

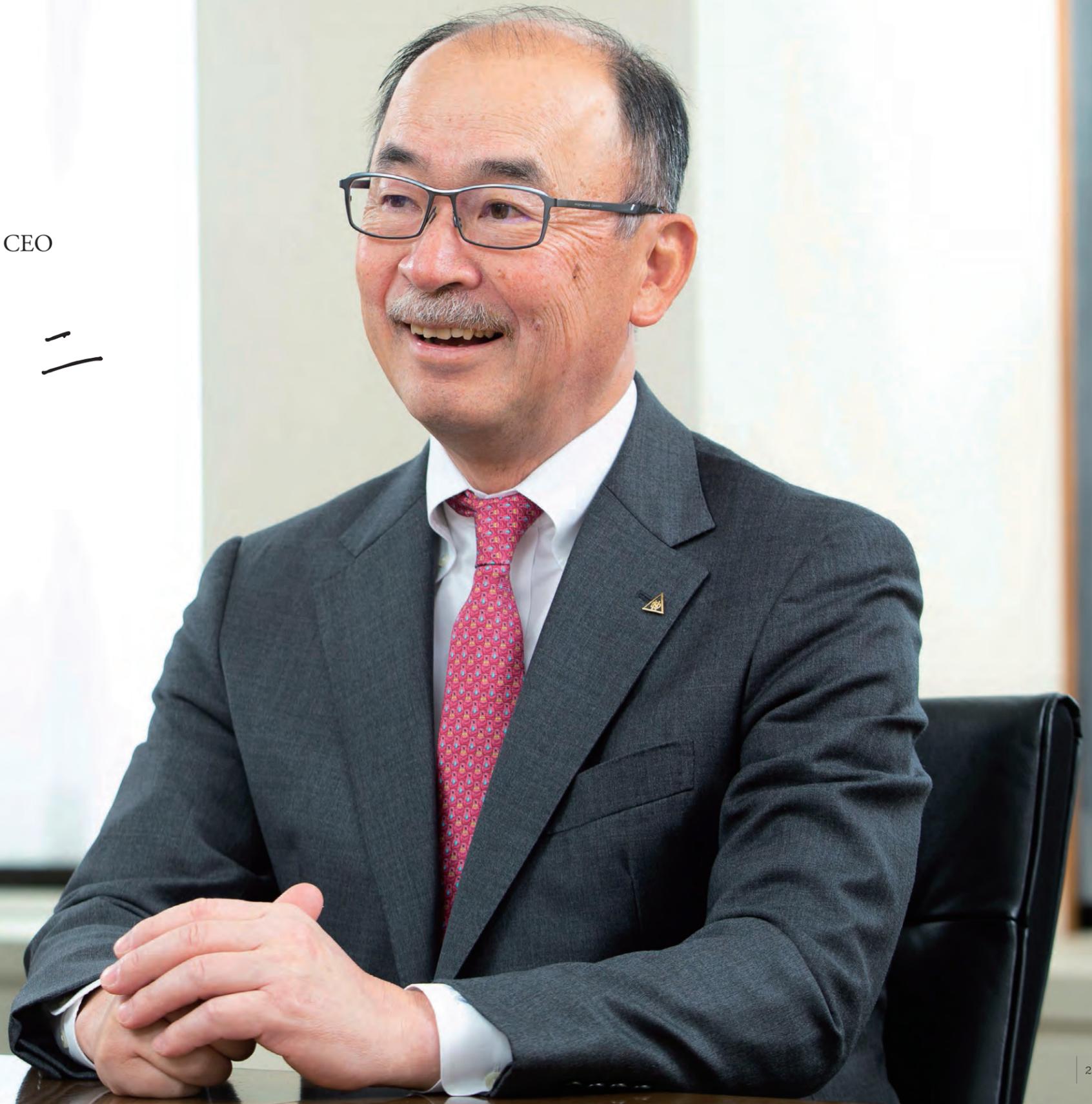
CEO Message

Representative Director, President and CEO

朝倉 研二

Kenji Asakura

We will achieve sustainable growth by balancing economic and social value, with the aim of creating a sustainable world where people live with peace of mind.



# The Best Way to Ensure Sustainable Growth Is to Help Solve Social Issues through Our Business Activities

I would be remiss if I did not discuss fiscal 2020 without reflecting on the impact of COVID-19. There was a dramatic transformation in the social and economic environment. However, I do not think the whole story of this transformation can be explained by COVID-19. Rather, it seems to me that changes that were supposed to happen a little further ahead in the future were brought forward to the present and occurred all at once. Conditions were uncertain across the board in the first quarter of the fiscal year. However, economic activity in China started to rebound at an early stage, and the NAGASE Group's business performance also returned to a recovery path.

Currently, the pace of economic recovery varies from region to region. I expect economic activity to gradually return to normal from the second half of fiscal 2021. There has been a lot of talk about the semiconductor shortage in the automobile-related business, which has a large impact on the NAGASE Group. However, automobile production volume is likely to recover on a full-year basis. I expect performance in the electronics-related business to hold firm, despite concerns about friction between the U.S. and China. This firm performance will likely be underpinned by demand in the semiconductor- and information/communications-related sectors.

In the business environment that lies ahead, the best way to assure our success will surely be to solve social issues. Our customers' points of view and requests have been changing dramatically. We take the importance of these changes very seriously in our single-year plan and five-year new medium-term management plan. It is imperative that we develop businesses that pave the way for solving social issues. The key issue will be how to make these businesses commercially

viable. NAGASE is limited in what it can accomplish alone. I believe that partnerships in various shapes and forms will only continue to increase in importance.

## Looking Back on the Previous Medium-Term Management Plan

### Paved the Way for Growth, while Falling Short of Quantitative Targets

The NAGASE Group defined the five-year period covered by the medium-term management plan ACE-2020 as a period of "Reform." In this sense, I believe that we succeeded in initiating reform.

I would now like to discuss each of the core themes we laid out in the previous medium-term management plan—"Reform of Profit Structure" and "Reform of Corporate Culture"—in order. First, we delivered a measure of success on the reform of our profit structure. Here, we had two policies: portfolio optimization and expand and strengthen the revenue base. Under the former policy of portfolio optimization, we executed growth investments centered on Life & Healthcare and Electronics, which were classified as focus areas, and steadily expanded the size of those businesses. Our acquisition of U.S.-based company Prinova Group in 2019 was a major M&A deal that significantly transformed our business portfolio. The acquisition of Prinova Group also improved our geographic portfolio, which had previously been concentrated on Asia. We now have a larger presence in North America and Europe.

Meanwhile, we were unable to achieve our quantitative targets in relation to our policy to expand and strengthen the revenue base, because inorganic growth was insufficient

to contribute to our quantitative benchmarks. As top management, I feel deeply responsible for this outcome. Additionally, I commend the Group's attempts to develop many new businesses over the plan's five-year period. However, we learned important lessons. We fell short of targets because of a lack of feasibility for growth investments at the planning stage. On the other hand, we laid the groundwork for businesses that could become core drivers of our business in the future, such as the environment-related business and materials informatics (MI). I see these achievements as positive developments.

The second core theme of the plan was reform of our corporate culture. Here, I highly commend the fact that our younger employees and Group companies centered on manufacturing have taken greater ownership of their duties. In addition, I believe that we managed to shed our former corporate culture, which lacked the tenacity of purpose we need to achieve our goals. I would like to continue to harness these early signs of progress on reforms in the next medium-term management plan.

