2.0

Analysis of Internal Conditions: NAGASE's Strengths

In addition to procuring and providing products, expanding provided value to research, development, processing and manufacturing to address customer issues and needs



NAGASE'S
Strengths

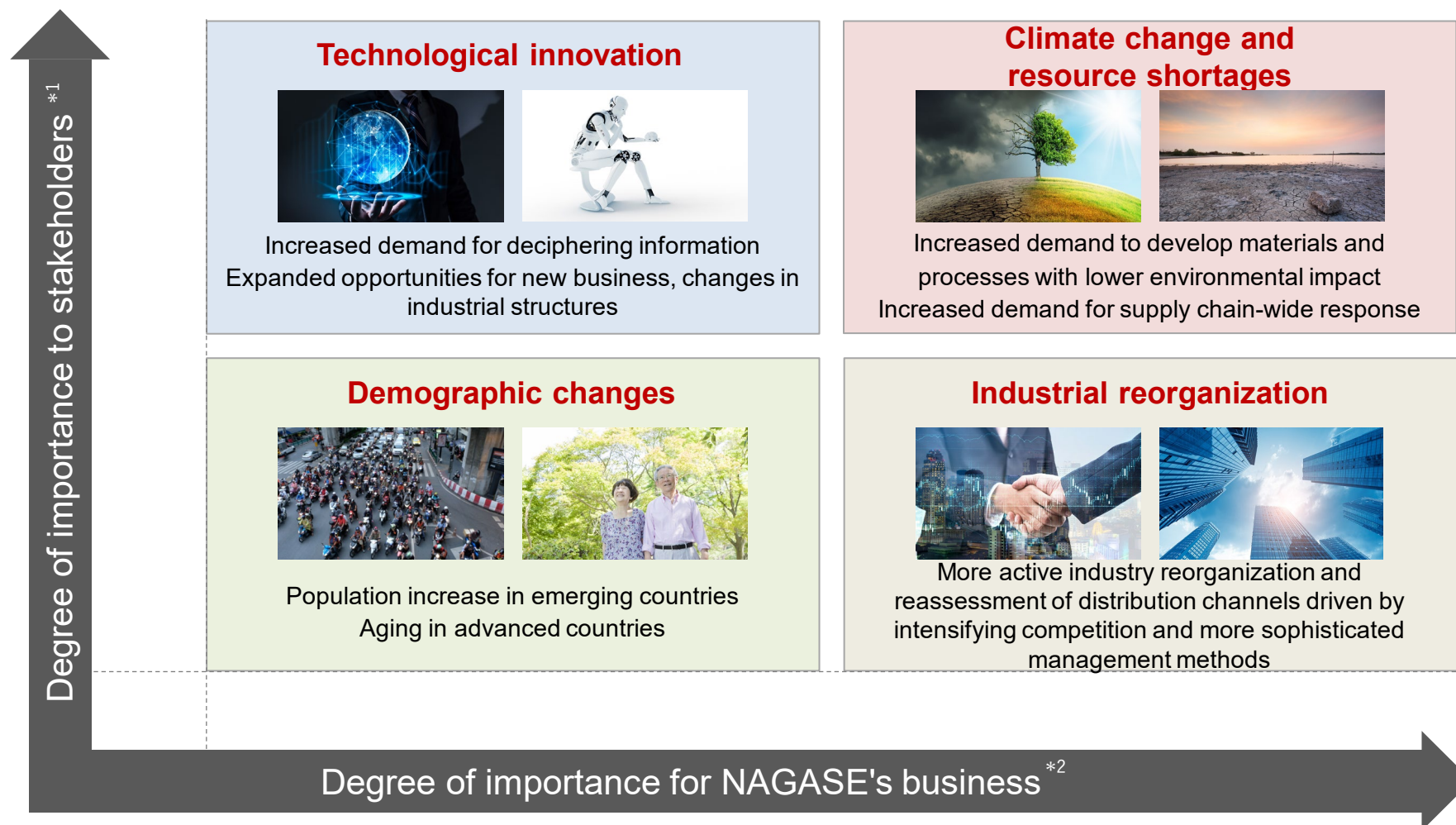
A broad network supporting customers' global supply chains

Technical knowledge in chemicals, bio, etc.

Problem-solving capabilities and human resources that leverage the ability to anticipate markets and technical knowledge

Our Recognition of External Environmental Changes

The most important matters for both NAGASE and its stakeholders are “technological innovation”, “climate change and resource shortages”, “demographic changes”, and “industrial reorganization”



^{*1} Assessed as important matters that produce great change to the respective needs of employees, business partners, local communities, consumers, and shareholders.

^{*2} Assessed as important matters that offer opportunities for new businesses, opportunities for existing businesses, threats to existing businesses, and threats to business continuation.

Dilution Risk of Our Provided Values / Future Opportunities and Threats

Dilution of Our Current Strengths

Future Opportunities and Threats

Technological Innovation

- **Leveraging gaps in business information is decreasing** due to the increased availability of information in circulation.
- The acceleration of information updates **makes past experience and knowledge obsolete.**

- The evolution of digital marketing and emergence of digital platforms will **close the information gap between customers and suppliers.**
- **New competitors will emerge** from unexpected areas.

Climate change and resource shortage

- **Business of selling high environmental impact products is decreasing or disappearing.**
- Rising importance of the environment in capital markets, including designated environmental stocks.

- There will be heightened interest from business partners to reduce environmental burden.
- There will be **a shift** from existing products **to sustainable products.**

Demographic Changes

- **The relative position of Japan is falling** due to the rise of emerging countries, etc.
- Consumption and production areas are **shifting from advanced countries to emerging countries.**

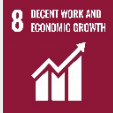








- **The volume of products will decrease in Japan due to a decrease in population and an aging society.**
- There will be changes to the supply chain in areas not yet fully cultivated.

Industrial reorganization

- **Product differentiation made difficult** by intensifying competition through consolidation and increased technical capabilities caused by the rise of emerging nation companies, etc.

- **Customers will consolidate their business partners, and suppliers will revisit/review existing distribution channels/rights** as industrial reorganization takes place.
- **Distribution channels/rights will change due to the emergence of new competitors.**

Materiality (Key Issues)

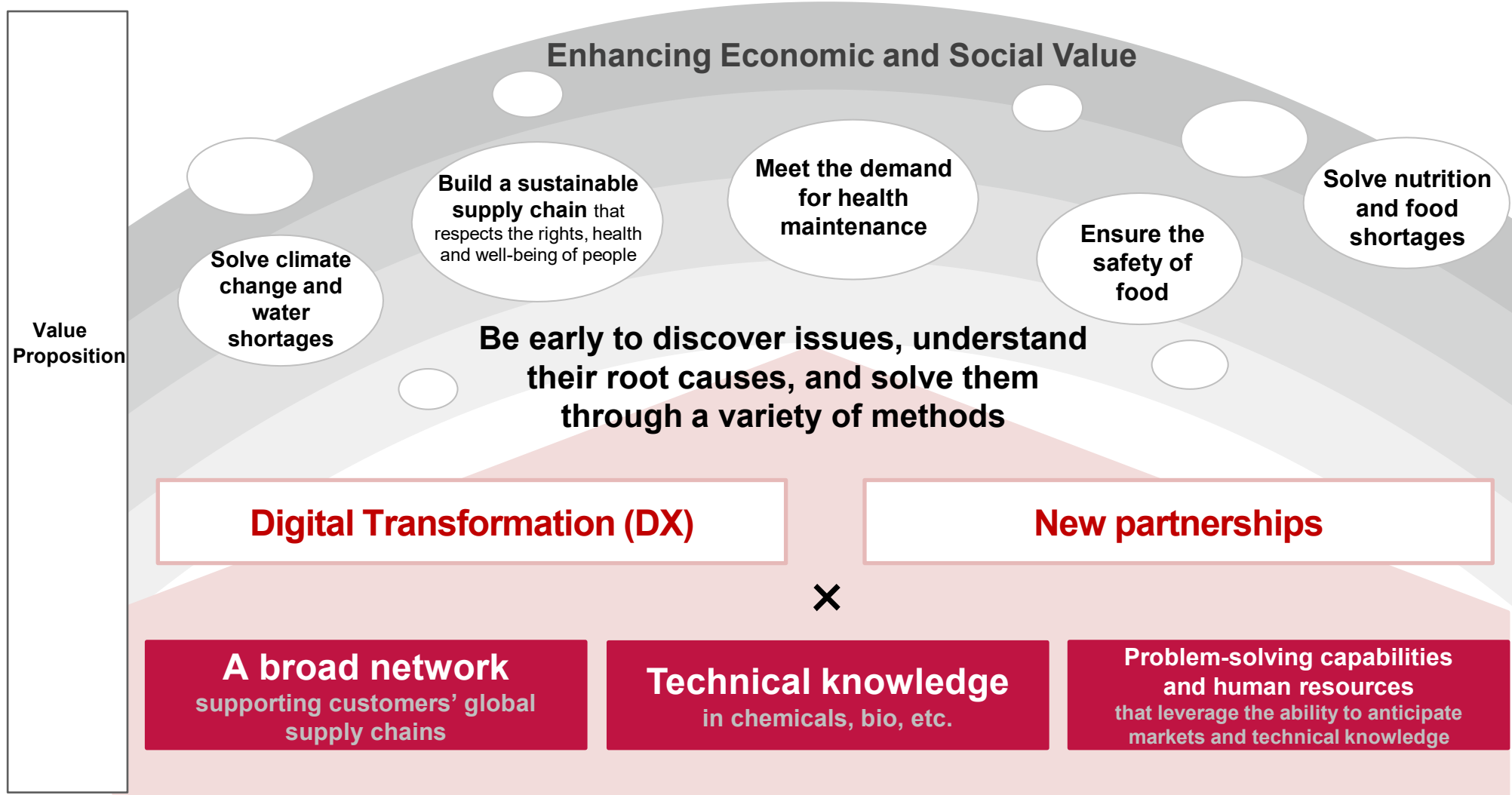
	Delivered Values	Materiality	Related SDGs
Employees	<ul style="list-style-type: none"> Provide a safe and friendly work environment. Provide a cheerful, happy, and engaging workplace. Create a corporate Group that is a sense of pride for employees and their families. 	<p>【Use diverse human resources; offer a workplace environment and corporate culture】</p> <ul style="list-style-type: none"> Use advanced technologies to improve productivity and leverage diverse human resources. Provide a workplace environment and foster a corporate culture as a Group where employees with diverse backgrounds have mutual respect and motivate each other. 	 
Business Partners	<ul style="list-style-type: none"> Establish a cooperative relationship by gaining deep understanding of business partners, which enables pursuit of a wide range of possibilities. Provide solutions to issues that need to be tackled throughout the value chain as well as social issues. 	<p>【Use of state-of-the-art technology to create new value】</p> <ul style="list-style-type: none"> Create new value leveraging advanced technologies and a network of business partners. Provide a wide range of solutions based on understanding the true causes of the increasingly complex problems of business partners. 	 
Society and Consumers	<ul style="list-style-type: none"> Contribute to the development of the local community through legal compliance and ethical management. Consider the rights, health and comfort of everyone involved in the supply chain. Provide products and services towards realization of a sustainable world. 	<p>【Solving Social and Environmental Issues, and Globalization】</p> <ul style="list-style-type: none"> Solve problems that threaten safety and security, e.g., climate change and food and water shortage. Contribute to securing and improving food safety by utilizing biotech, AI and other advanced technologies. Fulfill health maintenance demands due to increasingly aging societies in advanced countries. Contribute to the acceleration of globalization and solve social issues in each region. 	   
Share holders	<ul style="list-style-type: none"> Foster trust and a sense of security through a highly transparent management structure and timely and reasonable information disclosure. Maximize enterprise value by increasing both economic and social value and through continuous business creation. 	<p>【Corporate Governance】</p> <ul style="list-style-type: none"> Establish a highly transparent corporate governance system. Make sustainable improvement of enterprise value by balancing economic value and social value. 	