## Our Aspirations for ACE 2.0

### Pursuing Quality to Realize the Ideal NAGASE in 2032

We have formulated a vision for 2032, which marks the 200th anniversary of our founding. It is to become "A Business Designer that Creates a Sustainable Future." Since my appointment as president, I have continuously used the words "Business Designer" to describe our vision. It expresses our aspirations to become an enterprise that can design businesses with customers through R&D, DX (digital transformation) and manufacturing. We are determined to have NAGASE create new business models without being constrained by the traditional boundaries of a chemicals trading firm or imitating anybody else.

To realize the Ideal NAGASE, we have formulated the new medium-term management plan ACE 2.0, which covers the five-year period from fiscal 2021. The previous medium-term management plan also covered a period of five years. Over the past few years in the latter half of the plan, expectations for companies to create social value have increased rapidly. In these circumstances, we considered whether we should describe the next five years as a "Growth Period" as we had done previously. After careful consideration of the

matter, we decided to define the next five years as a period for advancing the "Pursuit of Quality." Economic and social value is not necessarily completely aligned in the same direction. I believe that one major challenge will be how we will balance economic and social value as we move forward with the plan.

## Reforming Our Corporate Culture by Enhancing the "Quality" of Business Activities and Creating Economic and Social Value

We have once again set the core themes of the new medium-term management plan as reform of our profit structure and corporate culture. This is to ensure that we continue to build on the signs of progress on reforms we saw during the previous medium-term management plan without interrupting these efforts.

Under reform of our corporate culture, we have formulated three policies. The first policy is the pursuit of economic and social value. As the realization of a sustainable society becomes urgently needed globally, my awareness as a business leader is that companies must not merely strive to grow the top line and expand the size of their businesses. Of course, the NAGASE Group has so far provided value to society through its business activities and worked to realize a sustainable world where people live with peace of mind. Going forward, I believe that, as our future direction, we need to build up an organization and foster a mindset that pursues sustainability even further.

The second policy is to pursue efficiency. We will pursue efficiency in each business activity, including improving capital efficiency and raising the profitability of each business. ROIC (Return on Invested Capital) has been adopted as our indicator of capital efficiency. Based on ROIC calculated in each business, we will analyze and classify businesses into four quadrants defined as the "Improve," "Base," "Develop" and "Focus" areas and reconsider our business strategies accordingly. Naturally, if a large number of businesses can be classified as "Develop" and "Focus" area businesses, the Group's condition will be sounder. However, such an outcome would be unrealistic. In the NAGASE Group's businesses, the "Base" area businesses are generally strong, and they have allowed the Group to build a stable business portfolio. Meanwhile, the lessons from the previous medium-term management plan have given us a strong sense of urgency—we must work to develop inorganic businesses.

## Creating Economic Value and Social Value as a Business Designer

ROIC will be employed as one indicator we will consider when we decide whether to shift existing businesses to “Focus” area businesses.

The third policy is to strengthen human resources to drive reforms. The NAGASE Group views employees as important stakeholders. One of the crucial missions of managers is to raise the quality of the workplace environment so that employees can work positively and enjoyably. If employees can enjoy their work, that enjoyment will be the starting point for providing solutions to customers and growing businesses. I am convinced that this process will ultimately lead to the creation of economic and social value through our business activities.

### Drive Reform of Our Profit Structure through Expansion of N-Sustainable Businesses

As part of the reform of our profit structure, we will carry out the pursuit of profitability and efficiency by implementing company-wide asset replacement and reallocation of resources. Another priority is to strengthen existing businesses. In addition, we will strive to create sustainable businesses (N-Sustainable Businesses).

With N-Sustainable Businesses, our goal is to provide solutions to generate profits through innovative services and technologies, thereby leaving a sustainable future for future generations. Under the previous medium-term management plan, we adopted the growth of inorganic businesses as a major theme and have been developing new businesses based on this theme. Under ACE 2.0, we have clearly stated our intention to develop new businesses by providing new value that solves social and environmental issues with a particularly strong focus on sustainability. Our operating income target for N-Sustainable Businesses in five years is ¥5.0 billion, which represents around 15% of total operating income. This target will not be easy to achieve. However, I believe that achieving it will lay a crucial foundation for realizing the Ideal NAGASE.

We have established the three N-Sustainable Business fields: Environment and Energy, Next-generation Communications, and Life & Healthcare. We are not starting any of these fields completely from scratch. For example, Life & Healthcare includes continuous activities and businesses that have newly started, such as initiatives in the food ingredients business and the biotechnology field. Each field offers opportunities for the NAGASE Group to work as an

agency or do work that involves manufacturing. There are also opportunities to introduce XaaS (X as a Service) business models, which provide what is known as the consumption of experience. An example of this is TABRASA™, which is a new materials search platform using AI. NAGASE possesses a global network that it has developed through its business in the chemical industry, and it is also well versed in technology. I believe it is crucial for NAGASE to maximize these strengths and contribute to society.

Looking ahead, we will strengthen our investment in businesses positioned in the three N-Sustainable Business fields. A wide range of investment decision-making criteria other than ROIC are conceivable, including prospects for the future and relevance to social and environmental issues. On the investment front, I believe that our awareness will change markedly compared with our traditional approaches to investing.

### Supporting Our Two Reforms with Acceleration of Digital Transformation (DX) and Promotion of Sustainability

We will work to strengthen three functions supporting our two reforms. The three functions are (1) Accelerate DX further, (2) Promote sustainability, and (3) Strengthen corporate functions.

Looking at DX, we will not make DX itself the goal. Instead, we see it as a tool that will ensure that we conduct sustainable corporate business activities into the future. With that said, our priority is to build a unique DX platform for NAGASE, instead of merely introducing ordinary digital technology available anywhere.

One of these initiatives is digital marketing. Agency business, which has been NAGASE’s core operation, will certainly decline going forward. I believe that digital marketing is the essential measure we must implement to address this crisis. Digital marketing refers to more than just e-commerce, where people buy and sell goods online. Digital marketing will serve as a basis for expanding our interfaces with markets in supply chains, identifying needs, and providing solutions that are unique to NAGASE.

From this perspective too, I believe that TABRASA™ has a pivotal role to play. I have high hopes that TABRASA™ will help to expand our solution proposals by allowing NAGASE to do things such as find and manufacture new materials needed by customers. As for future DX, we can expect to propose DX

as a service, as we have done with TABRASA™, and to provide DX to realize safe and secure supply chains using blockchain technology. By collaborating with partner companies through such initiatives, I believe that we can make an immense contribution to the solution of social and environmental issues.

We see our efforts to promote sustainability as a long road that will continue indefinitely without ending during the period covered by ACE 2.0. NAGASE newly formulated the Sustainability Basic Policy in February 2021. In June 2020, we launched a Sustainability Committee, on which I serve as Chair. Within the committee, we have been conducting lively discussions with the leaders of Group companies in Japan and overseas and research organizations. The process of clearly identifying stakeholders and defining materiality for each type of stakeholder was a major learning opportunity. Specific non-financial targets will be formulated within the current fiscal year. I believe that it is crucial to make steady strides on this priority, including raising awareness within the Group, without hastily rushing through the discussions.

### It Is Precisely Because We Are in a Fast-Changing Business Environment that We Must Always Maintain the Highest Standards of Integrity

The COVID-19 pandemic has been causing unprecedented changes. Under these conditions, I now keenly appreciate the importance of reaffirming our Management Philosophy—maintain the highest standards of integrity. Even in these trying circumstances, if we put this philosophy at the heart of our business activities and communication with stakeholders, I am convinced that things are sure to eventually head in the right direction. It is precisely because of these circumstances that I would like NAGASE to make a company-wide effort to cherish our management philosophy of maintaining the highest standards of integrity.

Looking ahead, guided by this universal management philosophy, all Group employees will make a concerted effort to realize a sustainable world where people live with peace of mind. I cordially ask for your continued understanding and support as we endeavor to reach our goals.



CFO Message

# Enhancing Capital Efficiency and Achieving a Sustainable Corporate Structure



## Masaya Ikemoto

Representative Director and Managing Executive Officer

### Review of Fiscal 2020 and Outlook for Fiscal 2021

I would like to open this message by summarizing the highlights of the fiscal year ended March 31, 2021. The NAGASE Group experienced a downturn in coating raw materials, plastics, automotive components and certain other products both in Japan and overseas. This downturn was caused by the sizable impact of the COVID-19 pandemic on the automobile industry, which is involved with many different businesses of the Group. Meanwhile, from the second quarter onward, electronics and plastics businesses performed favorably against the backdrop of working from home and stay-at-home demands. Combining these factors with rising health awareness, pharmaceutical- and food ingredient-related business trended firmly.

By region, business in Greater China made a tough start in the first quarter, but returned to a recovery path from June, driving Group-wide business performance. This recovery paved the way for NAGASE to upwardly revise its forecasts in the third quarter. The pace of recovery in the U.S. has also been faster than anticipated, and we made a strong start in fiscal 2021. However, regional differences in the pace of economic recovery have begun to emerge. Japan's

economic recovery could fall behind that of Europe, the U.S. and China. The key factor will be how we develop our businesses in regions outside Japan.

### Risks and Opportunities

#### Closely Monitoring Semiconductor- and Food Ingredients-Related Businesses

The NAGASE Group's business has been increasingly exposed to geopolitical risk, with overseas sales currently surpassing 50% of net sales. We are closely monitoring the whereabouts of the semiconductor regulated business, which is susceptible to the ebb and flow of the U.S.-China trade conflict, and the food ingredients-related business, which is highly reliant on Chinese products. Moreover, we believe that trends in society such as environmental measures and changes in the industrial structure in the automobile-related and chemical and resin businesses could present risks.

However, risk factors naturally harbor the possibility of being transformed into opportunities. For example, in the automobile-related business, where the semiconductor shortage is causing concerns over a contraction in production, the Group has business foundations both in the U.S. and China, and we believe that we can achieve robust overall growth in these countries. We will not simply look on idly at changes in the external environment. One of NAGASE's

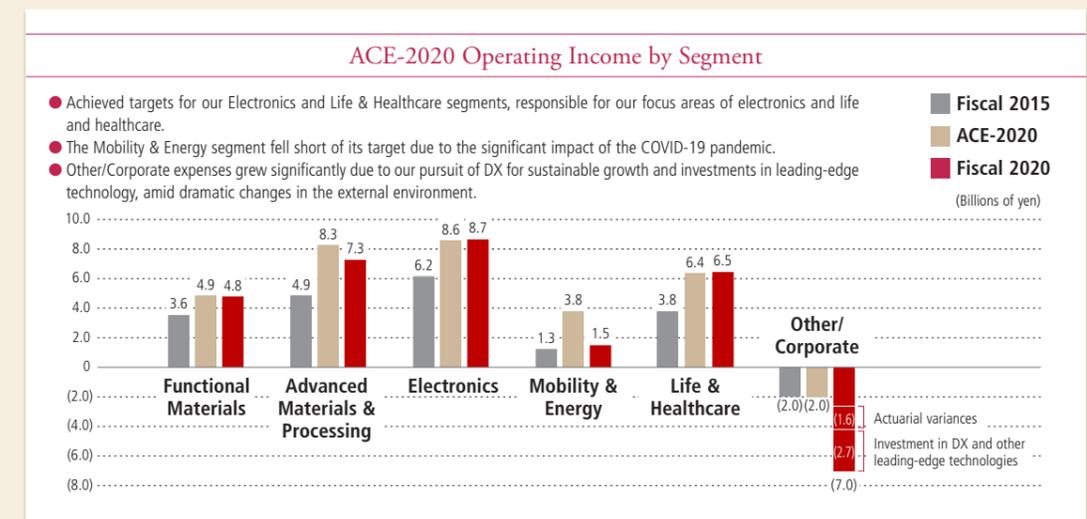
strengths is that it has a solid financial base that allows it to take decisive action at the right time when needed. Therefore, we will carefully assess risks and opportunities and make the investment decisions needed to achieve growth.

### Summary of ACE-2020

#### Reforms to Reduce Our Dependence on the External Environment Are Still in Progress

Under ACE-2020, our previous medium-term management plan, we set the following targets: consolidated net sales of ¥1.0 trillion or more, consolidated operating income of ¥30.0 billion or more, and ROE (Return on Equity) of 6.0% or more. These ambitious targets reflected our hopes to realize reform of our profit structure and corporate culture, which would be needed to attain our targeted business scale. Ultimately, the NAGASE Group posted consolidated net sales of ¥830.2 billion and consolidated operating income of ¥21.9 billion. Given the conditions faced in the plan's final year, I do not think the Group posted subpar results. However, I deeply regret the fact that we were unable to achieve our targets, and I felt responsibility for this outcome. Notably, I believe that we could have accomplished much more in terms of reforming our traditional profit structure.

I believe that the real reason why we fell short of our targets was that we did not generate as much growth as we



had expected in inorganic businesses that are not easily affected by the external environment. During the fiscal year, while there were periods when our results were encouraging, we were ultimately supported by organic businesses that rise and fall considerably with the external environment. Under ACE 2.0, our new medium-term management plan launched in April 2021, we will continue to work on reform of our business model and profit structure.

ROE, an indicator of our earning capability, was 5.9%, almost reaching our target of 6%. Although I see this result as commendable, I believe it is still very far from meeting the standard expected by investors. Under ACE 2.0, we aim to achieve further improvement in ROE as well.

#### Goals for ACE 2.0

### Pursuing Profitability and Efficiency through Full-Scale Utilization of ROIC

Under ACE 2.0, we have continued to adopt the theme of reform of our profit structure from the previous medium-term management plan. Through the pursuit of profitability and efficiency, we will work to implement company-wide asset replacement and reallocation of resources.

Specifically, we have classified our business portfolio into four domains, specifically the focus, growth, improvement and base areas based on the two criteria of growth potential and cost of capital. Capital will be intensively allocated to the focus areas and growth areas. We envision shifting around 10% of all invested capital to the focus areas and growth areas. Return on invested capital (ROIC) will be employed in earnest as an indicator of our earning capability, taking into account the cost of capital. We will actively invest in businesses that can generate returns in excess of the cost of capital, which is our standard.

ROIC is an indicator of investment efficiency that measures the amount of returns generated by funds invested in a business. I believe that ROIC sends a clear message not only to investors but also to staff within the company. It is natural to find a wide range of decision-making criteria for evaluating businesses given that staff in each business have their own unique ideas. That is exactly why it is crucial to objectively identify business value as a company from the perspective of ROIC. We will divide our business into more

than 100 categories, calculate the ROIC of each business, and carry out PDCA cycles. In the process, we will operate an internal system for monitoring activities and holding discussions to make investment decisions and evaluate businesses.