Ideal NAGASE

Our
vision

A Business Designer that Creates a Sustainable Future

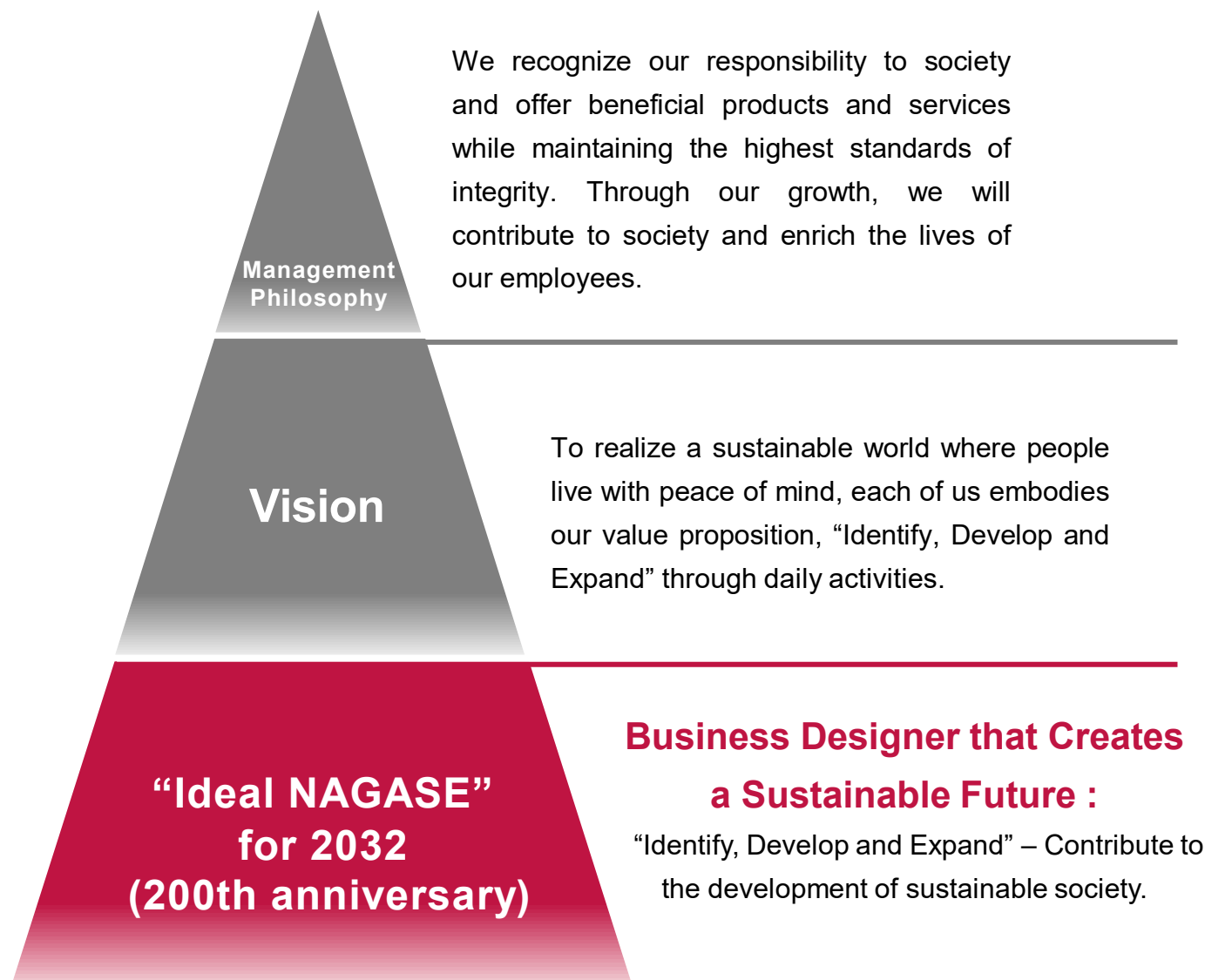
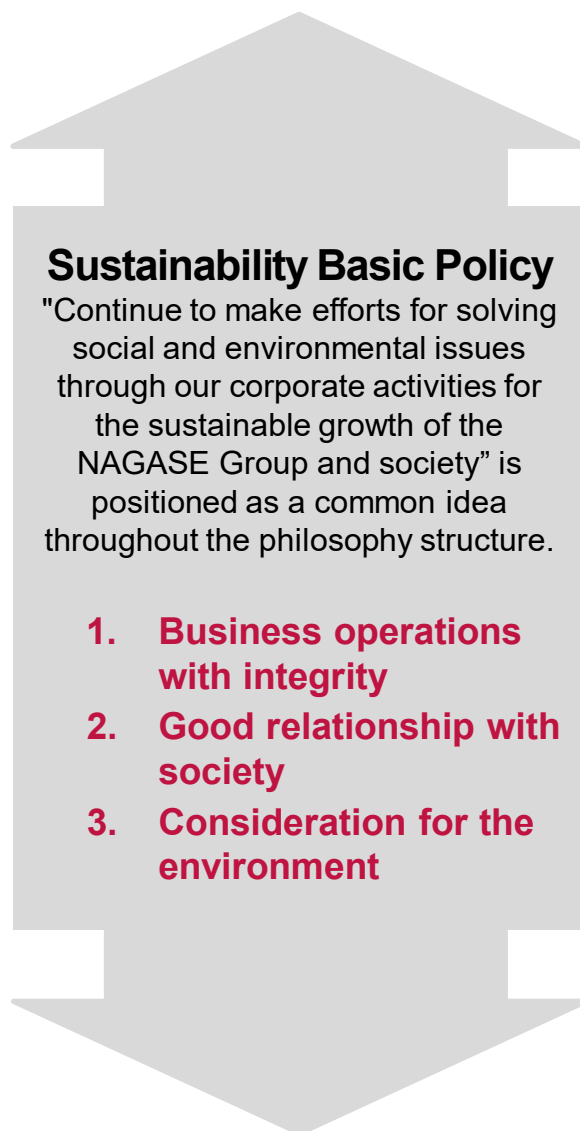
“Identify, Develop and Expand” – We will contribute to the development of a sustainable world.