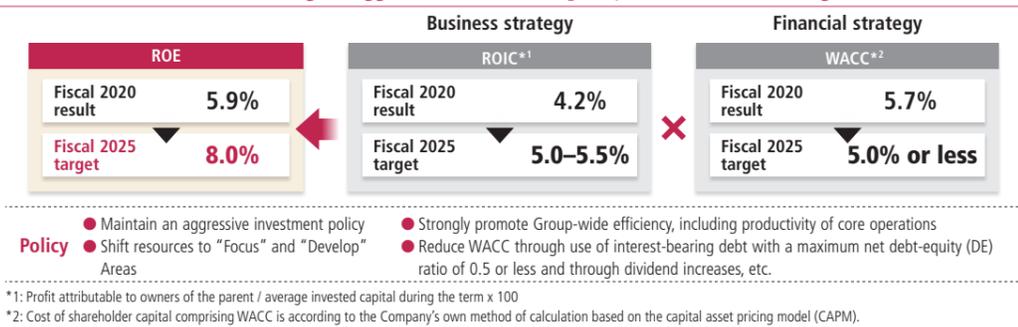
I am sometimes asked by shareholders and other investors whether we will withdraw from businesses that have a negative ROIC. We will not necessarily evaluate businesses using only short-term ROIC. The ultimate goal is to achieve sustainable growth in corporate value, so we have set the evaluation period for ROIC not as a single fiscal year but as a period spanning several years to a medium-term horizon. My job is to allocate capital while adroitly maintaining balance by taking care of our organic businesses, which are our backbone, along with allocating the cash generated by our existing business foundation to the focus areas and growth areas.

In the case of the NAGASE Group, working capital inevitably accounts for a large share of invested capital, partly due to the features of the traditional trading business and market characteristics. Another issue is low profitability. If we only increase the number of businesses with small profit margins, our prospects for sustained growth will be limited. The most important priorities for realizing high profitability will be to increase the number of high-value-added businesses based on reliable technologies and build a foundation for technological innovation that spurs the development of that added value further. In this sense, I believe that the NAGASE Group's unique DX (Digital Transformation) initiatives will provide an important mechanism for creating even more added value.

### Improving ROE by Pursuing Top-Line Growth

The NAGASE Group seeks to achieve an ROE target of 8.0%. In order to consistently and continuously increase ROE, we must pursue top-line growth, meaning that we must increase our earning capability. I believe that our top line will steadily grow as we invest in businesses with a positive ROIC, and our ROE will also increase. Even if our WACC (Weighted Average Cost of Capital) were reduced through technical factors and ROE were to increase as a result, questions would remain about the sustainability of the outcome. We need to reshape our capital structure so that ROE increases sustainably. We will control WACC steadily at low levels, increase earnings further, and

Achieve ROE of 8% by fiscal 2025, with ROIC > WACC while maintaining an aggressive investment policy aimed at sustained growth



sustainably improve ROE. These efforts will lead to sustainable growth in corporate value.

Investors often tell me that the NAGASE Group must improve the soundness of its capital structure further. One issue that they often point out is control of financial assets such as treasury shares and cross-shareholdings. The Group will successively review cross-shareholdings and allocate the funds generated through this process to new strategic investments and the repayment of debt. In parallel, we will implement financial strategies such as returning profits to shareholders through share buybacks. By continuing these activities, I am confident that the NAGASE Group can achieve its ROE target of 8.0%.

### Pushing Forward with "Reforms of Profit Structure" and "Reform of Corporate Culture" with a Focus on Sustainability

ACE 2.0 states that improving the productivity of the manufacturing business is also essential to the sustainable growth of the Group. In the NAGASE Group's manufacturing business, Nagase ChemteX Corporation and Hayashibara Co., Ltd. have so far served as the core companies. In August 2019, Prinova Group joined the NAGASE Group. In addition, the Group Manufacturers' Collaboration Committee (hereinafter MCC) was set up in 2019 to provide cross-company coordination for Group manufacturing companies in Japan. In the health and safety, quality, and environmental fields, MCC is working to improve the quality of the NAGASE Group's manufacturing business. Moreover, MCC is working to differentiate the NAGASE Group in the areas of distribution,

production and R&D by harnessing DX further.

Furthermore, I believe that the key to the NAGASE Group's future growth lies in developing our technology development capabilities, or, in other words, developing our R&D operations. On this front, we will achieve our goals through efforts both within and outside the company. R&D efforts within the company refer to the NAGASE Group's internal efforts to develop technologies. Developing R&D outside the company refers to activities to support and develop the technology development capabilities of our business partners. For the latter, I believe that TABRASA™ will have a pivotal role to play. TABRASA™ is a new materials search platform that will assist with the development of new materials by chemicals and biomaterials manufacturers through the use of AI and digital technology. We will harness and develop TABRASA™ as a DX tool that increases the NAGASE Group's added value by supplying needs that customers and business partners have not yet realized that they have. If the entire industry becomes healthy and vibrant, I believe that this will come back to benefit the NAGASE Group.

In closing, the promotion of sustainability, which has now become a global priority, is one of the key issues of ACE 2.0. Addressing sustainability is now an urgent task that cannot be delayed. Unless we face the issue of the sustainability of society in earnest, the Group's social value will be diminished, and the Group will fall behind the most important trends of the times. I have a strong sense of urgency because I feel that this threat is imminent right now. I intend to continuously push ahead with reforms of our profit structure and corporate culture with a focus on sustainability, with the aim of achieving sustained growth in the NAGASE Group's corporate value.

# Business Model Evolution Looking to the Future

## Becoming a Business Designer that Creates a Sustainable Future

The NAGASE Group has upheld a Business Designer that creates a sustainable future as part of the Ideal NAGASE for 2032, the 200th anniversary of its founding. The new medium-term management plan ACE 2.0 started in fiscal 2021 will continue through to fiscal 2025. ACE 2.0 was named to signify its intention to continue with the basic concept of ACE-2020, the previous five-year medium-term management plan that had run from fiscal 2016, while making further improvements. This section describes the NAGASE Group's management strategy, which aims for a sustainable society with an eye on the future.

## Review of the Previous Medium-Term Management Plan ACE-2020

In the quest to achieve the Ideal NAGASE for 2032, we positioned the first stage as "Reform," focusing on "reform the profit structure" and "reform the corporate culture." While we made some improvements, such as optimizing the portfolio through solid advancement toward strengthening focus areas and sowing seeds in growth areas, the transformation of reforming a profit structure dependent on external conditions is still underway. And execution of a highly achievable strategy for sustainable growth, including improving capital efficiency, is a challenge. In regard to the reforming the corporate culture, we saw progress in improving efficiency, fostering accountability and strengthening corporate governance.

### KGI (Key Goal Indicator)

KGI	FY2015 Actual	FY2020 Goal	FY2020 Actual	Degree Achieved	Versus FY2015
Consolidated net sales	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	+1.5 pt

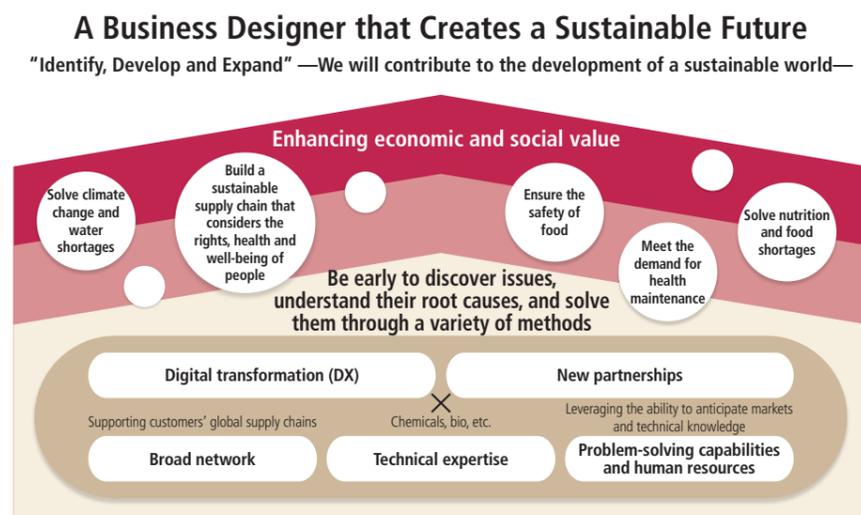
### "Pursuit of Quality" Goal and Index (KGI: Key Goal Indicator)

Reform/Strategy	Measures	KPI	FY2015 Actual	FY2020 Goal	FY2020 Actual	Degree Achieved	Versus FY2015
Profit structure reform indicators	Increase focused business (portfolio optimization)	Operating income in focus areas*1	10.3 billion yen	16.9 billion yen	18.2 billion yen	108%	177%
		Growing investment distribution ratio in focus areas	To be determined	35% or more	85%	+50 pt	—
	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%	+162 pt	—
Increase manufacturing profitability (expand and strengthen profit structure)	Operating income from manufacturing*1	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	+5 pt
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 indicators	Investment	Growth investment	To be determined	100.0 billion yen*2	122.6 billion yen*2	123%	—
		Financial structure	Rating (R&I)	A	A or better	A	100%

\*1. The figures in this chart are all simple management accounting data, which is different from the figures disclosed in the consolidated financial statements  
\*2. Total during the medium-term management plan

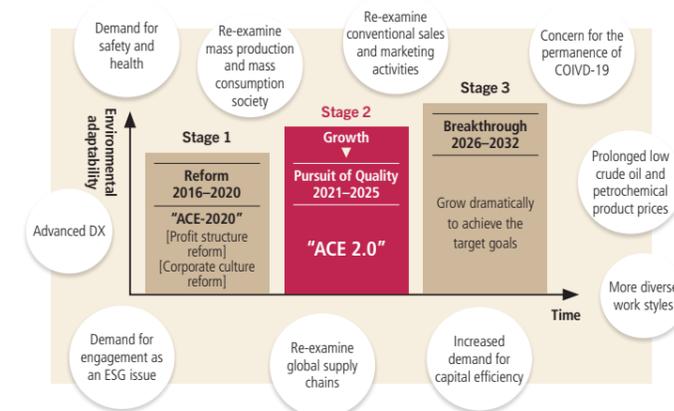
## Toward the Ideal NAGASE in 2032, Our 200th Anniversary of Founding

By combining the strengths of the NAGASE Group, such as its broad network, technological expertise, problem-solving capabilities and human resources, with DX, sustainability and partnerships within and outside the Group, we will quickly identify the problems of our customers and society and create value that leads to solutions. We will enhance economic and social value by designing business through "Identify, Develop and Expand," and aim to contribute to the development of a sustainable world.



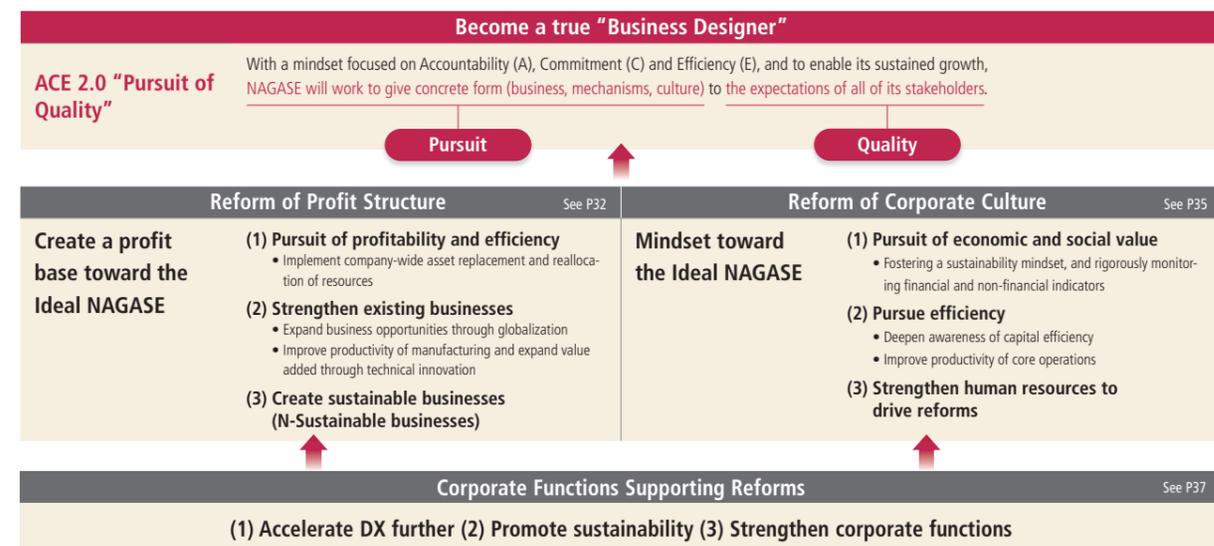
## New Medium-Term Management Plan ACE 2.0

With the rapid changes in the external environment, expectations for the creation of social value by corporations are rising. In response to this, we have positioned the second stage toward the realization of NAGASE as a period of "Pursuit of Quality" rather than a period of growth as originally envisioned. Continuing the mindset of Accountability (A), Commitment (C) and Efficiency (E), ACE 2.0 was named with the meaning of following on with the basic concept yet being an improved version of ACE-2020. To enable the sustainable growth of the NAGASE Group, we aim to create (= pursue) concrete forms (= business, mechanisms, culture) that meet the expectations (= quality) of all our stakeholders.



## ACE 2.0\* Basic Policies

\* The "ACE" in ACE 2.0 stands for Accountability (A), Commitment (C) and Efficiency (E).



## Quantitative Goals

**"Pursuit of Quality" KGIs** \* FY2025 assumptions: 1 USD = 108.7 yen, 1 RMB = 15.6 yen

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

### Key Performance Indicators (KPIs) for Achieving the "Pursuit of Quality" (KPI: Key Performance Indicator)

Reform/Function	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 development areas	—	10% or more
	Create "N-Sustainable businesses"	Operating income	—	5.0 billion yen or more*3
Reform of corporate culture	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
		Ratio of gross profit to general administrative expenses*6	57.1%*7	52.1%
Corporate functions supporting reforms	Accelerate DX further	Deepen awareness of capital efficiency	0.23 times	0.5 times or less
		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 expenses, working capital \*2 Five-year cumulative total \*3 Figure based on internal management \*4 Simple sum calculation  
\*5 Manufacturing classifications were reviewed, and Prinova Group was reclassified as a manufacturing business from FY2021; FY2020 results shown are also based on that reclassification. \*6 Excludes R&D expenses, amortization of goodwill and other acquisition-related intangible assets, and profit and loss due to amortization of actuarial differences \*7 Five-year average (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