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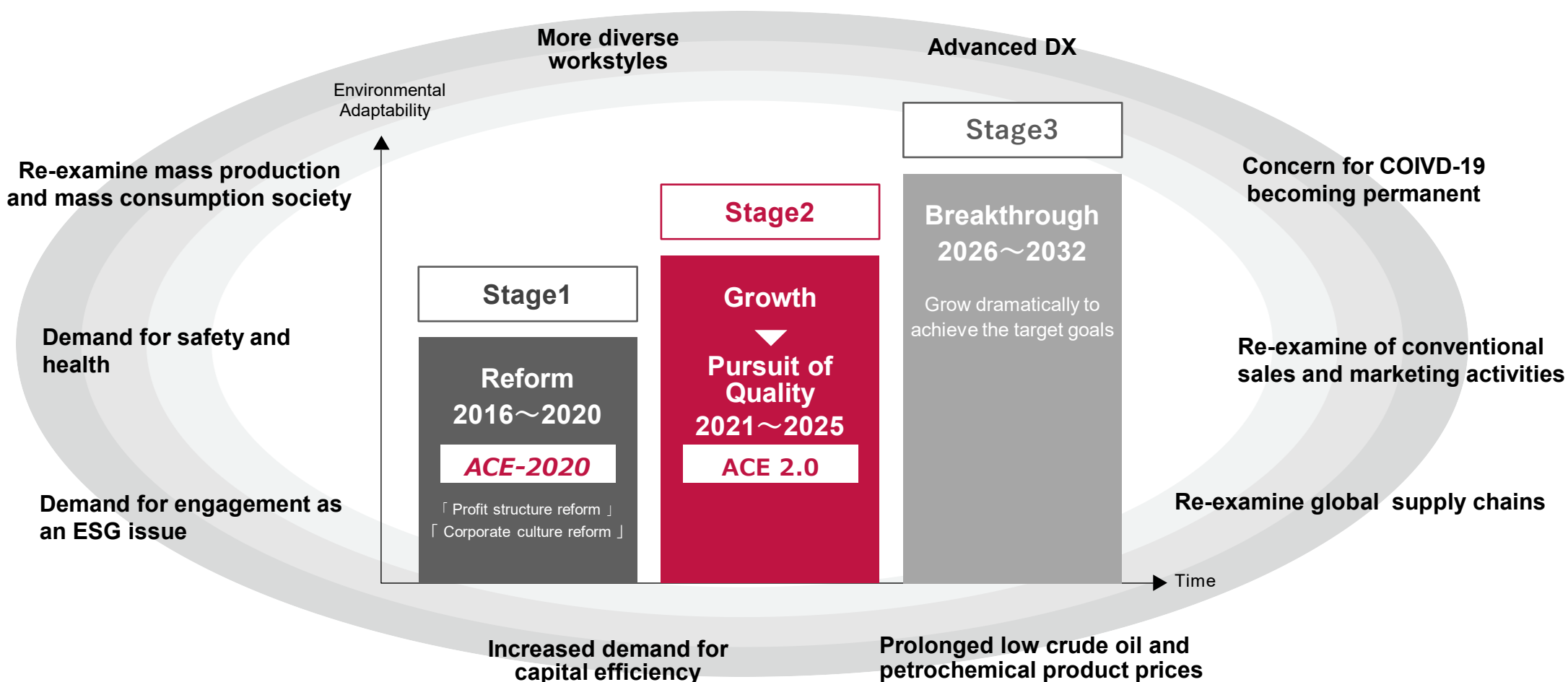
- Review of Previous Medium-term Management Plan *ACE-2020*
- Conditions Surrounding the NAGASE Group and Ideal NAGASE
- ▶ **New Medium-term Management Plan ACE 2.0**

Corporate Philosophy



Positioning of the New ACE 2.0 Medium-term Management plan

Toward achieving the “**Ideal NAGASE in 2032**”, we changed the positioning of Stage 2 to “**Pursuit of Quality**” from “**Growth period**” after we recognized **dramatic changes of the external environment**



ACE 2.0 Basic Policies

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

Accelerate DX Further

Enhance existing strengths through the use of DX as a function that supports innovation

R&D and manufacturing with a more precise grasp of society's needs

- Advance product development to meet the potential needs of customers and society at each manufacturing company



Unique state-of-the-art digital solutions

- Promote development of NAGASE Group's proprietary solutions within the development organization (ex. M1*3 (TABRASA))



Further enhance and expand existing strengths

Broad network

Technical knowledge

Problem-solving capabilities and human resources

Deepen/
Explore

Enhanced communications abilities via Real x Digital

Collect Needs

Expand customer base through digital marketing

- Access to customers, society and consumers that cannot be captured in the real world



Improve business opportunity in quantity and quality through CRM*1 and MA*2

- Improve both the quantity and the quality of business opportunities through strong relationships with business partners built over the years

Strengthen data analytics and nose for business

Identify Issues

Deepen/
Explore

Solutions leveraging digital and the Group's total capabilities

Create Value

Deepen/
Explore

Further refine NAGASE employees' nose for business

- Employees who are capable of identify and solve problems are the strength of NAGASE Group



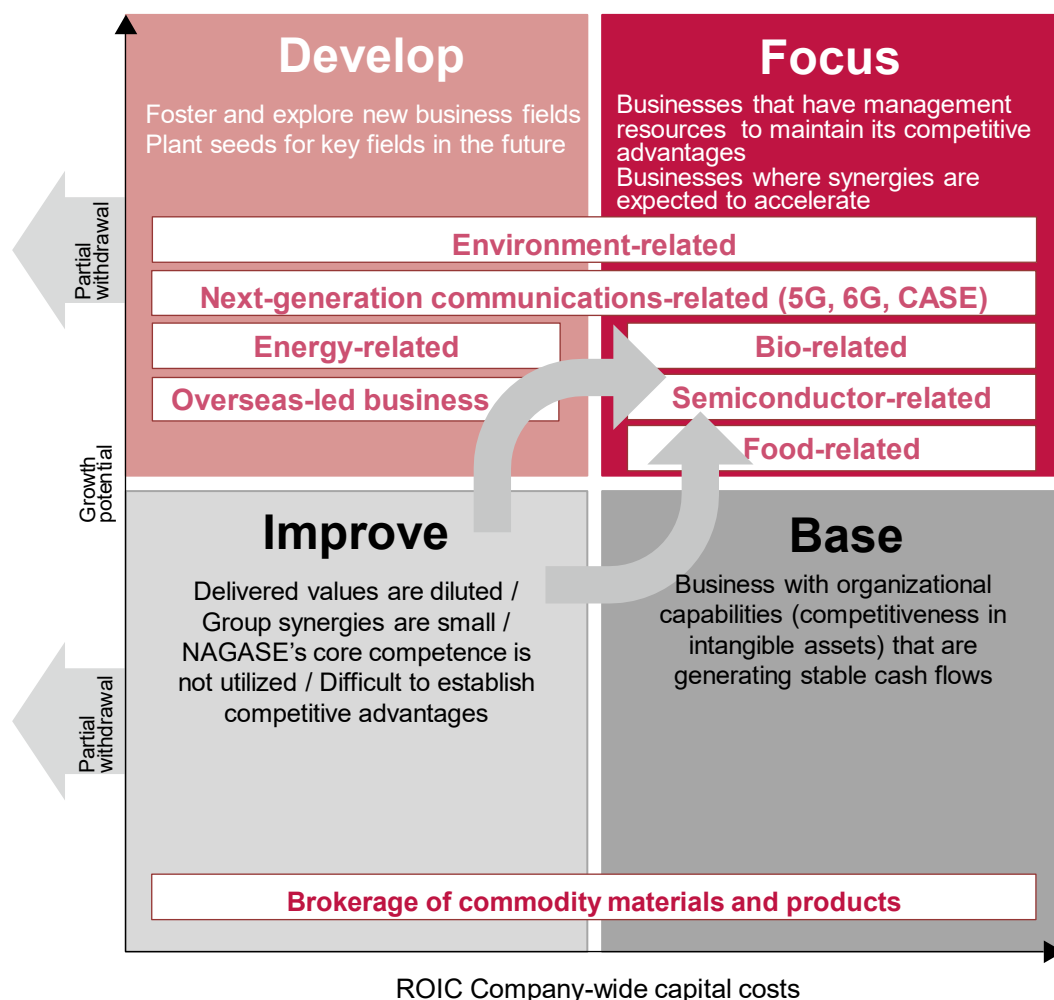
Build an analytic platform

- A mechanism that can tie together real world and digital information to generate solutions across the Group
- Advanced analysis including unstructured data
- NAGASE Group's solutions

Pursuit of profitability and efficiency

– Implement a company-wide asset replacement and reallocation of resources–

Approach to Business Portfolio



Key Policies

1. Secure management resources

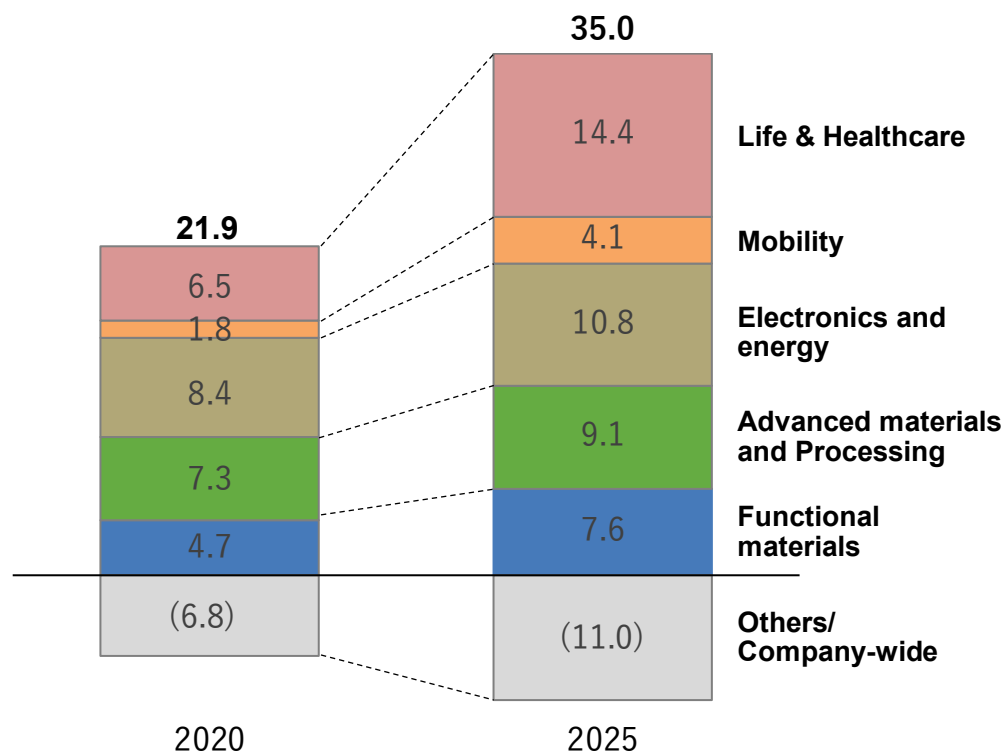
- ◆ Ensure monitoring and secure management resources from businesses with low capital efficiency