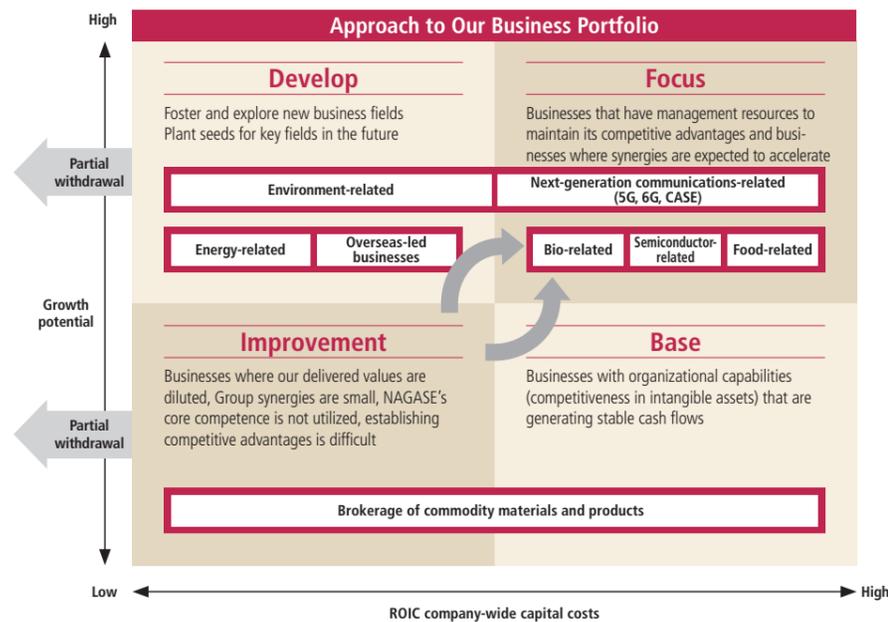
Shaping Value 1

# Reform of Profit Structure

Continuing on from ACE-2020, reforming the profit structure remains a pillar of the plan. Efforts are made for the pursuit of profitability and efficiency through company-wide asset replacement and reallocation of resources, and to strengthen existing businesses by expanding business opportunities through globalization and value-added manufacturing. In addition to the above, we will create sustainable businesses (N-Sustainable businesses).

## Pursuit of Profitability and Efficiency

To move forward on company-wide asset replacement and reallocation of resources, we will reconsider and secure our business strategy and secured management resources from businesses with low capital efficiency by thoroughly classifying and monitoring the quadrants of improvement, base, development and focus using ROIC as an indicator for each business. To further improve our profit structure, we will reinvest the management resources we secured into businesses with the potential for future earnings growth, such as energy-related businesses, and businesses with high growth potential and capital efficiency, such as biotechnology, semiconductors and food-related businesses. We will secure 10% of company-wide invested capital and reinvest in focus and development areas and set this as a KPI.



## Strengthen Existing Businesses

—Improve productivity of manufacturing and expand value added through technical innovation—

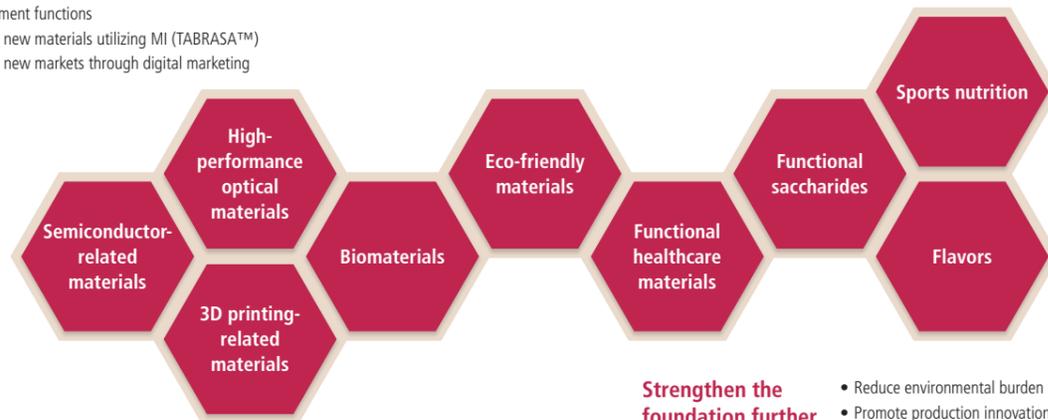
### Group Manufacturing Companies: Operating Income

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

### Provide new values in businesses in focus and development areas

- Strengthen and expand core technologies and product development functions
- Develop new materials utilizing MI (TABRASA™)
- Develop new markets through digital marketing

\*1 Simple sum totals  
\*2 Manufacturing classifications were reviewed, and Prinova Group was reclassified as a manufacturing business from FY2021; FY2020 results shown are also based on that reclassification.



### Strengthen the foundation further

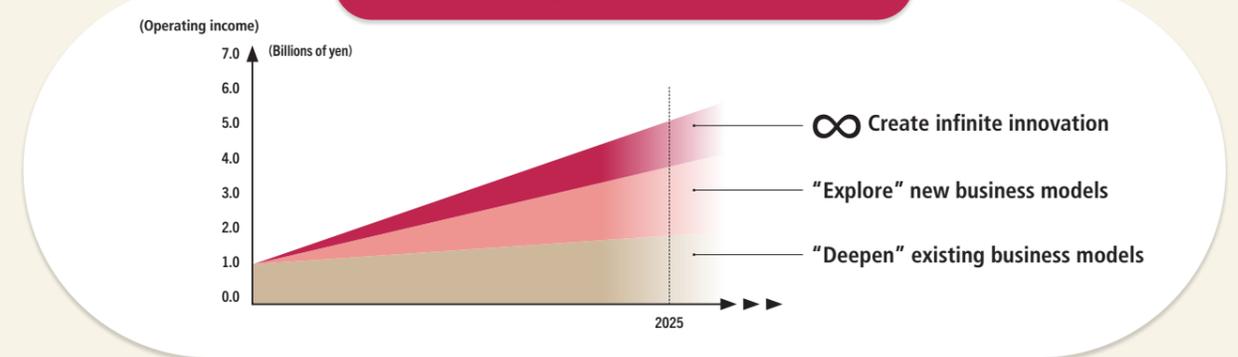
- Reduce environmental burden
- Promote production innovations utilizing DX

# Create Sustainable Businesses (= N-Sustainable Businesses)

Identify issues that customers and society have not yet recognized and provide “solutions to generate profits”

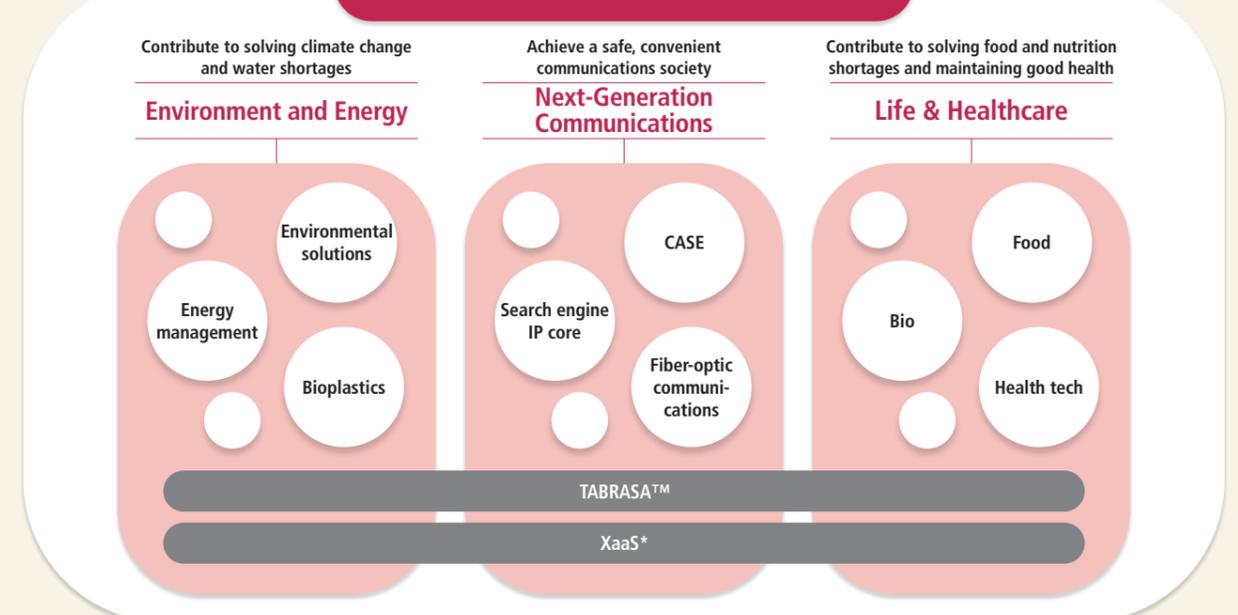
An important measure to realize the Ideal NAGASE is to create sustainable businesses (N-Sustainable businesses). The aim of N-Sustainable businesses is to leave future generations with a sustainable future by helping solve social and environmental issues through our business activities, and to provide solutions that generate profits through innovative services and technologies that utilize the NAGASE Group’s connections by quickly recognizing the challenges that customers and society will face in the future. We aim to achieve 15% of total operating income by FY2025.

## Value Created by N-Sustainable Businesses



We have defined environment and energy, next-generation communications and life & healthcare as three business fields for N-Sustainable Business. All of these fields have the potential to not only deepen existing businesses, but also to explore new businesses, utilizing the strengths of NAGASE that have been cultivated up to now, and are expected to create sustainable businesses that contribute to society and the environment.

## N-Sustainable Business Fields



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

Specific cases are described on the following page:

Case 1	Aience’s wastewater treatment system not reliant on chemical agents	Case 2	PULLULAN, Hayashibara’s original plant-based polysaccharide	Case 3	Polylactic acid fiber made from bio-based and biodegradable materials
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## N-Sustainable Business Case Studies

This section introduces examples of businesses that have already started.

### Case 1 Aquablaster, Aience's wastewater treatment system not reliant on chemical agents



Aience Inc., which is involved in the development and design of wastewater and exhaust treatment systems, developed Aquablaster, a wastewater treatment system that does not rely on chemical agents. The system is already being used in a broad range of fields, mainly in food processing plants, but also chemical and machinery manufacturing plants.

Aquablaster uses a water jet flow created through patented propeller blades in the diffuser tube to activate and maximize the decomposition power of microbes, which reduces the amount of sludge and odor without relying on chemical agents or coagulants, thus significantly reducing treatment costs. As awareness of the environment grows and

environmental regulations are strengthened throughout the world, Aquablaster can contribute to both environmental regulation measures, which is a major issue for our customers, and cost reduction through process improvement.

Hayashibara Co., Ltd., which takes charge of the bio-related business for the NAGASE Group, has also installed Aquablaster to stabilize wastewater treatment and cut costs. We will provide a wide array of solutions to customers' problems by utilizing the Group's network to not only provide hardware such as systems and equipment, but also in such ways as labor-saving through 24-hour monitoring systems utilizing IoT.

### Case 2 PULLULAN, a plant-based polysaccharide material made using Hayashibara's original fermentation production technology



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Products are now tending to avoid using conventional chemicals or animal-derived raw materials as nature awareness has risen. In the healthcare field such as supplements, there is a growing demand for raw materials that are plant-derived and produced using green methods such as microbial fermentation.

PULLULAN, produced by Hayashibara, is a plant-based polysaccharide material produced using an original fermentation production technology based on starch degradation products and a type of filamentous fungus. PULLULAN's features include strong binding properties, outstanding film-forming properties and easy solubility in water. It is used as a coating and binding agent for foods and tablets in addition

to being a base material for capsules in the healthcare area.

Hayashibara's original fermentation technology and strains optimized for PULLULAN production over generations of breeding not only allow for a more outstanding quality PULLULAN to be produced, Hayashibara also owns patents to contribute to higher-quality capsules. For capsule applications, we have been supplying raw materials to Lonza, one of the world's leading capsule manufacturers, for many years.

Hayashibara will leverage the technologies it has cultivated until now and engage in R&D to deliver new products to consumers seeking organic foods, such as vegans and vegetarians.

### Case 3 Polylactic acid fiber made from bio-based and biodegradable materials used as an alternative to fossil-based materials



Source: ONWARD KASHIYAMA Co., Ltd.

The Polymer Global Account Department conducts R&D centered on modification that will lead to the practical application of various biomaterials.

One such example is modified polylactic acid (PLA) resin using cane sugar or corn as a raw material. Cooperating with partner companies, we have improved heat resistance and strength by augmenting the degree of crystallization and are now expanding into the textile industry. The company plans to start mass production of some of the products in 2021, and to increase recognition of PLA fiber by establishing a sales track record in domestic apparel manufacturers' environmentally friendly clothing. The use of bio-derived and biodegradable materials is expected

to contribute to the reduction of textile waste, which is said to be the largest source of marine plastic waste. By applying the technology of Interfacial Consultants, a U.S. Group company, that enables the production of highly-filled masterbatch with various fillers, we will advance business development for use in high-performance food packaging materials. We have also begun to study environmentally friendly formulations based on PLA for various sheet and film applications.

We will continue to promote the practical use of biomaterials in various applications and contribute to a decarbonized society by reducing the use of petrochemical-derived resins.

## Shaping Value 2

# Reform of Corporate Culture

We are reforming our corporate culture to seek the Ideal NAGASE through the three axes of Pursuing Economic and Social Value, Pursuing Efficiency and Strengthening Human Resources to Drive Reforms.

## Pursuing Economic and Social Value

—Fostering a sustainability mindset and rigorously monitoring financial and non-financial information—

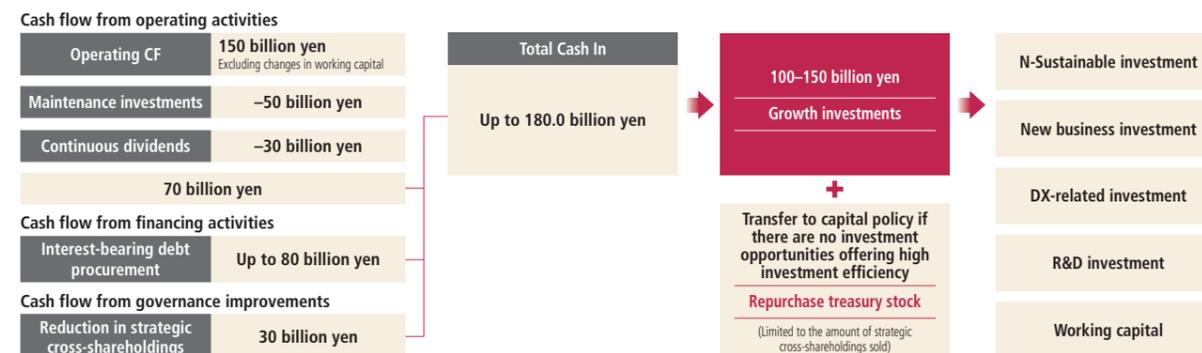
Materiality	Value Proposition Key Words	Envisioned KPIs
<b>Use diverse human resources and offer a workplace environment and corporate culture</b> <ul style="list-style-type: none"> <li>Use advanced technologies to improve productivity and leverage <b>diverse human resources</b></li> <li>Provide a <b>workplace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

\* KPIs are scheduled to be decided and disclosed in FY2021.