2. Reinvestment of management resources

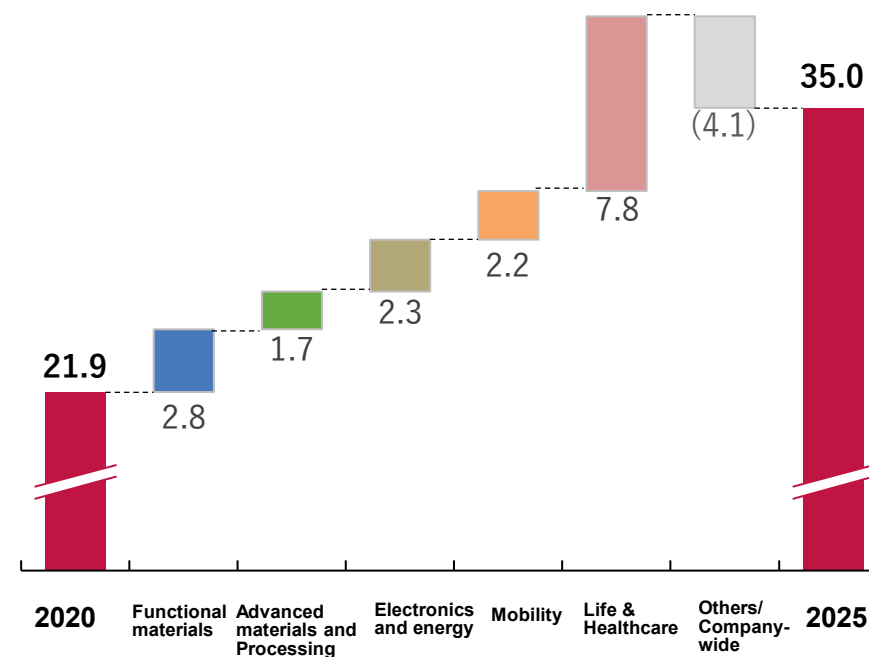
- ◆ Work to further improve profit structure by reinvesting management resources thus secured in energy-related and other businesses with potential for revenue growth, and business fields with high growth potential and capital efficiency, including bio, semiconductors, and food-related businesses.
- ◆ KPI: Focus 10% of company-wide invested capital/reinvest in focus/develop areas.

Breakdown of operating income goal

Operating income by segment
(billion yen)



Change in Operating Income by Segment
(billion yen)



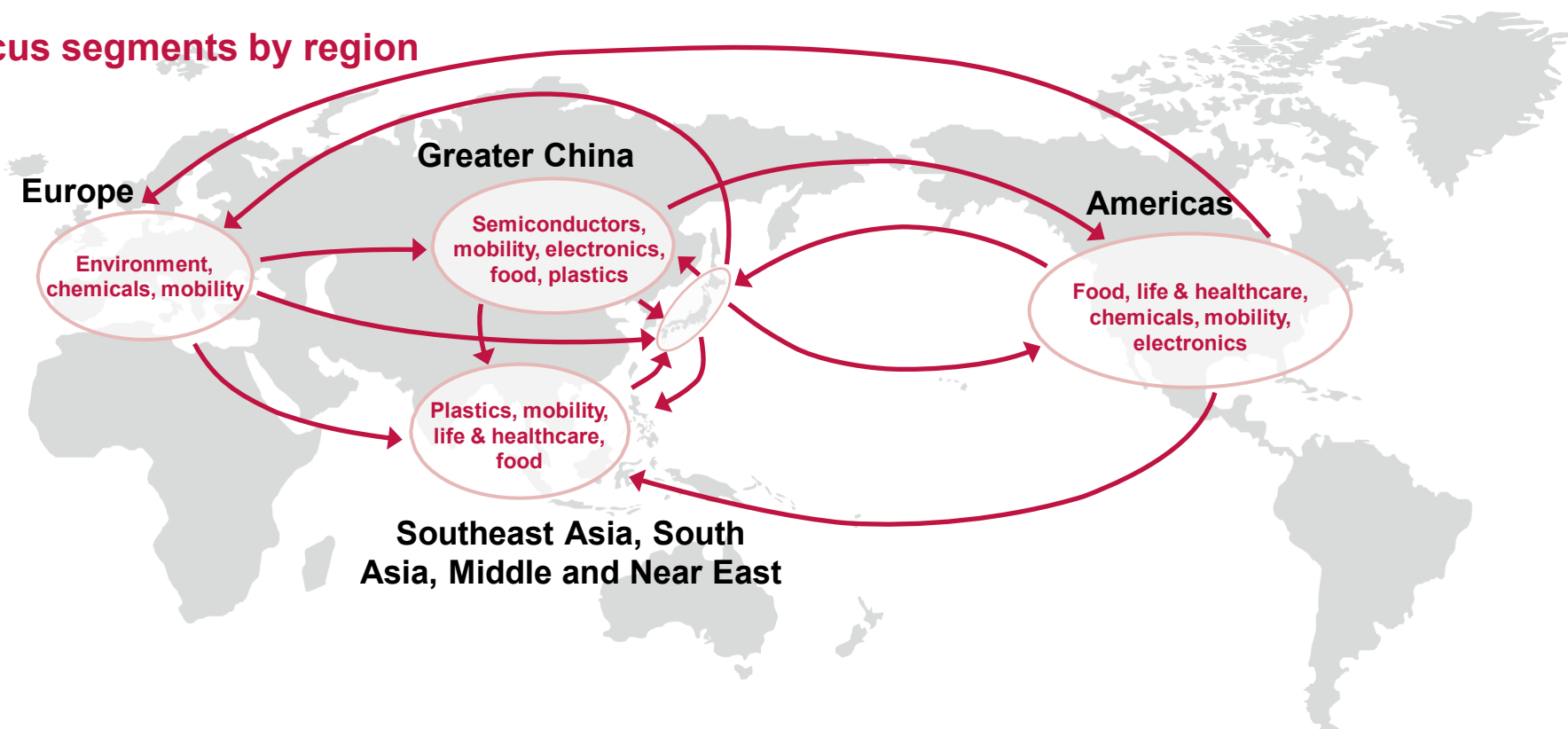
*In accordance with the reorganization of April 1, 2021, the method of classifying business segments has changed; results for FY2020 have been prepared under the classification method following those changes.

Strengthen Existing Businesses

– Expand business opportunities through globalization–

	ACE-2020	ACE 2.0
Business	<ul style="list-style-type: none"> Steadily build business base in key areas Acquire overseas companies such as Prinova 	Create candidate businesses whose strategic functions should be located overseas based on regional needs and industry trends
Structure/ Human Resources	<ul style="list-style-type: none"> Establish regional managing companies in the Americas and China Promote appointment of local staff as COOs of overseas entities 	Promote delegation of authority and strengthen development of local management personnel to create area-driven businesses

Focus segments by region



Strengthen Existing Businesses

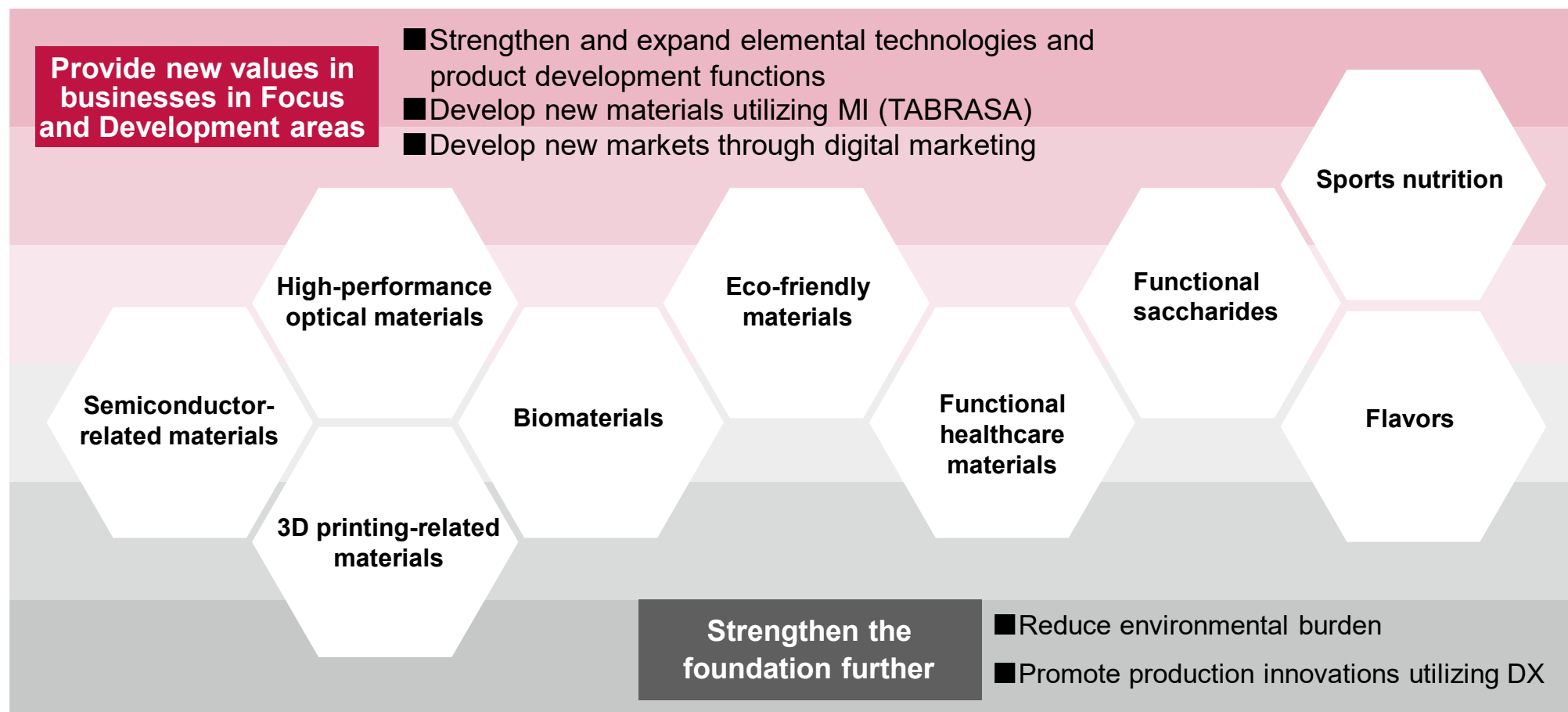
– Improve productivity of manufacturing and expand value-added through technical innovation

Group manufacturing companies: Operating income

	FY2015	FY2020	FY2025
Operating income* ¹	8.3 billion yen	13.8 billion yen* ²	20.0 billion yen or more

* 1 : Simple sum totals

* 2 : Manufacturing classifications were reviewed, and Prinova Group reclassified as a manufacturing business from FY2021; FY2020 results shown are also based on that reclassification.



Create “Businesses that are Sustainable” (= N-Sustainable Business)

Create “businesses that are sustainable” to improve social and environmental values by identifying issues that customers and society have not yet recognized and providing “solutions to generate profits” (= N-Sustainable)

Ideas of N-Sustainable Business

1. Improve social and environmental values

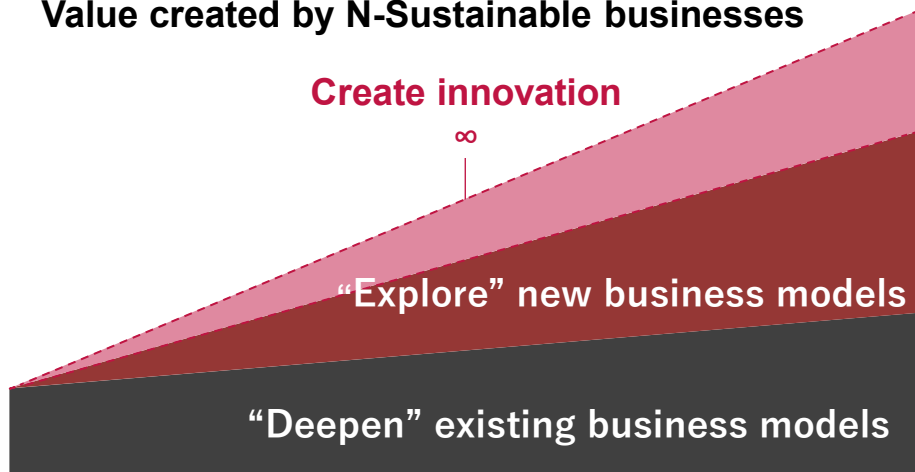
Leave a sustainable future for our future generations by unraveling the 17 goals (169 targets) of the SDGs and contributing to the resolution of these issues through our business activities.

and

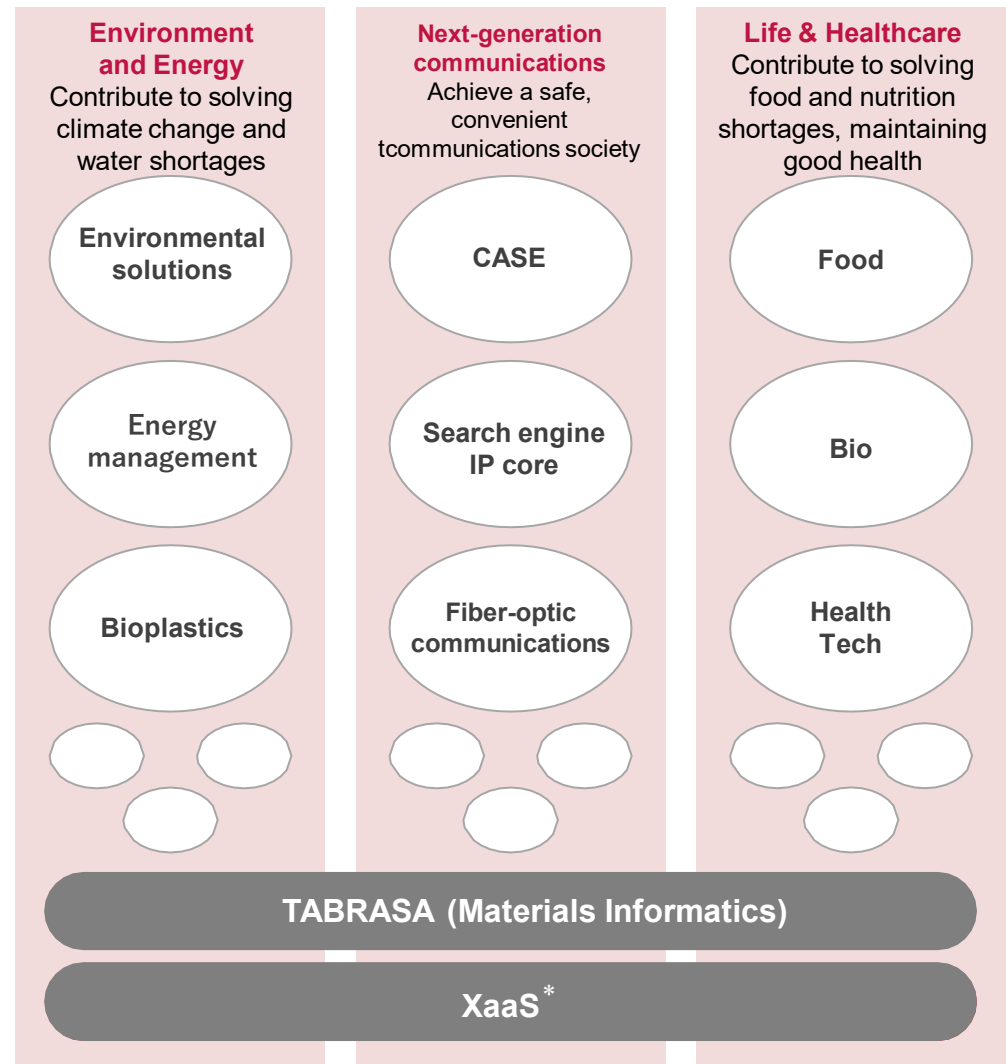
2. Provide new values that solve challenges

By foreseeing the challenges that customers and society will face in the future, leverage the “network” of the Group to provide “solutions that generate profits” through innovative services and technologies.

Value created by N-Sustainable businesses



N-Sustainable Business Fields



*X as a Service: Various service-related business models

Pursuing Economic and Social Value

- Fostering a sustainability mindset, and rigorous monitoring of financial and non-financial information

To succeed in the pursuit of quality, in addition to financial information, plans call for setting and disclosing non-financial goals as KPIs in FY2021.

Materiality	Value Proposition Key Words	Envisioned KPIs
<p>【Use diverse human resources; offer a workplace environment and corporate culture】</p> <ul style="list-style-type: none"> Use advanced technologies to improve productivity and leverage diverse human resources. Provide a workplace environment and foster a corporate culture as a Group where employees with diverse backgrounds have mutual respect and motivate each other 	<p>【Employee engagement】</p> <p>【Work styles, diversity】</p>	<ul style="list-style-type: none"> Number of women in management Number of specialist scientists Shift to local management of overseas entities, etc.
<p>【Use of state-of-the-art technology to create new value】</p> <ul style="list-style-type: none"> Create new value leveraging advanced technologies and a network of business partners. Provide a wide range of solutions based on understanding the true causes of the increasingly complex problems of business partners. 	<p>【N-Sustainable business】</p> <p>【GHG emissions reductions】</p> <p>【Circular economy】</p> <p>【Food loss】</p>	<ul style="list-style-type: none"> Number of N-Sustainable business deals GHG emissions Water usage and discharge Energy usage Waste generated, etc.
<p>【Solving Social and Environmental Issues, and Globalization】</p> <ul style="list-style-type: none"> Solve problems that threaten safety and security, e.g., climate change and food and water shortage. Contribute to securing and improving food safety by utilizing biotech, AI and other advanced technologies. Fulfill health maintenance demands due to increasingly aging societies in advanced countries. Contribute to the acceleration of globalization and solve social issues in each region. 		
<p>【Corporate Governance】</p> <ul style="list-style-type: none"> Establish a highly transparent corporate governance system. Make sustainable improvement of enterprise value by balancing economic value and social value. 	<p>【Corporate Governance】</p>	<ul style="list-style-type: none"> Diversity in management ranks, etc.