## Pursue Efficiency —Deepen awareness of capital efficiency—

We will 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)	Safety and Efficiency	Shareholder Returns
<b>Operating CF 150.0 billion yen</b> We will basically use interest-bearing debt to finance investments in excess of operating cash flow, but will continue to maintain a sound financial structure as a base for sustainable growth	<b>Net DE ratio 0.5 times or less</b> We will 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	<b>Continued dividend increases, flexible acquisition of treasury stock</b> Dividends will be paid on the basis of continued dividend increases during the ACE 2.0 period. In addition, we will consider flexible repurchases of treasury stock with an awareness of the correlation with our business strategies



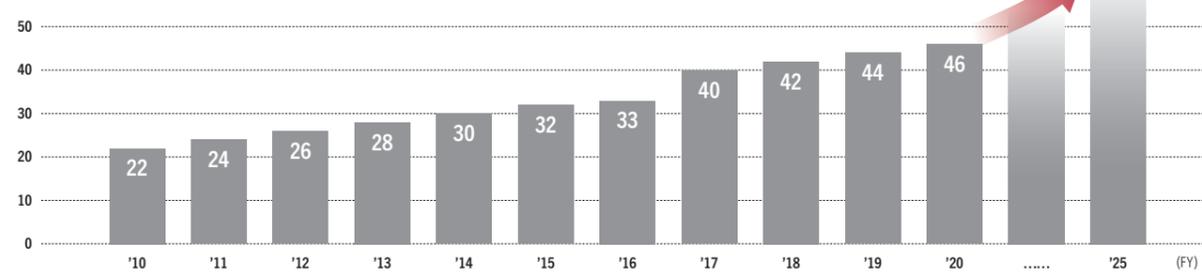
>> Pursue Efficiency

**Shareholder Return Policy during 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. Furthermore, we will consider repurchases of treasury stock in a flexible manner, while keeping efficiency in mind.

	Conventional	ACE 2.0
Dividend	Stable dividends	<ul style="list-style-type: none"> <li>We will not consider the dividend payout ratio or total return ratio, and will, in principle, avoid lowering dividends even in the event of single-year performance declines due to one-time factors</li> </ul> <p>Continued dividend increase</p>
Acquisition of treasury stock	—	<ul style="list-style-type: none"> <li>Evaluation of company's stock in capital markets</li> <li>Status of financial soundness (Net DE ratio to be 0.5 times or less)</li> <li>Investment capacity for growth</li> </ul> <p>Implement flexibly with overall consideration of the items to the left</p>

Annual DPS (dividend per share) (Yen)



**Strengthen Human Resources to Drive 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. For human resources, we promote talent management and health management, including the appropriate acquisition and placement of resources. From an environmental aspect, we will create offices that enable employees to display their creating, starting with the renovation of the Tokyo Head Office (see P67), and move ahead on reforming work styles, such as working without time or place constraints. In terms of culture, we aim to foster a culture and climate in which diverse individuals can demonstrate their abilities and continue to take on challenges by promoting diversity and inclusion.

See P66–67, "Human Resource Development to Drive Innovation"



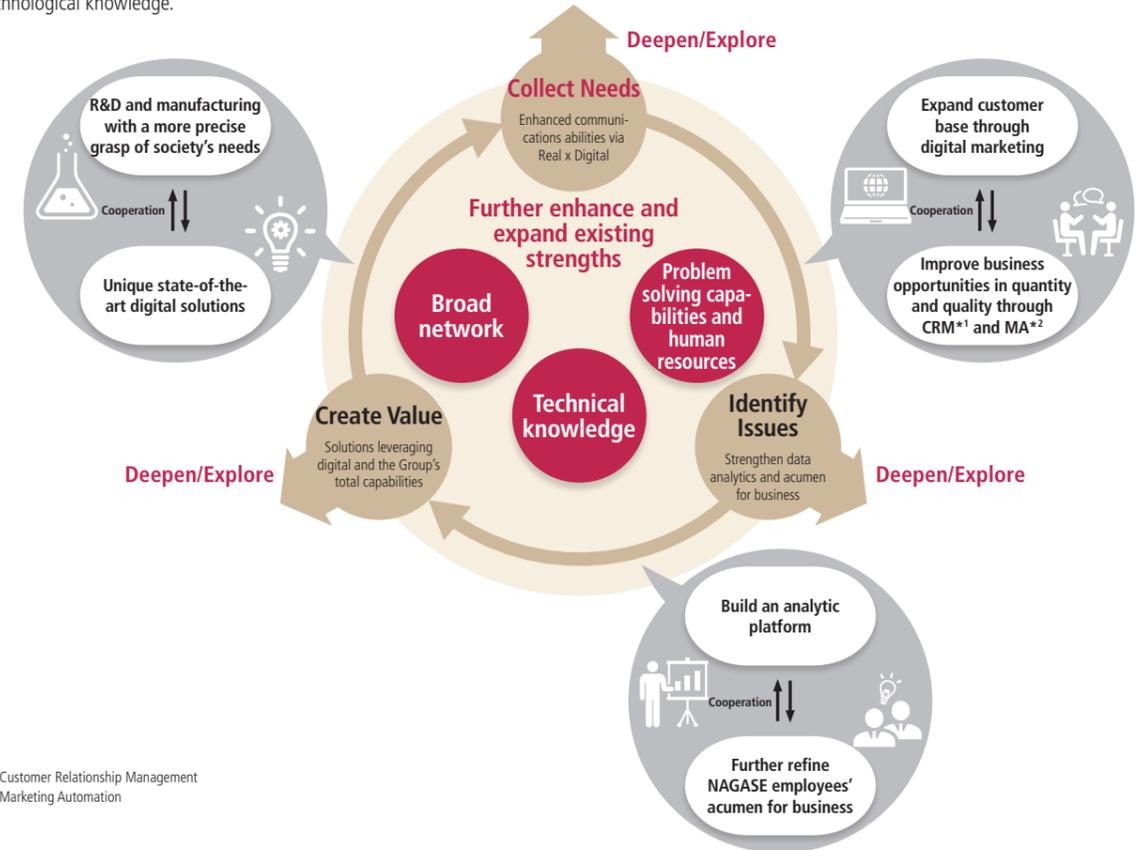
Shaping Value 3

**Corporate Functions Supporting Reforms**

We are working on further accelerating DX, promoting sustainability, and enhancing corporate functions to support reforming the profit structure and corporate culture.

**Accelerate DX Further**

By using DX we will bolster the existing strengths of the NAGASE Group, such as our extensive network supporting our customers' global supply chains; technological expertise in chemicals, bio and other fields; ability to anticipate markets; and problem-solving capabilities and human resources utilizing our technological knowledge.



\*1: Customer Relationship Management  
\*2: Marketing Automation

**Promote Sustainability**

The NAGASE Group is actively promoting sustainability management that leads to the resolution of social and environmental issues. In June 2020 we established the Sustainability Committee chaired by the President and comprised of executive officers and senior management from Group companies. This committee formulates policies for promoting sustainability throughout the Group, establishes and maintains the promotion structure, monitors measures and policies, and conducts enlightenment activities within the Group.

- | Sustainability Committee   | Corporate Sustainability Office/ Sustainability Committee Secretariat  | Executing organizations (sales divisions, area, individual companies, corporate organizations)   |
|--|--|--|
| <ul style="list-style-type: none"> <li>Monitors progress of materiality and stakeholder dialogue</li> <li>Defines and updates SDGs materiality shared throughout the Group</li> <li>Proposes measures for sustainability management and a promotion structure</li> </ul> | <ul style="list-style-type: none"> <li>Support and make proposals to the Sustainability Committee</li> <li>Ascertain the status of feedback from various stakeholders and report to the committee</li> <li>Promote communication with the Sustainability Committee and executing organizations</li> <li>Support executing organizations (evangelist) and promote communication with the executing organizations (skewer)</li> <li>Inner/outer branding activities</li> <li>Respond to external assessment organizations</li> </ul> | <ul style="list-style-type: none"> <li>Promote "shared" and "unique" materiality</li> <li>Dialogue with various stakeholders (employees, business partners, society and consumers, shareholders)</li> <li>Promote a sense of ownership within each of our own organizations</li> </ul> |