Non-Financial Target (1): Improve Employee Engagement

Announced May 10, 2022



Ideal NAGASE (Long-Term)	Values we want to provide to stakeholders	[Employees] <ul style="list-style-type: none"> • Provide a safe and friendly work environment • Provide a cheerful, happy, and engaging workplace • Create a corporate group that is a sense of pride for employees and their families
	Materialities (Key Issues)	[Use diverse human resources; offer a workplace environment and corporate culture] <ul style="list-style-type: none"> • Use advanced technologies to improve productivity and leverage diverse human resources • Provide a workplace environment and foster a corporate culture as a group where employees with diverse backgrounds have mutual respect and motivate each other
Ideal NAGASE (Medium-Term)	ACE 2.0 Non-financial targets (KPIs)*	Group companies : Percentage of companies conducting regular engagement surveys 100% NAGASE (non-consolidated) : Engagement survey score of 60 or more
	Initiatives and policies	Talent management, health management, work-style reform, Diversity & Inclusion, HR policy
Single-year results (Short-Term)	Results	Implemented engagement survey; engaged in work-style reform (started Project Bridge, eliminated dress code)
	Disclosures	[Number of employees (non-consolidated)] Number (percentage) of male and female employees, number (percentage) of non-regular employees, percentage of employees with disabilities, number of mid-career hires [Work-style (non-consolidated)] Rate of new graduates retained after three years, turnover rate for personal reasons, average years of service, average annual salary, total annual hours worked, rate of paid leave taken, number of employees taking maternity and childcare leave, number of employees participating in human resource development training, total hours of training [Safety and health (non-consolidated + domestic manufacturing companies)] Number of work-related accidents, number of fatalities, frequency rate, frequency of work-related accidents, number of employees participating in training related to health and safety

* Prinova Group calculated as a single company.

* FY2021: Implemented by 41% of group companies (including 24 companies with one-time implementation) NAGASE (non-consolidated) engagement survey score was 52.4.

Non-Financial Target (2): Carbon Neutrality

Announced May 10, 2022



**Ideal NAGASE
(Long-term)**

Values we want to provide to stakeholders	<p>[Society and Consumers]</p> <ul style="list-style-type: none"> Contribute to the development of the local community through legal compliance and ethical management Consider the rights, health and comfort of everyone involved in the supply chain Provide products and services towards realization of a sustainable world where people live with peace of mind
Materialities (Key Issues)	<ul style="list-style-type: none"> Solve problems that threaten safety and security, e.g., climate change and food and water shortages Contribute to the acceleration of globalization and solve social issues in each region

**Ideal NAGASE
(Medium-Term)**

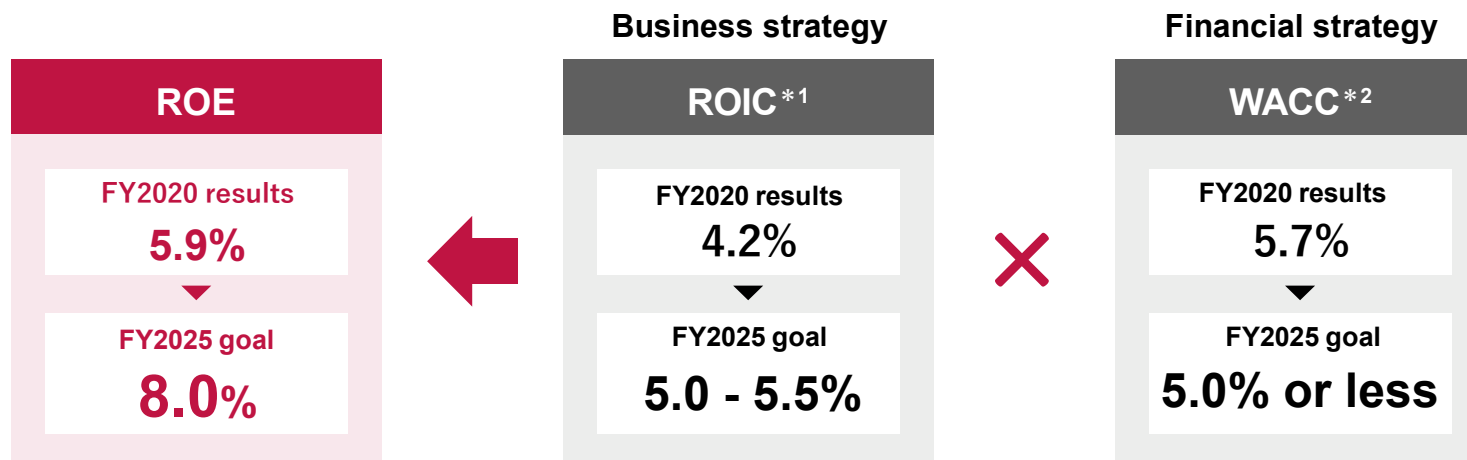
ACE 2.0 Non-financial targets (KPIs)	<p>Consolidated : Scope 1 and 2 reduction rate of 37% or more (compared to 2013)</p> <p>Consolidated : Reduce emissions through the generation or purchase of renewable energy of 35,000 tons or more (cumulative total)</p> <p>NAGASE (non-consolidated) : Scope 2 Zero emissions</p>
Initiatives and policies	<p>Overall Measures : Participation in external initiatives, promote environmental investing, examine internal carbon tax</p> <p>Visualization : Visualize emissions in the supply chain, calculate the LCA of strategic products</p> <p>Reductions : Provide low-carbon products and reduction solutions; adopt environmentally friendly facilities</p> <p>Improve production process, utilize renewable energy (purchase, generate renewable energy in-house)</p>

**Single-year results
(Short-Term)**

Results	Declaration of carbon neutrality, declaration of support for TCFD, business alliance with ZeroBoard Inc. began calculating LCA for domestic manufacturing subsidiaries
Disclosures (results only)	<p>[Consolidated]</p> <ul style="list-style-type: none"> Greenhouse gas emissions (Scope 1, 2, and 3) Greenhouse gas Scope 1 emissions by type Energy consumption, electricity consumption, consumption rate during production (t-CO2/ton of production)

Pursue Efficiency - Deepen awareness of capital efficiency, improve productivity of core operations

Achieve ROE of 8% by FY2025, with ROIC > WACC while maintaining an aggressive investment policy aimed at sustained growth



Policy

- Maintain aggressive investment policy
- Shift resources to Focus and Develop Areas
- Strongly promote Group-wide efficiencies, including productivity of core operations
- Reduce WACC through use of interest-bearing debt with a maximum Net DE ratio of 0.5 times or less and through dividend increases, etc.

*1 Profit attributable to owners of the parent / average invested capital during the term * 100

*2 Cost of shareholder capital comprising WACC is according to Company's own method of calculation based on CAPM

Pursue Efficiency - Deepen awareness of capital efficiency

Generate cash flow through sustained growth and portfolio improvements, ensure financial soundness, and efficiently allocate funds to new business investments and R&D investments for new growth

Cash flow (cumulative)

Operating CF 150.0 billion yen

We will basically use interest-bearing debt to finance investments in excess of operating cash flow, but we continue to maintain a sound financial structure as a base for sustainable growth.

Safety and Efficiency

Net DE ratio of 0.5 times or less

Build a financial structure that effectively reflects the results of business strategies by transforming the company's financial structure to offer both soundness and efficiency.

Shareholder returns

Continued dividend increases, flexible acquisition of treasury stock

Dividends will be paid on the basis of continued dividend increases during **ACE 2.0** period. In addition, we will consider flexible repurchases of treasury stock with an awareness of the correlation with our business strategies.

● Cash flow from operating activities

Operating CF	150 billion yen
Maintenance investments	Excluding changes in working capital (50 billion yen)
Continuous dividends	(30 billion yen)

70 billion yen

Total Cash Flow
~180 billion yen

100~150 billion yen

Growth investments

+

Transfer to capital policy if there are no investment opportunities offering high investment efficiency.

Repurchase of treasury stock

(Limited to the amount of strategic cross-shareholding sold)

N-Sustainable Investment

New business investment

DX-related investment

R&D investment

Working capital

● Cash flow from financing

Interest-bearing debt procurement	~ 80 billion yen
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● Cash flow from governance improvements

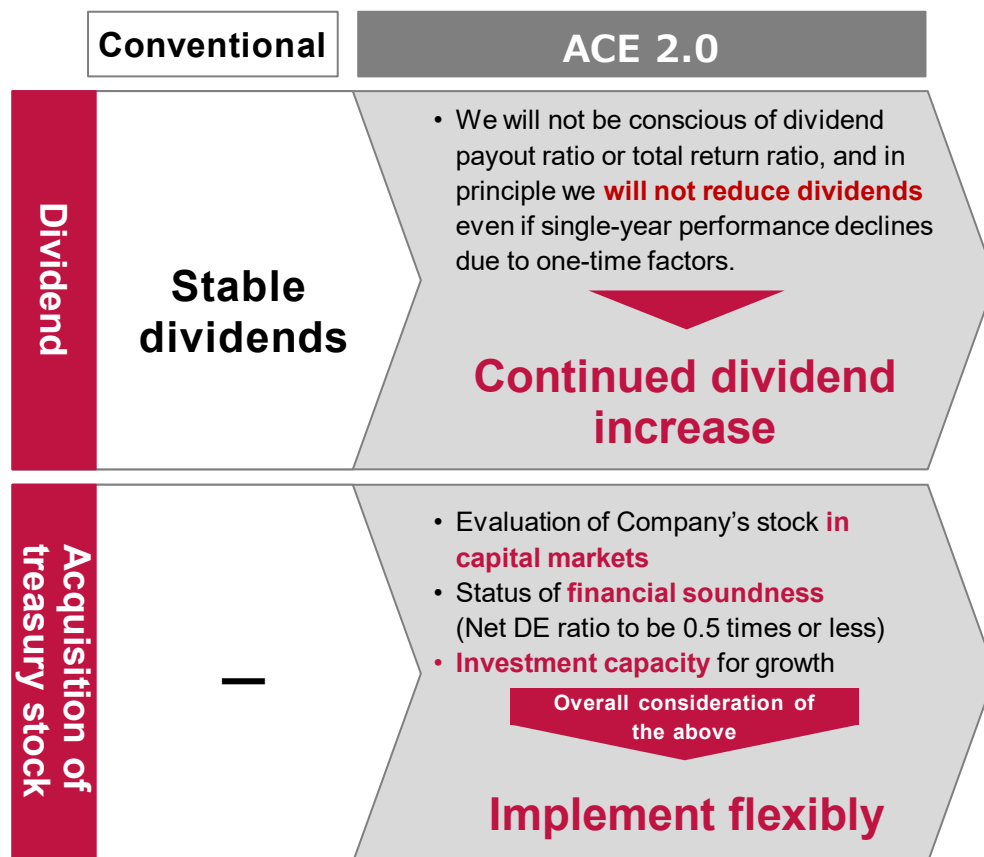
Reduction in strategic cross-shareholdings	30 billion yen
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Pursue Efficiency —Deepen awareness of capital efficiency—

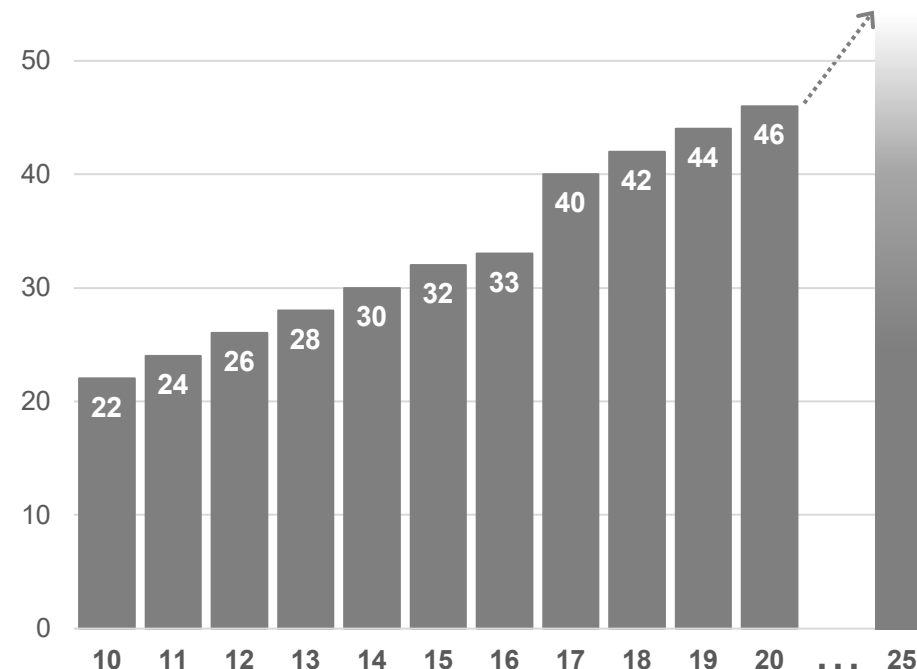
Shareholder returns policy during term of ACE 2.0

We will pay dividends based on consolidated cash flow and investment status, with a basic policy of continuously increasing dividends in consideration of consolidated performance and financial structure, while improving profitability and strengthening the corporate structure.

Further, we will consider repurchases of treasury stock in a flexible manner, while keeping efficiency in mind.

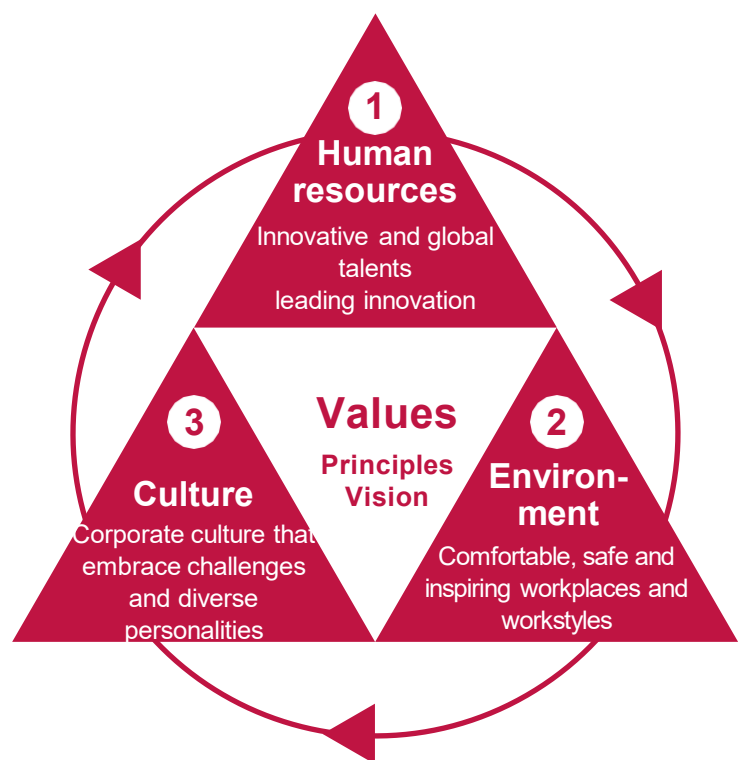


Annual DPS (dividend per share) (Yen)



Boost personnel to promote reforms

Improve engagement between employees and the company through a virtuous cycle of human resources, environment and cultural measures, and drive sustainable growth and development for employees and the company.



Enhanced engagement

**Sustained growth and development
for employees and the company**

Alignment between
business strategy and
human resource strategy

Create a foundation for
**empowering diverse
personnel**

① Human resources

Talent management

Acquire and develop talented personnel and placing them in the right roles

- Make global personnel portfolio visible
- Acquire and strengthen development of personnel in conjunction with strategy

Health and Productivity Management

Physically and emotionally healthy employees

- Strengthen efforts to visualize and analyze employee health status and execute new measures

② Environment

Work Style Reforms

Offices where employees can exercise their creativity

- Establish and achieve a new workplace vision where strong individuals work together with a sense of unity

Work styles independent of time or place

- Introduction of effective and efficient working styles, such as telecommuting and staggered working hours

③ Culture

Diversity & Inclusion

Diversification of Personnel

- Improve ratio of women, non-Japanese, and highly specialized personnel in Japan

Human Resource Policy

Management decisions focused on both improving capital efficiency and challenging new businesses

- Revision of the executive compensation system

Quantitative Goals

“Pursuit of Quality” Key Goal Indicators (KGIs)

Measures	Indicators	FY2020	FY2025*
Improvement in capital efficiency	ROE	5.9%	8.0% or greater
Increased profitability	Operating Income	21.9 billion yen	35.0 billion yen

* FY2025 assumptions: 1 US\$= 108.7 yen, 1 RMB = 15.6 yen

Key Performance Indicators (KPIs) for achieving the “Pursuit of Quality”

Measures	Measures	Indicators	FY2020	FY2025
Reform of Profit Structure	Company-wide asset replacement and reallocation of resources	Growth investments*1	—	150.0 billion yen or more*2
		Secure 10% of company-wide invested capital and reinvest in focus and develop areas	—	10% or more
	Create “N-Sustainable businesses”	Operating Income	—	5.0 billion yen or more*3
	Improve productivity of manufacturing and expand value-added through technical innovation	Manufacturing business operating income*4	13.8 billion yen*5	20.0 billion yen or more
Reform of Corporate Culture	Improve productivity of core operations	Ratio of gross profit to general administrative expenses*6	57.1%*7	52.1%
	Deepen awareness of capital efficiency	Net DE ratio	0.23 times	0.5 times or less
Functions supporting reforms	Accelerate DX further	Invested capital (including expenses)*8	2.4 billion yen	10.0 billion yen*2

*1 N-Sustainable investment, new business investment, DX-related investment, R&D expense, working capital

*2 5-year cumulative figure

*3 Figure based on internal management

*4 Simple sum calculation

*5 Manufacturing classifications were reviewed, and Prinova Group reclassified as a manufacturing business from FY2021; FY2020 results shown are also based on that reclassification.

*6 Excludes R&D expense, amortization of goodwill and other acquisition-related intangible assets, and profit and loss due to amortization of actuarial differences

*7 Average figure for past five years (FY2016-FY2020)

*8 Five-year cumulative total of 10.0 billion yen in DX-related investments is included in growth investments of 150.0 billion yen

Segment Strategy

Functional Materials Segment

Market Opportunity

- In the paint and ink industries, environmentally friendly products such as low VOC (volatile organic compounds) is increasing in response to tighter environmental regulations worldwide.
- Increased demand for paints and inks in emerging country markets
- The plastic market has wide range of applications and will continue to grow due to their use in metal substitution and other applications.

Strengths

Broad network

Extensive network of business partners based on handling of diverse products, from commodity chemicals to high-performance materials

Technical knowledge

In-depth knowledge of specialized fields such as energy- and cost-saving state-of-the-art organic synthesis technologies, paints, and water treatment

Problem-solving ability and human resources

The ability to quickly identify and respond to market issues by combining our technological expertise and networks in the chemical field

Manufacturing Affiliates

Nagase ChemteX, Nagase Filter, Aience, etc.

Target Value Proposition

contribute to solving issues our business partners and customers face as well as solving environmental problems, based on highly specialized knowledge in the chemical field

Main Businesses

- Sales of high-performance materials for electronics and other applications
- Sales of ingredients to paint and ink manufacturers

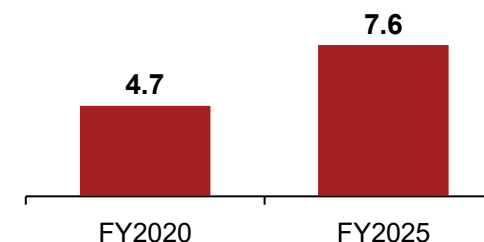
Pursuit of profit and efficiency

- Greater efficiency in sales activities through use of digital technology
- Drive high added value through use of development and assessment functions
- Reassessment of policies for non-focus businesses

N-Sustainable Businesses

- Develop eco-friendly products, including bio-derived materials, etc.
- Develop comprehensive eco-friendly consulting services in exhaust gas, wastewater, energy savings, etc.

Operating
income goal
(billion yen)



Advanced Materials & Processing Segment

Market Opportunity

- Increased environmental awareness and tightened environmental regulation have increased demand for chemicals, biodegradable plastics and recycling technologies that have less impact on the environment and human health
- Differentiation in engineering plastic and other non-commodity plastics is advancing as functionality increases

Strengths

Broad network

Global network of business partners across a broad range of industries

Technical knowledge

Knowledge of plastics processing, development and manufacturing of color materials, etc. accrued in Group manufacturing and processing companies

Problem-solving ability and human resources

Problem-solving capabilities tied to the ability to quickly identify and combine seeds and needs globally and across multiple regions

Manufacturing Affiliates

Fukui Yamada Chemical, Nagase ChemteX, Hayashibara, etc.

Target Value Proposition

Quickly identify seeds and needs globally and across multiple regions, providing eco-friendly products and services utilizing business partner networks and Group manufacturing and processing capabilities

Main Businesses

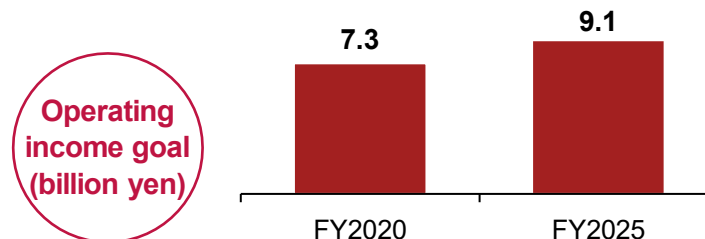
- Sales of high-performance, eco-friendly plastics
- Sales of pigments and high-performance film, manufacturing and sales of digital printing supplies

Pursuit of profit and efficiency

- Greater efficiency in sales activities, advanced inventory management by utilizing digital technology
- Establish high value-added processing technology
- Consider withdrawal from non-focus areas

N-Sustainable Businesses

- Develop biomass and other eco-friendly materials
- Work to build a plastics recycling supply chain



Segment Strategy

Electronics & Energy Segment

Market Opportunity

- The next-generation telecommunications market (5G, 6G) is growing
- With the rise of next-generation devices, the semiconductor related materials market will continue to grow.
- As demand for clean energy grows, new markets for hydrogen, power storage, etc. will expand

Strengths

Broad network

Connections across a wide range of industries related to electronics, including other segments

Technical knowledge

Deep insight into not only material properties but also processes in functional resins and precision processing

Problem-solving ability and human resources

Ability to quickly identify and solve problems by integrating development, manufacturing and trading company functions

Manufacturing Affiliates

Nagase ChemteX, CAPTEX, INKRON, 3D Glass Solutions, Xenomax-Japan, etc.

Target Value Proposition

Provide total solutions in the fields of electronics and energy using advanced technologies with high performance and high functionality and contribute to the realization of a safe and convenient communications society.

Main Businesses

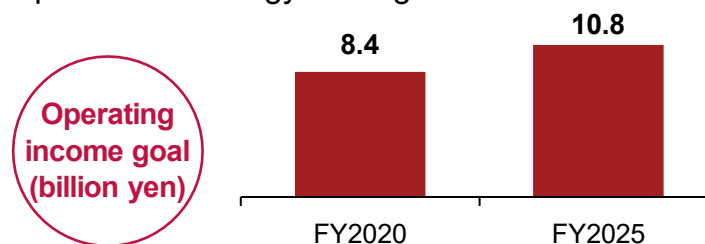
- Manufacturing and sales of liquid epoxy encapsulating materials and other semiconductor-related materials
- Sales of semiconductor precision processing-related materials

Pursuit of profit and efficiency

- Promote greater efficiency in sales, lower logistics costs and other cost reductions
- Develop new applications utilizing existing technology

N-Sustainable Businesses

- Develop materials and processes for next generation communications
- Provide structural materials for 3D printers, materials, equipment and services for XR and other next-generation devices
- Manufacturing and sales of high heat-resistant polyimide film
- Expansion of energy management-related business



Segment Strategy

Mobility Segment

Market Opportunity

- Electrification of mobility is accelerating from an environmental standpoint, generating new markets, new customers and new technologies
- As the trends of CASE and MaaS continue, mobility will be equipped with new communication functions and the use of IT technologies will be promoted.

Strengths

Broad network

Strong relationships of trust with business partners, including not only procurement but also technology development division

Technical knowledge

Deep knowledge encompassing everything from components to products, including materials, processing technology and manufacturing methods

Problem-solving ability and human resources

The ability to offer proposals that flexibly combine Group functions and partnerships, with a deep understanding of industry and customer needs

Manufacturing Affiliates

KN Plotech America, Tokai Spring Mfg. (Foshan), Huizhou Sanli Three Synergy Precision, etc.

Target Value Proposition

Provide solutions globally for achieving an eco-friendly, safe and comfortable next-generation mobility life

Main Businesses

- Sales of automotive interior and exterior materials, plastics, materials and components for functional parts, battery materials, and products for electrification, automated driving and interior electronics

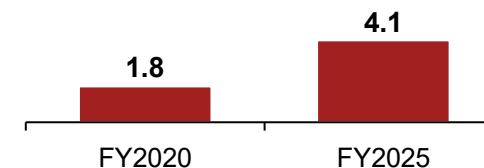
Pursuit of profit and efficiency

- Enhance business portfolio
- Create next-generation businesses

N-Sustainable Businesses

- Expand sales of products related to electrification and autonomous driving
- Consider MaaS business

Operating
income goal
(billion yen)



Segment Strategy

Life & Healthcare Segment

Market Opportunity

- Expansion of functional food and preventive and pre-disease care markets due to the increase in the elderly population and growing health consciousness
- Food loss reduction, plant-based food, and clean labels are expanding due to changes in consumer awareness
- Transformation of the drug discovery process through the widespread use of new modalities
- Responding to new issues arising from increased awareness of ethical awareness, and increasing use of eco-friendly products, etc.

Strengths

Broad network

A global network extending across Asia, Europe and the Americas

Technical knowledge

Biotechnologies, new modality drug-related technologies, food processing/formulation technologies, AI-based drug efficacy prediction and novel marker discovery

Problem-solving ability and human resources

Ability to conceptualize new business and identify technologies based on strong technical literacy in the food and life sciences fields

Manufacturing Affiliates

Hayashibara, Prinova Group, Nagase ChemteX, etc.

Target Value Proposition

Going beyond materials to contribute to future beauty and health, the joy of food, and a sustainable society and environment

Main Businesses

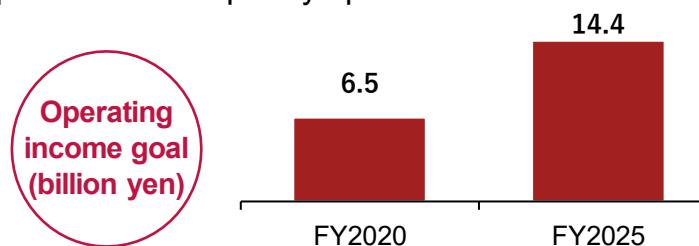
- Manufacturing and sales of food additives and cosmetic ingredients
- Manufacturing and sales of pharmaceutical ingredients, intermediates and additives
- Sales of food materials, pre-mixes, sports nutrition-related products

Pursuit of profit and efficiency

- Reevaluate existing operations, including manufacturing, distribution and inventory management, in addition to improving and optimizing productivity using digital technology
- Reevaluate policies for low-profit businesses

N-Sustainable Businesses

- Development and sales of proprietary biomaterials
- Expand Hayashibara products business that contributes to solving food loss and other social issues
- Develop health tech services in medical fields such as prevention and pre-symptomatic care





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These presentation materials contain forward-looking projections based on assumptions, forecasts, and plans as of May 11, 2021. Actual earnings may differ from projections due to risks and uncertainties in the future global economy, competitive landscape, currency exchange rates, etc.